TOWN OF MOUNTAIN VILLAGE
TOWN COUNCIL REGULAR MEETING
THURSDAY, OCTOBER 21, 2021, 2:00 PM
2nd FLOOR CONFERENCE ROOM, MOUNTAIN VILLAGE TOWN HALL
455 MOUNTAIN VILLAGE BLVD, MOUNTAIN VILLAGE, COLORADO
AGENDA REVISED

https://us06web.zoom.us/webinar/register/WN_WjH_Q-ALSxa4WdR8URM9cA

Please note that times are approximate and subject to change.

	Time	Min	Presenter	Type	
1.	2:00				Call to Order
2.	2:00	5			Public Comment on Non-Agenda Items
3.	2:05	30	Wisor	Executive Session	Executive Session for the Purpose of: a. Purpose of Receiving Legal Advice and Determining Positions Relative to Matters that may be Subject to Negotiations, Developing Strategies for Negotiations, and Instructing Negotiators Pursuant to Section 24-6-402(4)(b) and (e) in Connection with Proposed Community Housing Project b. Purpose of Discussing Specialized Details of Security Arrangements or Investigations and Determining Positions Relative to Matters that may be Subject to Negotiations, Developing Strategy for Negotiations, and Instructing Negotiators Related to Third Party Broadband Provider Agreements Pursuant to 24-6-492(4)(d) and (e) C.R.S.
4.	2:35	5	Johnston	Action	Consent Agenda: All matters in the Consent Agenda are considered to be routine by the Town Council and will be enacted with a single vote. There will be no separate discussion of these items. If discussion is deemed necessary, that item should be removed from the Consent Agenda and considered separately: a. Consideration of Approval of the September 16, 2021 Regular Town Council Meeting Minutes
5.	2:40	5	Johnston Dean	Action	Consideration of a Proclamation Recognizing the Month of October as Domestic Violence Awareness Month
6.	2:45	15	Ruud	Informational	Telluride Regional Wastewater Treatment Plant (TRWWTP) Update
7.	3:00	10	Vergari	Informational Action	Finance: a. Presentation of the September 30, 2021 Business & Government Activity Report (BAGAR) b. Consideration of the August 31, 2021 Financials
8.	3:10	10	Wisor	Action	First Reading, Setting of a Public Hearing and Council Vote on an Ordinance Regulating Weight Size of Motor Vehicles
9.	3:20	30	Miller Wisor	Work Session	Town-Owned Properties Plan
10.	3:50	5	Wisor	Action	Consideration of a Resolution Approving Colorado Opioids Settlement Memorandum of Understanding
11.	3:55	10	Wisor	Action	Consideration of a Resolution Amending the Town of Mountain Village Procurement Manual
12.	4:05	5	Wisor	Action	Consideration of a Resolution Reimbursing the Town for Soft Costs Incurred in Connection with VCA Construction
13.	4:10	15	Wisor Miller	Action	Consideration of a Resolution Authorizing the Housing Authority Manager to Contingently Enter Into Real Estate Contracts on Behalf of the Town
14.	4:25	5	Loebe Wisor	Action	Consideration of a Resolution Approving a Transit Vehicle Transfer Agreement with the San Miguel Authority for Regional Transportation (SMART)
15.	4:30	30	Haynes	Action *Quasi-Judicial*	First Reading, Setting of a Public Hearing and Council Vote on an Ordinance Regarding a Rezone and Density Transfer Located at Lot 27A, Belvedere Phase III Development, Parcel Three-R, 112 Lost Creek Lane, Mountain Village to Develop 19 Condominium Units
16.	5:00	15			Dinner

17.	5:15	20	Ward	Action ***Quasi-Judicial***	First Reading, Setting of a Public Hearing of an Ordinance Regarding a Density Transfer and Rezone Located at Lot 27A, 112 Lost Creek Lane, Unit 2-3, to Transfer One Condominium Unit of Density from the Density Bank onto the Property Re-Separating Units 2 & 3 into Two Separate Condominium Units
18.	5:35	10	Wisor Haynes	Action	Consideration of a Resolution to Implement the Affordable Housing Mitigation Methodology (AHMM) in Arears for Large Scale Projects Submitted for Development in the Mountain Village Between November 1 and Adoption of the AHMM in 2022
19.	5:45	15	Miller Adamson Holmes Haynes	Action	Mountain Village Housing Authority: a. Policy Change Request Regarding Mountain Village Employees Who Receive Job Attached Housing at VCA b. Pilot Program to Incentivize Temporary Housing at VCA for Mountain Village Employees on the Employee Wait List Until Such Time a VCA Unit Becomes Available-Budget Neutral Request
20.	6:00	15	Benitez Graham Loebe	Informational	Gondola Long Range Planning Update
21.	6:15	30	Kirn Dohnal Wisor Katz	Action	Allocation of American Rescue Plan Act (ARPA) Funding to Mountain Munchkins
22.	6:45	20	Council Members & Staff	Informational	Council Boards and Commissions Updates: 1. Telluride Tourism Board - Berry 2. Colorado Flights Alliance - Gilbride 3. Transportation & Parking – Mogenson/Duprey 4. Budget & Finance Committee –Gilbride/Duprey/Mogenson 5. Gondola Committee – Caton/Berry/Prohaska 6. Colorado Communities for Climate Action – Berry 7. San Miguel Authority for Regional Transportation (SMART)-Berry/Prohaska/Mogenson 8. Telluride Historical Museum- Prohaska 9. Alliance for Inclusion – Prohaska 10. Green Team Committee- Berry/Prohaska 11. Business Development Advisory Committee – Caton/Duprey 12. San Miguel Watershed Coalition- Prohaska 13. Telluride Mountain Village Owners Association Governance Auxiliary Committee – Duprey 14. Wastewater Committee – Duprey/Mogenson 15. Mayor's Update – Benitez
23.	7:05	15	Haynes Broady Soukup	Informational	Staff Reports a. Planning & Development Services b. Police Department c. IT/Broadband
24.	7:20	5	Wisor	Action	Consider of Approval of Engagement of Garfield & Hecht as Town of Mountain Village Special Council
25.	7:25	5		Informational	Other Business a. Consideration of the 2022 Town Council Meeting Dates
26.	7:30				Adjourn

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Public Comment Policy:

- All public commenters must sign in on the public comment sign in sheet and indicate which item(s) they intend to give public comment on Speakers shall wait to be recognized by the Mayor and shall give public comment at the public comment microphone when recognized by the Mayor
- Speakers shall state their full name and affiliation with the Town of Mountain Village if any
- Speakers shall be limited to five minutes with no aggregating of time through the representation of additional people
- Speakers shall refrain from personal attacks and shall keep comments to that of a civil tone
- No presentation of materials through the AV system shall be allowed for non-agendized speakers
- Written materials must be submitted 48 hours prior to the meeting date to be included in the meeting packet and of record. Written comment submitted within 48 hours will be accepted, but shall not be included in the packet or be deemed of record

TOWN OF MOUNTAIN VILLAGE
MINUTES OF THE SEPTEMBER 16, 2021
REGULAR TOWN COUNCIL MEETING
DRAFT

Agenda Item 4

The meeting of the Town Council was called to order by Mayor Laila Benitez at 2:00 p.m. on Thursday, September 16, 2021. Due to the Town's Disaster Declaration of March 19, 2020 related to the COVID-19 virus, the meeting was held in person and with virtual access provided through Zoom.

Attendance:

The following Town Council members were present and acting:
Laila Benitez, Mayor
Dan Caton, Mayor Pro Tem
Patrick Berry
Pete Duprey
Jack Gilbride
Marti Prohaska
Harvey Mogenson

The following Town Council members were absent:

Also in attendance were:

Kim Montgomery, Town Manager
Susan Johnston, Town Clerk
Paul Wisor, Town Attorney
Julie Vergari, Chief Accountant
Chris Broady, Chief of Police
Jaime Holmes, Human Resources Director
Zoe Dohnal, Business Development and Sustainability Director
Kathrine Warren, Public Information Officer
Michelle Haynes, Director of Planning & Development Services
John Miller, Community Housing Program Director & Senior Planner
Mike Otto, Forester
Luke Adamson, VCA Property Manager
Jim Soukup, Chief Technology Officer
Jim Loebe, Director of Transportation & Recreation
Amy Ward, Planner
Dawn Katz, Director of Mountain Munchkins
Kate Burns, Controller
J.D. Wise, Assistant Public Works Director
Lauren Kirn, Environmental Sustainability and Grant Coordinator
Jonathan Greenspan
John Wagner
Anton Benitez
Lou Lazo
Mathew Shears
Avani Patel
Tamara Gorzaly
Rachel Meier
Julia Newman
Doug Vanderberghe
Cristy Breckenridge
Pete Mitchell
Doug Tueller
Matt Hintermeister
Chris Hawkins
James Hutcheson
Lee Shea Betten
Sherry Reeder
Stephanie Fanos
Thomas Kennedy
Marcus Engel
Gordon Jenson
Connor Reilly
Joseph Solomon
Nancy Wagner

Public Comment on Non-Agenda Items (2)
No public comment was received.

Executive Session for the Purpose of: (3)

a. **Receiving Legal Advice and Determining Positions Relative to Matters that may be Subject to Negotiations, Developing Strategy for Negotiations, and Instructing Negotiators with Respect to Lot 615-1CR and the Temporary Closure of Meadows Trail Pursuant to § 24-6-402(4)(b) and (e)**

b. **Discussing Personnel Matter – Proposed Compensation Forum – Pursuant to Section 24-6-402(4)(f)(II), C.R.S.**

On a **MOTION** by Marti Prohaska and seconded by Dan Caton, Council voted unanimously to move into Executive Session for the purpose of determining positions relative to matters that may be subject to negotiations, developing strategy for negotiations, and instructing negotiators with respect to Lot 615-1CR and the temporary closure of Meadows Trail pursuant to §24-6-402(4)(b) and (e), and for (b) discussing personnel matter- Proposed Compensation Forum – pursuant to Section 24-6-402 (4)(f)(II),C.R.S. at 2:02p.m.

Council returned to open session at 3:21 p.m.

Consent Agenda:

All matters in the Consent Agenda are considered to be routine by the Town Council and will be enacted with a single vote. There will be no separate discussion of these items. If discussion is deemed necessary, that item should be removed from the Consent Agenda and considered separately: (5)

a. **Consideration of Approval of the August 19, 2021 Regular Town Council Meeting Minutes**
b. **Consideration of Approval of the September 4, 2021 Special Town Council Meeting Minutes**

Town Clerk Susan Johnston presented. On a **MOTION** by Marti Prohaska and seconded by Dan Caton, Council voted unanimously to approve the Consent Agenda with revisions to the September 4, 2021 meeting minutes; adding Harvey Mogenson and removing Natalie Binder and noting that Patrick Berry was absent.

Consideration of Adoption of Compensation Study Recommendations (5)

Town Manager Kim Montgomery presented along with Human Resources Director Jaime Holmes, Jack Gilbride, Pete Duprey and Employers Council Compensation Consultant Lou Lazo. Council discussion ensued. On a **MOTION** by Harvey Mogenson and seconded by Dan Caton Council voted 6-1 (with Pete Duprey dissenting) to approve the adoption of the 2021 Compensation Study

Finance: (6)

Chief Accountant Julie Vergari presented.

a. **Presentation of the August 31, 2021 Business & Government Activity Report (BAGAR)**
b. **Consideration of the July 31, 2021 Financials**
c. **2022 Budget Discussion**

Council discussion ensued. On a **MOTION** by Dan Caton and seconded by Patrick Berry , Council voted unanimously to approve the July 31, 2021 Financials as presented.

Council moved to agenda item 13.

Second Reading, Public Hearing and Council Vote on an Ordinance Regarding Amendments to the Community Development Code Consistent with the Town of Mountain Village Community Housing Initiatives; Specifically, Amendments to Reintroduce Duplex Development within an Overlay District in the Single Family Zone District, Modifications to the Definition of Accessory Dwelling Unit (ADU), Removing Mother-in-Law Suite, Allowing for Expedited Review for Deed Restricted Projects and Clarifying that an ADU is Allowed within Detached Condominium Development and other Conforming Amendments (7)

Planning and Development Services Director Michelle Haynes. The Mayor opened the public hearing. Public comment was received from Stephanie Fanos, Pete Mitchell and Doug Tueller, . The Mayor closed

the public hearing. Council discussion ensued. On a **MOTION** by Dan Caton and seconded by Jack Gilbride, Council voted 7-0 to table the Ordinance.

Council moved to agenda item 12.

Council broke for dinner from 4:45-4:59.

Discussion of an Alternative PUD Amendment on Lot 109R, Known as the Mountain Village Hotel PUD (8)
Michelle Haynes presented. The applicant was represented by Matthew Shears and Doug Vanderberghe, Kephard Architects. Council discussion ensued.

2020 Government, Community, and Regional Green House Gas Reports (9)
Business Development and Sustainability Director Zoe Dohnal introduced Lauren Kirn our new Environmental Sustainability and Grant Coordinator. Lotus representatives Rachel Meier and Julia Newman presented. Council discussion ensued.

Village Court Apartments Update (10)
VCA Property Manager Luke Adamson presented. Council discussion ensued.

Forestry Update (11)
Community Housing Program Director John Miller and Town Forester/GIS Assistant Mike Otto presented. Council discussion ensued. Council directed staff to present at the November meeting to discuss the Siebold report.

Council moved to agenda item 14.

Construction Update (12)
Michelle Haynes presented. Council discussion ensued.

Council moved back to agenda item 8.

Council Boards and Commissions Updates: (13)

1. **Telluride Tourism Board - Berry**
2. **Colorado Flights Alliance - Gilbride**
3. **Transportation & Parking –Duprey/Mogenson**
4. **Budget & Finance Committee –Gilbride/Duprey/Mogenson**
5. **Gondola Committee – Caton/Berry**
6. **Colorado Communities for Climate Action – Berry**
7. **San Miguel Authority for Regional Transportation (SMART)- Caton/Prohaska**
8. **Telluride Historical Museum- Prohaska**
9. **Alliance for Inclusion – Prohaska**
10. **Green Team Committee- Berry/Prohaska**
11. **Business Development Advisory Committee – Caton/Duprey**
12. **San Miguel Watershed Coalition- Prohaska**
13. **Telluride Mountain Village Owners Association Governance Auxiliary Committee – Duprey**
14. **Wastewater Committee- Duprey/Mogenson**
15. **Mayor's Update – Benitez**

Council moved back to agenda item 7

Staff Reports: (14)

a. Mountain Munchkins

Director Dawn Katz presented. Council discussion ensued.

b. Town Manager

Kim Montgomery presented her report. Great Services award was given to . Council discussion ensued. Jim Soukup addressed the broadband outage and answered questions.

Other Business (15)

There being no further business, on a **MOTION** by Dan Caton and seconded by Marti Prohaska, Council voted unanimously to adjourn the meeting at 6:23 p.m.

Respectfully prepared and submitted by,

Susan Johnston
Town Clerk

Town of Mountain Village
Proclamation

A Proclamation Declaring October 2021
Domestic Violence Awareness Month

WHEREAS: Domestic violence is the intentional and systematic pattern of behavior to gain power and control over an intimate partner by use of physical violence, sexual violence, threats, emotional, psychological, and financial abuse; [1]

WHEREAS: 38% of Coloradan women and 30.5% of Coloradan men experience domestic violence as intimate partner physical violence, sexual violence, or stalking; [1]

WHEREAS: 20% of domestic violence cases reported in Colorado involved children; [2]

WHEREAS: 70 fatalities were reported in Colorado as a result of domestic violence incidents in 2019 with an average of 49.6 domestic violence deaths per year between 2014-2019; [2]

WHEREAS: 1 in 11 female and 1 in 14 male high school students reported physical dating violence in the past year; [3]

WHEREAS: San Miguel Resource Center spent an average of 73 hours per month in 2020 supporting domestic violence survivors;

WHEREAS: Domestic violence occurs across all genders, cultures, races & ethnicities, all ages, abilities, and education levels, in all communities, and has impacts that can lead to homelessness, ongoing trauma, severe injury, and death

NOW THEREFORE, we, the Mountain Village Town Council, do hereby proclaim the month of October 2021 as

Domestic Violence Awareness Month

During Domestic Violence Awareness Month, we implore every member of the community to educate themselves about domestic violence and its impact on individuals and communities, to believe survivors when they are brave enough to report these crimes, and to be an active part of the solution every day, in every month. We also encourage those who are currently surviving abuse to speak up. Silence is a powerful tool for abusers. When we work together to take away the tools that perpetuate abuse we become one step closer to ending the violence.

Dated this 21st day of October 2021

Laila Benitez, Mayor

Susan Johnston, Town Clerk

Sources: 1 NCADV.org; 2 2020 Colorado Attorney General Annual Report: Domestic Violence Fatality Review Board; 3 https://www.cdc.gov/violenceprevention/intimatepartnerviolence/teendatingviolence/fastfact.html;

MOUNTAIN VILLAGE
TOWN COUNCIL
AGENDA MEMORANDUM

Item No. 6
Meeting Date: October 21, 2021

TITLE: TELLURIDE REGIONAL WASTEWATER TREATMENT PLANT UPDATE

SUBMITTED BY: Town of Telluride Public Works

ATTACHMENTS:
TRWWTP Masterplan Executive Summary
H_2O Innovation/Carollo Engineering Proposal
TRWWTP PWA Tasks & Deliverables
PWA Telluride Kick Off Meeting Slides
Technical Memorandum 1
Technical Memorandum 2

TRWWTP Masterplan

The Town of Telluride completed the Telluride Regional Wastewater Treatment Plant Masterplan in 2017. This overarching document identified immediate TRWWTP improvements that were necessary, near-term TRWWTP improvements that were recommended, and long-term TRWWTP improvements that were envisioned. Please see the attached Executive Summary.

The TRWWTP Professional Wastewater Advisor

The Town of Telluride issued a Request for Proposals for a Professional Wastewater Advisor at the end of 2020 and selected the team of H_2O Innovations and Carollo Engineering as our PWA in early 2021. This team will provide guidance, planning, and engineering for the anticipated rebuild of the TRWWTP. Please see the attached H_2O Innovations/Carollo Engineering Proposal. In particular, please thoroughly review the Project Understanding & Approach Section, pages 12 – 26 of the Proposal.

H_2O Innovations and Carollo Engineering have completed the first two of six Technical Memorandums, which are TM 1: Basis of Design and TM 2: Hydraulic Modeling Evaluation. Please see the attached Telluride Kick Off Meeting Slideshow and the two technical memorandums.

Prepared by: Paul Ruud
Public Works Director
Town of Telluride

Executive Summary

The Telluride Regional Wastewater Treatment Plant (TRWWTP) serves the Towns of Telluride and Mountain Village, as well as the communities of Aldasoro, Hillside, and Lawson. Growth in the service areas and seasonally high loading conditions are pushing the TRWWTP to its design capacity. Growth of the base population has been steady at 1% to 1.5% annually. Visitors have a significant impact seasonally, nearly tripling the population during peak events. Commercial businesses also have an impact as business success leads to plans for expansion. Wastewater flow and loading to the TRWWTP were projected by estimating the contribution from the various service areas and sources, including residents, visitors, and commercial entities. Wastewater flows are projected to be within the current permit limits for most of the 30-year planning period. On the other hand, high wastewater loading as characterized by biochemical oxygen demand, or BOD_5, will be the primary driver for required near- and long-term improvements.

This Master Plan addresses the ability of the TRWWTP to meet the new metals discharge limits, and the planning for near-term (5-year plan) improvements, and the long-term (30-year plan) expansion for wastewater treatment and biosolids disposal.

Metals Compliance

The Colorado Water Quality Control Division (WQCD) issued new discharge limits for several metals parameters that went into effect on January 1, 2017. Metals test data were obtained from water supply and wastewater sources including drinking water supplies, influent wastewater and treated effluent from the TRWWTP. The data was categorized, mapped and analyzed to determine if any defined sources of metals could be eliminated or treated before entering the TRWWTP.

Three metals were identified as a potential concern: arsenic, copper, and selenium. The numeric standard that was originally listed for arsenic was retracted by permit modification pending further study by the USEPA and subsequent development of an arsenic standard by the WQCD (potentially 10 years out). The WQCD would issue a compliance schedule as part of the renewal of the TRWWTP discharge permit. The arsenic standard is unknown at this time and the requirements to meet a future arsenic limit remain vague.

Selenium data show that concentrations are normally below the permitted limit. However, a few data points indicate unexplained spikes in selenium concentrations entering the TRWWTP. Ongoing monitoring will determine if these high levels are real, requiring the TRWWTP to incorporate a treatment process to remove low levels of selenium, which would challenge the current limits of technology.

Copper concentrations show high seasonal levels, occasionally above the permit limit. Further investigation was conducted identifying corrosion of copper service lines and household plumbing in the Telluride drinking water distribution system as a concern. Our analysis showed that low buffering capacity of the drinking water and variable pH could be corrosive to

household plumbing and service lines. Other possible sources of copper in wastewater include discharges of septage, brewery and distillery waste, and boiler water maintenance flushing. The TRWWTP obtained a modification to their permit allowing an additional year (January 1, 2018) to address corrosion control of the drinking water and monitor impacts on copper levels in the TRWWTP effluent. Monitoring indicates that Telluride's corrosion control program for drinking water is not sufficient on its own. Additional measures include an ordinance to limit boiler water discharges and discharge limits on specific commercial waste dischargers. Interim measures are being implemented for chemical treatment to remove copper at the TRWWTP.

Near-Term Improvements Plan

Wastewater influent to the TRWWTP has a relatively high concentration of BOD_5, which will bring the plant within 95% of its permitted design capacity within 3 years (refer to Figure ES-1). The Town will work on pre-treatment agreements with commercial wastewater dischargers. Currently, the TRWWTP does not restrict septage receiving. Seasonal restrictions on septage hauling to the TRWWTP will seek to decrease loadings during peak season. A septage receiving station is also being considered for storage of septage, which gives operators control of releases into the TRWWTP.

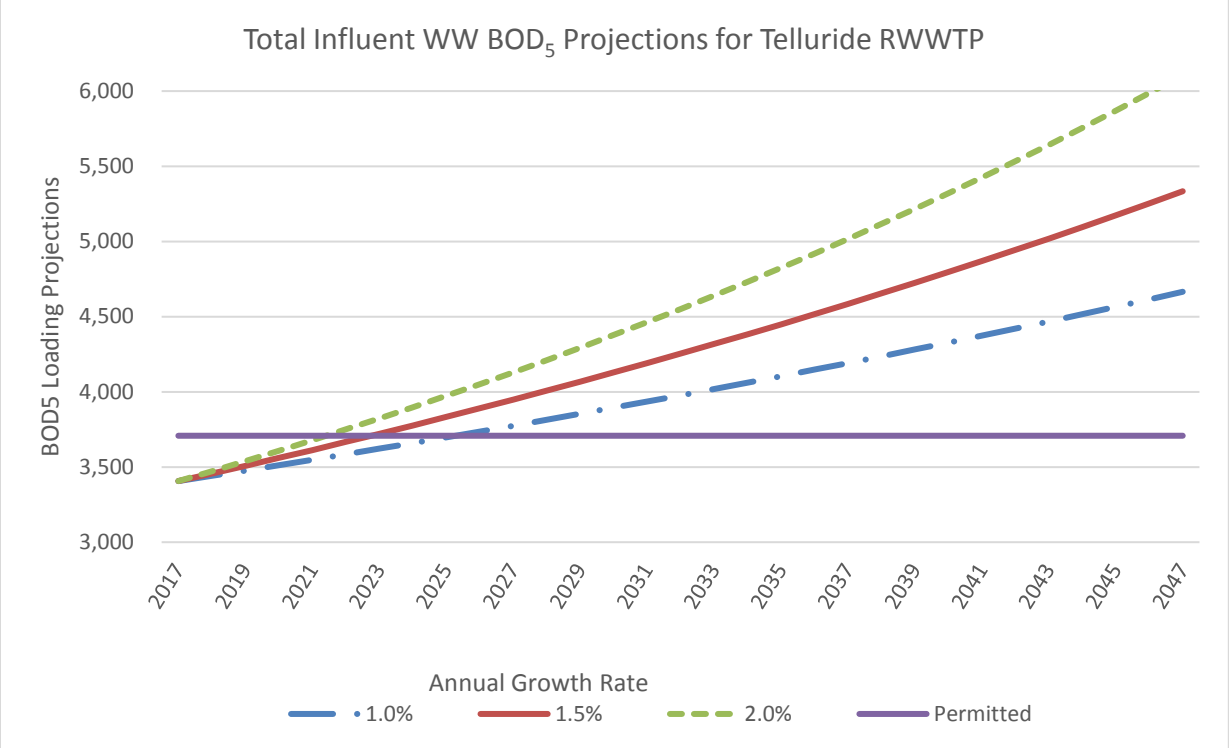


Figure ES-1 Loading Projections at Varied Population Growth Rates

At the TRWWTP, several limitations impact operations and maintenance. Condition assessments of observable structures and electrical system components were conducted. Oxidation ditch no. 1 shows signs of corrosion of structural supports. Several areas in the TRWWTP are classified according to the National Fire Protection Association Standard 820, which provides requirements for protection against fire and explosion hazards specific to wastewater treatment facilities. As

related improvements are conducted at the TRWWTP, corrective measures will need to be incorporated into the plans.

The most immediate needs are for improvements to the existing oxidation ditches. Settled solids have accumulated and operators require a dewatering process for solids being removed during maintenance of these basins. Three alternatives were evaluated involving permanent and mobile systems. The two permanent options consist of concrete structures either using sand drying beds or geosynthetic tubes in a containment area. The mobile system is a containerized filter unit mounted on a trailer. The trailer unit can be used to transport the dewatered solids removed during maintenance activities to the landfill.

Supplemental oxygen will soon be needed for the oxidation ditches. The existing mechanical aeration system cannot supply enough oxygen to meet peak demand conditions resulting in periods of low dissolved oxygen concentrations in the oxidation ditches. As growth in the service area increases the pollutant load to the TRWWTP will exceed the permitted capacity. The first alternative for supplemental oxygen replaces the existing aeration system with larger units. Other alternatives would supplement the existing system using jet aeration or a pure oxygen saturator. The deck-mounted jet aeration system is the least efficient but could be added without shutting down the existing units. The pure oxygen saturator requires a source of liquid oxygen to be delivered and stored on site.

Long-Term Expansion Plan

If the near-term improvements are implemented, it is projected that the improved TRWWTP could serve the needs of the community until scheduled nutrient regulations for total inorganic nitrogen and total phosphorus are applied. Colorado Regulation No. 85 nutrient limits are anticipated to take effect in 2027. The TRWWTP will require major improvements just to meet these new limits. As such, a 30-year planning period (to year 2047) was established for the expansion project. Wastewater flow entering the plant in 2047 is estimated at 2.3 million gallons per day (mgd), and BOD_5 loading criteria is currently projected at 6,005 pounds per day (ppd).

Preliminary treatment would likely be the first construction to occur in support of a plant expansion. Pre-treatment consists of screening, grit removal and flow measurement within the "Headworks". A headworks building can be constructed on site as the first phase of construction.

The second phase of construction would target the secondary treatment processes. Figure ES-2 shows a diagram of a conventional activated sludge process for general reference.

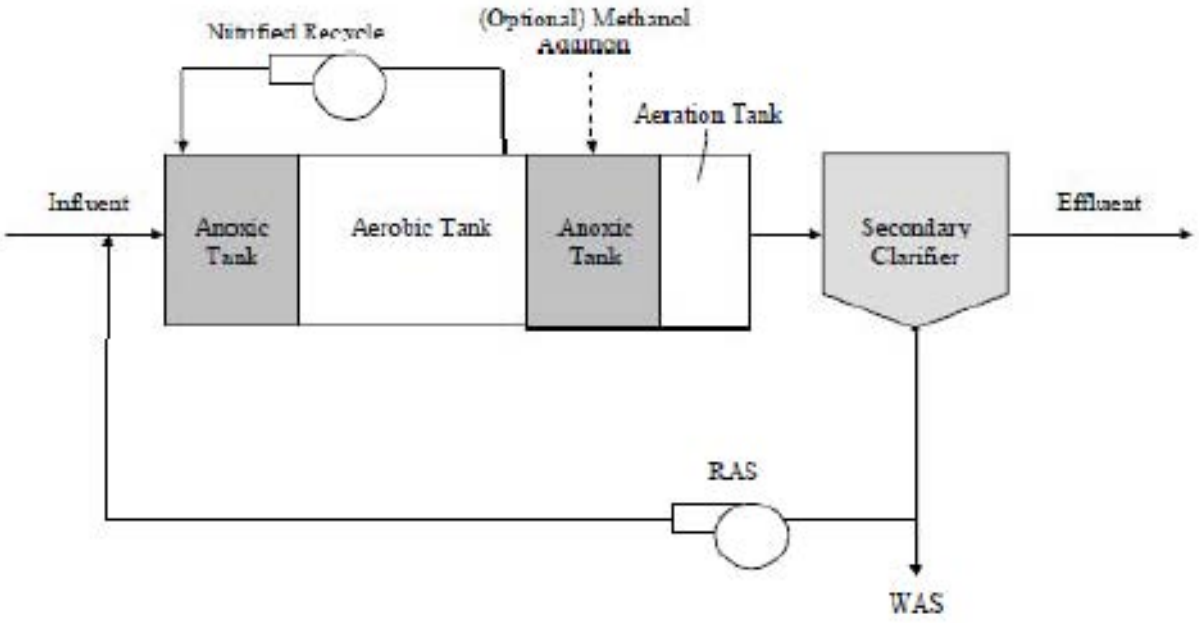


Figure ES-2 Conventional Activated Sludge Process Diagram
Image Source: USEPA Nitrogen Control Design Manual, 2010.

The existing TRWWTP site is constrained within a small area with little space to stage construction. Two technologies were identified as feasible ***if no additional land is added to the site***:

a) Membrane Bio-Reactor (MBR) coupled with an activated sludge system but replaces the secondary clarifiers with membranes

b) BioMag®, which is a proprietary enhancement to the existing process.

MBR provides superior filtration technology configured with an activated sludge process to process organic pollutants. The BioMag® system upgrades the existing activated sludge process using a magnetic ballast material that increases the settleability of floc particles within the secondary clarifier.

MBR improvements can be done within one of the three oxidation ditch/clarifier units, which allows the remaining two units to maintain operation. However, the limited space adds significant cost for demolition and construction activities for the MBR upgrades. While the BioMag® process uses the existing oxidation ditches and clarifiers, they require completely new aeration equipment and mixing systems, and a space for the magnetite feed and recovery equipment.

The MBR technology is preferred for expansion within the existing site but it is very costly for capital construction and for operation and maintenance. The BioMag® system is new proprietary technology that has a very small number of installations, but it is the least costly.

If land adjacent to the site could be purchased, construction access and staging is no longer a major constraint. New construction could occur without impacting the operation of the TRWWTP. Two technologies were considered:

a) MBR configured with activated sludge

b) Conventional Activated Sludge (CAS).

The CAS is a flexible process that has been used for over 100 years. CAS would require a larger footprint that the MBR system and the capital cost is roughly the same. The major disadvantage to the MBR technology is that the membranes must be replaced every 10 years at a significant cost. However, the MBR technology is the system of choice to meet new regulations and stringent discharge limits.

Expansion Project Cost Summary

A present value comparison of capital and operation and maintenance costs in FY 2017 dollars, is shown below:

Headworks: Capital Cost = $2.5 MM

On-site Expansion Options

- MBR: Capital Cost = $29.8 MM O&M Cost (PV2017) = $5.6 MM
- BioMag®: Capital Cost = $19.1 MM O&M Cost (PV2017) = $4.5 MM

Adjacent Site Expansion Options:

- MBR (new): Capital Cost = $28.3 MM O&M Cost (PV2017) = $5.6 MM
- CAS (new): Capital Cost = $26.9 MM O&M Cost (PV2017) = $3.4 MM

The existing disinfection system would be used as part of the various options. However, the cost to meet future limits associated with Colorado Regulation No. 31 are not included here. The CAS process would likely require a tertiary filtration process for ultra-low phosphorus limits. Very low nitrogen limits may require improvements to all process alternatives depending on the numeric standard given for the San Miguel River.

Biosolids Management Plan

Biosolids handling and treatment is a complex need for the TRWWTP. Biosolids treatment currently uses aerobic digestion to meet Class B biosolids requirements. There are four digester basins that are aerated using coarse-bubble diffusers. After the required time under aeration, the biosolids are thickened and stored for a contract hauler to beneficially reuse at their permitted land application sites.

The contract hauler operates throughout the region serving several other municipalities. As such, the hauler limits their services to the TRWWTP, and if the hauler is delayed it places severe constraints on the ability of operators to treat, thicken and store biosolids within available capacity.

The TRWWTP wants to develop their own biosolids program, with the goal of meeting the requirements for Exceptional Quality (EQ), Class A biosolids, according to Colorado Regulation No.64. The classification of biosolids is determined by pathogen and vector attraction reduction requirements. Class A biosolids have more requirements to meet than Class B. However, all types and classes of biosolids must meet the ceiling concentration for pollutants. The primary benefit of meeting Class A requirements is there are no site restrictions for beneficial reuse.

Disposal of EQ Class A biosolids normally involves beneficial reuse as a soil amendment. Biosolids can be sold in bags, hauled off by individuals in trucks and other containers, or distributed in bulk. End uses may include municipal restoration projects, such as parks and roadsides, mine reclamation, cover material for interim operations and final closure of landfills, agricultural land application and range land application.

The following is a summary of options for biosolids treatment and for handling/disposal. Treatment options are described separately for Class B and Class A criteria.

I. Biosolids Treatment

A. Class B biosolids treatment options:

1. Upgrade the existing digesters using mesophilic aerobic digestion in a process patented as MesoAer™.

a) Advantages: Approved process by CDPHE

b) Disadvantages:

(1) Requires a new building on site

(2) Requires WAS pre-thickening, which typically generates odors within the building

c) Costs:

(1) O&M, energy = $60,000 annually

(2) Capital = $3,500,000

2. CleanB™ using chlorine dioxide generated on-site. (Preferred option)

a) Advantages:

(1) Small footprint

(2) Significantly reduced odors

(3) Short stabilization time

(4) 1-3 digesters can be repurposed

(5) Easy to operate, supplier to provide all maintenance and chemical supply

b) Disadvantages:

(1) Requires a new building on site

(2) Requires storage and handling of 15% Sodium Chlorite solution, and 50% Sulfuric Acid solution

(3) May generate disinfection by-products, which will be regulated in the future (manufacturer indicated DBPs are not formed)

(4) Sole source supplier

(5) Not yet approved for use in Colorado

c) Costs:

(1) O&M, energy = $36,000 - $46,000 annually

(2) Capital = $2,000,000

Note: Leasing a mobile CleanB™ system allows pilot-testing on site and data gathering for design, operation and permitting. The cost quote from the manufacturer for 24 weeks including shipping, setup, training, chemicals and removal from the TRWWTP is $100,000.

B. Class A biosolids treatment options:

1. Composting offsite using the biosolids product from the CleanB™ system

a) Advantages:

(1) Allows composting operations to be moved to remote site where odors are not a major detractor

(2) Biosolids can be stored longer on larger site

(3) Farmers/Ranchers are more likely to come to site and handle biosolids for land application

b) Disadvantages:

(1) TRWWTP has no composting experience

(2) Bulking materials needed to mix with biosolids

2. Autothermal Thermophilic Aerobic Digestion (ATAD) installation on the existing site would prevent expansion of the TRWWTP within its current boundaries.

a) Advantages:

(1) Relatively stable end-product

(2) Would use existing digester basins

(3) Includes an odor control system

(4) Highly automated.

b) Disadvantages:

(1) Batched processing requires coordination of pre-treatment and post treatment systems

(2) Existing facility not set up for pre-thickening and post dewatering

(3) Potential for odors if system is upset and odor control system fails

(4) Reliance on multiple levels of instrumentation for stable operation

(5) New pumps, blowers, and controls systems needed in a new building

(6) Sequencing of construction may not be possible with current plant loading

3. Off-site Composting by 3rd Party in Olathe

a) Advantages:

(1) Could be part of a near-term strategy to extend timeline for improvements

b) Disadvantages:

(1) Site not currently permitted to take domestic biosolids

(2) No guarantees of permits or long-term viability of arrangement

(3) Town would be responsible for hauling

4. Closed alkaline stabilization process by Schwing Bioset, Inc.

a) Advantages:

(1) Compact

(2) Energy efficient

(3) Achieves a drier biosolids product.

b) Disadvantages:

(1) High alkaline biosolids difficult to distribute in SW Colorado having alkaline soil conditions.

II. Biosolids Hauling and Disposal

A. Hauling options

1. Extend contract for hauling and disposal

2. Take over hauling and disposal operations in-house

a) Costs:

(1) O&M = 1 full time FTE

(2) Capital = $200,000

3. Transition from contract hauling to in-house operations over the next year to allow purchase of equipment, development of additional permitted land application sites, and hiring of staff to take over in-house hauling and disposal operations

B. Disposal options

1. Expand sites for Class B biosolids disposal for long-term plan

2. Establish a Class A biosolids storage and distribution operation on existing permitted site in Nucla, CO and develop relationships with local farmers/ranchers, County landfill and others as part of end-use plan.

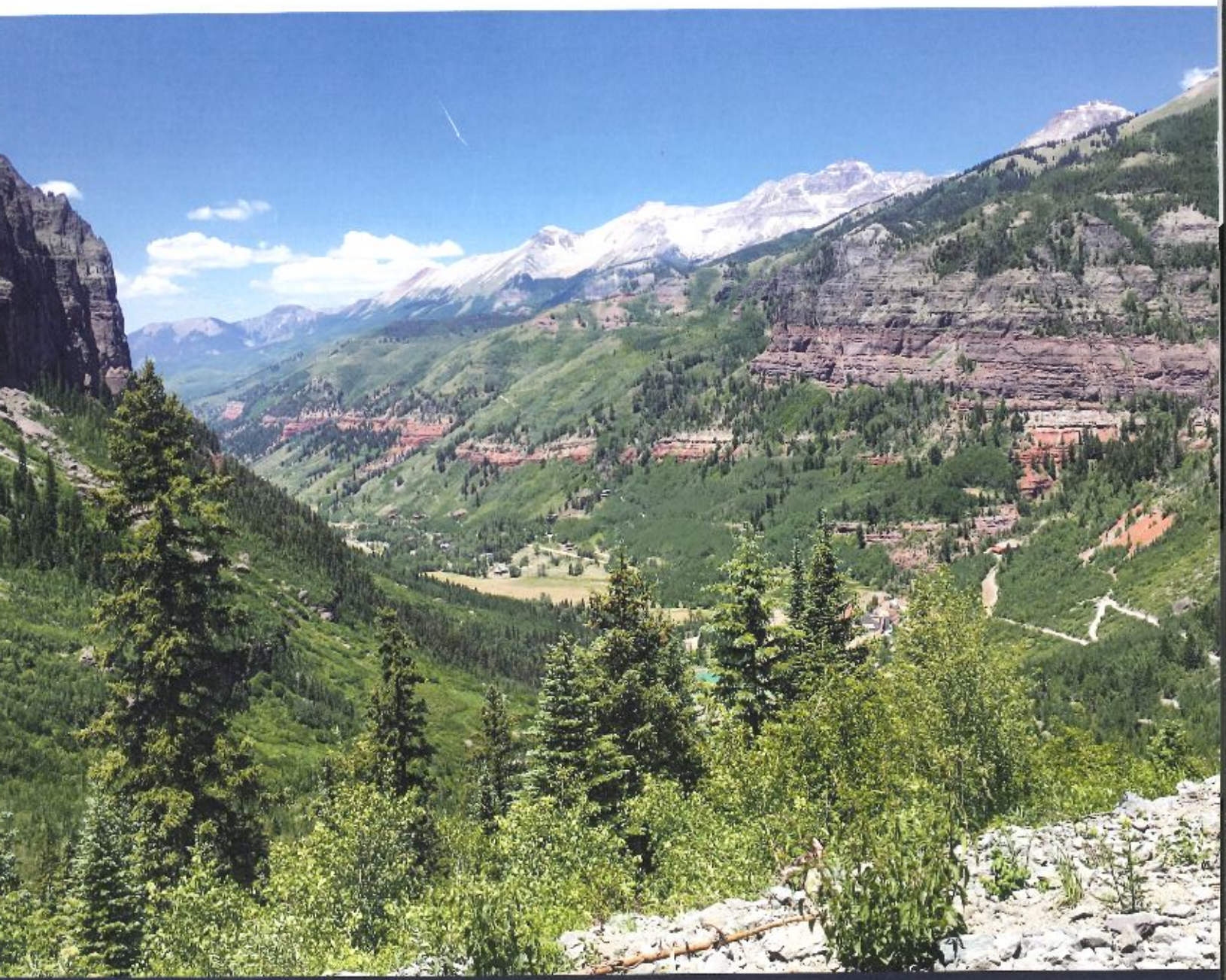
3. Develop a near-term plan to expand permitted sites for Class B and/or agreement with private compost facility owner until plant expansion allows construction within existing site for Class A treatment. Note that Disposal Option 3. still requires an end use plan to be developed for Class A biosolids but provides more time for transition.

Proposal for the **TOWN OF TELLURIDE**

Professional Wastewater Advisor to Assist the Town of Telluride with

Implementation of the Telluride Regional WASTEWATER TREATMENT PLANT MASTER PLAN

FEBRUARY 2021



h2o innovation® in association with carollo Engineers...Working Wonders With Water®

February 19, 2021

Paul Ruud
Public Works Director
Town of Telluride
1370 Black Bear Road
Telluride, Colorado 81435

Subject: Proposal for the Professional Wastewater Advisor – Implementation of the Telluride Regional Wastewater Treatment Plant Master Plan

Dear Mr. Ruud and the Selection Committee:

On behalf of H_2O Innovation and Carollo Engineers (Carollo), I would like to thank the Town of Telluride for the opportunity to provide this proposal in response to the Request for Proposals for a Professional Wastewater Advisor. As a leader in the implementation of membrane-based treatment technologies, H_2O Innovation's vision of an membrane bioreactor (MBR) retrofit for the existing Telluride Regional Wastewater Treatment Plant (TRWWTP) holds the potential to save the Town and other stakeholders millions of dollars while accelerating the schedule and taking advantage of existing infrastructure.

Our company has a highly qualified technical staff focused on innovative system engineering and manufacturing. To provide the Town of Telluride the very best Professional Wastewater Advisory role, we have partnered with Carollo, a first-class company who we highly respect as leaders in consulting engineering and design-build projects. Carollo has the in-house engineering expertise, vast experience with design-build projects in Colorado, and familiarity with CDPHE regulations to provide the ideal complement to H_2O Innovation's strengths to form a Professional Wastewater Advisory Team. H_2O Innovation has enjoyed partnering with Carollo in previous projects, most notably the implementation of our Fiberflex Ultrafiltration membrane system installed for the Clifton Water District, which is highlighted within this document.

H_2O Innovation and Carollo have appreciated the preliminary interactions we have had with the Town of Telluride representatives and have gained a deep understanding of the existing plant processes and equipment, as well as the importance of environmental stewardship, safety, and a practical approach to design for this project. We look forward to an opportunity to work with the Town to establish a collaborative vision in response to the upcoming regulatory framework that leverages the existing infrastructure at the Telluride Wastewater Treatment Plant. The outcome of the project scope detailed in this proposal will support the rapid execution of a wastewater treatment upgrade that incorporates sound engineering practices and the best available technology to secure the long-term compliance of the Town's wastewater program.

Sincerely,

Fraser Kent, PhD, PE

H_2O Innovation
8900, 109th Ave North, Suite 1000, Champlin, MN 55316, United States
Tel: 763.566.8961 Fax: 763.566.8972
www.h2oinnovation.com info@h2oinnovation.com

CAROLLO ENGINEERS, INC.

At Carollo, their mission is simple: Provide creative, responsive, and quality solutions to those they serve. They achieve this by focusing on only water-related engineering services. Since the firm's founding in 1933, Carollo has been a leading expert in the planning, design, and construction management of water and wastewater projects for public agencies and municipalities. With more than 1,200 employees in 49 offices, Carollo is the largest water-focused engineering firm in the country. Their commitment to the water industry has been a company hallmark for 88 years. They strive to sustainably optimize the use and benefits of this precious resource with a single-minded focus that allows them to deliver innovative solutions, the best talent in the business, and exceptional, responsive client service. They have become a leader in the development of comprehensive master planning projects, asset management, reliability assessment, and financial plans for clients nationwide. Carollo's history covers work on more than 25,000 projects, from small studies to large, complex design-builds.

Unparalleled Colorado Experience

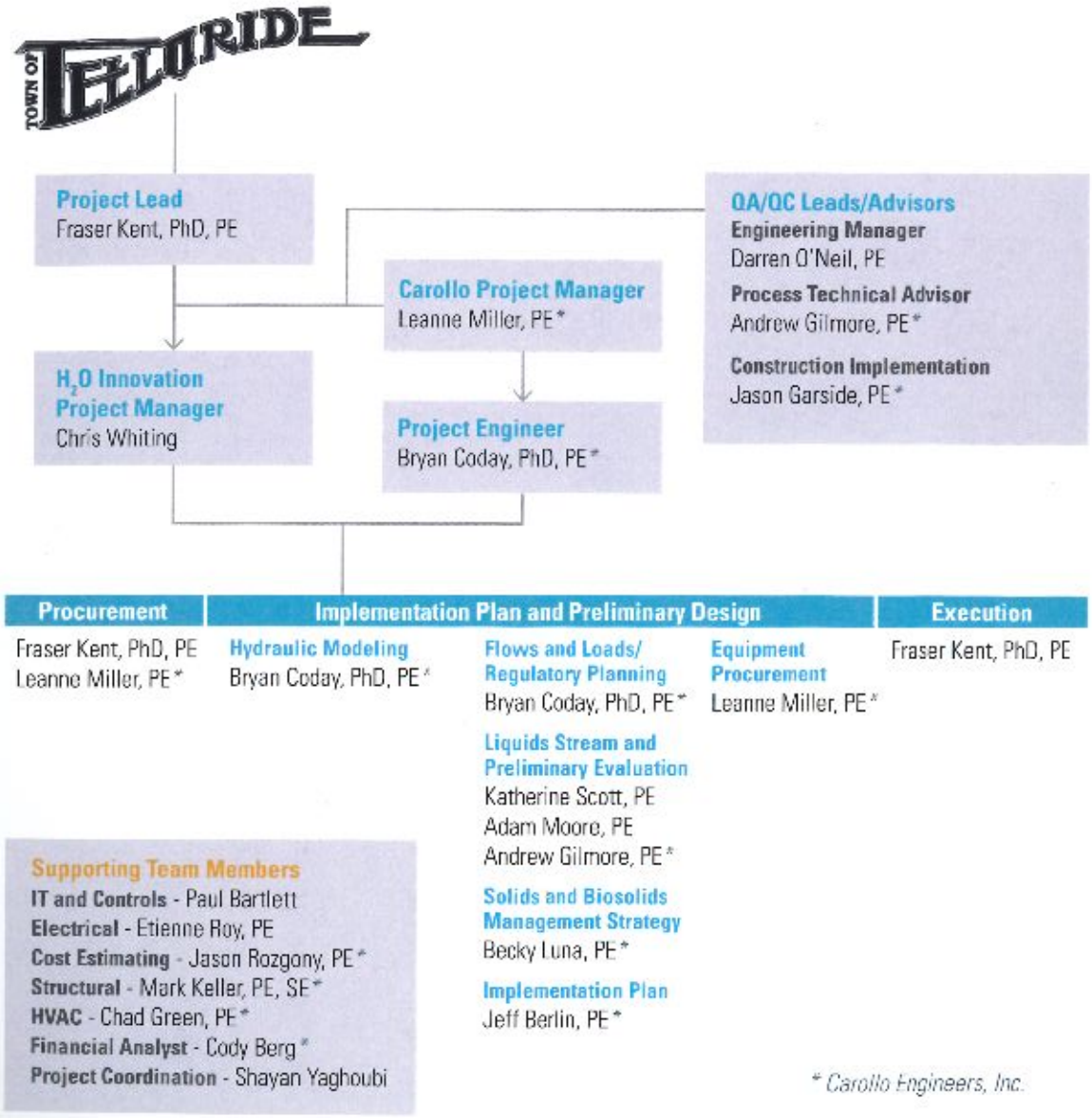
Carollo's Colorado offices have more than 150 professionals dedicated to solving water and wastewater challenges for clients. They have provided engineering services for dozens of wastewater planning and design efforts throughout Colorado, including for Eagle River Water and Sanitation District, Clifton Water District; and the Cities of Grand Junction, Montrose, Crested Butte, Aspen, Fort Collins, Greeley, Loveland, Longmont, Boulder, and Aurora.

The H_2O/Carollo team complement each other perfectly to provide the expertise Telluride deserves for a successful project.

Project Team

TEAM ORGANIZATION

We have assembled a focused team to support and advise the Town on this important project. Our team is built around a simple, yet powerful concept—put the best individuals into roles where they can add the highest value to the Town and this project.



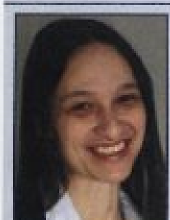
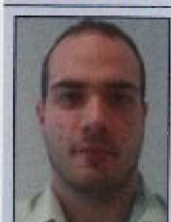
* Carollo Engineers, Inc.

THE RIGHT TEAM FOR TELLURIDE

We have built our team around your needs for a professional wastewater advisor. Many of our core team members are already familiar with Telluride because of their experience working with you, and their industry contributions to challenges that you share with other utilities, such as fast-tracked schedule, aging infrastructure, complex construction challenges, and meeting stringent future effluent limits. We have a proven track record supporting wastewater utilities in treatment plant expansion planning and implementation and delivering cost-effective solutions that maximize existing reuse of equipment. More importantly to you, each team member has demonstrated experience that comes only from years of excellence in their respective disciplines. Our team's organization corresponds to our project approach, and the following pages detail our team member's qualifications.

TEAM QUALIFICATIONS

H2O INNOVATION KEY TEAM MEMBERS

Team Member	Biography
 WORKED ON OVER **40** MBR PROJECTS **Fraser Kent, PhD, PE** *Project Lead*	Fraser is a Professional Engineer with over 20 years of process design experience in water and wastewater treatment with a focus on membrane filtration. He has a Ph.D. in Environmental Engineering, and his doctoral thesis focused on membrane bioreactors and reverse osmosis technologies for water reclamation. He has extensive experience with membrane technologies gained from over a decade working at Zenon Environmental and GE Water & Process Technologies before joining H_2O Innovation in 2012. He will serve as the project lead, Town contact, provide technical design expertise, and quality assurance/quality control for various aspects of the project. His relevant project experience includes: ▪ Conventional Activated Sludge Plant MBR Retrofit in Princeton, NJ ▪ SBR to flexMBR™ Retrofit Solution for City of Decatur, AR ▪ Virginia Water Hub MBR-RO for Sustainable Water, VA
 WORKED ON OVER **125 MGD** OF MBR DESIGNS **Darren O'Neil, PE** *QA/QC*	Darren is a Professional Engineer with over 20 years of water and wastewater treatment and engineering experience including project management, mechanical and process engineering design for various multi-million-dollar projects in both municipal and industrial fields. He has worked on large wastewater treatment projects such as the 4 MGD Marco Island MBR in Florida, the Tri-City WPCP in Clackamas County, Oregon- a 10 MGD MBR facility, and a 400-kW anaerobic digester for the Michigan State University power generation facility. Darren is H_2O Innovation's Engineering Manager and will provide quality assurance and quality control support for the preliminary design of the proposed retrofit as part of this project. Project experience includes: ▪ SBR to flexMBR™ Retrofit Solution for City of Decatur, AR ▪ Virginia Water Hub MBR-RO for Sustainable Water, VA ▪ Charles A. Strain WTP Micofiltration/Ultrafiltration Progressive Design-Build
 DELIVERED MORE THAN **30** MEMBRANE PROJECTS **Katherine Scott, PE** *Process Lead*	Katherine is a Professional Engineer with over 10 years of experience in membrane applications for drinking water and industrial water and wastewater systems. Her experience centers on cost development, wastewater process evaluation and design, and commissioning and managing membrane pilots systems. As part of this project, Katherine will serve as a wastewater process design and provide valuable insight as part of the liquid stream evaluation and preliminary design phases of the Implementation Plan. Project experience includes: ▪ SBR to flexMBR™ Retrofit Solution for City of Decatur, AR ▪ Virginia Water Hub MBR-RO for Sustainable Water, VA ▪ Ceramic MBR Retrofit for Charles County, MD
 COMPLETED OVER **50** MBR PROCESS DESIGNS **Adam Moore, PE** *Process Specialist*	Adam is a Professional Engineer whose education and experience has focused on wastewater treatment using membranes. His research work was focused on the application of membrane bioreactors for treating high strength food industry wastewater for potential reuse. His past experience includes conducting surface water field programs involving stream flow characterization, water quality and watershed surveillance. Adam's various experience benefits the team by providing "big picture" context to the liquid stream process design. For this project, he will provide modeling support and mechanical design feasibility considerations as part of the liquid stream evaluation and preliminary design. ▪ SBR to flexMBR™ Retrofit Solution for City of Decatur, AR ▪ flexMBR™ Industrial Retrofit in Jamestown, NY ▪ Biological Nutrient Removal MBR for Craig, MT

CAROLLO KEY TEAM MEMBERS

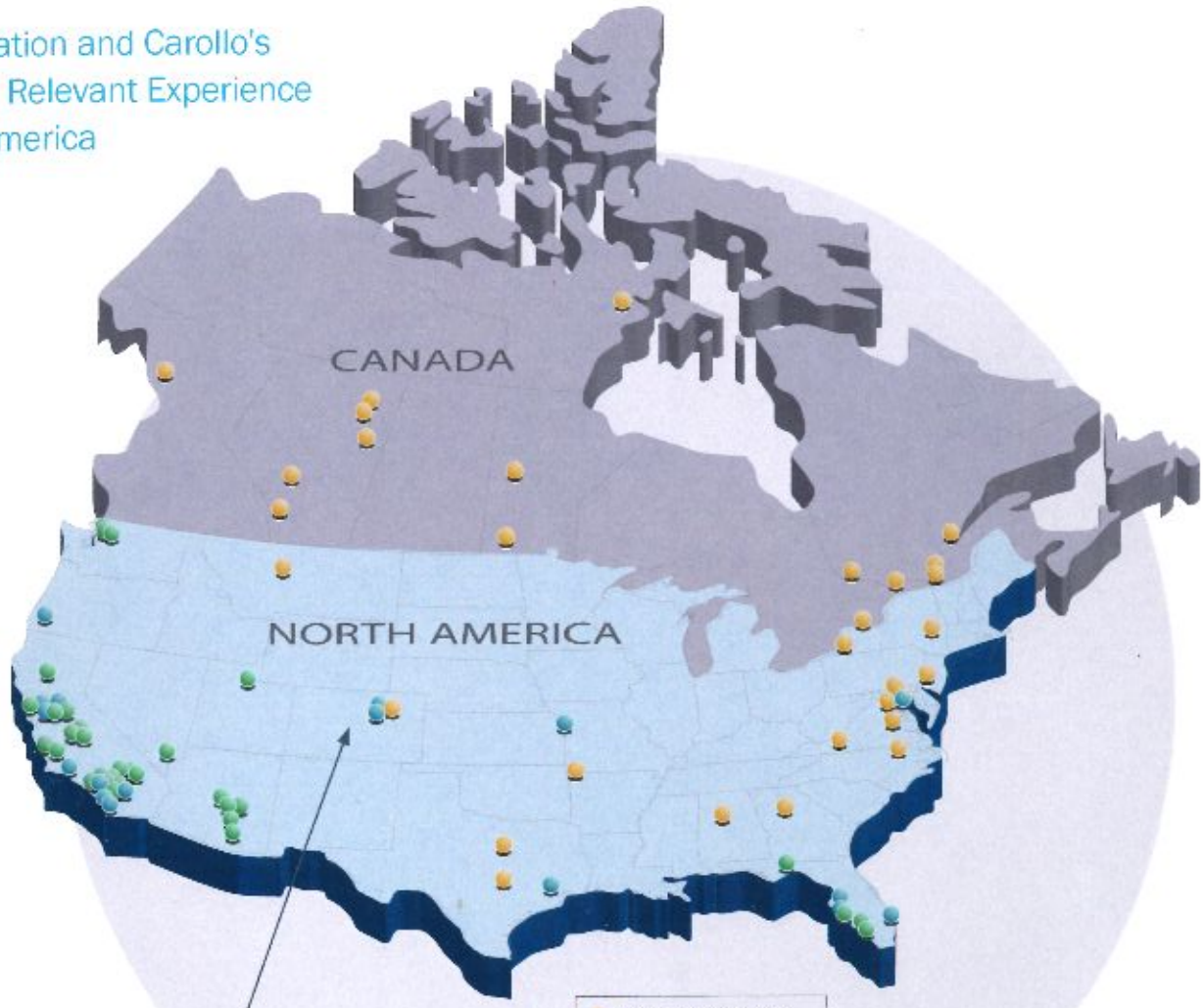
Team Member	Biography
 LED **5** RECENT WASTEWATER IMPLEMENTATION PLANS FOR MOUNTAIN COMMUNITIES **Leanne Miller, PE** *Carollo Project Manager*	Leanne brings over 11 years of water and wastewater planning, design, construction, and optimization experience for treatment plants and infrastructure. She has authored multiple water and wastewater planning studies for communities throughout Colorado, such as Grand Junction, Montrose, Ouray, Orchard City, and Crested Butte. For this project, she will support hydraulic model development, solids processing and biosolids management strategy, cost estimating for developed solutions, evaluation of equipment acquisition, and development of the phased implementation plan. Leanne is known for her client centered, collaborative approach and is located in Glenwood Springs, allowing her to provide cost-effective onsite support if needed throughout the project. Her experience includes: ▪ Persigo Wastewater Treatment Plant Master Plan Development for City of Grand Junction, CO ▪ Wastewater Treatment Plant Nutrient Removal Optimization for City of Montrose, CO ▪ WWTP Master Plan for City of Ouray, CO
 OVER **20** SUCCESSFUL MBR PROJECTS **Andew Gilmore, PE** *QA/QC and Technical Advisor*	Andrew has 23 years of professional experience in project management, wastewater treatment process and design, construction administration, water system process and design, civil site design, and cost estimating. He serves as Carollo's wastewater technical practice's Membrane Bioreactor Chief Technologist and is a national expert with both conventional and membrane wastewater treatment technologies. Project experience includes: ▪ Bee Ridge Water Reclamation Facility Expansion and Upgrade to Advanced Wastewater Treatment for Sarasota County, FL ▪ Robert W. Hite Northern Treatment Plant Owner's Advisor – PAR 1088 for Metro Wastewater Reclamation District, CO ▪ Wastewater Reclamation Owner's Advisor for Hi-Desert Water District, CA
 WORKED WITH **10** LOCAL UTILITIES ON RECENT NUTRIENT REMOVAL PROJECTS **Becky Luna, PE** *Solids and Biosolids Management*	Becky is respected throughout the industry for her expertise in solids handling and biogas processes, and for her unwavering commitment to delivering projects that are tailored to clients' specific needs. She brings 18 years of experience focused on wastewater planning, design and construction. Becky is known for her hands-on, collaborative approach with nutrient removal projects. Project experience includes: ▪ Wastewater Planning, Regulatory Assistance, and Other Services for Eagle River Water and Sanitation District, CO ▪ Persigo Wastewater Treatment Plant Master Plan Development for City of Grand Junction, CO ▪ Wastewater Treatment Plant Nutrient Removal Optimization for City of Montrose, CO
 PROVIDED HYDRAULC MODELING FOR **6** FACILITIES IN COLORADO **Bryan Coday, PhD, PE** *Project Engineer and Hydraulic Modeling*	Bryan is a lead technologist with Carollo specializing in wastewater process performance optimization, process hydraulic modeling, and the planning and design of wastewater treatment facilities. He has developed advanced and dynamic BioWin models to assess nutrient removal improvements several Colorado utilities and is trusted for his expertise in process and hydraulic modeling, data evaluations, condition assessments, design drawings, and report writing. His experience includes: ▪ Wastewater Planning, Regulatory Assistance, and Other Services for Eagle River Water and Sanitation District, CO ▪ Persigo Wastewater Treatment Plant Master Plan Development for City of Grand Junction, CO ▪ Wastewater Treatment Plant Nutrient Removal Optimization for City of Montrose, CO
 KEY ROLE IN **5** COLORADO ALTERNATIVE DELIVERY PROJECTS **Jeff Berlin, PE** *Implementation Plan*	Jeff brings 20 years of experience in wastewater treatment planning, design, operations, construction administration, and cost estimating. He has helped cities across Colorado comply with Regulation 85 and meet their nutrient removal needs and has been serving Colorado clients, for more than 16 years. His Colorado wastewater design experience includes projects for the Eagle River Water and Sanitation District, Cities of Boulder, Longmont, Greeley, and Loveland, as well as for Metro Wastewater Reclamation District. Project experience includes: ▪ Wastewater Planning, Regulatory Assistance, and Other Services for Eagle River Water and Sanitation District, CO ▪ WPCF Treatment and Nutrient Master Plan and Design for City of Greeley, CO ▪ WWTP Nutrient Removal Planning Study for City of Longmont, CO

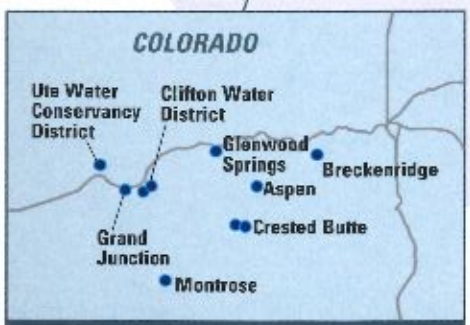
Relevant Project Experience

AN INTEGRATED TEAM WITH SHARED EXPERIENCE

H_2O Innovation and Carollo team members have become trusted advisors on innovative wastewater treatment plant expansion retrofits for utilities throughout North America. Our varied experience brings the right resources to help you make informed decisions, giving you the confidence in the path ahead of the TRWWTP Expansion.

H_2O Innovation and Carollo's Combined Relevant Experience in North America





Carollo's Experience with Colorado Mountain and Western Slope Communities

CHARLES A. STRAIN WTP MICROFILTRATION/ULTRAFILTRATION PROGRESSIVE DESIGN-BUILD

CLIFTON WATER DISTRICT, COLORADO

As the design engineer, Carollo completed the design and construction of this 12 mgd membrane filtration water treatment plant. This progressive design-build project utilized 3D design and frequent meetings with the District early in the design phase to make important decisions that kept the project on track. Maintaining operation of the existing water treatment facility during construction demanded a high-level of collaboration between the District, Carollo, and the design-builder to maintain water quality and ensure the success of the project. This project helped meet the District's goal of applying leading edge water treatment technologies to provide superior drinking water to their customers. The use of an open platform for the membrane system allowed the District to take advantage of lower project capital costs, the potential for system customization, and lower life-cycle costs without compromising long-term membrane module performance and warranties. H_2O Innovation served as the equipment supplier on this project. We designed the flexible, open platform membrane technology to meet the project design criteria. H_2O also provided the project integration and controls for the facility. The project was the first surface-water open-platform application in North America.

REFERENCE

Dale Tooker | Manager
970-434-7328
dtooker@cliftonwaterdistrict.org

PERSONNEL INVOLVED

Fraser Kent, Darren O'Neil, Mark Keller, Chad Green

STATUS

Completed 2016

SBR TO flexMBR™ RETROFIT SOLUTION

CITY OF DECATUR, ARKANSAS

The City of Decatur wastewater treatment plant operated as a Sequencing Batch Reactor (SBR) for over 10 years. The facility reached its maximum capacity of 2.2 MGD and was struggling to achieve the required effluent criteria. A design-build team determined that retrofit of SBR into a MBR. H_2O Innovation was chosen as the MBR supplier to expand the capacity to 4.6 MGD based on their competitiveness and unique design approach. Virtually all the existing infrastructure was leveraged for the MBR retrofit. The membrane system employs H_2O Innovation's flexMBR™ design and highlighted energy savings and SCADA integration. The flexMBR™ system includes a universal platform support system designed to fit most MBR modules covering an acceptable membrane surface area range.

The unique variable influent trends for the City of Decatur facility allowed an energy saving controls strategy to be implemented. Additionally, the design included blower VFDs and dissolved oxygen control loops leading to an extremely energy efficient process.

The SCADA developed by H_2O Innovation included a new state-of-the-art 55-inch touchscreen SCADA control panel. It also allowed integration of the existing headworks, dewatering system, influent pumps, and UV system in addition to the new MBR controls system. Extensive process monitoring functionality and the addition of automated report generation was provided using the Ignition software platform.

REFERENCE

James Boston | Public Works Manager
479-212-0726
jboston.cod@gmail.com

PERSONNEL INVOLVED

Fraser Kent, Darren O'Neil, Katherine Scott, Adam Moore, Paul Bartlett

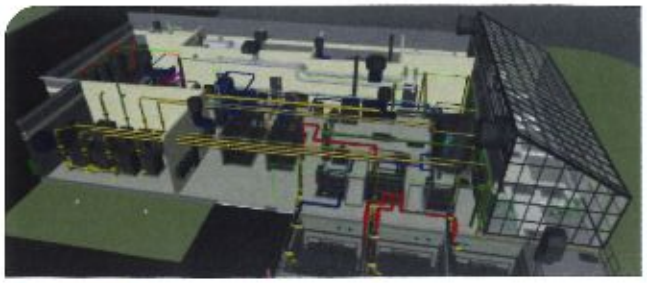
STATUS

Completed 2019

VIRGINIA WATER HUB MBR-RO

SUSTAINABLE WATER, VIRIGINA

Sustainable Water, an industrial manufacturer located in Virginia, was interested in novel ways of managing their water use and environmental impact. Historically they had discharged their wastewater to sewer and paid the city for potable water in their cooling tower makeup. H_2O Innovation worked to develop a cost-effective solution to construct a 0.71 mgd onsite system to treat wastewater to an industrial reuse level for cooling tower application. An MBR was selected as the initial treatment process, with an RO downstream. Due to the variable nature and flow of the industrial waste, the facility has integrated flexibility in the MBR design—a sewer interceptor pulls wastewater from the existing sewer up to a maximum flow and sends this flow to an equalization tank via fine screens. The wastewater is treated by anoxic and aerobic biological treatment followed by a swing post-anoxic tank that can be converted to additional aerobic volume as influent water quality demands. From this single bioreactor, the mixed liquor is pumped to three membrane trains, each of which is fitted with a flexMBR™ system. The flexMBR™ system includes a universal platform support system designed to fit most MBR modules covering an acceptable membrane surface area range. The robust plant controls accommodate a pre-determined range of membrane manufacturer operating parameters, including air scour rates, permeation cycles, cleaning frequency, and other process control parameters, such as sludge wasting to control MLSS.



REFERENCE

Eric Lohan | Director of Technology
434-242-1693
eric.lohan@sustainablewater.com

PERSONNEL INVOLVED

Fraser Kent, Darren O'Neil, Katherine Scott, Paul Bartlett

STATUS

Completed 2019

flexMBR™ INDUSTRIAL RETROFIT

PRIVATE INDUSTRIAL CLIENT, NEW YORK

A Diesel Engine Manufacturer, was experiencing problems with their aging wastewater treatment plant. The facility's influent included domestic and industrial waste. The average daily flowrate of 50,000 GPD was treated with a conventional activated sludge system but was unable to meet effluent discharge limits due to the challenging wastewater characteristics. H_2O Innovation was selected to provide a flexMBR™ demonstration pilot where both a ceramic membrane and PTFE membrane were evaluated for a full-scale facility over the course of eight months.

Based on the results of the pilot study, the ceramic membrane was selected as the technology of choice, and a full-scale facility was constructed. In order to expedite the execution of the project and take advantage of offsite manufacturing, a pre-fabricated approach was used, including five stainless steel tanks and a pre-engineered shippable building that houses the ancillary equipment. The pre-fabrication allowed the site construction to commence and the tanks and building to be constructed in parallel, saving approximately 8-12 months in the overall schedule.

H_2O Innovation's design involves fine screening followed by flow equalization and three trains of Anoxic -› Aerobic Membrane -› Filtration process flows.

REFERENCE

Christian Brinegar | Facilities Engineer
716-397-6615
christian.brinegar@cummins.com

PERSONNEL INVOLVED

Fraser Kent, Darren O'Neil, Adam Moore, Paul Bartlett

STATUS

Completed 2019

WASTEWATER PLANNING, REGULATORY ASSISTANCE, AND OTHER SERVICES

EAGLE RIVER WATER AND SANITATION DISTRICT, COLORADO

Carollo developed a master plan for three interconnected wastewater treatment plants (total combined capacity of 10 mgd) that considered flow and nutrient trading to develop the best-value and lowest life-cycle cost approach for achieving Regulation 85 and 31 compliance. Carollo developed and calibrated BioWin models for all three plants and identified optimization opportunities at each facility with plant staff. The project team conducted field testing with operations for alternative process control strategies to provide recommendations that were effective and acceptable to treatment staff. A major element of the project was performing a condition assessment to evaluate remaining useful life of the process/mechanical, structural, electrical/instrumentation and control, and HVAC systems at the three plants. With the results from the condition assessment, Carollo identified a prioritized list of asset replacement projects and an overall sequence of facility improvements.

Based on recommendations from the master plan, Carollo was selected to design the $50M Avon Wastewater Treatment Facility Biological Nutrient Removal Upgrades project, including conversion from an MLE to an A2O process, with flexibility to operate in the 5-Stage Bardenpho configuration. Construction includes expansion of existing aeration basin volume; construction of a third secondary clarifier; and replacement of major equipment for screening, grit removal, primary clarification, equalization, and electrical infrastructure. This construction project is in progress and is being delivered using the Construction Manager at-Risk (CMAR) alternative project delivery method.

REFERENCE

Siri Roman | Director of Operations
970-476-7480
sroman@erwsd.org

PERSONNEL INVOLVED

Becky Luna, Bryan Coday, Jeff Berlin, Jason Rozgony, Mark Keller, Chad Green

STATUS

Ongoing construction

PERSIGO WASTEWATER TREATMENT PLANT MASTER PLAN

CITY OF GRAND JUNCTION, COLORADO

For this project, Carollo is currently developing a comprehensive review of the existing treatment processes and recommending improvements using a holistic approach. This facility master plan is intended to develop a roadmap for achieving operational resiliency and reliability to meet the wastewater needs of users within the 201 Service Area. The master plan will identify the wastewater infrastructure needed to serve the anticipated growth projections for future land uses identified in the City's 2020 Comprehensive Plan. Additionally, the master plan will ensure the facility meets the current and future regulatory and statutory requirements while reinvesting in asset revitalization and replacement.

REFERENCE

Kurt Carson | Wastewater Services Manager
970-256-4171
kurtc@gjcity.org

PERSONNEL INVOLVED

Leanne Miller, Bryan Coday, Becky Luna, Jason Rozgony

STATUS

Ongoing

WASTEWATER TREATMENT PLANT NUTRIENT REMOVAL OPTIMIZATION

CITY OF MONTROSE, COLORADO

Carollo completed an evaluation of the ability of the existing wastewater treatment plant to improve biological nutrient removal and identify opportunities for implementing phosphorus removal. Working together with plant staff, the Carollo team developed an understanding of the existing processes to create a roadmap for the facility to achieve future effluent nitrogen and phosphorus limits, focusing specifically on Regulation 85 and the Incentive Program. The plant staff's extensive historical understanding of the process in conjunction with a calibrated BioWin process model and historical process data were used to highlight process optimization opportunities that could be full-scale tested as part of Phase 2 of this study.

As part of Phase 2, Carollo is conducting a full-scale test in coordination with plant staff to optimize DO concentrations in the oxidation ditches by automating and adjusting brush aerator speed to facilitate conditions for simultaneous nitrification and nitrification. The full-scale testing is a 16-week test, which also includes pilot testing ammonia and nitrate instrumentation. Results of this study will be used to develop a final approach to achieve future effluent nitrogen and phosphorus discharge limits.

REFERENCE

David Bries, CET, CPM | Utilities Manager
970-240-1484
dbries@ci.montrose.co.us

PERSONNEL INVOLVED

Leanne Miller, Bryan Coday, Becky Luna, Jason Rozgony

STATUS

Ongoing

BEE RIDGE WATER RECLAMATION FACILITY EXPANSION AND UPGRADE TO ADVANCED WASTEWATER TREATMENT

SARASOTA COUNTY, FLORIDA

The County selected Carollo to evaluate design upgrades and requirements to expand the facility from 12 mgd monthly average daily flow to 18 mgd maximum monthly average daily flow (MMADF) and convert its process to meet Florida's advanced wastewater treatment (AWT) requirements.

Carollo evaluated seven treatment alternatives to determine the best option to meet the County's requirements for AWT. The evaluations included BNR process in conventional activated sludge (CAS) arrangements and alternative technologies, such as MBR, IFAS, AGS, and BAS. A suite of decision criteria was used during a comparative analysis of each alternative. The County's priorities for each criterion were applied at a workshop and MBR, CAS, and IFAS alternatives were short-listed for further evaluations. Short listed evaluations assessed hydraulics, site layouts, additional project-specific design criteria, and various economic and non-economic criteria, such as capital and O&M costs, site constraints, and flexibility for future upgrades. Ultimately, a Modified Bardenpho treatment process with MBR was selected, as it required a much smaller footprint, allowing flexibility for future expansion. The MBR also provides future opportunities to implement high-level treatment options, such as indirect non-potable reuse.

After completion of the preliminary design phase, Carollo assisted the County in selecting a CMAR, including development of Request for Proposal documents, responses to proposer questions, and preparation of addenda. The County and Carollo are currently negotiating a scope of services for CMAR preconstruction activities.

REFERENCE

Greg Rouse, PE | Engineering Manager
941-861-0548
grouse@scgov.net

PERSONNEL INVOLVED

Andrew Gilmore

STATUS

Ongoing

Project Understanding & Approach

A successful project begins with a thoughtful and actionable plan which leverages experience in alternative project delivery, mountain construction complexity, and wastewater process design. Our team's combined experience provides this breath of expertise coupled with a focus on customer service and collaboration.

The Town of Telluride is looking for a professional wastewater advisor to serve as a partner through the implementation of a phased expansion project for the TRWWTP over the next 5-years. Our team lead, Fraser Kent, has spent the past two years reviewing the wastewater challenges facing the Town. Through multiple meetings with your staff and key stakeholders, he has become intimately familiar with these challenges and has developed a cost-effective retrofit option to expand the existing facility.

We listened, and what we heard from your staff and key stakeholders shaped our approach to providing the professional wastewater advisor services on the following four key goals.

- Develop a cost-effective pathway to achieve capacity and regulatory requirements.
- Re-using the existing infrastructure "where practical" while improving process efficiency, operability, and facility redundancy/reliability.
- Minimize risk to the Town through selection of the appropriate alternative project delivery method, equipment procurement strategies, and development of appropriate contract documents.
- Understanding construction complexity common to mountain communities like Telluride and developing a plan to achieve fast tracked schedule goals within these constraints.

To accomplish these goals, the five tasks included on the request for proposal fall into three project phases: procurement, implementation plan and preliminary design, and execution.

PROCUREMENT

Task 1

- Selection of Alternative Project Delivery Method
- Support Engineer/Construction Contractor RFP and contract document
- Review Engineer/Construction Contractor proposals and provide evaulation and recommended selection

IMPLEMENTATION PLAN AND PRELIMINARY DESIGN

Tasks 2–4

- Confirm the basis of design
- Optimize the facility hydraulic grade line
- Provide liquid and solids process solutions
- Develop the preliminary process design
- Create a thoughtful, cost-effective, and flexible biosolids management strategy
- Deliver a 5-year implementation plan
- Provide an equipment acquisition strategy consistent with the Town's goals

EXECUTION

Task 5

- Support the City throughout the alternative delivery process to ensure the vision is realized

Our team's collaborative approach and scope of work is organized to prioritize your input and guidance using seven interim deliverables and four workshops as shown in the project schedule on page 28. This approach provides multiple decision points to achieve consensus for future objectives and obtain buy-in at every step of the process. The following pages further outline our understanding, approach, and scope of services to deliver an actionable implementation plan for a successful, cost-effective expansion project within the budgetary and schedule goals.

PROCUREMENT

Our project delivery experts will listen carefully to your needs, then apply proven assessment methods to efficiently identify the best alternative delivery method to meet your project goals.

The TRWWTP expansion project will be a multi-year program which requires thoughtful planning and preparation for successful execution. Developing a well thought out program for procuring the Engineer/Construction Contractor team will be a critical step to delivering the implementation plan program cost effectively, on schedule, and while minimizing risk. As your wastewater advisor, our team will guide you through the process of selecting the delivery method that best meets the needs of your wastewater treatment plant improvement program. Step one in this process starts by identifying and understanding the key criteria which are driving the goals and objectives you have for your project. Step two is focused on evaluating these criteria with respect to the five delivery methods that municipal owners, engineers, and contractors have experience with on water/wastewater projects in Colorado and across the United States. Each of these delivery methods have varying capacities for meeting the Town's goals. We have provided the table below, which shows a high level comparison of how several typical project criteria are met by each delivery method. We will work with the Town to prioritize your identified project selection criteria, and then match these criteria to the delivery model that best meets them. Once the project delivery method has been selected, your criteria will also be used to determine the best procurement approach. Whether the procurement approach is a one-step or two-step procurement process, we will prepare documentation that will be efficient for the Town, as well as maximize interest in potential respondents.

Delivery Model Characteristic Comparison

	Design-Bid-Build	Competitive Sealed Proposals	Design/CMAR	Lump Sum Design-Build	Progressive Design-Build
Selection Criteria	Price based	Qualifications based with price considerations	Qualifications based with price considerations	Primarily priced based	Qualifications based with price considerations
Owner Involvement and Flexibility	Good through detailed design. Minimal after construction contract is awarded	Good through detailed design. Provides for modifications after selection	Good throughout entire design and construction phases	Good through preliminary design. Minimal after DB contract is awarded	Good throughout entire design and construction phases
Schedule	Slow	Slowest	Faster	Fastest	Faster
Number of Contracts to manage (with OA)	3	3	3	3	2
Potential to Deliver "Least Cost"	Very good (in favorable market conditions with good design)	Very good to great (in favorable market conditions with good design)	Good to very good	Good	Very good to great
Cost Control	Reduced control once construction contract is awarded	Some flexibility in cost control after selection	Later cost identification. More control throughout entire project	Early cost identification. Least control after preliminary design is advanced	Later cost identification. Most control throughout entire project
Potential for Change Orders and Claims	Higher	Lower	Lower	Higher	Lowest

The delivery method that is most suitable for the Town will depend on the Town's priorities, such as schedule, cost control, owner involvement, and flexibility.

We recommend keeping the procurement approach streamlined and concise. Overly complex and extended procurement cycles will discourage prospective respondents due to the time and expense required in getting to contract award. In our experience as an Owner's Advisor, we know the most efficient way to select and get an Engineer/Construction Contractor hired is with a one-step RFQ. There is little material needed for a design criteria package (which compresses the procurement cycle) and the basis of selection is focused on firm qualifications, past experience with similar wastewater projects, and the experience of their key team members.

Procurement Task Workshops and Deliverables

- Workshop 1: Kickoff, Vision, and Site Visit.
- Draft RFP Comments.
- Draft Engineer/Construction Contractor team contract comments.
- Evaluation summary and recommendation for the selection of the Engineer/Construction Contractor team.

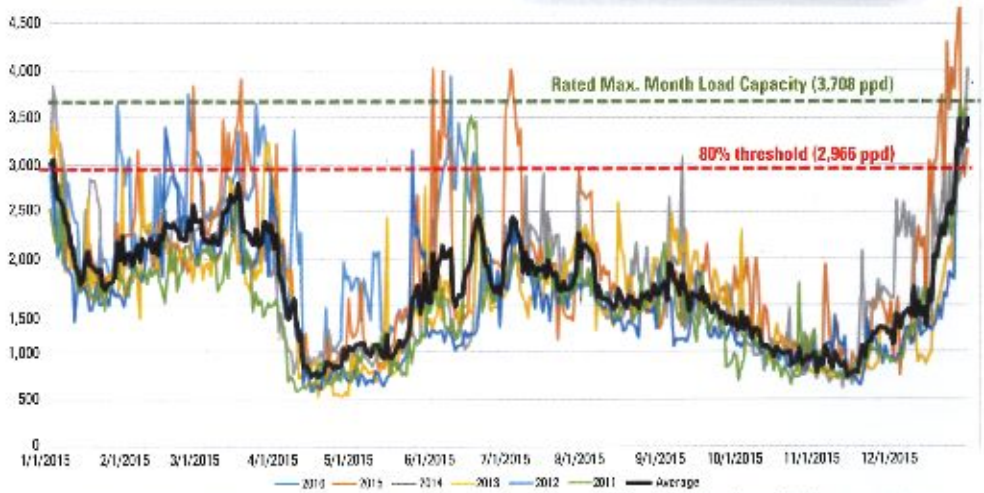
IMPLEMENTATION PLAN AND PRELIMINARY DESIGN

We will deliver a phased implementation plan to meet capacity expansion requirements, discharge permit compliance goals as well as satisfy mountain construction boundaries while respecting budget constraints.

The goal of the implementation plan is to provide a detailed set of next steps—a prioritization of recommended steps for the project describing an implementation pathway. You have already invested in developing a plan to meet future objectives and we want to leverage these efforts to reduce cost and schedule impacts associated with "re-work". To confirm the recommendations in the 2017 Master Plan and development of a 5-year implementation plan we have outlined the four steps of our approach—basis of design, plant hydraulics, developing solutions, and implementation planning.

Basis of Design

Dramatic growth in flows and especially organic loads to the TRWWTP were discussed in the 2017 Master Plan and serve as a call to action. While not yet an emergency, initiating this facility expansion is pressing and a well-structured plan is crucial to getting the necessary capacity improvements in place. You are already operating your facility beyond CDPHE's wastewater planning trigger (80 percent of rated capacity) and were quickly approaching the State's capacity expansion trigger (95 percent of rated capacity) as of the 2017 Master Plan. Construction capacity improvements will need to be operational before the facility reaches 100 percent capacity —likely by 2023/2024 based prior projections.



Prior loading data show seasonal trends and regular exceedances of expansion thresholds, suggesting a near-term expansion project.

We have analyzed the previous flow and organic (BOD) load projections from the 2017 Master Plan. This evaluation is now over five years old and lacks a comprehensive evaluation of influent nutrient loading that will impact how the Town plans and designs for Regulation 85 and Regulation 31 effluent nutrient limits. We suggest revisiting flow projections and capacity needs with you to define the exact near-term capacity rating that matches growth projections, and a logical modular facility expansion considering economies of scale. While the definition of the average daily maximum month flow (ADMMF) and load conditions is important for demonstrating rated design capacity with CDPHE, the definition of the future peak hour flows and loads from peak tourist seasons are also critical for design. We have experience in quantifying infiltration and inflow (I/I) contributions and separating these

from peak hydraulic flow projections. We also are adept at characterizing the touristic nature of mountain communities to ensure you have adequate capacity and flexibility to confidently respond to seasonally variable conditions.

The effluent design conditions are equally as critical as the influent design conditions. Targeting future anticipated effluent limits as part of this effort, reduces the need for another significant capital project within the 20-year planning horizon. Additionally, reducing nutrients in the near-term allows the Town to take advantage of the voluntary incentive program offer by CDPHE to possibly defer Regulation 31 limits.

Your discharge permit issued December 2020 includes a number of new limits, such as the 2026 potential dissolved Copper limit. Other near term regulatory concerns to consider in the planning effort associated with this project are summarized below. Due to the costs associated with construction in remote mountain communities and the small footprint of the existing site you need reliable, efficient technology to achieve future regulatory requirements. Our team recommends prioritizing anticipated future effluent limits as a component of this expansion project to recognize cost savings and capitalize on effluent limit incentives from the voluntary incentive program.

CDPHE has a current back log of several months. The site application will need to be published and reviewed for commenting by a number of reviewing agencies before CDPHE will start its review. To keep the project on schedule, we need to hit the ground running with an updated flow and load evaluation and gain clear consensus with your stakeholders. A redefinition of the project later on can significantly delay your schedule.

Regulation 85 - The nutrient reductions required by Regulation 85, "Nutrients Management Control Regulation," are implemented through effluent TIN and TP limits as a running annual median of 15 mg/L and 1 mg/L, respectively. Regulation 85 implementation is delayed until December 31, 2027 for dischargers who discharge to a low priority watershed, like the TRWWTP. Planning for Regulation 85 limits at a minimum are recommended. Your permit also includes a daily maximum TIN limit of 17 mg/L that is effective starting in 2025. We anticipate the Town will receive nutrient limits as part of the next permit renewal cycle with limits effective starting between the years 2027 and 2029.

Regulation 31 - During the Regulation 85 and Regulation 31 Rulemaking Hearings in 2017, the State delayed adoption of TN and TP standards for rivers until 2027. Anticipated future nutrient limits under Regulation 31 therefore remain uncertain. We will work with the Town to define anticipated future effluent nutrient discharge limits required to meet the Regulation 31 instream standards, assuming the current dilution credit and the available instream background pollutant concentrations. TN and TP limits associated with Regulation 31 would likely become effective as annual median limits sometime between 2032 and 2034 based on the permitting cycle, assuming no earned credit under the Incentive Program.

Metals - Your CDPS permit lists monitoring requirements and limits for several metals. While you currently meet the limits for most the listed metals, your seasonally variable effluent copper concentrations (typically 15 to 20 µg/L) exceed the future limits starting in 2026 (12 µg/L 30-day average and 0.95 µg/L 2-year average). Your last Master Plan provided a first glimpse at some possible solutions, but did not yet conduct a systematic process analysis, predict the cost-effectiveness of proposed alternatives, or develop a practical plan for how to implement solutions at the TRWWTP. The good news is that you are already proactively working with LRE on your current and future effluent permit compliance. We will coordinate and verify effluent copper compliance assumptions with you, LRE, and CDPHE, while conducting an evaluation in-parallel on what technologies can meet your effluent permit requirements should additional treatment be needed.

Temperature - In compliance with the new permit requirements, your facility is currently conducting temperature monitoring in the final effluent and likely in the San Miguel River. As a result, the Town may receive temperature limits as part of a future permit renewal, should the decision be made that there is reasonable potential for the facility to cause or contribute to an exceedance of the water quality standard for temperature. Our team is familiar with efficient wastewater cooling technologies currently on the market and has worked with other Colorado facilities to identify and evaluate opportunities to meet future effluent temperature limits. We will bring this experience to bear on this project and provide solutions to replace the aging temperature recovery system currently installed at the TRWWTP.

Basis of Design Task Workshops and Deliverables

- Workshop 1: Kickoff, Vision, and Site Visit.
- Technical Memorandum: Basis of Design.

Developing an optimized hydraulic grade line of the existing facility allows us to understand hydraulic bottlenecks and evaluate alternative flow pathways to reduce energy consumption and minimize future O&M costs.

The existing facility was constructed in three phases between 1987 and 2001. Our evaluation of the existing hydraulic grade line and future hydraulic grade line will evaluate site layout opportunities and options to reduce multiple points of pumping through the TRWWTP. To characterize the existing facility hydraulics, bottlenecks, and site limitations, as well as opportunities for hydraulic optimization, this task includes the following components:

- **Site survey:** We will partner with local surveyor, Bulson Surveying to develop a site survey which will be used during optimization of the site layout, confirmation of critical structure top of wall elevations, and water surface elevations (WSEs) during current flow conditions for model calibration. The developed site survey can also be used by the Engineer/ Construction Contractor team during design and will expedite the next steps for the design team.
- **Raw sewage lift station and headworks review:** Our team will review available equipment information and facility assessments to understand redundancy, equipment, and operational shortcomings and work with the Town in developing a path forward for an efficient and reliable influent pumping and headworks configuration.

To model the hydraulic and energy grade lines through the facility we will use our Hydraulix® modeling software. The program estimates the WSEs at a given point in the process stream by creating a hydraulic profile of the entire treatment facility. This process is a fundamental step to understanding the opportunities to reuse existing infrastructure while minimizing risk and complications during construction.

Plant Hydraulics Task Workshops and Deliverables

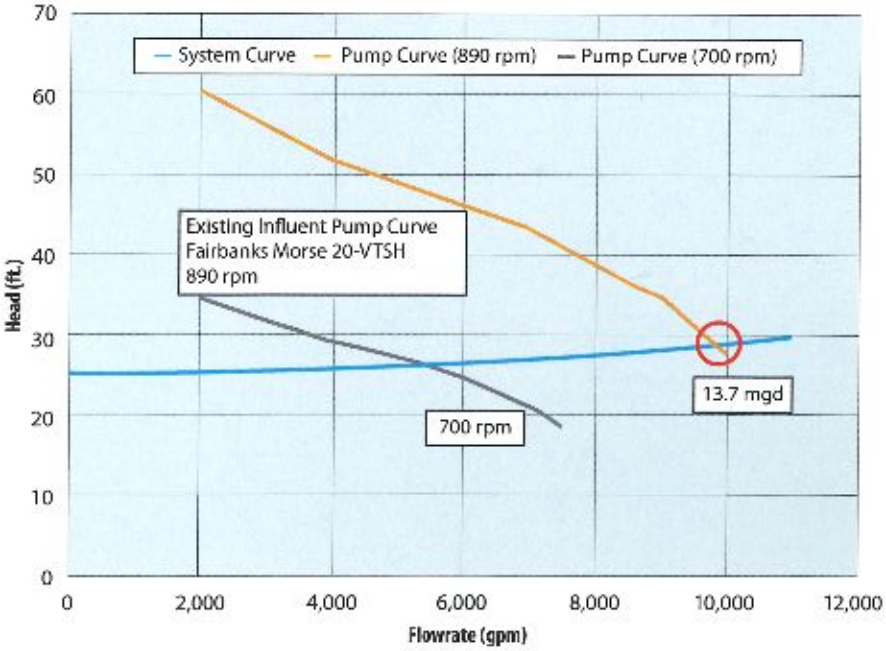
- Workshop 1: Kickoff, Vision, and Site Visit.
- Workshop 2: Liquid Stream Recommendations and Hydraulic Grade Line.
- Technical Memorandum #2 – Existing and Future Hydraulic Model.

Hydraulix® BY carollo

Carollo's internal hydraulic model is an Excel based program specifically designed for evaluation of wastewater treatment plant hydraulics.

The following objectives will be achieved through this evaluation to provide a final product that facilitates ease of operation and process reliability and efficiency.

1. Determine potential hydraulic limitations and flow restrictions of the liquid stream processes.
2. Identify potential corrective measures and impacts from new process elements as part of the alternative analysis.
3. Summarize limitations and required upgrades to provide sufficient hydraulic capacity of the liquid stream to meet current and future flows.
4. Evaluate alternative flow configurations to reduce energy use and maximize hydraulic efficiencies.



In addition to flow paths, detailed hydraulic analysis will assess pumping requirements, capacity, and flow ranges.

Our head start will allow us to rapidly assess existing assets for replacement or optimization, as well as streamline the overall design direction for your facility to meet your short and long term goals.

Our team has visited the facility and has worked with your staff to explore preliminary design concepts for the proposed expansion retrofit. Key aspects of the proposed improvements are shown on the figure below. The concepts below will be discussed in a workshop with Town staff in a collaborative fashion, with the goal to obtain ideas from Town staff and work towards a future vision that meets the near and long term goals.

Key Retrofit Features to Make this Project a Success

Dewatering

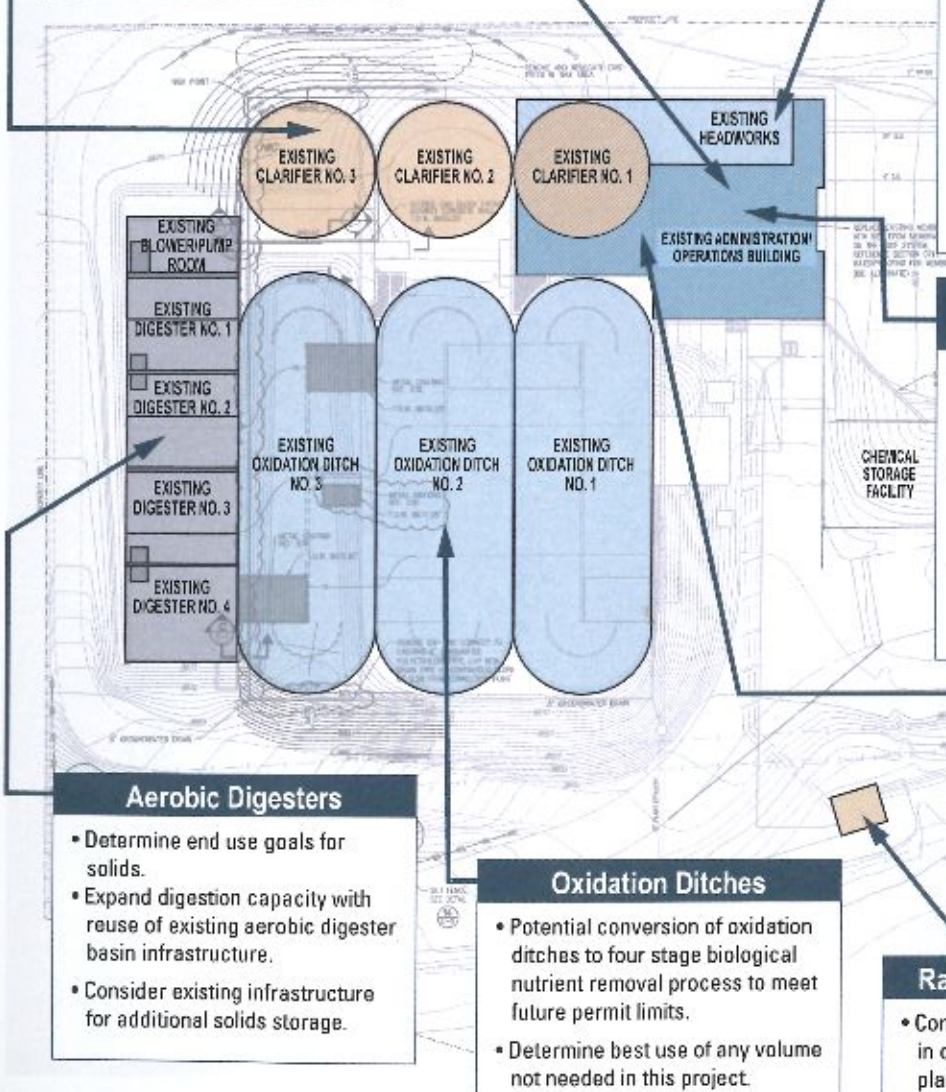
- Review Parkson Rotary Drum thickeners.
- Evaluate volute dewatering process.
- Confirm adequate capacity, redundancy, and storage for design period.

Secondary Clarifiers

- Re-purpose existing clarifier 1 for membrane train installation.
- Consider existing clarifier volume for equalization or potential solids thickening process.

Headworks/Preliminary Treatment

- Add fine screens to protect the membranes.
- Further evaluate the need for grit removal or possible variance request from CDPHE.
- Evaluate location for new headworks and eliminate double pumping, for long-term energy savings.
- Improve operator health and safety with improved containment, conveyance, and treatment of odors along with improved air quality into the operators spaces.



Administrative Building/ Lab/SCADA:

- Evaluate space previously used by animal control for administrative services.
- Identify optimal approach to controls integration of existing and new equipment.
- Improve SCADA to include laboratory data integrated with analogue parameter trending.

UV Disinfection

- Increase UV capacity for WWTP expansion and provide redundancy for critical disinfection process.
- Pontential UV optimization after membrane treatment for lower lifecycle costs.

Aerobic Digesters

- Determine end use goals for solids.
- Expand digestion capacity with reuse of existing aerobic digester basin infrastructure.
- Consider existing infrastructure for additional solids storage.

Oxidation Ditches

- Potential conversion of oxidation ditches to four stage biological nutrient removal process to meet future permit limits.
- Determine best use of any volume not needed in this project.

Raw Sewage Lift Station

- Consider hydraulic improvements in conjunction with headworks planning to eliminate pumping influent twice and improve system redundancy, operability, and staff health and safety.

MBR technology will maximize the reuse of existing infrastructure, provide exceptional effluent water quality, and defer capital expenditures.

The Town of Telluride is at a crossroads with the selection of the future technology to meet nutrient limits at the forefront of that decision. There are several options which have been presented in prior reports and certainly meetings with parties interested in participating in this expansion project. Some of the options available to the Town are:

- Granular Sludge (such as Nereda).
- Moving Bed Bioreactor Reactor.
- Membrane Bioreactor.

Each of these options hold the potential to upgrade the existing oxidation ditch to meet the stringent nutrient requirements. Our analysis suggests that an MBR is the most suitable pathway forward for several key reasons:

1. Proven operation in cold climates.
2. Proven ability to meet stringent nutrient requirements.
3. Proven intensification approach that is not bleeding edge and reduces risks to the Town.
4. Ability to get best value pricing by using open platform membrane equipment approach.
5. Ability to modify the existing facility with the lowest cost and least interruptions to the existing plant.

Oxidation Ditch Modifications into an MBR meets Telluride's Future Permit Requirements

Modifying the oxidation ditch into an MBR will provide a robust, flexible, and reliable system for the Town. The process configation shown will provide for enhanced biological nutrient removal (nitorgen and phosphorus).

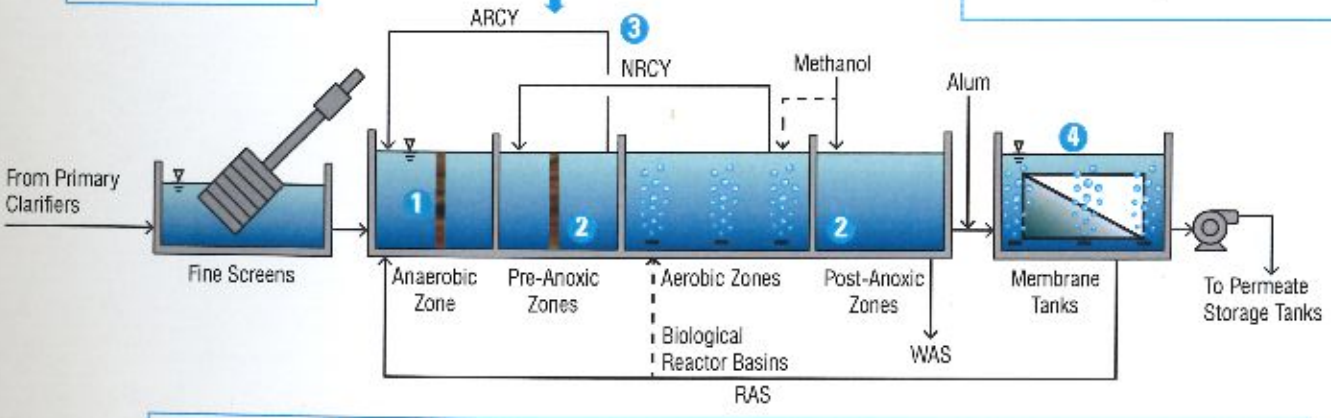
1 *New Fine Screens* *will be required to protect the membranes but will also benefit operation by reducing the amount of debris that gets into the plant.*

2 *Swing Zones* *Allows testing the benefits of adjusting Pre-Anoxic and Post-Anoxic zone sizing for seasonal conditions.*

5 

Modify to using stainless steel baffles allows for added flexibilty if in the future you need to reduce or expand the sizes of zones. You are not locked into the configuration.

3 *RAS and IMLR Rates and Return Locations* *Allows testing of alternate RAS & IMLR approaches to prevent oxygen poisoning and optimize conditions in anaerobic/anoxic zones. For example, high-rate RAS return to aerobic zones and two-step lower IMLR return from aerobic to anoxic, and anoxic to anaerobic zones, as shown here.*

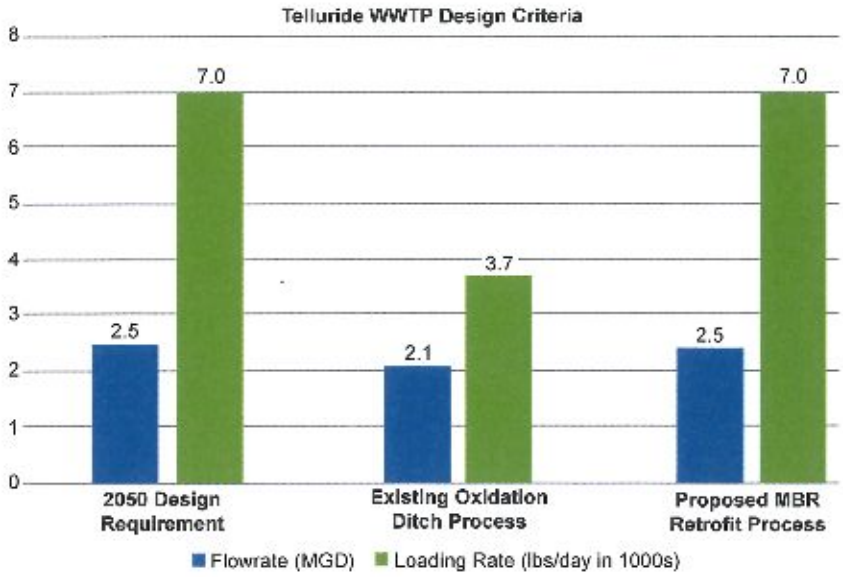


4 *Universal MBR Rack* *Each membrane manufacturer provides a special rack configuration to accommodate their system's design. However, with a bit of additional design thinking, a universal rack system can be designed to accommodate multiple manufacturers. This open platform approach will let the Town select a membrane supplier that is the best value and provide flexibility if in the future to adopt different manufacturers that may advance this process. A key benefit is that the Town is not locked into one supplier's configuration and platform.*

After the review of the alternatives our team recommends proceeding with the recommended membrane bioreactor (MBR) strategy for a secondary treatment approach due to the exceptional water quality, which will achieve anticipated Regulation 31 effluent limits, small footprint, and ability to retrofit into existing infrastructure. The initial proposal for these improvements involves the installation of three (3) MBR trains, allowing an increase in treatment capacity and improved effluent water quality within the confines of the existing structures.

Solutions Task Workshops and Deliverables

- Workshop 2: Liquid Stream Recommendations and Hydraulic Grade Line.
- Technical Memorandum: Liquid Stream Process Recommendations.



The hydraulic and organic loading capacity of the existing oxidation ditch and MBR retrofit as compared to the 2050 design condition demonstrates the opportunities to reuse existing infrastructure.

BENEFITS OF PROPOSED MBR RETROFIT

1 Optimized Operation and Maintenance Costs

An biological nutrient removal MBR provides state-of-the-art biological process design minimizing chemical consumption. The process incorporates pre- and post-anoxic biological zones that minimize alkalinity consumption by returning half of the consumed alkalinity during the denitrification process. Also, the inclusion of an upfront anaerobic biological zone allows the proliferation of polyphosphate accumulating organisms that facilitate biological phosphorus removal to minimize the amount of coagulant needed to reach the effluent criteria. Finally, control and monitoring systems can provide real-time feedback loops and customized metrics to ensure consistent visibility on chemical and power usage to identify areas of potential savings.

2 Minimal New Construction

The biggest cost in any plant upgrade is new construction. Our approach considers the site-specific restrictions and building layout to maximize reuse of the existing infrastructure. Care has been taken to ensure that the system can be upgraded without requiring significant additional land development, significantly reducing the overall project costs.

3 Existing Plant Integration

The retrofit plan ensures that the plant will continue to operate at the required capacity throughout the MBR upgrade. Membranes can be installed in Clarifier 1 to avoid impacting the existing plant. Oxidation ditches can be retrofitted and commissioned on a train-by-train basis to eliminate downtime during the retrofit and avoid interrupting the existing process.

4 Exceptional Water Quality

MBRs have been recognized as a superior wastewater treatment technology with effluent TSS values near zero and the ability to virtually eliminate BOD, phosphorus and total nitrogen. This provides peace of mind that effluent criteria will be consistently met, now and in the future.

Advancing the process design as part of this scope of work will bring focus to the Engineer/ Construction Contractor RFP, zero-in on your goals and needs, and expedite project delivery.

The proposed upgrade approach requires updating the TRWWTP drawing set. At the end of the project a full set of as-built drawings will be provided to the Town that are finalized by the successful Engineer/Construction Contractor Team. However, there are distinct advantages to creating process focused engineering drawings in parallel with the development of the Engineer/Construction Contractor RFP to define the process design. The advantages include:

- **Improved schedule** – Moving forward with preliminary design saves the time it would take to develop these documents after the Engineer/Construction Contractor team is brought on board.
- **Facilitation of Hydraulic Grade Line Optimization** – The development of P&IDs and preliminary process selection for the various unit operations is necessary to complete Task #2 since the hydraulic profile is tied to the unit operations selected.
- **More Representative Evaluations of RFP Responses** – Advancing the preliminary process design prior to the RFP will bring focus to the RFP responses, improving the ability to make representative evaluations of the responses.
- **Improved Efficiency for Engineer/Construction Contractor** – A preliminary process design will allow the successful Engineer/Construction Contractor to commence immediately on other aspects of design such as structural, electrical, mechanical and architectural aspects and avoid the delays and distractions associated with a lack of direction in regard to the process design.

Process Flow Diagrams (PFD)

The basis of design inputs established by our team become inputs in the PFD where the general processes used to achieve the effluent water quality parameters established within the basis of design can be proposed. A PFD acts as a high level vision of how the wastewater treatment process functions.

Piping and Instrumentation Diagrams (P&ID)

The piping and instrumentation diagrams are more detailed than the PFDs and identify equipment, valves, instrumentation and pipe sizes. There is a significant advantage to creating preliminary P&ID drawings early in the process because there are so many ramifications of design elements that cannot be identified without P&ID development. For example, the size of a particular pipe required to transport liquid from a bioreactor to a membrane tank is tied to the optimization of the Hydraulic Grade Line and vice versa. Ultimately, a reasonable set of P&ID drawings brings more focus to the RFP for the Engineers/ Construction Contractors and stakeholders looking to move the project forward.

Layout Drawings for Priority Unit Operations

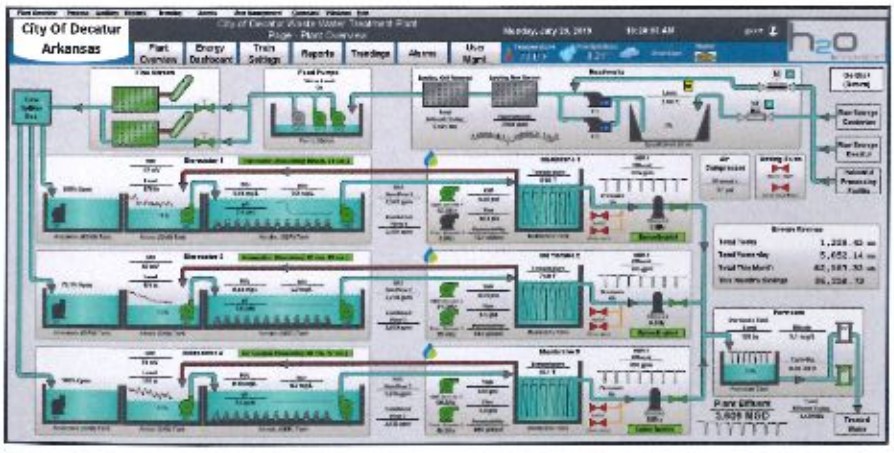
To optimize the reuse of existing infrastructure at the TRWWTP, we will conduct an evaluation of the available spaces and their ability to adequately house new equipment. We will model the proposed equipment in the existing spaces after field verification of dimensions to provide an assessment of process options at a "go/no-go" level. This step eliminates iterations by the successful Engineer/Construction Contractor team. It also feeds the constructability perspective regarding installation restrictions such as limiting doorway or hallway sizes. Furthermore, and perhaps most importantly, the development of these visual proposed upgrades will provide the opportunity for TRWWTP staff to visualize the proposed upgrades and provide comments early in the design process. Staff input is invaluable as the vision of the future treatment process takes shape.

Process Controls and Integration

A process control narrative (also known as a functional description) is an explanation, in words, of how the equipment, valves and instruments interact to function as a unified treatment process. It identifies process boundaries and system reactions to various conditions. It is essentially a summary of how the treatment system "should" work. This document will be developed to compliment the PFD, P&ID and layout models to clarify the manner in which the various unit operations will interact. This is particularly important for the TRWWTP staff to start to explore treatment processes they may be unfamiliar with and provide comments and feedback.

Preliminary Design Task Deliverables

- Liquid Treatment Process Preliminary Design.



Integrating new and existing equipment and processes within a SCADA system ensures unified system monitoring as well as the opportunity to take advantage of the latest SCADA platforms.

We will consider a range of solids treatment and biosolids end-use options, so the Town has a robust and flexible plan moving forward.

Secondary solids are sent to four aerobic digesters for stabilization and are thickened by a rotary drum thickener prior to conveyance to a recently installed volute dewatering press prior to be hauled offsite. Class B biosolids are hauled by a private contractor and are currently landfilled, although the Town has entered a contract with 3xM Grinding and Compost LLC for use at a compost facility in Olathe, Colorado. TRWWTP's solids handling system has several limitations, including thickening limitations with the RDT and within the aerobic digesters, digester performance, odor generation, redundancy, layout of solids processing equipment (dewatering and thickening is on the opposite site of the site from the digesters), and managing hauler's requirements.

Solids Handling Evaluation

Our team will evaluate your existing aerobic digestion process alongside alternative stabilization scenarios to determine the best fit for your facility in conjunction with your end use goals of achieving a Class A or Class B product. Your latest master plan provided an overview of digestion options, but ultimately recommended a technology that was not successful during pilot testing. While aerobic digestion may well be the best fit for your facility given your existing infrastructure and lack of primary clarifiers, our team will consider solids stabilization opportunities that compliment your existing infrastructure, planned secondary treatment retrofit, and long-term solids handling goals.

We recommend consideration of the following alternative solids stabilization approaches.

1. Aerobic digestion.
2. Autothermophilic aerobic digestion (ATAD).

Aerobic Digestion

Your current aerobic digestion process results in a biologically stable Class B end product. Aerobic digestion provides you with a simple-to-operate stabilization approach that has been proven at similar facilities across the country. While maintaining this process would result in the lowest capital cost requirements, it is critical that your existing limitations be addressed. Our team proposes considering several optimization measures, including an improved aeration and mixing system to improve oxygen transfer, and recuperative thickening.

Our team's history and experience with optimizing aerobic digestion will give the Town the confidence that, if this alternative is selected, plant staff will have a fully optimized digestion facility that reduces operating costs.

Our team's approach to optimizing aerobic digestion at other facilities reduces both capital and operating costs. The following optimization measures have been included in our recent designs.

- Staged configuration to help decrease the digester volume required to meet Class B from 60 days down to 42 days at 15 degrees Celsius.
- Thickening to up to 3 percent solids to further decrease the volume requirement.
- Cyclic aeration to reduce energy consumption and help prevent digester failure associated with pH depletion.
- Energy efficient mixers to keep solids in suspension during unaerated cycles.
- Recuperative thickening to prevent overheating of the digesters due to exothermic reactions.
- Foam abatement spray bars to provide relief during digester foaming episodes.

Autothermophilic Aerobic Digestion (ATAD)

An advantage of the ATAD system, which is a variation of both conventional and high-purity oxygen aerobic digestion, is that it has a small footprint and can generate Class A biosolids if operated in batch mode. The high temperature process increases the biological activity and results in a relatively short detention time (6 to 12 days). Adoption of this process opens up the potential for creating a marketable biosolids product for the Town. First generation ATAD systems installed in the 1990's experienced recurring issues with undersized and ineffective aeration equipment, and inadequate odor control systems. The second generation ATAD process technology has significantly improved mixing and aeration equipment, and better odor control.

ERWSD expanded their ATAD process in 2016.

ATAD has been successfully implemented in Colorado at the City of Fruita and the Eagle River Water and Sanitation District (Edwards Facility). The Edwards treatment facility opted to expand their ATAD process in 2016, forgoing an evaluation of other solids stabilization processes given their satisfaction with the technology (i.e., easier compliance, less monitoring and recordkeeping, and less odor in the final product). This high-temperature process is expected to result in a higher volatile solids reduction, in a range of 35 to 45 percent, which would reduce hauling costs.

Dewatering

The recent dewatering improvements at the TRWWTP to incorporate a volute dewatering press has improved the biosolids product and reduced implications on cost and end use options due to liquid hauling. This modification is anticipated to have significantly reduced hauling costs and reduced the bottleneck associated with your existing holding tanks. As part of the implementation plan, the capacity of the existing equipment and any opportunities to increase process efficiencies and redundancy will be reviewed relative to the proposed secondary treatment improvements and solids production projections. Additionally, consideration will be given to how the production of a dewatered cake (and associated return flows) might impact the liquid stream process. Our team is experienced, not just in the design of dewatering facilities, but working with utilities throughout Colorado, from Montrose to Fort Collins, to optimize their secondary treatment processes for nutrient removal. We will combine our experience in both solids handling and nutrients to maintain a whole plant perspective through this project.

Biosolids Disposal/Use

An evaluation of digestion alternatives for the Town must include capital and operating costs, ease of operation, flexibility for maintenance, and your long-term solids hauling and end use goals. For example, while continuing aerobic digestion may have the lowest capital costs, this process has higher solids generation, requiring additional land for land application and/or higher landfill tipping fees. On the other hand, conversion to ATAD or composting to produce a Class A product would increase marketability for beneficial use of your biosolids and could open up markets closer to the TRWWTP.

Throughout the country, we advise our clients that they maintain alternative management practices to ensure that their continued operation is not impacted by changes to the land application site, weather, or other external factors. Nowhere is this more important than in our mountain communities. As part of this project, we recommend that an evaluation be performed regarding the management practices for Class A and B biosolids to identify any cost savings opportunities.

Diversification of disposal options will provide redundancy under adverse weather and other unforeseen conditions. This strategy could involve Class B land application in conjunction with the 3XM composting facility. A third standby option may be to provide an onsite location for extended storage of biosolids to mitigate unanticipated events.

Solids and Biosolids Management Strategy Workshops and Deliverables

- Workshop 3: Solids Process Alternatives and Biosolids Management.
- Technical Memorandum: Solids Process and Biosolids Management Recommendations.

Our team's dedicated cost estimating personnel improve cost certainty and confidence in implementation costs starting at conceptual planning and design, avoiding cost surprises.

The proposed 5-year plan is anticipated to be a significant investment for the Town. As such, developing cost certainty you can have confidence in is essential.

Our team's approach to cost estimating is specifically designed to replicate the pricing methods used by general contractors such as those expected to submit pricing for this project. This includes the establishment of a dedicated team of full-time estimators who have all gained most of their work experience working for general contractors or specialty subcontractors that focus on the water/wastewater market space. This body of experience allows our team to not only anticipate the proper level of effort based on the complexity of the work, but anticipates a contractor's procurement strategy, both of which are critical to predicting project costs. Our team also understands the importance of early cost certainty and works to not only price what is shown in the preliminary engineering documents, but also what experience tells us will be required to construct the intent of the design.

2.7%
Carollo Cost Estimates Compared to Bid Over the Past 2 Years

$5.3B
Total Value of Cost Estimates Over the Past 2 Years.

Our experienced cost estimators will bring cost certainty to your budgeting process.

This team has implemented the use of industry-standard estimating software and other quantity surveying tools that add quality and consistency to the pricing process. These tools allow us to confidently identify project cost drivers and prioritize budgetary pricing requests from the market. Experience has shown that this approach is superior to relying on published pricing manuals created for the general construction industry.

Preliminary Estimate	Intermediate Estimate	Final Estimate
• Highly Collaborative • Coordinated Assumptions • Capture All Intended Scope Including "Reasonably Anticipated Work • Challenge Design Concepts	• Confirm/Revise Quantities • Updated Pricing for Cost Drivers • Incorporate Site and Schedule Constraints	• Finalize Quantities and Prices • Incorporate Prime Contract Terms • Adjust Contingency based on Bid Risk • Predict Fee Based on Anticipated Bid Participation

Establishing early cost certainty begins on day one and remains priority throughout the process.

Our phased implementation plan will define the path to capacity expansion and discharge permit compliance, while reflecting mountain construction realities and adhering to budget constraints.

Our plan will develop a phased approach that respects funding availability constraints but prioritizes needs and provides the justification to allocate funds through the budgeting process. This project is unique due to the remote location relative to material suppliers and labor availability. The complexity of mountain construction will play an integral role in implementation planning as we consider sequencing, cost, variable influent conditions, and site access for exterior construction throughout the year.

The implementation plan incorporates the following components:

- **Develop a permitting plan** to understand the required timelines for CDPHE permitting and identifying the critical path submittals.
- **Refine preliminary cost estimates and annual expenditures** based on the outcomes and recommendations from the cost estimating process to provide annual budgeting for improvements.
- **Conduct a constructability/project delivery analysis** for the project phases or targeted process construction to determine how best to achieve cost certainty while meeting an accelerated schedule when necessary.
- **Develop a phased implementation plan** that allocates available funding to the most urgent needs first and while maintaining plant operation.

Implementation Plan Workshops and Deliverables

- Workshop 4: Implementation Plan and Cost Estimates.
- Technical Memorandum: Implementation Plan.

Our hands-on equipment procurement experience provides real-world perspective on equipment procurement options, tailored to meet the Town's scheduling and budgetary needs detailed in the Implementation Plan.

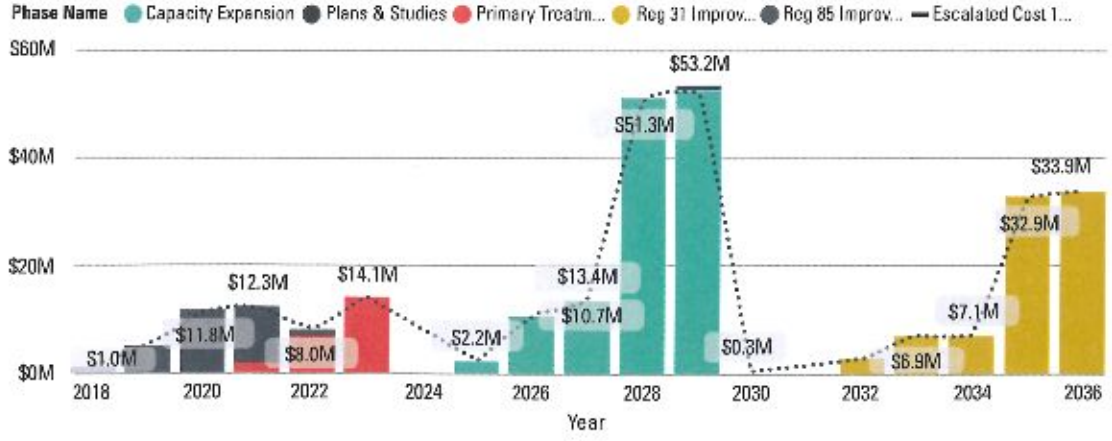
Identification of the appropriate method of equipment acquisition will be dependent on the selection of the project delivery method and the developed implementation strategy and schedule. The Implementation Plan will be used to understand critical path equipment and identify opportunities to reduce project schedule, cost, risk, and improve process performance assurances. Chapter 4, article 6 of your municipal code allows equipment procurement without competition if prescribed by a professional advisor (Sec. 4-6.250.h). This strategy may be recommended depending on the developed schedule. Pre-selection of equipment based on a best value selection process can also be used to streamline design, permitting, and construction while maintaining procurement responsibilities with the project contractor.

As part of a recent project for Glenwood Springs we developed an equipment procurement approach that combined pre-selection and pre-purchase options based on equipment lead times to meet an aggressive delivery schedule in response to the 2020 wildfire impacts to the City's watershed.

Equipment Acquisition Strategy Deliverables

- Technical Memorandum: Equipment Procurement Evaluation and Strategy Recommendation

Costs by Year (set Inflation to 0% to see unescaled costs)

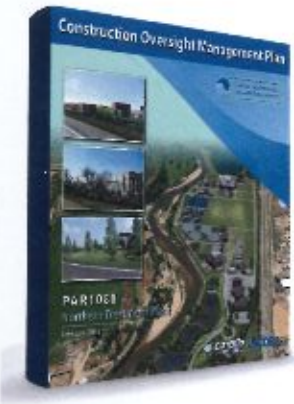


Carollo created a dynamic CIP dashboard using standard Microsoft Power BI for the City of Greeley's four-phase WWTP CIP. The dashboard and associated attributes were customized to the City's capital requirements.

EXECUTION

Developing a vision and a thoughtful implementation plan lays the foundation and "guard rails" to guide a successful TRWWTP expansion project. Maintaining our advisor role through design and construction provides continuity and reduces rework.

Our team is committed to maintaining key decisions made during planning through design, construction, and commissioning. Upfront, clear collaboration, has proven to be a winning formula for delivering fast-tracked projects cost-effectively and on budget.



As part of our Alternative project delivery (APD) services, Carollo has developed construction phase APD oversight procedures that delineate construction and quality auditing roles for the Owner, and Professional Advisor – the procedures have been discussed at DBIA as best practices and lessons learned in APD management.

Key areas where our team has supported Owners during the execution phase include:

- Project management.
  - document management (reporting).
  - workflow and contract management.
- Risk mitigation/project controls.
- Interim design and GMP review.
- GMP contract negotiations.
- Construction management.
- Commissioning.
- Project completion/warranty.

CAROLLO'S TWO-STEP APPROACH TO AN EFFECTIVE PROJECT CONTROLS STRATEGY

1. Identify the project risks.
2. Develop tailored collaboration and management tools to effectively monitor and manage the project.

Carollo's project controls strategy is based on the process of monitoring, controlling, and reporting on scope, budget, schedule, and quality. Effective management in all of these areas is critical to managing overall project risk.

We recommend evaluating the scope of services during design and construction for the professional advisor after selection of the project delivery method and development of the implementation plan to understand the services needed to best meet the project objectives. For completeness of this proposal response, we have included costs for attendance at one monthly design or construction meeting through 2026.

As your Professional Advisor, our focus during the execution phase is to help you efficiently and effectively meet your goals—it's not about taking control of your project, it's about being your trusted advisor and working as an extension of your team. We will ensure we have the committed resources doing the right things at the right time. This means working for you in a collaborative environment and never losing focus until your project is a success.

Project Management and Coordination

Our team's project management approach centers on a collaborative process. Our project lead, Fraser Kent, will provide the hands-on management experience required for a successful professional services advisor. Fraser is a technical expert who will be intimately involved with your staff and will facilitate the daily technical direction of the project to move this effort forward.

Planning the Work

The workflow diagram and schedule presented in this proposal illustrate the phases of work anticipated in 2021. The project schedule on page 28 shows the timeframes for key project elements, workshops, and deliverables anticipated during the first year of professional advisor services.

QA/QC

Our team's core value is delivering quality products to our clients within the budget and schedule required. Our QA/QC program is straightforward. We use industry experts not fully engaged in the project who employ time- tested quality review procedures and checklists for each deliverable throughout the project to ensure we meet our company wide standards and your expectations. We have assigned number individuals as the QC, each with different expertise. These individuals will review deliverables prior to being submitted.

Our QM tools include standard basis of planning checklists, independent process reviews, and cost reviews, which are integrated with our standard checking process from project start to finish.

PROJECT MANAGEMENT PRACTICES

- Systematic up-front planning to convey expectations and provide the framework for executing tasks.
- Conduct monthly progress meetings with select, key team member to solicit staff input, maintain project schedule, and review progress on project tasks.
- Maintain and issue decision and action logs to keep track of changes, resolution of issues, and document the progression of work relative to the contractual scope. Designate responsible personnel with due dates on a timely basis after all meetings, conference calls, and workshops.
- Conduct "solution-focused" workshops as defined in our project schedule - that concentrate the involvement of staff along with all relevant disciplines on key decisions and make efficient use of all of our time.
- Issue monthly progress reports documenting progress relative to schedule, budget, major decisions, and other key information.

Draft Contract Review

Below is a summary of the requested modifications to the Town of Telluride draft contract.

- **Section 7.4:** It is not possible to name additional insureds on Professional Liability insurance policies. To make that clear, we request the following changes:
  - » In the 1st line, insert "or Professional Liability" after "Workers' Compensation."
  - » In the 6th line, delete "[and/or Professional Liability."
- **Section 8:** This indemnification obligation should be in accordance with CRS 13-50.2-102 (Section 8(a). To make this indemnification obligation insurable under a professional liability insurance policy and to bring it into conformance with the noted statute, we request the following:
  - » In the 3rd line, replace: "if" with "to the extent,"
  - » In the 4th line, insert "negligent" before "act, omission,"
  - » In the 5th line, replace "other fault" with "error."
  - » New Section 8.2: Unless attributable to gross negligence, willful misconduct, or bodily harm, Consultant's liability shall not exceed the insurance limits required under this Agreement and neither party shall be liable for consequential, indirect, or special damages.
- **New Sections:** As shown below for inclusion.

22. STANDARD OF CARE

Consultant shall complete the services required hereunder in accordance with the prevailing standard of care by exercising the skill and ability ordinarily required of consultants performing the same or similar services, under the same or similar circumstances, in the State of Colorado.

23. TOWN-PROVIDED INFORMATION AND SERVICES

Town shall furnish Consultant available studies, reports and other data pertinent to Consultant's services; obtain or authorize Consultant to obtain or provide additional reports and data as required; furnish to Consultant services of others required for the performance of Consultant's services hereunder, and Consultant shall be entitled to use and reasonably rely upon all such information and services provided by Town or others in performing Consultant's services hereunder, in accordance with the prevailing standard of care.

24. ESTIMATES AND PROJECTIONS

Consultant has no control over the cost of labor, materials, equipment or services furnished by others, over the incoming wastewater quality and/or quantity, or over the way Town's plant(s) and/or associated processes are operated and/or maintained. Data projections and estimates are based on Consultant's opinion based on experience and judgment. Consultant cannot and does not guarantee that actual costs and/or quantities realized will not vary from the data projections and estimates prepared by Consultant and Consultant will not be liable to and/or indemnify Town and/or any third party related to any inconsistencies between Consultant's data projections and estimates and actual costs and/or quantities realized by Town and/or any third party in the future, except to the extent such inconsistencies are caused by Consultant's negligent performance hereunder.

25. DELAYS

Consultant is not responsible for damage or delay in performance caused by events beyond the reasonable control of Consultant. In the event Consultant's services are suspended, delayed or interrupted for the convenience of Town or delays occur beyond the reasonable control of Consultant, an equitable adjustment in Consultant's time of performance and cost of Consultant's personnel and subcontractors may be made.

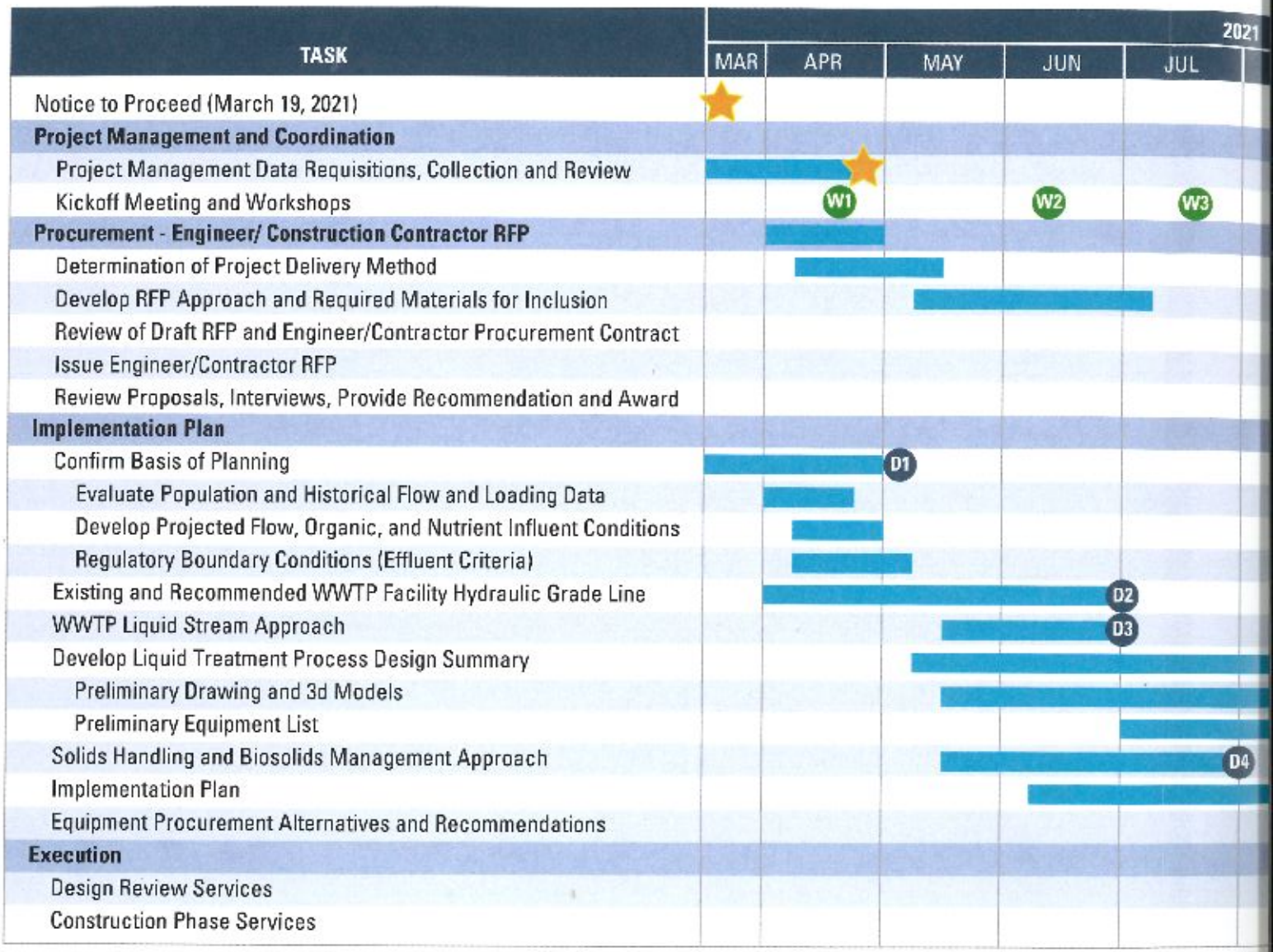
26. WARRANTIES, GUARANTEES, AND DAMAGES

Consultant shall not be responsible for warranties, guarantees, fitness for a particular purpose, breach of fiduciary duty, loss of anticipated profits or for economic, incidental, liquidated, or consequential damages to Town or any third party arising out of breach of contract, delay, termination, or for professional negligence. Additionally, Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than Consultant's subconsultants, that impact project completion and/or success.

27. THIRD PARTIES

The services to be performed by Consultant are intended solely for the benefit of Town. No person or entity not a signatory to the Agreement shall be entitled to rely on Consultant's performance of its services hereunder, and no right to assert a claim against Consultant by assignment of indemnity rights or otherwise shall accrue to a third party as a result of the Agreement or the performance of Consultant's services hereunder.

Schedule



PROPOSED PROJECT SCHEDULE

With a commitment to providing a timely and responsive schedule, we assume a start date of March 19, 2021.

The schedule provided above shows our proposed work for 2021, with an approximate schedule through the 2026 implementation time frame. Our team will work with the Town during project initiation to finalize the schedule, including key deliverables, site visits, and workshops. Work completed in 2021 for the Implementation Plan will further dictate the remainder for the project schedule.

Fee for Project

TOWN OF TELLURIDE PROFESSIONAL WASTEWATER LABOR HOURS AND ENGINEER

	EXPENSES			
	Project Communication and Equipment Expense	Travel, Mileage, Shipping, Misc.	Total Expenses	TOTAL BASE COST
	$13			
Project Management and Coordination	**$2,500**	**$6,600**	**$9,200**	**$47,500**
Project Management, Data Requisitions, Collection	$624		$624	$9,744
Project Coordination and Progress Reporting (9 Mo	$234		$234	$3,654
Monthly Coordination Calls (9 Months)	$416		$416	$6,496
Workshop 1 Kickoff, Project Delivery Approach	$1,274	$6,619	$7,893	$27,633
Plan Engineer/Construction Contractor RFP (Task 1	**$2,000**	**$0**	**$2,000**	**$31,800**
Determination of project delivery method	$338		$338	$5,550
Develop RFP approach and required materials for	$598		$598	$9,314
Review of draft RFP and Engineer/Contractor Proc	$572		$572	$8,780
Review proposals, interviews, provide recommend	$520		$520	$8,120
Implementation Plan (Task 2 - 4)	**$18,700**	**$0**	**$18,700**	**$271,800**
Evaluate Population and Historical Flow and Loadi	$572		$572	$8,044
Develop Projected Flow, Organic, and Nutrient Infl	$234		$234	$3,926
Regulatory Boundary Conditions (Effluent Criteria)	$390		$390	$5,362
D1 (Draft) Basis of Planning	$520		$520	$7,724
D1 (Final) Basis of Planning	$364		$364	$5,068
Develop existing WWTP Hydraulic Model	$1,248		$1,248	$19,592
Evaluate alternative flow configurations (assume 3	$1,144		$1,144	$17,672
D2 (Draft) Hydraulic Modeling Evaluation	$286		$286	$3,926
D2 (Final) Hydraulic Modeling Evaluation	$104		$104	$1,304
WWTP Liquid Stream Approach	$1,144		$1,144	$15,352
D3 (Draft) Liquid Stream Process Recommend	$832		$832	$11,168
D3 (Final) Liquid Stream Process Recommend	$520		$520	$7,184
Workshop 2 - Liquid Stream and Hydraulic Gra	$676		$676	$10,556
Preliminary Process Design	$3,848		$3,848	$50,136
Solids Handling and Biosolids Management Appro	$1,170		$1,170	$17,186
D4 (Draft)) Solids Process and Biosolids Mana	$546		$546	$8,186
D4 (Final) Solids Process and Biosolids Manag	$221		$221	$3,181
Workshop 3 - Solids Process and Biosolids Ma	$780		$780	$12,380
Implementation Plan	$962		$962	$15,534
D5 (Draft)) Implementation Plan	$910		$910	$13,026
D5 (Final) Implementation Plan	$468		$468	$6,396
Workshop 4 - Implementation Plan (virtual)	$1,014		$1,014	$16,078
Equipment Procurement Evaluation and Strategy	$390		$390	$6,262
D6 (Draft) Equipment Procurement Evaluation	$208		$208	$3,348
D6 (Final) Equipment Procurement Evaluation	$130		$130	$2,030
Execution (Task 5)	**$3,100**	**$0**	**$3,100**	**$48,700**
Monthly Design Progress Meetings (assumed 24	$1,248		$1,248	$19,488
Monthly Construction Progress Meetings (anticipa	$1,872	$6,619	$1,872	$29,232
PROJECT TOTALS	**$26,300**	**$9,600**	**$33,000**	**$399,800**

Deliverable	Contracted Date	Revised Date	Reasons for Delay	Comments
TM 1 - Basis of Design	7/29/2021	8/26/2021	* Received final influent flow data required for calculating peak hour and peak instantaneous factors on August 11 from BHEC (originally requested June 30) * Received direction from Town regarding design flow and load on August 5	TM is unlikely to capture the permit modifications that are anticipated from the CDPHE in the regulatory update.
Apply for PELs	8/6/2021	8/19/2021	* Received decision on design flow and loading on August 6	Package will be ready for Town to submit to CDPHE after Town review and input
TM 2 - Hydraulic Modeling Evaluation and Recommendations	8/27/2021	9/2/2021 9/16/2021	* Received final equipment headloss information on 8/6/21 * Providing a week between submitting TM1 and TM2 for Town review for initial draft * Second draft will be submitted with the liquid stream recommendation to incorporate the hydraulic evaluation for the proposed alternative.	This draft will only cover existing hydraulics at the facility for 2.1 mgd and the proposed design capacity of 2.3 mgd. The hydraulic evaluation for the recommendations will be developed with H_2O Innovations during the Liquid Stream Approach TM and submitted to the Town for review.
TM 3 - Liquid Stream Process Recommendations (H_2O Innovations)				
Workshop 2 - Liquid Stream and Hydraulic Modeling	9/22/2021	On Schedule		
TM 4 - Solids Process and Biosolids Management Recommendation	10/5/2021	On Schedule		Pending delivery of solids projections from liquid stream recommendations are provided by September 1.
TM 5 - 5 Year Implementation Plan and CIP	11/19/2021	On Schedule		Pending scheduled delivery and Town review of TM 3 and TM 4 as information developed for these deliverables are inputs for the implementation plan, cost, and sequencing. Understanding of Town's bond spending requirements in 2022 is also required to complete this task. Originally requested on June 18, 2021
Workshop 4 - Implementation Plan Review	12/1/2021	On Schedule		
TM 6 - Equipment Procurement Evaluation and Strategy Recommendation	12/21/2021	On Schedule		Pending scheduled delivery and Town review of TM 3, 4, and 5 as information developed for these deliverables are inputs for the strategy to procure equipment. Understanding of Town's bond spending requirements in 2022 is also required to complete this task. Originally requested on June 18, 2021

1

// Kick-off workshop(s): agenda(s)

PART 1 – JULY 8

1. Welcome and Introductions [10 min.]
   - Introductions
   - Agenda Overview
   - Meeting Objectives
2. Project Information / Background / Expectations [20 min.]
   - Team contacts
   - Communications
   - Scope, Workflow, Schedule

BREAK

3. Regulatory Overview [40 min.]
   - Overview
   - Liquid Stream
   - Solids Stream discussion
4. Flow and Load Projections [50 min]
   - Population projections
   - Influent flow and load Conditions
5. Wrap up and coordination for next week

PART 2 – JULY 13

1. Surveyor Site Meeting [60 min.]
2. Project status, workflow, schedule [10 min.]
3. Basis of Design [20 min.]
   - Information request
   - Influent projections
   - Regulatory overview
4. Project Goals and Objectives [90 min.]
   - Background
   - Group Exercise

LUNCH

5. Facility Walk Through [2 hrs.]

PART 3 – JULY 14

1. Alternative Project Delivery Method Selection [2 hrs.]
   - Summary of Project Goals/Objectives
   - CMAR and Progressive DB
   - Schedule Implications

LUNCH

2. Hydraulic Profile Model Development [60 min.]
   - Review flow path
   - Clarifications
   - Required field verification
3. Field Verification [2 hrs.]
4. Workshop wrap up [60 mins.]
   1. Goals
   2. Selected ADP Method
   3. Schedule
   4. Next Steps and Action Items

2

2

// Today's meeting objectives

- Kick-off project and review scope, fee, and preliminary schedule
- Review projections and influent conditions
- Discuss regulatory scenarios
- Review of data and data gaps
- Confirm agenda for next week's site visit

3

Project Information

4

// Primary project team contact list

Contact Name	Project Role	Phone Number	Email Address
Paul Ruud	Public Works Director	(970) 728-3077	pruud@telluride-co.gov
Karen Guglielmone	Env. and Engineering Manager	(970) 728-0190	kguglielmone@telluride-co.gov
Katie Doody	Water/ Wastewater Manager	(970) 708-4862	kdoody@telluride-co.gov
Joyce Huang	Town Engineer	(970) 728-2169	jhuang@telluride-co.gov
Fraser Kent	H_2O Innovation Project Manager	(289) 813-5533, ext 103	fraser.kent@h2oinnovation.com
Leanne Miller	Carollo Project Manager	(720) 878-8465	lmiller@carollo.com
Andrew Gilmore	Technical Advisor	(602) 474-4214	agilmore@carollo.com

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5

// Project communication

- Funneling communications
  - Decisions – through PMs
  - Correspondence – carbon copy PMs
- Data storage and sharing: Project OneDrive
  - Wastewater Data
  - Equipment Shop Drawings
  - Facility Record Drawings
  - Planning Documents
- Weekly coordination calls – Thursdays 1:00pm
- Meeting minutes, action items, decision log

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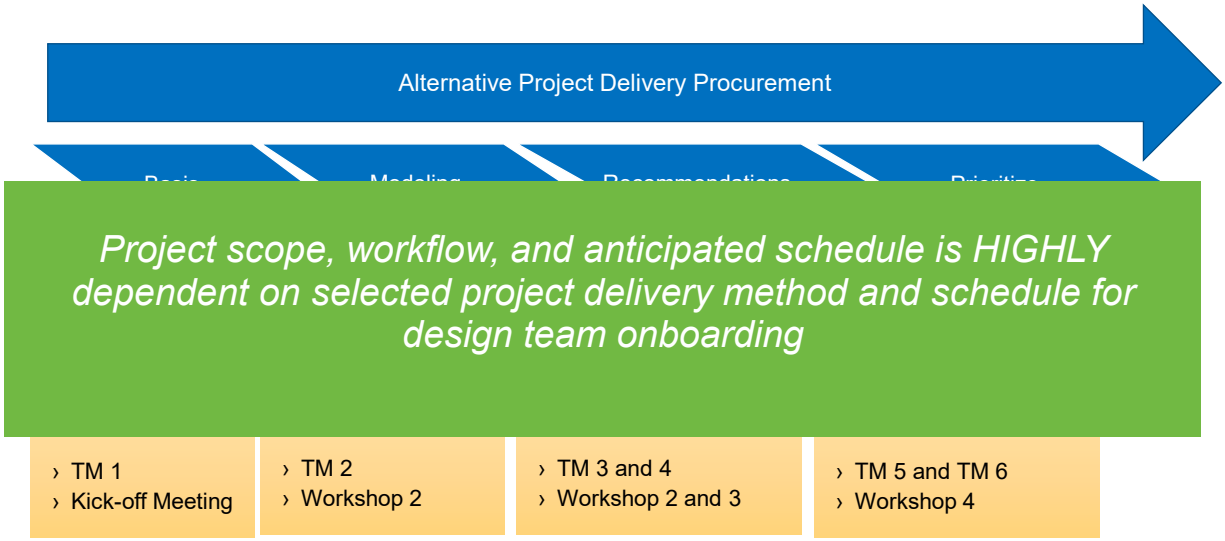
6

// Project Objectives and Goals – PSA Implementation Plan

- Select and solicit project delivery method and equipment procurement method(s)
  - Minimize Town risk by selecting appropriate project delivery method, equipment procurement strategies, and development of appropriate contract documents
- Create a hydraulic model for the facility
  - Understand expansion project optimization opportunities
- Develop an Implementation Plan for the TRWWTP Expansion
  - Provide pathway for liquid stream and solids stream improvements
  - Cost effective solutions to achieve capacity and regulatory requirements
  - Re-use existing infrastructure where practical while improving process efficiency, operability, and facility redundancy/ reliability
  - Understand complex mountain construction constraints to create a plan that achieves expansion goals, timeline, and cost within these constraints

7

// Project workflow



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// Interim deliverables and workshops opportunity to provide input and direction

- Define the interim deliverables
- How to review and provide input
- Addressing your comments
- Final versions

DELIVERABLES AND WORKSHOPS

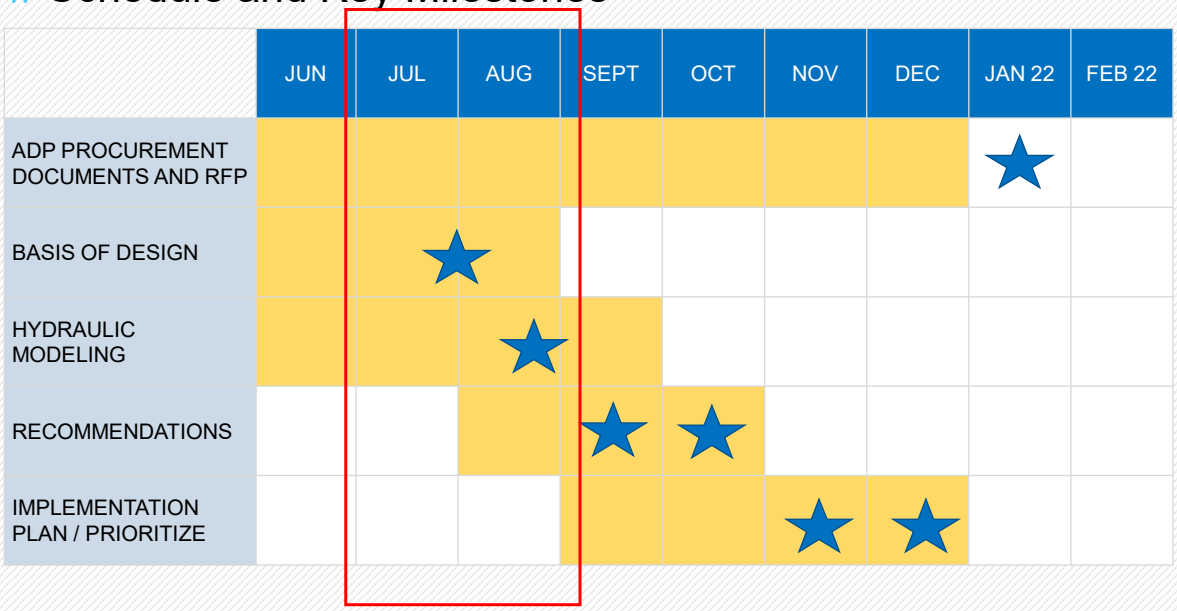
1. Six (6) Tech Memos
2. Four (4) Workshops
3. 2-Day Site Visit

TMs, workshops, and other deliverables are used to create your vision.

// Interim deliverables and workshops opportunity to provide input and direction

DELIVERABLES	WORKSHOPS
• TM 1: Basis of Design (July)	• WS 1a: Basis of Design (virtual)
• TM 2: Hydraulic Modeling Evaluation (Aug.)	• WS 1b: Site Visit and Kickoff Workshop
• TM 3: Liquid Stream Process Recommendations (Sept.)	• WS 2: Liquid Stream and Hydraulic Model (Virtual)
• TM 4: Solids Process and Biosolids Management Recommendation (Oct.)	• WS 3: Solids Process and Biosolids Management (Virtual)
• TM 5: Implementation Plan (Nov.)	• WS 4: Implementation Plan (Virtual)
• TM 6: Equipment Procurement Evaluation and Recommendation (Dec.)	

// Schedule and Key Milestones



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// Project schedule – 3 month look ahead

JULY	AUGUST	SEPTEMBER
› TM 1 Draft : July 29 › WS 1: July 8, 13 - 15	› Apply for PELs: Aug 1* › TM 1 Comments Due: Aug 6 › TM 2 Draft: Aug 27 › TM 2 Comments Due: Sept 3	› TM 3 Draft: Sept 15 › TM 3 Comments Due: Sept 30 › Workshop 2: Sept. 22 (virtual)

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Regulatory Drivers and Scenarios

13

// Current effluent permit limitations

Parameter	30-day Average	7-day Average	Daily Maximum	2-Year Average
TSS (mg/L)	30	45		
BOD_5 (mg/L)	30	45		
E. *Coli (#/100 mL geometric mean)*	224	448		
TRC (mg/L)	0.02		0.032	
Total Ammonia (mg/L)	1.8 to 10		20 to 37	2.4 (Sept.)
Total Inorganic Nitrogen (mg/L)			34 17 (eff. 2025)	

** Metals limits that are currently included in the Town's discharge permit will be contested through the permit modification, alternatives analysis, and discharge specific variance processes. These limits will be summarized next week and incorporated into the final basis of design technical memorandum.*

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14

// Regulation 85 technology based effluent limits

- Effective implementation date
  - Sept. 30, 2012
- Delayed implementation date
  - Dec. 21, 2027
- Qualifications for delayed implementation
  - Design flow greater than 1 mgd but less than 2 mgd
  - Existing watershed control regulations
  - Discharging into a low-priority 8-unit HUC watershed

Regulation 85 Discharge Limits

Parameter	Annual Median	95th Percentile
TIN (mg/L)	15	20
TP (mg/L)	1.0	2.5

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HUC = Hydrologic unit code

15

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// Voluntary Incentive Program for Early Nutrient Reductions

CDPHE's Voluntary Incentive Program allows facilities to reduce nitrogen and phosphorus in the effluent below Regulation 85 limits in exchange for an extended Regulation 31 compliance schedule. Incentive credits will be calculated for each calendar year based on the annual median of each pollutant. Incentive credits can be earned for up to a maximum of 10 years if decreasing both nutrients.

Voluntary Incentive Program Effluent Targets

Parameter	Upper End	Lower End
TIN (mg/L)	14.99	7.0
TP (mg/L)	0.99	0.7

ENTER DATA HERE

CREDITS EARNED

	Annual median concentrations		Incentive credits earned		
	TIN	TP	TIN	TP	TIN+TP
	mg/L	mg/L	Month	Month	Month
2018	21.3		0	0	
2019	16.8		0	0	
2020			0	0	
2021			0	0	
2022			0	0	
2023			0	0	
2024			0	0	
2025			0	0	
2026			0	0	
2027			0	0	
Total months			0	0	0
Eligible Months			0	0	0
Eligible Years			0	0	0

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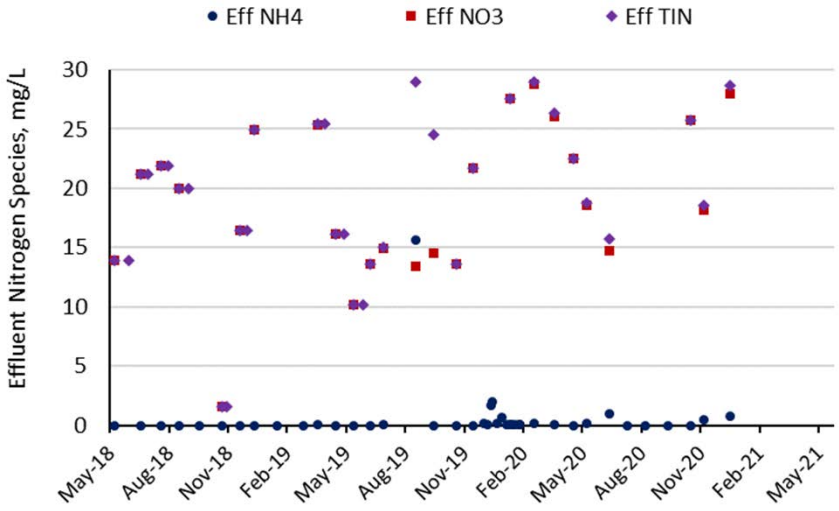
// Historical effluent TIN concentrations



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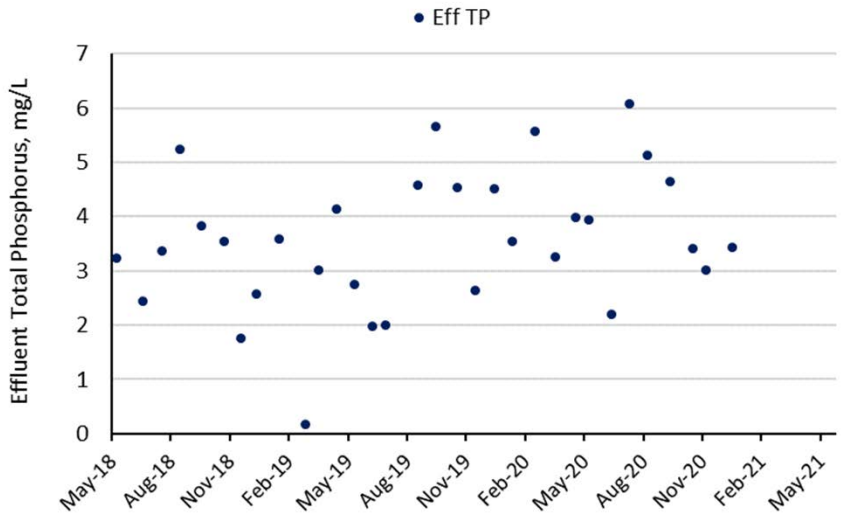
// Historical effluent TP concentrations



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// Regulation 31 Water Quality Based Effluent Limits (WQBELs) implemented after 2027

Condition	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
In-stream Requirement (Cold Designation)	1.25	0.11

$$M_2 = \frac{M_3Q_3 - M_1Q_1}{Q_2}$$

- Q1 = Upstream flow
- Q2 = WRRF Design flow
- Q3 = Downstream flow
- M1 = In-stream background concentration
- M2 = Calculated WQBEL
- M3 = Water Quality Standard

- Assumptions
  - 30E3 flow data used in lieu of 1E5 data (conservative)
    - Evaluated with and without bifurcation
  - 85th percentile of in-stream TN and TP data adopted

The limits shown above were the limits included in the 2017 Master Plan

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// Regulation 31 Water Quality Based Effluent Limits (WQBELs) implemented after 2027

Condition	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
In-stream Requirement (Cold Designation)	1.25	0.11

$$M_2 = \frac{M_3Q_3 - M_1Q_1}{Q_2}$$

- Q1 = 2.5 cfs / 9.7 cfs
- Q2 = 3.2 cfs
- Q3 = 5.7 cfs / 12.9 cfs
- M1 = 0.35 mg/L (TN) / 0.00 mg/L (TP)
- M2 = Calculated WQBEL
- M3 = 1.25 mg/L (TN) / 0.11 mg/L (TP)

- Assumptions
  - 30E3 flow data used in lieu of 1E5 data (conservative)
    - Evaluated with and without bifurcation
  - 85th percentile of in-stream TN and TP data adopted

Filename.ppt/20

20

20

// Regulation 31 Water Quality Based Effluent Limits (WQBELs) implemented after 2027

Condition (Current Design Capacity 2.1 mgd)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
In-stream Requirement (Cold Designation)	1.25	0.11
Estimated Discharge Limit (with bifurcation)	>1.94	>0.19
Estimated Discharge Limit (without bifurcation)	>3.93	>0.44

- Q1 = 2.5 cfs / 9.7 cfs
- Q2 = 3.2 cfs
- Q3 = 5.7 cfs / 12.9 cfs
- M1 = 0.35 mg/L (TN) / 0.00 mg/L (TP)
- M2 = Calculated WQBEL
- M3 = 1.25 mg/L (TN) / 0.11 mg/L (TP)

- Assumptions
  - 30E3 flow data used in lieu of 1E5 data (conservative)
    - Evaluated with and without bifurcation
  - 85th percentile of in-stream TN and TP data adopted

Filename.ppt/21

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// Regulation 31 Water Quality Based Effluent Limits (WQBELs) implemented after 2027

Condition	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
In-stream Requirement (2017 MP design condition)	1.25	0.11
Estimated Discharge Limit (without bifurcation, 2.1 mgd)	> 3.93	> 0.44
Estimated Discharge Limit (without bifurcation, 2.5 mgd)	> 3.50	> 0.39

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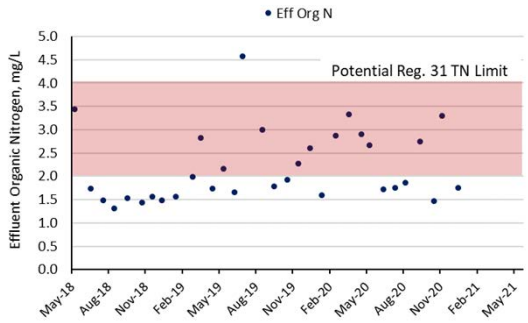
22

// Regulation 31 Water Quality Based Effluent Limits (WQBELs) implemented after 2027

Condition at current rated capacity	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)
In-stream Requirement (Cold Designation)	1.25	0.11
Estimated Discharge Limit (with bifurcation)	>1.94	>0.19
Estimated Discharge Limit (without bifurcation)	>3.93	>0.44



- Assumptions
  - 30E3 flow data used in lieu of 1E5 data (conservative)
    - Evaluated with and without bifurcation
  - 85th percentile of in-stream TN and TP data adopted

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23

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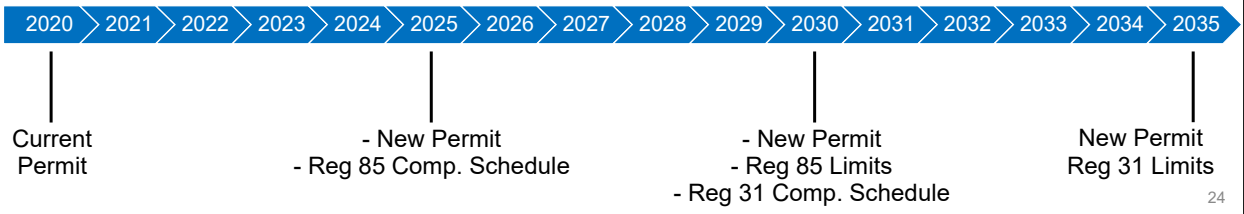
// Summary of potential future effluent nutrient regulations

Parameter	30-Day Average	Daily Maximum	Regulation 85 (~2030)	Regulation 31 (~2035+)
Ammonia (mg/L)	1.8 - 10	20 to 37		
TIN (mg/L)		34 17 (eff. 2025)	15 / 20	
TN (mg/L)				~ 3.5
TP (mg/L)			1 / 2.5	~ 0.39

CDPHE WQCD could immediately jump to Regulation 31 implementation in 2027 (plus time for negotiated compliance schedule)



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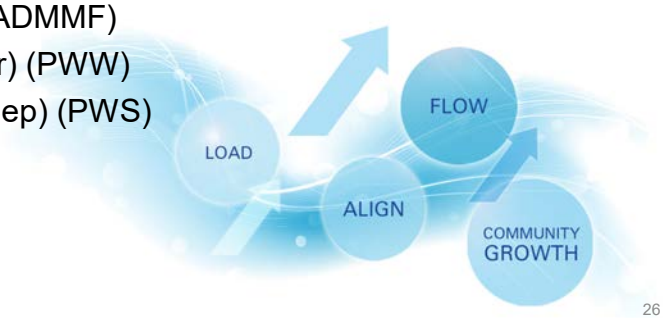
Flow and Load Projections

25

// Flow and load projections – introduction

- Per capita flow and loading developed to project future influent WWTP conditions
- Population projections adopted from 2017 Master Plan
- Projections developed for
  - Average day annual (ADAF)
  - Average day maximum month (ADMMF)
  - Peak Week Winter (Oct thru Mar) (PWW)
  - Peak Week Summer (Apr thru Sep) (PWS)
  - Peak Day (PDF)
  - Peak Hour (PHF)



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// Flow and load projections – definitions

Condition	Projected Parameters	Purpose
ADAF	Flow and loads	Demonstrating treatment capacity with units out of service now and in the future.
ADMMF	Flow and loads	CDPHE permitting and design treatment capacity.
PWW	Flow and loads	Demonstrating peak seasonal treatment capacity now and in the future.
PWS	Flow and loads	
PDF	Flow	Demonstrating hydraulic treatment and equalization capacity now and in the future.
PHF	Flow	CDPHE for permitted hydraulic treatment capacity purposes – selected processes.

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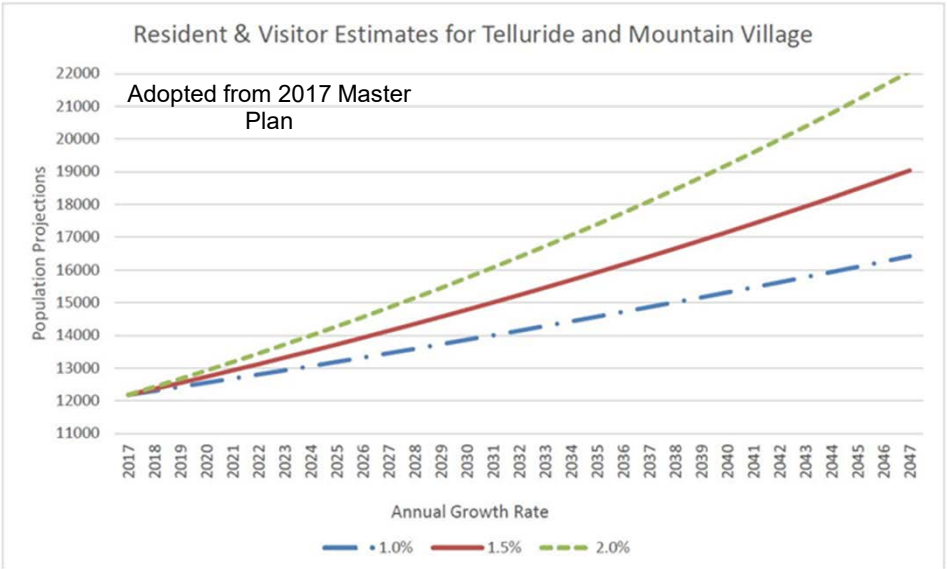
// Population projection for service area



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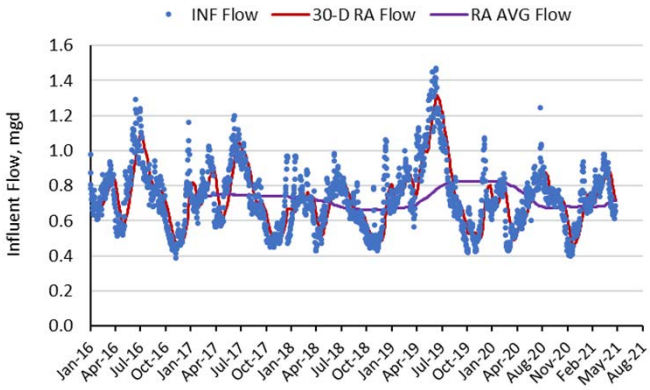
// Historical influent flow data



Flow Condition	2017 Value (mgd)	2021 Value (mgd)	Peaking Factor
ADAF	0.70	0.83	-
ADMMF	1.04	1.32	1.59
PW – Winter	NA	1.01	1.22
PW – Summer	NA	1.41	1.71
Peak Day	1.39	1.47	1.78
Peak Hour	2.8*	2.00	2.41

Current permitted hydraulic capacity = 2.1 mgd

** 2017 Peak Hour was an estimated value based on 2x peak day*

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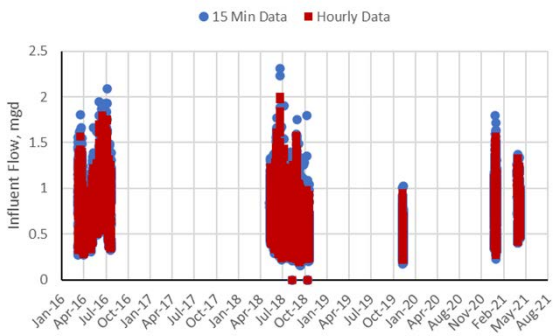
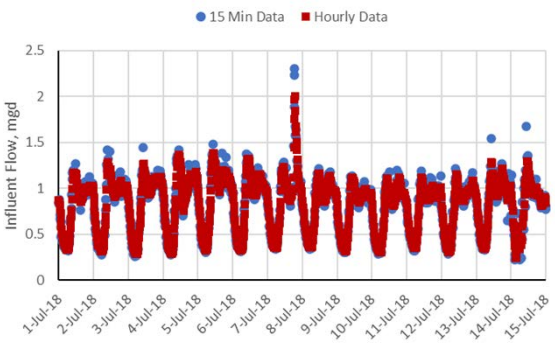
// Historical influent flow data – Peak hour





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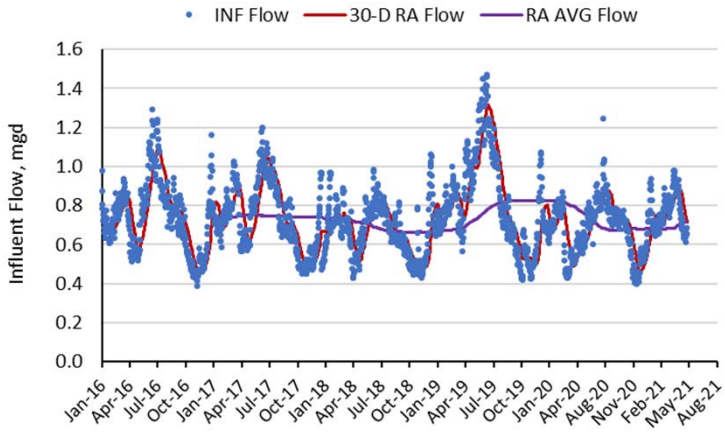
// Historical influent flow data



Flow Condition	Value (mgd)	Per Capita (gpd/cap)
ADAF	0.83	66
ADMMF	1.32	104
PW – Winter	1.01	80
PW – Summer	1.41	112
Peak Day	1.47	116
Peak Hour	--	--

*Assumes 2021 population of 12,693

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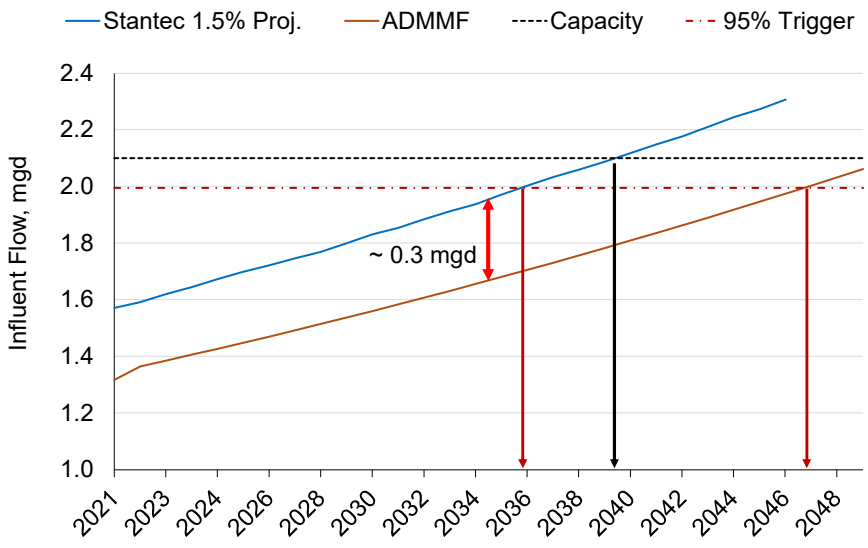
// Influent flow projections



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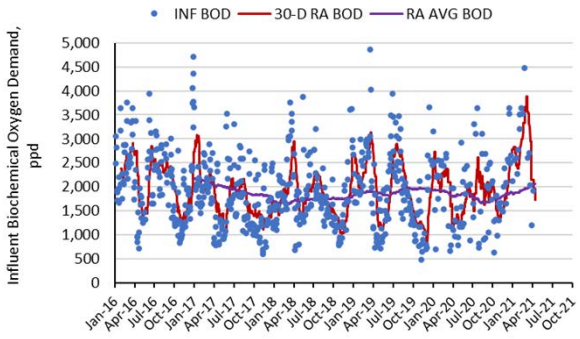
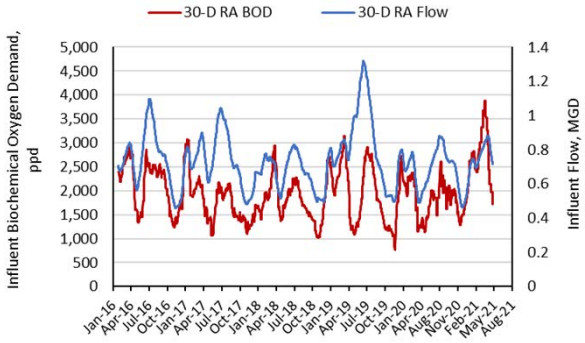
// Historical influent BOD_5 data





*Not uncommon for Town events to coincide with and even mask I/I events

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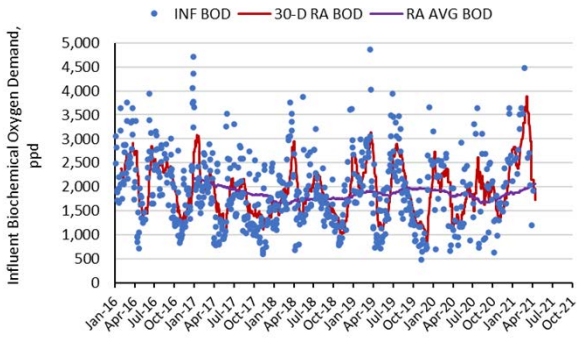
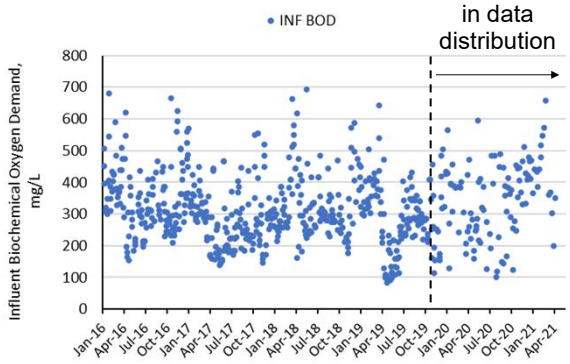
// Historical influent BOD_5 data





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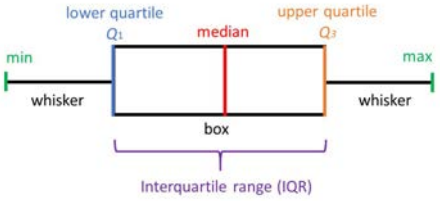
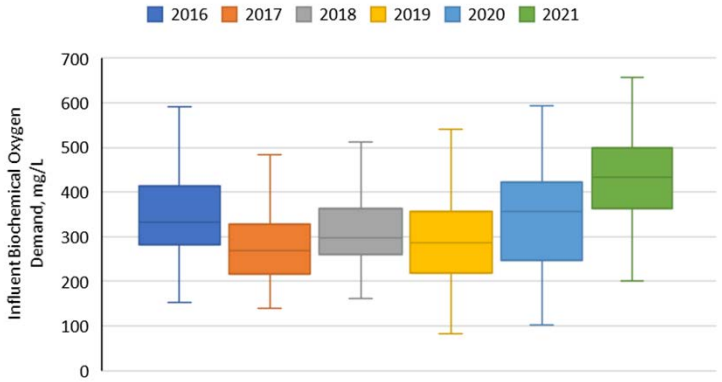
// Historical influent BOD_5 data



Reading a Box Plot



- Greater data variability since Nov. 2019
  - Median value has increased
  - IQR has increased
  - Min-Max range has increased

Filename.ppt/35

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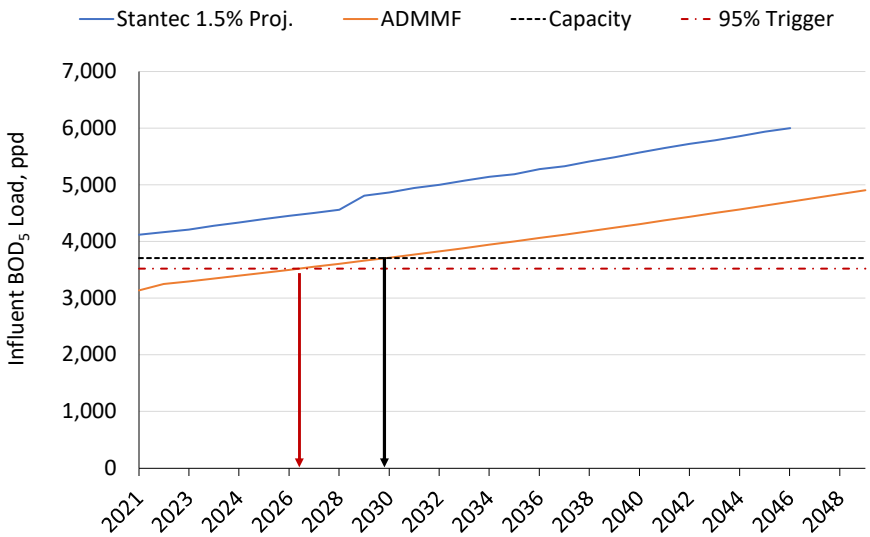
// Influent BOD_5 projections (excluding 2021 data)



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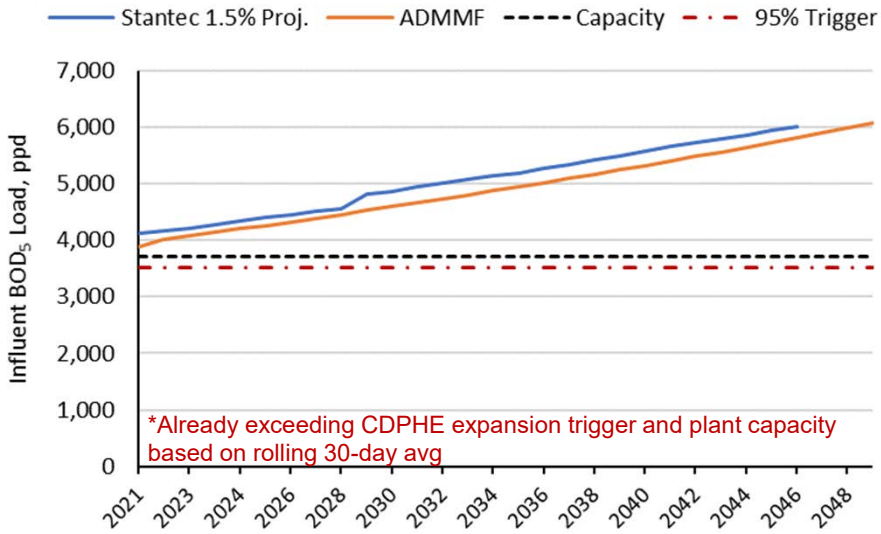
// Influent BOD_5 projections (including 2021 data)



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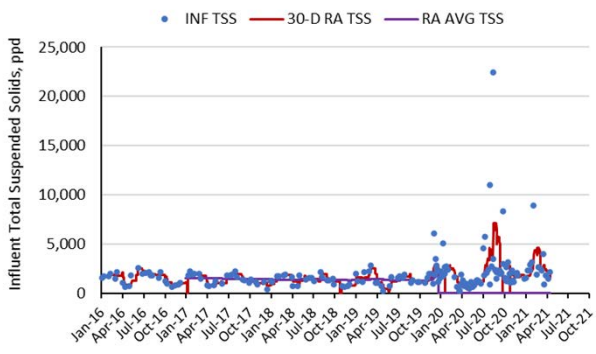
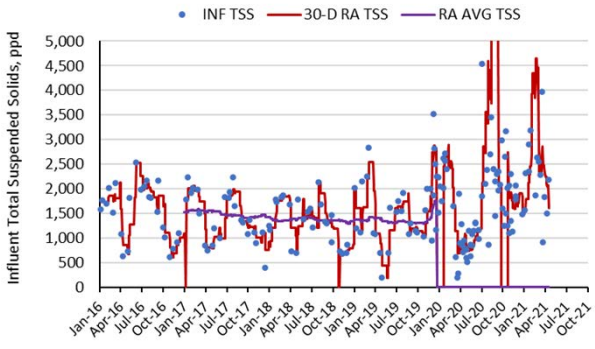
// Historical influent TSS data





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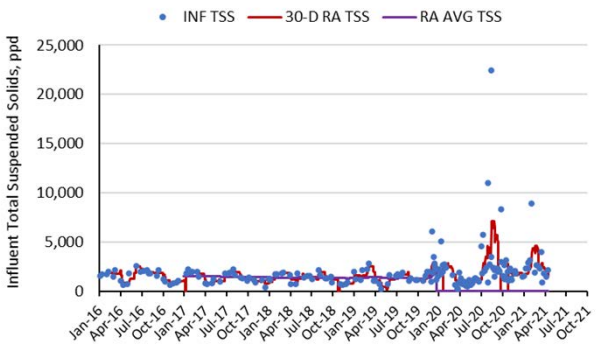
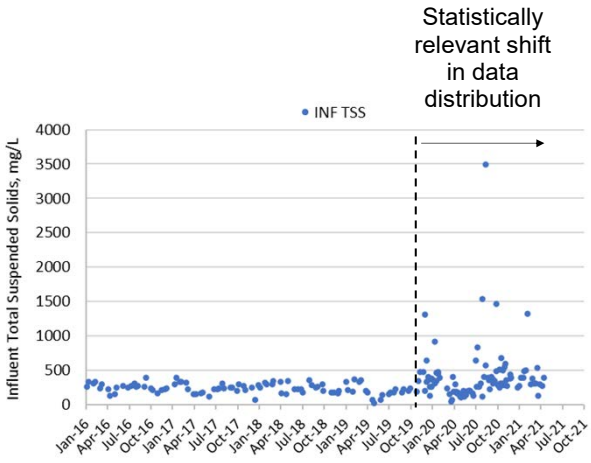
// Historical influent TSS data





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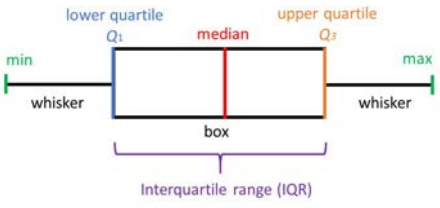
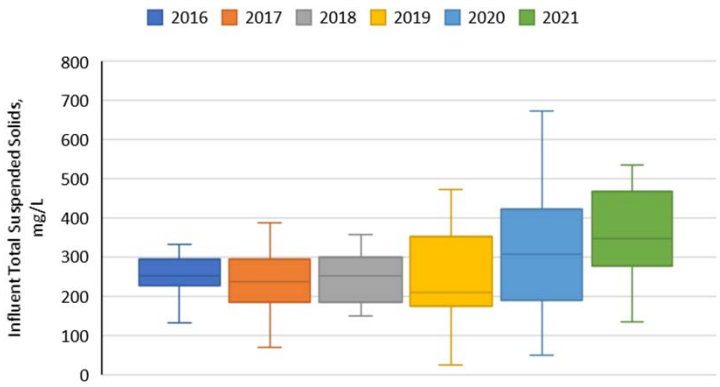
// Historical influent TSS data



Reading a Box Plot



- Greater data variability since Nov. 2019
  - Median value has increased
  - IQR has increased
  - Min-Max range has increased

Filename.ppt/40

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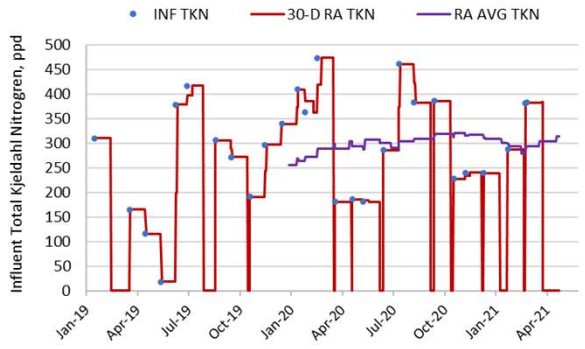
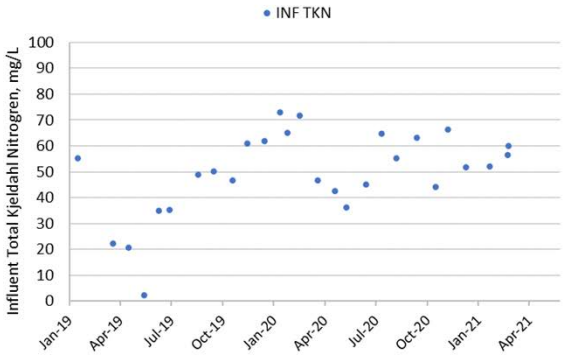
// Historical influent TKN data





**Influent nutrient data sampled only 1x per month

Filename.ppt/41

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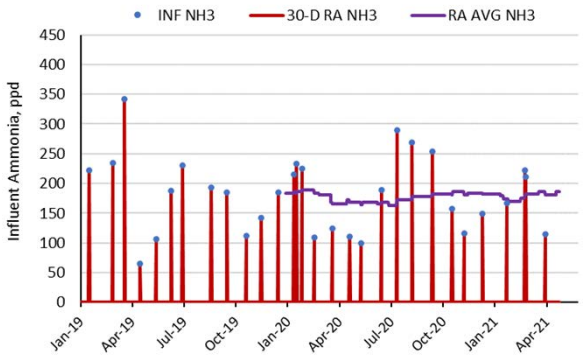
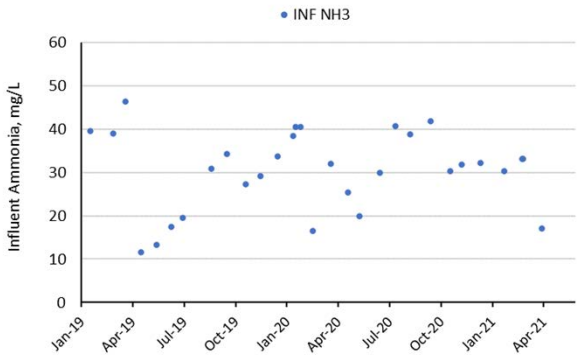
// Historical influent NH_4 data





**Influent nutrient data sampled only 1x per month

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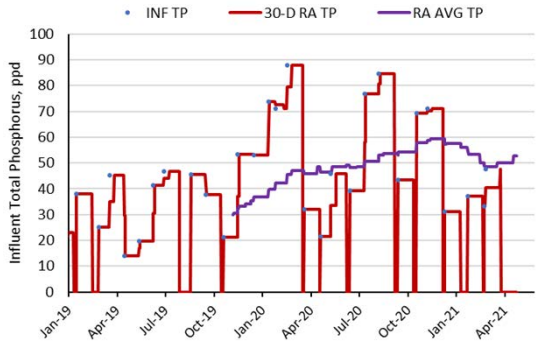
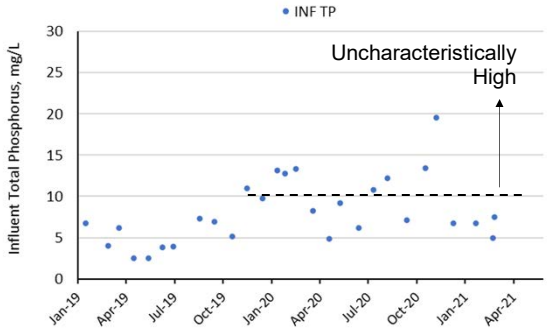
// Historical influent TP data





**Influent nutrient data sampled only 1x per month

Filename.ppt/43

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// Discussion – Data for inclusion in the flow and load projections

Exclude 2021 as incomplete year…

Use data as is…

Exclude years with Covid…

Use data pre-2019…

Filename.ppt/44

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Next Steps

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// Recap Today's Meeting Objectives

- ✓ Confirm agenda for next week's site visit
- ✓ Kick-off project and review scope, fee, and preliminary schedule
- ✓ Discuss regulatory scenarios
- ✓ Review projections and influent conditions
- ✓ Review of data and data gaps

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// Next steps / 30 day look ahead

- Town to complete information request
- Finalize site visit agenda and confirm meeting locations
- Select project delivery method
  - Revise project schedule
- Basis of design and PEL application
- Hydraulic modeling
- Site Survey
- Draft TM 1 to Town July 29

Town of Telluride

Telluride Regional Wastewater Treatment Plant Expansion

TM 1 – BASIS OF DESIGN

DRAFT | August 2021

h2o innovation® in association with carollo

Telluride Regional Wastewater Treatment Plant Expansion

Technical Memorandum 1
BASIS OF DESIGN

DRAFT | August 2021

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Contents

Technical Memorandum 1 – Basis of Design

Appendices

Tables

Figures

Abbreviations

2017 Master Plan	Telluride Regional Wastewater Treatment Plant Master Plan
ADAF	average daily annual flow
ADMM	average daily maximum month
ADMMF	average daily maximum month flow
BOD_5	5-day biochemical oxygen demand
°C	degrees Celsius
Carollo	Carollo Engineers
CDPHE	Colorado Department of Public Health and Environment
cfs	cubic feet per second
CFU/gram	colony forming units per gram
EPA	Environmental Protection Agency
F	Fahrenheit
FOG	fats, oil, and grease
gpd	gallons per day
HA	health advisory
I/I	inflow and infiltration
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mgd	million gallons per day
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mg/m^2	milligrams per square meter
mL	milliliter
MPN/g	most probable number per gram
ng/L	nanograms per liter
NH_4	ammonia
nm	nanometer
NORM	Naturally Occurring Radioactive Materials
PDF	peak day flow
PFAS	per- and polyfluoroalkyl substances
PFBS	perfluorobutanesulfonic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanyl sulfonate
PEL	preliminary effluent limits
ppb	parts per billion
ppd	pounds per day

ppt	parts per trillion
PSRP	Processes to Significantly Reduce Pathogens
Regulation 64	Biosolids Regulation No. 64 (5 CCR 1002 64)
SSE	site specific equation
SU	Standard Unit
TENORM	Technologically Enhanced Naturally Occurring Radioactive Materials
TIN	total inorganic nitrogen
TKN	total Kjeldahl nitrogen
TMDL	total maximum daily loads
TN	total nitrogen
TOrC	trace organic contaminant
Town	Town of Telluride
TP	total phosphorus
TRWWTP	Telluride Regional Wastewater Treatment Plant
TSS	total suspended solids
TVS	total volatile solids
VAR	vector attraction reduction
WQBEL	water quality based effluent limits
WQCD	Water Quality Control Division
WWTP	wastewater treatment plant

Technical Memorandum 1

BASIS OF DESIGN

1.1 Introduction

The Town of Telluride (Town) manages, operates, and maintains the Telluride Regional Wastewater Treatment Plant (TRWWTP) for the benefit of the current and future users of sewer service, which includes the Town, Mountain Village, and Aldasoro, Lawson Hill, and unincorporated San Miguel County. Mountain Village participates jointly with the Town to provide financial support for operation and maintenance of the facility. The current TRWWTP was commissioned in 1988 and has complied with its statutory and regulatory requirements along with meeting obligations as outlined in the agreement between the Town and Mountain Village.

Figure 1.1 Vicinity Map and Aerial of TRWWTP

The Town is committed to safeguarding the community's most vital resource, clean water. A team of dedicated water professionals manage, operate, and maintain the wastewater treatment systems in a fiscally responsible manner that ensures the protection of public health and the environment. The TRWWTP provides reliable and efficient wastewater collection, conveyance, and treatment service to approximately 12,000 people in surrounding service area.

The TRWWTP:

1. Provides treatment services for the surrounding service area and receives septic waste from users not connected to the collection system in the surrounding area.
2. Treats wastewater flows at the 2.1-million-gallon-per-day (mgd) facility, which is located at 12000 Colorado 145 (location shown in Figure 1.1). Effluent from the TRWWTP is discharged to the San Miguel River.

1.2 Project Objectives and Goals

As part of the Town's 2017 Master Planning effort, expansion projects for the TRWWTP were recommended to address increasing organic and hydraulic loading to the existing TRWWTP. The purpose this memorandum and the additional memoranda supporting this document is to develop a strategic implementation roadmap for achieving operational resiliency and reliability to meet the wastewater needs of users within the service area through the 2050 planning horizon in a strategic and financially responsible manner.

The primary goal of this effort is to develop influent and effluent design criteria based on existing facility data. As part of this project, the Town identified seven objectives to guide the development of the implementation pathway and the ultimate TRWWTP expansion project. The main objective of the implementation plan is to recommend sequential improvements using a holistic approach that:

- Revitalizes **aging infrastructure** to support long term operation of the new facility.
- Protects the health and safety of the community and Town employees.
- Generates solutions that are forward thinking to provide options to address **future regulatory** challenges.
- Streamline unit **process efficiency** to reduce variability and minimize staff attention by leveraging operational and energy efficiencies
- Enhances facility **automation and control** by increasing connectivity and functionality for process control, data management, and decision making by implementing the latest technology standards.
- Develop **project communication** guidelines between the Town, engineer, and contractor team to enhance project success and efficient delivery of the final TRWWTP expansion project.
- Solutions are protective of and provides benefit to all environmental media (water, air, land) by considering opportunities for enhanced **sustainability** practices through resource recovery opportunities, renewable energy, and energy efficient processes.

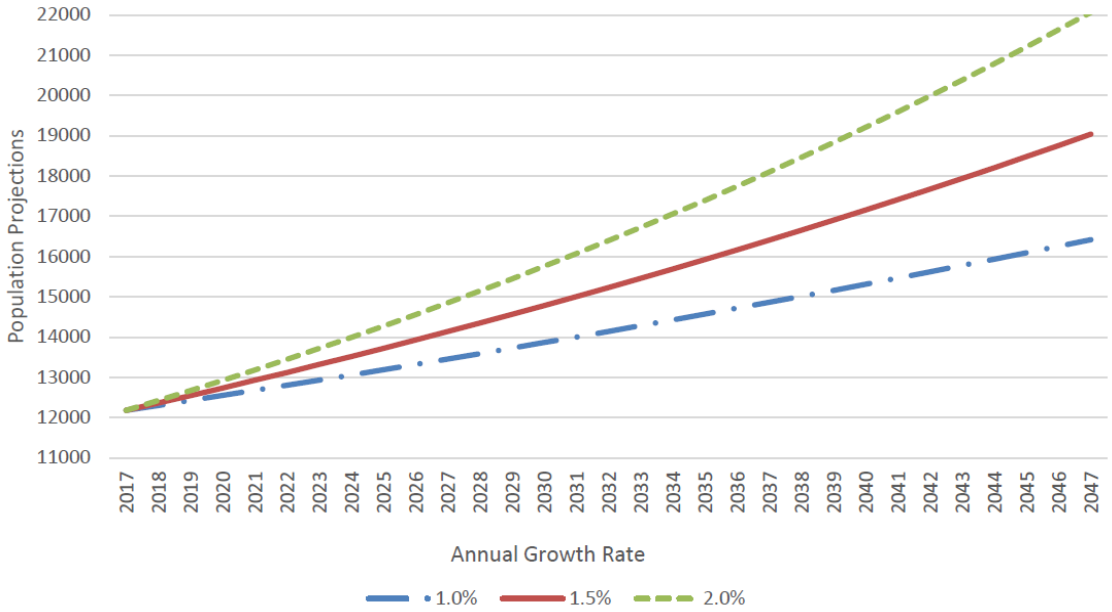
1.3 Population Estimates

Population projections for this basis of design were adopted from the *Telluride Regional Wastewater Treatment Plant Master Plan* (2017 Master Plan) (Stantec, 2017). The projections were developed from 2017 through a 30-year planning horizon of 2047 and assumed a constant annual growth rate from both residents and short-term visitors to the Town. Key findings and assumptions from those population projections included:

- The year-round resident population of the service area is relatively small and has grown at a rate of between 1 and 2 percent, annually.
- The available accommodations are likely to be developed at a rate that is consistent with residential population growth.
- Projections for both the Town and Mountain Village assumed a 1.5 percent annual growth rate for residents and visitors for the next 30 years.

Figure 1.2 shows the totalized resident and visitor populations during the peak seasons at three annual growth rates over 30 years; 1 percent, 1.5 percent, and 2 percent. For continuity of planning and at the direction of Town staff, this basis of design adopted these projections assuming a 1.5 percent annual growth to estimate future flows and loads. Town staff approved

the use of the 1.5 percent growth data, as it is consistent with observed growth in the service area since the 2017 Master Plan was published.



Adapted from the 2017 Master Plan

Figure 1.2 Resident and Visitor Population Projections for TRWWTP Service Area

1.3.1 Future Impacts of Commercial and Industrial Dischargers

The 2017 Master Plan identified three additional sources of wastewater that impact flows and loads into the TRWWTP, which will remain primary contributors into the future.

1.3.1.1 Septage

Septage will continue to be collected at the TRWWTP into the future. At this time, septage haulers discharge flows into a manhole outside of the facility headworks; no storage is provided to attenuate flows. The 2017 Master Plan recommended installation of a dedicated receiving station consisting of an equalization tank and odor control treatment system, giving operations staff the ability to control how and when septage is discharged into the plant headworks.

Based on several assumptions regarding the number of county septic systems, the gallons pumped from each system, and the pumping frequency, the 2017 Master Plan used an annual growth rate of 3 percent for septage flows into the TRWWTP. In 2047, the estimated septage flows were 1,700 gallons per day (gpd) (average daily flow), 5,600 gpd (maximum month flow), 11,200 gpd (maximum week flow), and 56,000 gpd (peak day flow [PDF]). The projected maximum month flow represents approximately 0.3 percent of the current rated hydraulic capacity of the facility. The estimated 5-day biochemical oxygen demand (BOD_5) loads in the 2047 were 99 pounds per day (ppd) (average daily), 330 ppd (maximum month), 660 ppd (maximum week), and 817 ppd (peak day). The projected maximum month BOD_5 load represents approximately 8.9 percent of the current rated organic capacity of the facility.

Given the comparatively low flow and load contribution to the TRWWTP on a maximum month basis (as a percentage of the total flow and load), and the fact that the 2017 Master Plan septage projections were based largely on textbook values and not actual sampling data, this basis of

design assumed that septage flows will increase at a rate proportional to the resident and visitor population into the future. Septage flows and loads were not allocated separately as compared to other contributing sources and were instead assumed to be represented in the combined historical influent wastewater data provided by the Town.

During the design phase for the TRWWTP expansion project, septage flow data collected since the completion of the 2017 Master Plan should be used to design and appropriately size the recommended septage receiving station. For purposes of the implementation plan and conceptual cost estimates in subsequent phases, the projections from the 2017 Master Plan will be used for sizing purposes.

1.3.1.2 Commercial Businesses

The following subsections discuss the significant commercial dischargers identified as contributing flows to the TRWWTP in the 2017 Master Plan. Town staff have indicated that there has been no change to the commercial dischargers since the 2017 Master Plan was published.

Restaurants and Bars

The 2017 Master Plan assumed that the estimates of resident and visitor population account for the flow and loading from this source; this assumption will remain consistent for this basis of design. An exception is the discharge of fats, oil, and grease (FOG) from restaurants. By Town ordinance, restaurants are required to install and maintain grease traps on their service lines. Currently, haulers of FOG transport this material as far as Grand Junction for disposal. Long-term, the Town is interested in considering opportunities to receive this waste at the TRWWTP.

Hotels and Laundromats

The 2017 Master Plan assumed that waste associated with hotels and laundromats are also captured in the per capita flow and loading associated with the resident and visitor population estimates. For continuity of planning, this basis of design has adopted the same assumption.

Boiler Systems

Another source of high strength waste that is commonly discharged to the collection system comes from boilers used to heat buildings and infrastructure. The 2017 Master Plan noted that the spent glycol-based boiler water is either discharged into the collection system or transported by septage haulers to the TRWWTP during maintenance activities. Because the discharges are associated with maintenance activities that are unpredictable in nature, no flow or load projections were established in the 2017 Master Plan for this waste stream. It was instead recommended that the Town develop a utility ordinance and public education program to control the discharge of boiler waste streams in the collection system.

Given the comparatively low flow and load contribution to the TRWWTP, and the lack of available data, this basis of design assumed that boiler discharge flows will increase at a rate proportional to the resident and visitor population.

Brewery and Distillery

The Town is home to one brewery and one distillery. Currently, the waste streams from both businesses discharge to the TRWWTP under an industrial discharge permit with required monitoring, sampling, and reporting. Based on discussions with the business owners regarding speculative future growth, the 2017 Master Plan developed projections through the 30-year planning horizon for consideration against the current rated capacity of the treatment facility. In

2047, the estimated brewery/distillery waste flows were 12,700 gpd (average daily flow), 19,100 gpd (maximum month flow), 22,230 gpd (maximum week flow), and 25,500 gpd (PDF). The projected maximum month flow represents approximately 0.9 percent of the current rated hydraulic capacity of the facility. The estimated BOD_5 loads in 2047 were 573 ppd (average daily), 846 ppd (maximum month), 1,025 ppd (maximum week), and 1,170 ppd (peak day). The projected maximum month BOD_5 load represents approximately 23 percent of the current rated organic capacity of the facility. Note that these projections from the 2017 Master Plan assumed that a 400 percent brewery expansion would occur at a new location in 2020, and that a second brewery would open in 2030. Town staff confirmed that the brewery expansion has not occurred as intended and that the planned expansion location is no longer an option for the brewery.

This space to be updated with information from the Town regarding the future expansion plans from the brewery.

1.3.1.3 Institutions

Schools are currently the only large institutions in the TRWWTP collection system. The 2017 Master Plan assumed that the resident and visitor population estimates cover the flow and loading from these sources. For continuity of planning, this basis of design has adopted the same assumption.

1.3.1.4 Society Turn Development – Medical Facility

Although not included in the 2017 Master Plan, future development adjacent to the TRWWTP is anticipated to occur within the expansion project planning horizon. Documentation provided by the development engineer in a memorandum dated May 31, 2019, indicated that all water use for the development is anticipated to be conveyed to the TRWWTP as irrigation will be provided through a separate raw water irrigation source. Uses anticipated as part of this development include retail, food and beverage, office space, industrial, medical center, employee housing (multi-family), and a proposed hotel. Projected wastewater flow from the final development is anticipate to equal 376 gpd (average daily flow).

Although this analysis developed anticipated hydraulic loading from the proposed development, organic loading and other constituents of concern anticipated to be conveyed to the TRWTTP (metals in particular) were not identified. During the design phase for the expansion project, special consideration of the medical center waste and possible recommendations for industrial pre-treatment should be further considered to protect the TRWWTP. For the purposes of the basis of design, an assumption was made that projected flow and loading from resident and visitor populations will cover the addition loading associated with this development.

1.4 Influent Flow Projections

In support of the TRWWTP expansion project, the Town provided 5 years (2016 to 2021) of historical average day flow data. These data were used to quantify the recent base and peak flow events, which were then projected through 2050 based on the available population projections as discussed in Section 1.2. For the basis of design, future projections were developed for the scenarios shown in Table 1.1.

Table 1.1 Summary of Projected Flow and Load Conditions

Condition	Projected Condition	Master Planning Purpose
Average Daily Annual Flow (ADAF)	Flow and Loads	Relevant for demonstrating treatment capacity with units out of service now and in the future.
Average Daily Maximum Month Flow (ADMMF)	Flow and Loads	Relevant for Colorado Department of Public Health and Environment (CDPHE) permitting and design treatment capacity purposes.
Peak Week – Winter	Flow and Loads	Relevant for demonstrating peak seasonal treatment capacity now and in the future
Peak Week – Summer	Flow and Loads	
PDF	Flow	Relevant for demonstrating hydraulic treatment and equalization capacity now and in the future.
Peak Hour Flow (PHF)	Flow	Relevant for CDPHE for permitted hydraulic treatment capacity purposes.
Peak 15-Minute Flow	Flow	Relevant for demonstrating hydraulic treatment and equalization capacity now and in the future

The TRWWTP influent wastewater is a combination of flows from the Telluride interceptor, Lawson interceptor, Mountain Village interceptor, and the Aldasoro interceptor. Nonresidential sources of wastewater entering the plant were discussed in Section 1.2.2 and include commercial businesses (e.g., restaurants/bars, breweries, distilleries, hotels), septage (hauled from residential septic tanks, recreational vehicles, and from portable toilets set up during festivals), boiler water drain waste, and institutions (e.g., schools). The Town continues to develop its Industrial Pretreatment Program with monitoring requirements for nutrients, BOD_5, and various metals. Flow and organic loading from the industrial dischargers are routinely monitored by the Town but are not restricted.

A reasonable expectation, based on discussions with operations and Town staff, is that commercial and industrial customers in the service area will continue to grow at a rate proportional to the anticipated residential growth. Therefore, flow and load projections that were calculated in this basis of design on a per capita basis comprise all existing flow sources including domestic, short-term visitors, commercial, institutional, and septage wastewater. By multiplying the expected future population by combined per capita flows and loads, future commercial and industrial flows and loads are inherently reflected in flow and load projections for the treatment plant.

Results derived from the flow and load analyses, along with supporting documentation from previous studies and population projections, are summarized below.

1.4.1 Current Flow

Historical influent flows the TRWWTP are plotted from 2016 through April of 2021 in Figure 1.3. Each of the influent flow scenarios defined in Table 1.2, excluding PDF, PHF, and peak 15-minute flow were determined from this data set. Note that the 7-day running average influent flows are not shown and can instead be viewed in Figure 1A.1 of Appendix 1A. All critical flow values used to calculate hydraulic peaking factors in this basis of design and for use in the flow projections

occurred in 2019. This was a particularly wet and busy year for the Town and many other mountain communities, with above average snowfall, runoff, and a significant increase in regional tourism.

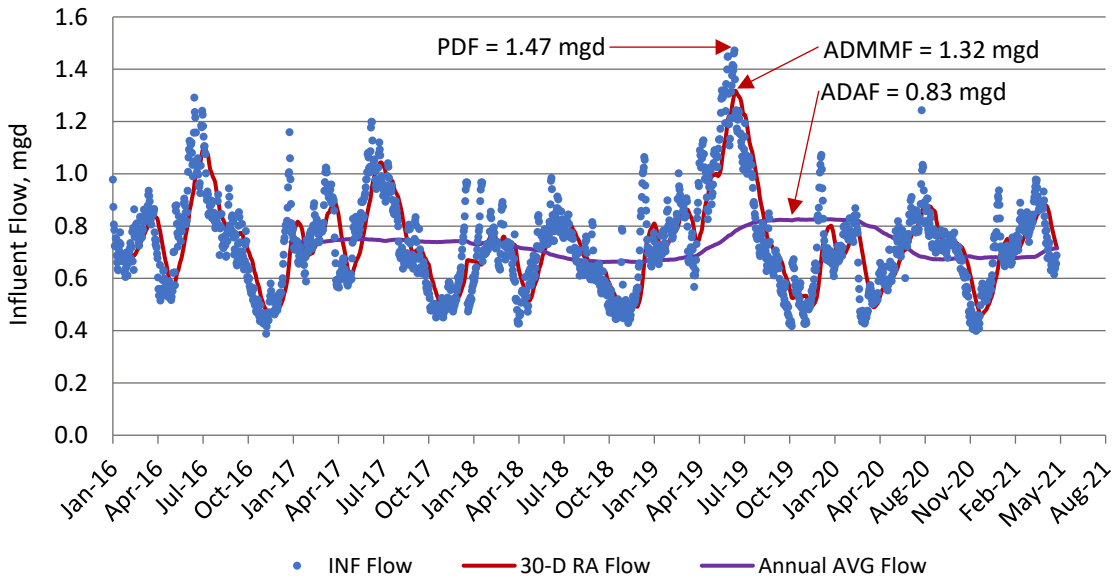


Figure 1.3 Average Day and 30-day Running Average Flows Since 2016

A water balance approach for estimating future ADMMF and PDF was attempted during this analysis. The water balance approach is based on the premise that the ADMMF and PDF events are comprised of a "dry weather" and a "wet weather" flow component. The wet weather flow contribution is calculated as the difference between the peak 30-day running average or PDF (typically inflow and infiltration [I/I] influenced) and the base dry weather flow. The project team can then choose to hold the wet weather flow contribution constant through the planning horizon and add the flow component to the projected increase in dry weather flow due to population growth. Or the project team can assume that the wet weather flow contribution will increase proportionally to the base dry weather flow through the planning horizon, which is a more conservative approach.

Given the increase in year-round tourism of the area and the large number of tourism events and festivals that occur in the Town during peak I/I season (typically June for mountain communities similar to Telluride), it was not possible to distinguish (with an acceptable level of certainty) between peak runoff and I/I flows and the increase in influent to the TRWWTP due to heavy tourism volume associated with events in late May and June. Therefore, the project team adopted the more conservative approach to project the future hydraulic flow conditions and assumed that wet weather flows will increase proportionally with population.

The historical PHF and peak 15-minute events were determined using the combined 15-minute flow data from the Telluride interceptor and Mountain Village Interceptor (upstream of influent pumping) (Figure 1.4). The combined flow from these two interceptors represents most all of the influent flow to the TRWWTP, as shown in Figure 1.4, when overlayed with the daily average pumped influent data. Generally, it is preferred to evaluate at least 5 years of diurnal influent flow data for estimating peak flows to ensure that the high variance exhibited by hydrologic

factors that drive peak flow are captured. However, only 15-minute data from January 2019 through August 2021 was provided to the project team for this analysis.

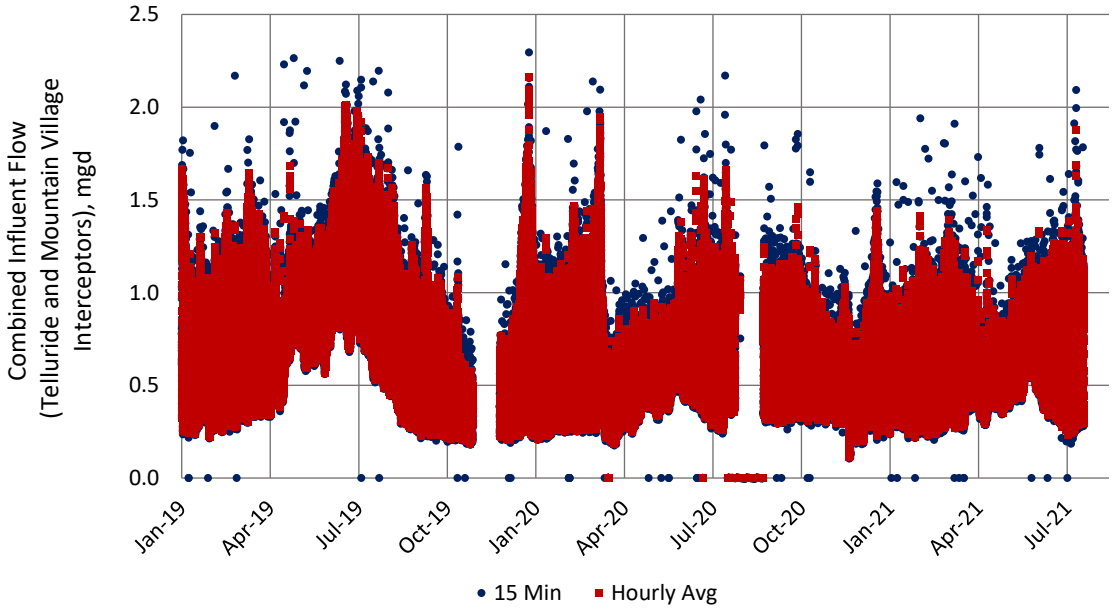


Figure 1.4 Combined Influent Flow Data from Telluride and Mountain Village Interceptors

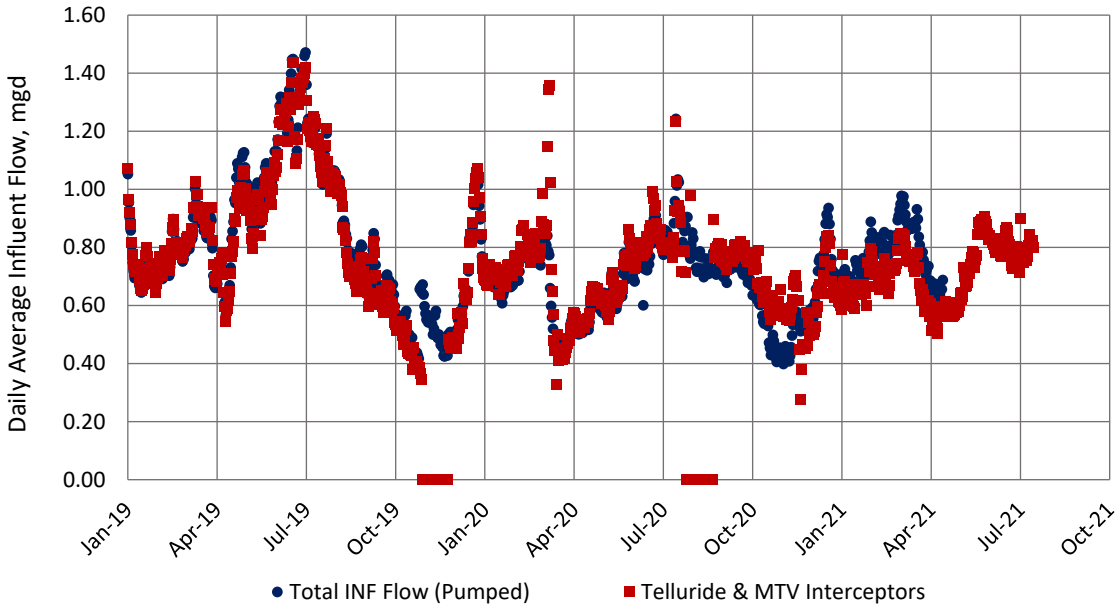


Figure 1.5 Comparison of Daily Average Influent Flow Data – Combined Interceptor and Pumped

A summary of the current flows and peaking factors calculated from the available historical data are presented in Table 1.2. These values are used for the flow projection analysis described in later sections.

Table 1.2 Summary of Historical Flow Conditions and Peaking Factors

Condition	Current (mgd)[1]	Peaking Factor[2]
ADAF[3][9]	0.83	1.0
ADMMF[4][9]	1.32	1.59
Peak Week – Winter[5][9]	1.01	1.21
Peak Week – Summer[6][9]	1.41	1.70
PDF[7][9]	1.47	1.77
PHF[8][10]	2.16	2.60
Peak 15-Minute Flow[10]	2.30	2.77

Notes:
(1) Assumes that wet weather flow contribution (i.e., I/I) grows proportionally with population through the planning horizon.
(2) Peaking factors for each flow condition are calculated against the reported ADAF of 0.83 mgd.
(3) Maximum value from a running 365-day average calculated over the span of available data.
(4) Maximum monthly average value obtained by a 30-day running average of flows over the span of available data.
(5) Maximum 7-day running average obtained for months October through March over the span of available data.
(6) Maximum 7-day running average obtained for months April through September over the span of available data.
(7) Maximum 1-day average flow observed in the available data.
(8) Maximum flow rate sustained for a 1-hour period over the span of available data.
(9) Based on daily influent flow data from 2016 through April 2021.
(10) Based on 15-minute influent flow data from the Telluride and Mountain Village interceptors from January 1, 2019, to August 1, 2021.

1.4.2 Inflow and Infiltration Analysis

A specific I/I assessment of the collection system was not conducted as part of the basis of design. While the Town intends to maintain and rehabilitate segments of the collection system to reduce I/I in future years, the project team did not take credit for possible I/I reductions in the peak flow projections. This approach is conservative and assumes the wet weather flows will increase proportionally with population in the future as discussed in the previous section.

1.4.3 Unit Flow Rate Per Capita

Per capital flow rates, calculated using the current population (shown in Section 1.3) and the historical influent flows shown in Table 1.2, are presented in Table 1.3. These values are used to project future influent flows through 2050. Per capita flow values are not shown for PDF or PHF, as these are flow conditions that are typically influenced by I/I; these conditions were projected by applying the peaking factors from Table 1.2 to the projected ADAF.

Table 1.3 Summary of Historical Flow Conditions and Peaking Factors

Condition	Current (mgd)[1]	Per Capita Flow (gpd/capita)[2]
ADAF	0.83	65.2
ADMMF	1.32	103.8
Peak Week – Winter	1.01	79.7
Peak Week – Summer	1.41	111.3

Notes:
(1) Assumes that wet weather flow contribution (i.e., I/I) grows proportionally with population through the planning horizon.
(2) Per capita flows are calculated for each condition assuming a population of 12,693, adopted for 2021 as presented in the 2017 Master Plan.

1.4.4 2040 Projected Flow Conditions

Figure 1.6 presents the projected influent flows to the TRWWTP through 2050. For clarity, the projected flow rates for each condition in 2050 are as follows:

- ADAF = 1.29 mgd.
- ADMMF = 2.05 mgd.
- Peak Week – Winter = 1.56 mgd.
- Peak Week – Summer = 2.19 mgd.
- PDF = 2.28 mgd.
- PHF = 3.35 mgd (not shown).
- Peak 15-Minute = 3.57 mgd (not shown).

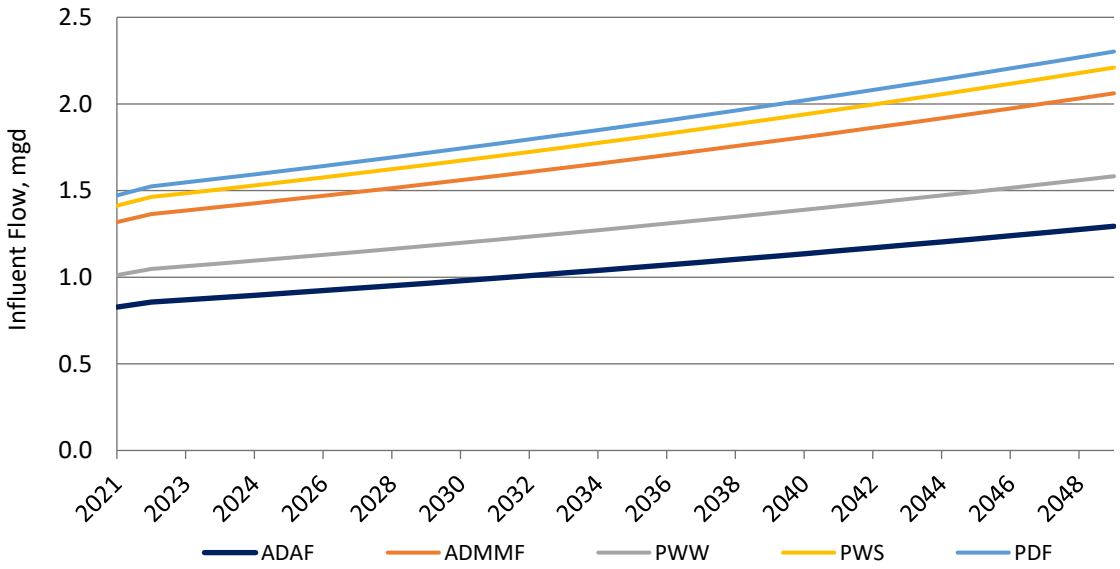


Figure 1.6 Projected Flow Conditions through 2050

Per CDPHE, domestic wastewater treatment works are required to 1) initiate engineering and financial planning for expansion whenever the ADMMF throughput and treatment reaches 80 percent of design capacity, and 2) commence construction of such expansion whenever ADMMF throughput reaches 95 percent of the design capacity. The estimated ADMMF in 2050 (2.06 mgd) is less than the current permitted capacity of the WWTP (2.10 mgd ADMMF) but is projected to exceed the 95 percent construction trigger around 2047.

Therefore, the near-term drivers for design and construction of capital improvements at the TRWWTP are not driven by the hydraulic capacity of the existing facility, which is consistent with the general finding in the 2017 Master Plan.

1.5 Influent Load Projections

Influent loads and design concentrations for BOD_5, total suspended solids (TSS), total Kjeldahl nitrogen (TKN), ammonia (NH_4) and total phosphorus (TP) are summarized in the sections below. Detailed analysis of historical influent concentrations and loads to the TRWWTP underlie the load projections for this basis of design.

1.5.1 Current Influent Loads

In support of the influent load analysis, the Town provided historical influent wastewater concentrations from the following date ranges:

- Influent BOD_5 and TSS from January 1, 2016, to April 30, 2021. Samples were generally collected by operations staff between 1-2 times per week.
- Influent TKN, NH_4, and TP from January 1, 2019, to April 30, 2021. Samples were collected by operations staff once per month.

Graphs presenting the influent concentrations and calculated influent loads for each constituent are available in Appendix 1A.

During analysis of the available data, the project team identified a shift in the reported influent concentrations that occurred in early November 2019 and continues through present day. The shift was most notable for influent BOD_5 and TSS, where the mean and interquartile range (or the statistical spread) of the data increased as compared to previous years. This is confirmed by visually inspecting the concentration data (see Figures 1A.2 and 1A.5 in Appendix 1A) and by developing box plots for both data sets (see Figures 1A.3 and 1A.6 in Appendix 1A).

The project team cannot conclude with certainty that a similar shift in concentrations occurred for the influent nutrients given the limited span and number of available data points. During project meetings with the Town on three separate occasions regarding the influent data (June 24, July 8, and July 13, 2021), operations and lab staff provided the following additional information pertaining to influent sampling.

- Prior to November 2019, influent samples were hand composited using grab samples collected four times per day (8:00 AM, 10:00 AM, 12:00 PM, and 2:00 PM). Since then, the facility has transitioned to an autosampler, which collects a 24-hour flow based composite sample. Following the meeting on June 24, operations and lab staff initiated a side-by-side comparison of the autosampler and hand composited data from the influent to determine if there was a significant, repeatable difference in the data between the two approaches. *Results from that effort were pending at the time of this draft report and will be updated for the final report.*
- Operations staff noted on June 24 that there have been periods when the influent sampler tube has been found touching the bottom of the influent channel. During these periods, the samples may have collected a higher load of solids that were either moving across or deposited on the bottom of the influent channel. Operations staff have since raised the sample tube in the influent channel and are currently monitoring it to ensure that the tube remains submerged under diurnal low-flow conditions.
- Operations staff noted on both July 8 and July 13, the uncharacteristically high influent TSS concentrations (concentrations much greater than 1,000 milligrams per liter [mg/L]) are most likely due to recent (and more frequent) mechanical issues with the influent screening equipment. The influent screen was offline for a period of 4 weeks during the second quarter of 2021. When the screens are down, there is a significant increase in the solids conveyed through the influent channel. These events also likely impacted the influent BOD_5 measurements, albeit not to the same degree.

After presenting a summary of the influent concentration and load data to Town and operations staff on July 8, the Town directed the project team to proceed using the influent loading data prior to November 2019 for load projections while the operations team continues to investigate the observed sampling discrepancy, such as the side-by-side sampling campaign noted above. Ultimately, a sampling error could not be confirmed by the TRWWTP through ongoing review of the influent data and the side-by-side comparison, and therefore the data from beyond the November 2019 was incorporated in the projected loading values. For comparison and documentation, the loading projections which excluded the influent data after November 2019 are included in Appendix 1B.

The current influent wastewater loads and calculated design concentrations assuming the entire data set are summarized in Table 1.4. Note that the following five influent TSS samples (all above 1,000 mg/L) were excluded from the analysis, as these concentrations are atypical for municipal wastewater and don't align with other influent parameters collected on and around the same dates:

- 1,310 mg/L on December 12, 2019.
- 1,533 mg/L on August 11, 2020.
- 3,493 mg/L on August 26, 2020.
- 1,460 mg/L on October 7, 2020.
- 1,322 mg/L on February 17, 2021.

Even with the exclusion of the above data points, the peak week influent TSS loads may be biased by uncharacteristically high influent concentrations. Typically, the BOD_5 to TSS ratio in municipal wastewater influent is around 1.0, while ratio calculated for the influent at the is significantly lower, as low as 0.52 for peak week calculations.

Table 1.4 Current Influent Flows, Loads, and Design Concentrations Using All Available Data from January 2016 through April 2021

Parameter	ADAF	ADMMF	Peak Week – Winter	Peak Week – Summer
Influent Flow, mgd	0.83	1.32	1.01	1.41
Influent Loads				
BOD_5, ppd	2,180	3,880	4,480	3,980
TSS, ppd	2,010	3,560	8,360	5,740
TKN, ppd	325	475	475	465
NH_4, ppd	190	345	345	290
TP, ppd	60	90	90	85
Design Concentrations				
BOD_5, mg/L	316	353	530	338
TSS, mg/L	291	324	990	487
TKN, mg/L	47	43	56	39
NH_4, mg/L	27	31	40	25
TP, mg/L	8.7	8.0	10.4	7.2

Given the limited availability of influent nutrient data, the project team recommends that a sensitivity analysis be conducted as part of the liquid stream and solid stream approach technical memorandum using a range of influent concentrations. This approach will inform the Town and the final design engineer (to be contracted in late 2021) of any capacity (both liquids and solids

stream) and nutrient removal bottlenecks/deficiencies that should be addressed if the influent concentrations are indeed higher in coming years. The sensitivity analysis is especially prudent given the likelihood that the facility will be designed for Regulation 31 limits.

The project team also recommends that the TRWWTP increase the frequency of influent nutrient sampling to at least once per week moving forward. Ideally, laboratory staff would collect one composite sample representative of weekend conditions, and at least one composite sample representative of weekday conditions each week. This increased sampling becomes even more critical during peak tourism events in the service area which may necessitate collecting samples on additional days during peak week scenarios (Telluride Bluegrass Festival, Fourth of July, Christmas, Spring Break, etc.).

1.5.2 Per Capita Loading Rate

Per capital loading rates, calculated using the current population (shown in Section 1.3) and the historical influent loads shown in Table 1.2, are presented in Table 1.5. These values are used to project future influent loads through 2050.

Table 1.5 Current Per Capita Loading Rates

Per Capita Loading Rates	ADAF	ADMMF	Peak Week – Winter	Peak Week – Summer
BOD_5, ppd per capita	0.17	0.31	0.35	0.31
TSS, ppd per capita	0.16	0.28	0.66	0.45
TKN, ppd per capita	0.026	0.037	0.037	0.036
NH_4, ppd per capita	0.015	0.027	0.027	0.023
TP, ppd per capita	0.0047	0.0069	0.0069	0.0067

1.5.3 Influent Load Projections

Influent load projections, based on the historical influent data prior to November 2019 and summarized in Table 1.4, are presented in 2050 in Table 1.6. For brevity of this section, load projection graphs for each influent parameter are provided in Appendix 1A.

Table 1.6 Load Projections in 2050

	ADAF	ADMMF	Peak Week – Winter	Peak Week – Summer
Influent Flow, mgd	1.29	2.06	1.58	2.21
Influent Loads				
BOD_5, ppd	3,410	4,910	6,290	6,230
TSS, ppd	2,480	3,990	4,440	3,960
TKN, ppd	380	655	485	655
NH_4, ppd	295	535	535	360
TP, ppd	55	75	75	75

As noted previously, CDPHE requires domestic wastewater treatment works to 1) initiate engineering and financial planning for expansion whenever the average daily maximum month (ADMM) organic loading to the plant reaches 80 percent of design capacity, and 2) commence construction of such expansion whenever ADMM organic loading reaches 95 percent of the design capacity. The estimated ADMM BOD_5 in 2050 (4,910 ppd) exceeds the current permitted

capacity of the TRWWTP (3,708 ppd as BOD_5) and is anticipated to exceed the CDPHE 95 percent construction trigger around 2027.

Note that for transparency in this basis of design, the estimated ADMM BOD_5 load in 2050 is 6,070 ppd assuming the use of all historical influent data (not shown in Table 1.6). Under this assumption, the facility would have already exceeded the 95 percent construction trigger when using a 30-day rolling average calculation (in lieu of a 30-day calendar average) of the influent data.

Regardless of the chosen data set, initiation of design and construction of capital improvements at the TRWWTP is driven more immediately by organic loading capacity and anticipated regulatory requirements as opposed to hydraulic capacity.

1.6 Comparison to Previous Studies

The 2017 Master Plan was reviewed in support of the flow and loading analysis to provide a comparison between historical and current flows and load and population projections.

Table 1.7 shows a comparison of the design flow and loading concentrations and peaking factors that were summarized for conceptual design. Generally, the values presented in the 2017 Master Plan are slightly more conservative as compared to the values calculated as part of this basis of design (assuming all years of available data). It is important to note the following with respect to the 2017 Master Plan values:

- Influent design concentrations were only provided for the average daily annual condition. No recommended design concentrations were provided for the other planning scenarios including average daily maximum month or peak seasonal conditions.
- The concentrations shown were based on ratios calculated from 24-hour composite influent monitoring that was conducted on December 26, 2016, which represented the maximum week wastewater loading conditions at the time. These values were adopted as a conservative basis of planning but are not based on long-term influent monitoring data.

Table 1.7 Historical Master Planning Effort – Flow and Load Projection Factor Comparison

Parameter	Units	2017 Master Plan	2020 Basis of Design – All Historical Data Since 2016
ADAF Per Capita Flow	gpd/capita	80	65.2
ADMMF Per Capita Flow	gpd/capita	120	103.8
ADMMF/ADAF	--	1.50	1.59
Peak Week – Winter/ADAF	--	1.75	1.22
Peak Week – Summer/ADAF	--		1.71
PDF/ADAF	--	2.01	1.78
PHF/ADAF	--	3.89	2.58
Peak 15-Minute/ADAF	--	--	2.74
BOD_5	mg/L	350 / NA	316 / 353
TSS	mg/L	250 / NA	291 / 324
TKN	mg/L	49 / NA	47 / 43
NH4	mg/L	35 / NA	27 / 31
TP	mg/L	7.0 / NA	8.7 / 8.0

Notes:
(1) Projected loads for ammonia were not included as part of the 2017 Master Plan.

1.6.1 Influent Flow

Figure 1.7 shows the influent flow projections from the 2017 Master Plan assuming 1.5 percent population growth and the actual ADMMF observed each year since 2016. This graph shows that influent flows to the TRWWTP are trending lower as compared to the projections in the 2017 Master Plan.

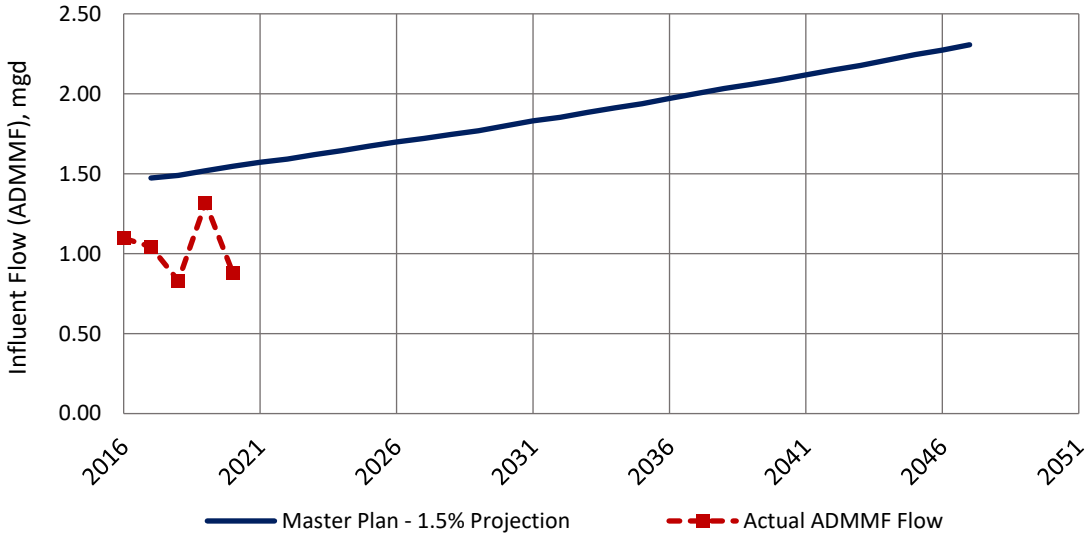


Figure 1.7 Comparison of 2017 Master Plan Flow Projections and Historic Influent ADMMF Data (2016-2021)

Projecting the 2019 ADMMF of 1.32 mgd forward through 2050, the TRWWTP is not expected exceed its current rated hydraulic capacity or the projections presented in the 2017 Master Plan (Figure 1.8). The 95 percent construction trigger associated with the hydraulic capacity is projected to be exceeded between 2046 and 2047. The current rated capacity of the plant would be exceeded between 2051 and 2052.

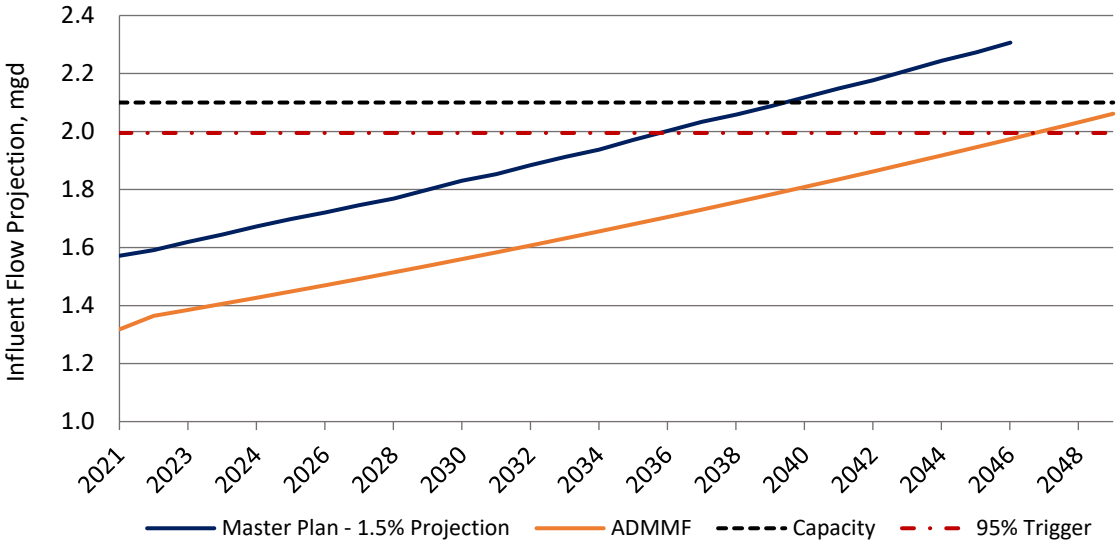


Figure 1.8 Comparison of 2017 Master Plan Flow Projections and Basis of Design Flow Projections

1.6.2 Influent Organic Loading

Figure 1.9 shows the influent BOD_5 load projections from the 2017 Master Plan using the 1.5 percent annual population growth and the actual ADMM BOD_5 loads since 2016. The plot includes two scenarios from the 2017 Master Plan:

1. The first scenario assumes a 400 percent expansion of the Telluride Brewery in 2020, followed by the opening of a smaller brewery in 2030.
2. The second scenario assumes no Telluride Brewery expansion.

At the July 13, 2021, meeting staff confirmed that the Telluride Brewery expansion was not anticipated within the planning horizon. *Town staff intend to confirm the brewery's long-term plan, no update has been provided at the time of this draft report. Information will be updated in the final report if available.*

The graph shows that influent loads to the TRWWTP were trending about 10 percent lower as compared to the BOD_5 projections in the 2017 Master Plan until this year, when BOD_5 fell between the two projection scenarios noted above.

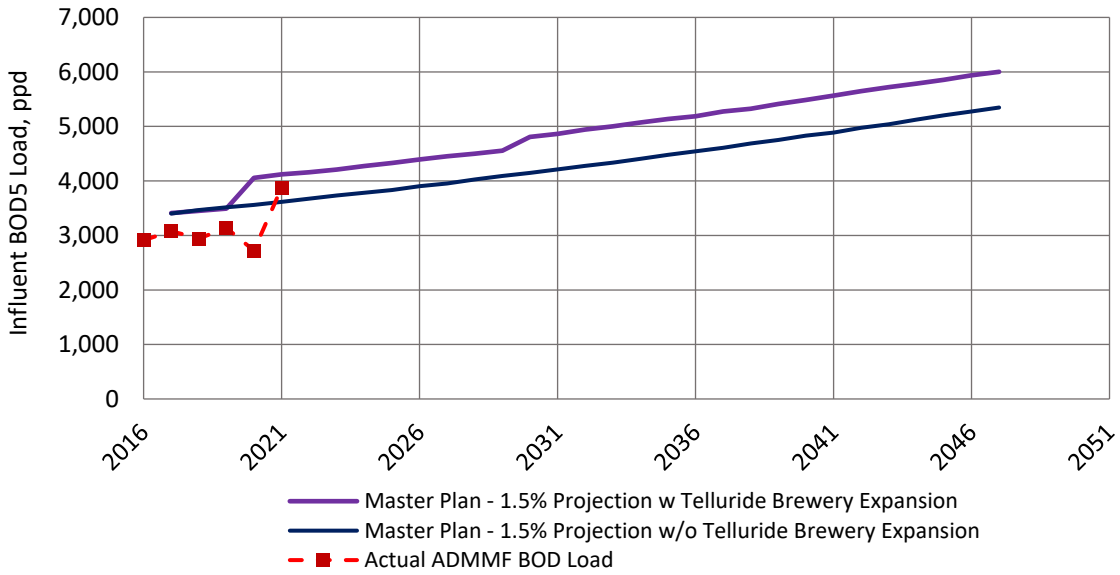


Figure 1.9 Comparison of 2017 Master Plan BOD_5 Load Projections and Recent Influent BOD_5 Load Data (2016-2021)

Projecting the current ADMM BOD_5 load of 3,880 ppd forward through 2050, the TRWWTP has already exceeded its 95 percent construction trigger, is at risk for triggering a construction schedule compliance plan in the event the increased loading conditions occur within a 30-day calendar period and may exceed the current rated organic loading capacity within the next 2 years (Figure 1.10). The organic loading projections fall between the two influent loading scenarios presented in the 2017 Master Plan with and without and expansion of the Telluride Brewery.

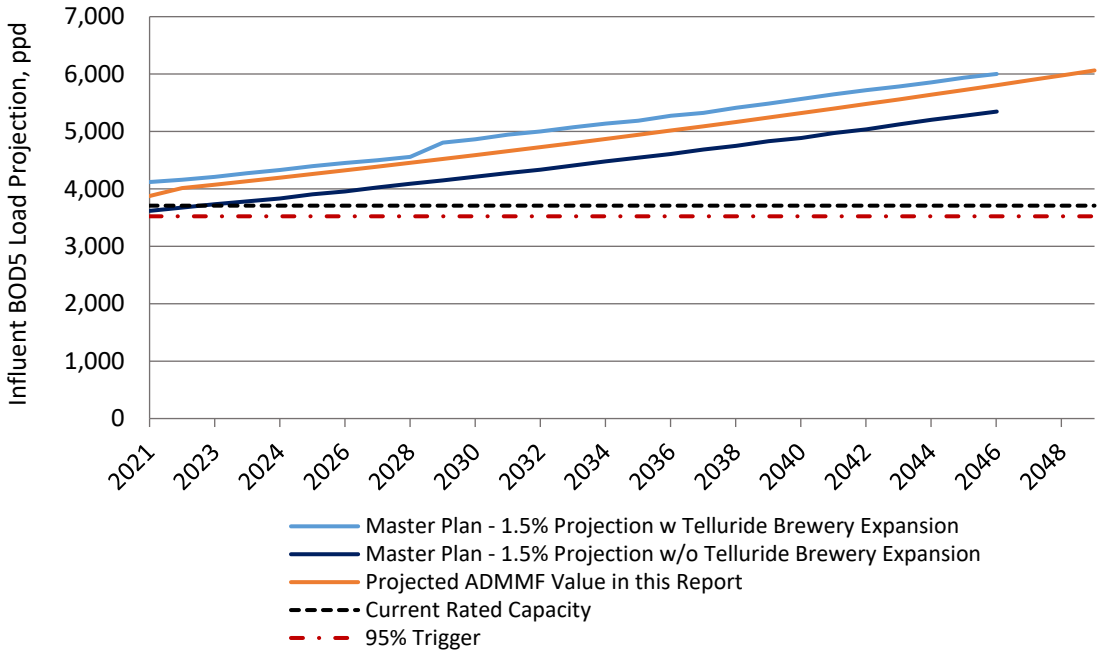


Figure 1.10 Comparison of 2017 Master Plan BOD_5 Load Projections and Basis of Design BOD_5 Load Projections

1.7 Summary of Hydraulic and Loading Projections for Preliminary Design

Based on the information presented above, Table 1.8 summarizes the 2050 influent conditions based on the available historical process data from January 2016 to April 2021.

Table 1.8 Summary of Projected 2050 Influent Design Criteria (based on historical data)

	ADAF	ADMMF	Peak Week – Winter	Peak Week – Summer	PDF	PHF	Peak 15-Minute
Influent Flow, mgd	1.29	2.06	1.56	2.19	2.28	3.35	3.57
Influent Loads					Not Analyzed		
BOD_5, ppd	3,410	6,070	7,000	6,230			
TSS, ppd	3,140	5,570	13,100	8,980			
TKN, ppd	510	745	745	725			
NH_4-N, ppd	300	535	535	455			
TP, ppd	95	140	140	135			

Based on discussions with the Town for developing design criteria for the proposed expansion project, the above hydraulic and organic loading considerations are close to the recommendations included in the 2017 Master, and therefore the ADMMF and organic loading recommended in the 2017 Master Plan will be used for design implementation. The final influent design criteria are provided in Table 1.9 and the primary difference is the influent flow criteria.

Table 1.9 Summary of 2050 Influent Design Criteria

	ADAF	ADMMF	Peak Week – Winter	Peak Week – Summer	PDF	PHF	Peak 15-Minute
Influent Flow, mgd	**1.44**	**2.3**	**1.74**	**2.45**	**2.54**	**3.73**	**4.0**
Influent Loads					Not Analyzed		
BOD_5, ppd	3,410	**6,005**	7,000	6,230			
TSS, ppd	3,140	5,570	13,100	8,980			
TKN, ppd	510	745	745	725			
NH_4-N, ppd	300	535	535	455			
TP, ppd	95	140	140	135			

1.8 Regulatory Framework

The regulatory requirements for the TRWWTP are continuously changing through revisions of current regulations, new water quality standards, or the addition of new facilities that can alter existing assimilative capacity allocations in the San Miguel River. The following sections present current, future, and other potential water quality regulatory drivers that are expected to impact near- and long-term treatment planning activities for the TRWWTP.

1.8.1 Current Discharge Permit

The TRWWTP is owned and operated by the Town and is permitted under Discharge Permit No. C00041840 that went into effect on December 1, 2020. The permit is valid for 5 years and will expire on November 30, 2025. The TRWWTP is located in the SW 1/4 of the NW 1/4 of S33; T24N; 12000 Hwy 145, Telluride CO; at 37.94866° N and 107.87366° W. There is one permitted outfall location to the San Miguel River.

The TRWWTP is permitted for a hydraulic capacity of 2.1 mgd ADMMF and an organic loading of 3,708 ppd measured as BOD_5. Table 1.10 summarizes the current discharge limits as published in the permit (December 1, 2020). The current discharge permit does not set effluent limits for TP and a variety of metals, but the Town is required to monitor and report effluent concentrations for these constituents at this time. On March 31, 2021, the Town submitted a permit modification request to CDPHE to incorporate instream modifications that removed the bifurcation condition and adjust the low flow criteria based on provided monitoring data collected and submitted by the Town. At the time of this draft report, the permit modifications have not been finalized by the CDPHE Permitting Division.

Table 1.10 TRWWTP Discharge Permit Limitations for San Miguel River (excluding metals)[1][2]

Effluent Parameters	Units	San Miguel River Effluent Limitations	
Effluent Flow	mgd	2.1	
E. coli	#/100 mL	224 (30-day average) 448 (7-day average)	
Total Residual Chlorine	mg/L	0.02 (30-day average) 0.032 (daily maximum)	
BOD_5	mg/L	30 (30-day average) 45 (7-day average)	
TSS	mg/L	30 (30-day average) 45 (7-day average)	
pH	SU	6.5-9.0	
Total Inorganic Nitrogen (TIN)	mg/L	34 (daily maximum) 17 (daily maximum)[3]	
Oil and Grease	mg/L	10 (daily maximum)	
Total Ammonia as N		**30-day Average**	**Daily Maximum**
January	mg/L	2.8	28
February	mg/L	2.8	27
March	mg/L	2.8	29
April	mg/L	2.8	23
May	mg/L	2.8	20
June	mg/L	2.8	28
July	mg/L	2.8	36
August	mg/L	1.8	34
September	mg/L	10	37
October	mg/L	1.8	28
November	mg/L	2.8	31
December	mg/L	2.8	28

Notes:
(1) As of August 26, 2021.
(2) The TRWWTP also has monitoring and reporting requirements for the following parameters: effluent temperature, total dissolved solids, aluminum, arsenic, cadmium, chromium, copper, iron, lead, manganese ,mercury, molybdenum, nickel, selenium, silver, zinc, chloride, sulfate, and nonlyphenol.
(3) Effective December 1, 2025.
mL milliliter
SU Standard Unit

The TRWWTP is authorized to only use the following chemicals on-site based on the current discharge permit documents: sulfuric acid for pH control during biosolids digestion and sodium chlorite for chlorine and chloride control in biosolids digestion.

1.8.2 Water Quality of Receiving Water

This section provides a brief overview of water quality considerations in the San Miguel River discharge Segment COGUSM03b (water quality based effluent limits [WQBEL] summarized in Table 1.11). Segment COGUSM03b in the San Miguel River is designated as reviewable under the classification for Aquatic Life Cold 1, Recreation Class E, Agriculture and water supply and requires an antidegradation review as a "reviewable" segment. The dilution ratio of the chronic low flow (30E3 – 30-day average low flow recurring in a 3-year interval) to the design flow of the TRWWTP (2.1 mgd) for discharge into the San Miguel River is 0.78:1 based on the information provided in the most recent discharge permit.

The stream segment is on the 303(d) list of water quality impacted streams for cadmium, zinc, and sediment. The CDPHE's Restoration and Protection Unit has completed the determination of total maximum daily loads (TMDL) and therefore, the requirements of the TMDLs would normally apply for these constituents. However, the TMDLs completed in 2008 determined that the Town is not considered a major contributor of metals and therefore, the fact sheet and discharge permit does not include waste allocation loads (or limits) for the TRWWTP.

According to the Rationale for Classifications, Standards and Designations of the San Miguel River, Segment COGUSM03b is designated a water supply. For this reason, the nitrate standard of a daily maximum instream concentration of 10 mg/L, which is applied at the point of intake to a water supply, was evaluated as part of the last Water Quality Assessment in 2020. The daily maximum effluent limitation of 21 mg/L for TIN effective September 1, 2024, are therefore based on that standard.

Table 1.11 CDPHE Chronic and Acute WQBELs Developed for San Miguel River

Effluent Limit	Units	San Miguel River	
		Acute	Chronic
E. coli	#100/mL	126	
Total Ammonia		TVS	TVS
Chlorine	mg/L	0.019	0.011
Sulfide			0.002
Boron			0.75
Nitrite as N	mg/L	0.5	
Nitrate as N	mg/L	10	
Chloride			250
As, dissolved	µg/L	340	
As, total recoverable[(1)]	µg/L		0.02
Cd, dissolved		SSE	SSE
Cd, recoverable	µg/L	5.0	
Cr +3, total recoverable	µg/L	50	
Cr+3, dissolved	µg/L	TVS	
Cr+6, dissolved	µg/L	TVS	TVS
Cu, dissolved	µg/L		TVS
Cyanide, free	mg/l	0.005	
Fe, total recoverable	µg/L		1,000
Pb, dissolved	µg/L	TVS	

Effluent Limit	Units	San Miguel River	
		Acute	Chronic
Pb, total recoverable	µg/L	50	
Mn, dissolved	µg/L	TVS	TVS
Mo, total recoverable	µg/L		150
Hg, total	µg/L		0.01
Ni, dissolved	µg/L	TVS	TVS
Ni, total recoverable	µg/L		100
Se, dissolved	µg/L	TVS	TVS
Ag, dissolved	µg/L	TVS	
Zn, dissolved	µg/L		190

Notes:
(1) Expiration date of 12/31/2024
µg/L micrograms per liter
SSE site specific equation
TVS total volatile solids

1.8.3 Water Quality Parameters Potentially Relevant in Future Permit Renewal

1.8.3.1 Temperature

In compliance with the permit requirements, the TRWWTP is currently conducting temperature monitoring in the final effluent and in the San Miguel River. As a result, the facility may receive temperature limits as part of a future permit renewal, should the decision be made that there is reasonable potential for the facility to cause or contribute to an exceedance of the water quality standard for temperature. Table 1.12 summarizes the in-stream standards.

Table 1.12 Temperature

Date	Daily Maximum Temperature (°C)	Maximum Weekly Average Temperature (°C)
October 1-October 31	13.9	9
November 1-March 31	13	9
April 1-May 31	14	9
June 1-September 30	21.7	17

Notes:
°C degrees Celsius

1.8.3.2 Nutrients

Total Inorganic Nitrogen and Total Phosphorus – Regulation 85

The nutrient reductions required by Regulation 85, "Nutrients Management Control Regulation," are implemented through the TIN and TP limit as a running annual median of 15 mg/L and 1 mg/L, respectively. Regulation 85 also requires meeting a running annual 95th percentile limit of 20 mg/L TIN and 2.5 mg/L TP. Although Regulation 85 became effective on September 30, 2012, delayed implementation (until December 21, 2027) is specified in the regulation to occur for domestic WWTPs that fall into one of three categories: discharge more than 1 mgd and less than or equal to 2.0 mgd; have an existing watershed control regulation; or where the discharge is to waters in a low-priority 8-digit hydrologic unit code.

Based on the Fact Sheet to Permit No. C00041840, the TRWWTP discharges to a low-priority watershed and therefore, implementation of technology based effluent TIN and TP limits under Regulation 85 are delayed. As such, the Town is anticipated to receive (at the minimum) a compliance schedule as part of the next permit renewal cycle with limits effectively starting in 2030 (assuming CDPHE does not proceed immediately to Regulation 31 limits – summarized below).

Total Nitrogen and Total Phosphorus – Regulation 31

In March 2012, interim numeric nutrient criteria were adopted for total nitrogen (TN) and TP, but not directly applied to streams and lakes except in limited cases in which TP standards were adopted above discharge locations and in direct use water supply reservoirs. The Environmental Protection Agency (EPA) subsequently approved the interim values for TN and TP in lakes (with additional recommendations) and chlorophyll-*a* in lakes and streams but took no action on stream TN and TP interim values. During the Regulation 85 and Regulation 31 Rulemaking Hearings in October 2017, the Water Quality Control Commission identified an anticipated schedule for nutrients standards adoption as follows:

- 2022 – Statewide adoption of chlorophyll-*a* standards for lakes and streams, and adoption of TN and TP standards for lakes and reservoirs with either Direct Use Water Supply classification or a public swim beach. The chlorophyll-*a* interim numeric values for warm water streams is 150 milligrams per square meter (mg/m^2) and for warm water lakes is 20 µg/L.
- 2027 – Statewide adoption of TN and TP standards for rivers and remaining lakes.

Anticipated future nutrient limits under Regulation 31, "The Basic Standards and Methodologies for Surface Water" (5 CCR 1002-31 Section 31.17), therefore remain uncertain at this time. The interim nutrient values (effective December 31, 2027, if approved by the EPA) for TN and TP limits in cold water streams are 1.25 mg/L and 0.11 mg/L, respectively. A conservative assumption is that these interim values would apply at the end-of-pipe for the TRWWTP, particularly if the ambient water quality in the San Miguel River exceeds the instream standard (TN and TP data were not included in the recent Water Quality Analysis). However, the ratio of the low flow in the San Miguel River to the TRWWTP design flow is currently 0.78:1 and 100 percent of the available assimilative capacity of the river can assumed when calculating WQBELs. Therefore, the estimated effluent nutrient discharge limits required to meet the Regulation 31 instream standards, assuming the dilution credit at the proposed hydraulic rating of the plant (2.3 mgd), are summarized in Table 1.13.

Table 1.13 Estimated Effluent Nutrient Discharge Limits under Regulation 31

Condition	TN (mg/L)	TP (mg/L)
Instream Requirement(1)	1.25	0.11
Estimated Effluent Discharge Limit without Bifurcation, at 2.3 mgd proposed design capacity(2)	Approx. 3.69	Approx. 0.41

Notes:
(1) Regulation 31 cold water stream standard prior to dilution credit.
(2) Calculated using the mass-balance equation presented in the Fact Sheet to Permit No. CO0041840. Upstream flow (9.7 cubic feet per second [cfs]), average daily effluent flow (3.6 cfs), and downstream flow (13.3 cfs) were adopted from flow numbers developed for the permit modification dated March 31, 2021. Instream 85th percentile TN concentration of 0.35 mg/L was adopted for the calculation of effluent TN based on data collected monthly by the TRWWTP from May 2018 to December 2020. Instream 85th percentile TP concentration of 0 mg/L was adopted for the calculation of effluent TP from the same data set.

Note that the estimated upper discharge limits were calculated assuming the 30-day average low flow from the San Miguel River as submitted in the 2021 permit modification, as the annual median low flow of the river was not provided. The analysis also assumed that the bifurcation removal is approved by CDPHE as part of the permit modification request. The instream background pollutant concentrations upstream of the plant were taken as the 85th percentile of monthly sample data collected by the TRWWTP from May 2018 through December 2020. Instream data that was reported as non-detect by the Town was converted to 0 mg/L for the analysis.

Given the TRWWTP's permitting cycle, one of two regulatory scenarios may occur:

1. The Regulation 31 limits would become effective as annual median limits (as observed in preliminary effluent limits from other Colorado facilities) sometime around 2035, assuming no earned credit under the Incentive Program. This scenario assumes that the Town would first receive a Regulation 85 compliance schedule as part of the next permit renewal cycle in 2025 (compliance required by 2030), followed by a Regulation 31 compliance schedule as part of the following permit renewal cycle in 2030 (compliance required by 2035).
2. The Regulation 31 limits would become effective as early as 2030. This scenario assumes that since the Regulation 85 limits for low-priority water sheds become effective the same year as Regulation 31 (year 2027), CDPHE would immediately jump to Regulation 31 limits. It is unknown whether or not the typical 5-year compliance schedule would apply, or if additional years would be granted when bypassing the Regulation 85 values.

Carollo Engineers (Carollo) attempted to contact the CDPHE Permitting Division for guidance regarding the above scenarios and did not receive feedback at the time of this draft report. Based on discussions with operations staff, the Town's legal counsel has also not received any confirmation from the CDPHE Permitting Division regarding how the regulations will be applied to the TRWWTP in the future. As such, the project team recommends that the Regulation 31 effluent limits be used as the basis of design for this project, pending receipt of preliminary effluent limits (PEL) from CDPHE.

1.8.3.3 Ammonia

Since the EPA published updated ammonia standards in 1999, the ammonia aquatic life criteria have been reevaluated on basis of recent evidence that freshwater mussel species may be more susceptible to ammonia than the aquatic organisms used for developing the 1999 criteria. The EPA published the revised ammonia criteria in 2013. CDPHE is currently assessing the presence of sensitive mussel species in Colorado streams and rivers. Alternate ammonia criteria may be developed for Colorado streams and rivers pending these results. CDPHE is scheduled to propose revised ammonia criteria in 2027. These criteria could tighten TRWWTP's effluent ammonia limits within the 2050 planning horizon.

1.8.3.4 Metals

The following subsections capture the metals identified as constituents of concern as related to the limits stated in the current discharge permit. Additional metals limits are also captured in the Town's discharge permit; however, a review of the historical data indicates that the effluent concentrations are below the proposed discharge limits for these constituents. Metals with an effluent concentration below the discharge permit limit were not included in the subsections below. The Town's permit modification request submitted on March 31, 2021, is anticipated to

further adjust the metals limits described in the sections below due to the modification to the low flow condition. The Town intends to pursue additional permit modification efforts associated with these limits in lieu of treatment due to technological limitations to achieve these limits and the associated costs.

Copper

The current 30-day average limit is 45 µg/L and the TRWWTP is in compliance with this limit. The future 30-day average limit is 12-µg/L and a 2-year average limit will also be added of 16 µg/L in 2024. The future 2-year average will be 0.95 µg/L in 2026. Based on previous monitoring, the TRWWTP may not be able to consistently meet the new limitations and a compliance schedule was added to the permit to give the facility time to meet the limitations.

Arsenic

The current 30-day average limit is 4.7 µg/L and the TRWWTP is historically in compliance. The upcoming limit will be 0.036 µg/L. Based on the current effluent data, the TRWWTP may not be able to meet the future limitation consistently. A compliance schedule was added to the permit to give the facility time to meet the limitation. The in-stream standards also include a temporary modification for total recoverable arsenic with an expiration date of December 31, 2024.

Nonylphenol

The current 30-day average limit is 23 µg/L and the daily maximum limit is 37 µg/L until 2023. The future 30-day limit is 12 µg/L, daily maximum is 47 µg/L and 2-year average is 1.8 µg/L. Based on the current effluent data, the facility may not be able to meet the future limitation consistently; however, the current data set is limited and ongoing monitoring of this parameter is recommended.

1.8.4 Future Effluent Regulatory Considerations

1.8.4.1 Per- and Polyfluoroalkyl Substances in Effluent Discharges

Per- and polyfluoroalkyl substances (PFAS) are a large group of synthetic fluorinated organic chemicals that are soluble, mobile, and recalcitrant to chemical and biological processes. The two most dominant groups of PFAS consist of perfluorooctanyl sulfonate (PFOS) and perfluorooctanoic acid (PFOA).

PFAS are manmade chemicals that are heat, water, and lipid resistant. Because of these qualities, they deter water, grease, and oil, and are therefore used in many industrial applications, ranging from flame-retardants to stain-resistant carpets to Teflon® pans. Due to decades of ubiquitous use of these chemicals, PFAS are now detected throughout the environment in soil, air, water, household dust, and humans.

Elevated exposure to PFAS compounds (primarily by way of ingestion of drinking water) have been associated with developmental effects during pregnancy such as low infant birth weights and skeletal variations, effects on the immune system such as changes in antibody production and immunity, liver effects including tissue damage, cancer, and thyroid hormone disruption. Even though PFAS compounds are not used in the wastewater treatment process, because they are so widely used in commercial and residential applications, they end up in wastewater. The largest source of PFAS compounds at WWTPs is from industrial dischargers. Thus, source control of industrial facilities using significant volumes of PFAS compounds is important because WWTP solids treatment processes do not destroy PFAS compounds. Under certain circumstances, PFAS can be created from precursors during the treatment process.

Most PFAS will partition to solids and end up in the biosolids stream. However, some treated effluents can contain concentrations that could be deemed problematic. What concentrations are "problematic" for discharge into streams and rivers is currently being defined by regulatory state agencies including CDPHE. The EPA has not regulated PFAS other than in drinking water, but it is in the process of developing standards for PFAS in biosolids and surface waters. As such, the EPA is following regulatory developments that individual state agencies are currently leading. Examples include:

- States that have already developed or are in the process of developing surface water quality standards for PFAS include Colorado, Michigan, Minnesota, New Hampshire, Vermont, and Wisconsin, and have set a PFOS limit of 12 nanograms per liter (ng/L) and for PFOA 12,000 ng/L for non-drinkable sources.
- States that have developed or are in the process of developing biosolids and or compost standards for PFAS include California and Massachusetts. Maine has set enforceable biosolids screening levels at 0.0025 milligrams per kilogram (mg/kg) for PFOA, 0.0052 mg/kg for PFOS, and 1.9 mg/kg for perfluorobutanesulfonic acid (PFBS).
- First states that require monitoring and reporting of PFAS concentrations in biosolids include California, Maine, Massachusetts, New York, North Carolina, and Washington.
- First states that have implemented requirements to monitor and report PFAS concentrations in treated effluents include California and Washington.

In 2012, the European Union implemented a combined PFOS and PFOA limit of 100 micrograms per kilogram (µg/kg) that was adopted into composting and biosolids standards. This limit is generally not considered to be stringent enough by regulatory agencies in the United States.

CDPHE has initiated a public stakeholder group process in 2019 to accompany the development of water quality standards in Colorado for PFOS. As of August 2021, three permit renewals within the State of Colorado include monitoring for effluent PFAS as a new parameter on the discharge permit, although no limits have been implemented yet. Monitoring requirements are anticipated for the Town on the next permit renewal cycle.

CDPHE focuses on surface water standards first since the analytical methods for PFAS in wastewater matrices are further developed. CDPHE currently does not have a basis for developing PFAS limits for biosolids since occurrence data does not exist currently and analytical methods for PFAS in biosolids are still under development. Regardless, it is anticipated that PFAS effluent limits may be implemented within the next 5 years in Colorado followed shortly by PFAS limits for biosolids.

1.8.4.2 Emerging Unregulated Contaminants

A number of trace organic contaminants (TOrC) can be detected in treated domestic wastewater effluents that have been demonstrated to negative effects aquatic and/or human health depending on occurrence concentrations. These contaminants originate differently in domestic, industrial, or stormwater sources including personal care products, food additives, pharmaceuticals, industrial chemicals, or disinfectant by-products. Concentrations in treated effluent can range from micro to nanograms. While some of the chemicals can be toxic or carcinogenic for humans, concentrations are typically too low and of more immediate concern for discharge locations can be the possible toxic effects of TOrC on aquatic life, specifically endocrine disruption in fish.

Because of the large amount of TOrCs and incomplete data on cause-effect relationships, the EPA has not yet regulated the majority of these compounds. Instead, standards have been developed for individual compounds, such as nonylphenol and currently perfluorinated compounds (see section below). However, regulations regarding TOrCs discharge from wastewater treatment facilities have been anticipated in the coming one to two decades. Several years ago, other European countries already started to require and implement treatment requirements in form of the so-called fourth treatment step (post tertiary treatment for nutrient removal). The two most typical technologies that are implemented for TOrC removal are either activated carbon sorption or ozonation followed by biologically active filtration.

Two feasible regulatory pathways for TOrC in future years are:

1. Development of regulatory requirements for a small defined group of TOrCs that require treatment upgrades that will then also result in the effective removal of a broader group of TOrCs.
2. The EPA has also contemplated developing "group regulations" for TOrCs instead of proceeding with compound-by-compound regulations.

While timing and nature of these regulations are uncertain, utilities are advised to plan long-term in site layouts and finances for treatment upgrades that can accommodate TOrC removal.

1.8.4.3 Microplastics

Microplastics in wastewater and the environment have become a topic of research over the past years. Of general interest are particles less than 5 millimeters (mm) in size and particles are categorized into micro-, meso-, and nano plastics. Plastic particles are detected virtually ubiquitously and introduced in wastewater treatment plants through consumer products, stormwater, and other sources.

Microplastics cause possible concerns for aquatic life, but the science and cause-effect relationships are not yet well understood. Detection methods are still under development and not standardized. In the United States, research needs to be further developed before it is clear whether microplastics need to be regulated to mitigate exposure risks, and if that should be the case, for the EPA to develop the necessary data to develop standard methods and the necessary database to develop standards. For this reason, regulations in the United States from the EPA are not anticipated within the next 10 to 15 years.

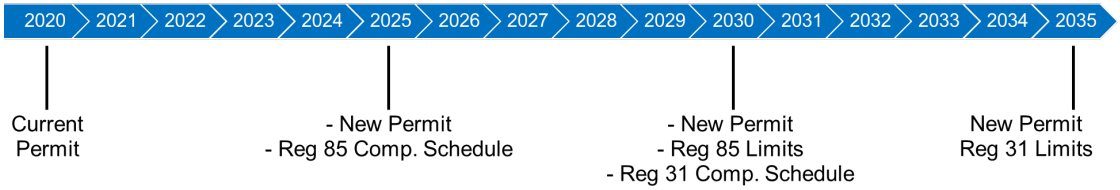
1.8.4.4 Nanoparticles

Nanoparticles are a broad group of organic or inorganic particles in the size range of about 1 to 100 nanometers (nm) or larger. These particles originate various sources in wastewater influent including consumer products, industrial chemicals, clothing, electronics, or food. In August 2017, the EPA issued a requirement for information collection and reporting for nanomaterials under the Toxic Substances Control Act. This is regarded as a first necessary step for the EPA to start collecting data on this group of chemicals to help with the assessment of whether regulations may be necessary.

Nanoparticles have a high surface area to volume ratio and are therefore often reactive. Few particles are known to be cancerogenous or toxic; for most particles, such information is not yet available. Toxicity endpoints are not well understood, occurrence data is difficult to analyze in environmental matrices, and toxicity data is insufficient. For this reason, regulations in the United States from the EPA are not anticipated within the next 10 to 15 years.

1.8.5 Anticipated Permitting Timeline

Based on the preliminary regulatory review, the anticipated regulatory timeline is presented in Figure 1.11. There is uncertainty surrounding the timing of the promulgation of Regulation 31 as compared to Regulation 85 for the TRWWTP. The timing for Regulation 31 limits shown in Figure 1.11 do not account for any credits earned through the Voluntary Incentive Program (the Town has earned nothing to date) and assume that the CDPHE Permitting Division will implement Regulation 85 and Regulation 31 sequentially. A more conservative approach assumes that CDPHE transitions directly to Regulation 31 for the TRWWTP in 2027. Efforts to confirm the strategy for dischargers similar to Telluride has not generated any feedback from the CDPHE Permitting Division regarding this approach. Therefore, the project team recommends that the Regulation 31 effluent limits be used as the basis of design for this project, pending receipt of PELs from CDPHE. These limits will be summarized in Section 1.9.



Timeline assumes CDPHE does not bypass Regulation 85.

Figure 1.11 Anticipated Regulatory Timeline

1.8.6 Current and Anticipated Regulatory Requirements for Biosolids

The Town's current practice for biosolids disposal is through hauling and disposal at the landfill, which is a cost effective and operationally simplistic solution for disposal of generated biosolids in the near-term. However, volatility in hauling costs and landfill tipping fees, risk to hauling (and on-site storage availability) operations during the winter, and future sustainability goal warrant consideration of other disposal options as part of the implementation pathway and long-term planning considerations.

1.8.6.1 Regulation 64 Background

The Water Quality Control Division (WQCD) adopted Biosolids Regulation No. 64 (5 CCR 1002-64) (Regulation 64) (CDPHE, 1993) in November 1993; the regulation was last amended June 2014. Regulation 64 "establishes requirements, prohibitions, standards, and concentration limitations on the use of biosolids as a fertilizer and/or organic soil amendment in a manner so as to protect the public health and prevent the discharge of pollutants into state waters."

Regulation 64 is based on EPA 40 CFR Part 503 Biosolids Rule, but it is a Colorado-specific rule that governs how biosolids are handled, treated, and applied to land or utilized for public use. The following discussion presents regulatory pathways for beneficial use of biosolids for land application (Class B).

Class A biosolids are a higher-quality product that must meet more stringent pathogen reduction requirements. As a result, these biosolids can be distributed for public use without further testing and monitoring. Class B biosolids must still meet certain pathogen reduction requirements, but the limits are lower than those for Class A biosolids. These biosolids cannot be distributed for public

use, but they may be land-applied. However, sites that apply Class B biosolids are subject to certain access and food production restrictions.

1.8.6.2 Pathogen Reduction Requirements

Pathogens are disease-causing organisms present within the biosolids. Only biosolids that meet either Class A or Class B requirements for pathogen destruction can be land applied.

For Class B biosolids to be used or distributed for beneficial use, the biosolids pathogen destruction must be evaluated or treated by one of two alternatives, as shown in Table 1.14.

Table 1.14 Pathogen Reduction Alternatives (Class B)

Alternative	Description
1	Geometric mean of seven samples
2	Process to significantly reduce pathogens

Alternative 1 requires that the geometric mean of seven samples shows the density of fecal coliforms to be less than 2,000,000 most probable number per gram (MPN/g) of total solids on a dry weight basis or less than 2,000,000 colony forming units per gram (CFU/g) of total solids on a dry weight basis. No further treatment is required if the biosolids meet this criterion.

Alternative 2 requires processing the biosolids using one of six treatment processes known as "Processes to Significantly Reduce Pathogens" (PSRP). The possible PSRPs are shown in Table 1.15.

Table 1.15 Processes to Significantly Reduce Pathogens

Alternative	Process	Description
2a	Aerobic Digestion	Biosolids are agitated with air or oxygen to maintain aerobic conditions for a mean cell residence time at a temperature or temperatures within a time-temperature function having as end points 40 days at 20°C and no less than 60 days at 15°C.
2b	Air Drying	Biosolids are dried on beds or on paved or unpaved basins. The biosolids dries for a minimum of 3 months. During 2 of the 3 months, the ambient average daily temperature is above 0°C.
2c	Anaerobic Digestion	Biosolids are treated in the absence of air for a mean cell residence time at a temperature or temperatures within a time-temperature function having as end points 15 days at 35 to 55°C and no less than 60 days at 20°C.
2d	Composting	Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the biosolids is raised to 40°C or higher and remains at 40°C or higher for 5 days. For 4 hours during the 5 days, the temperature in the compost pile exceeds 55°C.
2e	Lime Stabilization	Sufficient lime is added to the biosolids to raise the pH of the sewage sludge to 12 after 2 hours of contact.
3	Alternative EPA Approved	Any other method of biosolids treatment which is certified as a PSRP by the EPA, Region VIII, or, after assumption of delegation by the State, which is is certified as such by the WQCD.

1.8.6.3 Vector Attraction Requirements

In addition to pathogen destruction criteria, biosolids for use or distribution must also meet vector attraction reduction (VAR), also referred to as "biosolids stability." Vectors are disease-carrying organisms that are attracted to biosolids. VAR requirements must be met regardless of whether the biosolids are Class A or Class B. There are ten methods available to meet the VAR requirement; only one must be met for compliance with Regulation 64. The VAR alternatives are described in Table 1.16.

Table 1.16 Vector Attraction Reduction Alternatives (Class A and Class B)

Alternative	Process	Description
1	Volatile Solids Reduction	Reduce the mass of volatile solids by a minimum of 38%.
2	Bench-Scale Digestion (Anaerobic)	Demonstrate vector attraction reduction with additional anaerobic digestion in a bench-scale unit.
3	Bench-Scale Digestion (Aerobic)	Demonstrate vector attraction reduction with additional aerobic digestion in a bench-scale unit.
4	Specific Oxygen Uptake Rate	Meet a specific oxygen uptake rate for aerobically treated biosolids.
5	Aerobic Processing Plus Raised Temperature	Use aerobic processes at greater than 40°C for 14 days or more.
6	Alkaline Addition	Add alkaline materials under specified conditions.
7	Percent Solids of Stabilized Biosolids	Reduce moisture content of biosolids.
8	Percent Solids of Unstabilized Biosolids	Reduce moisture content of unstabilized biosolids from primary treatment.
9 or 10	Application Method	Inject or incorporate biosolids under specified conditions.

The Town has indicated that the existing biosolids stabilization process does not meet current regulations for stabilization with regards to time or temperature conditions.

1.8.6.4 Metals Concentration Limits in Biosolids

Section 64.12 of Regulation 64 lists the limits on metals concentrations in biosolids. Both Class A and Class B biosolids must be tested for metals and meet the same concentration limits. Biosolids with metals exceeding the ceiling concentrations in Table 1.17 are not allowed to be applied to land.

Table 1.17 Metals Ceiling Concentration Limits (Table 1 Quality)

Pollutant	Ceiling Concentration Limit (mg/kg, dry weight)
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

Biosolids which meet the ceiling concentration limits listed in Table 1.17 are considered "Table 1 quality" biosolids and are subject to maximum cumulative loading limits on land application sites. Regulation 64 also specifies pollutant concentration limits under which biosolids are no longer subject to those maximum loading limits. If the average of at least seven daily composite samples in a calendar month is below the concentration listed in Table 1.18, the biosolids are considered "Table 3 quality" and are not subject to cumulative pollutant loading rates for land application sites. This means it may be easier to find and manage land application sites for "Table 3 quality" biosolids versus "Table 1 quality" biosolids.

Table 1.18 Metals Pollutant Concentration Limits (Table 3 Quality)

Pollutant	Ceiling Concentration Limit (mg/kg, dry weight)
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Molybdenum	N/A
Nickel	420
Selenium	100
Zinc	2,800

1.8.6.5 Biosolids Land Application Requirements

Before pursuing land application of biosolids, a "Letter of Intent" must be submitted to CDPHE. It includes general information regarding both the application site, the biosolids generation facility, and the biosolids applier. The soil must be tested for soil fertility, physical characteristics, and metals concentrations, both before application and on a set sampling frequency after application. These results are used to determine both the quantity and quality of acceptable biosolids application. The site also must meet several location-specific criteria to qualify as an acceptable location. These include proximity to surface water as well as several other physical characteristics.

The biosolids from the TRWWTP would need to be routinely sampled to confirm quality. Biosolids require sampling on a frequency determined by the total quantity of solids production and the total quantity being reused for land application purposes. In addition to the pathogen, vector reduction, and metals sampling requirements discussed above, there are general biosolids monitoring requirements that include testing for nutrients such as phosphorus and nitrogen. The results of this testing are factored into a calculation on cumulative metals and nutrient loading to the site. When a site has reached their allowable metals and nutrient limits (which are based on agronomic uptake rates), the site can no longer accept biosolids.

All collected data is summarized and reported annually in accordance with Regulation 64 Biosolids Annual Report – Section 1 Biosolids Land Application Report. This report form is also referred to as the "self-monitoring report." There are also notification letters required of both the biosolids preparer (WWTP) and applier (end user).

1.8.6.6 Anticipated Future Biosolids Requirements

It is anticipated that in the foreseeable future biosolids regulations in Colorado will be expanded to include provisions for PFAS limits and radionuclide requirements.

Per- and Polyfluoroalkyl Substances

PFAS water quality standards are currently under development by CDPHE. Given that several states in the United States are already currently developing PFAS limits for biosolids and that this is a current priority focus by EPA as well, it is to be anticipated that CDPHE will also develop or adopt PFAS limits for biosolids in the near future. As a first step, monitoring and reporting of PFAS in biosolids may be required.

The concern with PFAS in biosolids is two-fold. In particular, in shallow groundwater areas, the land application of biosolids containing PFAS contamination has resulted in PFAS leaking into ground water resulting in drinking water source contamination. Second, PFAS may be taken up into plants and crops and thereby entering the human food chain.

On a national level, the EPA has set a health advisory (HA) for PFOA and PFOS in drinking water at 70 parts per trillion (ppt) and is currently evaluating the need for maximum contaminant levels. An HA limit provides information on contaminants that can cause human health effects and are set to offer a margin of protection for all humans (including the most vulnerable populations) throughout their life. The HA limits are non-regulatory and non-enforceable, regardless public attention and concern surrounding PFAS have required utilities and local regulators in many parts of the country to take immediate action.

To date, most biosolids land application sites where groundwater monitoring is conducted have not found levels of PFOA and PFOS above 70 ppt; however, there have been a few cases (e.g., in Alabama, Maine, and Michigan) where biosolids land application resulted in PFAS levels above the EPA drinking water HA in the groundwater tested. These cases were the result of high levels of PFAS discharged to WWTPs by a PFAS-using industry. In March 2019, in reaction to public outcry of a farm that received paper mill sludge and biosolids, Maine initiated a testing requirement for all land-applied biosolids. While this farm did receive biosolids, after further investigation, the source of the PFOS contamination (biosolids or other residuals) was inconclusive. As a precautionary measure, Maine established a limit for PFOA and PFOS in beneficially used biosolids. These limits are 2.5 parts per billion (ppb) and 5.2 ppb, respectively. Notably, these levels are lower than the concentration levels detected in most biosolids products tested to date.

Radionuclides

Geologic sources of radionuclides in groundwater in the Colorado River basin may enter the collection system via I/I. Therefore, the Town should anticipate that monitoring and reporting might be included in the upcoming permit renewal.

Regulation 64 does not include requirements for Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) in biosolids at this time. A recent law was passed (Senate Bill-245) in Colorado that requires CDPHE to develop new Naturally Occurring Radioactive Materials (NORM) and TENORM regulations even without the EPA having adopted such rules first, following a stakeholder process. A stakeholder process was initiated and began in July 2018, finalized rules regarding TENORM have not been promulgated at this time.

1.9 Summary of Regulatory Design Criteria for Preliminary Design

Based on the information presented in the previous sections, Table 1.19 summarizes the 2050 influent conditions (excluding future metals limits) to be used in the preliminary design of the TRWWTP expansion project.

Table 1.19 Summary of Key Effluent Design Criteria

Parameter	Discharge Limit (mg/L)	Design Condition[1] (mg/)
BOD_5	30	15
TSS	30	15
NH_3-N (most restrictive value)	1.8	0.9
TN[2]	3.69	2.76
TP[2]	0.41	0.30

Notes:
(1) Design condition assumes a 25% safety factor for TN and TP, 50% safety factor for ammonia, and 66% safety factor for BOD_5 and TSS. These criteria are to be reviewed as part of this draft report and finalized with input from the Town.
(2) TN and TP conditions are based on projected Regulation 31 limits using low flow criteria submitted to the CDPHE on March 31, 2021. These criteria have not been approved by CDPHE at the time of this draft report.

With regards to regulatory considerations for the solids process to be incorporated into TM 4 – Solids Processing Recommendations, the implementation pathway will provide solutions to achieve Class B biosolids quality as an operational option for the TRWWTP expansion project (near-term planning horizon). Recommendations will also be provided to achieve Class A biosolids as a part of the long-term planning horizon 10- to 20-year time frame.

Appendix 1A

HISTORICAL FLOWS, LOAD, AND CONCENTRATIONS

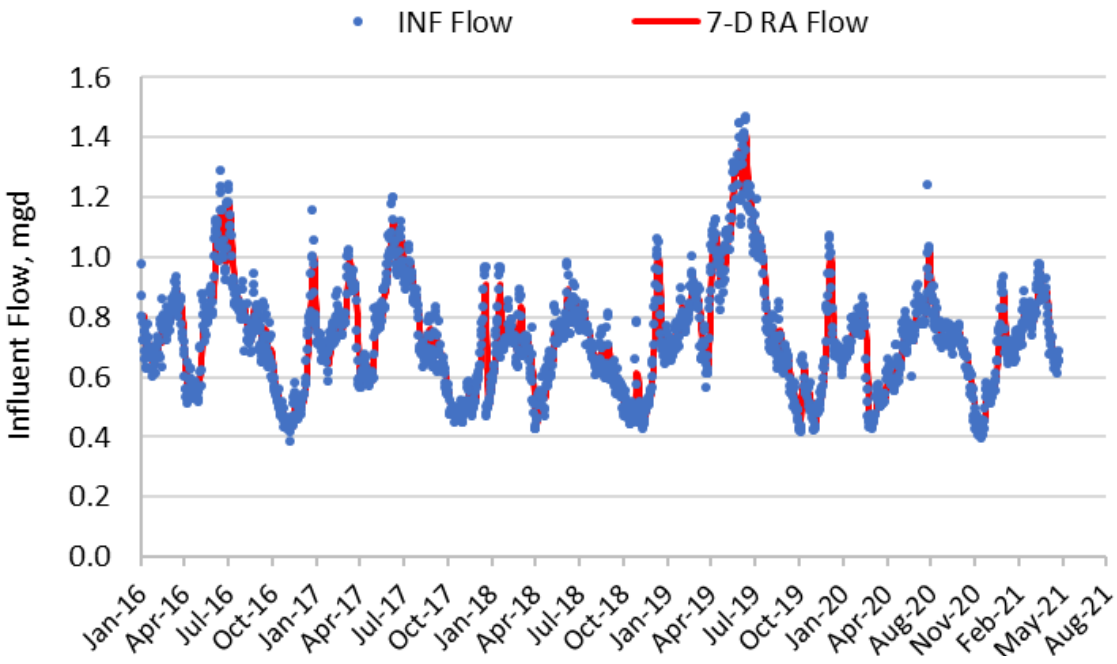


Figure 1A.1 Historical Influent Flow Since 2016

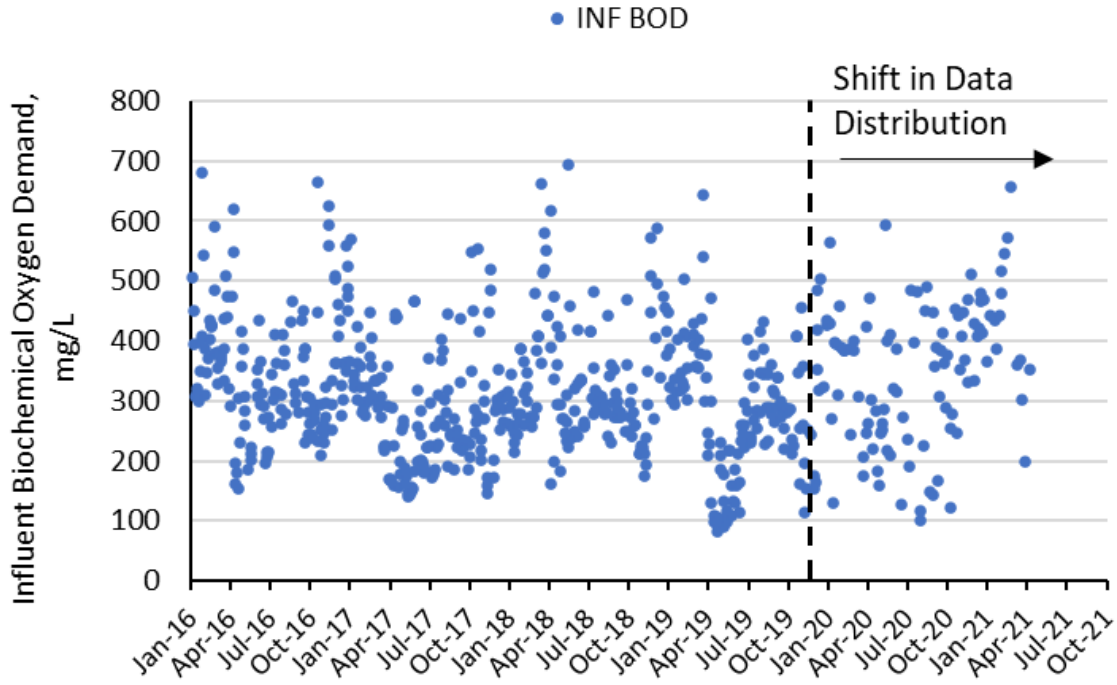


Figure 1A.2 Historical Influent BOD_5 Concentration Since 2016

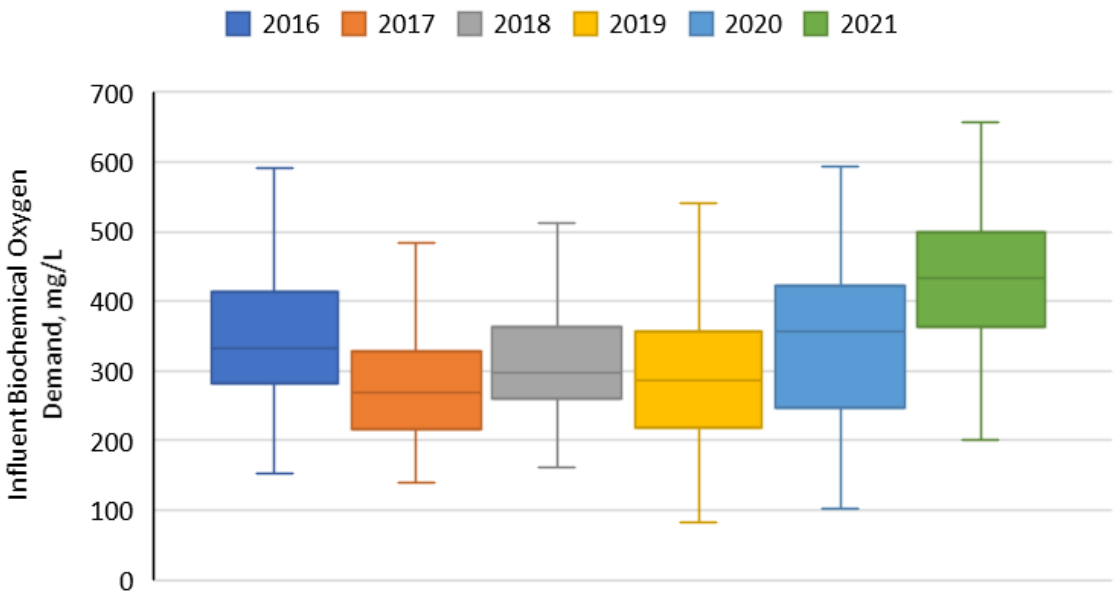


Figure 1A.3 Statistical Box Plot of Historical Influent BOD_5 Concentration Since 2016

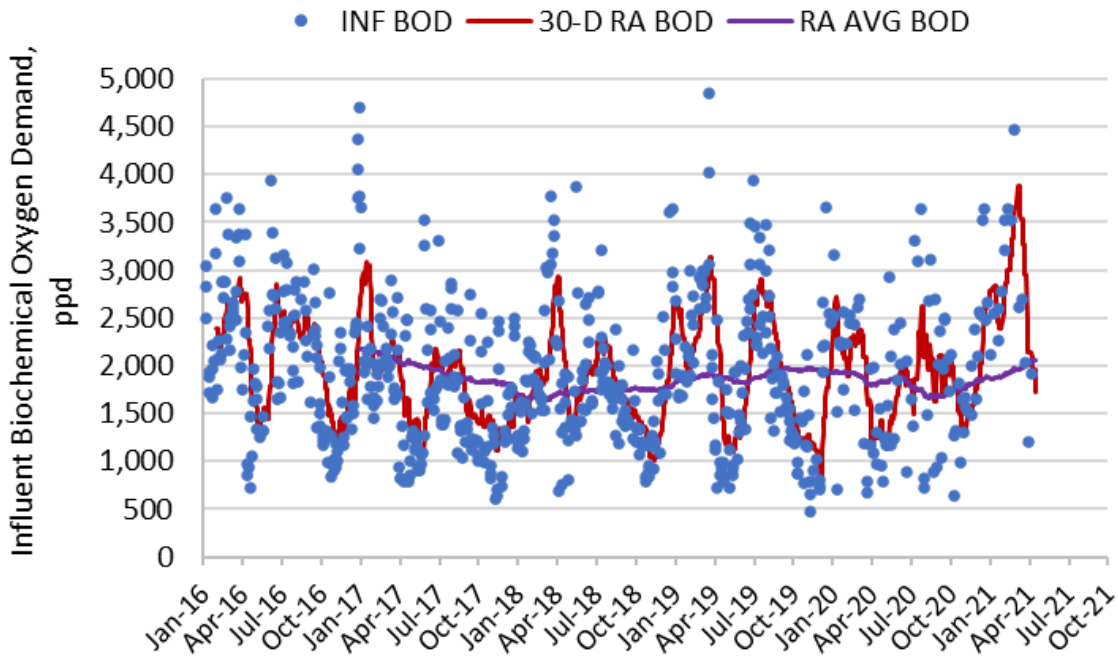


Figure 1A.4 Historical Influent BOD_5 Load Since 2016

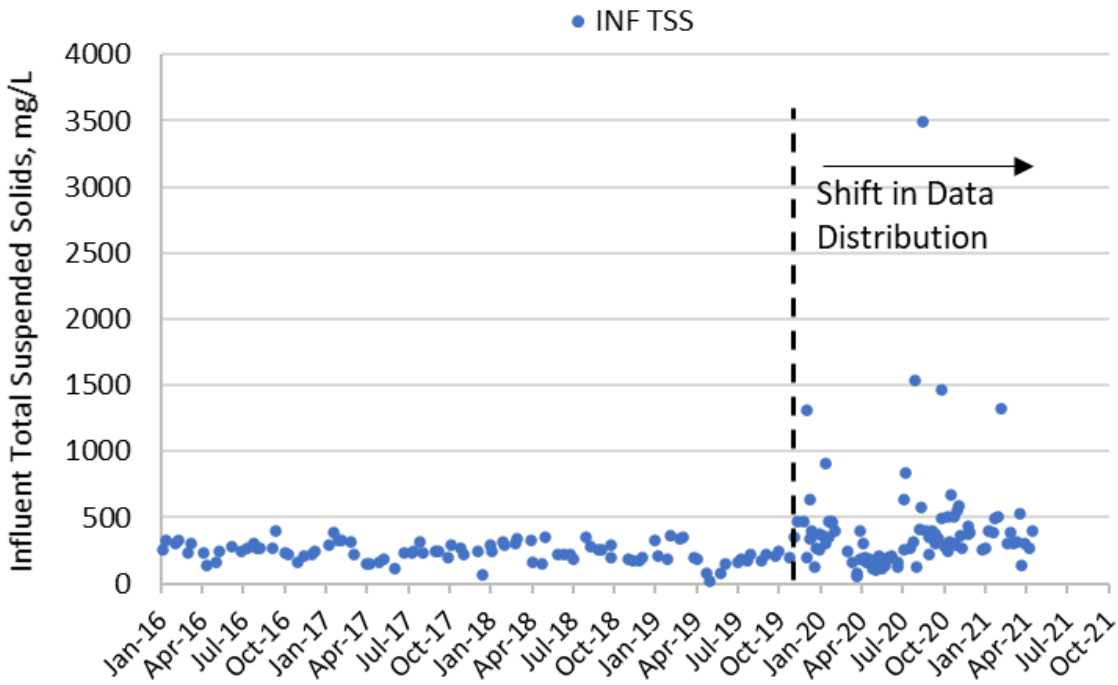


Figure 1A.5 Historical Influent TSS Concentration Since 2016

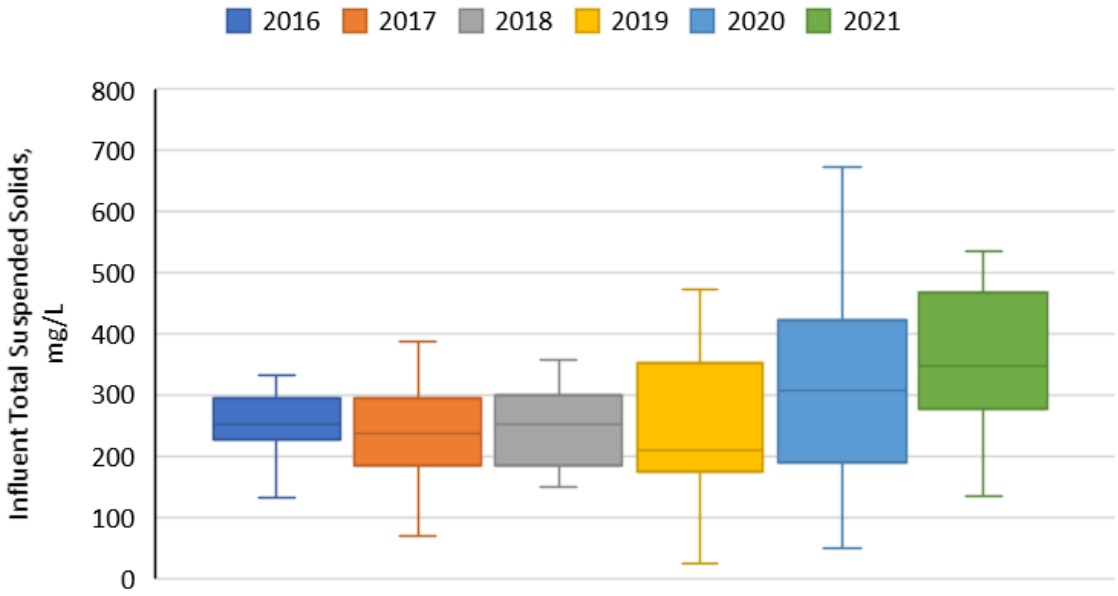


Figure 1A.6 Statistical Box Plot of Historical Influent TSS Concentration Since 2016

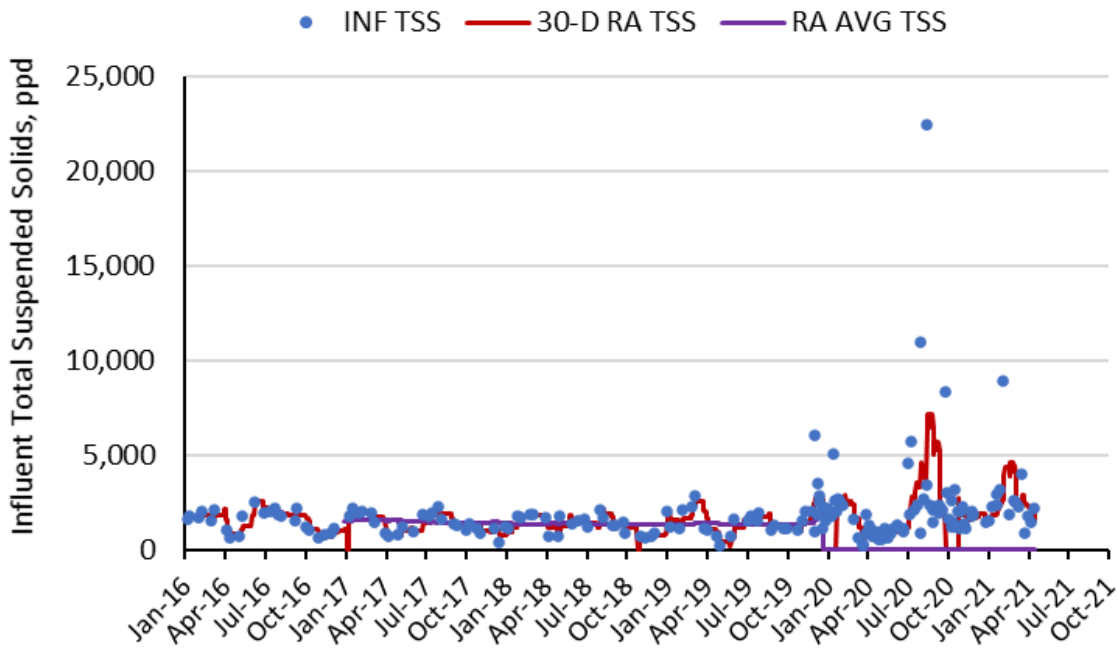


Figure 1A.7 Historical Influent TSS Load Since 2016

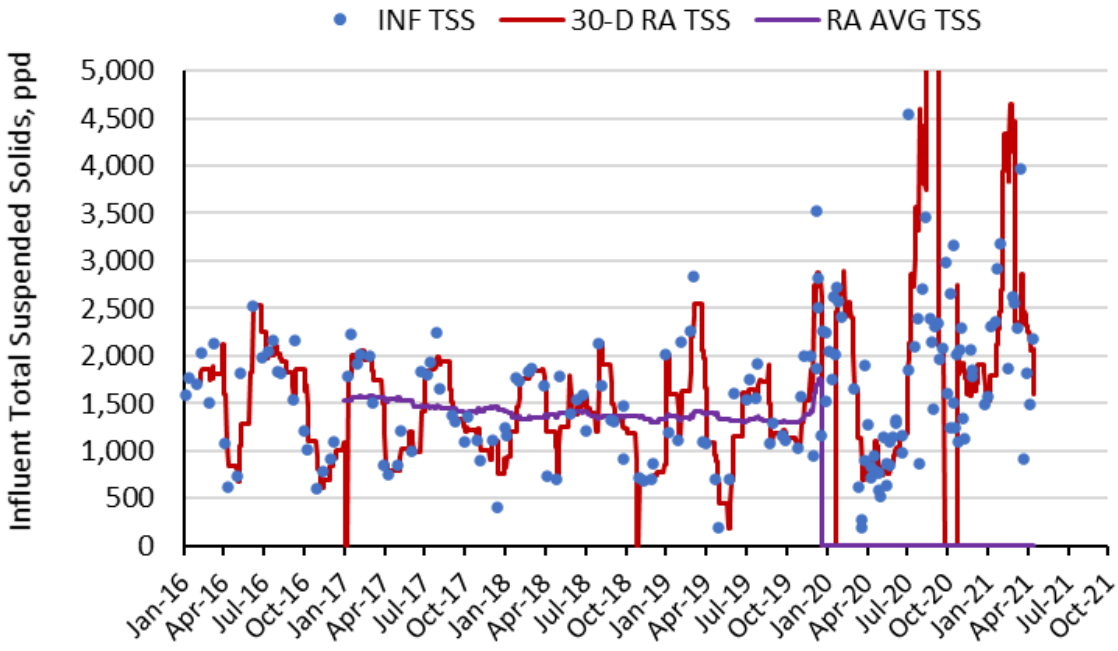


Figure 1A.8 Historical Influent TSS Load Since 2016 (Zoomed in Y-Axis for Clarity)

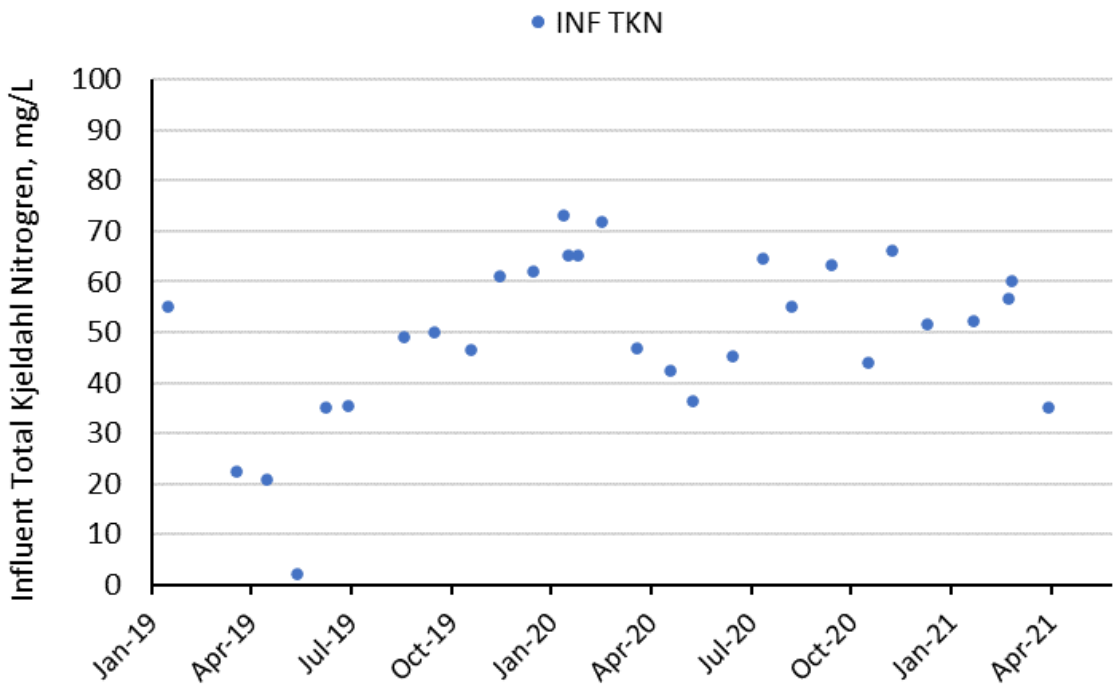


Figure 1A.9 Historical Influent TKN Concentration Since 2019

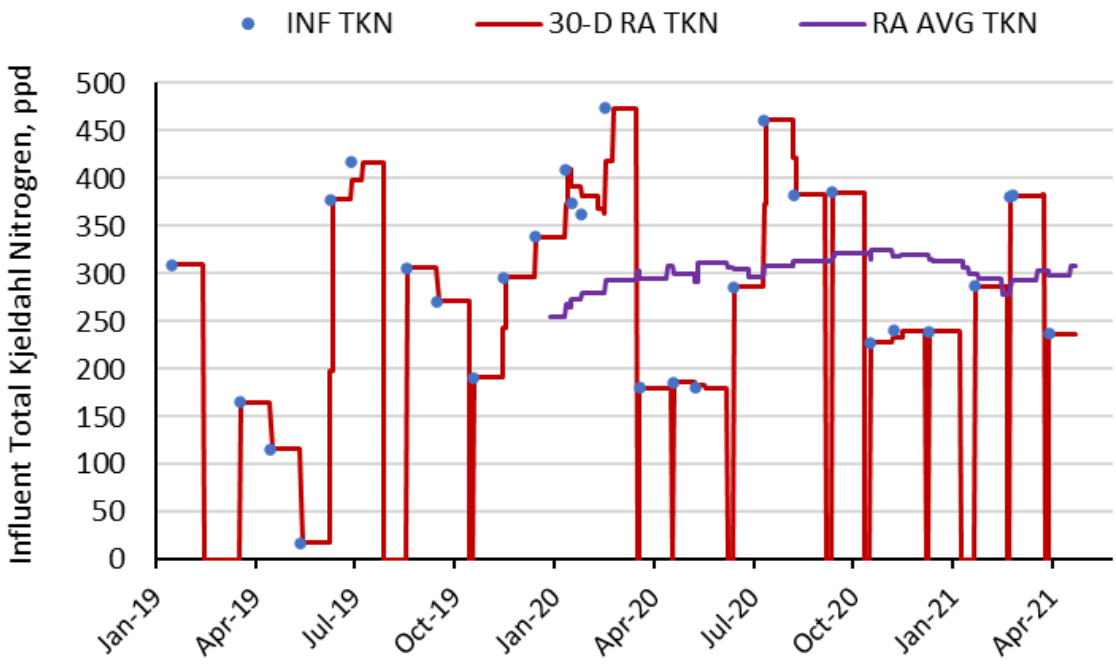


Figure 1A.10 Historical Influent TKN Load Since 2019

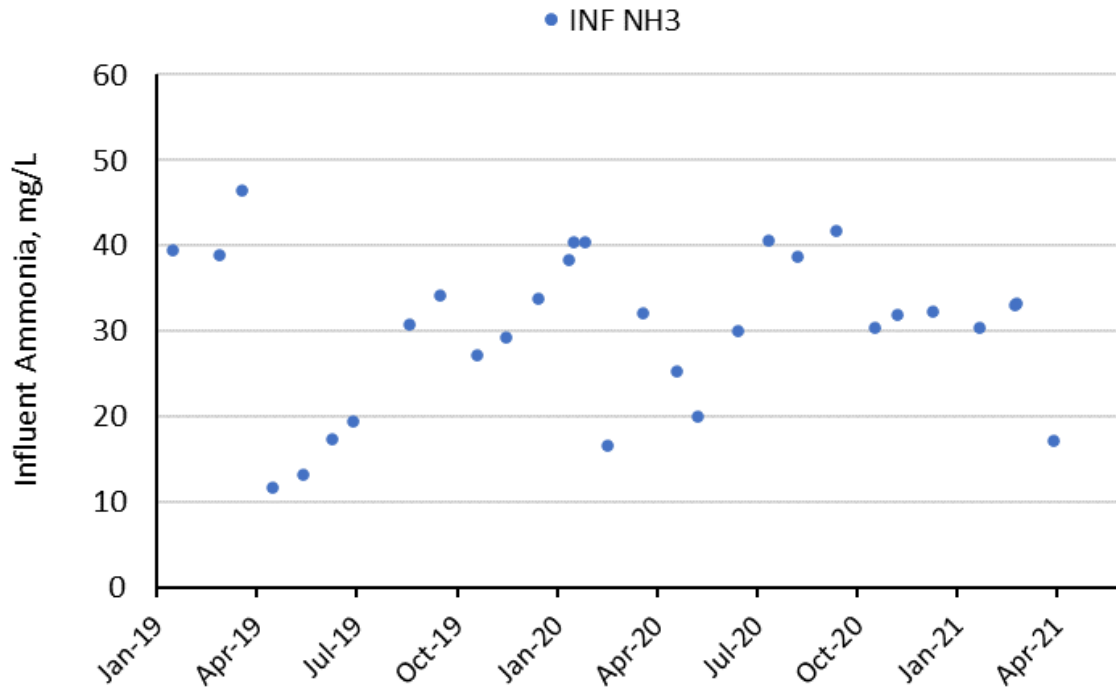


Figure 1A.11 Historical Influent Ammonia Concentration Since 2019

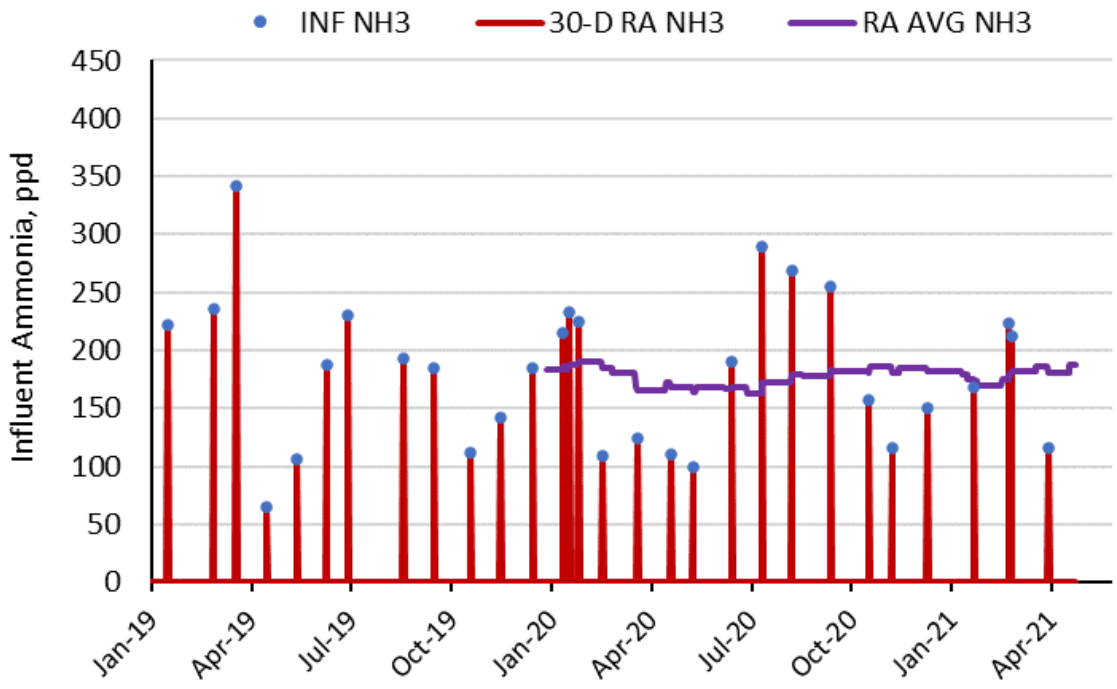


Figure 1A.12 Historical Influent Ammonia Load Since 2019

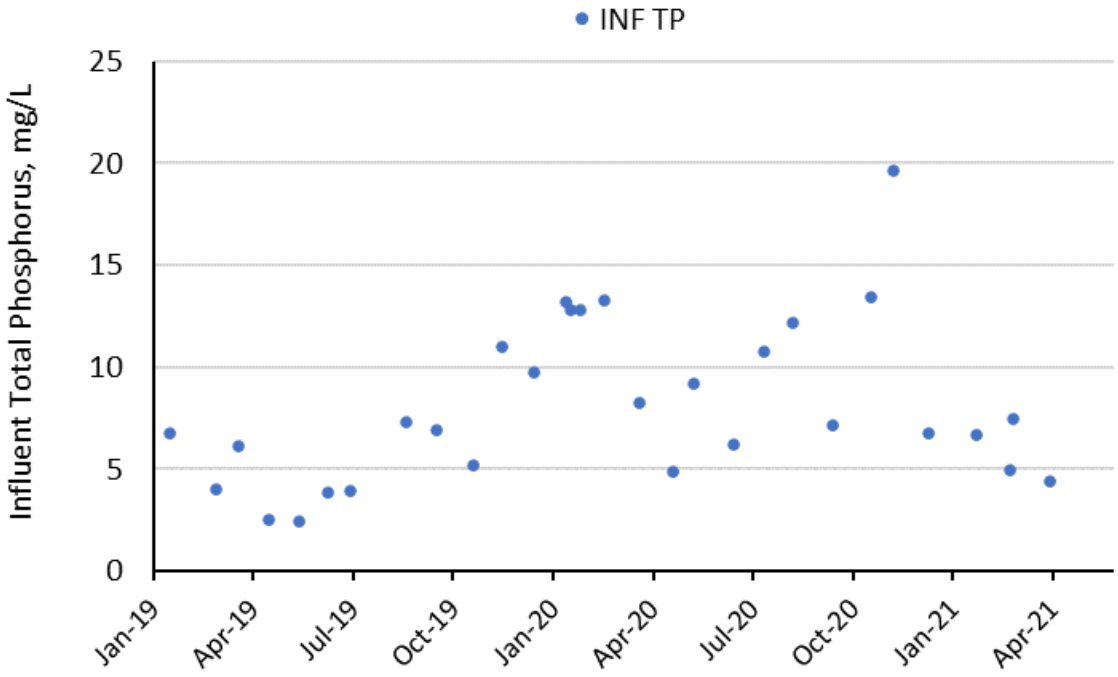


Figure 1A.13 Historical Influent Total Phosphorus Concentration Since 2019

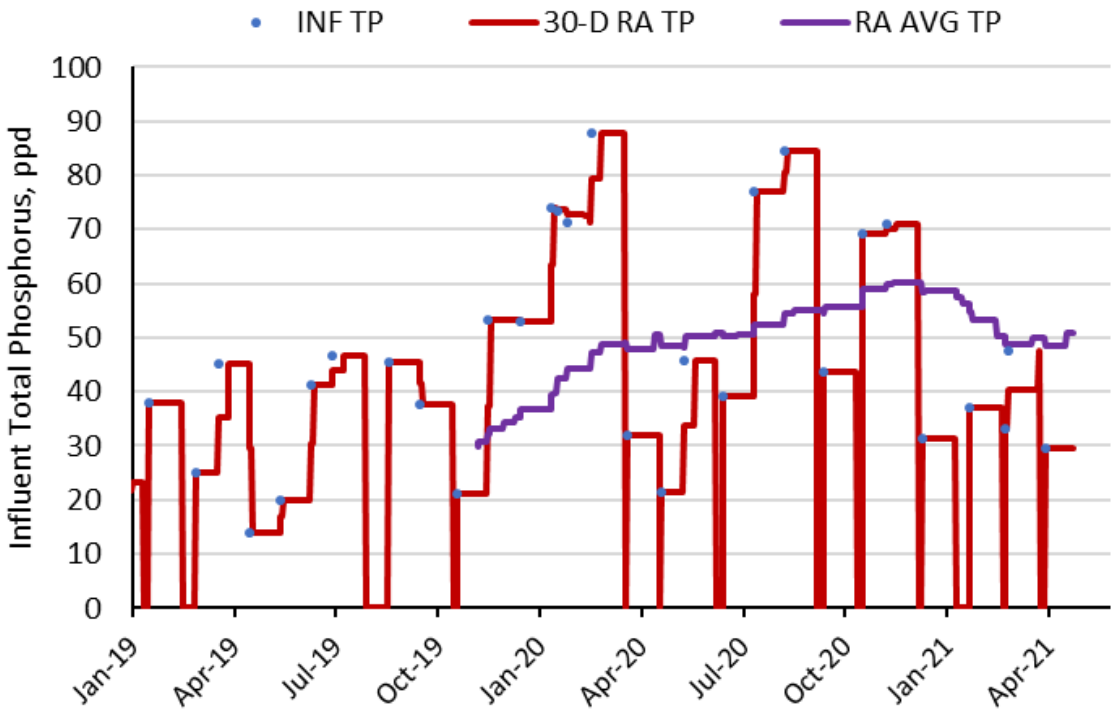


Figure 1A.14 Historical Influent Total Phosphorus Load Since 2019

Appendix 1B

INFLUENT LOADING ANALYSIS EXCLUDING DATA AFTER NOV 2019

Introduction and Background

As noted in TM 1 – Basis of Design, the project team identified a shift in the reported influent concentrations during the influent loading analysis that occurred in early November 2019 and continues through present day. The shift was most notable for influent BOD_5 and TSS, where the mean and interquartile range (or the statistical spread) of the data increased as compared to previous years. This is confirmed by visually inspecting the concentration data and by developing box plots for both data sets (see Appendix 1A).

After presenting a summary of the influent concentration and load data to the Town and operations staff on July 8, 2021, the Town directed the project team to proceed using the influent loading data prior to November 2019 for load projections while the operations team continues to investigate the observed sampling discrepancy, such as the side-by-side sampling campaign noted above. Ultimately, a sampling error could not be confirmed by the TRWWTP through ongoing review of the influent data and the side-by-side comparison, and therefore the data from beyond November 2019 was incorporated in the projected loading values. For comparison and documentation, the loading projections, which excluded the influent data after November 2019, are presented herein.

Current Influent Load Analysis Excluding Data After November 2019

The current influent wastewater loads and calculated design concentrations for the available data prior to November 2019 are summarized in Table 1B.1. It is important to note that a full 12 months of data are not available for calculating the average daily annual (ADA) load for influent nutrients under this scenario, as the TRWWTP started collecting influent nutrient data in January 2019. Therefore, the average load over the available 10 months of data is shown.

Table 1B.1 Current Influent Flows, Loads, and Design Concentrations Using Data Prior to November 2019

Parameter	ADA	ADMM	Peak Week – Winter	Peak Week – Summer
Influent Flow, mgd	0.83	1.32	1.01	1.41
Influent Loads				
BOD_5, ppd[(1)]	2,180	3,140	4,020	3,980
TSS, ppd[(1)]	1,590	2,550	2,840	2,530
TKN, ppd[(2)]	245	420	310	420
NH_4, ppd[(2)]	190	345	345	230
TP, ppd[(2)]	35	50	45	50
Design Concentrations				
BOD_5, mg/L	316	285	476	338
TSS, mg/L	230	232	336	215
TKN, mg/L	35[(1)]	38	37	35
NH_4, mg/L	27[(1)]	31	40	20
TP, mg/L	4.8[(1)]	4.2	5.4	4.0

Notes:
(1) Calculated from data collected between January 2016 to November 2019.
(2) Average of 10 months of available data, from January to November 2019.

The calculated increase in influent load (as ppd and percent increase) and design concentrations between the influent loading presented in TM 1 (including data beyond November 2019) and the data presented in Table 1B.1 are shown in Table 1B.2. Influent loads and concentrations generally increase for all parameters and nearly all planning scenarios if the entire set of available data is used in the analysis (as seen in TM 1). This is especially true for influent TSS, TKN, and TP.

Table 1B.2 Approximate Increase in Influent Loads and Design Concentrations Between Analysis Approaches

Parameter	ADA	ADMM	Peak Week – Winter	Peak Week – Summer
Increase in Influent Loads(1)				
BOD_5, ppd (% increase)	0 (0)	740 (24)	460 (11)	0 (0)
TSS, ppd (% increase)	420 (26)	1,010 (40)	5,520 (194)	3,210 (127)
TKN, ppd (% increase)	80 (33)	55 (13)	165 (53)	45 (11)
NH_4, ppd (% increase)	0 (0)	0 (0)	0 (0)	60 (26)
TP, ppd (% increase)	25 (71)	40 (80)	45 (100)	35 (70)

Notes:
(1) Percent difference is based on the two separate influent load analyses where the first assumed only the available data prior to November 2019 (as presented above). The second load analysis assumed all available data including data after November 2019 (as presented in TM 1).

Influent Load Analysis Excluding Data After November 2019

Influent load projections, based on the historical influent data prior to November 2019 and summarized in Table 1B.1, are presented in 2050 in Table 1B.3. For brevity of this section, load projection graphs for each influent parameter are provided in Appendix 1A.

Table B.3 Load Projections in 2050

(1)	ADAF	ADMMF	Peak Week Winter	Peak Week Summer
Influent Flow, mgd	1.29	2.06	1.58	2.21
Influent Loads				
BOD_5, ppd	3,410	4,910	6,290	6,230
TSS, ppd	2,480	3,990	4,440	3,960
TKN, ppd	380	655	485	655
NH_4, ppd	295	535	535	360
TP, ppd	55	75	75	75

As noted previously, CDPHE requires domestic wastewater treatment works to: 1) initiate engineering and financial planning for expansion whenever the ADMM organic loading to the plant reaches 80 percent of design capacity; and 2) commence construction of such expansion whenever ADMM organic loading reaches 95 percent of the design capacity. Under the above assumptions related to available historical data, the estimated ADMM BOD_5 in 2050 (4,910 ppd) exceeds the current permitted capacity of the WWTP (3,708 ppd as BOD_5) and is anticipated to exceed the CDPHE 95 percent construction trigger around 2027.

Town of Telluride

Telluride Regional Wastewater Treatment Plant Expansion

TM 2 – HYDRAULIC MODELING EVALUATION AND RECOMMENDATIONS

DRAFT | September 2021

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Telluride Regional Wastewater Treatment Plant Expansion

Technical Memorandum 2
HYDRAULIC MODELING
EVALUATION AND RECOMMENDATIONS

DRAFT | September 2021

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Abbreviations

ADMMF	average daily maximum month flow
Carollo	Carollo Engineers
CDPHE	Colorado Department of Public Health and Environment
mgd	million gallons per day
RAS	return activated sludge
TM	Technical Memorandum
Town	Town of Telluride
TRWWTP	Telluride Regional Wastewater Treatment Plant
UV	ultraviolet
WAS	waste activated sludge
WSE	water surface elevation

Technical Memorandum 2

HYDRAULIC MODELING EVALUATION AND RECOMMENDATIONS

2.1 Overview

The Town of Telluride (Town) Regional Wastewater Treatment Plant (TRWWTP) has a design capacity of 2.1 million gallons per day (mgd) at average daily maximum month flow (ADMMF) conditions. The TRWWTP was constructed in three major phases with some additional upgrades and improvements since completion of the final project phase in 2001. An updated and complete liquid stream hydraulic profile of the facility does not currently exist. Carollo Engineers (Carollo) was tasked to develop a hydraulic model to identify existing hydraulic limitations. As part of a follow up to this draft Technical Memorandum (TM) 2, opportunities to improve the existing hydraulic grade line in conjunction with the TRWWTP Expansion Project will be discussed. In particular, the Town is interested in options to improve the hydraulic efficiency through a new flow path and eliminating multiple influent points of pumping.

The primary objectives for this initial phase of the hydraulic modeling effort are to:

- Develop a complete liquid stream hydraulic profile of the existing facility.
- Document hydraulic limitations of the existing facility based on the permitted design capacity.
- Document hydraulic limitations of the existing infrastructure based on the future ADMMF/hydraulic design capacity of 2.3 mgd. (It is understood that peak day and peak hour flow conditions will be equalized through an equalization process either before or after the headworks facility and therefore, the existing secondary treatment infrastructure was not evaluated at flows higher than the future ADMMF capacity.)

As part of the final TM 2, the following objectives will be achieved:

- Assessment of the pumped flow system associated with the existing raw sewage pump station and influent/primary wet well pump station.
- Complete influent to effluent hydraulic grade line for the recommended TRWWP Expansion Project including pump sizing for new influent pumping system to support the future flow conditions.

The appendices supporting this TM include Appendix 2A – Compiled Drawing Set and Appendix 2B – Hydraulix® Model Output.

2.1.1 Summary of Flows

Influent and internal recycle design flow conditions are summarized in Table 2.1. The influent flow condition is based on the permitted facility capacity. The future design flow of 2.3 mgd was also evaluated as part of the existing facility model (30-year projected influent flow from the

Telluride Regional Wastewater Treatment Plant Master Plan [Stantec, 2017]). Internal recycle and waste flows were assumed based on process information and previous reports and studies.

Table 2.1 Influent and Internal Recycle Flows

Flow Description	ADMMF (mgd)	Future ADMMF (mgd)
Influent	2.1	2.3
Return Activated Sludge (RAS)(1)	1.58	1.73
Waste Activated Sludge (WAS)(2)	0.03	0.03
Recycle Flows(3)	0.17	0.17

Notes:
(1) RAS flow assumed to be 75 percent of influent flow
(2) WAS flow assumed average annual solids loading to the aerobic digesters per the *Dewatering Improvements: Engineering Report for the Telluride Regional Wastewater Treatment Plant* (Jacobs Engineering, 2019).
(3) Recycle flows include pressate recycle, decant and filtrate recycle. Pressate recycle assumed 0.158 mgd per the *Dewatering Improvements: Engineering Report for the Telluride Regional Wastewater Treatment Plant* (Jacobs Engineering, 2019), decant flow assumed to be 0.008 mgd, and filtrate recycle assumed 0.004 mgd. Recycle flows assumptions to be updated in continued modeling efforts.

2.2 Hydraulic Flow Path and Unit Process Notes

2.2.1 Hydraulix® Model

Hydraulic modeling of the TRWWTP was performed using Carollo's Hydraulix® software. Hydraulix® is an in-house, spreadsheet-based, steady-state hydraulic model used to calculate the hydraulic and energy grade lines through the treatment plant. The model tracks the estimated water surface elevation (WSE) from downstream to upstream in the plant, accounting for headloss through the critical path of flow conveyance.

2.2.2 Model Development

The following units were identified as the critical path for this hydraulic model as part of discussions with the project team during Workshop 1:

- Screening channel.
- Grit vortex unit.
- Oxidation Ditch No. 3.
- Secondary Clarifier No. 3.
- UV disinfection.

The critical path is the path of most hydraulic resistance through the plant. Wherever applicable, the pipe route with the longest pipe segments and most fittings was modeled, even if that flow path is a fictional route (e.g., flow into Secondary Clarifier No. 2 and out of Secondary Clarifier No. 3) to develop the most conservative hydraulic scenario. The Town provided drawings for previous projects at the TRWWTP and these drawings were compiled into a comprehensive drawing set with existing structures and components of the hydraulic critical path highlighted. Drawing elevations are reported in a local datum and are consistent across all drawing sets. The hydraulic profile drawing set developed to create the model is included as Appendix 2A – Compiled Drawing Set.

2.2.3 Hydraulic Assumptions

Hydraulic assumptions used in the development of the hydraulic model are included in this section. The following assumptions were used for hydraulic coefficients:

- A Manning's "n" friction coefficient of 0.013 for channel hydraulic calculations.
- An absolute roughness coefficient of 0.004 for pipe hydraulic calculations.

2.2.4 Unit Process Assumptions

The following specific notes apply to individual process areas.

2.2.4.1 Plant Influent

The hydraulic model extends to the influent channel of the headworks where flow is pumped from the raw sewage pumping station in a 14-inch force main. As assessment of the raw sewage pump station pumping capacity will be included as an appendix to the final TM.

2.2.4.2 Screening Channel

The screening channel in the headworks consists of a Duperon FlexRake bar screen installed in 2018. Headloss through the bar screen process was provided by Duperon for flow rates of 1 mgd and 5 mgd. Headloss assumptions are presented in Table 2.2. For the hydraulic modeling, the headloss of 3.34 inches was assumed for both flow conditions. Headloss across the screen assumed a 25 percent blinding factor. There is a bypass channel connected to the screening channel, but the Town has indicated it is only used as an emergency bypass and therefore was not modeled.

Table 2.2 Bar Screen Headloss Conditions from Vulcan Industries

Flow (mgd)	Blinding Factor	Headloss through One Screen (inches)
1	25%	3.09
5	25%	3.34

2.2.4.3 Grit Removal

The grit removal system consists of a Smith and Loveless vortex grit unit installed as part of the Phase 3 WWTP Improvements Project in 2001. Headloss through the system was assumed to be 0.25 inches, as information on the exact headloss was not provided by the manufacturer at the time of this draft. There is a bypass channel around the grit system, but the Town indicated it is only used as an emergency bypass and therefore was not included in the model.

2.2.4.4 Influent Wet Well Pump Station

Flow is pumped from the influent wet well pump station to the oxidation ditch diversion structure. The WSE in this area is the downstream hydraulic set point for the grit removal unit, screening channel, and plant influent segments of the model. A high water alarm WSE of 8,661 feet was used as a conservative value, and may be updated once the pumps are modeled.

2.2.4.5 Oxidation Ditches

All three oxidation ditches were modeled in service, as would be the typical operation under the permitted design capacity condition. Flow is pumped to the oxidation level control structure. The flow split between the three oxidation ditches is controlled by three straight edged weirs. Each

weir is set at the same elevation to split flow evenly between the ditches. The WSE of each oxidation ditch is controlled by a 2-foot wide effluent adjustable weir. Each oxidation ditch flows over its effluent weir and into a diversion structure which routes flow to the secondary clarifiers.

2.2.4.6 Secondary Clarifiers

There are three 50-foot diameter secondary clarifiers downstream of the oxidation ditches. All three clarifiers are connected with a bypass line, but the Town indicated that the existing configuration does not allow flow to reach Clarifier No. 1. For this reason, Clarifier No. 1 is not in service and was not included in the model. In the developed model, the flow from the oxidation ditches is split between Clarifier No. 2 and Clarifier No. 3.

2.2.4.7 Ultraviolet Disinfection

Headloss through the ultraviolet (UV) disinfection lamps was taken from the 2013 TRWWTP UV Disinfection System Improvements project. Downstream of the UV lamps is a finger weir before discharge to the plant effluent line. No drawings are available for the details of this weir, so the hydraulic model includes a straight edge weir from the original construction.

2.3 Hydraulic Profile

WSEs for the two flow scenarios with respect to top of concrete elevations are plotted in Figure 2.1. Available freeboard was calculated for each hydraulic node and is presented in Table 2.3. The hydraulic model output is included as Appendix 2B – Hydraulix® Model Output.

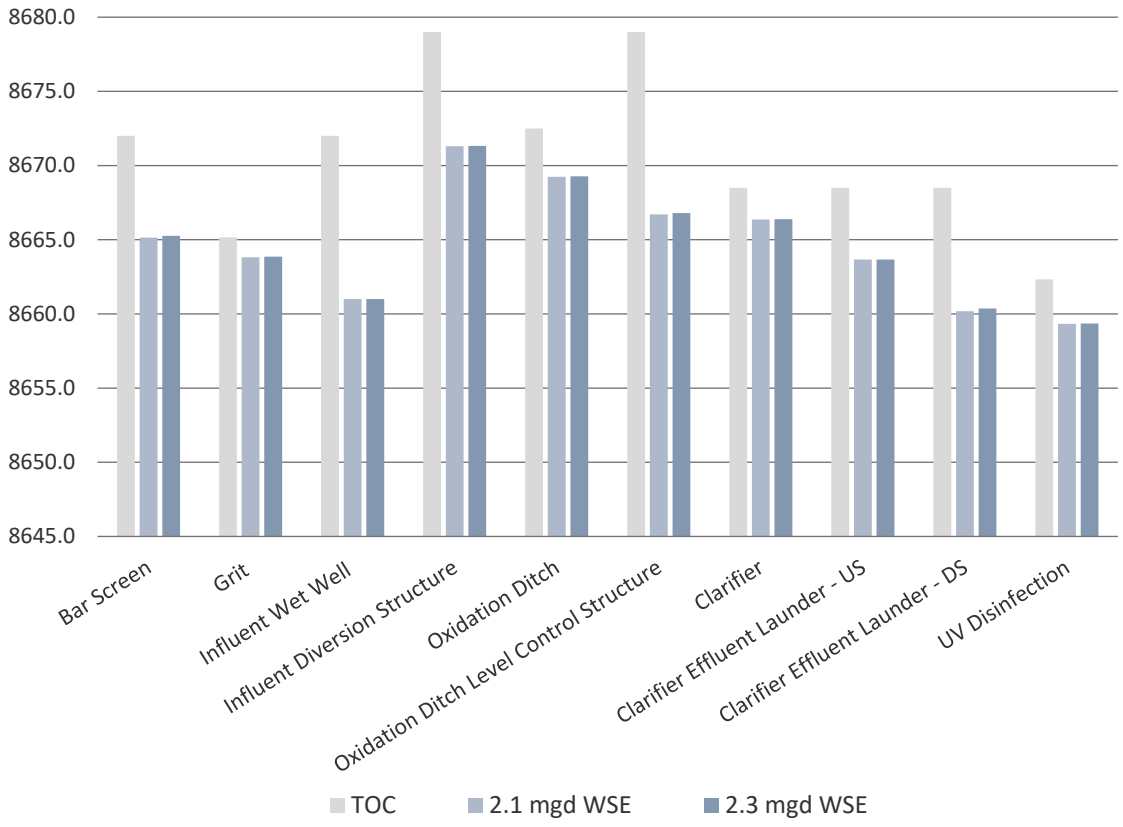


Figure 2.1 Water Surface Elevations with Respect to Top of Concrete

Table 2.3 Existing Facility Available Freeboard

Location	Freeboard Available at 2.1 mgd (feet)	Freeboard Available at 2.3 mgd (feet)
Bar Screen	6.9	6.7
Parshall Flume	1.4	1.3
Grit	1.4	1.3
Influent Wet Well	11.0	11.0
Influent Diversion Structure	7.7	7.7
Oxidation Ditch	3.3	3.2
Oxidation Ditch Level Control Structure	12.3	12.2
Clarifier	2.1	2.1
Clarifier Effluent Launder – US	4.8	4.8
Clarifier Effluent Launder – DS	8.3	8.1
UV Disinfection	3.0	3.0

2.4 Existing Hydraulic Limitations

The Colorado Department of Public Health and Environment's (CDPHE) *Colorado Design Criteria for Domestic Wastewater Treatment Works, WPC-DR-1* (2012) defines numerous hydraulic design criteria. These include total and firm (with largest unit out of service) capacity requirements for conveyance and pumping facilities, freeboard requirements (18 inches [1.5 feet] for most areas, 12 inches [1 foot] for primary and secondary clarifiers), and floodplain considerations. In addition, certain unit processes have required operating levels above which treatment performance is affected. These include UV disinfection and hydraulic control points such as weirs that are intended to be free flowing (i.e., unsubmerged).

The initial hydraulic modeling shows that there are no immediate hydraulic concerns for the UV system, clarifiers, oxidation ditches, or grit removal system. Adequate freeboard is maintained in each process area, and all flow control weirs are free-discharging at both flow conditions.

The 9-inch Parshall flume between the grit unit and the bar screen is 100 percent submerged at 2.1 mgd and 111 percent submerged at 2.3 mgd. Submergence of greater than 100 percent can result in less accurate flow measurement. In addition, directly upstream of the Parshall flume, the top of concrete is at a lower elevation than the screening channel, and there is only 15.6 inches of freeboard available, which is slightly below the requirement of 18 inches per CDPHE. Modifications to this system will be required to accommodate the future design flow if the existing headworks facility is reused. The required modifications will be more significant at the future peak hour condition if flow equalization is not provided upstream of the future headworks process.

The Town indicated that there is an uneven flow split between the three clarifiers such that Clarifier No. 1 does not receive flow. Although Clarifier No. 1 was not included in the hydraulic model, visual observation of the piping layout provided on the facility drawings clearly indicates concerns associated with this flow split. Additional modeling and recommendations

to correct this deficiency was not deemed appropriate as the proposed retrofit associated with the TRWWTP Expansion project will no longer require a flow split between the three clarifiers since the membrane modules are planned for installation only in one existing clarifier.

2.5 Additional Considerations

Based on the elevation of the plant outfall to the San Miguel river and the invert elevation of the UV system, there is almost 20 feet of excess and available head. This could be an opportunity to explore utilizing hydro-electric power between the UV system and the plant outfall. 

2.6 Recommended Flow Path, Site Layout, and Hydraulic Profile

All following sections will be updated for the final deliverable in conjunction with TM 3 – Liquid Stream Recommendations.

2.6.1 Flow Path, Process Flow Diagram, and Site Layout

Pending.

2.6.2 Hydraulic Profile

Pending.

2.6.2.1 Influent Pumping

Pending.

2.6.3 Existing Limitations and Proposed Solutions

Pending.

Business and Government Activity Report

For the month ending: September 30th

Activity	2021 MONTH	2021 Monthly Change	2021 YTD	2020 MONTH	2020 Monthly Change	2020 YTD	YTD or MTD Variance	Variance %
Cable/Internet	***New**							
TV Residential Sunscribers	410	(22)		636	0		(226)	-35.5%
Fiber Video *	188	16		na	NA		NA	NA
TV Bulk Subscribers	655	(3)		508	0		147	28.9%
Fiber Commercial *	20	3		na	NA		NA	NA
TV Inactive Digital Subscribers	64	7		88	6		(24)	-27.3%
Cable Modem Residential Cable Modem Subscribers	711	(25)		958	0		(247)	-25.8%
Cable Modem Business Net Service Subscribers	30	1		37	0		(7)	-18.9%
Cable Modem Hospitality Subscribers	272	0		278	2		(6)	-2.2%
Dark Fiber Transport	8	0		7	0		1	14.3%
Fiber Hospitality Subscribers	8	0		8	0		0	0.0%
Fiber Residential Subscribers	409	23		181	45		228	126.0%
Phone Subscribers	64	0		78	(1)		(14)	-17.95%
Village Court Apartments								
Occupancy Rate %	99.55%	0.00%	99.70%	100.00%	0.00%	99.49%	0.21%	0.2%
# Vacated Units	3	0	22	2	0	19	3	15.8%
# Work Orders Completed	18	4	130	12	(16)	205	(75)	-36.6%
# on Waiting List	232	(5)		252	62		(20)	-7.9%
Public Works								
Service Calls	1,502	433	8,440	1,550	60	6,863	1,577	23.0%
Truck Rolls	839	182	3,659	889	65	2,531	1,128	44.6%
Snow Fall Inches	0	0	188	3	3	142	46	32.4%
Snow Removal - Streets & Prkg Lots Hours	0	0	2,396	43	43	2,528	(132)	-5.2%
Roadway Maintenance Hours	301	(84)	2,141	185	78	633	1,508	238.2%
Water Billed Consumption Gal.	20,442,000	417,000	137,636,000	20,611,000	(2,001,000)	112,696,000	24,940,000	22.1%
Sewage Treatment Gal.	6,152,000	(1,872,000)	74,402,000	11,722,000	3,800,000	83,998,000	(9,596,000)	-11.4%
Child Development Fund								
# Infants Actual Occupancy	6.11	(1.17)		4.53	0.82		1.58	34.9%
# Toddlers Actual Occupancy	10.47	2.25		11.18	(0.11)		(0.71)	-6.3%
# Preschoolers Actual Occupancy	11.76	0.59		13.11	(0.65)		(1.35)	-10.3%
Transportation and Parking								
GPG (noon snapshot)	6,078	(152)	59,758	5,531	(539)	49,133	10,625	21.6%
GPG Parking Utilization (% of total # of spaces occupied)	44.0%	0.30%	47.6%	40.10%	-2.50%	39.0%	8.6%	22.1%
HPG (noon snapshot)	1,204	(69)	13,736	1,325	(99)	10,476	3,260	31.1%
HPG Parking Utilization (% of total # of spaces occupied)	37.9%	-0.80%	47.5%	41.70%	-1.60%	36.1%	11.4%	31.6%
Total Parking (noon snapshot)	11,221	(268)	108,206	9,758	(959)	85,630	22,576	26.4%
Parking Utilization (% of total # of spaces occupied)	46.2%	0.40%	49.0%	40.20%	-2.50%	38.6%	10.4%	26.9%
Paid Parking Revenues	$42,705	$9,505	$365,600	$45,118	($10,375)	$290,037	$75,563	26.1%
Bus Routes # of Passengers	5,043	(791)	28,132	2,734	181	12,281	15,851	129.1%
Human Resources	Part Time EE's: Council (7), Judge (1), Child Care (6), IT Tech Help (1) MARRS: 6 employees Seasonal EE's: Gondola Ops, Plaza/ Sanitation Services, Groundskeepers New Hires: 3 Gondola Seasonal, 1 VCA Attendant, 1 Planning Tech/Admin Asst, 1 Interim Town Manager, Town Attroney, Direcotr of Operations, 1 Part Time Childcare Program Asst, 1 Part Time IT Tech Terms: 2 Gondola seasonal, 1 Sr Deputy Clerk, 1 Plaza Supervisor Reason for Terms: end of season, move out of area, took another local position							
FT Year Round Head Count	79	0		78	0		1	1.3%
Seasonal Head Count (FT & PT)	4	0		0	0		4	NA
PT Year Round Head Count	14	0		13	0		1	7.7%
Gondola FT YR, Seasonal, PT YR Head Count	51	0		59	0		(8)	-13.6%
Total Employees	156	18		150	0		6	4.0%
Gondola Overtime Paid Hours	387	(142)	2,891	250	0	1,952	939	48.1%
Other Employee Overtime Paid	56	14	538	81	0	606	(68)	-11.2%
# New Hires Total New Hires	8	3	40	18	8	59	(19)	-32.2%
# Terminations	4	1	45	11	4	62	(17)	-27.4%
# Workmen Comp Claims	2	0	7	1	0	2	5	250.0%
Workmen Comp Claims Costs	$0	$0	$18,868	$0	$0	$7,094	$11,774	166.0%
Communications & Business Development			**Town hosted meetings include Zoom meetings**					
Town Hosted Meetings	5	1	44	5	(5)	95	(51)	-53.7%
Email Correspondence Sent	13	(13)	161	12	(11)	142	19	13.4%
E-mail List #	8,177	(50)		7,936	372		241	3.0%
Ready-Op Subscribers	2,068	13		1,939	0		129	6.7%
News Articles	18	(4)	218	25	8	184	34	18.5%
Press Releases Sent	7	2	36	2	1	23	13	56.5%
Gondola and RETA								
Gondola # of Passengers	296,926	(60,374)	2,330,465	258,254	(57,074)	1,994,544	335,921	16.8%
Chondola # of Passengers	0	0	77,388	0	0	80,532	(3,144)	-3.9%
RETA fees collected by TMVOA	$ 1,240,580	$ (349,518)	$ 12,201,577	$ 1,822,280	$ 142,082	$ 6,331,508	$5,870,069	92.7%

Business and Government Activity Report
For the month ending: September 30th

Activity		2021 MONTH	2021 Monthly Change	2021 YTD	2020 MONTH	2020 Monthly Change	2020 YTD	YTD or MTD Variance	Variance %
Police									
Calls for Service	#	460	(63)	4,423	410	(60)	2,984	1,439	48.2%
Investigations	#	17	7	125	12	(3)	109	16	14.7%
Alarms	#	15	8	146	20	1	190	(44)	-23.2%
Arrests	#	0	0	10	2	2	11	(1)	-9.1%
Summons	#	0	0	9	3	3	17	(8)	-47.1%
Traffic Contacts	#	5	(9)	110	12	(2)	109	1	0.9%
Traffic Tickets Written	#	3	1	9	2	(2)	19	(10)	-52.6%
Parking Tickets Written	#	404	(79)	3,480	380	(71)	2,050	1,430	69.8%
Administrative Dismissals	#	6	2	39	1	(2)	18	21	116.7%
Building/Planning									
Community Development Revenues		$283,206	($354,687)	$2,074,780	$97,623	($33,493)	$1,279,849	$794,931	62.1%
# Permits Issued		45	-7	231	41	3	291	(60)	-20.6%
Valuation of Mtn Village Remodel/New/Additions Permits		$12,651,431	($10,599,223)	$68,616,959	$610,268	($3,572,890)	$39,534,872	$29,082,087	73.6%
Valuation Mtn Village Electric/Plumbing/Other Permits		$368,740	($143,041)	$3,279,588	$382,420	$218,284	$2,382,964	$896,624	37.6%
Valuation Telluride Electric/Plumbing Permits		$728,750	$240,285	$3,098,387	$186,455	$49,895	$1,942,472	$1,155,915	59.5%
# Inspections Completed		367	(58)	3,450	317	(123)	2,539	911	35.9%
# Design Review/Zoning Agenda Items		12	(6)	144	10	(5)	99	45	45.5%
# Staff Review Approvals		59	(101)	515	66	26	295	220	74.6%
Plaza Services									
Snow Removal Plaza	Hours	0	0	795	28	28	1,004	(209)	-20.8%
Plaza Maintenance	Hours	720	58	5,362	467	43	2,672	2,689	100.6%
Lawn Care	Hours	155	(66)	885	101	(9)	563	322	57.1%
Plant Care	Hours	645	75	3,537	344	19	1,492	2,046	137.2%
Irrigation	Hours	102	(97)	793	106	(8)	654	139	21.2%
TMV Trash Collection	Hours	121	(17)	992	117	(12)	851	142	16.6%
Christmas Decorations	Hours	12	2	485	10	2	531	(46)	-8.6%
Vehicle Maintenance									
# Preventive Maintenance Performed		20	1	162	24	11	165	(3)	-1.8%
# Repairs Completed		25	6	201	23	(2)	167	34	20.4%
Special Projects		6	6	13	0	(1)	11	2	18.2%
# Roadside Assists		0	0	1	0	0	1	0	0.0%
Finance									
# Other Business Licenses Issued		19	(3)	1,143	23	0	1,046	97	9.3%
# Privately Licensed Rentals		1	(3)	94	1	1	72	22	30.6%
# Property Management Licensed Rentals		6	(8)	469	3	1	430	39	9.1%
# Unique VRBO Property Advertisements Listings for MV		512	1		460	4		52	11.3%
% of Paperless Billing Accts (total paperless customers)		54.87%	0.79%		55.09%	7.86%		-0.2%	-0.4%
# of TMV AR Bills Processed		2,227	(14)	19,768	2,189	(193)	19,620	148	0.8%

Accounts Receivable

	(includes Gondola funding)		Water/Sewer		VCA - Village Court Apartments	
Current	$301,682	83.3%	$500,740	85.4%	$0	0.0%
30+ Days	5,067	1.4%	56,442	9.6%	-	0.0%
60+ Days	28,146	7.8%	14,479	2.5%	-	0.0%
90+ Days	13,193	3.6%	13,530	2.3%	-	0.0%
over 120 days	14,287	3.9%	1,059	0.2%	6,545	100.0%
Total	$ 362,375	100.0%	$ 586,250	100.0%	$ 6,545	100.0%
	Construction Parking		**Total All AR**		**Increase (Decrease) in AR**	
Current	$23,080	58.6%	$ 825,502	83.0%	($657,512)	47.1%
30+ Days	6,932	17.6%	68,441	6.9%	(281,872)	20.2%
60+ Days	4,415	11.2%	47,040	4.7%	14,203	-1.0%
90+ Days	964	2.4%	27,687	2.8%	(480,713)	34.4%
over 120 days	4,017	10.2%	25,908	2.6%	9,227	-0.7%
Total	$39,408	100.0%	$ 994,578	100.0%	$ (1,396,667)	100.0%

General Fund Investment Activity

Change in Value (Month)	($516,983)
Ending Balance	$7,471,567
Investment Income (Month)	$6,300
Portfolio Yield	na
Yield Change (Month)	na

Other Statistics

Population (estimated)	1,434
(Active) Registered Voters	873
Property Valuation	310,031,920

Memorandum

To: Town Council

From: Julie Vergari, Chief Accountant

Date: October 5, 2021

Re: Town of Mountain Village Financial Statements through August 2021

Mountain Village Financials Statements through August 2021

General Fund Summary

The August financials reflect budgets adopted for 2021 and prorated accordingly. As of August 31, 2021, the General Fund reflects a surplus of $5.5 million primarily resulting from sales tax collections, grant monies, and development revenues. Revenues of $11.8 million were over the budget by $3.6 million.

Total GF operating expenditures of $6 million were under budget by $371,500. Some budgets reflect budget overages due to the retroactive salary and wage increase.

Transfers to other funds include:

Fund	This Month	YTD Budget	YTD Actual	Budget Variance
Capital Projects Fund (From GF)	$ -	$ 40,000	$ 39,794	(206)
Child Development Fund	$ 834	$ 46,811	$ 834	(45,977)
Conference Center Subsidy	$ -	$ 98,653	$ 91,300	(7,353)
Affordable Housing Development Fund (Monthly Sales Tax Allocation)	$ 76,506	$ 285,367	$ 538,183	252,816
Vehicle & Equipment Acquisition Fund	$ -	$ 35,000	$ 33,151	(1,849)

Income transfers from other funds include:

Fund	This Month	YTD Budget	YTD Actual	Budget Variance
Overhead allocation from Broadband, W/S, Gondola, VCA and Parking Services	$ 56,370	$ 400,512	$ 450,283	49,771
*Tourism Fund	$ 7,456	$ 43,065	$ 73,838	30,773
*This transfer is comprised of administrative fees, interest, and penalties collected.				
Debt Service Fund (Specific Ownership Taxes)	$ 4,925	$ 20,877	$ 16,667	(4,210)

Vehicle and Equipment Acquisition Fund – No Fund Income Statement Attached

The skid steer leases are paid, a pressure washer and a Polaris Sportsman ATV were purchased.

Capital Projects Fund – No Fund Income Statement Attached

$39,119 has been spent for safety improvements. $422 has been spent on shop remodel costs and $252 has been spent on Country Club title work.

Historical Museum Fund – No Fund Income Statement Attached

$100,326 in property taxes were collected and $98,315 was tendered to the historical museum. The county treasurer retained $2,011 in treasurer's fees.

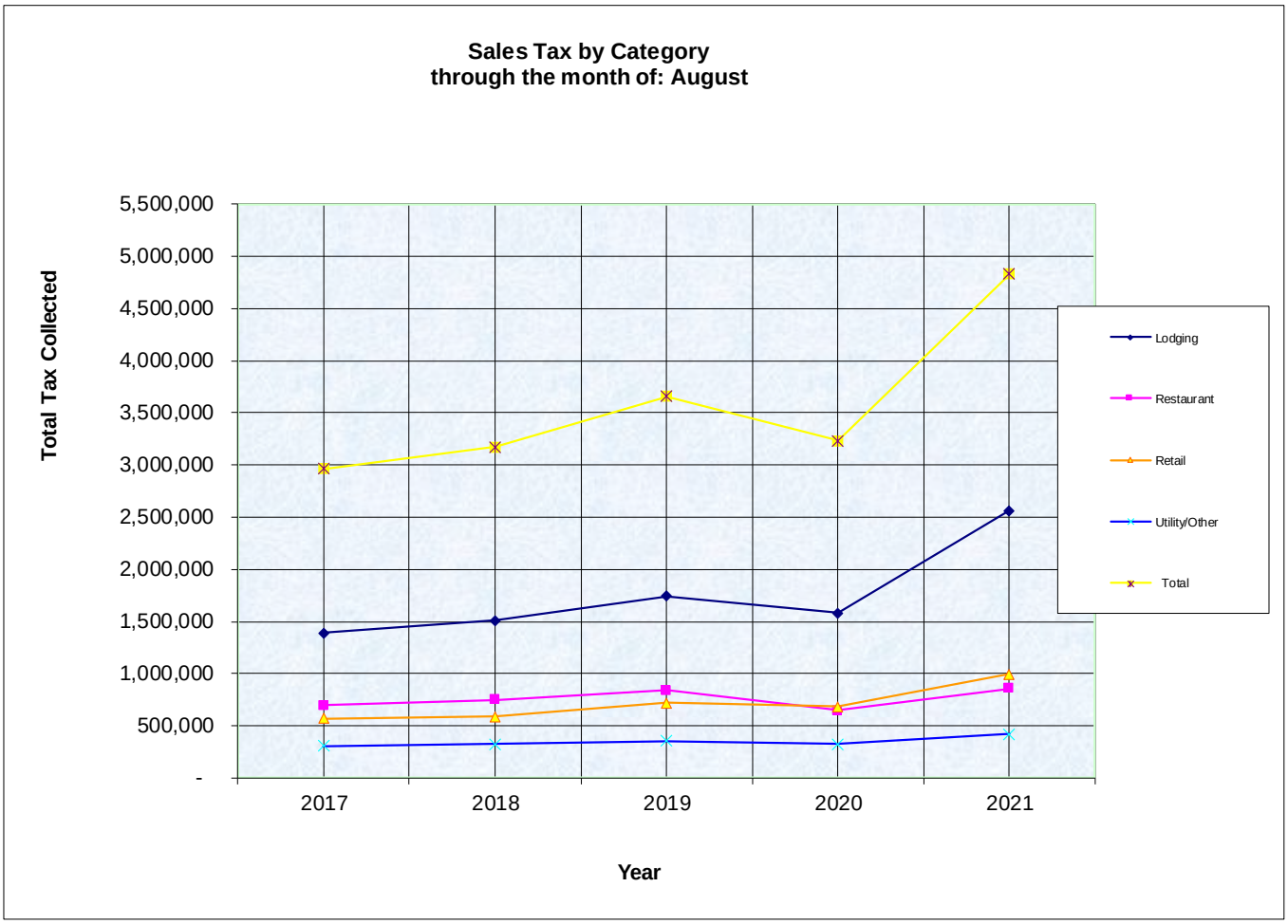
Mortgage Assistance Fund – No Fund Income Statement Attached

There has been $6,521 in interest collected in this fund to date.

Sales Tax

Sales taxes of $4.8 million are 49% over 2020 through this period. Lodging shows the highest increase at 62.1%, followed by Retail at 46%. March 2021 was the highest collection month on record.

Actual Sales Tax Base By Class, Through August 2021										
Category	Actual 2017 4.5%	Actual 2018 4.5%	PY % Increase 2017 to 2018	Actual 2019 4.5%	PY % Increase 2018 to 2019	Actual 2020 4.5%	PY % Increase 2019 to 2020	Actual 2021 4.5%	PY $ Variance 2020 to 2021	PY % Increase 2020 to 2021
Lodging	30,835,134	33,531,262	9%	38,782,108	16%	35,075,092	-10%	56,860,946	21,785,854	62.11%
Restaurant	15,509,063	16,632,778	7%	18,662,318	12%	14,340,930	-23%	18,993,990	4,653,060	32.45%
Retail	12,666,420	13,112,376	4%	15,953,070	22%	15,173,444	-5%	22,143,663	6,970,219	45.94%
Utility/Other	6,863,852	7,166,391	4%	7,845,288	9%	7,198,810	-8%	9,289,436	2,090,625	29.04%
Total	**65,874,469**	**70,442,807**	**7%**	**81,242,783**	15%	**71,788,277**	-12%	**107,288,035**	35,499,757	49.45%



Tourism Fund

2021 restaurant taxes totaling $379,671 have been collected and $372,078 was tendered to the airline guarantee program. $2.18 million in lodging taxes were collected and $2,142,415 was tendered to the airline guarantee program and to MTI. The Town retained $40,219 in administrative fees, and penalties and interest of $2,453.

Lodging taxes are over prior year by 60% and over budget by 55%. Restaurant taxes are over prior year by 42% and over budget 33%, respectively.

Town of Mountain Village Colorado Lodging Tax Summary									
	2017	2018	2019	2020	2021		2020	2021	Budget
	Activity (4%)	Activity (4%)	Activity (4%)	Activity (4%)	Activity (4%)		Var %	Budget (1)	Var %
January	245,628	273,707	300,246	325,337	271,522		-16.54%	205,924	24.16%
February	260,809	262,096	310,947	334,936	358,131		6.93%	212,240	40.74%
March	312,990	322,588	401,256	212,698	475,919		123.75%	132,906	72.07%
April	8,353	18,205	17,822	855	40,874		4679.32%	500	98.78%
May	12,493	18,134	24,335	784	51,474		6463.75%	554	98.92%
June	122,193	137,760	139,428	55,426	229,731		314.48%	34,095	85.16%
July	158,585	170,730	196,062	242,927	410,690		69.06%	151,026	63.23%
August	112,264	136,080	160,993	226,805	336,701		48.45%	142,644	57.63%
September	148,624	171,040	158,287	173,096	-		-100.00%	110,511	NA
October	34,399	34,696	46,789	94,985	-		-100.00%	60,115	NA
November	18,535	17,307	14,761	38,597	-		-100.00%	23,842	NA
December	290,808	283,658	295,803	266,888	-		-100.00%	161,269	NA
Total	**1,725,680**	**1,846,001**	**2,066,729**	**1,973,334**	**2,175,041**		10.22%	**1,235,627**	43.19%
Tax Base	**43,142,003**	**46,150,032**	**51,668,223**	**49,333,357**	**54,376,019**			**30,890,675**	

Town of Mountain Village Colorado Restaurant/Bar Tax Summary									
	2017	2018	2019	2020	2021		2020	2021	Budget
	Activity (2%)	Activity (2%)	Activity (2%)	Activity (2%)	Activity (2%)		Var %	Budget (1)	Var %
January	54,097	57,188	62,864	73,576	45,206		-38.56%	56,344	-24.64%
February	60,144	63,140	66,720	76,476	59,218		-22.57%	58,501	1.21%
March	74,202	75,202	87,671	50,565	82,463		63.08%	38,723	53.04%
April	1,829	7,119	7,364	85	5,733		6660.89%	65	98.87%
May	4,448	4,838	4,299	553	6,196		1019.64%	424	93.16%
June	34,365	39,048	38,614	9,040	55,585		514.89%	6,923	87.55%
July	46,470	46,603	60,113	37,654	66,256		75.96%	28,836	56.48%
August	34,998	39,031	44,673	37,777	59,014		56.22%	28,929	50.98%
September	39,291	36,920	42,922	32,718	-		-100.00%	25,055	NA
October	13,519	12,695	17,657	19,674	-		-100.00%	15,066	NA
November	5,352	7,221	3,503	8,215	-		-100.00%	6,292	NA
December	54,303	53,383	57,178	39,602	-		-100.00%	30,327	NA
Total	**423,017**	**442,390**	**493,579**	**385,935**	**379,671**		-1.62%	**295,485**	22.17%
Tax Base	**21,150,852**	**22,119,524**	**24,678,936**	**19,296,742**	**18,983,564**			**14,774,250**	

Business license fees of $335,261 are over budget (10%) and prior year (7%). $315,145 was remitted to MTI and $31,064 in admin fees and penalties were transferred to the General Fund.

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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Revenues									
Charges for Services	$ 504,406	$ 224,021	$ 280,385	125.16%	$ 291,458	$ (212,948)	$ 237,713	$ 237,915	$ 254,948
Contributions	44,999	8,340	36,659	439.56%	33,340	(11,659)	34,168	20,685	2,914
Fines and Forfeits	1,843	7,649	(5,806)	-75.91%	11,841	9,998	3,505	7,639	59,124
Interest Income	21,216	74,923	(53,707)	-71.68%	100,000	78,784	157,467	202,145	62,223
Intergovernmental	463,423	343,926	119,497	34.74%	413,533	(49,890)	427,660	371,091	380,917
Licenses and Permits	471,088	248,947	222,141	89.23%	339,828	(131,260)	303,396	241,761	198,861
Miscellaneous Revenues	332,474	25,271	307,203	1215.63%	89,118	(243,356)	57,173	61,425	41,052
Taxes and Assessments	9,962,142	7,298,432	2,663,710	36.50%	8,653,973	(1,308,169)	8,113,189	8,117,976	7,388,423
Total Revenues	11,801,591	8,231,509	3,570,082	43.37%	9,933,091	(1,868,500)	9,334,271	9,260,637	8,388,462
Operating Expenses									
Legislation & Council	53,732	67,436	(13,704)	-20.32%	115,516	61,784	42,639	49,989	50,102
Town Manager	186,469	187,965	(1,496)	-0.80%	269,210	82,741	211,535	174,422	170,077
Town Clerk's Office	200,934	224,620	(23,686)	-10.54%	311,190	110,256	229,478	254,809	242,126
Finance	640,998	643,405	(2,407)	-0.37%	894,821	253,823	638,131	599,169	607,911
Technical	354,650	360,205	(5,555)	-1.54%	507,346	152,696	301,857	276,547	255,470
Human Resources	224,214	227,831	(3,617)	-1.59%	341,381	117,167	237,347	225,364	233,531
Town Attorney	165,498	185,311	(19,813)	-10.69%	310,000	144,502	202,749	314,548	271,229
Communications and Business Development	325,578	330,935	(5,357)	-1.62%	539,144	213,566	272,212	334,913	204,896
Municipal Court	16,102	20,347	(4,245)	-20.86%	34,255	18,153	18,405	19,019	18,146
Police Department	638,099	661,563	(23,464)	-3.55%	1,032,734	394,635	617,830	603,764	553,939
Community Services	36,603	35,256	1,347	3.82%	59,610	23,007	30,673	35,048	33,469
Community Grants and Contributions	112,338	112,338	-	0.00%	112,338	-	110,745	97,363	112,850
Roads and Bridges	761,239	858,761	(97,522)	-11.36%	1,136,648	375,409	552,911	828,690	503,045
Vehicle Maintenance	272,280	279,280	(7,000)	-2.51%	464,635	192,355	246,384	284,013	279,246
Municipal Bus	144,589	117,870	26,719	22.67%	218,440	73,851	179,192	148,103	143,055
Employee Shuttle	17,420	69,031	(51,611)	-74.76%	79,983	62,563	31,239	32,367	39,279
Parks & Recreation	275,135	300,984	(25,849)	-8.59%	514,139	239,004	230,802	298,121	337,081
Plaza Services	785,036	889,109	(104,073)	-11.71%	1,410,250	625,214	737,535	846,565	771,213
Public Refuse Removal	41,476	37,712	3,764	9.98%	61,345	19,869	37,322	42,512	43,682
Building/Facility Maintenance	178,030	172,413	5,617	3.26%	285,248	107,218	140,694	125,125	114,677
Building Division	251,485	244,282	7,203	2.95%	95,000	(156,485)	208,375	155,708	193,502
Housing Division Office	19,809	12,909	6,900	53.45%	438,406	418,597	13,181	13,746	12,353
Planning and Zoning Division	317,378	351,017	(33,639)	-9.58%	21,696	(295,682)	154,887	218,634	263,262
Contingency	-	-	-	NA	686,553	686,553	-	-	-
Total Operating Expenses	6,019,092	6,390,580	(371,488)	-5.81%	9,939,888	3,920,796	5,446,123	5,978,539	5,454,141
Surplus / Deficit	5,782,499	1,840,929	3,941,570	214.11%	(6,797)	(5,789,296)	3,888,148	3,282,098	2,934,321
Capital Outlay	92,430	94,357	(1,927)	-2.04%	191,535	99,105	836	81,170	105,806
Surplus / Deficit	5,690,069	1,746,572	3,943,497	225.78%	(198,332)	(5,888,401)	3,887,312	3,200,928	2,828,515
Other Sources and Uses									
Sale of Assets	2,476	-	2,476	NA	-	(2,476)	2,500	12,496	14,383
Transfer (To) From Affordable Housing	(538,183)	(285,367)	(252,816)	88.59%	(415,792)	122,391	(359,501)	(406,959)	(352,765)
Transfer (To) From Affordable Housing-Housing Off	-	-	-	NA	21,696	21,696	-	-	-
Transfer (To) From Broadband	-	-	-	NA	(447,120)	(447,120)	-	-	10,000
Transfer (To) From Child Development	(834)	(46,811)	45,977	-98.22%	(126,770)	(125,936)	(21,697)	(35,960)	(65,861)
Transfer (To) From Capital Projects	(39,794)	(40,000)	206	-0.52%	(1,046,546)	(1,006,752)	(48,390)	(20,426)	(11,247)
Transfer (To) From Debt Service	16,667	20,877	(4,210)	-20.16%	32,000	15,333	16,131	18,426	19,151
Transfer (To) From Overhead Allocation	450,283	400,512	49,771	12.43%	590,993	140,710	447,218	463,198	335,227
Transfer (To) From Parking Services	-	-	-	NA	-	-	-	-	-
Transfer (To) From Conference Center	(91,300)	(98,653)	7,353	-7.45%	(151,538)	(60,238)	(161,591)	(151,044)	(148,634)
Transfer (To) From Tourism	73,838	43,065	30,773	71.46%	51,362	(22,476)	54,881	23,132	35,704
Transfer (To) From Vehicle/Equipment	(33,151)	(35,000)	1,849	-5.28%	(290,831)	(257,680)	(62,402)	(105,767)	(251,938)

	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Transfer (To) From Water/Sewer	-	-	-	NA	-	-	-	-	-
Total Other Sources and Uses	(159,998)	(41,377)	(118,621)	286.68%	(1,782,546)	(1,622,548)	(132,852)	(202,904)	(415,980)
Surplus / Deficit	$ 5,530,071	$ 1,705,195	$3,824,876	224.31%	$ (1,980,878)	$ (7,510,949)	$ 3,754,461	$ 2,998,024	$ 2,412,535

Beginning Fund Balance Components	**Actual YTD**	**Annual Budget**
Emergency Reserve	$ 3,478,961	$ 3,478,961
Unreserved	10,326,924	9,327,247
Beginning Fund Balance	$ 13,805,885	$ 12,806,208
YTD Ending Fund Balance Components		
Emergency Reserve	$ 3,478,961	$ 3,478,961
Unreserved	15,856,995	7,346,369
Ending Fund Balance	$ 19,335,956	$ 10,825,330

Revenues

Taxes & Assessments - Property taxes are under budget due to abatements. Specific Ownership taxes are over budget $24,000 and are $20,000 more than prior year. We have collected 129% of the annual budget in sales tax revenues. Construction use tax is at 160% of the annual budget.
Licenses & Permits - Construction permits are over budget $175,000. Plumbing and Electrical permits are also over budget $30,736.
Intergovernmental - Intergovernmental revenues are exceeding budget in R&B taxes ($19,300) and the SMART contribution.
Charges for Services - DRB fees and plan review fees are exceeding the annual budget(s) as well as road impact fees.
Fines & Forfeitures - $1,842 in fines have been assessed to date.
Investment Income - Investment income is under budget and prior year and is netted with gains or losses on investments.
Miscellaneous - Revenues are over budget primarily due to grant funds.
Contributions - Defensible space and roof rebate contributions have been received.

Top Ten Budget Variances

Over Budget

Municipal Bus Service - $26,719 Employee expense and gasoline are over budget.
Building Division - $7,203 Over budget for environmental incentive programs.
Housing Division (Office) - $6,900 Over budget in wages due to the addition of the housing program director position.
Building/Facility Maintenance - $5,617 Over budget in employee expenses.
Trash Removal - $3,764 Employee expense and supplies are over budget.
Community Services - $1,347 Over budget in employee costs.

Under Budget

Plaza Services - $104,073 Savings in group insurance, worker's compensation, and paver/planter repair.
Road & Bridge - $97,522 Under budget in vehicle repair & maintenance and employee expenses.
Employee Shuttle - $51,611 Gasoline and vehicle repair are under budget.
Planning & Zoning - $33,639 Savings in personnel costs due to vacancies and staff changes.

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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Tourism Fund									
Revenues									
Business License Fees	$ 335,261	$ 303,113	$ 32,148	11%	$ 315,307	$ (19,954)	$ 313,121	$ 310,830	$ 307,480
Lodging Taxes - Condos/Homes	1,502,050	476,397	1,025,653	215%	678,055	(823,995)	846,742	848,319	724,003
Lodging Taxes - Hotels	672,991	403,493	269,498	67%	557,572	(115,419)	551,059	701,157	613,613
Lodging Taxes - Prior Year	6,678	-	6,678	NA	-	(6,678)	1,555	5,311	5,781
Penalties and Interest	13,401	7,305	6,096	83%	10,500	(2,901)	9,368	7,712	15,752
Restaurant Taxes	379,671	218,745	160,926	74%	295,485	(84,186)	285,642	372,124	332,172
Restaurant Taxes - Prior Year	84	-	84	NA	-	(84)	1,103	1,779	394
Total Revenues	2,910,136	1,409,053	1,501,083	107%	1,856,919	(1,053,217)	2,008,590	2,247,232	1,999,195
Tourism Funding									
Additional Funding	-	-	-	NA	-	-	-	34,030	25,299
Airline Guaranty Funding	1,441,202	645,516	795,686	123%	895,033	(546,170)	966,695	1,128,271	984,179
MTI Funding	1,395,096	720,472	674,624	94%	908,025	(487,071)	987,015	1,061,800	954,013
Total Tourism Funding	2,836,298	1,365,988	1,470,310	108%	1,803,057	(1,033,241)	1,953,710	2,224,100	1,963,491
Surplus / Deficit	73,838	43,065	30,773	71%	53,862	(19,976)	54,881	23,132	35,704
Administrative Fees									
Audit Fees	-	-	-	NA	2,500	2,500	-	-	-
Total Administrative Fees	-	-	-	NA	2,500	2,500	-	-	-
Surplus / Deficit	73,838	43,065	30,773	71%	51,362	(22,476)	54,881	23,132	35,704
Other Sources and Uses									
Transfer (To) From Other Funds	(73,838)	(43,065)	(30,773)	71%	(51,362)	22,476	(54,881)	(23,132)	(35,704)
Total Other Sources and Uses	(73,838)	(43,065)	(30,773)	71%	(51,362)	22,476	(54,881)	(23,132)	(35,704)
Surplus / Deficit	$ -	$ -	$ -		$ -		$ -	$ -	$ -

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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Parking Services Fund									
Revenues									
Contributions/Shared Facility Expenses	$ -	$ -	$ -	NA	$ -	$ -	$ -	$ -	$ 4,245
Fines and Forfeits	34,519	21,170	13,349	63%	35,000	23,450	14,840	34,035	27,109
Gondola Parking Garage	95,303	43,333	51,970	120%	65,000	20,665	80,946	74,085	55,110
Heritage Parking Garage	193,902	104,492	89,410	86%	110,000	106,374	142,271	188,561	149,688
Parking in Lieu Buyouts	13,000	-	13,000	NA	-	-	-	-	-
Parking Meter Revenues	24,145	10,863	13,282	122%	82,000	10,390	15,112	17,238	14,514
Parking Permits	9,245	7,579	1,666	22%	10,000	6,390	6,590	8,565	10,665
Special Event Parking	-	-	-	NA	106,000	-	-	113,643	44,628
Total Revenues	370,114	187,437	182,677	97%	408,000	167,269	259,759	436,127	305,959
Operating Expenses									
Other Operating Expenses	2,858	1,386	1,472	106%	5,458	2,600	3,641	5,089	12,488
Personnel Expenses	90,222	91,757	(1,535)	-2%	154,999	64,777	77,937	87,382	75,611
Gondola Parking Garage	39,485	34,306	5,179	15%	68,834	29,349	30,181	45,545	25,658
Surface Lots	15,754	13,901	1,853	13%	28,900	13,146	13,465	9,039	15,250
Heritage Parking Garage	80,604	57,440	23,164	40%	86,830	6,226	52,739	58,695	50,720
Meadows Parking	1,000	1,000	-	0%	1,000	-	1,000	16	1,000
Total Operating Expenses	229,923	199,790	30,133	15%	346,021	116,098	178,963	205,766	180,727
Surplus / Deficit	140,191	(12,353)	152,544	-1235%	61,979	51,171	80,796	230,361	125,232
Capital									
Capital	14,961	15,000	(39)	0%	29,800	14,839	5,415	92,696	5,615
Surplus / Deficit	125,230	(27,353)	152,583	-558%	32,179	36,332	75,381	137,665	119,617
Other Sources and Uses									
Sale of Assets	-	-	-	NA	-	-	-	-	-
Insurance Proceeds	15,345	-	15,345	NA	-	(15,345)	-	-	-
Overhead Allocation	(25,662)	(25,662)	-	0%	(32,077)	(6,415)	(26,896)	(33,070)	(20,283)
Transfer (To) From General Fund	-	-	-	NA	-	-	-	-	-
Total Other Sources and Uses	(10,317)	(25,662)	15,345	-60%	(32,077)	(21,760)	(26,896)	(33,070)	(20,283)
Surplus / Deficit	$ 114,913	$ (53,015)	$ -	0%	$ 102		$ 48,485	$ 104,595	$ 99,334
Beginning Fund Balance	$ 466,658	$ 324,550	$ 142,108						
Ending Fund Balance	$ 581,571	$ 271,535	$ 310,036						

Parking revenues are over budget $182,700. HPG revenues are over budget 86% and prior year 36%. Parking meter (surface lots) revenues are over budget 122% and over prior year 60%. GPG is over budget and prior year 120% and 18%. Parking fines are over budget and prior year. Personnel costs are under budget but other general expenses are over budget mainly because of signage. GPG is under budget in supplies but over budget for elevator maintenance. Surface lots is over budget in striping. HPG has budget savings in tech support but is over budget in maintenance due to replacing the door. The 2021 transfer to the General Fund is $25,662, which is the overhead allocation. $15,345 in insurance proceeds were received for the HPG door damage.

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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Gondola Fund									
Revenues									
Event Operations Funding	$ -	$ -	$ -	NA	$ -	$ -	$ 6,831	$ 3,318	$ 2,667
Event Operations Funding - TOT	-	-	-	NA	36,000	36,000	-	-	-
Capital/MR&R Grant Funding	-	-	-	NA	320,000	320,000	-	580,770	470,615
Operations Grant Funding	128,228	125,000	3,228	2.58%	133,354	5,126	340,815	117,084	116,744
Miscellaneous Revenues	-	-	-	NA	-	-	788	204	2,160
Sale of Assets	-	-	-	NA	-	-	-	-	-
TSG 1% Lift Sales	179,491	117,648	61,843	52.57%	150,000	(29,491)	146,951	183,520	151,854
TMVOA Operating Contributions	2,366,598	2,305,970	60,628	2.63%	4,023,556	1,656,958	2,012,974	2,445,951	2,889,789
TMVOA Capital/MR&R Contributions	378,706	514,603	(135,897)	-26.41%	439,500	60,794	92,452	183,520	155,406
Total Revenues	3,053,023	3,063,221	(10,198)	-0.33%	5,102,410	2,049,387	2,600,811	3,514,367	3,789,235
Operating Expenses									
Overhead Allocation Transfer	21,489	36,667	(15,178)	-41.39%	55,000	33,511	20,542	26,391	35,647
MAARS	40,916	44,419	(3,503)	-7.89%	79,363	38,447	37,312	40,193	40,693
Chondola	122,710	121,630	1,080	0.89%	242,657	119,947	106,418	117,514	175,496
Grant Success Fees	-	-	-	NA	-	-	-	-	-
Operations	1,320,021	1,120,427	199,594	17.81%	1,952,917	632,896	1,130,129	1,169,552	1,087,484
Maintenance	852,503	912,322	(59,819)	-6.56%	1,436,841	584,338	930,179	845,617	855,680
FGOA	316,678	313,153	3,525	1.13%	456,132	139,454	283,779	326,787	271,672
Major Repairs and Replacements	320,000	455,897	(135,897)	-29.81%	710,000	390,000	91,878	965,425	1,212,773
Contingency	-	-	-	NA	120,000	120,000	-	-	-
Total Operating Expenses	2,994,317	3,004,515	(10,198)	-0.34%	5,052,910	2,058,593	2,600,237	3,491,479	3,679,445
Surplus / Deficit	58,706	58,706	-	0.00%	49,500	(9,206)	574	22,888	109,790
Capital									
Capital Outlay	58,706	58,706	-	0.00%	49,500	(9,206)	574	22,888	109,790
Surplus / Deficit	$ -	$ -	$ -	NA	$ -		$ -	$ -	$ -

The gondola fund is $10,200 under budgeted expenditures.
MARRS is under budget with savings primarily in worker's compensation. Chondola expenses are over budget due mainly to (Telski) parts and supplies.
Gondola operations is under budget in worker's compensation ($19,000), but is over budget in all other employee costs. Maintenance is under budget with savings in worker's compensation and group insurance. FGOA costs are over budget mainly in communications, dues and fees, and water/sewer. MR&R expenditures were for gearbox rebuilds, and spare parts, window buffing, grant funded driveline and conveyor rebuilds, and station upgrades. Capital expense was for bike racks.

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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Child Development Fund									
Revenues									
Infant Care Fees	$ 44,850	$ 54,808	(9,958)	-18.17%	$ 82,104	$ 37,254	$ 30,864	$ -	$ -
Toddler Care Fees	80,521	129,109	(48,588)	-37.63%	193,752	113,231	61,661	171,083	182,040
Preschool Fees	92,599	117,853	(25,254)	-21.43%	176,772	84,173	69,004	130,666	119,196
Fundraising Revenues - Infant	-	-	-	NA	3,550	3,550	-	-	-
Fundraising Revenues - Preschool	-	-	-	NA	5,000	5,000	-	650	-
Fundraising Revenues - Toddler	-	-	-	NA	8,450	8,450	-	265	1,950
Grant Revenues - Infant	48,367	14,500	33,867	233.57%	14,500	(33,867)	38,567	-	-
Grant Revenues - Preschool	35,583	19,134	16,449	85.97%	19,134	(16,449)	30,543	36,693	25,200
Grant Revenues - Toddler	55,362	36,500	18,862	51.68%	36,500	(18,862)	46,820	49,375	34,005
Regional Childcare Tax - Infant	-	-	-	NA	15,000	15,000	15,000	-	-
Regional Childcare Tax - Preschool	-	-	-	NA	-	-	-	-	-
Regional Childcare Tax - Toddler	-	-	-	NA	15,000	15,000	15,000	-	-
Total Revenues	357,282	371,904	(14,622)	-3.93%	569,762	212,480	307,459	388,732	362,391
Operating Expenses									
Toddler Care Other Expense	27,009	32,713	(5,704)	-17.44%	54,306	27,297	28,795	54,669	40,739
Toddler Care Personnel Expense	144,656	141,503	3,153	2.23%	248,060	103,404	136,923	225,454	242,996
Infant Care Other Expense	15,674	15,432	242	1.57%	25,206	9,532	9,210	-	-
Infant Care Personnel Expense	68,600	84,469	(15,869)	-18.79%	141,589	72,989	60,593	-	-
Preschool Other Expense	30,104	24,311	5,793	23.83%	39,838	9,734	21,760	39,957	40,347
Preschool Personnel Expense	72,073	120,287	(48,214)	-40.08%	187,533	115,460	71,875	104,612	104,170
Total Operating Expenses	358,116	418,715	(60,599)	-14.47%	696,532	338,416	329,156	424,692	428,252
Surplus / Deficit	(834)	(46,811)	45,977	-98.22%	(126,770)		(21,697)	(35,960)	(65,861)
Other Sources and Uses									
Contributions	-	-	-	NA	-	-	-	-	-
Transfer (To) From General Fund	834	46,811	45,977	98.22%	126,770	125,936	21,697	35,960	65,861
Total Other Sources and Uses	834	46,811	45,977	98.22%	126,770	125,936	21,697	35,960	65,861
Surplus / Deficit	$ -	$ -	$ -	NA	$ -		$ -	$ -	$ -

Child Development revenues are $14,600 under budget. Child care fees are under projections, but grant monies make up for some of the loss.
Operating expenses are $60,600 under budget due primarily to personnel expenses in the infant care and preschool programs. Preschool other expense is over for playground improvements and scholarship expense, which is grant funded. The program has required $834 in funding from the General Fund in 2021.

Town of Mountain Village Monthly Revenue and Expenditure Report
August 2021

	2021						2020	2019	2018
Water & Sewer Fund	**Actual YTD**	**Budget YTD**	**Budget Variance ($)**	**Budget Variance (%)**	**Annual Budget**	**Budget Balance**	**Actual YTD**	**Actual YTD**	**Actual YTD**
Revenues									
Mountain Village Water and Sewer	$ 2,060,736	$ 2,051,956	$ 8,780	0.43%	$ 3,205,415	$ 1,144,679	$ 1,978,734	$ 1,792,440	$ 1,822,924
Other Revenues	8,044	5,451	2,593	47.57%	8,650	606	4,648	6,921	4,615
Ski Ranches Water	193,073	179,040	14,033	7.84%	268,017	74,944	175,420	128,611	105,661
Skyfield Water	15,674	22,650	(6,976)	-30.80%	34,482	18,808	14,003	20,772	18,638
Total Revenues	2,277,527	2,259,097	18,430	0.82%	3,516,564	1,239,037	2,172,805	1,948,744	1,951,838
Operating Expenses									
Mountain Village Sewer	395,694	389,354	6,340	1.63%	564,101	168,407	378,250	295,405	322,276
Mountain Village Water	649,842	718,612	(68,770)	-9.57%	1,379,339	729,497	604,548	554,084	663,112
Ski Ranches Water	19,808	18,309	1,499	8.19%	42,071	22,263	8,228	21,670	17,839
Contingency	-	-	-	NA	35,000	35,000	-	-	-
Total Operating Expenses	1,065,344	1,126,275	(60,931)	-5.41%	2,020,511	955,167	991,026	871,159	1,003,227
Surplus / Deficit	1,212,183	1,132,822	79,361	7.01%	1,496,053		1,181,779	1,077,585	948,611
Capital									
Capital Outlay	336,082	296,000	40,082	13.54%	2,080,500	1,744,418	224,783	405,133	382,527
Surplus / Deficit	876,101	836,822	39,279	4.69%	(584,447)		956,996	672,452	566,084
Other Sources and Uses									
Overhead Allocation Transfer	(149,844)	(149,844)	-	0.00%	(187,305)	(37,461)	(139,609)	(136,781)	(101,604)
Mountain Village Tap Fees	134,608	83,000	51,608	62.18%	100,000	(34,608)	28,680	83,149	49,724
Grants	-	-	-	NA	-	-	-	-	-
Ski Ranches Tap Fees	-	-	-	NA	5,000	5,000	-	-	-
Skyfield Tap Fees	-	-	-	NA	2,000	2,000	-	-	-
Sale of Assets	-	-	-	NA	-	-	-	-	-
Transfer (To) From General Fund	-	-	-	NA	-	-	-	-	-
Total Other Sources and Uses	(15,236)	(66,844)	51,608	-77.21%	(80,305)	(65,069)	(110,929)	(53,632)	(51,880)
Surplus / Deficit	$ 860,865	$ 769,978	$ 90,887	11.80%	$ (664,752)		$ 846,067	$ 618,820	$ 514,204

Mountain Village water revenues are over budget in base water and sewer fees. Ski Ranch water is over budget in excess water fees. Other revenues is exceeding budget in inspection fees and Skyfield revenues are under budget in excess water fees. Sewer expenditures are over budget by 2%, primarily for wages, because of a PTO payout and the wage increase. MV water is under budget in electricity, legal, and employee costs. Ski Ranch operations is over budget because of repair and maintenance. Capital costs are mainly for Ski Ranches and sewer capital.

Town of Mountain Village Monthly Revenue and Expenditure Report
August 2021

	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Broadband Fund									
Revenues									
Cable TV User Fees	$ 621,114	$ 663,628	$ (42,514)	-6.41%	$ 997,471	$ 376,357	$ 660,036	$ 670,534	$ 646,759
Internet User Fees	875,585	648,711	226,874	34.97%	1,012,200	136,615	760,286	733,641	692,229
Other Revenues	55,681	49,789	5,892	11.83%	70,540	51,633	33,155	30,361	38,480
Phone Service Fees	18,907	24,171	(5,264)	-21.78%	35,000	(20,681)	24,475	27,673	28,578
Total Revenues	1,571,287	1,386,299	184,988	13.34%	2,115,211	543,924	1,477,952	1,462,209	1,406,046
Operating Expenses									
Cable TV Direct Costs	545,775	591,838	(46,063)	-7.78%	933,383	387,608	534,493	563,829	547,979
Phone Service Costs	11,229	8,273	2,956	35.73%	12,000	771	13,302	15,138	16,409
Internet Direct Costs	102,988	129,200	(26,212)	-20.29%	190,000	87,012	144,366	146,968	136,000
Broadband Operations	456,378	456,632	(254)	-0.06%	707,803	251,425	461,518	363,077	361,765
Contingency	-	-	-	NA	3,000	3,000	-	-	2,313
Total Operating Expenses	1,116,370	1,185,943	(69,573)	-5.87%	1,846,186	729,816	1,153,679	1,089,012	1,064,466
Surplus / Deficit	454,917	200,356	254,561	127.05%	269,025		324,273	373,197	341,580
Capital									
Capital Outlay	550,201	550,200	1	0.00%	545,000	(5,201)	1,432,158	256,404	39,572
Surplus / Deficit	(95,284)	(349,844)	254,560	-72.76%	(275,975)		(1,107,885)	116,793	302,008
Other Sources and Uses									
Sale of Assets	-	-	-	NA	-	-	-	-	-
Transfer from General Fund	-	-	-	NA	447,120	447,120	-	-	-
Transfer (To) From General Fund	-	-	-	NA	-	-	-	-	(10,000)
Overhead Allocation Transfer	(136,916)	(136,916)	-	0.00%	(171,145)	(34,229)	(141,800)	(136,589)	(104,839)
Total Other Sources and Uses	(136,916)	(136,916)	-	0.00%	275,975	412,891	(141,800)	(136,589)	(114,839)
Surplus / Deficit	$ (232,200)	$ (486,760)	$ 254,560	-52.30%	$ -		$ (1,249,685)	$ (19,796)	$ 187,169
Beginning (Available) Fund Balance	$ -	$ -	$ -						
Ending (Available) Fund Balance	$ (232,200)	$ (486,760)	$ 254,560						

Residential TV revenues are under budget but bulk account revenues are over budget. Internet revenues are over budget 35% and over prior year 15%. Other revenues are over budget 12% due primarily to parts sold to customers. Direct costs for cable are under budget 8% and over prior year 2%.
Internet costs are under budget 20%. Phone service revenues are under budget by 22%, while phone service expenses are over budget by 35.7%.
Broadband operating expenses are within budget but employee costs are over budget due to the wage increase. Capital expenses are for continuing system upgrades.

Town of Mountain Village Monthly Revenue and Expenditure Report
August 2021

	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Telluride Conference Center Fund									
Revenues									
Beverage Revenues	$ -	$ -	$ -	NA	$ -	$ -	$ -	$ -	$ -
Catering Revenues	-	-	-	NA	-	-	-	-	-
Facility Rental	-	-	-	NA	-	-	-	-	-
Operating/Other Revenues	-	-	-	NA	-	-	-	-	-
Total Revenues	-	-	-	NA	-	-	-	-	-
Operating Expenses									
General Operations	-	-	-	NA	-	-	4,600	-	2,017
Administration	91,300	98,653	(7,353)	-7.45%	131,538	40,238	81,991	69,573	67,045
Marketing	-	-	-	NA	-	-	75,000	75,000	75,000
Contingency	-	-	-	NA	-	-	-	-	-
Total Operating Expenses	91,300	98,653	(7,353)	-7.45%	131,538	40,238	161,591	144,573	144,062
Surplus / Deficit	(91,300)	(98,653)	7,353	-7.45%	(131,538)		(161,591)	(144,573)	(144,062)
Capital Outlay/ Major R&R	-	-	-	NA	20,000	20,000	-	6,471	4,572
Surplus / Deficit	(91,300)	(98,653)	7,353	-7.45%	(151,538)		(161,591)	(151,044)	(148,634)
Other Sources and Uses									
Damage Receipts	-	-	-	NA	-	-	-	-	-
Insurance Proceeds	-	-	-	NA	-	-	-	-	-
Sale of Assets	-	-	-	NA	-	-	-	-	-
Transfer (To) From General Fund	91,300	98,653	(7,353)	-7.45%	151,538	60,238	161,591	151,044	148,634
Overhead Allocation Transfer	-	-	-	NA	-	-	-	-	-
Total Other Sources and Uses	91,300	98,653	(7,353)	-7.45%	151,538	60,238	161,591	151,044	148,634
Surplus / Deficit	$ -	$ -	$ -	NA	$ -		$ -	$ -	$ -

Expenses for the year are HOA dues.

Town of Mountain Village Monthly Revenue and Expenditure Report
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	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Affordable Housing Development Fund									
Revenues									
Contributions	$ -	$ -	$ -	NA	$ -	$ -	$ -	$ -	$ -
Grant Proceeds	-	-	-	NA	-	-	-	-	-
Rental Income	23,678	23,056	622	2.70%	34,630	10,952	23,456	18,931	8,890
Sales Proceeds	-	-	-	NA	-	-	-	-	-
Total Revenues	23,678	23,056	622	2.70%	34,630	10,952	23,456	18,931	8,890
Operating Expenses									
Community Garden	-	-	-	NA	750	750	74	487	-
Property Purchase Expenses	-	-	-	NA	-	-	-	-	-
Leased Properties	15,120	14,400	720	5.00%	21,600	6,480	13,800	13,529	-
HA Consultant	-	-	-	NA	-	-	-	-	-
RHA Funding	92,625	92,625	-	0.00%	92,625	-	92,625	50,000	107,668
Town Owned Properties	14,321	14,341	(20)	-0.14%	18,506	4,185	6,885	13,984	19,284
Density Bank	16,086	17,002	(916)	-5.39%	17,002	916	16,475	14,580	8,856
Total Operating Expenses	138,152	138,368	(216)	-0.16%	150,483	12,331	129,859	92,580	135,808
Surplus / Deficit	(114,474)	(115,312)	(838)	0.73%	(115,853)	(1,379)	(106,403)	(73,649)	(126,918)
Other Sources and Uses									
Transfer (To) From MAP	-	-	-	NA	(60,000)	(60,000)	-	(30,000)	(30,000)
Gain or Loss on Sale of Assets	(12,416)	-	(12,416)	NA	-	12,416	-	(2,278)	(4,572)
Transfer (To) From General Fund - Sales Tax	538,183	285,367	252,816	88.59%	415,792	(122,391)	359,501	406,959	352,765
Transfer (To) From VCA	-	-	-	NA	(141,751)	(141,751)	-	-	-
Transfer (To) From General Fund Housing Office	-	-	-	NA	(21,696)	(21,696)	-	-	-
Total Other Sources and Uses	525,767	285,367	240,400	84.24%	192,345	(333,422)	359,501	374,681	318,193
Surplus / Deficit	$ 411,293	$ 170,055	$ (241,238)	-141.86%	$ 76,492	$ (334,801)	$ 253,098	$ 301,032	$ 191,275
Beginning Fund Equity Balance	$ 2,553,553	$ 2,432,635	$ 120,918						
Ending Equity Fund Balance	$ 2,964,846	$ 2,602,690	$ 362,156						

Expenses consist of HOA dues, lease payments for a rental unit, RHA funding, and maintenance and utilities on town owned properties.

Town of Mountain Village Monthly Revenue and Expenditure Report
August 2021

Village Court Apartments	2021 Actual YTD	2021 Budget YTD	2021 Budget Var ($)	2021 Budget Var (%)	2021 Annual Budget	2021 Budget Balance	2020 Actual	2019 Actual	2018 Actual
Operating Revenues									
Rental Income	$ 1,415,903	$ 1,508,493	$ (92,590)	-6.14%	$ 2,262,740	$ 846,837	$ 1,344,897	$ 1,520,567	$ 1,511,127
Other Operating Income	62,379	59,899	2,480	4.14%	91,210	28,831	97,616	85,031	79,873
Total Operating Revenue	**1,478,282**	**1,568,392**	**(90,110)**	**-5.75%**	**2,353,950**	**875,668**	**1,442,513**	**1,605,598**	**1,591,000**
Operating Expenses									
Office Operations	127,172	142,892	(15,720)	-11.00%	220,524	93,352	118,223	130,108	122,351
General and Administrative	121,557	142,708	(21,151)	-14.82%	158,762	37,205	141,378	102,096	99,328
Utilities	192,758	204,381	(11,623)	-5.69%	307,071	114,313	259,180	270,443	247,091
Repair and Maintenance	353,818	404,990	(51,172)	-12.64%	687,322	333,504	355,476	272,189	243,402
Major Repairs and Replacement	49,622	60,178	(10,556)	-17.54%	181,000	131,378	141,528	196,924	180,581
Contingency	-	-	-	NA	14,500	14,500	-	-	-
Total Operating Expenses	**844,927**	**955,149**	**(110,222)**	**-11.54%**	**1,569,179**	**724,252**	**1,015,785**	**971,760**	**892,753**
Surplus / (Deficit) After Operations	**633,355**	**613,243**	**20,112**	**3%**	**784,770**		**426,728**	**633,838**	**698,247**
Non-Operating (Income) / Expense									
Investment Earning	(18)	(2,042)	2,024	-99.12%	(3,500)	(3,482)	(1,369)	(5,693)	(3,037)
Debt Service, Interest	265,800	266,000	(200)	-0.08%	354,198	88,398	184,916	286,675	296,174
Debt Service, Fees	-	-	-	NA	-	-	-	-	-
Debt Service, Principal	-	-	-	NA	434,079	434,079	-	-	-
Total Non-Operating (Income) / Expense	**265,782**	**263,958**	**(1,824)**	**-0.69%**	**784,777**	**518,995**	**183,547**	**280,982**	**293,137**
Surplus / (Deficit) Before Capital	**367,573**	**349,285**	**18,288**	**5.24%**	**(7)**		**243,181**	**352,856**	**405,110**
Capital Spending	-	-	-	NA	-	-	11,105	368,379	138,775
Surplus / (Deficit)	**367,573**	**349,285**	**18,288**	**5.24%**	**(7)**		**232,076**	**(15,523)**	**266,335**
Other Sources / (Uses)									
Transfer (To)/From General Fund	(116,373)	(116,373)	-	0.00%	(145,466)	(29,093)	(118,371)	(130,627)	(72,856)
New Loan Proceeds	-	-	-	NA	-	-	-	-	
Sale of Assets	-	-	-	NA	-	-	-	-	-
Grant Revenues	(2,162)	-	(2,162)	NA	-	2,162	-	-	-
Transfer From AHDF	-	-	-	NA	141,751	141,751	-	-	-
Total Other Sources / (Uses)	**(118,535)**	**(116,373)**	**(2,162)**	**1.86%**	**(3,715)**	**143,913**	**(118,371)**	**(130,627)**	**(72,856)**
Surplus / (Deficit)	**249,038**	**232,912**	**16,126**	**6.92%**	**(3,722)**		**113,705**	**(146,150)**	**193,479**

Rent revenues are under budget 6% and over prior year 5% because of the rent waivers. Other revenues are over budget 4% due mainly to laundry revenues and an SMPA rebate.
Office operations are under budget 11% which is manly due to employee expenses. General and administrative is under budget because of legal costs, however, association dues and credit card charges exceed the annual budget. Utilities are 5.7% under budget in electricity because of the electric submetering but is over budget in water/sewer. Maintenance is under budget 13% due to employee costs. MR&R expenses include carpet and vinyl replacement, appliance and hot water heater replacements, and window repairs.

Town of Mountain Village Monthly Revenue and Expenditure Report
August 2021

	2021						2020	2019	2018
	Actual YTD	Budget YTD	Budget Variance ($)	Budget Variance (%)	Annual Budget	Budget Balance	Actual YTD	Actual YTD	Actual YTD
Debt Service Fund									
Revenues									
Abatements	$ -	$ -	$ -	NA	$ -	$ -	$ -	$ -	$ (53,221)
Contributions	38,000	38,000	-	0.00%	206,000	168,000	39,800	41,600	43,325
Miscellaneous Revenue	-	-	-	NA	-	-	-	-	-
Property Taxes	452,168	472,275	(20,107)	-4.26%	480,012	27,844	532,560	543,905	547,173
Reserve/Capital/Liquidity Interest	270	1,733	(1,463)	-84.42%	2,000	1,730	1,681	3,622	3,171
Specific Ownership Taxes	16,667	20,877	(4,210)	-20.16%	32,000	15,333	16,131	18,426	19,151
Total Revenues	507,106	532,885	(25,779)	-4.84%	720,012	212,906	590,172	607,553	559,599
Debt Service									
2001/2011 Bonds - Gondola - Paid by contributions from TMVOA and TSG									
2001/2011 Bond Issue - Interest	38,000	38,000	-	0.00%	76,000	38,000	39,800	41,600	43,325
2001/2011 Bond Issue - Principal	-	-	-	NA	130,000	130,000	-	-	-
2006/2014/2020 Bonds - Heritage Parking		-							
2014 Bond Issue - Interest	78,037	78,037	-	0.00%	144,032	65,995	122,513	125,363	128,113
2014 Bond Issue - Principal	-	-	-	NA	320,000	320,000	-	-	-
Total Debt Service	116,037	116,037	-	0.00%	670,032	553,995	162,313	166,963	171,438
Surplus / (Deficit)	391,069	416,848	(25,779)	-6.18%	49,980		427,860	440,591	388,162
Operating Expenses									
Administrative Fees	495	1,182	(687)	-58.11%	3,182	2,687	289	348	2,250
County Treasurer Collection Fees	13,586	14,742	(1,156)	-7.84%	14,797	1,211	16,009	16,347	14,860
Total Operating Expenses	14,081	15,924	(1,843)	-11.57%	17,979	3,898	16,298	16,695	17,110
Surplus / (Deficit)	376,988	400,924	(23,936)	-5.97%	32,001		411,562	423,896	371,052
Other Sources and Uses									
Transfer (To) From General Fund	(16,667)	(20,877)	4,210	-20.16%	(32,000)	(15,333)	(16,131)	(18,426)	(19,151)
Transfer (To) From Other Funds	-	-	-	NA	-	-	-	-	-
Payment to Refunding Bonds Escrow	-	-	-	NA	-	-	-	-	-
Proceeds From Bond Issuance	-	-	-	NA	-	-	-	-	-
Total Other Sources and Uses	(16,667)	(20,877)	4,210	-20.16%	(32,000)	(15,333)	(16,131)	(18,426)	(19,151)
Surplus / (Deficit)	$ 360,320	$ 380,047	$ (19,727)	-5.19%	$ 1		$ 395,431	$ 405,470	$ 351,901
Beginning Fund Balance	$ 369,490	$ 405,573	$ (36,083)						
Ending Fund Balance	$ 729,810	$ 785,620	$ (55,810)						

Agenda Item No. 8
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: Paul Wisor, Town Attorney
DATE: October 7, 2021
RE: Ordinance Regulating Weight Size of Motor Vehicles

Summary

The proposed ordinance would prohibit the operation of large trucks and similar vehicles within the Town of Mountain Village unless the operator of such a vehicle obtains a permit for such operation.

Background

As a general matter, the Town discourages the use of large vehicles within Town as such operation impacts the health, welfare and safety of the community. The operation of large vehicles to facilitate construction projects within Town is generally regulated and limited through development agreements.

Recently, however, there has been an increase in requests to run large vehicles through the Town unrelated to construction projects. Currently, there is no mechanism by which the Town can prohibit operators of large vehicles from using Town streets.

Discussion

The proposed ordinance would prohibit the operation of vehicles exceeding size and weight limitations set forth in state statute or the operation of any hauling estimated to be in excess of 3,000,000 pounds within a twelve-month period. These standards are consistent with standards set forth by San Miguel County. Moreover, staff has evaluated known hauling proposals through Town, and staff believes the 3,000,000 pound over a twelve-month period is a sufficient benchmark to regulate activity that could be detrimental to the health, welfare, and safety of the community.

Such vehicles may only be operated pursuant to a permit issued

Financial Considerations

There is no direct financial impact to the Town; however, the proposed Ordinance does provide any permittee must post bond with the Town, which will enable the Town to use third party funds to make any necessary repairs resulting from the permittee's use.

Staff Recommendation

Staff recommends approval of the proposed Ordinance.

Proposed Motion

"I move to approve the proposed Ordinance to regulate weight size of motor vehicles on first reading and set a public hearing and second reading for November 18, 2021."

TOWN OF MOUNTAIN VILLAGE
ORDINANCE NO. 2021-__

ADDING CHAPTER 10.13 TO TITLE 10 OF THE MUNICIPAL CODE TO PROVIDE LIMITATIONS ON THE SIZE OF MOTOR VEHICLES OPERATED UPON TOWN STREETS.

WHEREAS, the Town of Mountain Village ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Town of Mountain Village Home Rule Charter of 1995, as amended (the "Charter"); and

WHEREAS, pursuant to Section 1.3 of the Charter, the Town has all power of local self-government and home rule and all power possible for a municipality to have under the Constitution and laws of the State of Colorado; and

WHEREAS, the Town Council has not previously adopted an ordinance regulating the size of motor vehicles operated on the streets of the Town; and

WHEREAS, the Town Council has determined that the adoption of this Ordinance is necessary for the preservation of the public health and safety of the residents and visitors of the Town; and

WHEREAS, the Town Council is adopting this Ordinance pursuant to its Home-Rule authority provided under the Colorado Constitution, Article XX, Section 1-6, the Town of Mountain Village Town Charter, specifically section 5.8, as well as the Town's police powers pursuant to Colorado Revised Statutes, Section 31-15-401.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO, as follows:

Section 1. Recitals. The above recitals are hereby incorporated as findings of the Town Council in support of the enactment of this Ordinance.

Section 2. Addition of Chapter 10.13 to Title 10 of the Town of Mountain Village Municipal Code. Chapter 10.13, "Limitations on Size of Motor Vehicles" is added to Title 10, "Vehicles and Traffic," of the Mountain Village Municipal Code to read as set forth in Exhibit A: Addition of Chapter 10.13 to Title 10 of the Town of Mountain Village Municipal Code, attached hereto.

Section 3. Severability. If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.

Section 4. Safety Clause. The Town Council hereby finds, determines and declares that this Ordinance is promulgated under the general police power of the Town of Mountain Village, that it is promulgated for the health, safety and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained.

Section 5. Effective Date. As provided in Article V, Section 5.8 of the Charter, this Ordinance shall become effective immediately upon a single reading and passage and shall be recorded in the

official records of the Town kept for that purpose and shall be authenticated by the signatures of the Mayor and the Deputy Town Clerk.

Section 6. Publication. The Town Clerk or Deputy Town Clerk shall post and publish notice of this Ordinance as required by Article V, Section 5.8 of the Charter.

INTRODUCED AND ADOPTED ON FIRST READING AND REFERRED TO PUBLIC HEARING on October 21, 2021 and setting such public hearing for November 18, 2021 at the Town Council Chambers, Town Hall, 455 Mountain Village Blvd, Mountain Village, Colorado 81435.

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

BY: ATTEST:

_____ _____

Laila Benitez, Mayor Susan Johnston, Town Clerk

HEARD AND FINALLY ADOPTED by the Town Council of the Town of Mountain Village, Colorado this 18th day of November 2021.

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

BY: ATTEST:

_____ _____

Laila Benitez, Mayor Susan Johnston, Town Clerk

APPROVED AS TO FORM:

_____

Paul Wisor, Town Attorney

I, Susan Johnston, the duly qualified and acting Town Clerk of the Town of Mountain Village, Colorado (“Town") do hereby certify that:

1. The attached copy of Ordinance No._____ (“Ordinance") is a true, correct and complete copy thereof.

2. The Ordinance was introduced, read by title, approved on first reading with minor amendments and referred to public hearing by the Town Council the Town (“Council") at a regular meeting held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on May 20, 2021, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**“Yes”**	**“No”**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Natalie Binder				
Jack Gilbride				

3. After the Council’s approval of the first reading of the Ordinance, notice of the public hearing, containing the date, time and location of the public hearing and a description of the subject matter of the proposed Ordinance was posted and published in the Telluride Daily Planet, a newspaper of general circulation in the Town, on _____, 2021 in accordance with Section 5.2b of the Town of Mountain Village Home Rule Charter.

4. A public hearing on the Ordinance was held by the Town Council at a regular meeting of the Town Council held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on November 18, 2021. At the public hearing, the Ordinance was considered, read by title, and approved without amendment by the Town Council, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**“Yes”**	**“No”**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Natalie Binder				
Jack Gilbride				

5. The Ordinance has been signed by the Mayor, sealed with the Town seal, attested by me as Town Clerk, and duly numbered and recorded in the official records of the Town.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town this _____ day of _____, 2021.

_____
Susan Johnston, Town Clerk

(SEAL)

CHAPTER 10.13

LIMITATIONS ON SIZE OF MOTOR VEHICLES

Sections:

10.13.010 Purpose

The purpose of this Chapter is to protect and enhance the quality of life and the present and future health, safety, and welfare of all citizens and visitors.

10.13.020 Definitions

A. Motor Vehicle – a vehicle that is self-propelled.

B. Commercial Motor Vehicle – a motor vehicle, other than a motorcycle, designed or used for the transportation of property or delivery purposes as defined by C.R.S. § 42-4-235.

C. Semitrailer – a vehicle without motive power that is designed or used with a motor vehicle so that some of its weight and the weight of its load rests on or is carried by the motor vehicle.

D. Trailer – a vehicle without motive power that is designed or used to carry property or passengers on its own structure exclusively and drawn by a motor vehicle.

E. Vehicle – a mechanical device, other than a device moved by human power or used exclusively upon stationary rails or tracks, in, on, or by which a person or property can be transported on a public roadway. The term includes a motor vehicle, commercial motor vehicle, truck-tractor, trailer or semitrailer.

10.13.030 Application

This Chapter shall apply to every street, alley, sidewalk area, driveway, park and to every other public way or public place or public parking area, either within or outside the corporate limits of the Town, the use of which the Town has jurisdiction and authority to regulate.

10.13.040 Size Limitations

Except as otherwise provided in this Ordinance or as provided by law, a motor vehicle, trailer, semitrailer or combination thereof may not be operated upon any Town street if such vehicle or combination exceeds the size and/or weight limit set forth in §§42-4-501 through 42-4-512, C.R.S., as amended, or the operation of any hauling estimated to be in excess of 3,000,000 pounds within a twelve month period.

10.13.050 Prohibited Vehicles

It shall be unlawful for any person to operate or cause to be operated, upon any Town street, any vehicle which has lugs, studs, cleats, ridges, beads or any other protuberance of metal which project more than one-fourth inch (1/4”) beyond the tread or traction surface of such vehicle’s tires or tracks, unless bands, wooden blocks, skids or other devices are provided which are sufficient to protect the street surface from damage by reason thereof.

10.13.060 Exemptions

The provisions of this Ordinance shall not apply to:

A. Any vehicle operated by the Town or a private operator under contract with the Town, or the San Miguel Authority for Reginal Transportation, or its successor.

B. Any vehicle operated by the Town, or a private contractor under contract with the Town, while engaged in street maintenance, construction or related activities.

C. Any vehicle owned by a public utility while necessarily in use in the construction, installation or repair of any public utility facility.

D. Emergency vehicles of the Town or bona fide emergency vehicles from another entity.

E. School buses under the jurisdiction of the Telluride R-1 School District.

10.13.070 Permits

A. It shall be unlawful for any person to cause or permit the operation of any vehicle upon a Town street which has a height or weight in excess of the Limits set forth herein, without having first obtained a permit therefore from the Town Manager.

B. Such an application for a permit shall: state ownership of the vehicle; describe the vehicle and driver; provide a copy of proof of vehicle insurance; give the height of the vehicle; give the weight of the vehicle and the weight of the total load; give dates on which the vehicle will use Town streets; give route of travel within the Town; and be dated by the applicant.

C. An application for a permit under this Section shall be accompanied by a permit fee in such amount as shall be established from time to time by the Town Council.

D. Permits under this Section shall be within the sole discretion of the Town Manager, including the impositions of any conditions contained in such permits.

E. Before the Town Manager of thier designee shall issue a permit under this Section, the applicant shall file with the Town a surety bond in the amount of $15,000.00, conditioned that the owner of the vehicle will pay to the Town any damage to a Town street caused by the operation of the vehicle.

10.13.080 Truck Routes

Subject to 10.13.070, it shall be unlawful for any person to operate a motor vehicle, trailer, semitrailer or combination thereof upon a street or roadway within the Town in excess of the height and weight limits set forth herein.

10.13.090 Violations and Penalties

A. Any person, firm or corporation violating any provision of this Ordinance shall be deemed guilty of a misdemeanor and shall be subject to a fine not to exceed five-hundred dollars ($500) for each offense. Each day of any violation of this Ordinance shall constitute a separate offense.

B. The Municipal Judge is empowered in his/her discretion to assess court costs in a reasonable

amount against any defendant who pleads guilty or nolo contendere, or who enters into a plea agreement or who, after trial, is found guilty of a violation of this Ordinance.

C. No remedy provided herein shall be exclusive, but the same shall be cumulative and the taking of any action, including charge or conviction in Municipal Court, shall not preclude or prevent the taking of other actions to abate or enjoin any nuisance. The abatement provision provided herein shall constitute a concurrent remedy over and above any charge or conviction of a municipal offense.

Agenda Item 9
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
HOUSING DIVISION
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 728-1392

TO: Mountain Village Town Council
FROM: John Miller, Community Housing Program Director
DATE: October 9, 2021
RE: Town Owned Property Report – Work Session

Exhibits.

Exhibit A: Community Housing Inventory

PART I. Introduction

The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry-level restaurant workers to top-level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

The purpose of this inventory is to propose a framework for future funding and policy decisions surrounding the development of community housing. The inventory does not however contain a prioritized list of actions or estimated dollar amounts for potential projects. It is important to remember the Town's responsibility as it relates to affordable housing and note that it falls into four categories: policy, regulation, facilitation, and funding. It is important to remember that the Town has in some instances in the past built dedicated housing units (VCA, Coyote Court), but otherwise relies on development partners to create deed-restricted housing units. Each property identified within the inventory presents opportunity for the Town to develop the properties in partnership or as the sole developer.

The intent of the document is to allow for the Town Council to provide feedback as it relates to priorities, feasibility, and specific funding preferences for the Lots identified below in Figure 1.

PART II. Community Housing Inventory

The Town has undertaken an effort to identify town-owned properties within the Mountain Village that could potentially allow for future development of different types of community housing. The majority of the lots identified as potentially developable are zoned either Multi-Family or Active Open Space (AOS). The Community Development Code (CDC)

allows for employee housing as a use by right in the Multi-Family Zone, and as a conditional use in the AOS Zone.

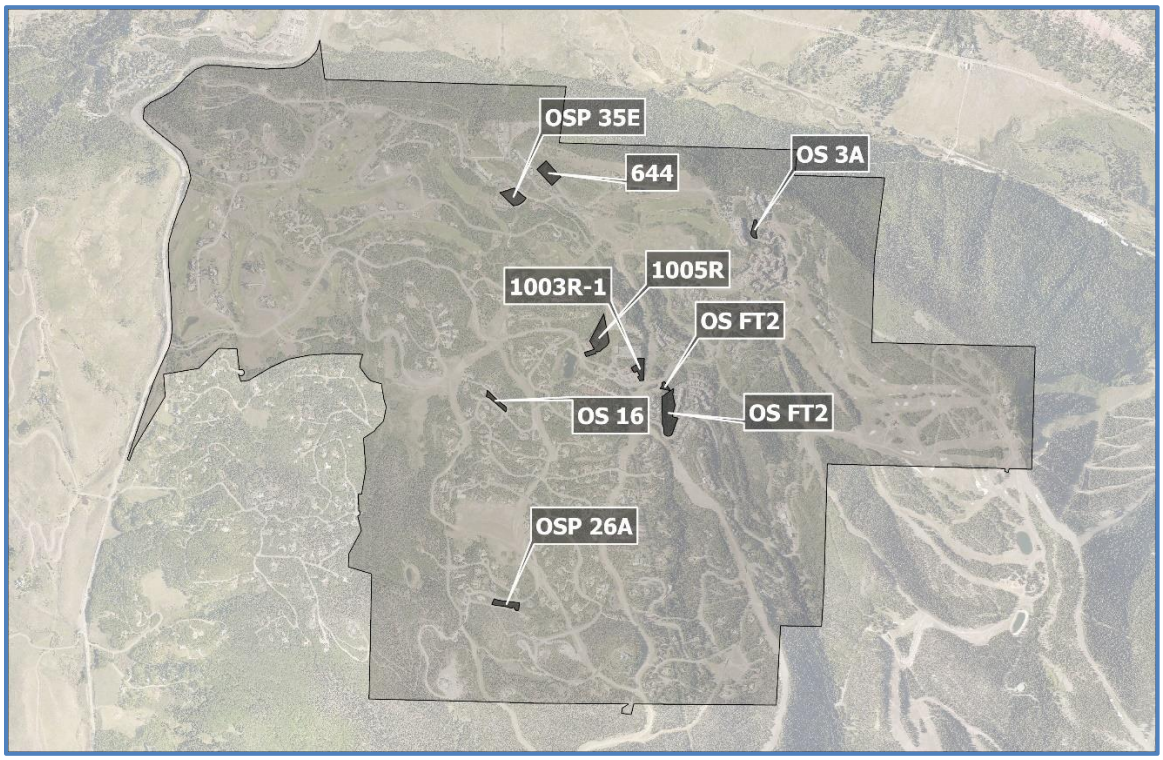


Figure 1: Town-Owned Property Overview

Town-Owned Property Summary:

LOT	Zoning / Lot Size	Anticipated Program
Lot 644	Multi-Family / 1.61 Acres	P3; 50-80 Rental Units 80-120% AMI
OSP-35E	AOS / 1.5 Acres	P3 if Rental; 10-20 Units 80-200% AMI
Lot 1005R (VCA)	Multi-Family / n.a.	Town Financing; 10+ Units 50-80% AMI
Lot 1003R-1	Civic / .991 Acres	Town Financing; 4-6 Units 120-200% AMI
OS-3A	AOS / 0.502 Acres	Town Financing; 2-4 Units 120-200% AMI
OS-16	AOS / 0.631 Acres	Town Financing; 2-4 Units 120-200% AMI
OS-FT2	AOS / 3.201 Acres	4.13 Acres Total Land Swap to Passive
OSP-26A	AOS / 0.929 Acres	

Staff has provided a general summary above of potential development opportunities for Town-owned properties in the Mountain Village. Each lot would focus on different development goals in order to establish additional deed-restricted units based on AMI's that target our existing workforce population. Two of the lots above have been identified as potential properties that could be land swapped for future housing programming yet to be determined.

PART III. Funding

Generally speaking, affordable and attainable housing is funded through two funding mechanisms outlined below. Specific project funding should align with the policy decisions made around the development of each individual lot or project and are not a one size fits all template.

1. Public-Private Partnerships (P3): Public-private partnerships involve collaboration between a government agency and a private-sector company that can be used to finance, build, and operate projects. The Telluride Foundation discussed this funding resource in length as part of a 2016 regional analysis, stating that "Local government, which controls entitlements (zoning, fees, and the approval process) and may own land, partners with the private housing development sector to deliver projects that meet the goals of the local municipalities while utilizing the expertise and financing of private housing developers."

   "P3s are generally developer-led and financed by private capital. Because P3 housing, by nature, calls for a partnership between the public and private sectors, the public sector involvement often takes form in a contribution of land. Policy can come into play, too, with entitlements, reductions in some requirements (i.e., parking), waivers/reductions of fees, as well as modifications of restrictions related to the occupancy, sale and/or leasing of the units." [1]

   The negotiations surrounding specific individual developments in the P3 model should address incentives to help further reduce barriers to private development of employee housing. Things like donation of town owned properties or long-term leases, tap fee waivers, increased density, and reduction of parking all help to increase the developability of these types of projects.

2. Public Financing Model: The Town of Mountain Village and the Town of Telluride have had success in the past with public financing models that allowed for the development of rental and for sale employee housing. Examples of public financing can be seen at Village Court Apartments, Coyote Court and Shandoka, and more recently developments in the Town of Telluride such as Silver Jack and Longwell 16. If a public financing mechanism is utilized, it may be preferable to focus on a for sale product with the exception of funding to be utilized for any future VCA expansion. By focusing on for sale units, the town can limit its long term liability and allow for returns on development costs.

3. Grants with CHFA, DOLA, DOH: Both option 1 and 2 above can utilize funding available through state and federal housing programs in certain situations. The Low-Income Housing Tax Credit (LIHTC) program was created by Congress in 1986 as Section 42 of the Federal Tax Reform Act. Its purpose is to encourage the construction and rehabilitation of low-income rental housing by providing a federal income tax credit as an incentive to investors. Both individual and corporate investors may receive 10 years of tax credits in return for investing equity capital into the development of eligible housing projects. CHFA minimum requirements include at least 75 percent of units must be rented to residents earning no more than 120 percent AMI and at least 20 percent of the total units must be rented to

[1] http://telluridefoundation.org/wp-content/uploads/2016/12/P3-packet-12102016.pdf

residents at 80% or less AMI. With tax credits or tax-exempt bonds, there is a deeper requirement for 20% of the units at 50 percent AMI or 40 percent at 60 percent AMI.

On March 23, 2018, President Trump signed into law the Fiscal Year 2018 Omnibus Spending Bill. This important legislation included key provisions that were supported by CHFA establishing a new minimum set-aside election option for Housing Credit developments. Specifically, rather than committing to either 40 percent of units limited to 60 percent AMI or 20 percent of units limited to 50 percent of AMI, developers would have a third option, allowing credit-qualified units to serve households earning as much as 80 percent of AMI, so long as the average income limit in the property is 60 percent or less of AMI. Under the income averaging option, the higher rents that households with incomes in the 61-80 percent of AMI range could pay would have the potential to offset the lower rents for extremely low- and very low-income households living in the property, thereby allowing developments to maintain financial feasibility while providing a deeper level of affordability than is currently possible without other subsidies. Income averaging would thus preserve rigorous targeting to low-income households, while providing more flexibility and greater income-mixing potential.

PART IV. Conclusions

Staff is requesting feedback regarding the proposed draft of the Community Housing Inventory. As such, Council should take into consideration the specific properties identified as part of the inventory and provide guidance to staff as it relates to priority for development, specific conceptual programming, and funding guidance as it relates to public financing or public private partnerships. Because this is a work session, this is non-binding feedback that allows for staff to continue to analyze and long range plan potential housing opportunities.

Town of Mountain Village

Community Housing Inventory

Fall 2021

DRAFT

table of contents.

project summary.

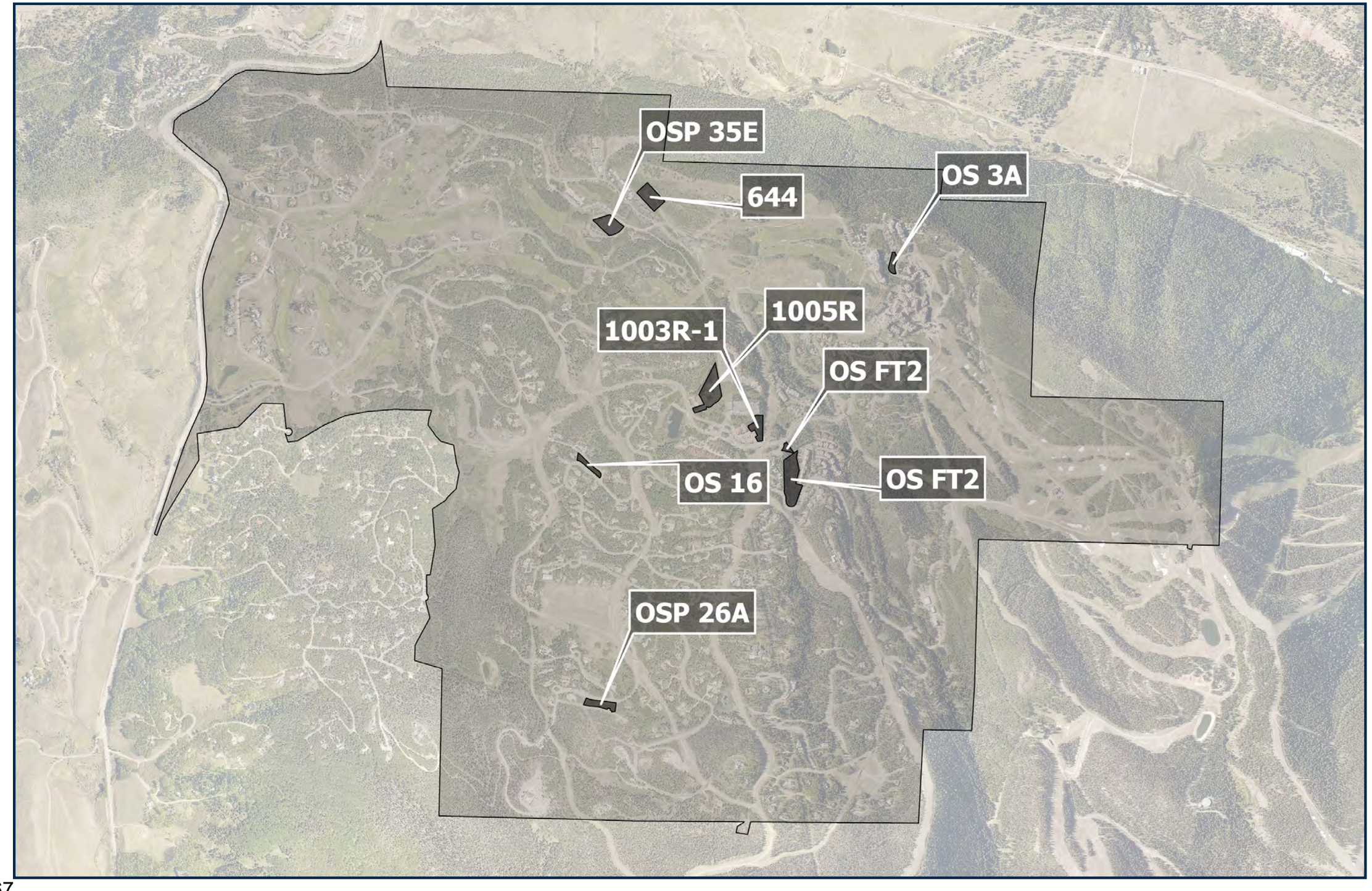
com·mu·ni·ty: a feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals.

The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry level restaurant workers to top level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

This document intends to provide community housing development strategies and priorities for town-owned properties in the Town of Mountain Village. The sites range in size, location, and development potential and will require additional scoping for any future development.

This document attempts to identify lots spread throughout the Mountain Village in order to provide deed-restricted housing more equitably in our community.

town owned property map: active open space and multi-family zoning



project inventory

This document intends to provide community housing development strategies and priorities for town owned properties in the Mountain Village. The Lots range in size, location, and development potential and are detailed more within this document in order to assess specific development potential and constructability. In order to better understand each opportunity, an overview of each property has been provided, along with potential development concepts.

lot overview

This section will introduce the site. A base map graphic orientates readers to the existing conditions and spatial relationships. In addition, information about the site acreage and zoning, current uses and existing site photos provides context for each town-owned property.

conceptual concept

Within this section, the development concept is introduced. A simple, rendered site plan illustrates the development vision.

implementation

The project phasing section describes a logical order of implementation for the project when multiple programmatic and built elements are recommended.

development framework

The following documents provided guidance for the development of this document

Mountain Village Comprehensive Plan (2011)

Village Center Subarea Plan

Meadows Subarea Plan

Mountain Village Town Hall Center Subarea Plan (2017)

The previous planning documents were informed by a robust civic engagement process which provided specific direction for future development. The Town is currently in the process of updating the Comprehensive Plan and those results will be incorporated into this document in the future.

TIER 1 OPPORTUNITIES

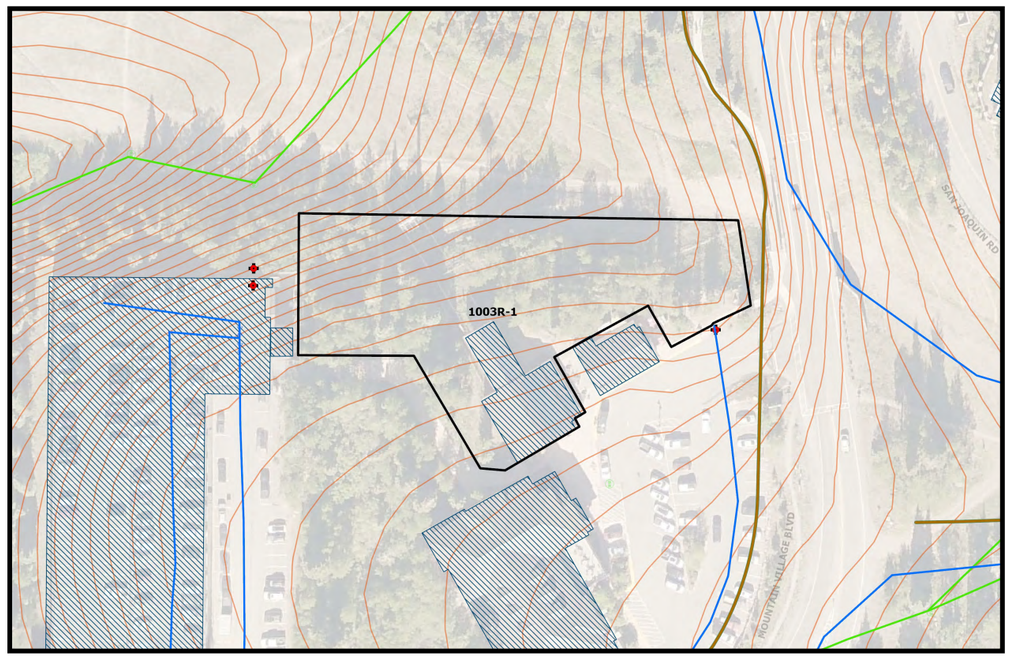
Tier 1 properties are prioritized for housing development. These lots typically have less topographic challenges, have Multi-Family or Active Open-Space Zoning, and are suited for additional community housing based on their location.

TIER 2 OPPORTUNITES

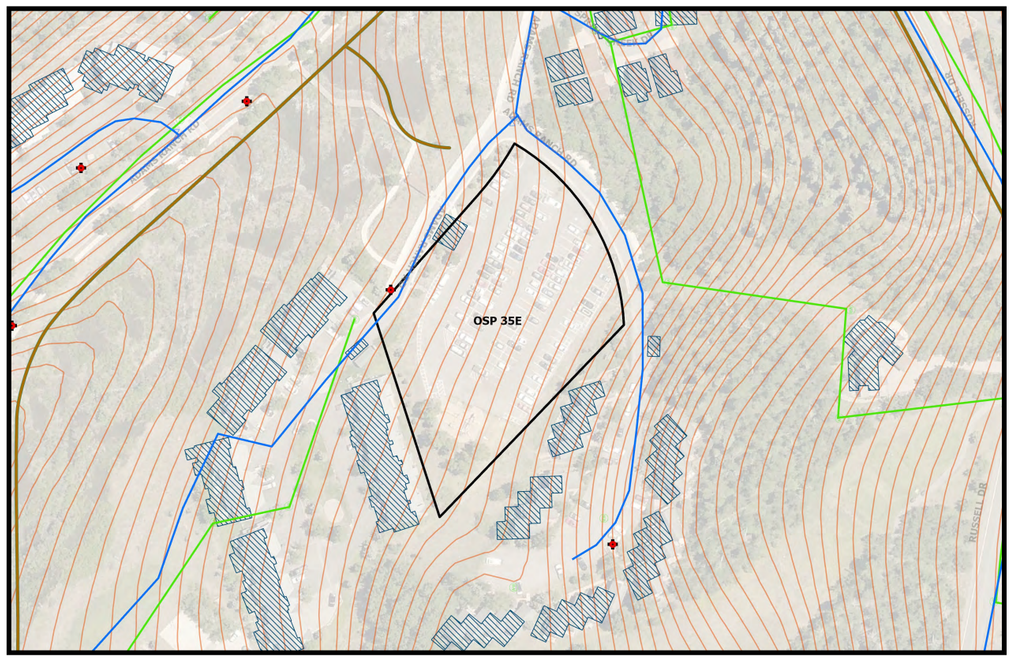
Tier 2 properties have topographical constraints but are otherwise developable. It may be preferable to rezone these lots from Active to Passive Open-Space, and rezone a more developable passive-open space lot in exchange.

TIER 1

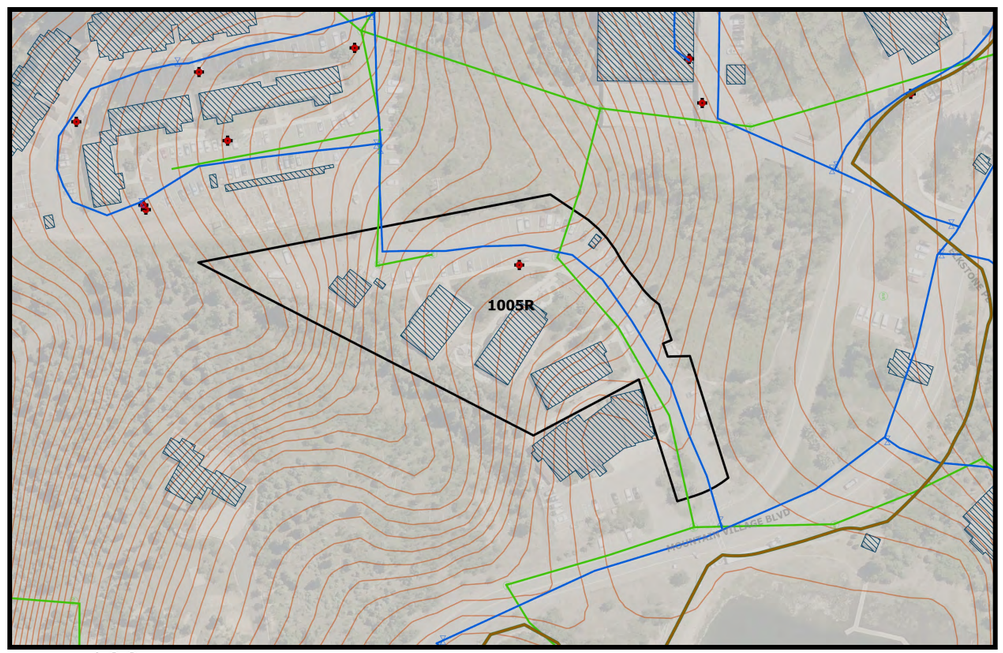
Lot 1003R-1 Land Unit 4 (Town Hall)



Lot OSP-35E (Meadows Parking Lot)



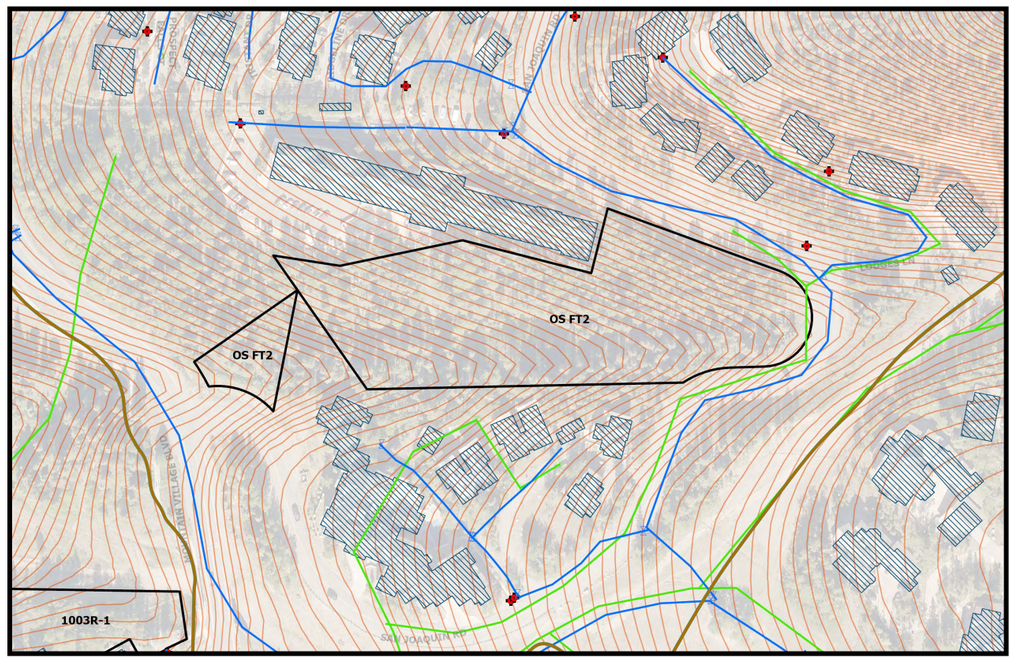
Lot 1005R (VCA Maintenance Shop)



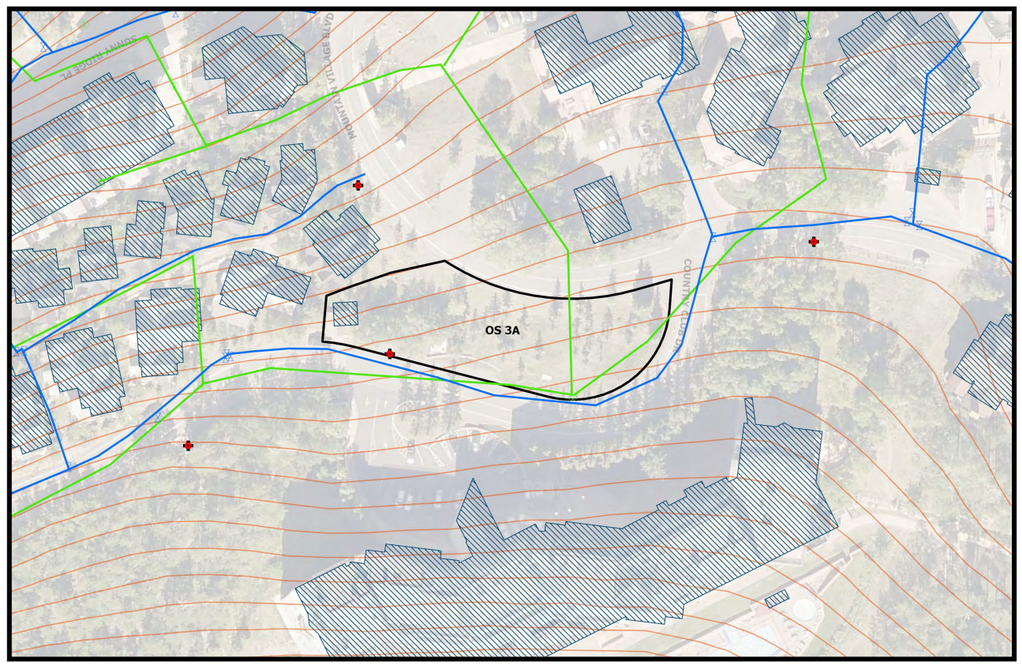
Lot 644 (Upper Jurassic Lot)

TIER 2

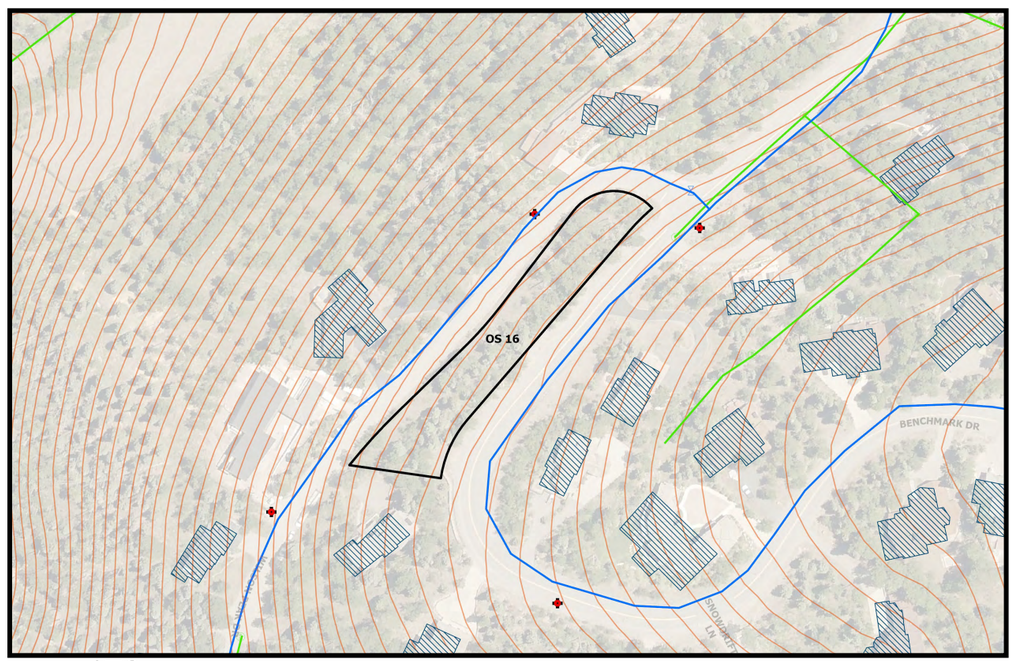
Lot OS-FT2 (San Joaquin)



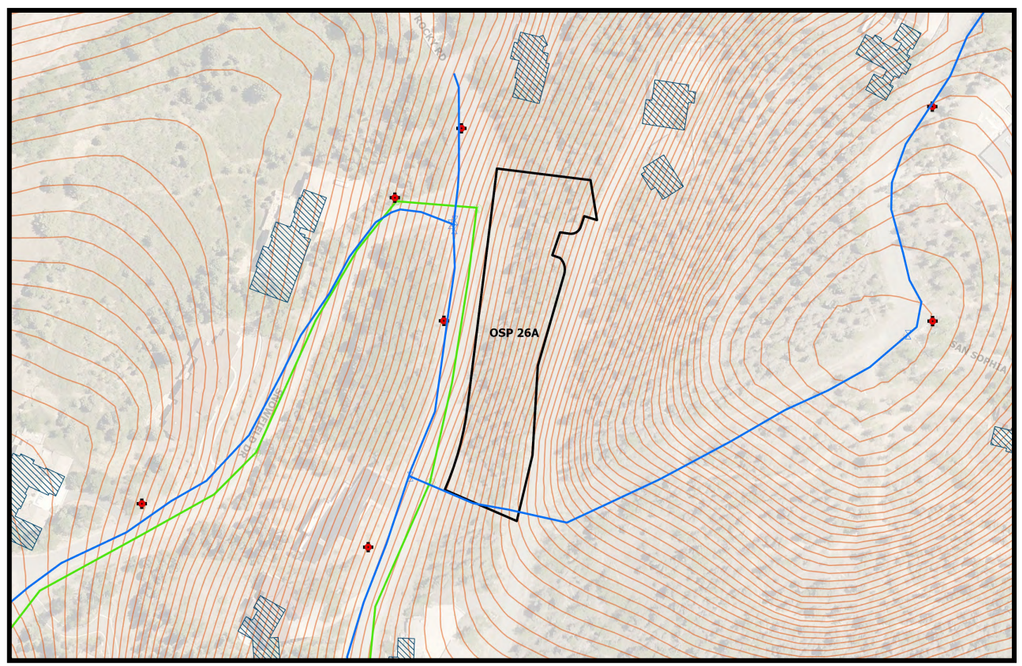
Lot OS-3A (Country Club Dr)



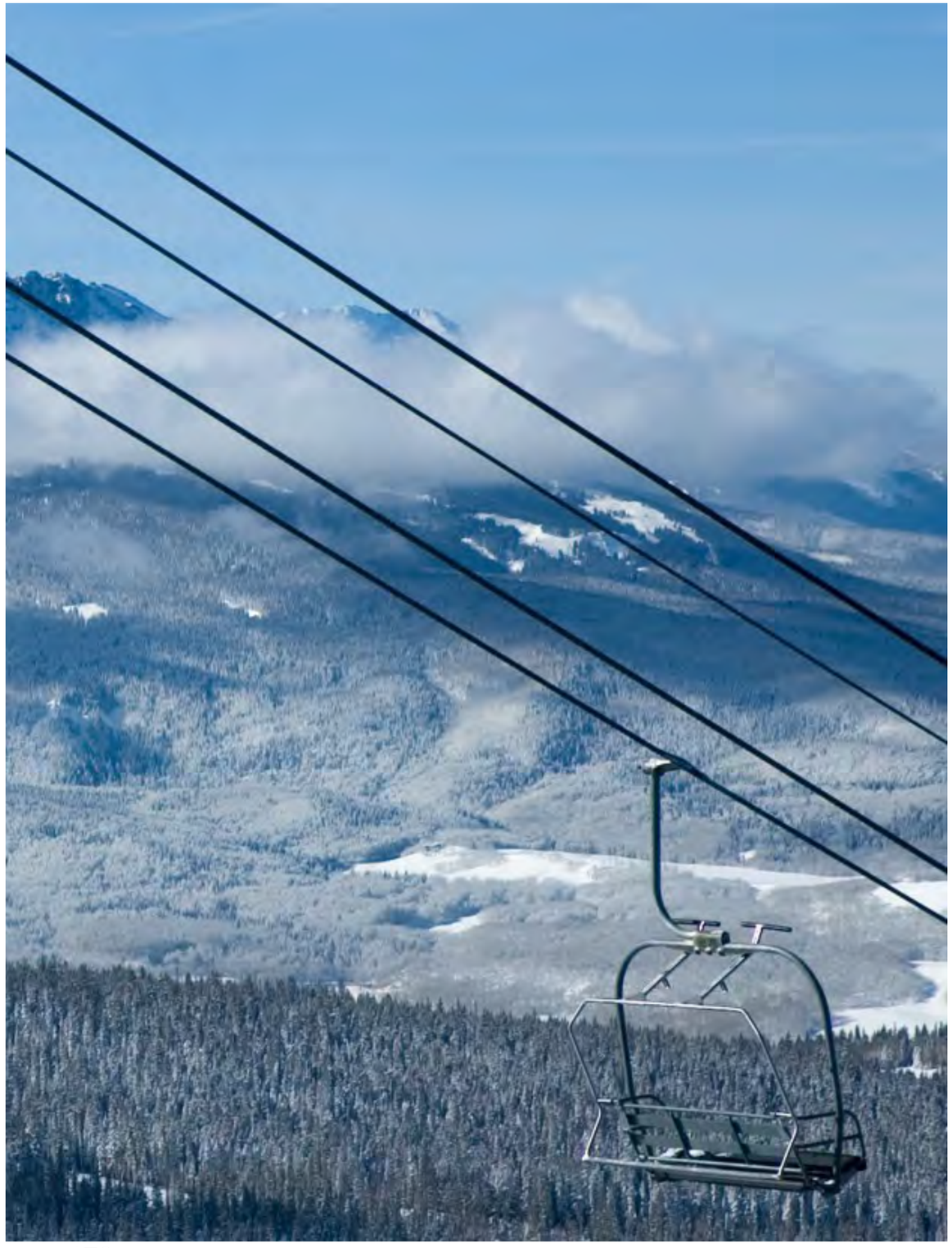
Lot OS-16 (Wilson Peak)



Lot OSP-26A (Rocky Road)




1003R-1
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
Prospect Creek
AJ Dr
Victoria Dr
SanJuan Skwy
Wagner Way
Arizona St
Skunk Creek
Mountain Village
Prospect Creek
Hood Park Rd
Polecat Ln
Quakey Ln
Ridge Rd
Vance Creek
Skunk Creek
Prospect Creek
TOWN OF MOUNTAIN VILLAGE
INCORP. 1995

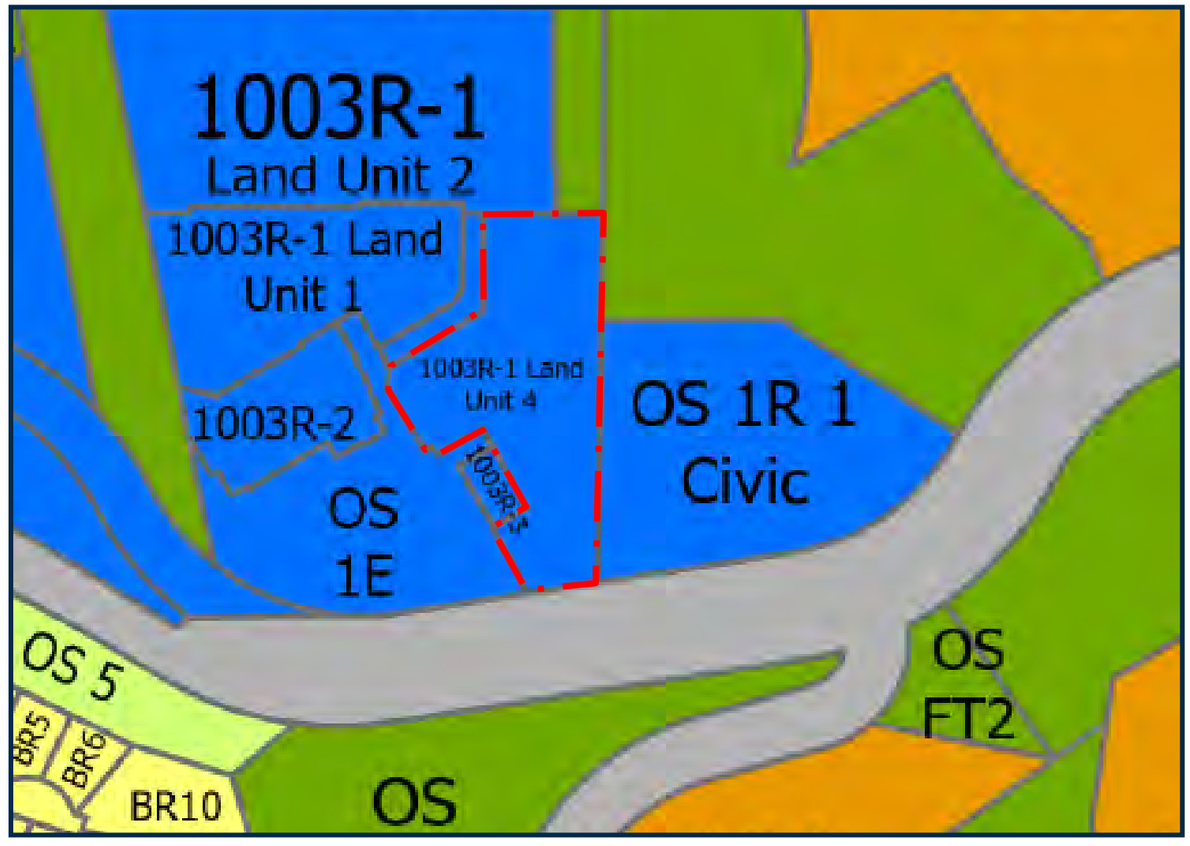


Lot 1003R-1

Unit 4

Town Hall Center

Zoning:



summary.

Zoning:	Civic
Lot Size:	0.991 Acres

LOT OVERVIEW

Lot 1003R-1 is located within the Town Hall Center Subarea and is the current site of Town Hall, the Village Market, the Gondola Station, the Gondola Parking Garage and other small commercial and civic spaces. The Lot has been condominiumized and this proposal relates to Land Unit 4 which is currently vacant with the exception of the Town Hall Gondola Station. Land Unit 4 is located directly adjacent to the double cabin ski run. The unit is treed and slopes down to the ski run to the east.

CONCEPTUAL CONCEPT

Community Housing

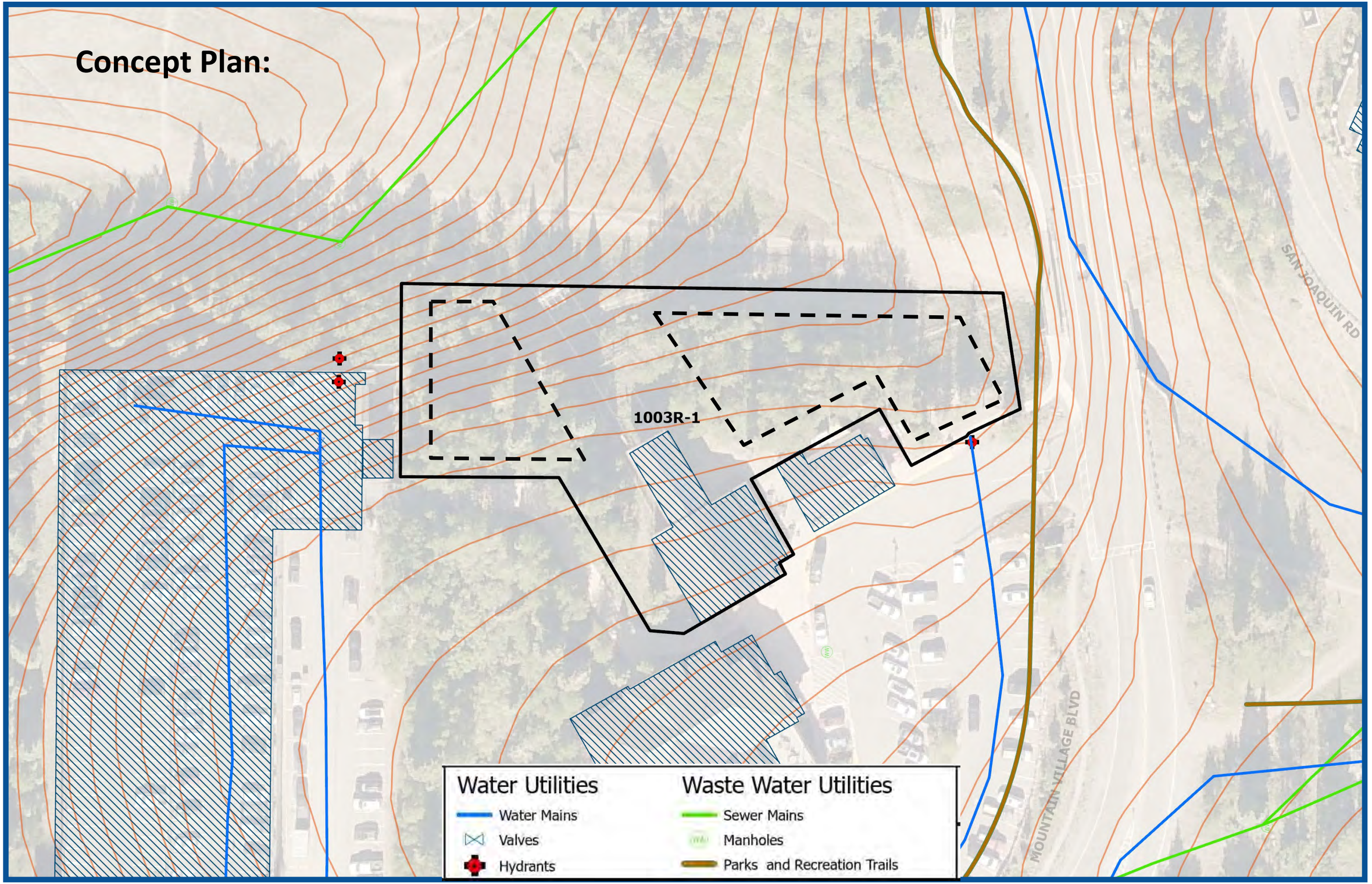
Lot 1003R-1, Land Unit 4 should be retained and prioritized for the long term needs of the Town of Mountain Village community housing. The specific development program will be determined in the future, but staff believes that this site could accommodate a stepped hillside development of condominiums or townhouses, adjacent to the gondola facility and to the rear of the existing commercial uses on the adjacent land unit. Due to the condominiumized nature of Lot 1003R-1, it may be preferable to maintain ownership of the units for long term rentals.

IMPLEMENTATION

1. Council decision on financing or partnership
2. Conceptual Scoping including parking analysis
3. Density Transfer and Rezone Application establishing new density
4. Design / Construct
5. Rental Lottery

existing conditions.

Concept Plan:

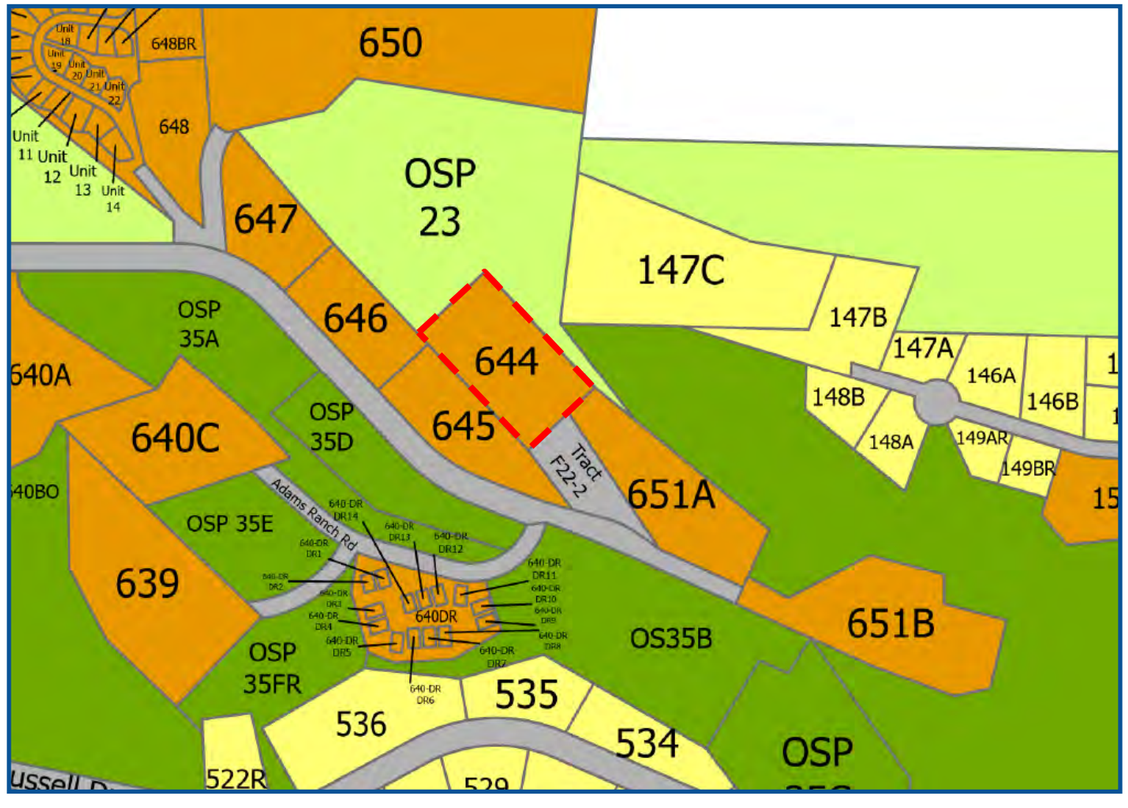



644
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Victoria Dr
San Juan Skwy
Arizona St
Wagner Way
145
Skunk Creek
Mountain Village
Prospect Creek
Hood Park Rd
Polecat Ln
Quakey Ln
Ridge Rd
Valley Creek
Skunk Creek
Prospect Creek
TOWN OF MOUNTAIN VILLAGE
INCORP 1995

Lot 644

Upper Jurassic

Zoning:



multi-family

active open space

single-family

passive open space

summary.

Zoning:	Multi-Family
Lot Size:	1.61 Acres

LOT OVERVIEW

Lot 644 is located within the Meadows Subarea and is currently vacant with the exception of the Jurassic Trail which traverses the Lot. This lot, is the only undeveloped Multi-Family Lot owned by the Town of Mountain Village. It presents a unique opportunity to work within a private-public partnership to develop a large amount deed-restricted housing opportunities. Lot 644 currently is assigned 41 Units of Employee Condominium Density. This is one of the premier lots to provide additional community housing in the Mountain Village.

CONCEPTUAL CONCEPT

Community Housing

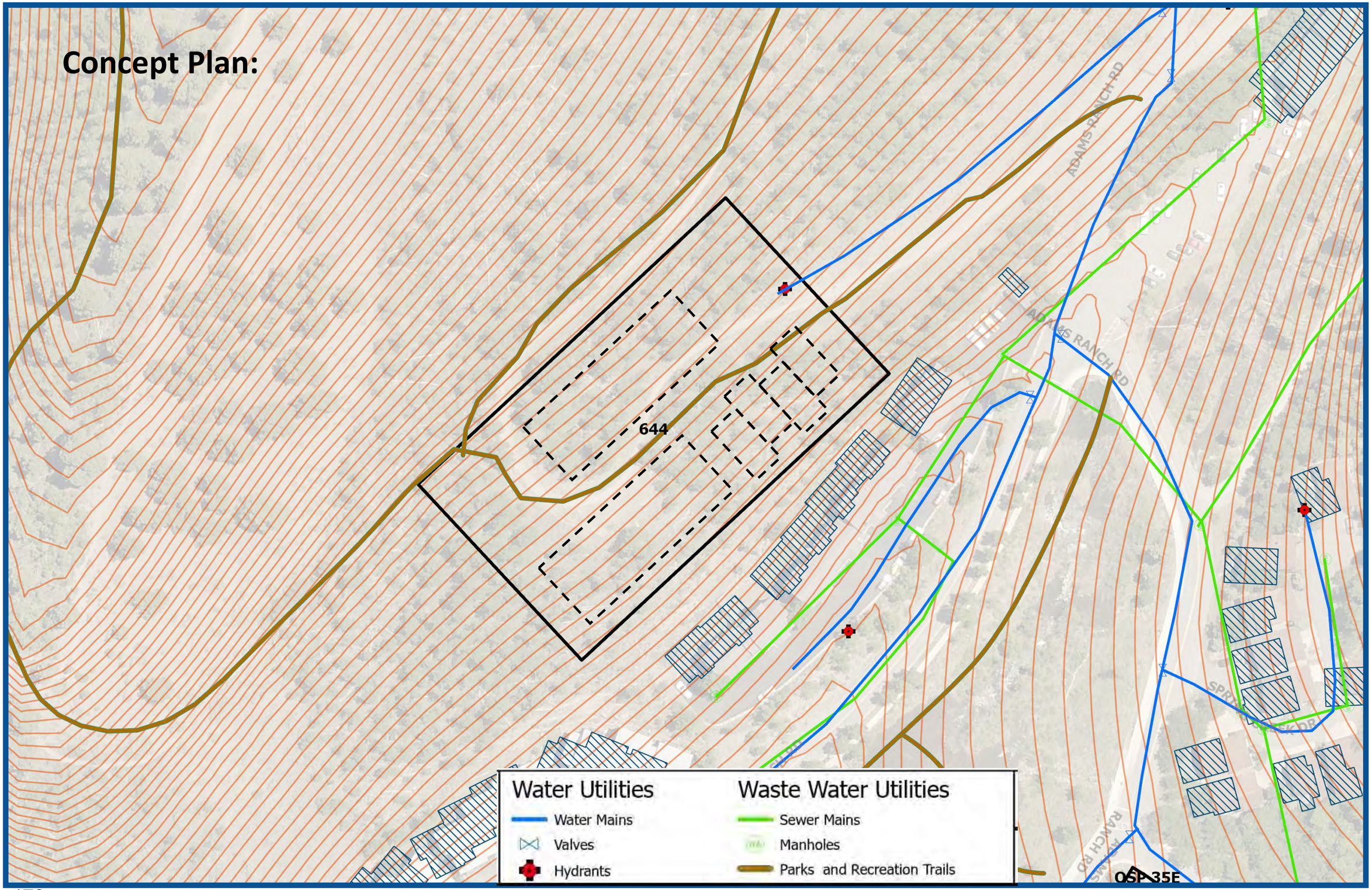
Lot 644 should be developed as for sale employee condominiums. The specific development program will be determined in the future, but focus should relate to private development incentives, public private partnerships, and/or working with adjacent property owners (651A, TSG), to allow for coordinated access and development proposals. Adjacent Lot 651A is assigned 15 units of free-market condo density and this free-market development could offset potential deed-restricted development costs.

IMPLEMENTATION

1. Council decision on financing or partnership
2. Discuss Meadows access and egress
3. Conceptual Scoping with TSG related to shared development costs, access, and appropriate density
4. Design / Construct in tandem with 651A or independently.

existing conditions.

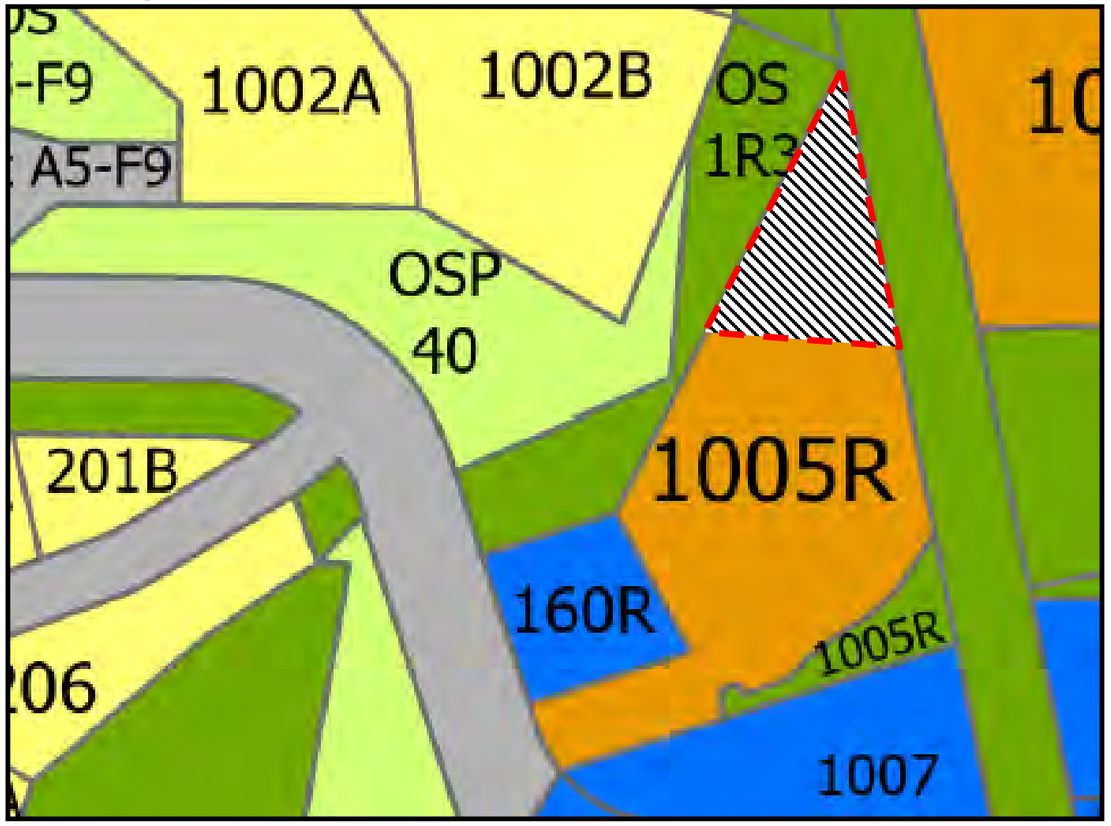
Concept Plan:



Lot 1005R

VCA Maintenance Shop

Zoning:



summary.

Zoning:	Multi-Family
Lot Size:	0.41 Acres (expansion area)

LOT OVERVIEW

Lot 1005R is the location of a portion of VCA and the VCA Maintenance Shop. The developable area was discussed within the Town Hall Subarea as a location for future community housing. To maximize the building envelope and to account for parking requirements, the existing maintenance shop may need to be relocated adjacent to the new development, or incorporated into a mixed use development.

CONCEPTUAL CONCEPT

Community Housing and VCA Maintenance Facility

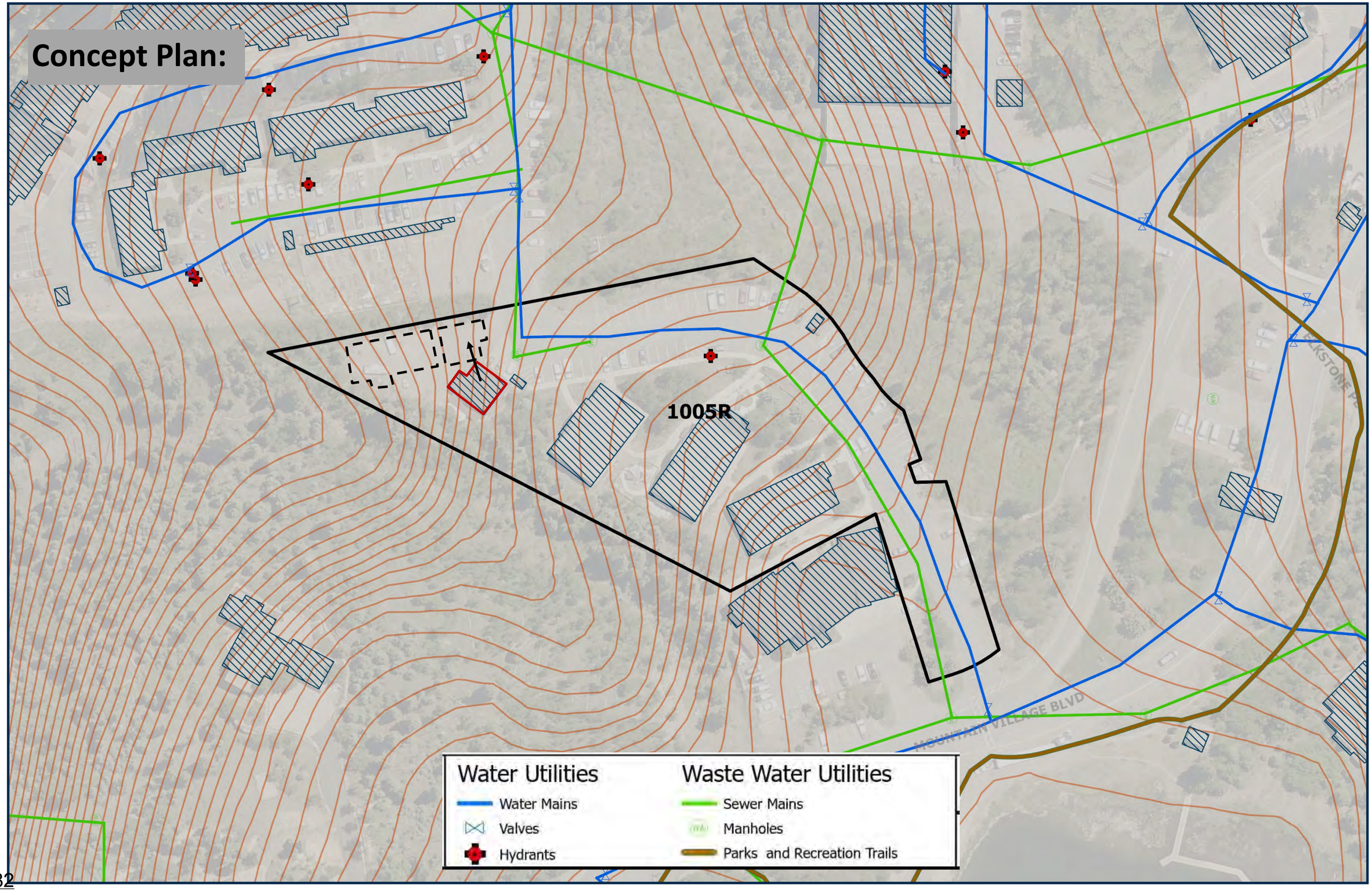
Any new development in VCA should be a for rent product focusing on 80-120% AMI. By incorporating the maintenance facility into a new development, existing facilities can be maintained and improved. This development would impact existing parking areas which would need to be addressed concurrently with any future development. In the past, VCA has been successful in obtaining relief from the parking requirements of the CDC and has otherwise been allowed one space per unit.

IMPLEMENTATION

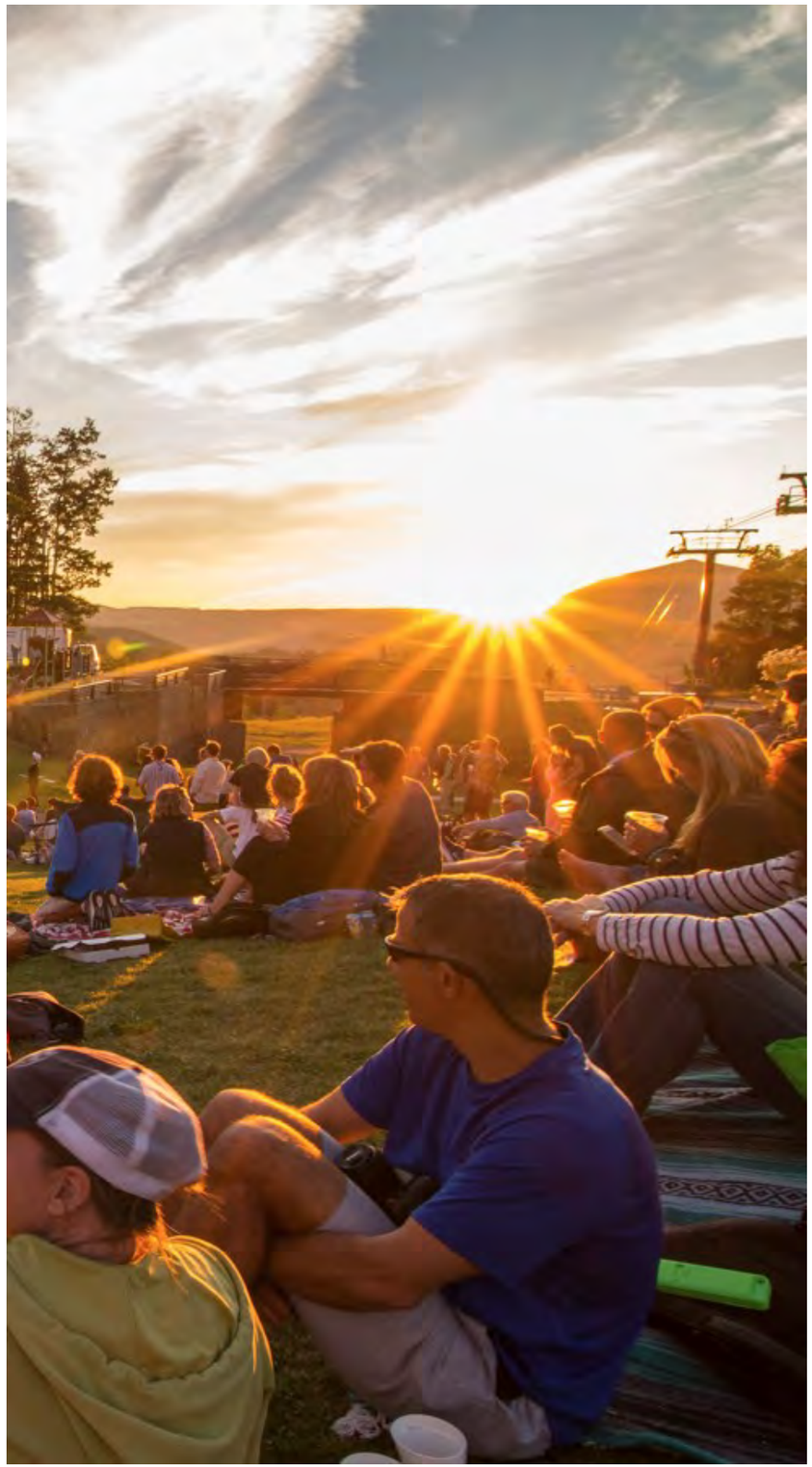
1. Conceptual Scoping including parking analysis
2. Density Transfer and Rezone Application establishing new density
3. Design / Construct
4. Potential Parking Variance

existing conditions.

Concept Plan:



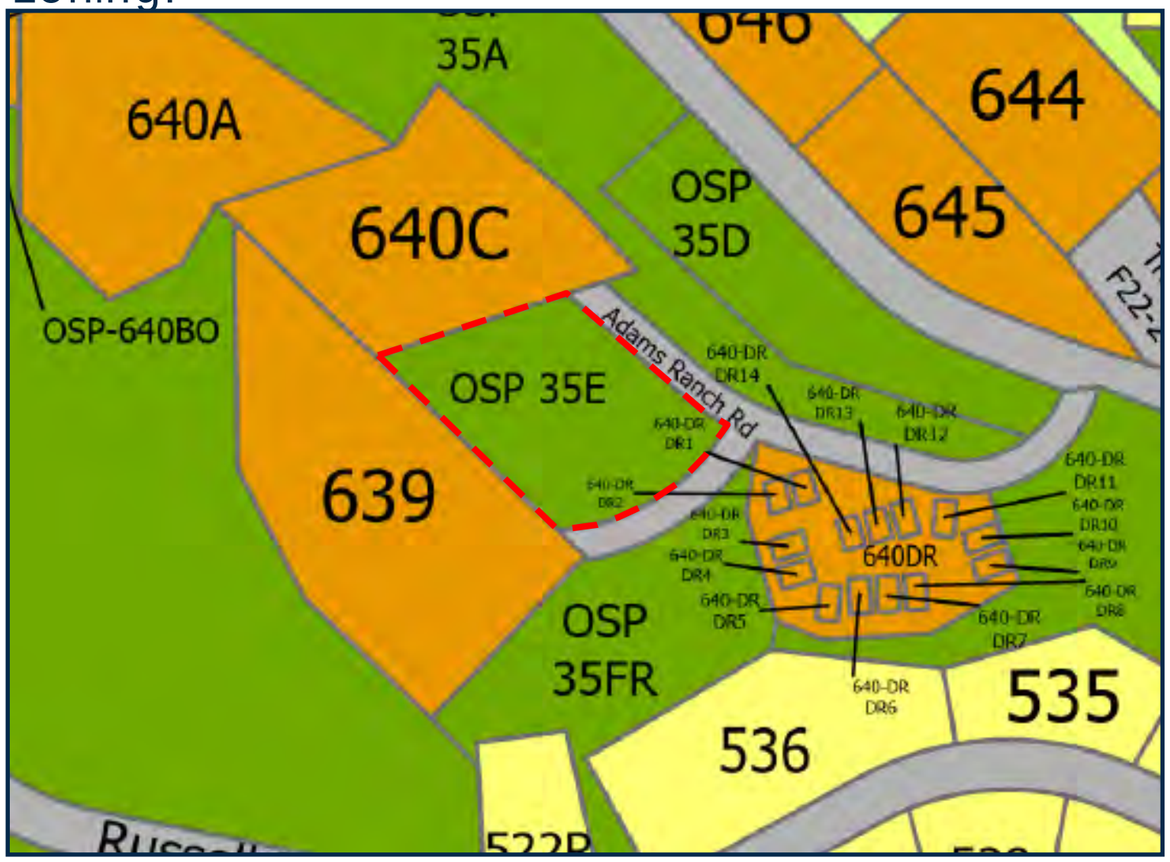

OSP 35E
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Victoria Dr
Arizona St
Wagner Way
Skunk Creek
Mountain Village
Prospect Creek
Hood Park Rd
Polecat Ln
Quakey Ln
Ridge Rd
Navajo Creek
Skunk Creek
Prospect Creek
TOWN OF MOUNTAIN VILLAGE INCORP 1995



Lot OSP-35E

Meadows Parking Lot

Zoning:



multi-family

active open space

civic

single-family

summary.

Zoning:	Active Open Space
Lot Size:	1.50 Acres

LOT OVERVIEW

Lot OSP-35E is located within the Meadows Subarea currently serves as surface parking along with a post office box location and playground. This lot was identified for development within the Meadows Subarea plan, which called for a multi-level development incorporating a parking garage in order to maintain existing parking. Given the community amenities this Lot currently provides, adequate scoping and public outreach should be conducted prior to any future development. This is one of the premier lots to provide additional community housing in the Mountain Village.

CONCEPTUAL CONCEPT

Community Housing and Parking

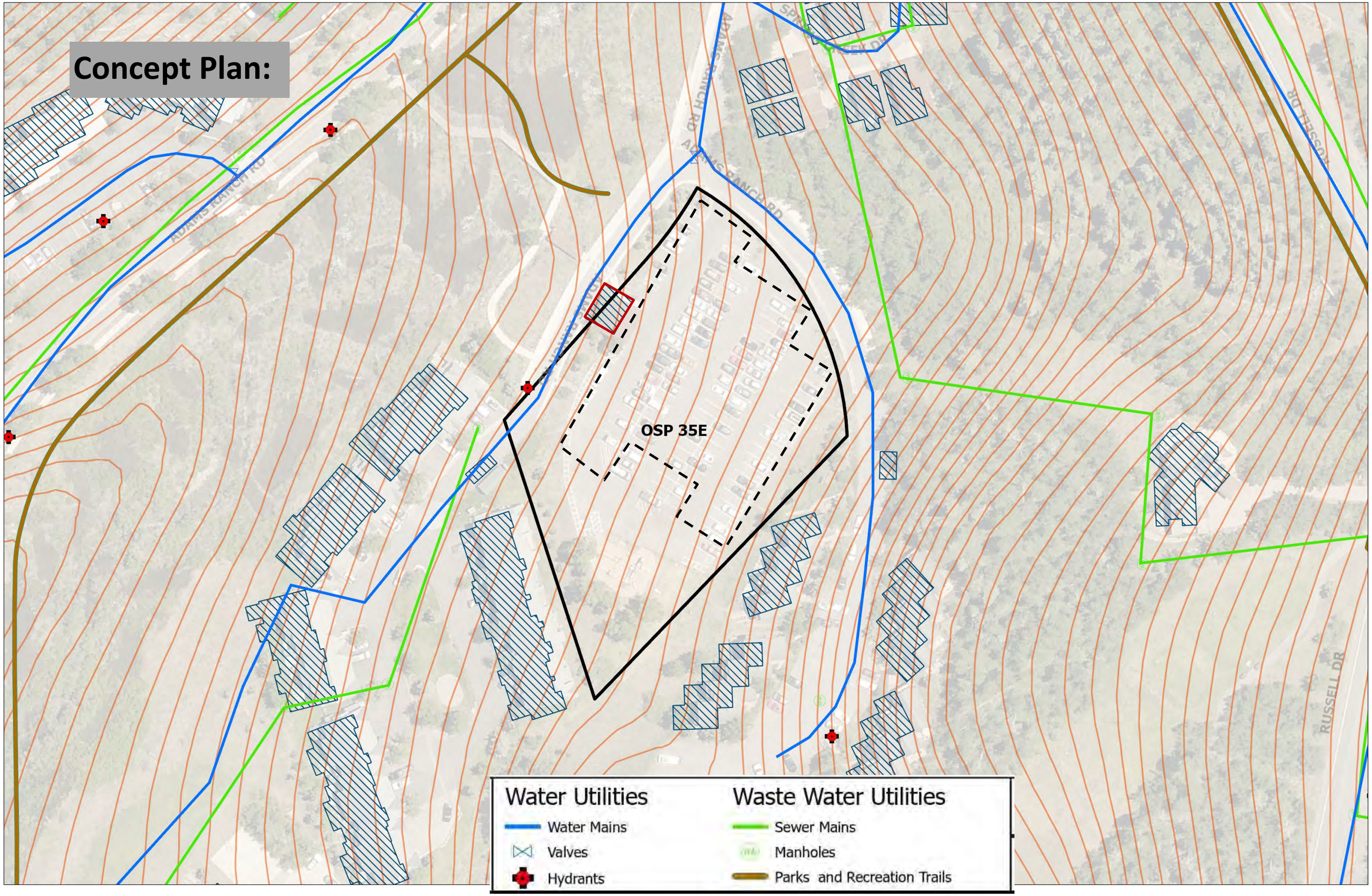
Lot OSP-35E should be developed as for sale employee condominiums. The specific development program will be determined in the future, but focus should be a multi-family condominium development with subgrade parking facilities. This parking should accommodate all existing parking plus additional unit requirements of 1.5 spaces per unit. Special consideration should be provided for the existing park area adjacent to the project and potentially incorporated into the project.

IMPLEMENTATION

1. Council decision on financing or partnership.
2. Soils study to understand subgrade parking feasibility.
3. Design / Construct.
4. For Sale Lottery to occur.

existing conditions.

Concept Plan:

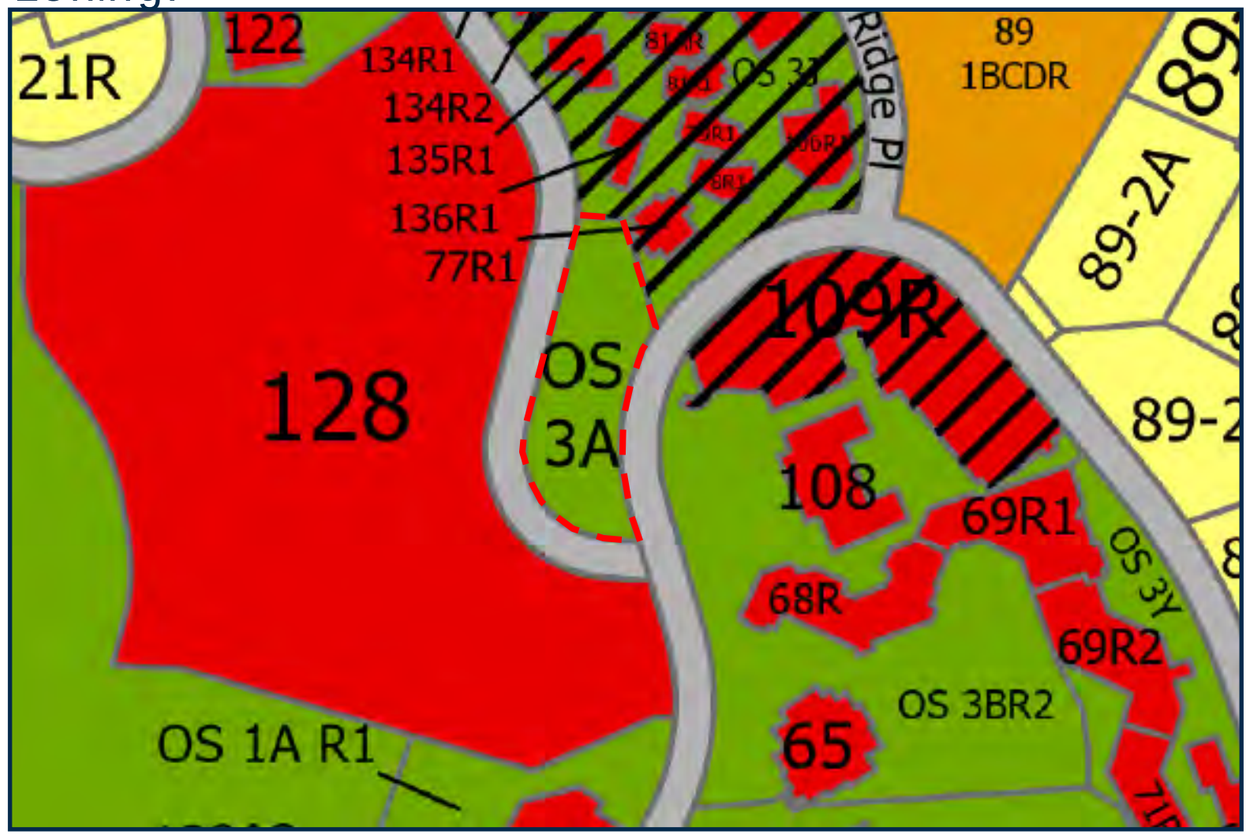



OS 3A
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Victoria Dr
Arizona St
Wagner Way
San Juan Skwy
Skunk Creek
Mountain Village
Prospect Creek
Hood Park Rd
Polecat Ln
Quakey Ln
Ridge Rd
Nanoo Creek
Skunk Creek
Prospect Creek
TOWN OF MOUNTAIN VILLAGE
INCORP 1995

Lot OS-3A

Country Club Drive

Zoning:



summary.

Zoning:	Multi-Family
Lot Size:	1.61 Acres

LOT OVERVIEW

Lot OS-3A is located at the intersection of Country Club Drive and Mountain Village Blvd. The Lot is currently vacant with the exception of electrical facilities near the Cabins at See Forever. This lot presents an opportunity to develop single family common interest deed-restricted housing near the village center. Access for these unit could be provided along either adjacent roadway. Home sizes would be slightly smaller than the adjacent cabins at See Forever, but they would otherwise blend into the current streetscape. Given the large amount of development surrounding this property, there may be less opposition to community housing in this location, and it provides a unique opportunity for single family product.

CONCEPTUAL CONCEPT

Community Housing

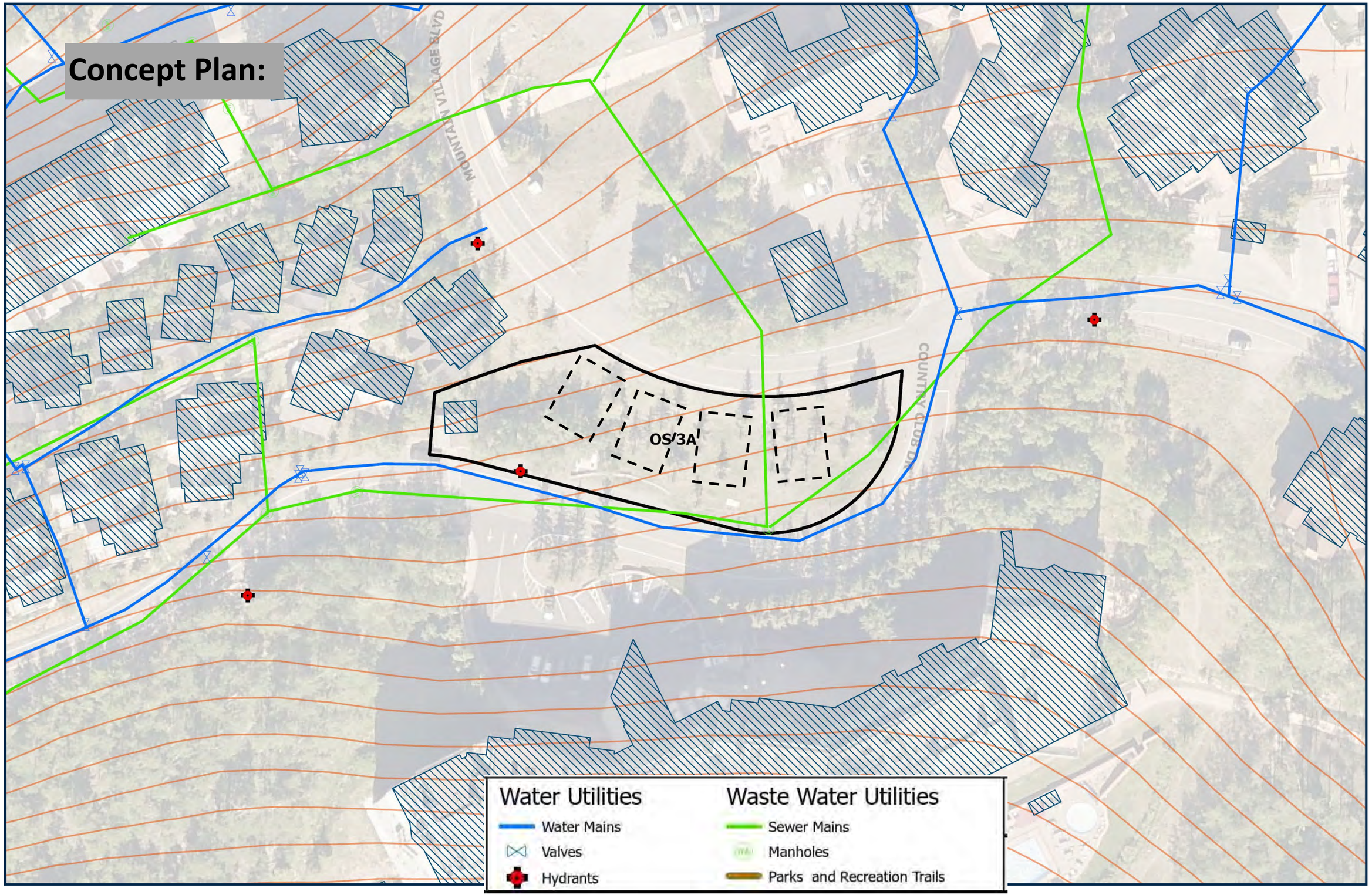
Lot OS-3A should be developed as for sale employee single-family common interest homes. The specific development program will be determined in the future, but focus should relate to higher AMI development of homes between $700K-1M.

IMPLEMENTATION

1. Determination of appropriateness for development
2. Conceptual Scoping
3. Design / Construct
4. Provide lottery for new homes

existing conditions.

Concept Plan:

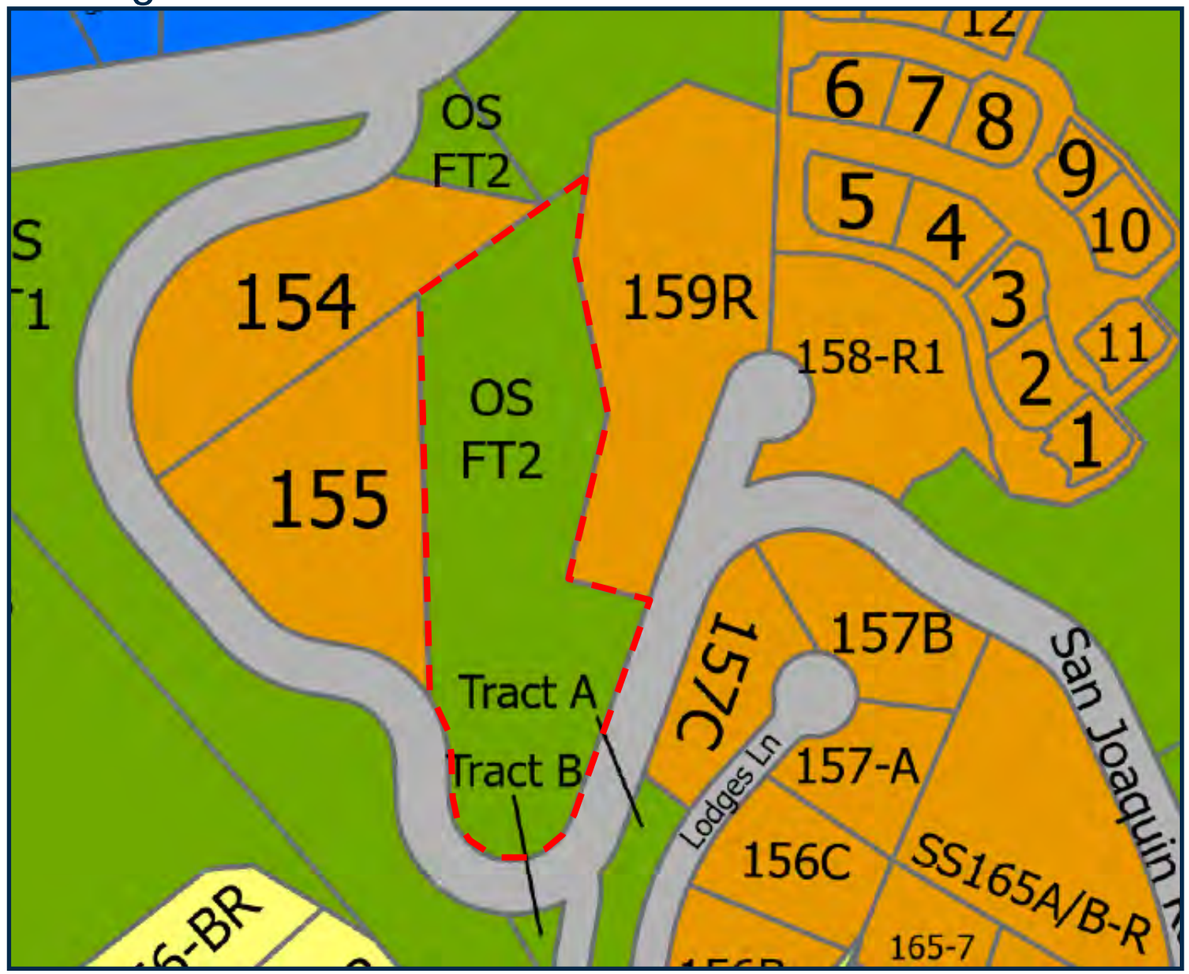



OS FT2
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Prospect Creek
Victoria Dr
SanJuan Skwy
Arizona St
Wagner Way
Stunk Creek
Mountain Village
Prospect Creek
Polecat Ln
Hood Park Rd
Quakey Ln
Ridge Rd
Vance Creek
Stunk Creek
Prospect Creek
TOWN OF MOUNTAIN VILLAGE
INCORP. 1995

Lot OS-FT2

San Joaquin Road

Zoning:



summary.

Zoning:	Active Open Space
Lot Size:	3.201 Acres

LOT OVERVIEW

Lot OS-FT2 is very steep and contained a stream feature that would need to be avoided. Although this lot is quite large, it may be better suited to rezone to passive open-space—allowing the town to rezone a separate passive open-space Lot to Active Open Space.

CONCEPTUAL CONCEPT

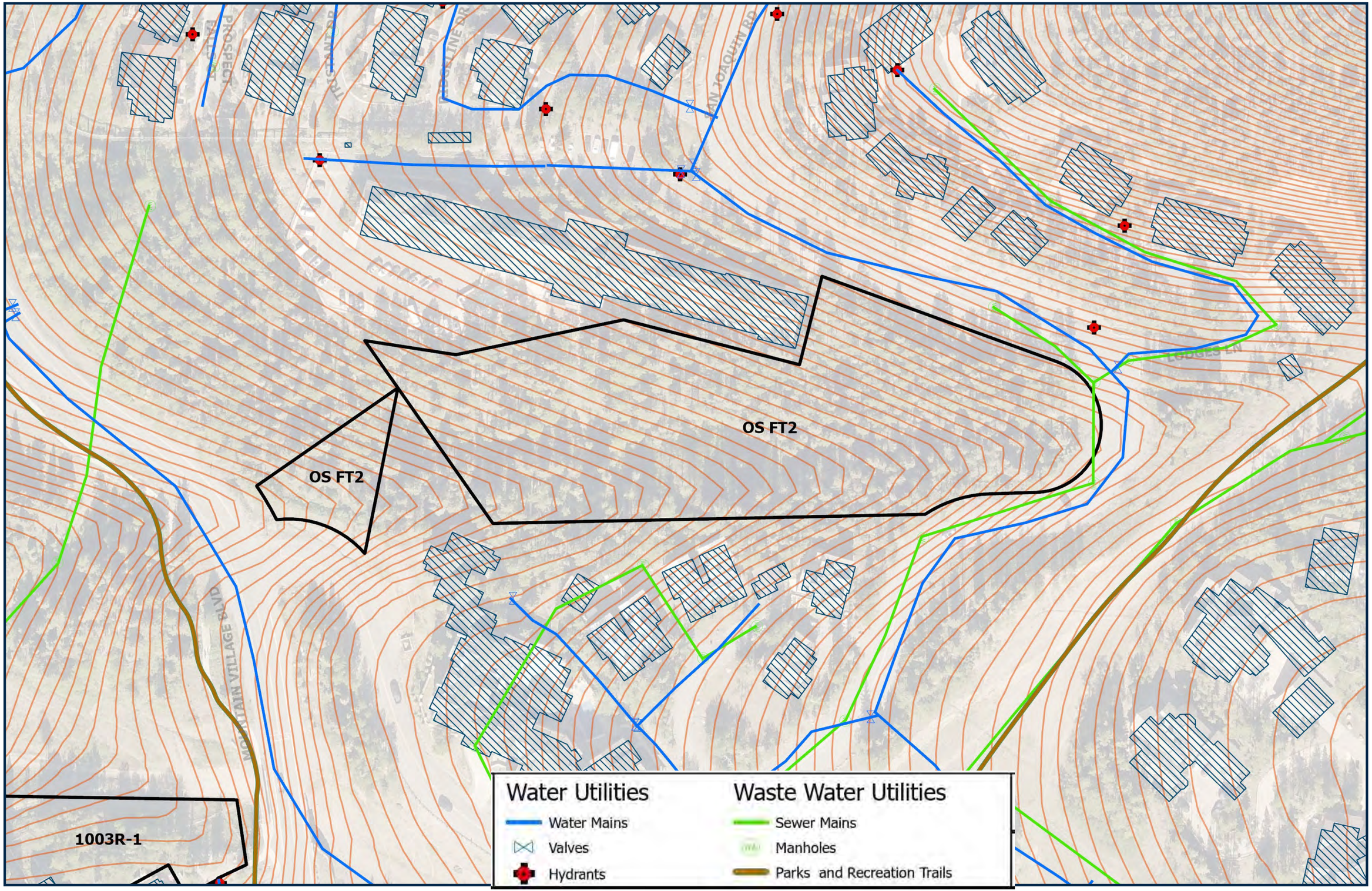
Land Bank—Land Swap

Lot OS-FT2 would best be suited to be swapped for a passive open space parcel. OS-FT2 could remain town owned, and presents an interesting opportunity for recreational trails connecting San Joaquin Road with Mountain Village Blvd.

IMPLEMENTATION

1. Rezone to Passive Open Space
2. Convert a better developable Passive Open Space Lot to Active Open Space to allow for future community housing development.

existing conditions.

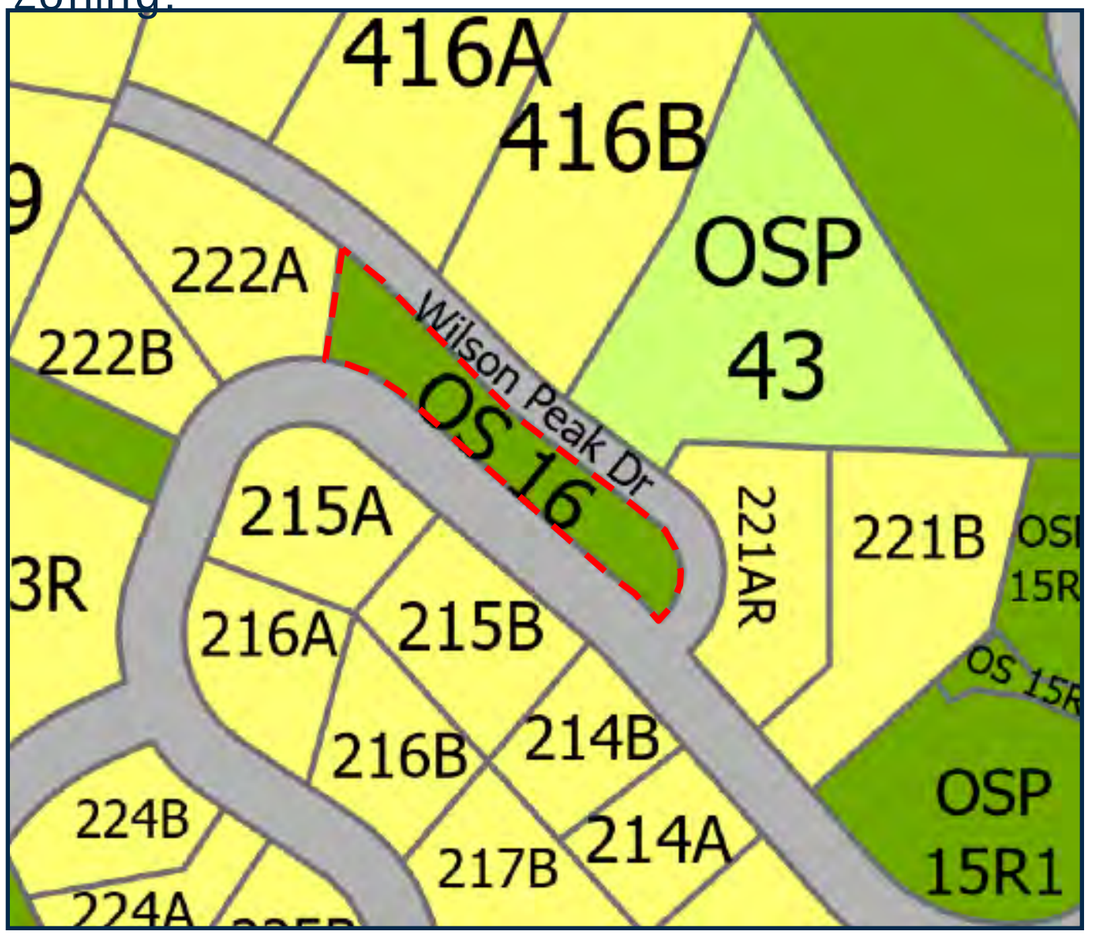

OS FT2
OS FT2
1003R-1
Water Utilities
Water Mains
Valves
Hydrants
Waste Water Utilities
Sewer Mains
Manholes
Parks and Recreation Trails


OS 16
Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Victoria Dr
Arizona St
Wagner Way
Skunk Creek
Mountain Village
Polecat Ln
Hood Park Rd
Quakey Ln
Ridge Rd
Vance Creek
TOWN OF MOUNTAIN VILLAGE
INCORP 1995

Lot OS-16

Wilson Peak Drive

Zoning:



summary.

Zoning:	Active Open Space
Lot Size:	0.632 Acres

LOT OVERVIEW

Lot OS-16 is located between Wilson Peak and Benchmark Drive, and is currently vacant. The Lot is narrow at only approximately 50 feet wide, but is otherwise flat. Due to grades along Wilson Peak, it may be preferable to access this Lot off of Benchmark Drive. This lot could potentially provide for up to 3 single-family common interest homes. These would be for sale deed-restricted homes.

CONCEPTUAL CONCEPT

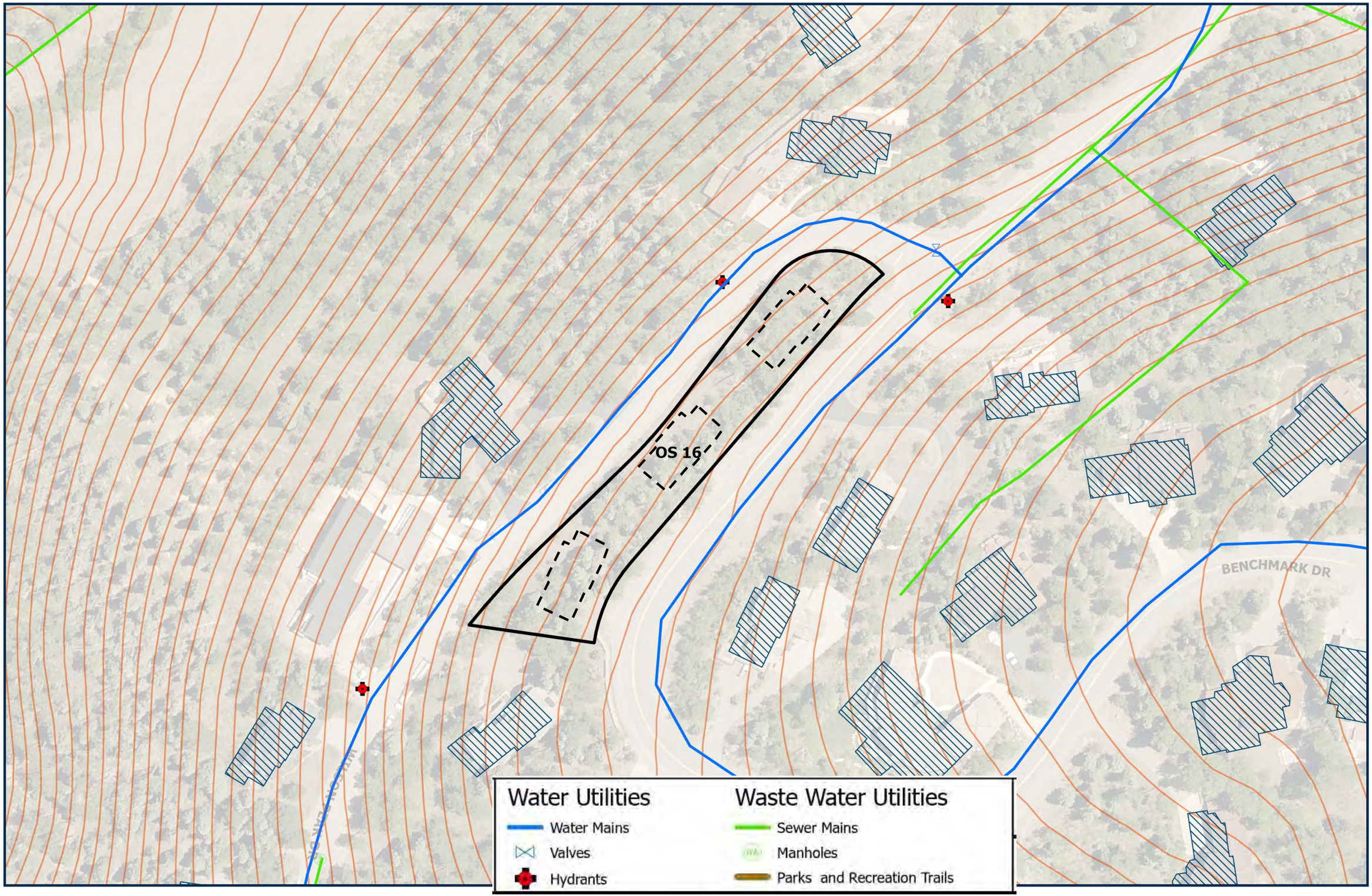
Community Housing

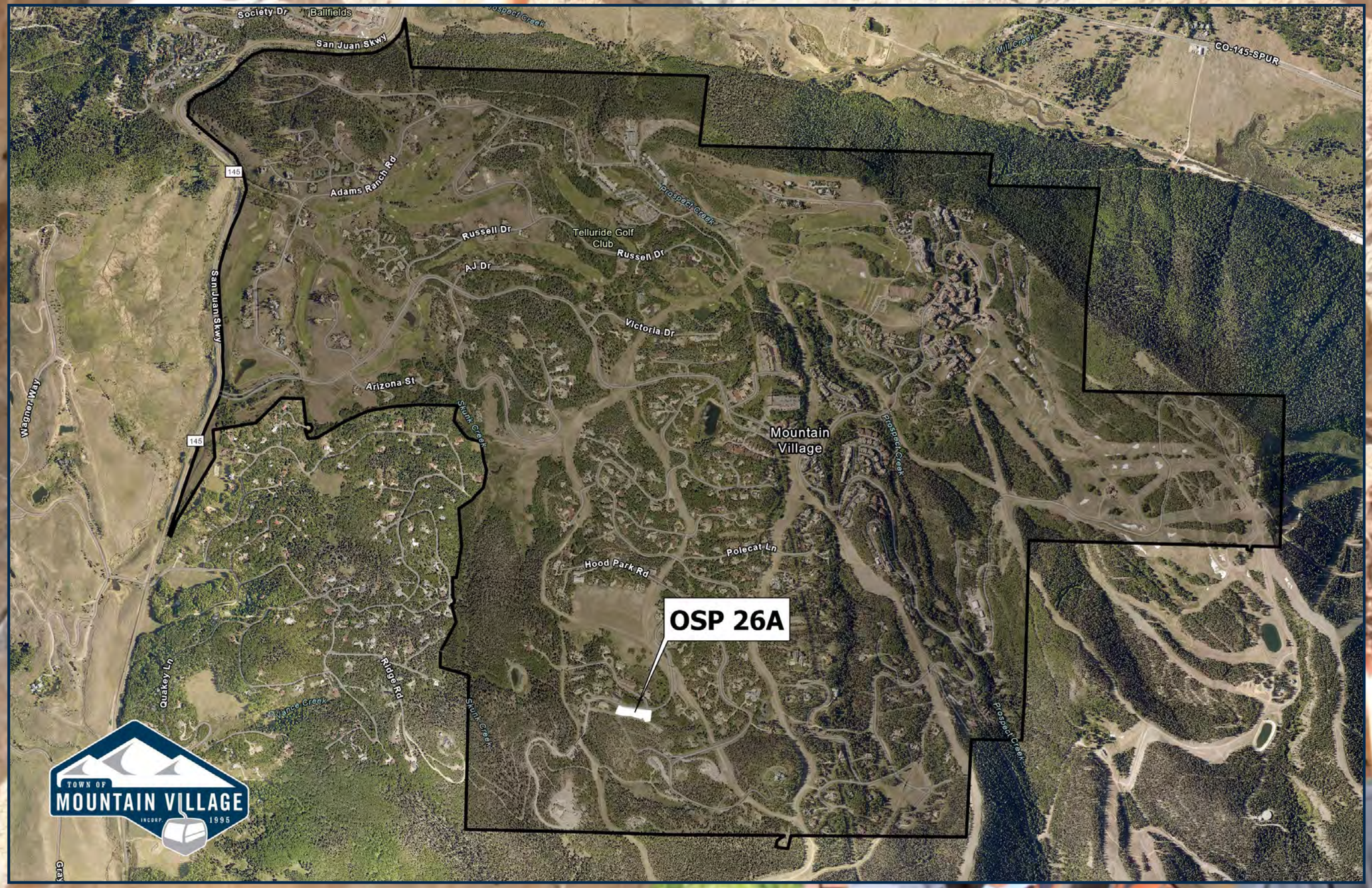
Lot OS-16 should be developed as for sale single-family common interest deed restricted homes. The specific development program will be determined in the future, but focus should relate to development of 2-3 single-family homes. Alternatively, this property could also be rezoned to passive open space to allow for conversion of more suited property in the future.

IMPLEMENTATION

1. Council decision on rezoning or development of OS-16
2. Discuss access from Benchmark Drive
3. Conceptual Scoping
4. Design / Construct
5. For Sale Lottery of the units to qualified residents

existing conditions.


OS 16
BENCHMARK DR
Water Utilities
Water Mains
Valves
Hydrants
Waste Water Utilities
Sewer Mains
Manholes
Parks and Recreation Trails


Society Dr
Ballfields
San Juan Skwy
Prospect Creek
Mill Creek
CO-145-SPUR
145
Adams Ranch Rd
Russell Dr
Telluride Golf Club
Russell Dr
AJ Dr
Victoria Dr
San Juan Skwy
Wagner Way
Arizona St
Skunk Creek
Mountain Village
Prospect Creek
Hood Park Rd
Polecat Ln
OSP 26A
Quakey Ln
Ridge Rd
Wanee Creek
Skunk Creek
Prospect Creek
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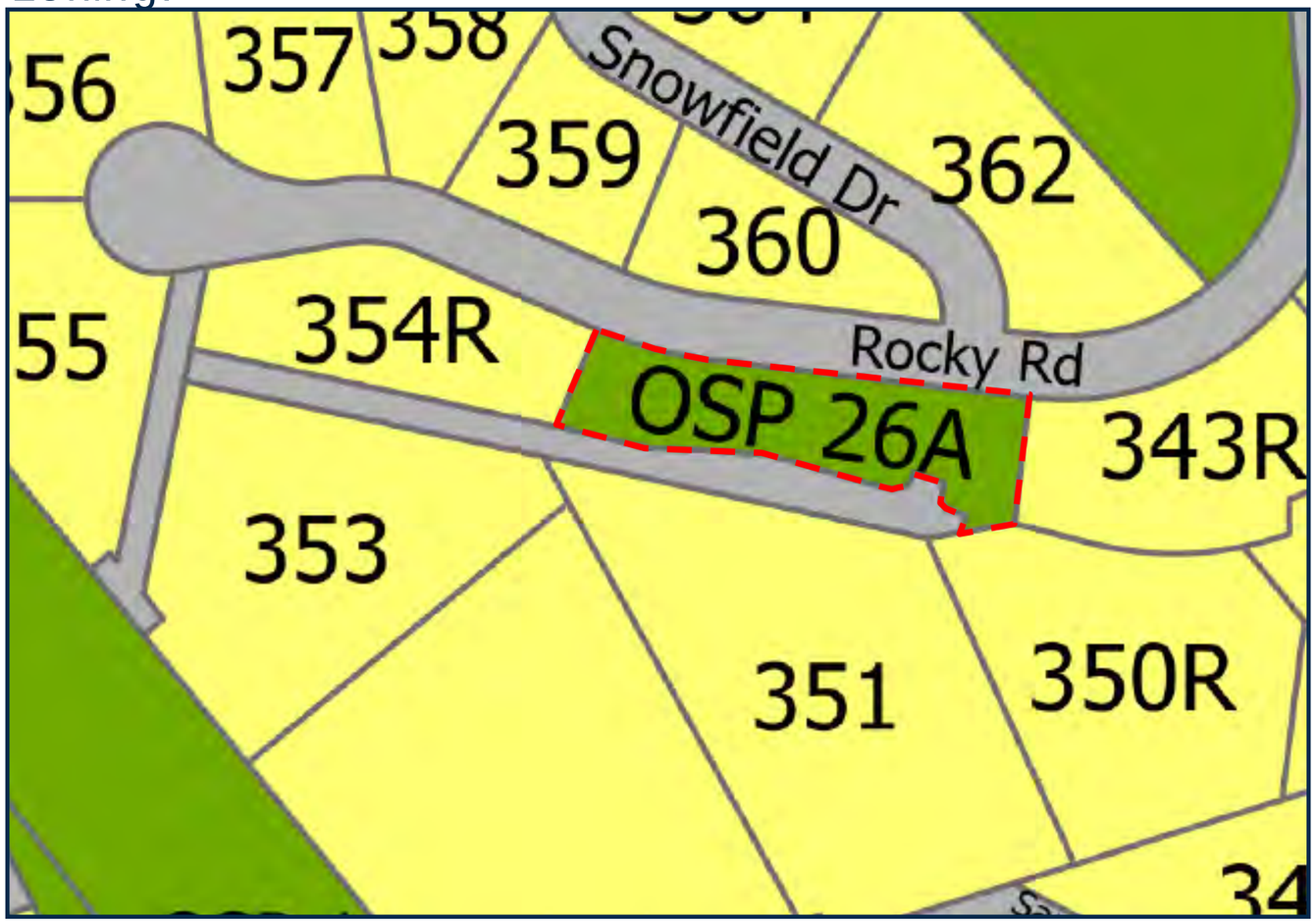
INCORP. 1995

200

Lot OS-26A

Rocky Road

Zoning:



single-family

active open space

civic

passive open space

summary.

Zoning:	Active Open Space
Lot Size:	0.929

LOT OVERVIEW

Lot OS-26A is very steep and narrow. At just under an acre, it also presents an opportunity for a land swap, converting this lot to passive open space while rezoning a separate passive open space lot to active open space.

CONCEPTUAL CONCEPT

Land Bank—Land Swap

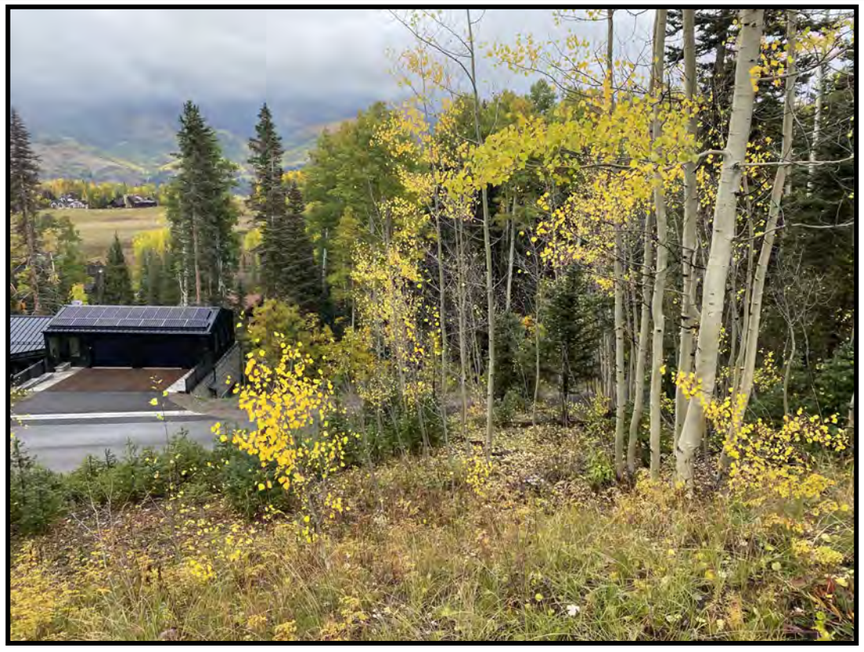
Lot OS-16 would best be suited to be swapped for a passive open space parcel. OS-16 could remain town owned, an would otherwise be undeveloped, providing additional greenspace.

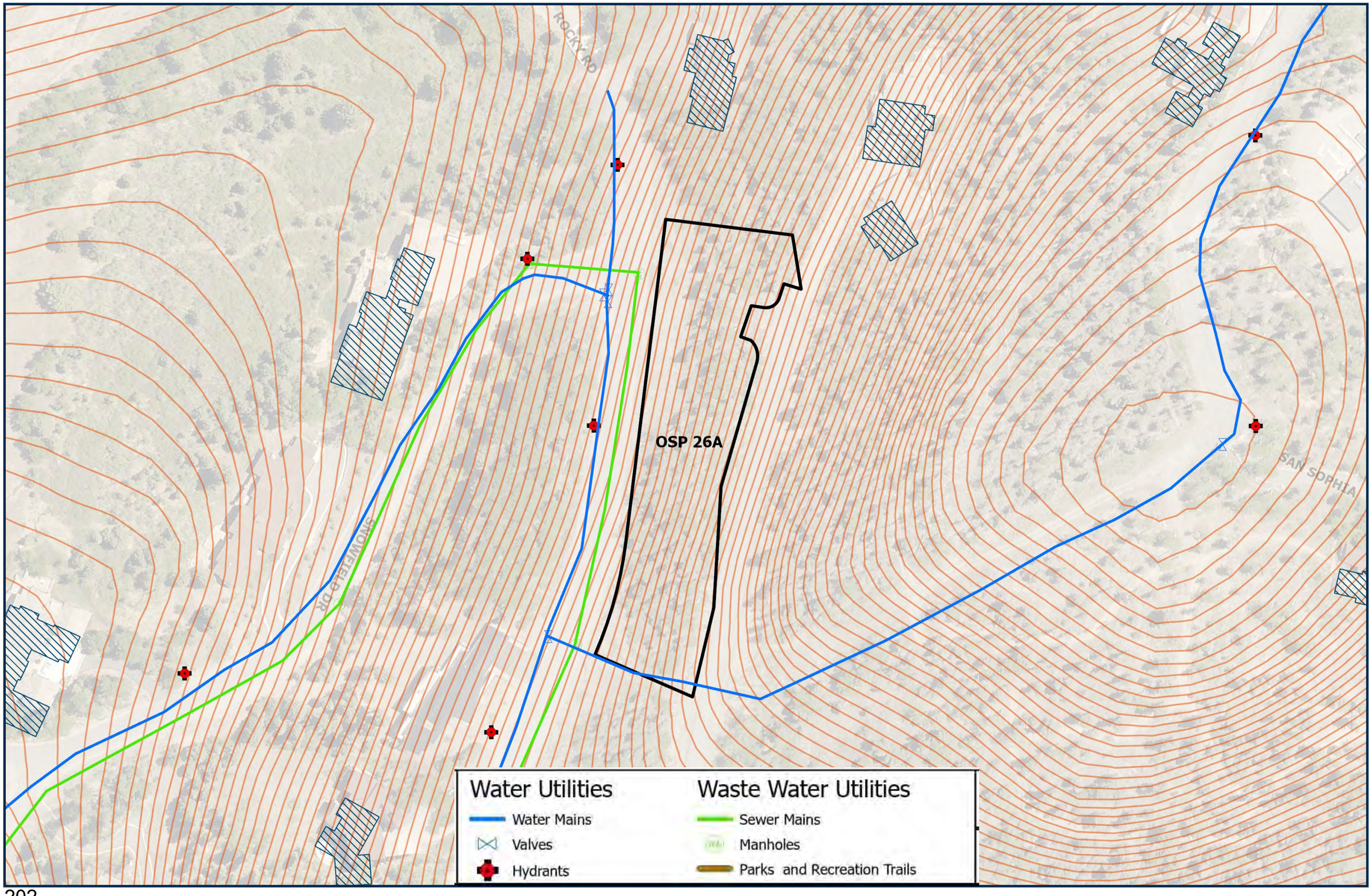
Development of this lot would allow for community housing near the south of our community, an area that has traditionally had limited deed restricted units, but would be expensive given the slopes of the Lot.

IMPLEMENTATION

1. Rezone to Passive Open Space
2. Convert a better developable Passive Open Space Lot to Active Open Space to allow for future community housing development.

existing conditions.




ROCKY RD
OSP 26A
SNOWFIELD DR
SAN SOPHIA
Water Utilities
Water Mains
Valves
Hydrants
Waste Water Utilities
Sewer Mains
Manholes
Parks and Recreation Trails

Conclusion

The Town of Mountain Village is the owner of several properties within the community. The Town Council would like to ensure that all town owned land can be an asset to the community in the future, not only providing needed housing resources for members of our community who provide for our businesses to remain open, but for those who help provide a vibrancy of place that makes our visitors and guest stay longer. The developability of each Lot was analyzed relating to it's location, context, site characteristics, existing uses, and goals in the Comprehensive Plan. Understanding the overall potential and defined best use for each Lot, allows the Town to prioritize improvements on the parcels over time. In summary, the development strategies for each Lot has been provided below.

Lot 1003R-1 Land Unit 4

This development would be a 2 phased development focused on a for rent product of condominiums or townhouses. Given the ski-in ski-out nature of the site as well as its overall accessibility being in the Town Hall Subarea, these units would be highly desirable and would generate rental incomes above 100% AMI. Parking at this site is problematic and may require the Gondola Parking Garage if parking cannot be accommodated on site.

Lot 644

This is the last remaining opportunity for larger scale multi-family development in the Meadows. With the density assigned, this project could accommodate a large number of deed-restricted condominiums and would only require a design review approval to proceed. This site could be developed in partnership with adjacent land owners or other interested parties and would be a for sale project. Although the site has difficult access, the building envelopes identified in this plan are relatively small and would allow for larger multi-family buildings along with townhouse type development. Access would need to be coordinated with TSG.

Lot 1005R

The VCA Maintenance facility was identified during the Town Hall Subarea as a potential area to add housing in VCA. Due to the current location of the Maintenance Facility and Parking, these items would need to be addressed and incorporated into any future design. Any future development within VCA Lots should be for rent apartments targeting 60-100% AMI or higher.

Lot OSP-35E

The Meadows Parking Lot presents an opportunity for the redevelopment of OSP-35E for a large multi-family condominium structure with underground parking and incorporated greenspace. Any future development needs to be conscious of existing residential density in the area, and should provide adequate stepped design to limit offsite impacts. This property could be entirely redeveloped into housing if these issues are addressed properly. The existing post office should be incorporated into this design.

OS-3A and OS-16

Both OS-3A and OS-16 provide opportunity for smaller deed-restricted single-family common interest communities. Neither site could accommodate more units than 4 but would otherwise provide for sale single-family housing stock that is desperately needed for upper level management residents.

OS-FT2 and OS-26A

These lots should continue to be explored but due to topography, should be rezoned to passive open space and swapped with passive opens pace lands that are better suited for development. In total, they provide for 4.13 acres of land that would allow for development in other more suited areas of the village.

TOWN OF
MOUNTAIN VILLAGE
INCORP. 1995

Agenda Item No. 10
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Housing Authority
FROM: Paul Wisor, Town Attorney
DATE: October 9, 2021
RE: Resolution Approving Opioid Settlement MOU

Summary

The proposed Resolution authorizes the Town to enter into a Memorandum of Understanding with the State of Colorado and other local governments pursuant to which opioid litigation settlement proceeds with be distributed.

Background

Nationwide settlements have been reached with the "Big 3" opioid distributors (McKesson, Cardinal Health, and AmerisourceBergen) and opioid manufacturer Johnson & Johnson to resolve claims by state and local governments that these companies contributed to the opioid epidemic. The claims being settled include those raised by local governments in the national multi-district litigation ("MDL"), *In Re: National Prescription Opiate Litigation*, MDL 2804 (N.D. Ohio).

The MOU establishes the framework for distributing and sharing these settlement proceeds throughout Colorado. Local governments and the State prepared the Colorado MOU, which prioritizes regionalism, collaboration, and abatement.

Discussion

Funds from the Big 3 and Johnson & Johnson settlements will be distributed over a period of years. The Big 3 distributors will pay a maximum of $21 billion over 18 years, while Johnson & Johnson will pay a maximum of $5 billion over no more than nine years. In total, up to approximately $22.8 billion in settlement proceeds will be payable to state and local subdivisions nationwide. Each state receives a percentage of that recovery, and Colorado's maximum share from these settlements will likely be more than $300 million. Colorado will receive its maximum share of settlement payments only if enough local governments sign on to the deal.

Under the Colorado MOU, settlement proceeds will be distributed as follows:

- 10% directly to the State ("State Share")
- 20% directly to Participating Local Governments ("LG Share")
- 60% directly to Regions ("Regional Share")
- 10% to specific abatement infrastructure projects ("Statewide Infrastructure Share")

All settlement funds must be used only for "Approved Purposes," a long and broad list that focuses on abatement strategies. These strategies emphasize prevention, treatment, and harm reduction. Some examples of these strategies include training health care providers on opioid use disorder ("OUD") treatment and responsible prescribing, expanding telehealth and mobile services for treatment, and increasing naloxone and rescue breathing supplies. The list of

Approved Purposes is broad enough to be flexible for local communities, while ensuring that settlement funds are used to combat the opioid epidemic.

Financial Implications

The most critical aspect of the MOU is the fact that more than 95% of Colorado governmental entities need to sign the MOU in order for the State to receive its $300 million. From there, a predetermined formula provides the Town will receive approximately $15,500. A broader region including the counties of Montrose, Delta, Gunnison, Hinsdale, Ouray and San Miguel would receive approximately $2,640,000.

Staff

Staff recommends adoption of the proposed Resolution.

Proposed Motion

"I move to approve the proposed resolution approving the Colorado Opioid Settlement and Recovery Memorandum of Understanding."

Attachments
Proposed Resolution
Memorandum of Understanding

TOWN OF MOUNTAIN VILLAGE, COLORADO
RESOLUTION NO. 2021-___

APPROVING COLORADO'S OPIOID SETTLEMENT AND RECOVERY

WHEREAS, the Colorado Department of Law has come to an agreement with Colorado's local governments for distributing opioid settlement and recovery funds to local counties and municipalities; and

WHEREAS, to maximize the settlement funds within Colorado, it is important that all Colorado counties and municipalities participate in these settlements and the distribution process.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO:

1. Recitals. The foregoing recitals are incorporated herein as findings and determinations of the Town Council of the Town of Mountain Village ("Town Council").

2. Approval. The Town Council approves for execution by the Mayor and Town Clerk the following documents:

(1) The Memorandum of Understanding that lays out the allocation of Opioid recoveries in the State of Colorado;
(2) The Subdivision Settlement Participation Form that releases subdivisions' legal claims against Johnson & Johnson;
(3) The Subdivision Settlement Participation Form that releases subdivisions' legal claims against AmerisourceBergen, Cardinal Health, and McKesson; and
(4) The Colorado Subdivision Escrow Agreement that ensures subdivisions' legal claims are released only when 95% participation by certain local governments has been reached.

3. Effective Date. This Resolution shall take effect upon adoption hereof.

ADOPTED AND APPROVED by the Town Council at a regular public meeting held on the 21st day of October 2021.

TOWN OF MOUNTAIN VILLAGE,
TOWN COUNCIL

By:_____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

APPROVED AS TO FORM:

_____
Paul Wisor, Town Attorney

Agenda Item No.11
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: Paul Wisor, Interim Town Manager
DATE: October 9, 2021
RE: Resolution Amending the Procurement Manual Adopted January 21, 2021

Summary

The proposed Resolution amends the Town's Procurement Manual Adopted January 21, 2016 (the "Procurement Manual"). in order to create greater efficiencies within each department. The proposed amendments provide staff must receive quotes from three vendors for purchase of more than $10,000, which is an increase from the current threshold of purchases of more than $2,500. The proposed amendments also provide Department Managers may sign purchase orders for purchases up to $10,000. The current threshold for Director approval is $2,500.

Background

Each Department Director is responsible for the development, submittal, and management of their respective budgets every year. It is the Town's expectation individuals who are hired as Directors are chosen for this role, in part, because these individuals exhibit excellent judgment and character.

Every year each department makes hundreds, if not thousands, of purchases. The Finance Department estimates at least half of these purchases are under $5,000. Under the current Procurement Manual, Directors must receive three quotes from vendors for every purchase over $2,500, and the Town Manager must sign every purchase order from purchases over $2,500. For their part, the Town Attorney is required to review every contract for purchases of $2,500 or more.

Section 2.1 of the Procurement Manual provides all Directors are held to strict ethical standards with respect to the Town's purchasing process. Specifically, the Procurement Manual provides "any attempt to realize personal gain through public employment is a breach of public trust. No favoritism shall be extended to any vendor. Purchases and contracts shall be made on the basis of competence, quality, price, delivery and performance. It shall be a breach of ethical standards for any employee or public official to knowingly use confidential information for his or her personal gain or for the personal gain of others. Any agent or employee of the Town making unauthorized purchases or contracts shall be personally liable for any obligations that result." Further, any violation of the ethical standards set forth in the Procurement Manual is grounds for termination.

Discussion

The current thresholds set forth in the Procurement Manual are proving to be inefficient and unworkable in the current economic climate. Town staff often finds itself seeking three quotes for relatively small projects. Town staff is aware that in many cases multiple vendors are capable of providing services to the Town, and thus sole sourcing the contract is not possible, but often Town staff can only get timely responses from more than one vendor. As such, Town projects

linger due to the limitations set forth in the Procurement Manual. In addition, the Town Manager is required to review a myriad of invoices in a given week. The number of invoices to be scrutinized makes such review significantly less effective.

The proposed amendments would raise the threshold to receive quotes from $2,500 to $10,000. Similarly, the proposed amendments would raise the threshold for Town Manager review from $2,500 to $10,000.

The proposed threshold increases are intended to create efficiencies within each department and reflect the reality of the current economic climate in which Town staff is operating. The proposed increases are also intended to make Town Manager review of purchases more meaningful.

The proposed amendments are not, however, intended to diminish accountability or oversight of Town funds. Each Director continues to be responsible for remaining within budget each year, and continues to have a fiduciary duty to assure such funds are properly spent. Nothing in the proposed amendments precludes a Director from seeking quotes from three or more vendors no matter the size of a purchase. In addition, nothing in the proposed amendments eliminates the requirements that a Director adhere to the ethical standards set forth in the Procurement Manual.

The Finance Department will continue to monitor all purchases, and the Town Attorney is still required to review all contracts in excess for $2,500.

Financial Implications

There is not direct financial implication to the Town, but Town staff believes the proposed resolution will result in greater efficiencies within each department.

Staff

Staff recommends adoption of the proposed Resolution.

Proposed Motion

"I move to approve the proposed resolution to amendments the Procurement Manual adopted January 21, 2016."

TOWN OF MOUNTAIN VILLAGE, COLORADO
RESOLUTION NO. 2021-___

AMENDING THE PROCUREMENT MANUAL AS ADOPTED BY TOWN COUNCIL ON JANUARY 21, 2016

WHEREAS, Town Council adopted a Procurement Manual on January 21, 2016 (the Procurement Manual"); and

WHEREAS, the Procurement Manual serves as a guide for fair and equitable treatment of all persons involved in public purchasing, and a tool for maximizing quality and value for the tax dollars; and

WHEREAS, the Procurement Manual requires three (3) quotes for purchases exceeding $2,500.00; and

WHEREAS, all purchase orders in excess of $2,500 must be approved by the Town Manager; and

WHEREAS, the thresholds set forth above lead to inefficiencies and delay, particularly in an atmosphere in which Town staff is expected to respond quickly and in which it is often difficult to receive responses from three separate service providers.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO:

1. Recitals. The foregoing recitals are incorporated herein as findings and determinations of the Town Council of the Town of Mountain Village ("Town Council").

2. Amendment of Section 3.5 of the Procurement Manual. Section 3.5 of the Procurement Manual shall be amended, in part, as set forth below:

Competitive Solicitation	Method of Purchase	Expenditure Amount	Agency Approval
Informal	Direct Purchase	~~Up to $2,500~~ Up to $10,000	Department Head
Informal	Request for Quote (Minimum 3 Quotes)	~~$2,501-$50,000~~ $10,001-$50,000	Town Manager

3. Amendment of Section 4.1 of the Procurement Manual. Section 4.1 of the Procurement Manual shall be amended, in part, as set forth below:

4.1 Small Purchases (Up to ~~$2,500~~ $10,000)

Purchases of up to ~~$2,500~~ $10,000 may be made by each department's ~~authorized personnel, with approval by the~~ department head. Required signatures of the department head must be on the PO prior to submittal to the finance department. All purchases shall be from pre-approved vendors. In order to establish a vendor as an approved vendor the department head shall fill out an approved vendor form with the finance department prior to submitting any request for approval of payment to the finance department.

4. Amendment to Section 4.2 of the Procurement Manual. Section 4.2 of the Procurement Manual shall be amended, in part, as set forth below:

4.2 Request for Quote (~~$2,501~~$10,001-$50,000)

Department heads shall budget for purchases over $2,500. Department heads shall plan for purchases over ~~$2,500~~ $10,000 to allow time to obtain the required 3 quotes.

A Request for Quote (RFQ) (see Section 12: Appendices, FORM B), with a minimum of 3 vendor names, must be submitted to the finance department with any ~~PO~~ purchase order for over ~~$2,500~~ $10,000.

Acceptable quotes may be obtained by a department head by mail, email, in person, over the phone, or by facsimile. If award is not made to the lowest quote, justification for accepting a higher quote must be included and be acceptable to the Town Manager. All ~~PO's~~ purchase orders for purchases over ~~$2,500~~ $10,000 must be approved by the Town Manager. All purchases shall be from pre-approved vendors. In order to establish a vendor as an approved vendor the department head shall fill out an approved vendor form with the finance department prior to submitting any ~~PO~~ purchase order for such vendor to the finance department.

5. Effective Date. This Resolution shall take effect upon adoption hereof.

ADOPTED AND APPROVED by the Town Council at a regular public meeting held on the 21st day of October 2021.

TOWN OF MOUNTAIN VILLAGE,
TOWN COUNCIL

By:_____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

APPROVED AS TO FORM:

_____
Paul Wisor, Town Attorney

Agenda Item No. 12
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Housing Authority
FROM: Paul Wisor, Town Attorney
DATE: October 9, 2021
RE: Resolution to Reimburse the Authority for Costs Associated with VCA Phase IV

Summary

The proposed Resolution will permit the Town of Mountain Village Housing Authority to be reimbursed for certain costs incurred in connection with construction of VCA Phase IV prior to the issuance of debt to finance such construction.

Background

Recently, the Housing Authority provided staff with direction to pursue the design and construction of VCA Phase IV. It is anticipated the construction of Phase IV will be financed through the issuance of tax-exempt bonds or through a tax-exempt loan. The financing for VCA Phase IV will likely not be in place prior to the beginning of 2022. In the interim, the Housing Authority will incur certain costs, including architectural, engineering, surveying, soil testing. The Authority will be required to pay vendors providing these services prior receipt of bond or loan proceeds.

Discussion

As a general matter, issuers of tax-exempt debt cannot be reimbursed out of debt proceeds if those costs are incurred prior to adopting the documentation authorizing the issuance of the debt. However, under Treasury Regulation 1.150-2, the Authority may adopt a resolution indicating it intends to undertake a financing to construct VCA Phase IV, and it further intends to reimburse itself for costs incurred prior to the issuance of the debt.

The proposed resolution fulfills the requirements of Regulation 1.150-2, and the Authority will be able to reimburse itself for costs incurred prior to undertaking the VCA Phase IV financing in 2022.

Financial Considerations

The proposed Resolution permits the Authority to be reimbursed for funds expended on Phase IV. However, the Authority will still be paying for these costs when the Authority makes its debt service payments as the cost to be reimbursed will be included in the overall par amount of the bonds.

Staff Recommendation

Staff recommends adoption of the proposed Resolution.

Proposed Motion

"I move to approve the proposed resolution expressing the Authority's intent to be reimbursed for certain costs incurred in connection with the construction of VCA Phase IV."

STATE OF COLORADO	)	
	)	
COUNTY OF SAN MIGUEL	)	SS.
	)	
TOWN OF MOUNTAIN VILLAGE	)	
HOUSING AUTHORITY	)	

The Board of Commissioners (the "Board") of the Town of Mountain Village Housing Authority, San Miguel County, Colorado (the "Authority"), met in regular session, in full conformity with law and the rules of the Authority, at 455 Mountain Village Boulevard, Suite A in the Town of Mountain Village, being the regular meeting place of the Board, on Thursday, October 21, 2021, at the hour of 2:00 p.m. Upon roll call, the following were found to be present, in person or by telephone, constituting a quorum:

Present:

Chair:	Laila Benitez
Vice Chair:	Dan Caton
Commission Members	Marti Prohaska
	Patrick Berry
	Peter Duprey
	Jack Gilbride
	Harvey Mogenson

Absent:

There were also present:

Interim Executive Director/ Authority Attorney	Paul Wisor, Esq.

constituting all the members of the Board.

Thereupon, the following proceedings, among others, were had and taken:

Commissioner _____ introduced in typewritten form a resolution, which resolution was thereupon read by title, copies thereof having been distributed to all members of the Board and to those members of the public in attendance, and which resolution is as follows:

TOWN OF MOUNTAIN VILLAGE
RESOLUTION NO. 21-____

EXPRESSING THE INTENT OF THE MOUNTAIN VILLAGE HOUSING AUTHORITY TO BE REIMBURSED FOR CERTAIN EXPENSES RELATING TO THE VILLAGE COURT APARTMENTS.

WHEREAS, the Town of Mountain Village Housing Authority, a public body corporate and politic of the State of Colorado (the "Issuer"), is authorized and empowered by the provisions of the Housing Authorities Law, being Part 2 of Article 4 of Title 29, Colorado Revised Statutes (the "Act"), as from time to time supplemented and amended, to issue revenue bonds, notes or other obligations for the purpose of providing residential housing that substantially benefits persons and families of low income; and

WHEREAS, the members of the Town Council (the "Town Council") of the Town of Mountain Village, Colorado, duly organized and existing as a home rule town under Article XX of the State Constitution and under its home rule charter, have been duly elected or appointed and qualified; and

WHEREAS, the Town Council has provided that in accordance with the Act, the members of the Town Council shall ex officio be appointed the Commissioners of the Board of Commissioners of the Issuer (the "Board"); and

WHEREAS, the Board has determined that it is in the best interest of the Issuer and public interest and necessity to finance the acquisition, construction and equipping of an additional 42-units of multifamily housing in the Village Court Apartments, which are expected to be located at 415 Mountain Village Boulevard, Buildings 15-16, Town of Mountain Village, Colorado 81435 (the "Project"); and

WHEREAS, the Issuer has determined that it is in the best interest of the Issuer to finance the Project through either: (i) the execution and delivery of Bonds; or (ii) by any other means legally available to the Issuer; and

WHEREAS, the Board has determined that it is necessary to make preliminary expenditures and capital expenditures to acquire and construct the Project prior to the time that the Issuer arranges for the specific financing of such Project; and

WHEREAS, it is the Issuer's reasonable expectation that when such financing occurs, the preliminary expenditures and capital expenditures will be reimbursed with the proceeds of the financing; and

WHEREAS, in order to comply with the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), it is the Issuer's desire that this resolution shall constitute the

"official intent" of the Board to reimburse such preliminary expenditures and capital expenditures within the meaning of Treasury Regulation §1.150-2.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF MOUNTAIN VILLAGE HOUSING AUTHORITY:

Section 1. All action (not inconsistent with the provisions of this resolution) heretofore taken by the Board and the officers, employees and agents of the Issuer directed toward the Bonds and the Project is hereby ratified, approved and confirmed.

Section 2. The Issuer intends to finance approximately $20,000,000 to pay the costs of the Project, including the reimbursement of certain costs incurred by the Issuer prior to the receipt of any proceeds of a financing, upon terms acceptable to the Issuer, as authorized in a resolution to be hereafter adopted and to take all further action which is necessary or desirable in connection therewith.

Section 3. The officers, employees and agents of the Issuer shall take all action necessary or reasonably required to carry out, give effect to and consummate the transactions contemplated hereby and shall take all action necessary or desirable to finance the Project and to otherwise carry out the transactions contemplated by the resolution.

Section 4. The officers and employees of the Issuer are hereby authorized and directed to take all action necessary or appropriate to effectuate the provision of this resolution.

Section 5. The Issuer shall not use reimbursed moneys for purposes prohibited by Treasury Regulation §1.150-2(h).

Section 6. This resolution is intended to be a declaration of "official intent" to reimburse expenditures within the meaning of Treasury Regulation §1.150-2.

Section 7. If any section, paragraph, clause or provision of this resolution shall for any reason be held invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this resolution.

Section 8. All acts, orders and resolutions of the Issuer, and parts thereof, inconsistent with this resolution be, and the same hereby are, repealed to the extent only of such inconsistency. This repealer shall not be construed to revive any act, order or resolution, or part thereof, heretofore repealed.

Section 9. The resolution shall in full force and effect upon its passage and approval.

PASSED AND ADOPTED this October 21, 2021.

TOWN OF MOUNTAIN VILLAGE
HOUSING AUTHORITY

(SEAL)

_____
Laila Benitez,
Chair of the Board of Commissioners

ATTEST:

_____
Susan Johnston, Secretary

APPROVED AS TO FORM:

_____
Paul Wisor, Authority Attorney

Agenda Item No. 13
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Housing Authority
FROM: Paul Wisor, Town Attorney
DATE: October 9, 2021
RE: Resolution Delegating Authority to Enter Into Real Estate Purchase Agreements

Summary

The proposed Resolution delegates to the Community Housing Director the authority to enter into real estate contracts, provided such contracts are conditioned on Town Council ratification. This proposed Resolution is proposed to make the Town's acquisition of community housing sites more efficient.

Background

The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry level restaurant workers to top level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

The Town Council recently created the position of Community Housing Program Director in order to address the myriad of housing needs of the Mountain Village community. The Town Council has tasked the Community Housing Program Director to, among other things, identify and acquire lots for community housing development and general land banking.

Given the competitive real estate market, recent experience has proven it is difficult and inefficient for the Community Housing Program Director to identify property suitable for community housing and then wait several weeks for Town Council to provide direction to place an offer on the identified property.

Discussion

The proposed Resolution would delegate to the Community Housing Program Director the authority to enter into agreements to purchase real estate on behalf of the Town. Such authority is limited, however, in that all such agreements must contain the following condition:

> "This contract has been executed by the Community Housing Program Director of Buyer but is conditional upon ratification by the Town Council of Mountain Village at the next regular public meeting of the Council that is scheduled to occur at least 48 hours after MEC. Should the Town Council fail to ratify the contract, then it shall be null and void, and the Earnest Money shall be fully refunded to Buyer."

Any such contract lack this condition would be null and void as the Community Housing Program Director lacks the authority to enter into such agreements on behalf of the Town.

Financial Implications

Although the acquisition of community housing sites has financial implications, the Resolution in and of itself does not carry with it a financial impact.

Staff

Staff recommends adoption of the proposed Resolution.

Proposed Motion

"I move to approve the proposed resolution delegating to the Community Housing Program Director the authority to enter into agreements to purchase real estate, subject to certain conditions."

TOWN OF MOUNTAIN VILLAGE, COLORADO
RESOLUTION NO. 2021-___

AUTHORIZING THE HOUSING MANAGER TO ENTER INTO REAL ESTATE CONTRACTS ON THE CONDITION SUCH CONTRACTS ARE APPROVED BY TOWN COUNCIL OR THE HOUSING AUTHORITY

WHEREAS, the Town Council of the Town of Mountain Village (the "Town"), pursuant to the Town's Home Rule Charter Section 3.6(b), has the authority to establish land use standards to provide for the present and future needs of the Town; and

WHEREAS, the Town Council recently created the position of Community Housing Program Director in order to address the myriad of housing needs of the Mountain Village community; and

WHEREAS, the Town Council has tasked the Community Housing Program Director to, among other things, identify and acquire lots for community housing development and general land banking; and

WHEREAS, given the competitive real estate market, recent experience has proven it is difficult and inefficient for the Community Housing Program Director to identify property suitable for community housing and then wait several weeks for Town Council to provide direction to place an offer on the identified property; and

WHEREAS, the Town Council desires to authorize the Community Housing Program Director to make offers on for sale property, provided such offers are conditioned on Town Council approval.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO:

1. Recitals. The foregoing recitals are incorporated herein as findings and determinations of the Town Council of the Town of Mountain Village.

2. Approval. The Town Council hereby delegates to the Community Housing Program Director or their designee the authority to enter into agreements to purchase property for the purposes of facilitating community housing, provided all such agreements are conditioned in substantially the form set forth below:

> "This contract has been executed by the Community Housing Program Director of Buyer but is conditional upon ratification by the Town Council of Mountain Village at the next regular public meeting of the Council that is scheduled to occur at least 48 hours after MEC. Should the Town Council fail to ratify the contract, then it shall be null and void, and the Earnest Money shall be fully refunded to Buyer."

3. Effective Date. This Resolution shall take effect upon adoption hereof.

ADOPTED AND APPROVED by the Town Council at a regular public meeting held on the 21st day of October 2021.

TOWN OF MOUNTAIN VILLAGE,
TOWN COUNCIL

By:_____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

APPROVED AS TO FROM:

_____
Paul Wisor, Town Attorney

Agenda Item No. 14
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: Paul Wisor, Town Attorney; Jim Loebe, Transit and Recreation Director
DATE: October 9, 2021
RE: Public Transit Vehicle Transfer Agreement with SMART

Summary

Town staff proposes to enter into an agreement with SMART pursuant to which the Town will transfer five transit vehicles to SMART so SMART can better serve the Town and region as a whole.

Background

The Town acquired five transit vehicles for purposes of transporting Town staff and the general public between Montrose, the West End, and Cortez and the Town. These vehicles were acquired through an FTA 5339 matching grant. SMART is in the process of expanding its services, and it will be taking over the routes serviced by these vehicles.

Discussion

In the interest of efficiency, the Town and SMART believe it would be in both parties' interest to enter into a Transfer Agreement whereby the Town transfers the transit vehicles to SMART and SMART assumes ownership and maintenance responsibilities for the vehicles.

Financial Implications

The Town acquired the vehicles through an FTA 5339 grant, so SMART will reimburse the Town for the Town's proportionate share of contributed to the acquisition of the funds that can be attributed to the future use of the vehicles, which amounts to $1,419.40 per vehicle or $7,097.00 total.

Staff

Staff recommends approval of the Transfer Agreement.

Proposed Motion

"I move to approve the Transfer Agreement by and between the Town and SMART for the conveyance of five, transit vehicles."

PERSONAL PROPERTY TRANSFER AGREEMENT

This Personal Property Transfer Agreement ("Agreement") is made and entered into as of this ____ day of October 2021, by and between the Town of Mountain Village, Colorado, a Colorado municipal corporation ("Transferor" or "Town"), and the San Miguel Authority for Regional Transportation, a political subdivision of the State of Colorado ("Recipient").

RECITALS

WHEREAS, Transferor is the owner of personal property consisting of five public transit vehicles currently owned by and located in the Town as fully described in Exhibit A attached hereto and incorporated herein by reference ("Property");

WHEREAS, Transferor now intends and desires to transfer to Recipient, and Recipient intends and desires to accept, the Property according to the terms set forth in this Agreement.

NOW, THEREFORE, the parties hereto agree as follows:

1. Recitals. The foregoing recitals are incorporated by reference herein as affirmative and material representations and acknowledgments of the parties.

2. Traansfer and Acceptance. Transferor agrees to donate, convey, and transfer to Recipient, and Recipient agrees to receive and accept from Transferor, all of the Transferor's right, title, and interest in and to the Property subject to the terms, conditions, and provisions of this Agreement.

3. Parties and Property.

3.1 **Transferor's Intent**. Transferor intends to transfer the Property to Recipient to support regional transportation of commuting employees.

3.2 **Recipient.** As provided herein, Recipient will take title to the Property as sole owner of the Property clear of any liens or encumbrances.

3.3 **Property**. The Property includes five transit vehicles, as set forth in Exhibit A attached hereto.

4. Terms of Transfer.

4.1 **Permanent Transfer**. Transferor shall permanently convey the Property, and title thereto will transfer to Recipient as of the dated first written above.

4.2 **Title and Insurance**. Upon execution of this Agreement, the Recipient agrees to pay for all necessary fees and costs associated with the transfer of titles and licenses for the Property. Transferor will release Division of Motor Vehicles titles to these vehicles to Recipient, at the time of vehicle transfer. Recipient shall promptly remove the Transferor as security interest

holder on titles and change ownership from Transferor to Recipient by updating title records with the Division of Motor Vehicles, registering the vehicles under Recipient's ownership, and paying any and all fees associated with the transfer of titles and registrations.

4.3 Transferor shall provide Recipient with copies of prior maintenance and repair records for the vehicle in paper or electronic format.

4.4 Recipient further hereby covenants, promises and agrees that all necessary maintenance, upkeep, and insurance of the Property is the responsibility of the Recipient.

4.5 **AS-IS**. Transferor certifies to the best of the Transferor's knowledge that the odometer reading listed in Exhibit A reflects the actual mileage of the Property. The Transferor warrants to Recipient that the Transferor has good and marketable title to the Property, full authority to transfer said Property. The Property is transferred free of all liens, encumbrances, liabilities, and adverse claims, of every nature and description whatsoever. Transferor has no knowledge of any hidden defects in and to the Property, and believes to the best of Transferor's knowledge that the Property transferred is in good operating condition. Said Property is otherwise transferred "AS-IS" condition with no warranty as its intended use and purpose.

4.6 Recipient shall ensure that the vehicles are used for the purpose of the original FTA or FASTER Grant; specifically, for the transportation of the public.

4.7 Recipient accepts the responsibility of continued compliance with the federal and state requirements that are bound to the assets transferred from the Town; to include the remaining federal or state interest in the vehicles.

4.8 Recipient shall run a minimum of three van pool routes which arrive / depart from Market Plaza in the Town of Mountain Village on a schedule as outlined in Exhibit B or as deemed viable by demand and qualified driver availability.

5. Local Share Reimbursement;

5.1 Recipient shall reimburse the Town in the amount of $7,097.00 for its proportionate remaining local interest funding FTA 5339 Grant contribution for the Property. Recipient agrees to pay the Town within 30 days of receipt the Property.

6. Miscellaneous.

6.1 Voluntary Agreement. This Agreement is the voluntary and contractual agreement of Transferor and Recipient.

6.2 Waiver of Defects. In executing this Agreement, Transferor waives all objections it may have concerning defects, if any, in the formalities whereby

it is executed or concerning the procedure, substance, and form of the ordinances or resolutions adopting this Agreement.

6.3 Modifications. This Agreement shall not be amended, except by subsequent written agreement of the parties.

6.4 TABOR. Any monetary obligations of Recipient herein are subject to all requirements and limitations of the Colorado Constitution including but not limited to annual budgeting and appropriation procedures. Further, no provision of this Agreement shall be construed or interpreted: i) to directly or indirectly obligate the Town to make any payment in any year in excess of amounts appropriated for such year; ii) as creating a debt or multiple fiscal year direct or indirect debt or other financial obligation whatsoever within the meaning of Article X, Section 6 or Article X, Section 20 of the Colorado Constitution or any other constitutional or statutory limitation or provision; or iii) as a donation or grant to or in aid of any person, company, or corporation within the meaning of Article XI, Section 2 of the Colorado Constitution.

6.5 Authority. Each person signing this Agreement represents and warrants that he or she is fully authorized to enter into and execute this Agreement, and to bind the party it represents to the terms and conditions hereof.

6.6 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which, when taken together, shall be deemed one and the same instrument.

6.7 Invalid Provision. If any provisions of this Agreement shall be determined to be void by any court of competent jurisdiction, then the remainder of this Agreement shall be interpreted to give force and effect, as fully as possible, to the intent of the parties as evidenced by the original terms and conditions of this Agreement, including the invalidated provision.

6.8 Governing Law. The laws of the State of Colorado shall govern the validity, performance, and enforcement of this Agreement. Should either party institute legal suit or action for enforcement of any obligation contained herein, it is agreed that the venue of such suit or action shall be in San Miguel County, Colorado.

AGREED TO by the parties on the date first set forth above.

DONOR, Town of Mountain Village

By: _____
Paul Wisor, Interim Town Manager

RECIPIENT, SMART

By: _____
David Averill. Executive Director

EXHIBIT A

Property Description

TMV ID	TITLE	YEAR	MAKE	MODEL	VIN	PURCHASE PRICE	CURRENT VALUE	MILEAGE
5512-21	50E088583	2015	CHEVROLET	2500 EXPRESS VAN	1GAZGZFF4F1104988	$26,882.50	$7,104	152,000
5512-22	50E088587	2015	CHEVROLET	2500 EXPRESS VAN	1GAZGZFFOF1104924	$26,882.50	$7,104	157,500
5512-23	50E088586	2015	CHEVROLET	2500 EXPRESS VAN	1GAZGZFF4F1102867	$26,882.50	$7,104	173,600
5512-24	50E088584	2015	CHEVROLET	2500 EXPRESS VAN	1GAZGZFF6F1104975	$26,882.50	$7,104	165,500
5512-25	50E088585	2015	CHEVROLET	2500 EXPRESS VAN	1GAZGZFF1F1102499	$26,882.50	$7,104	177,500

EXHIBIT B

ROUTE	ARRIVAL TMV	DEPARTURE TMV	FREQUENCY
MONTROSE	8:00AM	5:00PM	M-F Year Round
MONTROSE	7:00AM	5:30PM	7 Days Year Round
WEST END	7:00AM	5:30PM	7 Days Year Round
MONTROSE	5:30AM	4:00PM	7 Days Winter Only
WEST END	5:30AM	4:00PM	7 Days Winter Only

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 728-1392

Agenda Item # 15

TO: Mountain Village Town Council

FROM: Michelle Haynes, Planning and Development Services Director

FOR: October 21, 2021

DATE: October 15, 2021

RE: First Reading of an Ordinance regarding a rezone and density transfer located at Lot 27A, Belvedere Phase III Development, Parcel Three-R, 112 Lost Creek Lane, Mountain Village to develop 19 condominium units, Haynes, 30 minutes, quasi-judicial

---

Executive Summary
The applicant requests a rezone and density transfer on parcel three-R, the third phase of Belvedere's master development plan and property, from 17 condominiums, 10 lodge and 2 efficiency lodge units, to 19 condominiums and 2 employee condominiums. They are actively working with the HOA to receive approval for 2 employee condominiums. They request that if provided, this can satisfy the affordable housing mitigation for the project. In the event HOA approval does not occur for the additional 2 employee condominiums, the affordable housing mitigation ordinance will apply.

PROJECT GEOGRAPHY

Legal Description: Parcel Three-R, Belvedere Park Condominiums, A Common Interest Community, According To The Map Recorded June 15, 2006 In Plat Book 1 At Page 3674, And As Defined And Described In The Declaration Of Covenants, Conditions And Restrictions (Belvedere Park Condominiums, A Colorado Common Interest Ownership Community) Recorded June 29, 2004 Under Reception No. 367339, County Of San Miguel, State Of Colorado.
Address: TBD Lost Creek Lane
Applicant/Agent: Idarado Real Estate Co., & James Mahoney, attorney
Owner: TCH Belvedere Phase III LLC
Zoning: Village Center
Existing Use: Condominium Use
Proposed Use: Development of Phase III with 19 condominiums and two employee condominiums
Lot Acreage 1.58 acres in total (all three phases)
Adjacent Land Uses:

- **North:** multi-family, village center
- **South:** residential, vacant
- **East:** multi-family, village center
- **West:** multi-family

ATTACHMENTS

A. Ordinance
B. Applicant's Submittal Materials (narrative and Improvement Location Certificate)
C. Topographic Survey dated 2006
D. Belvedere Original Condominium Map Site Plan 2006
E. Planning Director Interpretation dated 8.30.2021

TOWN COUNCIL WORKSESSION

The applicant held a worksession with Town Council on August 19, 2021 to discuss the possible density transfer and rezone and future development plan.

DESIGN REVIEW BOARD RECOMMENDATION

On October 7, 2021, the Design Review Board provided a recommendation for Town Council to approve the rezone and density transfer with additional direction that two employee condominiums be provided as part of project.

ASSOCIATED FORMATIVE RECORD DOCUMENT

- Bridge Construction and Maintenance Agreement 10.18.2000
- 2004 Development Agreement 6.18.2004
- 2004 Master Condominium Map
- 2004 Master Declarations
- Prior approved Phase III Design Plans 2006 (expired)

Figure 1. Vicinity Map

PURPOSE

The applicant seeks approval for a density transfer and rezone application to rezone Belvedere Phase III from 17 condo's, 10 lodges and 2 efficiency lodges to 29 condominiums. Phase III would build 19 condominiums with 10 condominiums already developed through Phase I & II.

SITE HISTORY

Belvedere Park Condominiums Master Development plan was approved in 2004, to be developed in three phases. The Land Use Ordinance (LUO) and now the Community Development Code

that replaced the LUO, allowed for properties to be developed in a phased manner so long as a Master Development Plan was approved for the project. A Master Development Plan was approved in 2004. Pursuant to the approved Master Development Plan, Phase I was developed with three condominium units in 2005. Phase II was developed with 7 condominium units in 2006. Phase III had an approved development plan that included the construction of the then remaining density of 17 condominiums, 10 lodges and 2 efficiency lodges. The associated design review approval of Phase III expired in 2007.

HISTORY OF BELVEDERE PHASE III

Belvedere, inclusive of Phase III, had three prior rezones of unit designations

2004-Ordinance-2004-0511-04

Current Zoning		Rezone	
16	condominium	29	condominiums
31	lodge	0	lodge
71	efficiency lodge	0	efficiency lodge

2005-Resolution-2005-0712-13

Current Zoning		Rezone	
29	condominium	28	condominiums
0	Lodge	2	lodge

2006-Resolution-2006-0509-03

Current Zoning		Rezone	
28	condominium	27	condominiums
2	lodge	10	lodge
0	efficiency lodge	2	efficiency lodge

Resolution 2006-0509-03 was the last rezone and includes the ten condominium units already constructed in Phases I and II. Phase III was intended to be constructed in 2006-2007 but subsequently the design plans expired and the project was never realized. This was around the time of the Great Recession that technically began in 2007. We believe that with the rezone in 2006, there was some discussion that the rezone and subsequent development would be a partnership with the Lumiere. That agreement was never realized and the Great Recession occurred shortly thereafter. Subsequent to 2006, the HOA amended its covenants to cap development of Phase III at 19 condominium units.

Proposed Rezone

Current Zoning		Proposed Rezone	
27	Condominium	29	condominiums
10	Lodge	0	lodge
2	efficiency lodge	0	efficiency lodge

*10 condominiums are already constructed, the rezone would need to increase the condominium density by two units,and reduce the lodge and efficiency lodge by placing the density in the density bank as unassigned density. (Please note we indicate 10 condominiums built for the purposes of this memo. We have a pending application to separate one unit back to two units that had recently been combined via rezone and density transfer and a building permit that intends to revert back.)

VILLAGE CENTER ZONING PURSUANT TO THE CDC

The applicant intends to construct pursuant to the underlying zoning. Zoning requirements are listed below.

Village Center Zoning	Limitation
Lot Coverage	No lot coverage limitation
Parking	Parking must be in a parking garage below grade in the Village Center
	1 parking space per condominium unit
	1-5 common HOA spaces for service vehicles and deliveries
Building Heights	60 feet maximum height
	48 feet maximum average height

REZONE/DENSITY TRANSFER AND MASTER DEVELOPMENT PLAN APPLICATIONS

The applicant seeks approval of the proposed rezone/density transfer with a condition attached to any approval of the rezone/density transfer requiring a Master Plan Amendment and design review application be submitted and approved within 18 months of any approval of the rezone/density transfer application. If the rezone/density transfer application is approved, the applicant would then seek to amend the previously approved Master Development Plan with a concurrent two-step design review application.

ANTICIPATED PROCESS STEPS

The typical staff recommended process would be as follows:

- Rezone and Density Transfer Application. Class 4 application. Recommendation from the Design Review Board. Two readings of an ordinance by Town Council.
- Two-step design review process and concurrently amendment to the Master Development Plan. There would be an initial and final design review and concurrent amendment to the Master Development Plan.

CONFORMANCE WITH THE COMPREHENSIVE PLAN

The 2011 Comprehensive Plan does not list any site-specific policies for Parcel N, Lot 27; however, Belvedere is labeled Parcel N, Lot 27 and listed in the Village Center Development Table 7. with the following site-specific requirements:

Parcel Designation	Target Maximum Building Height	Target Hotbed Mix	Target Condo Units	Target Dorm Units*	Target Restaurant/ Commercial Area	Total Target Units
Parcel M Lot 30	78.5	88	12	2	0	102
Parcel N Lot 27	78.5	64	9	2	0	75
Parcel O TSG Clubhouse	57.5	51	7	1	0 (Private Club OK)	59

According to the Comprehensive Plan if a property is designated as a flagship hotel site, it must be developed pursuant to the PUD Zone District and consistent with general conformance with the Comprehensive Plan. The table would require 78.5 feet in height and a significantly larger amount of units with a mix of hotbeds, condominiums and employee dorms equaling generally around 75 units total.

A Planning Director Interpretation (consistent with CDC Section 17.1.8) draft was circulated to Town Council as part of the worksession application and subsequently formalized on August 30, 2021 (attached as exhibit C.). The interpretation is specific to the applicability of the Village Center

Development table to the proposed project in light of the previously approved Master Development Plan. In review of the Village Center Development Table, and all the development tables (Table 7, 8 & 9, Village Center, Town Hall and the Meadows respectively), the town did not include lots that either already had a site-specific development plan (like Rosewood (Lots 126R and 152) and 109R (The Mountain Village Hotel PUD), or a Master Development Plan (like Elkstone Lot 600A). As a result, inclusion of Lot 27A in the Village Center Development Table conflicts with the exclusion of other lots with site specific development plans or Master Development Plans. This conclusion is bolstered by the fact the Comprehensive Plan notes Parcel N Lot 27 has "no site-specific policies" associated with the property. In summary, inclusion of Parcel N, Lot 27 is ruled in error because it is governed by the Master Development Plan.

Finally, although the Town does not enforce private covenants, the Master HOA at Belvedere has limited the development of Phase III to 19 condominium units. The implication is that the HOA would not otherwise consent to an application if it otherwise does not conform with their desired density and development. The applicants propose development in alignment with the HOA's desires with the caveat that the applicant is seeking consent for 2 employee condominium units in addition to the 19 condominium units.

REZONE AND DENSITY TRANSFER CRITERIA

The following criteria shall be met for the review authority to approve a rezoning development application:

a. **The proposed rezoning is in general conformance with the goals, policies and provisions of the Comprehensive Plan;**

The rezone is in general conformance with the goals, policies and provisions of the Comprehensive Plan.

p. 9, "Concentrate development in high density areas to achieve economic sustainability and vibrancy."

There are no site specific policies
Table 7. Does not apply per the Planning Director Interpretation

b. **The proposed rezoning is consistent with the Zoning and Land Use Regulations;**

The applicants proposed to build consistent with the underlying zoning and do no propose any Variances nor a Planned Unit Development application.

c. **The proposed rezoning meets the Comprehensive Plan project standards;**

These standards apply to Planned Unit Development applications and are otherwise reviewed with design review (see p. 95 of the CDC for Comprehensive Plan Project Standards)

d. **The proposed rezoning is consistent with public health, safety and welfare, as well as efficiency and economy in the use of land and its resources;**

This criterion is met.

e. **The proposed rezoning is justified because there is an error in the current zoning, there have been changes in conditions in the vicinity or there are specific policies in the Comprehensive Plan that contemplate the rezoning;**

Not applicable

f. **Adequate public facilities and services are available to serve the intended land uses;**

This criterion will be met with a forthcoming building design.

g. **The proposed rezoning shall not create vehicular or pedestrian circulation hazards or cause parking, trash or service delivery congestion; and**

This criterion will be met with a forthcoming site and building design.

h. **h. The proposed rezoning meets all applicable Town regulations and standards**.

The applicants indicated they will construct pursuant to the underlying zone district regulations of Village Center.

Density Transfer Criteria:

a. **The criteria for decision for a rezoning are met, since such density transfer must be processed concurrently with a rezoning development application (except for MPUD development applications);**

This is being met.

b. **The density transfer meets the density transfer and density bank policies; and**

The applicants must demonstrate that they have acquired the necessary two condominium densities, 6 person equivalent, prior to recordation of the ordinance. The applicants will transfer the remaining lodge and efficiency lodge density into the density bank.

c. **The proposed density transfer meets all applicable Town regulations and standards.**

This is being met.

AFFORDABLE HOUSING REQUIREMENT

The applicants are actively working with the HOA to add two employee condominiums to the project, consistent with direction given at the Council worksession and the DRB's recommendation. The Town is actively pursuing a housing mitigation methodology that will be adopted by ordinance in the coming months. The applicants request that the two emplpyee condominiums satisfy their affordable housing mitigation in lieu of the specific terms of the housing mitigation ordinance being applied by Town Council, which ordinance would otherwise retroactively apply to this project.

If the applicants are not able to receive the HOA consent to add two employee condominiums, the applicants agree that the affordable housing mitigation ordinance would then apply to the project.

ADDITIONAL REZONE REQUEST

The applicants have requested to rezone either the lodge zoning designations or the efficiency lodge zoning designations to employee condominium. Staff is evaluating this request and its possible ramifications.

RECOMMENDED MOTION

I move to approve upon first reading of an ordinance a density transfer and rezone application at Lot 27A, Belvedere Phase III, 112 Lost Creek Lane, Parcel 3R from 17 condominiums, 10 lodge units and 2 efficiency lodge units, to 19 condominium units and two (2) employee condominiums.

With the following findings:

1. *Phase I has 3 constructed condominiums, Phase II has 7 constructed condominiums and Phase III proposes 19 condominiums and two employee condominiums. In total the property in aggregate will have 29 condominium zoning designation units and two employee condominums.*

2. *10 lodge units and 2 efficiency lodge units will be transferred to the density bank.*

3. *The applicant will acquire two (2) condominiums zoning designation units from the density bank and demonstrate the purchase/acquisition prior to recordation of the ordinance.*

4. *The application meets the rezone and density transfer criteria outlined in this memo.*

5. *The lot list will be updated to reflect the rezone approval.*

6. *The associated density certificate/s will be voided once the density is assigned to the lot concurrent with recordation of the ordinance.*

With the following conditions:

1. *The ordinance reflects that a Master Development Plan amendment and design review be submitted within 18 months of the rezone and density transfer approval.*
2. *The applicant affirms the design of the building will be consistent with the underlying zone district regulations.*
3. *The owner of record of density in the density bank, once transferred, shall be responsible for all dues, fees and any taxes associated with the assigned density and zoning until such time as the density is either transferred to a lot or another person or entity.*
4. *If the applicant is unable to receive HOA consent to add two employee condominium units, the applicants will comply with the Affordable Housing Mitigation Ordinance (which applies the mitigation in arears) and or affordable housing mitigation methodology when adopted.*

/mbh

ORDINANCE NO. 2020-___

ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO APPROVING A REZONE AND DENSITY TRANSFER ON LOT 27A PHASE THREE REZONING AND PROVIDING A DENSITY TRANSFER FROM 17 CONDOMINIUMS, 10 LODGE UNITS AND 2 EFFICIENCY LODGE UNITS TO 19 CONDOMINUM UNITS AND TWO EMPLOYEE CONDOMINUMS.

RECITALS

A. Idarado Real Estate Co. ("**Owners**') have submitted to the Town: (1) a rezoning and density transfer development application for a rezone of Phase III, Parcel Three-R, Belvedere Condominiums (Lot 27A) from 17 condominium units, 10 lodge units and 2 efficiency lodge units to 19 condominium units; ("**Applications**") pursuant to the requirements of the Community Development Code ("**CDC**").

B. Idarado Real Estate Co. is the owners of Phase III, Parcel 3R, Belvedere Condominiums.

C. Phase One built three (3) condominum units. Phase II built seven (7) condominum units.

D. Phase III's current zoning includes 17 condominum units, 10 (ten) lodge units and two (2) efficiency lodge units;

E. The Owner intends to purchase two condominium zoning designation units from the density bank, then place 10 lodge units and 2 efficiency lodge units into the density bank as part of this rezone and density transfer application.

F. The Owner intends to construct 19 condominums and two (2) employee condominums on Phase Three.

G. The two employee condominiums, when constructed, satisfy the affordable housing mitigation for the project.

H. If the two employee condominums are not constructed onsite, the affordable housing mitigation ordinance and/or methodology will apply to the project in order for the affordable housing mitigation to be satisfied.

I. The Property has the following zoning designations pursuant to the Official Land Use and Density Allocation List and zoning as set forth on the Town Official Zoning Map:

Figure 1. Zoning Designation for Phase I, Lot 27A Belvedere (no change)

Phase I	Zone District	Zoning Designation	Actual Units	Person Equivalent
	Village Center	Condominium	3	9

Figure 2. Zoning Designation for Phase II, Lot 27A Belvedere (no change)

Phase II	Zone District	Zoning Designation	Actual Units	Person Equivalent
	Village Center	Condominium	7	21

Figure 3. Zoning Designations Phase III Current, Lot 27A, Belvedere, Parcel Three0R

Phase III	Zone District	Zoning Designation	Actual Units	Person Equivalent	Total Person Equivalent
Parcel 3R	Village Center	Condominium	17	3	81
	Vilage Center	Efficiency Lodge	2	.5	1
	Vilage Center	Lodge	10	.75	7.5

Figure 4. Zoning Designations Phase III Proposed, Lot 27A, Belvedere, Parcel Three-R

Lot	Zone District	Zoning Designation	Actual Units	Person Equivalent	Total Person Equivalent
27A, Parcel 3R	Village Center	Condominium	19*	3	57
		Employee Condominium	2	3	6

*Two condominium unit designations will be purchased from the density bank and transferred onto the property. The existing lodge and efficiency lodge density will be transferred into the density bank.

Figure 5. Proposed Zoning Designation for Phases I, II and III, Belvedere in Total

Lot	Zone District	Zoning Designation	Actual Units	Person Equivalent	Total Person Equivalent
27A	Village Center	Condominium	29	3	87
		Employee Condominium	2	3	6

J. At a duly noticed public hearing held on October 7, 2021, the DRB considered the Applications, testimony and public comment and recommended to the Town Council that the Applications be approved with conditions pursuant to the requirement of the CDC.

K. At its regularly scheduled meeting held on October 21, 2021 the Town Council conducted a first reading of an ordinance and set a public hearing, pursuant to the Town Charter.

L. On November 18, 2021 Town Council held a second reading and public hearing on the ordinance and approved with conditions the Application.

M. The meetings were duly publicly noticed as required by the CDC Public Hearing Noticing Requirements, including but not limited to notification of all property owners within 400 feet of the Property, posting of a sign and posting on the respective agendas.

N. The Town Council hereby finds and determines that the Applications meet the Rezoning Process Criteria for Decision as provided in CDC Section 17.4.9(D).

O. The application was approved with the following findings as follows:

1. Phase I has 3 constructed condominiums, Phase II has 7 constructed condominiums and Phase III proposes 19 condominiums and two employee condominiums. In total the property will have 29 condominium zoning designation units and two employee condominums.

2. 10 lodge units and 2 efficiency lodge units will be transferred to the density bank.

3. The applicant will acquire two (2) condominiums zoning designation units from the density bank and demonstrate the purchase/acquisition of such units prior to recordation of the ordinance.

4. The Application meets the rezone and density transfer criteria of the CDC.

5. The lot list will be updated to reflect the rezone approval.

6. The associated density certificate/s will be voided once the density is assigned to the lot concurrent with recordation of the ordinance.

NOW, THEREFORE, BE IT RESOLVED THAT THE TOWN COUNCIL HEREBY APPROVES THE APPLICATION SUBJECT TO THE FOLLOWING CONDITIONS.

1. The ordinance reflects that a Master Development Plan amendment and design review be submitted within 18 months of the rezone and density transfer approval.
2. The applicant affirms the design of the building will be consistent with the underlying zone district regulations.
3. The owner of record of density in the density bank, once transferred, shall be responsible for all dues, fees and any taxes associated with the assigned density and zoning until such time as the density is either transferred to a lot or another person or entity.
4. If the applicant is unable to receive HOA consent to add two employee condominium units, the applicants will comply with the Affordable Housing Mitigation Resolution (which applies the mitigation in arears) and or affordable housing mitigation methodology when adopted.

Section 1. Effect on Zoning Designations

A. This Ordinance does not change any other zoning designation on the Properties it only affects Phase III, Parcel Three-R.

Section 2. Ordinance Effect

All ordinances, of the Town, or parts thereof, inconsistent or in conflict with this Ordinance, are hereby repealed, replaced and superseded to the extent only of such inconsistency or conflict.

Section 3. Severability

The provisions of this Ordinance are severable and the invalidity of any section, phrase, clause or portion of this Ordinance as determined by a court of competent jurisdiction shall not affect the validity or effectiveness of the remainder of this Ordinance.

Section 4. Effective Date

This Ordinance shall become effective on _____ , 2021 following public hearing and approval by Council on second reading.

Section 5. Public Hearing

A public hearing on this Ordinance was held on the __st of _____ 2021 in the Town Council Chambers, Town Hall, 455 Mountain Village Blvd, Mountain Village, Colorado 81435.
INTRODUCED, READ AND REFERRED to public hearing before the Town Council of the Town of Mountain Village, Colorado on the __th day of _____ 2021.

TOWN OF MOUNTAIN VILLAGE

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

By: _____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

HEARD AND FINALLY ADOPTED by the Town Council of the Town of Mountain Village, Colorado this __st day of _____ 2021

TOWN OF MOUNTAIN VILLAGE
TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

By: _____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

Approved as To Form:

_____
Paul Wisor, Town Attorney

I, Susan Johnston, the duly qualified and acting Town Clerk of the Town of Mountain Village, Colorado ("Town") do hereby certify that:

1. The attached copy of Ordinance No._____ ("Ordinance") is a true, correct and complete copy thereof.

2. The Ordinance was introduced, read by title, approved on first reading with minor amendments and referred to public hearing by the Town Council the Town ("Council") at a regular meeting held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on _____, 2021, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**"Yes"**	**"No"**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Harvey Mogenson				
Jack Gilbride				

3. After the Council's approval of the first reading of the Ordinance, notice of the public hearing, containing the date, time and location of the public hearing and a description of the subject matter of the proposed Ordinance was posted and published in the Telluride Daily Planet, a newspaper of general circulation in the Town, on _____, 2021 in accordance with Section 5.2b of the Town of Mountain Village Home Rule Charter.

4. A public hearing on the Ordinance was held by the Town Council at a regular meeting of the Town Council held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on _____, 2021. At the public hearing, the Ordinance was considered, read by title, and approved without amendment by the Town Council, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**"Yes"**	**"No"**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Harvey Mogenson				
Jack Gilbride				

5. The Ordinance has been signed by the Mayor, sealed with the Town seal, attested by me as Town Clerk, and duly numbered and recorded in the official records of the Town.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town this _____ day of _____, 2021.

_____
Susan Johnston, Town Clerk

(SEAL)

Idarado Real Estate Company
128B S Oak
Telluride, CO
970-708-1497

August 25, 2021

To: Mountain Village Design Review Board and Town Council
From: Idarado Real Estate Company and James Mahoney P.C.
For: October 7, 2021 DRB Meeting and October 21, 2021 Town Council Meeting
RE: Density Transfer Application Narrative for Lot 27A, Parcel Three-R, Belvedere Phase III Development, 112 Lost Creek Lane, Mountain Village

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PURPOSE OF APPLICATION

Idarado Real Estate Company has Parcel Three-R (the "Property") under contract with the intent to purchase and develop Belvedere Phase III, the last phase of development on the Property. The applicant seeks to amend the Master Plan of Parcel 27A and bring the density in line with what is approved by the Belvedere Park Owners Association (the "Master Association"), which is 19 total condominium units for Parcel Three-R.

SITE HISTORY

Lot 27A, Phases I, II, and III have had a long history resulting in conflicting zoning:

Date	May 2004	June 2004	May 2006	June 2006	2006	June 2011
Party	Town	HOA	Town	HOA	HOA	Town - Comp
Document	Ordinance-2004-0511-04 MASTER PLAN APPROVAL	Belvedere Park Condominiums Declaration	Density Transfer - Resolution-2006-0509-03	Belvedere Park Condominiums – First Amendment to Declaration	Belvedere Phase I and II built. Leaves 19 units remaining	Resolution-2011-0616-11 COMP PLAN Target
Condominium	29	29	27	29	19	9
Lodge			10			
Efficiency Lodge			2			
Hotbeds						64
Dorms						2
Total	**29**	**29**	**39**	**29**	**19**	**75**

2004:

- Belvedere Park Condominiums Master Development plan was approved in 2004, to be developed in three phases with an allowable 29 total units. The Land Use Ordinance (LUO) and now the Community Development Code that replaced the LUO, allowed for properties to be developed in a phased manner so long as a Master Development Plan was approved for the project.
- The Master Association codified 29 total allowable units in the Belvedere Park Condominiums Declaration in 2004.
- Pursuant to the approved Master Development Plan, Phase I was developed with three condominium units in 2005. Phase II was developed with 7 condominium units in 2006. This left Phase III with 19 possible units.

2006:

- Resolution 2006-0509-03 was a rezone that included the ten condominium units already constructed in Phases I and II. Phase III had an approved development plan that included the construction of 17 condominiums, 10 lodges and 2 efficiency lodges. The associated design review approval of Phase III expired in 2007.
- In 2006, the Master Association re-affirms that only 29 units total (19 units for Phase III) are allowed per the HOA Declaration and its First Amendment to the Declaration.

2011:

- Town of Mountain Village issues the Comprehensive Plan which addresses Lot 27A/Parcel Three-R in Table 7, Mountain Village Center Development Table. However, no site specific policies exist for Lot 27A/ Parcel Three-R, which creates further confusion for the Property's zoning. In August of 2021 the Town of Mountain Village Planning Director issued an official interpretation stating that development tables of the Comprehensive Plan are not applicable to properties with a prior existing Master Development Plan, which Belvedere Phase Three-R has had since 2004. This is discussed further in the CDC compliance section below.

REZONE/DENSITY TRANSFER APPLICATION

Our proposed rezone is to bring the town zoning in conformance with the Belvedere Park Condominiums Declaration, as well as the 2004 Master Plan Approval:

Current Zoning		Rezone	
27	Condominium	29	Condominiums
10	Lodge	0	Lodge
2	Efficiency Lodge	0	Efficiency lodge

10 condominiums are already constructed, bringing the rezone density for Phase III back to 19 units. The rezone would need to increase the condominium density by two units and reduce the lodge (-10) and efficiency lodge (-2) by placing the density in the density bank as unassigned density.

The applicant would like to seek approval of the proposed rezone/density transfer first. The applicant would be willing to consider a condition attached to any approval of the rezone/density transfer requiring a Master Plan Amendment and design review application be submitted and approved within 18 months of any approval of the rezone/density transfer application. This process optimizes the balance between time constraints, with the applicant under contract, with time for thoughtful and iterative design.

The following process steps were discussed and understood by Council in the work session on August 19, 2021:

- Rezone and Density Transfer Application. Class 4 application. Recommendation from the Design Review Board. Two readings of an ordinance by Town Council.
- Two-step design review process and concurrent amendment to the Master Development Plan following approval of Density Transfer by Town Council.

EMPLOYEE HOUSING UNITS

The proposed rezone does not include the addition of any employee housing units due to the applicant's timing constraints and the need to obtain Master Association approval for any additional employee housing units. The Applicant is pursuing the issue with the Master Association concurrently and would be willing to add an employee housing unit to this application if approved by the Master Association.

COMMUNITY DEVELOPMENT CODE COMPLIANCE ANALYSIS

Follows on the next page.

James Mahoney P.C.
www.telluriderlaw.com
James Mahoney, Esq.

To: Mountain Village Design Review Board and Town Council
From: Idarado Real Estate Company and James Mahoney P.C.
For: October 7, DRB Meeting and October 21, 2021 Town Council Meeting
RE: Analysis of CDC Criteria for the Density Transfer Application for Lot 27A, Parcel Three-R, Belvedere Phase III Development, 112 Lost Creek Lane, Mountain Village (the "**Application**").

In order to approve the Application, the DRB and ultimately the Mountain Village Town Council must consider the Application via the criteria set forth in the Community Development Code ("**CDC**") for a Density Transfer/Rezone as a Class 4 Application which are set forth in CDC section 17.4.10 as follows:

Class 4 Applications. The following criteria shall be met for the Review Authority to approve a density transfer:

a. The criteria for decision for a rezoning are met, since such density transfer must be processed concurrently with a rezoning development application (except for MPUD development applications);
b. The density transfer meets the density transfer and density bank policies; and
c. The proposed density transfer meets all applicable Town regulations and standards.

Criteria "a" is addressed below as there are multiple criteria within the rezone criteria. Criteria "b" is satisfied by meeting the density transfer and density bank policies which are set forth in Section 17.3.8 of the CDC and cover basic items related to density transfers and is satisfied as the applicant will acquire the two units of condominium density required to bring the number of condo units to 19 upon approval from the Town. The Applicant will complete the required documentation with the Town to place such density on the Property and will transfer the ten (10) lodge units and two (2) efficiency lodge units to the density bank and is willing to accept a condition of approval to ensure these actions occur on approval. Criteria "c" is met as the Application addresses all of the Town regulations and standards which apply as set forth in the Application, this narrative and the accompanying materials.

Rezone Criteria. Criteria "a" of the Density Transfer application requires that the criteria for a rezone application are also met. The Criteria for a rezone application are set forth in Section 17.4.9.C.3 as follows:

a. The proposed rezoning is in general conformance with the goals, policies and provisions of the Comprehensive Plan;
b. The proposed rezoning is consistent with the Zoning and Land Use Regulations;
c. The proposed rezoning meets the Comprehensive Plan project standards;
d. The proposed rezoning is consistent with public health, safety and welfare, as well as efficiency and economy in the use of land and its resources;
e. The proposed rezoning is justified because there is an error in the current zoning, there have been changes in conditions in the vicinity or there are specific policies in the Comprehensive Plan that contemplate the rezoning;
f. Adequate public facilities and services are available to serve the intended land uses;
g. The proposed rezoning shall not create vehicular or pedestrian circulation hazards or cause parking, trash or service delivery congestion; and
h. The proposed rezoning meets all applicable Town regulations and standards.

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The Application meets the criteria as follows:

a. The proposed rezoning is in general conformance with the goals, policies and provisions of the Comprehensive Plan;

The Town's Planning Director, Michelle Haynes, issued an official CDC interpretation regarding the applicability of Table 7, Mountain Village Center Development Table of the Comprehensive Plan to properties with a prior existing Master Development Plan. In simple terms the interpretation states that development tables of the Comprehensive Plan are not applicable to properties with a prior existing Master Development Plan which Belvedere Phase Three-R has had since 2004. Therefore, the target densities and flag designation set forth in Table 7 do not apply to this criterion and there are no site-specific policies for this Property in the Comprehensive Plan. However, this criterion is satisfied as the overall goals, policies and provisions of the Comprehensive Plan envision as the 19 condominium units fits within the diversity of the Village Center contemplated by the Comprehensive Plan, has the appropriate fit in the surrounding neighborhood (Comp Plan Pg. 35), and due to the popularity of whole unit rentals in the rental market provide lodging opportunities within the Village Center Sub Area which is a goal of the Comprehensive Plan.

b. The proposed rezoning is consistent with the Zoning and Land Use Regulations;

The proposed density transfer does not alter the zoning of the Property which is already zoned as Village Center which allows for a broad range of uses including multi-family dwellings and there is not change to the Land Use requested by the Application. The resulting development will comply with all Land Use Regulations including providing the required parking of one parking space per unit plus parking for HOA and other uses on site.

c. The proposed rezoning meets the Comprehensive Plan project standards;

There are no site-specific standards for this Property. Therefore, general standards of the Comprehensive Plan apply which relate to achieving density while minimizing visual impact, mass and scale that fits the site and other matters such as access and adequate facilities. The requested rezone/density transfer is actually a reduction in overall density which reduces the visual impact, mass and scale so that the resulting development will fit in with the surrounding properties such as Belvedere Phases One and Two as well as Lumiere and the Telemark buildings.

d. The proposed rezoning is consistent with public health, safety and welfare, as well as efficiency and economy in the use of land and its resources;

The Application is consistent with the public health, safety and welfare as the application is an overall reduction in density, adequate access and facilities exist and the resulting development will not result in any additional health safety or welfare concerns.

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e. The proposed rezoning is justified because there is an error in the current zoning, there have been changes in conditions in the vicinity or there are specific policies in the Comprehensive Plan that contemplate the rezoning;

This criterion is not all that applicable to a simple density transfer as there is no change in the underlying zoning however, the criteria is still meet as the applicant is simply cleaning up a disconnect between what has been approved by the Master Association and the density at the Town level.

f. Adequate public facilities and services are available to serve the intended land uses;

Adequate public facilities and services are available in access, water, sewer, fire protection and other similar public facilities and the overall reduction in density will not impact the adequacy of such facilities and services.

g. The proposed rezoning shall not create vehicular or pedestrian circulation hazards or cause parking, trash or service delivery congestion; and

The reduction in overall density will not create any vehicular or pedestrian circulation hazards, parking, trash or service delivery congestion as the access and facilities remains the same as would otherwise exist. The access to Belvedere Phase Three-R will be from Lost Creek between the Belvedere Phase One and Two buildings.

h. The proposed rezoning meets all applicable Town regulations and standards.

The Application meets all applicable Town regulations and standards.

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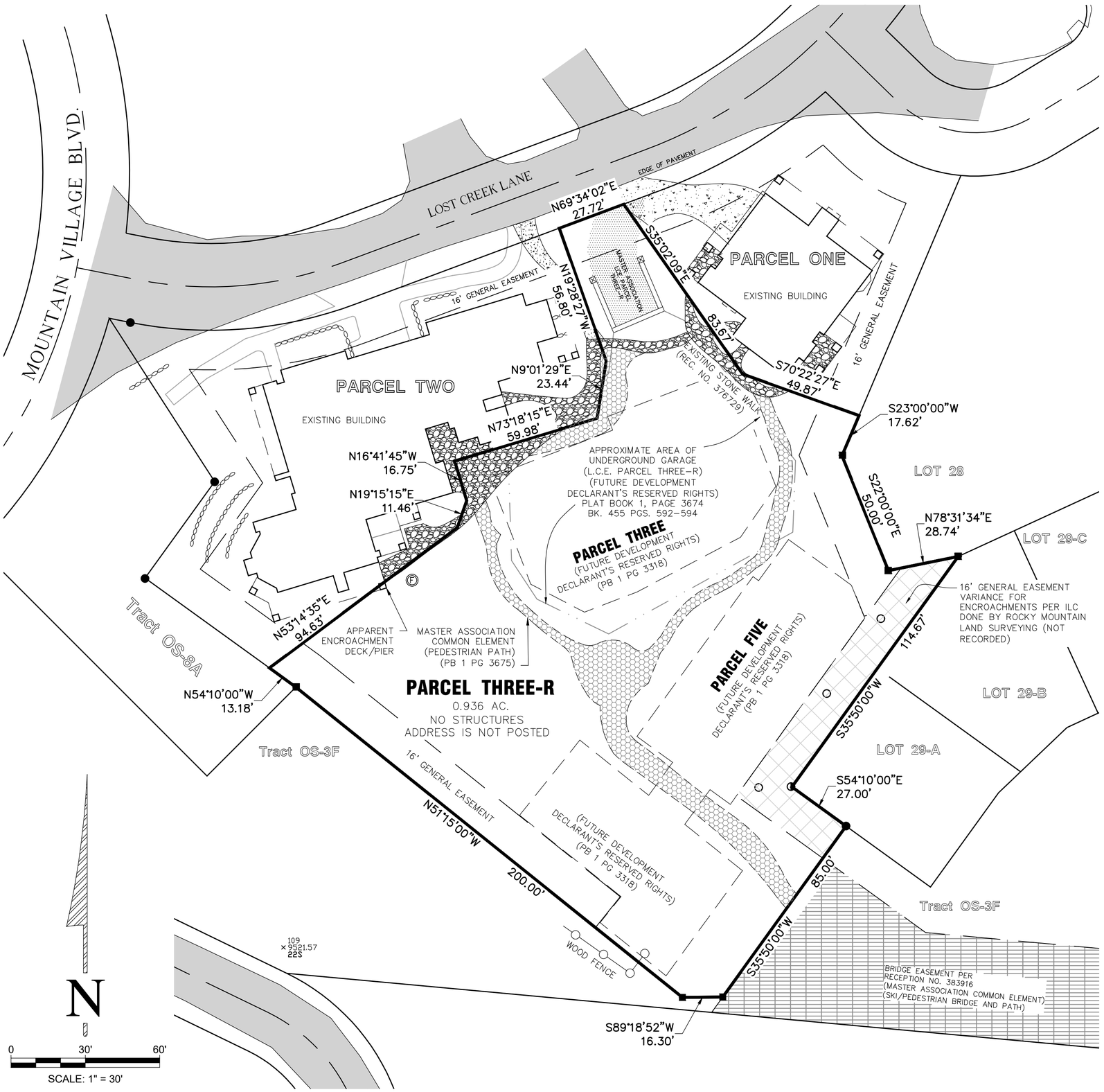


LEGEND

- FOUND REBAR & ALUMINUM CAP, LS 20632
- FOUND REBAR & ALUMINUM CAP, LS 24954
- FOUND REBAR & ALUMINUM CAP, LS 31155
- FOUND ALUMINUM CAP IN CONCRETE, CAP ILLEGIBLE
- Ⓕ FIRE PROTECTION SPRINKLER
- ASPHALT PAVEMENT
- INDICATES MASTER ASSOCIATION COMMON ELEMENT PLAT BOOK 1, PAGE 3674
- INDICATES MASTER ASSOCIATION LIMITED COMMON ELEMENT FOR PARCEL THREE-R PLAT BOOK 1, PAGE 3674
- INDICATES MASTER ASSOCIATION COMMON ELEMENT FOR BRIDGE EASEMENT PLAT BOOK 1, PAGE 3674

NOTICE:

According to Colorado Law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

NOTES:

1. According to Flood Insurance Rate Map 08113C0300 C dated September 30, 1988, this parcel lies within Flood Zone "X" (Areas determined to be outside the 500-year flood plain).
2. Easement research from Land Title Guarantee Company, Order No. ABS86008787, Effective Date 03/04/2019 at 5:00 P.M.
3. Lineal Units U.S. Survey Feet.
4. Improvements shown are from 4/2007 ILC, lot is completely snow covered. There is no evidence visible of any changes to the lot from the site inspection on 3/18/2019.
5. The use of this Improvement Location Certificate by any person or entity other than the person or entity certified to without the express permission of San Juan Surveying is prohibited.

PROPERTY DESCRIPTION:

Parcel Three-R, Belvedere Park Condominiums, A Common Interest Community, according to the Map recorded June 15, 2006 in Plat Book 1 at page 3674, and as defined and described in the Declaration of Covenants, Conditions, and Restrictions (Belvedere Park Condominiums, a Colorado Common Interest Ownership Community) recorded June 29, 2004 under Reception No. 367339,

County of San Miguel,
State of Colorado

IMPROVEMENT LOCATION CERTIFICATE

I hereby certify that this Improvement Location Certificate was prepared for Land Title Guarantee Company, Bariloche, LLC, and TCH Belvedere Phase Three, LLC, a Deleware Limited Liability Company, and that it is not a Land Survey Plat or Improvement Survey Plat, and that it is not to be relied upon for the establishment of fence, building, or other future improvement lines.

I further certify that the improvements on the above described parcel on this date, March 18, 2019, except utility connections, are entirely within the boundaries of the parcel, except as shown, that there are no encroachments upon the described premises by improvements on any adjoining premises, except as indicated and, there is no apparent evidence or sign of any easement crossing or burdening any part of said parcel, except as noted.

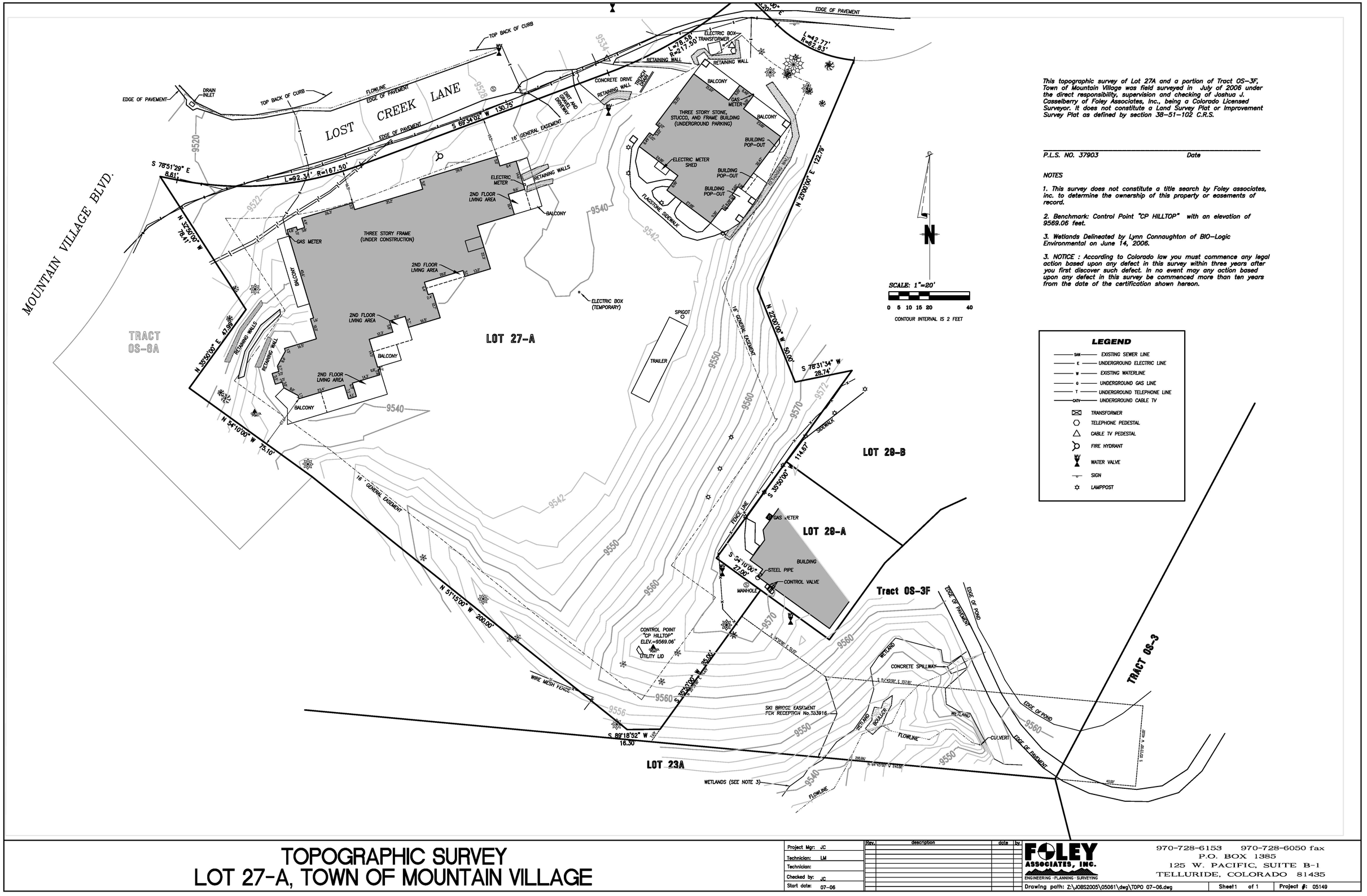
Christopher R. Kennedy, P.L.S. 36577
03/27/2019

COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR
CHRISTOPHER R. KENNEDY
03/27/19
36577

IMPROVEMENT LOCATION CERTIFICATE
PARCEL THREE-R, BELVEDERE PARK CONDOMINIUMS

SAN JUAN SURVEYING
SURVEYING * PLANNING
102 SOCIETY DRIVE TELLURIDE, CO. 81435
(970) 728 - 1128 (970) 728 - 9201 fax
office@sanjuansurveying.net

DATE:	3/22/2019
JOB:	03110
DRAWN BY:	ESS
CHECKED BY:	CRK
REVISION DATES:	
SHEET:	1 OF 1



This topographic survey of Lot 27A and a portion of Tract OS-3F, Town of Mountain Village was field surveyed in July of 2006 under the direct responsibility, supervision and checking of Joshua J. Casselberry of Foley Associates, Inc., being a Colorado Licensed Surveyor. It does not constitute a Land Survey Plat or Improvement Survey Plat as defined by section 38-51-102 C.R.S.

P.L.S. NO. 37903 *Date*

NOTES

1. This survey does not constitute a title search by Foley associates, inc. to determine the ownership of this property or easements of record.

2. Benchmark: Control Point "CP HILLTOP" with an elevation of 9569.06 feet.

3. Wetlands Delineated by Lynn Connaughton of BIO-Logic Environmental on June 14, 2006.

3. NOTICE : According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

LEGEND

- SAN — EXISTING SEWER LINE
- E — UNDERGROUND ELECTRIC LINE
- W — EXISTING WATERLINE
- G — UNDERGROUND GAS LINE
- T — UNDERGROUND TELEPHONE LINE
- CATV — UNDERGROUND CABLE TV
- TRANSFORMER
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- FIRE HYDRANT
- WATER VALVE
- SIGN
- LAMPPOST

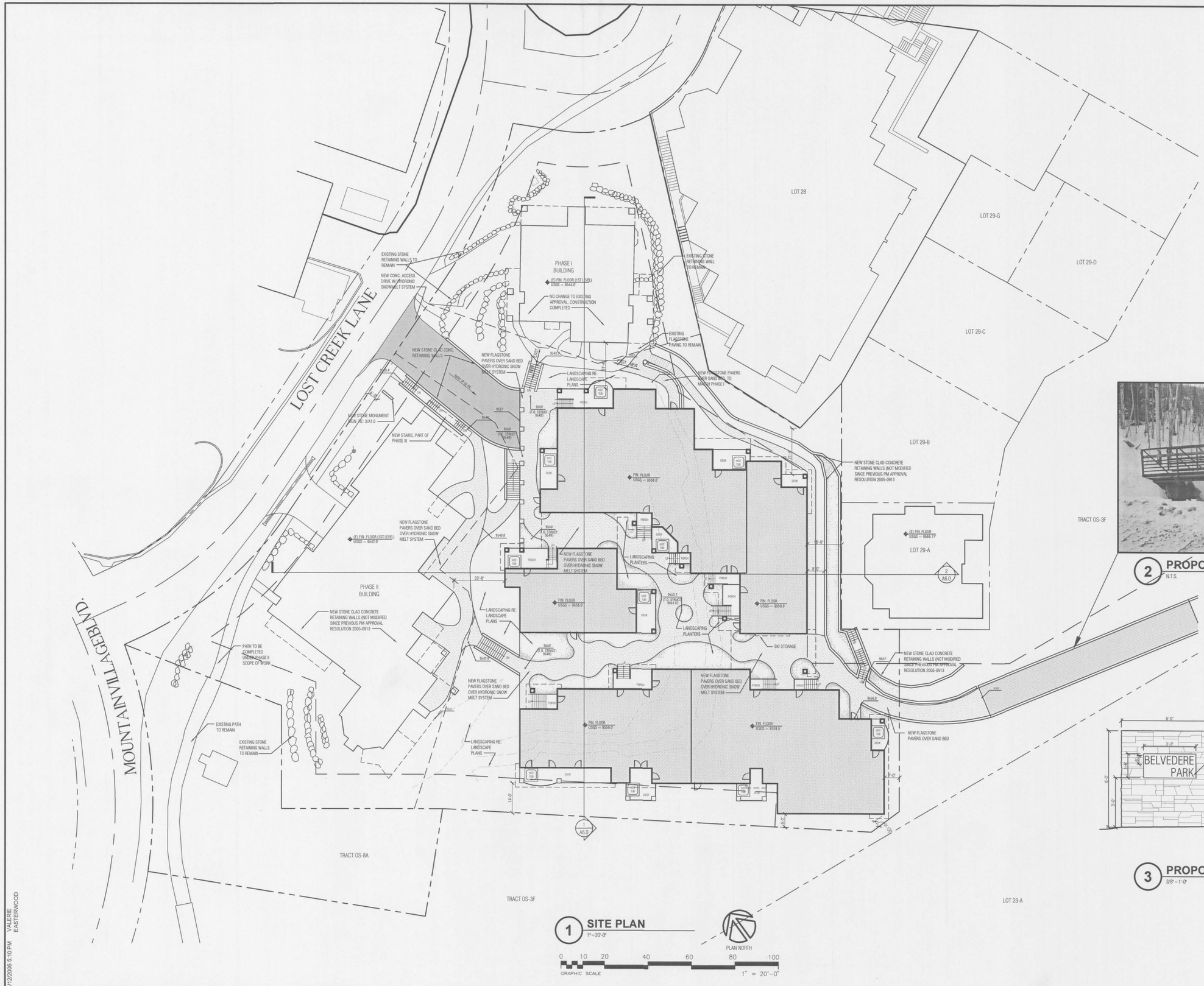
TOPOGRAPHIC SURVEY
LOT 27-A, TOWN OF MOUNTAIN VILLAGE

Project Mgr:	JC
Technician:	LM
Technician:	
Checked by:	JC
Start date:	07-06

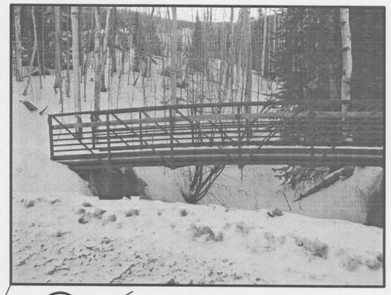
Rev.	description	date	by

FOLEY ASSOCIATES, INC.
ENGINEERING · PLANNING · SURVEYING
970-728-6153 970-728-6050 fax
P.O. BOX 1385
125 W. PACIFIC, SUITE B-1
TELLURIDE, COLORADO 81435

Drawing path: Z:\JOBS2005\05061\dwg\TOPO 07-06.dwg | Sheet1 of 1 | Project #: 05149

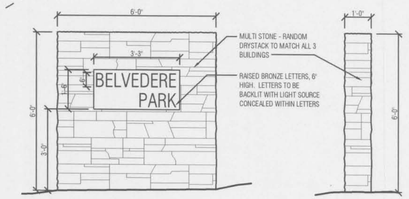


1 SITE PLAN
1"=20'-0"



2 PROPOSED BRIDGE PHOTO
N.T.S.

NOTE:
BRIDGE STYLE TO MATCH EXISTING BRIDGE CONSTRUCTION LOCATED @ NW CORNER OF ADJACENT SITE (TRACT OS-8A). NOTE BRIDGE CONSTRUCTION / STYLE NOT PREVIOUSLY APPROVED AS PART OF MASTER PLAN APPROVAL. REFER TO EXHIBIT C OF THIS PACKAGE FOR SKI BRIDGE EASEMENT AGREEMENT.



3 PROPOSED MONUMENT SIGN
3/8"=1'-0"

IVINS ARCHITECTURAL DESIGN PLANNING GROUP
1480 Humboldt St
Denver, CO 80218
PH 303-446-8030
FX 303-446-8031
www.ivinsdesign.com
formerly Parkhill • IVINS, P.C.

STATE OF COLORADO
BRUCE D. IVINS
B-2465
LICENSED ARCHITECT
05/16/06

BELVEDERE PARK

PHASE III
LOT 27A, LOST CREEK LANE
MOUNTAIN VILLAGE, COLORADO

REV.	DATE	ISSUED FOR:

JOB NO. 05014.0
DATE: 05-16-06
SCALE:
SHEET TITLE: SITE PLAN
SHEET NO. A1.0

5/12/2006 5:10 PM VALERIE EASTERWOOD

TOWN OF MOUNTAIN VILLAGE COMMUNITY DEVELOPMENT CODE INTERPRETATION

TOPIC: Comprehensive Plan development table applicability to projects with approved development plans inclusive of Planned Unit Development approvals or Master Development Plans

QUESTION: we would like to request an official interpretation from you as is authorized by the CDC in regards to the applicability of the development table in the comp plan to Belvedere Phase Three-R in light of the Master Plan for Belvedere's existence.

INTERPRETATION:

 _if additional background attached

In review of the 2011 Comprehensive Plan, build out analysis and the associated development tables, staff has analyzed and researched the parcels listed and also not listed in the three development tables found in the Comprehensive Plan (found on pages 52, 62, 66) as it pertains to existing approved development plans (like approved Planned Unit Developments) or approved master development plans. After careful analysis, I am providing this interpretation to create better development clarity as it relates the Tables' relevance to properties with approved development plans or approved master development plans. This interpretation applies specifically to Table 7. Mountain Village Center Development Table, Table 8. Town Hall Center Development Table and Table 9. Meadows Development Table.

Staff has discerned that properties that have existing approved development plans or approved master development plans were omitted from the tables. The rational is that if there is an existing approved development plan or master development plan, the anticipated development is already perfected so to anticipate a different development would be in conflict with existing town approvals.

For example, Lots 152R & 126R (commonly called Rosewood) and Lot 109R (commonly called the Mountain Village Hotel PUD) had valid Planned Unit Developments and were therefore not included in the Table 7. nor were associated site specific principles, policies or actions noted in the Comprehensive Plan. The Elkstone property, Lot 600A, in the Town Hall Center, is similar in that it was subject to a Master Development Plan, contemplating phased development, and omitted from Table 8 for that reason.

In only once instance did staff find that there is a listed parcel/lot specifically in Table 7. called Parcel N, which is listed as Lot 27, technically called 27A, that is subject to a master development plan. Table 7. creates a direct conflict with the master development plan as it anticipates heights, densities and flagship hotel designations not previously anticipated or approved by the master development plan.

Staffs interpretation is that when there is an existing approved development plan (a site

specific development plan inclusive of a Planned Unit Development) or a master development plan) that Table 7., Table 8, or Table 9 as applicable, does not apply. Site specific policies, as applicable could apply through the density transfer and rezone process at council's discretion

For the purposes of amendment to such properties, Comprehensive Plan general conformance can be determined by the relevant sections of the Comprehensive Plan as a whole. Amendments to properties with existing development approvals would rely upon either the PUD criteria, as applicable, or the master development plan, as applicable. I view the inclusion of Lot 27A as an error in the table because it has an approved master development plan.

APPLICABLE CODE SECTIONS:

- See definition of Master Development Plan
- Definition of Site Specific Development Plan
- Tables 7,8 and 9 of the 2011 Comprehensive Plan
- See CDC Section 17.4.11.E(2) Master Development Plan
- See CDC Section 17.4.12.I.(6) Prior Approved PUD's
- CDC Section 17.4.12.N. Planned Unit Development Amendment Process

FILE OR CASE # REFERENCE (if any):

APPROVED BY: 

Michelle Haynes,
Planning and Development Services Director

DATE: August 30, 2021

Agenda Item No. 17
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 369-8250

TO: Mountain Village Town Council

FROM: Amy Ward, Planner

FOR: Town Council Meeting, October 21, 2021

DATE: October 7, 2021

RE: First Reading of an Ordinance approving a density transfer and rezone located at Lot 27A, 112 Lost Creek Lane, to convert one condominium Unit to two condominium units, pursuant to Community Development Code Sections 17.4.9 & 17.4.10.

PROJECT GEOGRAPHY

Legal Description: *RESIDENTIAL UNIT 2-3, BELVEDERE PARK CONDOMINIUMS – PHASE ONE, ACCORIDING TO THE FIRST AMENDMENT TO THE BELVEDERE PARK CONDOMINIUMS – PHASE ONE CONDOMINIUM MAP RECORDED MARCH 12, 2021 UNDER RECEPTION NO. 468845, AND AS DEFINED AND DESCRIBED IN THE CONDOMINIOUM DECLARATIONFOR BELVEDERE PARKCONDOMINIUMS – PHASE ONE RECORDED AUGUST 1, 2005 UNDER RECEPTION NO. 376603 AS AMENDED BY THE FIRST AMENDMENT RECORDED MARCH 12, 2021 UNDER RECEPTION NO. 468846, COUNTY OF SAN MIGUEL, STATE OF COLORADO.*

Address: 112 Lost Creek Lane #2-3
Owner: Jefferson W. Kirby and Karen M. Kirby
Zoning: Multi Family
Existing Use: Multi Family
Proposed Use: Separate Units 2 & 3 into two condominiums

Adjacent Land Uses:

- **North:** Multi-Family
- **South:** Multi-Family
- **East:** Multi-Family
- **West:** Multi-Family

ATTACHMENTS

- Exhibit A: Applicant's narrative
- Exhibit B: Original Condo Map
- Exhibit C: First Map Amendment

CASE SUMMARY:

In February of 2020, Town Council approved an ordinance converting Units 2 and 3, Lot 27A, from two condominium designations to one condominium designation (Unit 2-3) and transferring the excess density into the density bank. Thomas G. Kennedy, the attorney for the current owners of Unit 2-3, is proposing a Density Transfer and Rezone to reverse this process, and again separate Unit 2-3 back into two condominium Units. Both the condominium and the excess density within the density bank are under the same ownership and the density just needs to be transferred back onto the property. Currently, Unit 2-3 has 1 unit of Condominium Density assigned for a total of 3 person equivalents. If the Town Council determines that the rezone of Unit 2-3 is appropriate, the newly created Unit 2 and Unit 3 would at that point need 1 extra unit of density that would be required per the CDC to be transferred from the Density Bank onto one of the units.

With that, the applicants have submitted an application for a Density Transfer and Rezone to rezone Unit 2-3 into two units 2 and 3 and transfer 1 Unit of Condominium density from the density bank onto one of the newly created Units. Once the applicant has obtained approval for the splitting of these two units, the owner will cause the two units to be separated again (see proposed floorplans attached).

Table 1: Current Zoning and Density for Unit 2-3

Unit No.	Zoning Designation	Units of Density	Person Equivalent
2-3	Condominium	1	3

Table 2: Proposed Zoning and Density for Unit 2 and 3

Unit No.	Zoning Designation	Units of Density	Person Equivalent
2	Condominium	1	3
3	Condominium	1	3
	Total	2	6

Staff Note: The proposal will result in a net increase of 1 Condominium Unit of Density – or 3 person equivalents on Lot 27A, Phase I. The density will be transferred from the density bank onto Lot 27A, Unit 3

Staff provided an opportunity to comment on the proposed development per the referral process and received the following comments - Finn Kjome with public works said public works had no issues with the application.

CRITERIA, ANALYSIS, AND FINDINGS

The criteria for the decision to evaluate a rezone that changes the zoning designation and/or density allocation assigned to a lot is listed below. The following criteria must be met for the review authority to approve a rezoning application:

17.4.9: Rezoning Process

(***)

3. Criteria for Decision: (***)

a. The proposed rezoning is in general conformance with the goals, policies, and provisions of the Comprehensive Plan;

Staff Finding: The Comprehensive Plan designates the Mountain Village Center sub-area as a neighborhood of mixed use including multiunit development. There

are no site specific policies. Per the planning director interpretation the development table does not apply.

b. The proposed rezoning is consistent with the Zoning and Land Use Regulations;
Staff Finding: The proposed rezone and density transfer meets the requirements of the CDC. The Village Center Zone is intended to provide higher density multi-family dwellings. By increasing the density and re-creating two condominium units, as was originally approved by the Town, the owners would be meeting that intent of providing higher density.

All other land use regulations are being met. Unit 2-3 currently has two designated parking spaces. With the separation of the two units, one parking space will be re-designated to each unit.

c. The proposed rezoning meets the Comprehensive Plan project standards;

The Comprehensive Plan Project Standards are listed as follows:

1. Visual impacts shall be minimized and mitigated to the extent practical, while also providing the targeted density identified in each subarea plan development table. It is understood that visual impacts will occur with development.

2. Appropriate scale and mass that fits the site(s) under review shall be provided.

3. Environmental and geotechnical impacts shall be avoided, minimized and mitigated, to the extent practical, consistent with the Comprehensive Plan, while also providing the target density identified in each subarea plan development table.

4. Site-specific issues such as, but not limited to the location of trash facilities, grease trap cleanouts, restaurant vents and access points shall be addressed to the satisfaction of the Town.

5. The skier experience shall not be adversely affected, and any ski run width reductions or grade changes shall be within industry standards.

Staff Finding: There will be no visual impacts, no change to existing mass and scale, no additional environmental or geotechnical impacts, no additional site-specific issues, and no skier experience impacts as this rezone is within an already existing building.

d. The proposed rezoning is consistent with public health, safety and welfare, as well as efficiency and economy in the use of land and its resources;
Staff Finding: This proposal returns the Units to the previously approved zoning from the initial development. Staff finds that there would be no detriment to returning this use.

e. The proposed rezoning is justified because there is an error in the current zoning, [and/or] there have been changes in conditions in the vicinity [and/] or there are specific policies in the Comprehensive Plan that contemplate the rezoning;
Staff Finding: The comprehensive plan envisions Lot 27A for multi-family development, the density transfer and rezone continues the use of the lot as such, albeit in a slightly increased overall density.

f. Adequate public facilities and services are available to serve the intended land uses;
Staff Finding: There are currently adequate public services to accommodate this request.

g. The proposed rezoning shall not create vehicular or pedestrian circulation hazards or cause parking, trash or service delivery congestion; and
Staff Finding: The rezoning will not create vehicular or pedestrian circulation hazards.

h. The proposed rezoning meets all applicable Town regulations and standards.
Staff Finding: The application meets all applicable regulations and standards.

17.4.10: Density Transfer Process

D. Criteria for Decision

2. Class 4 Applications. The following criteria shall be met for the Review Authority to approve a density transfer.

a. The criteria for decision for rezoning are met since such density transfer must be processed concurrently with a rezoning development application (except for MPUD development applications);
Staff Finding: The applicant has met the criteria for the decision for rezoning as provided above.

b. The density transfer meets the density transfer and density bank policies; and.
Staff Finding: The application meets all applicable density transfer and density bank policies.

c. The proposed density transfer meets all applicable Town regulations and standards.
Staff Finding: The application meets all applicable regulations and standards.

DESIGN REVIEW BOARD RECOMMENDATION:

The Design Review Board reviewed the application for rezone and density transfer for Lot 27A at their October 7, 2021 Regular Meeting and voted x-x to recommend approval to Town Council as written with no additional conditions.

RECOMMENDATION: If Town Council determines that the rezone and density transfer application meets the criteria for decision listed within this staff memo, then staff has provided the following suggested motion:

I move to approve the first reading of an ordinance regarding the Density Transfer and Rezone

application pursuant to CDC Sections 17.4.9 & 17.4.10 of the Community Development Code, to rezone Lot 27A Unit 2-3 and transfer 1 condominium density unit (3-person equivalent density) from the density bank to the lot based on the evidence provided within the Staff Report of record dated October 7, 2021, and with the following conditions:

1. Prior to the recordation of the associated ordinance approving the Density Transfer and Rezone, the owner must complete the Density Bank Transfer process with the Town and this change shall be reflected in the Town official Lot List.
2. The owner of record of density in the density bank, shall be responsible for all dues, fees, and any taxes associated with the assigned density and zoning until such time as the density is either transferred to this lot or another person or entity.
3. The final design of the newly separated condominium units shall be determined with the required Design Review Process application pursuant to the applicable requirements of the CDC.
4. A condominium map and amendment showing Unit 23 as two separate condominium unit 2 and 3 must be executed for the legal separation of the units prior to a certificate of occupancy being issued.

This motion is based on the evidence and testimony provided at a public hearing held on October 21, 2021, with notice of such hearing as required by the Community Development Code.

/abw

ORDINANCE NO. 2021-___

APPROVAL OF A REZONE AND DENSITY TRANSFER ON LOT 27A PHASE ONE UNITS 2 AND 3, REZONING ONE CONDOMINIUM ZONING DESIGNATION UNIT TO TWO CONDOMINIUM ZONING DESIGNATION UNITS

RECITALS

A. MV BP One LLC, a Colorado Limited Liability Company ("**Owners**'), with their attorney, Thomas G. Kennedy, have submitted to the Town: (1) a rezoning and density transfer development application for a rezone of Phase One Unit 2-3, Belvedere Condominiums (Lot 27A) ("**Property**") from one Condominium unit to two Condominium unist; and ("**Applications**") pursuant to the requirements of the Community Development Code ("**CDC**").

B. Owners own Phase One Units 2-3, Belvedere Condominiums, and the associated development rights and density allocated to Unit 2-3, Belvedere Condominiums.

C. The proposed rezoning and density transfer is to seperate one condominium unit into two condominium units pursuant to the requirements of the CDC.

D. Owners also own an excess 3 person equivalent density that is currently held in the Town of Mountain Village Density Bank. The Owner transferred the density from the density bank to the property as part of this rezone and density transfer application.

E. The Property has the following zoning designations pursuant to the Official Land Use and Density Allocation List and zoning as set forth on the Town Official Zoning Map:

Figure 1. Current Zoning Designation for Units 2-3, Lot 27A Belvedere Condominums

Unit No.	Zone District	Zoning Designation	Actual Units	Person Equivalent
2-3	Village Center	Condominium	1	3

Figure 2. Proposed Zoning Designation

Unit No.	Zone District	Zoning Designation	Actual Units	Person Equivalent
2	Village Center	Condominium	1	3
3	Village Center	Condominium	1	3

Figure 3. Lot 27A Current Zoning Designation for the Property

Lot	Zone District	Zoning Designation	Actual Units	Person Equivalent	Total Person Equivalent

27A	Village Center	Condominium	26	3	78
	Vilage Center	Efficiency Lodge	2	.5	1
	Vilage Center	Lodge	10	.75	7.5

Figure 4. Lot 27A Proposed Zoning Designation for the Property

Lot		Zone District	Zoning Designation	Actual Units	Person Equivalent	Total Person Equivalent
27A		Village Center	Condominium	27	3	81
		Vilage Center	Efficiency Lodge	2	.5	1
		Vilage Center	Lodge	10	.75	7.5

F. At a duly noticed public hearing held on October 7 2021, the DRB considered the Applications, testimony and public comment and recommended to the Town Council that the Applications be approved with conditions pursuant to the requirement of the CDC.

G. At its regularly scheduled meeting held on October 21, 2021 the Town Council conducted a first reading of an ordinance and set a public hearing, pursuant to the Town Charter.

H. On November 18, 2021 Town Council held a second reading and public hearing on the ordinance and approved with conditions the Application.

I. The meetings held on October 21 and November, 2021 were duly publicly noticed as required by the CDC Public Hearing Noticing Requirements, including but not limited to notification of all property owners within 400 feet of the Property, posting of a sign and posting on the respective agendas.

J. The Town Council hereby finds and determines that the Applications meet the Rezoning Process Criteria for Decision as provided in CDC Section 17.4.9(D) as follows:

Rezoning Findings

1. The proposed rezoning is in general conformance with the goals, policies and provisions of the Comprehensive Plan.

2. The proposed rezoning is consistent with the Zoning and Land Use Regulations.

3. The proposed rezoning meets the Comprehensive Plan project standards.

4. The proposed rezoning is consistent with public health, safety and welfare, as well as efficiency and economy in the use of land and its resources.

5. The proposed rezoning is justified there have been changes in conditions in the vicinity, namely voluntarily compliance and education regarding zoning designations and associated uses.

6. Adequate public facilities and services are available to serve the intended land uses.

7. The proposed rezoning shall not create vehicular or pedestrian circulation hazards or cause parking, trash or service delivery congestion.

8. The proposed rezoning meets all applicable Town regulations and standards.

K. The Town Council finds that the Applications meet the Rezoning Density Transfer Process criteria for decision contained in CDC Section 17.4.10(D)(2) as follows:

Density Transfer Findings

1. The applicant has the requisite required density of 3 person equivalents to execute a rezone from condominium to condominium zoning designation.
2. The applicant has met or exceeded the parking requirement of 1 parking space.
3. The application meets the criteria for decision as detailed within this staff memo of record.

NOW, THEREFORE, BE IT RESOLVED THAT THE TOWN COUNCIL HEREBY APPROVES THE APPLICATION SUBJECT TO THE FOLLOWING CONDITIONS.

1. The applicant shall submit a condominium map amendment and associated declarations, to the Town for review and approval showing the Unit 2-3 as two renumbered Condominium Units, Unit 2 and Unit 3, prior to issuance of a certificate of occupancy for the building permit associated with the separation of the units.
2. The lot list shall be updated to reflect the rezone from one Condominium units to two Condominium units.
3. This ordinance will not be recorded until the owner has demonstrated that the needed density has been transferred onto the property and the associated density certificate be voided
4. The owner is responsible for all dues, fees and any taxes associated with the assigned density and zoning until such time as the density is either transferred to the Unit or another person or entity.

Section 1. Effect on Zoning Designations

A. This Ordinance does not change any other zoning designation on the Properties it only affects Phase One Unit 2-3.

Section 2. Ordinance Effect

All ordinances, of the Town, or parts thereof, inconsistent or in conflict with this Ordinance, are hereby repealed, replaced and superseded to the extent only of such inconsistency or conflict.

Section 3. Severability

The provisions of this Ordinance are severable and the invalidity of any section, phrase, clause or portion of this Ordinance as determined by a court of competent jurisdiction shall not affect the validity or effectiveness of the remainder of this Ordinance.

Section 4. Effective Date

This Ordinance shall become effective on _____ , 2021 following public hearing and approval by Council on second reading.

Section 5. Public Hearing

A public hearing on this Ordinance was held on the __st of _____ 2021 in the Town Council Chambers, Town Hall, 455 Mountain Village Blvd, Mountain Village, Colorado 81435.
INTRODUCED, READ AND REFERRED to public hearing before the Town Council of the Town of Mountain Village, Colorado on the __th day of _____ 2021.

TOWN OF MOUNTAIN VILLAGE

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

By: _____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

HEARD AND FINALLY ADOPTED by the Town Council of the Town of Mountain Village, Colorado this __st day of _____ 2021

TOWN OF MOUNTAIN VILLAGE
TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

By: _____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

Approved as To Form:

_____
Paul Wisor, Town Attorney

I, Susan Johnston, the duly qualified and acting Town Clerk of the Town of Mountain Village, Colorado ("Town") do hereby certify that:

1. The attached copy of Ordinance No._____ ("Ordinance") is a true, correct and complete copy thereof.

2. The Ordinance was introduced, read by title, approved on first reading with minor amendments and referred to public hearing by the Town Council the Town ("Council") at a regular meeting held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on _____, 2021, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**"Yes"**	**"No"**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Harvey Mogenson				
Jack Gilbride				

3. After the Council's approval of the first reading of the Ordinance, notice of the public hearing, containing the date, time and location of the public hearing and a description of the subject matter of the proposed Ordinance was posted and published in the Telluride Daily Planet, a newspaper of general circulation in the Town, on _____, 2021 in accordance with Section 5.2b of the Town of Mountain Village Home Rule Charter.

4. A public hearing on the Ordinance was held by the Town Council at a regular meeting of the Town Council held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on _____, 2021. At the public hearing, the Ordinance was considered, read by title, and approved without amendment by the Town Council, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	**"Yes"**	**"No"**	**Absent**	**Abstain**
Laila Benitez, Mayor				
Dan Caton, Mayor Pro-Tem				
Martinique Davis Prohaska				
Peter Duprey				
Patrick Berry				
Harvey Mogenson				
Jack Gilbride				

5. The Ordinance has been signed by the Mayor, sealed with the Town seal, attested by me as Town

Clerk, and duly numbered and recorded in the official records of the Town.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town this _____ day of _____, 2021.

_____
Susan Johnston, Town Clerk

(SEAL)

Agenda Item No. 18
LEGAL DEPARTMENT
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: Paul Wisor, Town Attorney
DATE: October 9, 2021
RE: Resolution Giving Notice to Actively Pursue Adopting Housing Mitigation Fee

Summary

The proposed Resolution provides notice to the public of the Town's intent to adopt an ordinance requiring payment of a housing impact fee as a condition of issuing development and construction permits.

Background

The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry level restaurant workers to top level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

The Town, as part of a variety of initiatives, has engaged consultants to study the impacts of development and to recommend a methodology to establish, collect, and use housing impact fees. Such housing impact fees will either require new development to concurrently provide community housing or pay the Town a fee, established by a formula, for the Town to construct community housing.

Discussion

The Town will adopt a housing mitigation fee ordinance in the coming months, but such ordinance will apply to all projects that have not been approved by the Town. That is, the ordinance will be retroactive.

There is a general prohibition against retroactive laws if they are "retrospective," meaning that they (1) impair a vested right or (2) create an obligation or duty on past transactions or considerations. *Trailer Haven MHP, LLC v. City of Aurora*, 91 P.3d 1132, 1139 (Colo. App. 2003). The general rule "provides that a common law right to develop does not vest until the party has taken substantial steps in reliance on a building permit." *Hopper*, 917 P.2d at 356 (Colo. App. 1996) (*citing Crawford v. McLaughlin*, 172 Colo. 366, 473 P.2d 725 (1970) (right may vest based on substantial expenditure in reliance on initial permit despite need for additional permits)); *but see Cline v. Boulder*, 168 Colo. 112, 450 P.2d 335 (1969) (absent reliance, possession of a building permit does not vest a property right in the owner). Arguably, this means that if a developer has "substantially relied" on a building permit at the time this Resolution takes effect, their right has vested and the imposition of a housing impact fee could be considered retrospective, or unconstitutionally retroactive.

However, under the "pending ordinance doctrine," a municipality "may properly refuse a building permit" on the basis of a pending ordinance "even though application is made when the intended use conforms to existing regulations, and even though the application is made a considerable time before the enactment of the pending ordinance, provided the municipality has not unreasonably or arbitrarily refused or delayed the issuance of a permit, and provided the ordinance was legally 'pending' on the date of the permit application." *City of Aspen v. Marshall*, 912 P.2d 56, 59 (1996) (*citing* 8 Eugene McQuillin, *The Law of Municipal Corporations* § 25.155, at 691 (3d ed.1991)). "For an ordinance to be 'pending,' the proposed change need not be before the governing body, but the appropriate department of the city must be actively pursuing it." *Villa at Greeley, Inc. v. Hopper*, 917 P.2d 350, 35 (citations omitted). As such, the ordinance requiring payment of impact fees as a condition of permit issuance may already be considered "pending," as of the date the Town engaged the services of EPS. To cover all bases, this Resolution would make clear the Town's intent to pursue adoption of a housing impact fee and put the public on notice of such. While the ordinance is "pending," the Town could deny any permit application (arguably, applications made on or after the date the Town engaged EPS) if the developer refused to pay the housing impact fee.

As such, the attached Resolution includes language that the Town will be "actively pursuing" adoption of a housing impact fee so the ordinance to enact such a fee could be considered "pending" as of the effective date of the Resolution. Moreover, the Resolution makes clear the intent of the Town to implement a housing impact fee and apply it retroactively to development and construction permits not yet approved.

Financial Implications

Although the housing mitigation ordinance will have financial implications for the Town, the Resolution in and of itself does not carry with it a financial impact.

Staff

Staff recommends adoption of the proposed Resolution.

Proposed Motion

"I move to approve the proposed resolution indicating the Town's intent to retroactively adopt a housing mitigation fee ordinance."

TOWN OF MOUNTAIN VILLAGE, COLORADO
RESOLUTION NO. 2021-___

AUTHORIZING THE HOUSING MANAGER TO ENTER INTO REAL ESTATE CONTRACTS ON THE CONDITION SUCH CONTRACTS ARE APPROVED BY TOWN COUNCIL OR THE HOUSING AUTHORITY

WHEREAS, the Town Council of the Town of Mountain Village (the "Town"), pursuant to the Town's Home Rule Charter Section 3.6(b), has the authority to establish land use standards to provide for the present and future needs of the Town; and

WHEREAS, the Town Council recently created the position of Community Housing Program Director in order to address the myriad of housing needs of the Mountain Village community; and

WHEREAS, the Town Council has tasked the Community Housing Program Director to, among other things, identify and acquire lots for community housing development and general land banking; and

WHEREAS, given the competitive real estate market, recent experience has proven to is difficult and inefficient for the Community Housing Program Director to identify property suitable for community housing and then wait several weeks for Town Council to provide direction to place an offer on the identified property; and

WHEREAS, the Town Council desires to authorize the Community Housing Program Director to make offers on for sale property, provided such offers are conditioned on Town Council approval.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO:

1. Recitals. The foregoing recitals are incorporated herein as findings and determinations of the Town Council of the Town of Mountain Village.

2. Approval. The Town Council hereby delegates to the Community Housing Program Director the authority to enter into agreements to purchase property for the purposes of facilitating community housing, provided all such agreements are conditioned in substantially the form set forth below:

> "This contract has been executed by the Community Housing Program Director of Buyer but is conditional upon ratification by the Town Council of Mountain Village at the next regular public meeting of the Council that is scheduled to occur at least 48 hours after MEC. Should the Town Council fail to ratify the contract, then it shall be null and void, and the Earnest Money shall be fully refunded to Buyer."

3. Effective Date. This Resolution shall take effect upon adoption hereof.

ADOPTED AND APPROVED by the Town Council at a regular public meeting held on the 21st day of October 2021.

TOWN OF MOUNTAIN VILLAGE,
TOWN COUNCIL

By:_____
Laila Benitez, Mayor

ATTEST:

_____
Susan Johnston, Town Clerk

APPROVED AS TO FROM:

_____
Paul Wisor, Town Attorney

Agenda Item No. 19a
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
HOUSING DIVISION
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: John Miller, Community Housing Program Director
DATE: October 9, 2021
RE: Policy Change Request - Mountain Village Job Attached Housing

Summary
Town Staff is requesting that the Council reassess the Mountain Village employee policy related to job attached housing at Village Court Apartments (VCA). Currently, employees living at VCA with job attached housing are required to remain in their position for 12 months, after which they may leave employment with the Town but can continue to occupy their rental unit. The proposed policy change would eliminate that provision and would require employees with job attached housing to remain in employment with the Town in order to continue to be eligible to rent units at VCA.

Background
The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry level restaurant workers to top level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

VCA provides 222-units of employee housing units that serve to house not only Mountain Village employees but the greater regional workforce. In the past, the Town would often maintain vacant units for onboarding of new staff, but the ability to provide this resource has been limited due to the increasingly long waitlist for town employees. Under the discussion below, staff will outline potential options Council may take that could alleviate these issues described within this memo.

Discussion
There have been numerous instances over the past year, where the Town was unable to hire qualified candidates for open positions due to the lack of available housing. These employees are typically recruited from outside of the Telluride Region and have limited resources to find housing in an already competitive market.

The current Town policy provides a streamlined employee waitlist for new and/or existing employees to aid in obtaining housing at VCA. The requirement ties the housing to employment for a period of 12 months. At the end of this year long period, the employee may be terminated or resign without loss of housing. This policy has resulted in instances of employees working the required time period then leaving employment with the Town – ultimately retaining the occupied VCA unit indefinitely.

In order to address the Town's own staffing needs, staff is proposing the following changes to this policy:

1. Remove 12-mo employment requirement and otherwise require all new employees who sign new leases at VCA to acknowledge that the VCA unit is attached to employment.
2. Require at lease renewal that all existing employees in VCA units acknowledge that housing in VCA in attached to employment. Failure to remain employed by the Town of Mountain Village would otherwise result in the loss of housing within that Town Unit.

Staff Note: In most instances, the former employee would have 30 calendar days to vacate the unit. This timeframe in which to vacate the premises would be specified within the updated lease at signing or renewal. Staff recommends in unique circumstances that there be exemptions to this policy and these exemption requests would be processed through the Housing Committee.

Exemptions: Because all situations are different, staff would like to recommend exemptions to this policy.

a. Retirement from the Mountain Village (minimum of 5 years' service)
b. Medical emergencies (individual or dependents)
c. Town authorized sabbaticals (date certain)

Alternatives: If the Town Council determines that this policy change is not preferable, other options could include alternatives such as:

a. Limiting this policy to new hires only. This would reduce impacts on current employees.
b. Increase the overall timeclock requirement from 12 months to 36 months

Staff Note: Staff does not recommend the above alternatives.

Proposed Motion

"I move to approve the recommended policy change and exemptions as discussed in this Staff Memo of record and direct town staff to modify the Mountain Village's Job Attached Housing Policy as it relates to VCA, requiring that town-owned employee housing at VCA be directly tied to terms of employment and otherwise shall not expire."

Agenda Item No. 19b
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT
HOUSING DIVISION
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: John Miller, Community Housing Program Director
DATE: October 9, 2021
RE: Pilot Program to Incentivize Temporary Housing at Village Court Apartments for Mountain Village Employees

Summary
Town Staff is proposing a budget-neutral incentive pilot program aimed at increasing available housing at Village Court Apartments (VCA) through a temporary rental program for employees on the town employee waitlist. This program would allow for existing residents (town staff or otherwise) to rent extra bedrooms in exchange for a financial incentive such as a fractional waiver of rent.

Background and Discussion

The Town of Mountain Village, and the Telluride region as a whole, is in the midst of a housing crisis that directly threatens the quality of life of every Mountain Village resident, second homeowner, business, and visitor. From entry-level restaurant workers to top-level ski executives, and every other position in between, these critical roles are going unfilled, in large part, because such workers and their families lack viable housing options within or near Mountain Village. Unless this crisis is addressed, the basic services and amenities that make Mountain Village a place like no other, will be diminished or eliminated altogether.

VCA provides 222-units of employee housing that serve to house not only Mountain Village employees but the greater regional workforce. In the past, the Town would often maintain vacant units for onboarding of new staff but the ability to provide this resource has been limited due to the increasingly long waitlist for town employees. Under the discussion below, staff will outline potential options Council may take that could alleviate these issues described within this memo.

Rental Incentive Program: This program would target existing VCA residents who may have an under-occupied unit; granting these residents an incentive to provide temporary housing to Mountain Village employees who are currently on the employee waitlist. Existing tenants could volunteer for new employees to live in unoccupied rooms within the existing tenant's unit. The rent would remain the same, with the existing tenant and the new employee splitting the rent. The To induce tenants to pariciapte, the Town would provide a credit to the existing tenant, in an amount between $200 - $400 against their monthly rent. Participating tenants could see their month rent obligation reduced from to $100-$200 per month, creating significant savings for the existing tenant. This incentive would be provided until such a time that an employee unit does become available, or tenants mutually agree to become permanent roommates. This change could potentially help the Town hire key positions, but also help our existing tenants save money.

After some initial outreach, two existing residents have expressed interest in this type of incentive program. This program would utilize funding from the employee mortgage assistance program to remain budget neutral.

Proposed Motion

"I move to approve the recommended pilot incentive program for temporary staff housing, as discussed in this Staff Memo of record and direct town staff to allocate financial resources towards this pilot program as necessary.

Agenda Item 20

Town of Mountain Village Update

October 21, 2021

15 mins

0 Re-engaged since the delay caused by Covid

1 Objectives

2 Background (Reminder)

3 Framing - Engineering & Product Development Consultant

4 Meeting Schedule for 2021 & 2022

1 Objectives

- Provide high-level overview of:
  - Subcommittee work & progress over last 6-years
  - Key next steps: Leadership Committee (Nov. 9th meeting)

2 Gondola Background

Basics

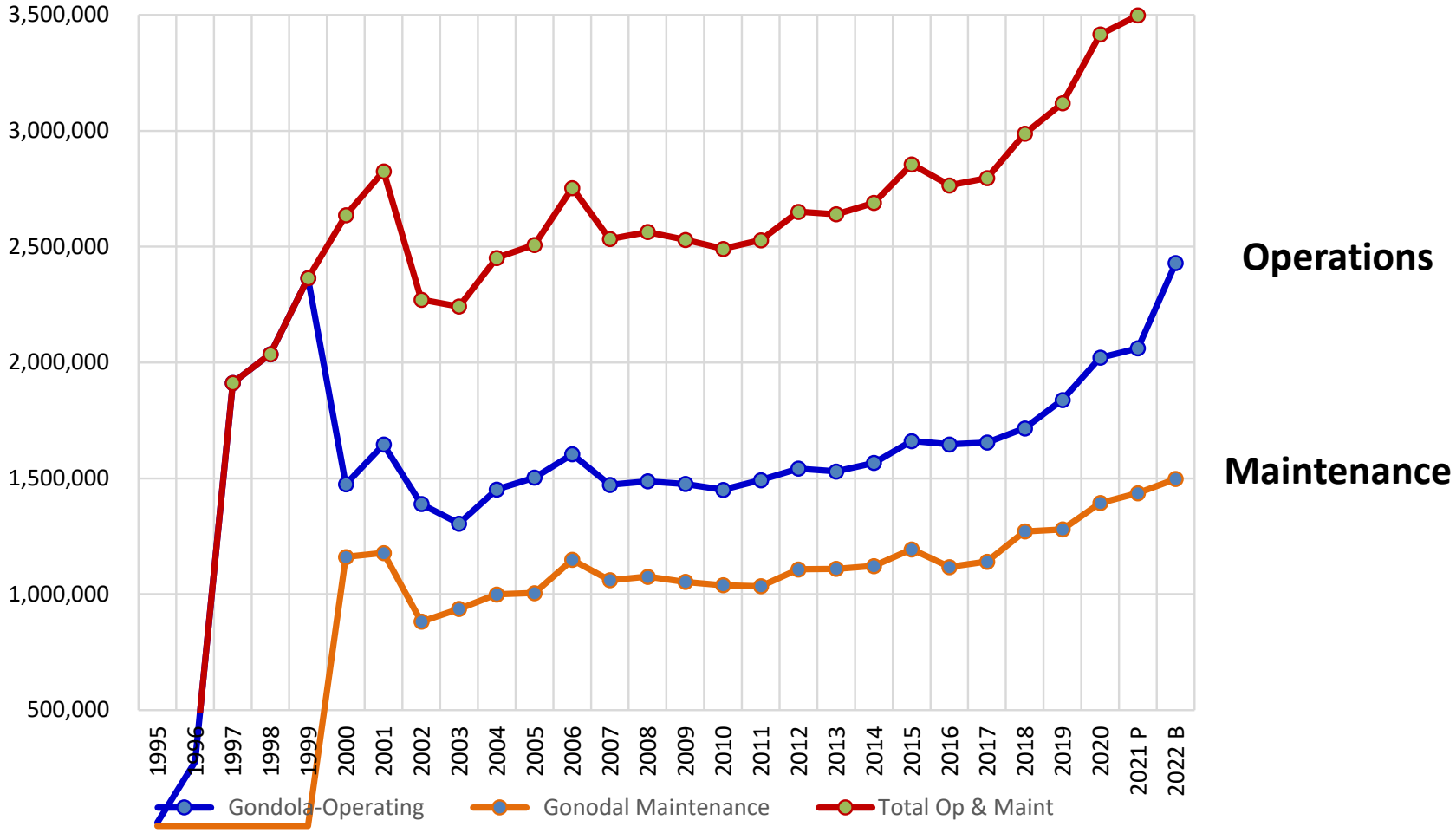
- Community has enjoyed the gondola for 25 years (started Dec 1996)
- Serves as transportation connection b/w Town of Telluride and Mountain Village, as well as b/w MV Center to Town Hall Subarea

- Town of Mountain Village owns and operates
- Majority of funding contractually provided by TMVOA through 3% MV real estate transfer assessment
- Operating and capital grants (+$10M), 1% of lift ticket sales by TSG (~$200K/yr), ToT extended hours contributions, & event operation funding
- Operating Agreement expires 12/31/27, with following no longer required
  - Operate & maintain Gondola system; provide buses during gondola shutdown (TMV)
  - Pay for operations, maintenance, capital (TMVOA)
  - Pay 1% of lift ticket (TSG)

2 Gondola Background

Annual Costs

- Operations & Maint. (~$3.5M)



Operations

Maintenance

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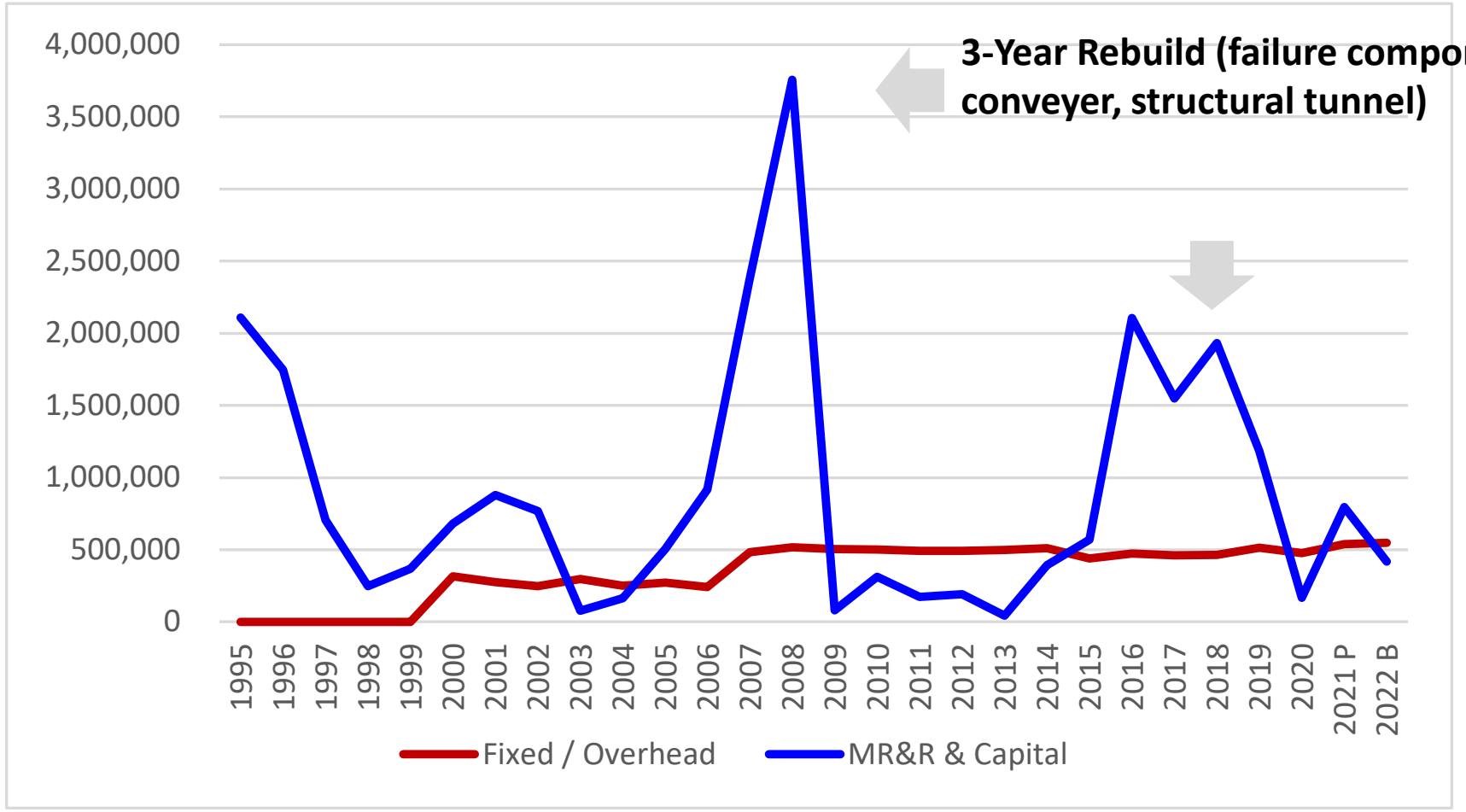
2 Gondola Background

Annual Costs

- Capital & major repairs



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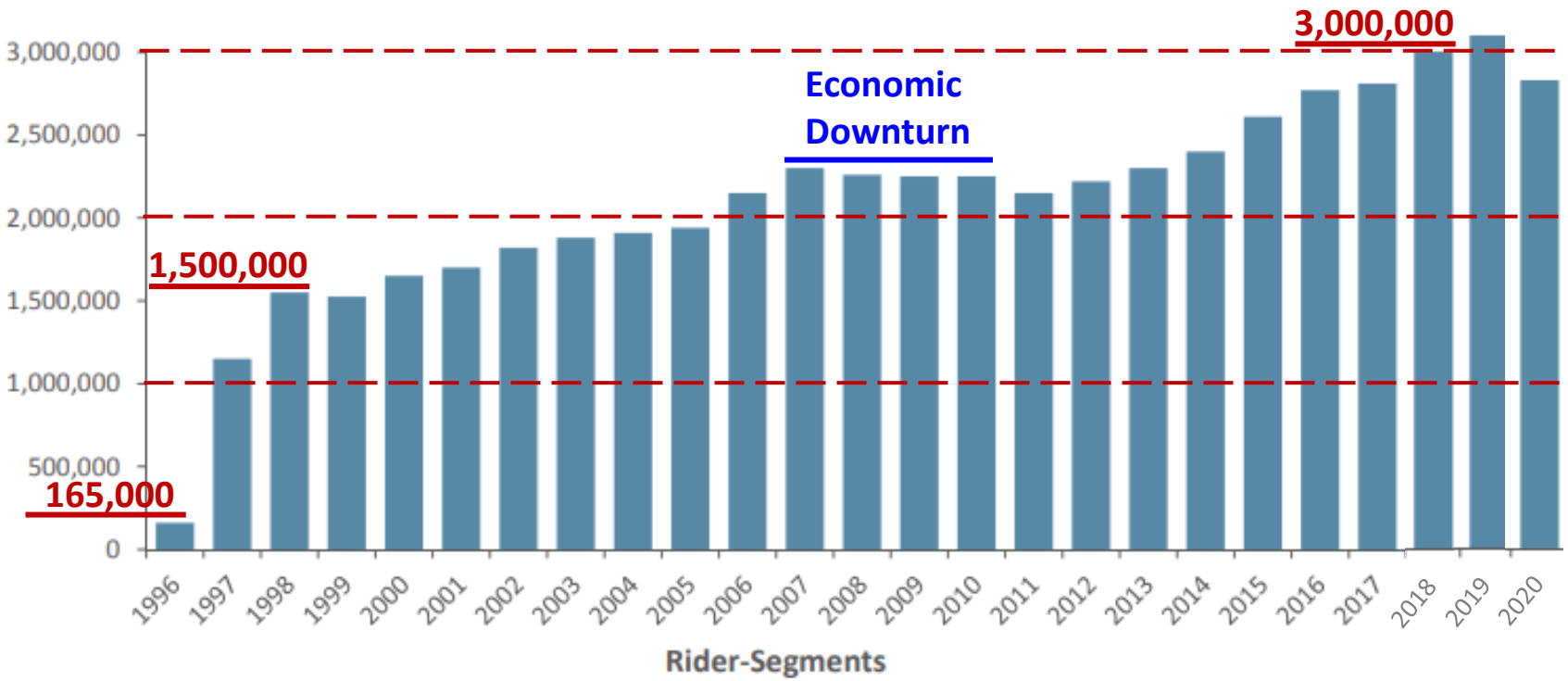
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Rider-Segments

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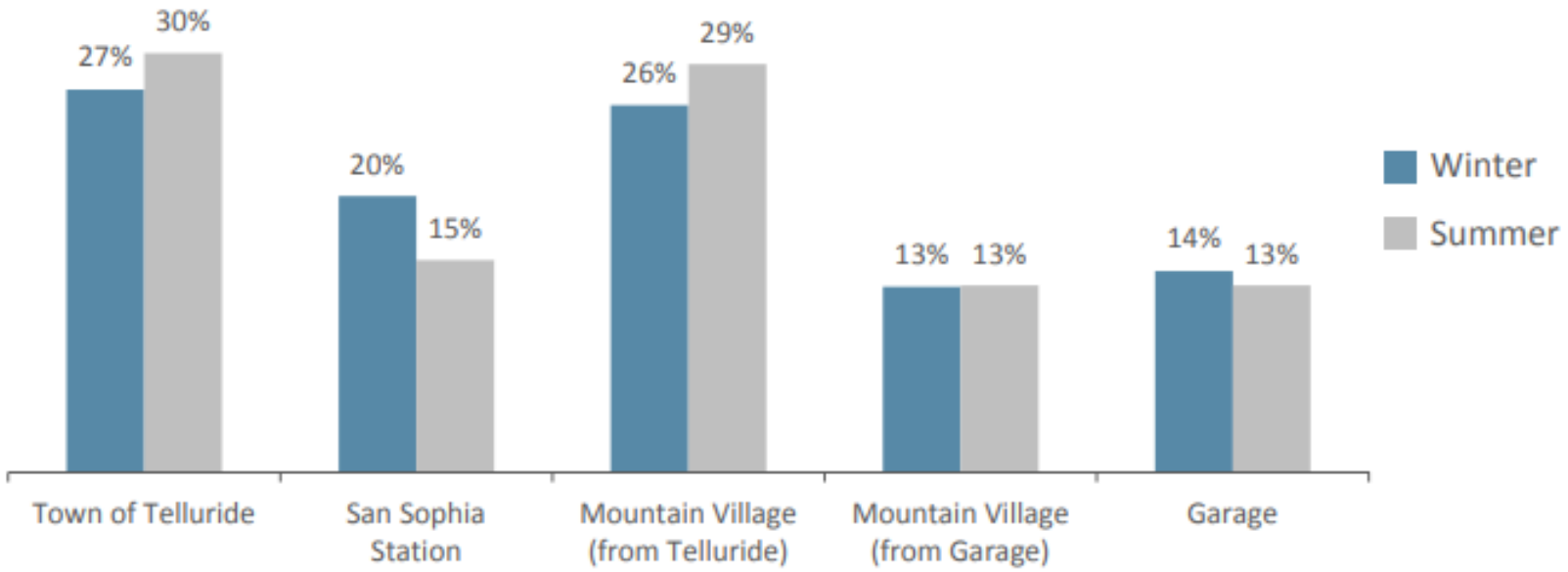
2011 - 2017



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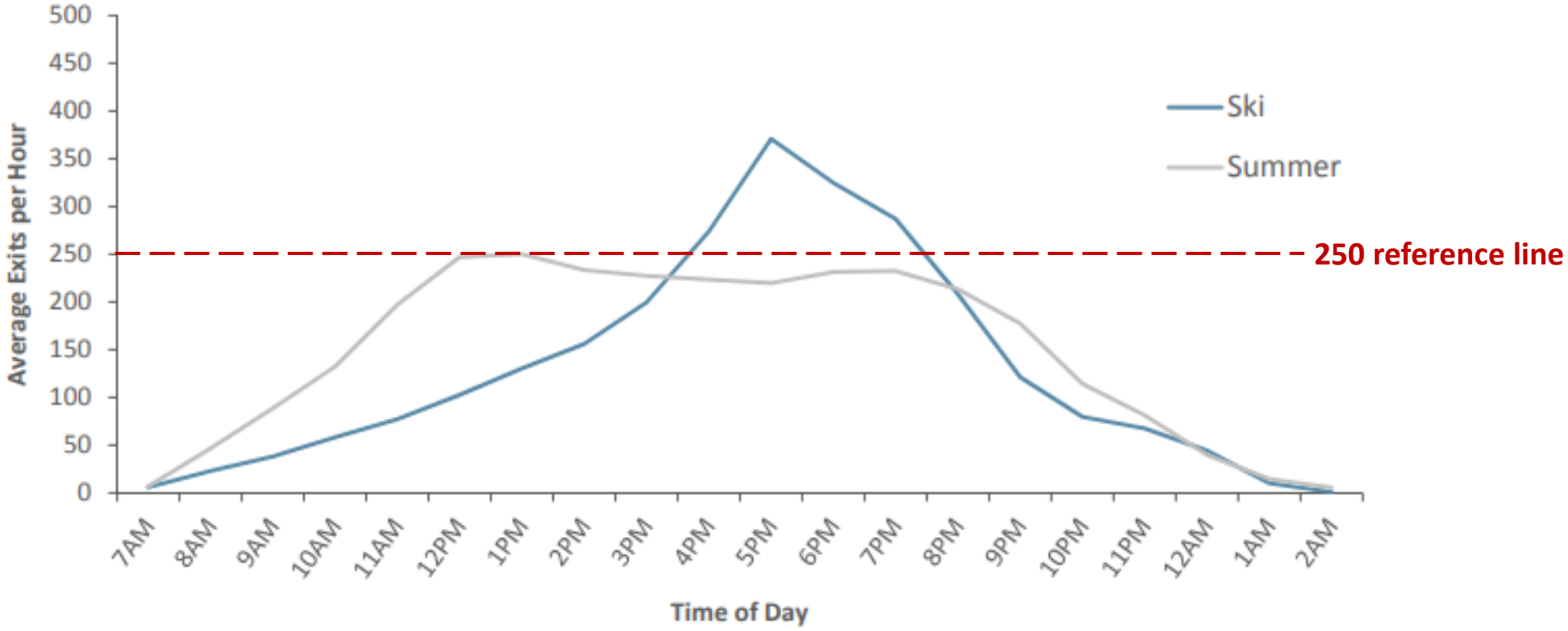
2016 - 2017

(Average hourly exits by season)



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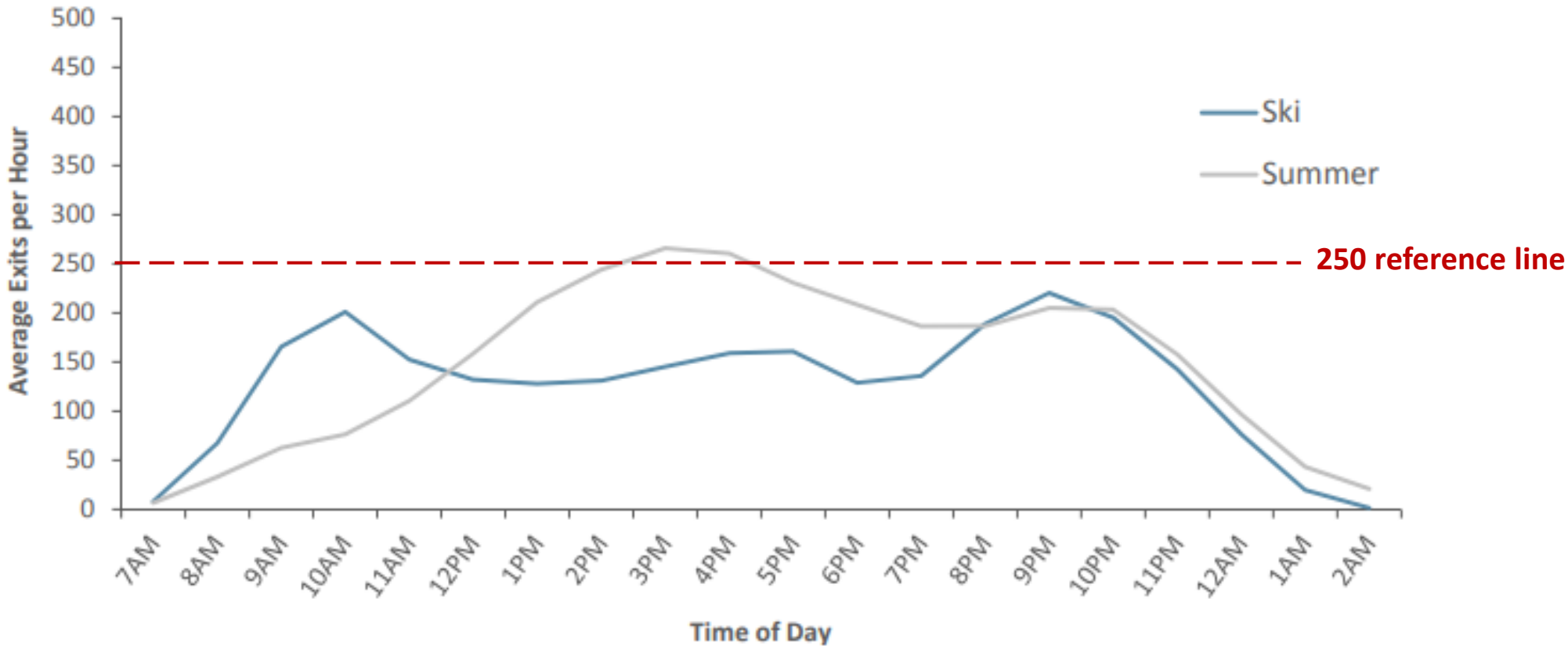
2016 - 2017

(Average hourly exits by season)



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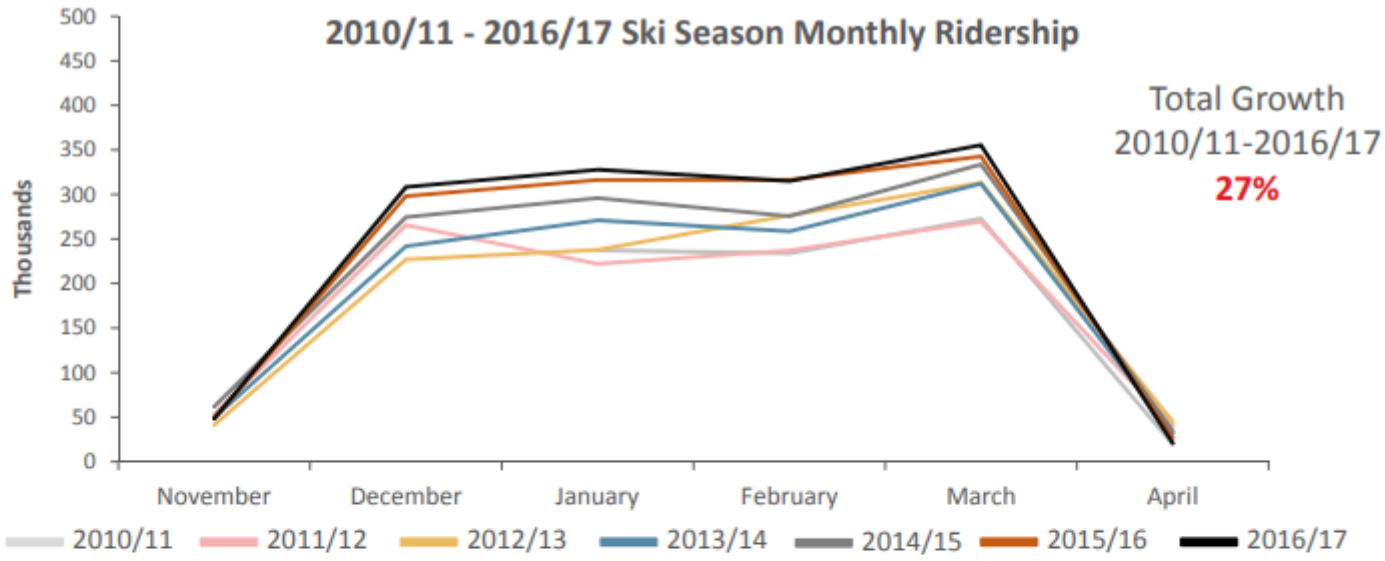
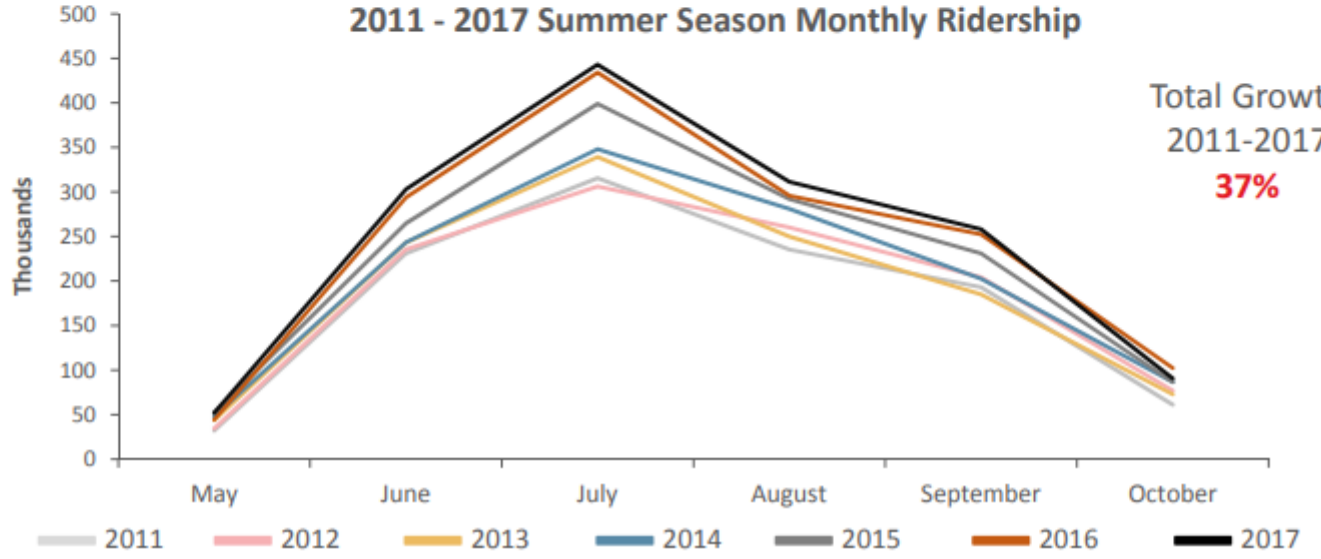
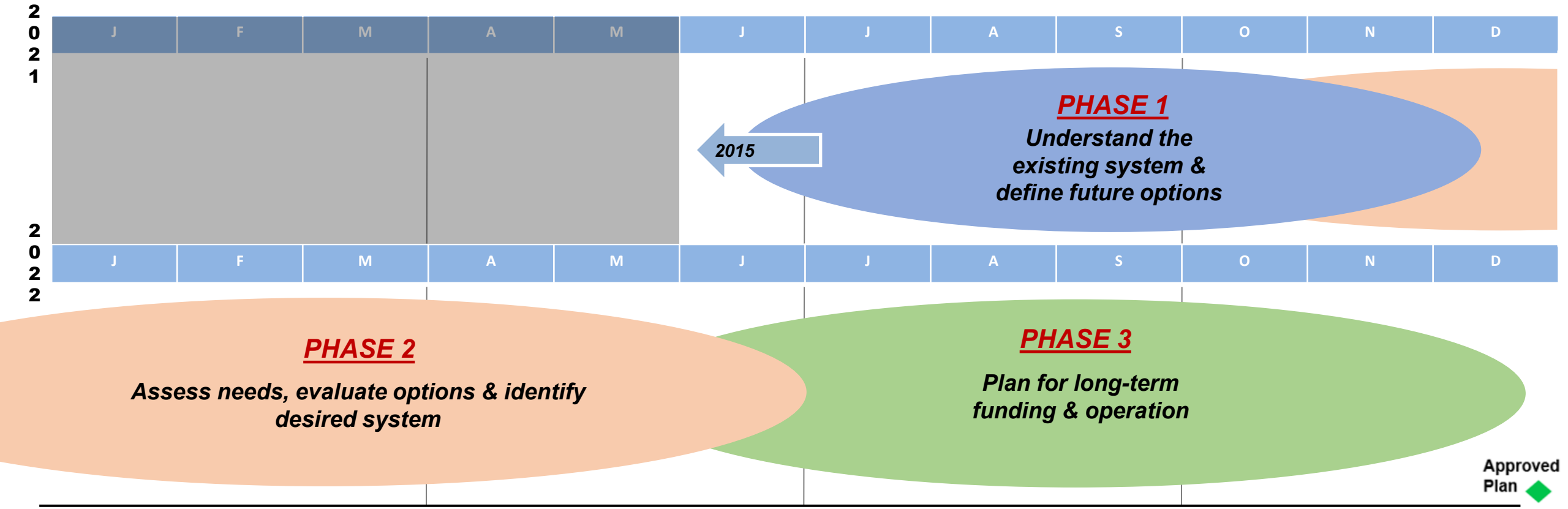
Consistency in Trends
- by season
- by month





3 Long-Term Roadmap: FRAMEWORK



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nusser & partner
SOLUTION FRAMING

OUTDOOR
ENGINEERS

Gondola Long Term Planning – Phase II

Framing Workshop – Results

FRAMING WORKSHOP

AGENDA of 9th of September 2019

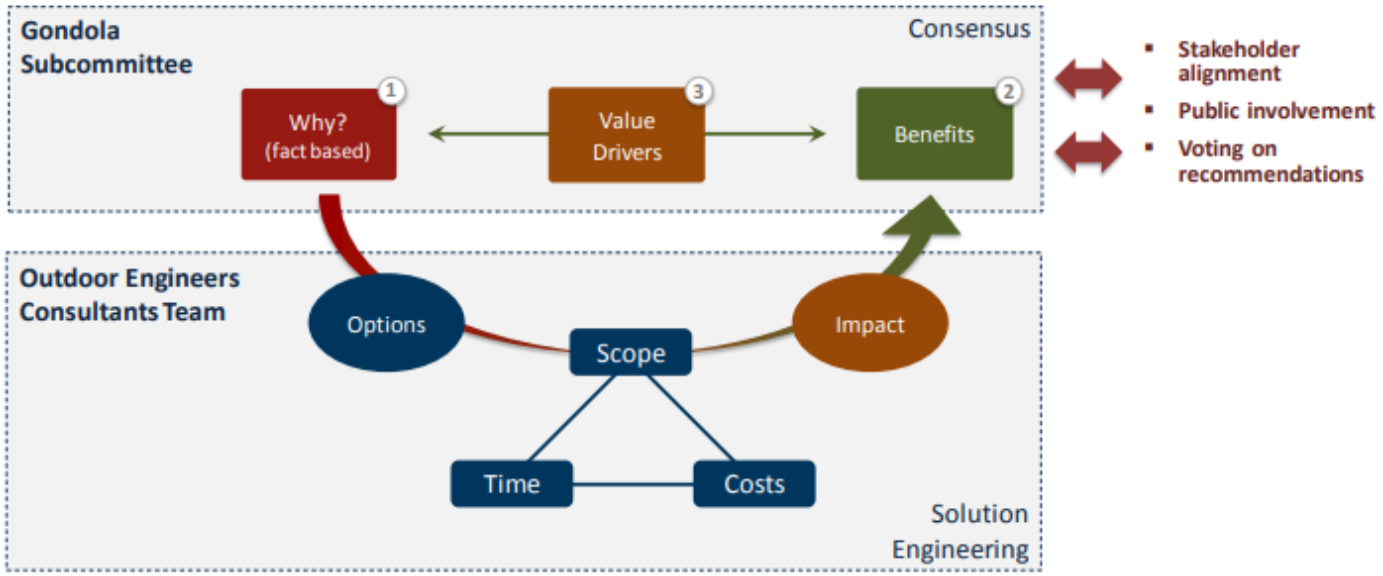
Morning Session

- Presentation of Phase 1 study
- Working on facts
  as a common ground to start from

Afternoon Session

- Definition of desired benefits
  ("Opportunity Statement")
- Measures of success
- Roadmap-definition and next steps

Underlying approach



Key element of Solution Framing is the quest for consensus.
Thus all results of the workshop, as reflected in this report, were concluded unanimously within the Gondola Subcommittee.

Only exceptions are the concept of the holistic business case and its exemplary components, which are external input for further discussion.

WHY are we talking about this now?

Underlying facts, assumptions and decisions

nusser & partner SOLUTION FRAMING

OUTDOOR ENGINEERS

FACTS

- The existing operating agreement expires 2027.
- The gondola is the central transportation facility between the Town of Telluride and Mountain Village.
- From a technical perspective the gondola can be operated approximately another 10 years at the current capacity.
- If we increase weight on the towers/foundations or become higher, we need to rebuild them.
- Replacing the gondola system would lead to a downtime of one summer season (even for option 3 as described in the phase I study)
- Our customer experience starts to decrease. Examples are:
  - Waiting lines at peak times
  - Missing or outdated features because of the age of the system
  - Inconvenient gondola access (step, door clearance)

SUBCOMMITTEE FINDINGS

1. **We want to have a gondola between the Town of Telluride and Mountain Village after 2027.**
2. **We continue planning and optimizing the future gondola system and giving it as a frame condition to the people responsible for regional planning.**
3. For growth projection we rely on the figures as presented in the bbc-report, but will update them based on actual data (2018 passenger figures).
4. **Doing nothing is not our answer to potential future growth.**

ASSUMPTIONS about growth

- Growth will happen, independent from the gondola.
- Mountain Village and the Town of Telluride will grow to their limits, as defined in existing regulations (e.g. zoning plan)
- The gondola itself does not determine growth. The gondola capacity rather correlates with growth, than causing it. But if we do nothing, this might have a negative impact on growth.
- The gondola project will not solve the tension between people who want growth and those who want to stay at the status quo.
- Downsides of growth are (exemplary):
  - Crowding
  - Increased cost of living
  - Decreased customer experience
  - Traffic overload
  - Utilities (esp. waste water) are at their limit

Which benefits do we seek?

Opportunity Statement

We see the chance to…

- create the required gondola capacity to meet the demand and expectations of visitors, locals and commuters
- provide a stable planning foundation for connected systems (ToT, MV, Ski resort, Traffic, Parking,…)
- create an optimal post-2027 funding agreement
- provide an efficient and reliable public transportation system to support local businesses and reduce congestions

BENEFITS

by

1. learning more about passenger expectations
2. checking state-of-the-art system features
3. defining acceptable waiting times and conditions
4. making the next move in the overall planning process
5. optimizing the holistic business case
6. defining the post-2027 funding, financing and operation agreement.

TASKS

By which criteria do we decide/optimize?

Value Drivers

DECISION ADVISORY GROUP

OUTDOOR ENGINEERS

VALUE DRIVERS define the overall value of the project.	KPIs represent measurable parameters of each value driver.	*weight (DRAFT)*
SYSTEM FLEXIBILITY	▪ Nominal capacity ▪ Capacity variability ▪ Up-to-dateness of features ▪ Developability	*30%*
TOTAL COST OF OWNERSHIP	▪ CAPEX ▪ OPEX ▪ Funding/financing	*30%*
PASSENGER FLOW	▪ Line formation ▪ Accessibility ▪ Intermodal integration of stations	*20%*
PASSENGER SATISFACTION	▪ Survey results	*10%*
ENVIRONMENTAL IMPACT	▪ Potential emission reduction	*10%*

These Value Drivers mainly describe the criteria to maximize the value of the gondola system.

Overall Phase II process is targeted at maximizing the **HOLISTIC BUSINESS CASE**, representing the shared value of the key stakeholder groups (MV, ToT, Ski resort, San Miguel county).

For more details on the holistic business case concept see next slide.

OPTION DEVELOPMENT

Range of Options

DECISION ADVISORY GROUP

OUTDOOR ENGINEERS

Indicative Option Assessment		System flexibility (30%)				Total cost of ownership (30%)		Passenger Flow (20%)			Passenger Satisfaction (10%)	Environmental Impact (10%)
		Nominal capacity	Capacity variability	up-to-date features	Develop-ability	CAPEX	OPEX	Line formation	Accessibility	Intermodal integration of stations	Survey results	Potential emission reduction
1	**Do nothing** special, continue operation as is and do ongoing maintenance and system repairs as they come up.											
2	Do **continuous smaller upgrades** to raise system reliability without getting into the "Major Modification" classification (which requires meeting current code).											
3	Make a **major upgrade** to a more state-of-the-art technology in order to raise comfort, capacity and reliability.											
4	**Replace** the current system **with a complete new one**.											

OPTION ASSESSMENT

Revised Range of Options

DECISION ADVISORY GROUP

OUTDOOR ENGINEERS

		System flexibility (30%)				Total cost of ownership (30%)		Passenger Flow (20%)			Passenger Satisfaction (10%)	Environmental Impact (10%)	Downtime
		Nominal capacity	Capacity variability	up-to-date features	Develop-ability	CAPEX	OPEX	Line formation	Accessibility	Intermodal integration of stations	Survey results	Potential emission reduction	Required system shutdown
1-2	Do **continuous smaller upgrades** to raise system reliability without getting into the "Major Modification" classification.												
3	Make a **major upgrade** to a more state-of-the-art technology in order to raise comfort, capacity and reliability.												
4	**Replace** the current system **with a complete new one.**												

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4 Long-Term Roadmap: DETAILED SCHEDULE

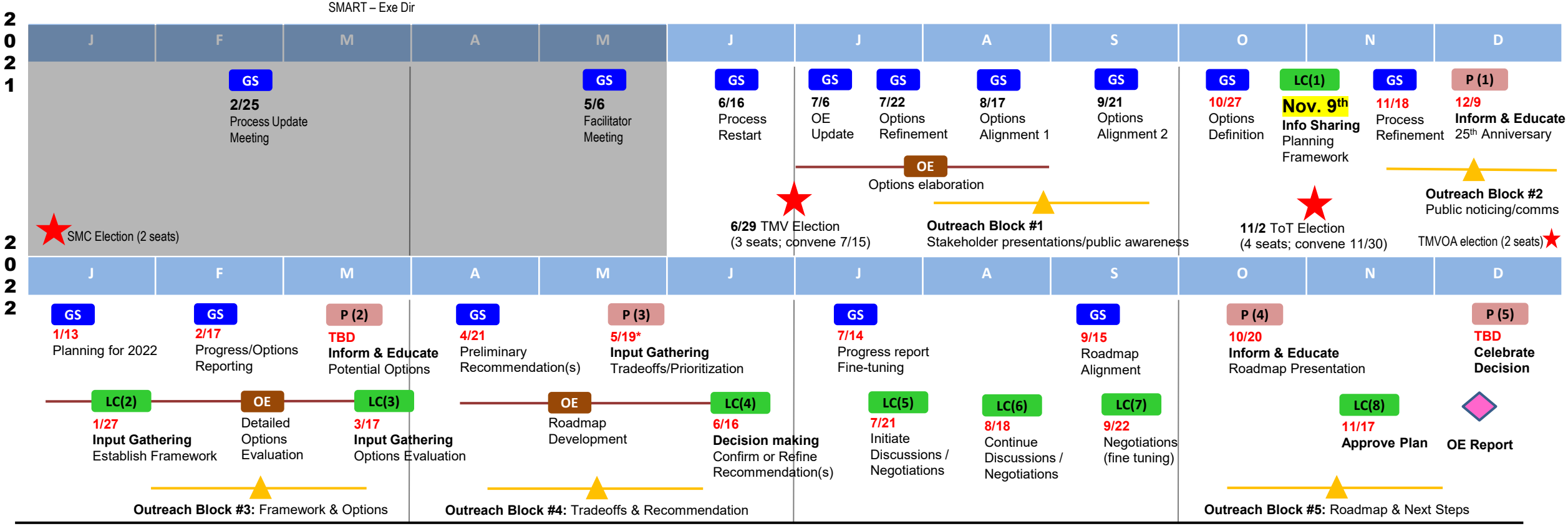
GS **Gondola Subcommittee**
Updated July 2021 – 10 members
TMVOA (2) SMC (2)
TMV (3) TSG (1)
ToT (2) SMART (1)

LC **Leadership Committee**
All members of following governments & organizations
TMVOA Board, CEO
TMV Town Council
ToT Town Council
SMC Commissioners
TSG – Mgt, Mtn Ops
SMART – Exe Dir

OE

P **Public Presentations**
*first originally proposed

Dates in red are proposed



Notes:
1. Meeting agendas / subjects are flexible; may be changed based on stakeholder needs.
2. Agendas to be published and available prior to meeting date.
3. Additional public sessions can be added, if needed.

TMVOA election (2 seats)

Thank You

TOWN OF MOUNTAIN VILLAGE
455 Mountain Village Blvd. Mountain Village, CO 81435
(970) 369-8236
Agenda Item 21

TO: Town Council

DATE: October 12, 2021

FROM: Lauren Kirn, Environmental Efficiencies and Grant Coordinator
Zoe Dohnal, Business Development and Sustainability Director

RE: American Rescue Plan Act Funds (ARPA) Funds

Executive Summary

The Town of Mountain Village received $358,425 in COVID-19 relief and economic recovery funds through the American Rescue Plan Act of 2021 (ARPA). The intention of these local recovery funds is to alleviate pandemic-related economic harm and to support critical sectors and essential workers. The Town has spent $17,825 to date on Kn95 masks, which have been and are being distributed to local businesses, visitors, and residents. The Town has $340,600 in remaining ARPA funds.

Per internal discussions about the community's greatest and most immediate needs, a review of eligible projects, and an evaluation of alternative funding opportunities, staff advocates for allocating the remaining funds to Mountain Munchkins for facility repairs and improvements and other program needs. The existing facility's conditions pose concerns related to safety, health, productivity, and energy efficiency. These funds can be used to cover costs incurred as of March 3, 2021. They must be obligated by December 31, 2024 and expended by December 31, 2026.

Background

The American Rescue Plan Act of 2021 established the Coronavirus State and Local Fiscal Recovery Funds to provide emergency funding to advance state and local governments' response to the COVID-19 pandemic and its economic impacts, and to support a strong and equitable recovery. The interim final rule was issued in May 2021 to provide guidance on spending, and includes a non-exhaustive list of eligible expenditures, encouraged expenditures, and prohibited expenditures. Per the U.S. Treasury Department's interim final rule, the recovery funds must be used for projects related to:

- Response efforts for the COVID-19 public health crisis and/or its negative economic impacts
- Strengthening support for essential services and their workers
- Services for disproportionately impacted communities
- Immediate economic stabilization for households and businesses
- Critical infrastructure and services investments: education and childcare, healthcare, transportation, sanitation, grocery and food production, environmental remediation, and public health and safety

- Investments in broadband, water, or sewer infrastructure

Through the U.S. Department of the Treasury, the Town of Mountain Village received $358,425 in total funding. The Town has $340,600 in remaining funds. The Town has spent $17,825 on 22,500 disposable Kn95 face masks purchased in response to the COVID-19 pandemic and San Miguel County's indoor face mask requirements. Masks have been and are being distributed to local businesses, visitors, and residents.

The intent of the local recovery funding is to advance pandemic response efforts, alleviate economic harm, and support critical sectors and essential workers, which includes childcare and early learning services. Mountain Munchkins had 42 children enrolled between the ages of 2 months and 5 years earlier this year. The center has lost 6 employees to date since its reopening in June 2020. This loss in qualified staff has decreased the capacity of the center to 34 children; the center can care for 18 toddlers, but due to the staffing shortage this number decreased to 10. Mountain Munchkins has a wait list of 13 families, and it is the only infant program in the region. About 15% of the enrolled students are from Spanish-speaking homes or single-parent families. The families are comprised of 9 essential workers, 28 Town of Mountain Village residents, and 6 residents of San Miguel County. Enrollment priority is given to essential workers and to Town employees. Due to the pandemic, Mountain Munchkins also suffered a severe loss in revenue from having to close its facility and cancel its fundraising events. Currently, Mountain Munchkins is not operating at full capacity due to continued staffing shortages. With the pandemic ongoing and children, toddlers, and infants ineligible for the vaccine, the current staff is placing themselves at-risk every day to care for Mountain Village's next generation.

In addition to capacity and staffing challenges, the Mountain Munchkins' facilities are in need of significant repairs and upgrades to allow for a safer, healthier, and more productive work and learning spaces. The infant/toddler center opened about 20 years ago and the preschool opened about 11 years ago. The centers were last painted three years ago and new flooring was installed seven years ago. The scope of the proposed repairs and upgrades includes, but is not limited to, a new ventilation system, replacing existing flooring, replacing cabinets and countertops, repairing the fence, expanding the office space, creating an employee break room, upgrading a door to meet ADA compliance, and replacing appliances and plumbing fixtures. In accordance with the interim final rule, the funds can be used to cover costs incurred by the Town of Mountain Village beginning on March 3, 2021. The funds must be obligated by December 31, 2024 and expended by December 31, 2026.

It is unrealistic for Mountain Munchkins to raise tuition costs to offset these costs or recoup revenue. According to the Economic Policy Institute, it costs about 21% of a median family's income for infant childcare in Colorado. Childcare is only considered affordable if it costs up to 7% of a family's income. The Mountain Munchkins actively works to help local families afford their programs by applying for multiple grants each year to offer tuition assistance and scholarships. Raising these costs is not a viable or effective solution to increasing Munchkins' revenue and capacity. Were Mountain Munchkins to raise tuition, it is likely most families would be forced to make the difficult choice to have one parent stay at home as

paying for Mountain Munchkins would no longer make economic sense. Such a choice would have downstream impacts as local businesses would be forced to replace workers in an already undersupplied job market.

Attachments

- Attachment A: Town of Mountain Village Commitments and Expenditures to Date
- Attachment B: Eligible Projects by Department

Eligible Department Projects

Mountain Munchkins is not the only department eligible for ARPA funding. As set forth in Attachment B, many other departments could receive ARPA funding. However, many of the funding priorities within these departments can be addressed through other existing grant programs. Specifically, ARPA has issued additional funding opportunities to be distributed by government agencies like the Department of Local Affairs (DOLA), the Federal Transit Administration (FTA), and U.S. Economic Development Association (EDA), as well as through the State of Colorado grants. Additional grant opportunities for affordable housing, transportation, and infrastructure are expected to become available. The opportunity for grant funding for Mountain Munchkins is significantly more limited as compared to other Town departments.

Staff Recommendations

The ARPA recovery fund guidelines require that the funds be spent on critical sectors and essential workers to alleviate COVID-19 related impacts and support resiliency and equity. The Mountain Munchkins and its essential workers provide an invaluable, critical sector service to the Mountain Village community. Its high-risk work environment and loss of revenue are a direct result of the pandemic, and consequently, these impacts are contributing to its operational challenges. The center needs significant facility repairs and upgrades to promote a healthier, safer, more productive, and more energy-efficient learning and work environment. The Town of Mountain Village staff highly recommends allocating all remaining $340,600 ARPA funds to Mountain Munchkins.

Proposed Motion

"I move to allocate the remaining ARPA local recovery funds to Mountain Munchkins, which funds are to be expended at the discretion of the Interim Town Manager in consultation with the Mountain Munchkins Director and Public Works Director."

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Attachment A: Town of Mountain Village Commitments and Expenditures to Date

Project	Spend to Date
Kn95 Masks	$17,825
Total	**$17,825**

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Attachment B: Eligible Projects by Department
Please note that "priority" in this context pertains to the intent and use of ARPA funds for a project.

Mountain Munchkins

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
high	Economic harm: revenue loss	$134,134	Due to COVID-19, Mountain Munchkins had to close in 2020 and reopen at partial capacity. The Mountain Munchkins is still operating at partial capacity. Additionally, the fundraising event, Family Date Night, was cancelled in 2020 due to the pandemic.	No
high	Facility improvements	$504,933	Repairs and upgrades to the infant/toddler and preschool centers for safety, health, ADA compliance, productivity, and energy efficiency.	No
high	Direct costs: materials (books, toys, etc.) and cleaning supplies	$5,000	Given covid-19 precautions and the extensive use and associated wear and tear of toys and books by infants, toddlers, and children, additional learning and play materials are also needed.	No
medium	Tuition assistance/scholarship program	$10,000	This program offsets the cost of tuition and provides scholarships for infants, toddlers, and children to attend Mountain Munchkins whose families cannot afford the center otherwise.	Yes*
medium	Playground upgrades or replacement	$17,000	Upgrade or replace existing playgrounds for maintenance, safety, and ADA access	Yes**
Total Allocation Request		**$676,067**		

*Telluride Foundation and the Buell Foundation help support the scholarship program.

**Great Outdoors Colorado (GOCO) has a grant for playgrounds.

Community Housing:

Affordable Housing

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
Town does not meet necessary qualifications under ARPA*	Affordable housing development: increase supply of high-quality and affordable housing units		Funds can be used for this is if it is: • within a Qualified Census Tract*; • to families living in Qualified Census Tracts*; • to other populations or households disproportionately impacted by the pandemic*	Yes**

***Mountain Village is not a Qualified Census Tract**. To qualify for this use, the Town must prove that the population the affordable housing units are serving is disproportionately affected by the pandemic.
**DOLA and OEDIT have grants that the Town is evaluating for affordable housing projects.

Village Court Apartments

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
low	Repairs/upgrades: outdoor access	$20,000	Dog park improvements: Leveling the existing surface of the dog park slightly and removing the existing irrigation. Basketball court: new fence around the perimeter	Yes*

medium	Repairs/upgrades: roof	$55,000	The contractor will be removing the roof tiles from one of the 2-bedroom buildings at VCA and replacing them with a corrugated steel style roof. The timeline for completion is tentatively the end of summer 2022. All buildings' roofs will need to be replaced over the next decade.	Maybe**
low	Repairs/upgrades: thermostats	$50,000	Replaced thermostats in 220 units, the daycare, office, and the maintenance shop.	No
low	Repairs/upgrades: Exterior lighting	$2,155	Replaced the exterior lighting at all VCA buildings in 2020 and 2021.	No
low	Playground repairs and upgrades	$34,000	Upgrade or replace two playgrounds at VCA	Yes*
Total Allocation Request		**$161,155**		

*Great Outdoors Colorado (GOCO) offers a grant for outdoor access and community impact (playgrounds, trails, etc.).
**DOLA offers a Rural Economic Development Initiative Grant for which this may qualify if we incorporate renewable energy.

Wildfire Mitigation

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
low	Public health & safety	$150,000	Fuel treatment; budgeted annually	Maybe

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low	Public health & safety	$50,000	Tree thinning; budgeted annually	Maybe
Total Allocation Request		**$200,000**		

Broadband

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
medium	Critical infrastructure: Resiliency improvements	$56,500	Implement redundancy at hardware, human, and internet connectivity levels to improve the resiliency of our network	Yes*
medium	Critical infrastructure: AC unit for cable headend	$25,000 to $30,000	Furnish and install an AC unit for the cabling system	Yes*
low	Public safety: video wall in Town Council Room	$15,000	Improve emergency operations center (EOC) capabilities	No
low	Address climate change: E-bikes	$4,000	Estimate for two e-bikes to offset vehicle use and reduce greenhouse gas emissions	No
Total Allocation Request		**$150,000**		

*Projects may be eligible for funding through the Economic Adjustment Assistance Grant or the Travel, Tourism, and Outdoor Recreation Grant through U.S. Economic Development Association (EDA).

Public Works

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities

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low	Critical infrastructure: Public safety (snowmelt) Address climate change	$26,000	Install Tekmar 1500 snow melt controls onto boiler systems. These controls will allow TMV to view and operate our snow melt system remotely. These controls improve efficiency of the system by allowing for a quicker response to weather changes.	Yes*
low	Critical infrastructure: Water	$75,000/year	Supervisory Control and Data Acquisition (SCADA) Upgrade; Multi-year project	Maybe**
medium	Critical infrastructure: Water	$35,000	Replace turbo meters	No
low	Critical infrastructure: Water	$300,000	Painted the double cabin water tank for maintenance and repair purposes; preserves and reinforces the integrity of the tank	No
low	Critical infrastructure: water	$300,000	Replace the San Miguel booster pump; planned for 2023	No
low	Critical infrastructure: water	$175,000	Purchase and install new power generation; planned for 2023	Yes***
medium	Critical infrastructure: water	$250,000	Replace waterlines at Ski Ranches	Maybe****
Total Allocation Request		**$1,161,000**		

*We will apply for a rebate of up to 50% of the total costs through Black Hills Energy.
**This may qualify for the Economic Adjustment Assistance funding and the Competitive Tourism Grant.
***Black Hills Energy commercial rebate

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****This may qualify for the Economic Adjustment Assistance funding.

Transit

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
low	COVID-19 direct impact: PPE	$8,585.20	Kn95 masks, surgical masks, gloves	Yes*
low	Address climate change: E-bikes	$6,000	Estimate for three e-bikes to offset vehicle use and reduce greenhouse gas emissions	No
Total Allocation Request		**$6,000**		

*CARES Act funding, ARP Additional Assistance for transit operations

Environmental

Priority	Spending Category	Funding Allocation Amount	Description	Other Funding Opportunities
medium	Covid-19 direct impact: disposable masks	$8,000	Install 9 disposable mask recycling bins at gondola stations, plazas, and the gondola parking garage. Bins will be replaced when full and relocated as needed. The $8k is the estimated cost for initial purchase and replacements of 9 boxes over 6 months. The Town distributed over 150,000 disposable masks in 3 months. This is a solution to keeping those masks out of our community (environment,	No

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			sidewalks, etc.) and landfills.	
Total Allocation Request		**$8,000**		

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 728-1392 **Agenda**

Item No. 23.a.

TO: Town Council

FROM: Michelle Haynes, Planning and Development Services Director

FOR: Meeting of October 21, 2021

DATE: October 6, 2021

RE: Planning and Development Services Fall Bi-Annual Report

We provided updates to Town Council at the September 16, 2021 regular meeting. See links below regarding those updates.
Forestry Update
Construction Update
Village Court Apartments Update

PLANNING
Below details information and data between 2017 and 2021 regarding participation in the defensible space fire mitigation program, the cedar shake roof fee waiver program, fee waiver data for other programs and tree removal statistics.

Table 1. Defensible Space Program participation to date from 2017 to present

Date	2017	2018	2019	2020	2021
Site Visits	7	7	12	12	38
Resulting D-Space Projects	7	7	3	4	17
Reimbursement Amount	$20,485	$21,900	$13,050	$15,550.00	$101,937.50

Cedar Shake Incentive Program
We will utilize all $100,000 between the Town's building fee waiver and TMVOA's $50,000 contribution to this incentive program. 25 cedar shake fee waiver building permits were issued in 2021.

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Table 2. 2021 Incentive Program and Fee Waivers to date

Fee Waiver or Reduction	Valuation	Fee Waiver or Reduction Value
Deed Restricted Properties	$61,800.00	$3,387.25
Cedar Shake Roof	$2,381,479.03	$ 89,855.07
Solar	$ 131,844.20	$ 5,000.00
Town Projects	$ 509,647.00	$ 19,219.89
Building Compliance	$ -	$ -
Planning Reviews Waived	$ -	$14,775.00
Telluride	$ 1,293,557.00	$ 29,472.73
TOTAL	$4,378,327.23	$ 161,709.94

The valuation of fee waiver between 2020 and 2021 increased by approximately two million dollars. The waived fee value increased by approximately $55,000.

Table 3. Tree Permits Issued from 2017 to present

Year	2017	2018	2019	2020	2021
Tree Permits Issued	137	104	97	84	78

PLANNING STAFFING

We are pleased to welcome Sam Quinn-Jacobs, planning technician and Brian Grubb senior planner to the team. Sam has an undergraduate degree in environmental studies, policy, planning and law. We look forward to mentoring Sam in the planning field.

Brian has a master's degree in urban and regional planning from the University of Colorado Boulder. Brian has many years in a hierarchy of planning and director positions in the Mountain West including Steamboat Springs and Jackson Hole Wyoming. We look forward to welcoming Brian and having full staffing levels.

Our planner continues to work in planning and communications processing plaza license agreements, special use permits, special events and vending. A report regarding these activities will be found in the communication's biannual reports.

COMMUNITY HOUSING

- We hired John Miller into the Community Housing Program Director position this fall.
- Our program director is working with Corenna, at the San Miguel Regional Housing Authority related to the transfer of information and a Mountain Village deed restricted housing compliance check.
- The Town Council heard one housing exception in 2021
- We have re-initiated the VCA Phase IV project, our program director is project managing this project.
- We are in process with establishing an affordable housing mitigation methodology.
- We formed an internal staff housing committee to discuss ongoing housing solutions related to accommodating housing for Mountain Village employees by addressing programs and policies.
- Our program director is working through a potential housing site inventory and getting up to speed regarding grant funding opportunities and finance structures.

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BUILDING

We had a high volume of single-family home construction with little mixed use or commercial development other than a handful of remodels.

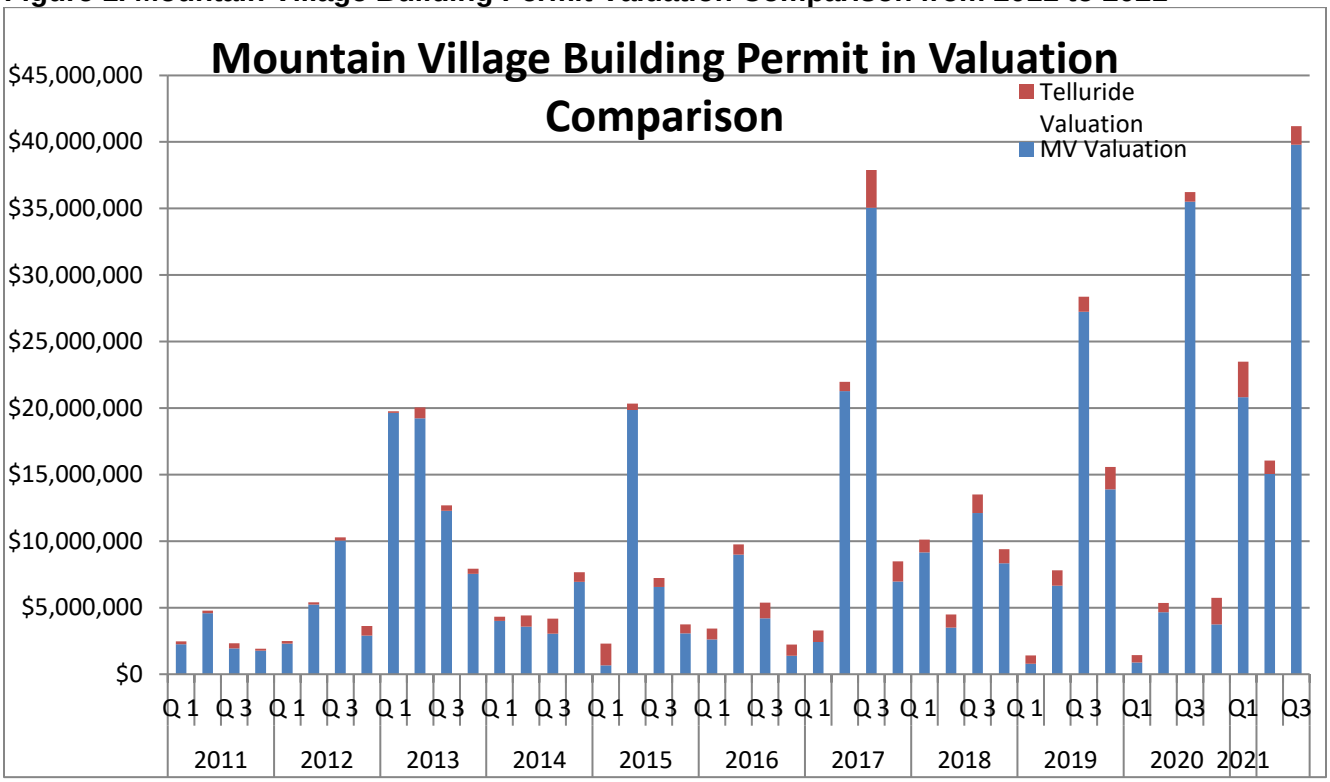
Year	2017	2018	2019	2020	2021*
Valuation	$63,154,900	$28,104,036	$37,573,475	$49,598,172	$74,994,934
Permits Issued	385	323	297	435	231
Inspections	n/a	2,153	2,875	3,560	3,450

*Year to date

Development Services Activity

The two graphs below map the value of new construction in Mountain Village over the last ten years, and the number of Town of Telluride and Mountain Village permits.

Figure 1. Mountain Village Building Permit Valuation Comparison from 2011 to 2021



Telluride Valuation means the valuation of plumbing and electric permits in Telluride

Figure 2. Building Permits Mountain Village and Telluride Comparison 2011-2021

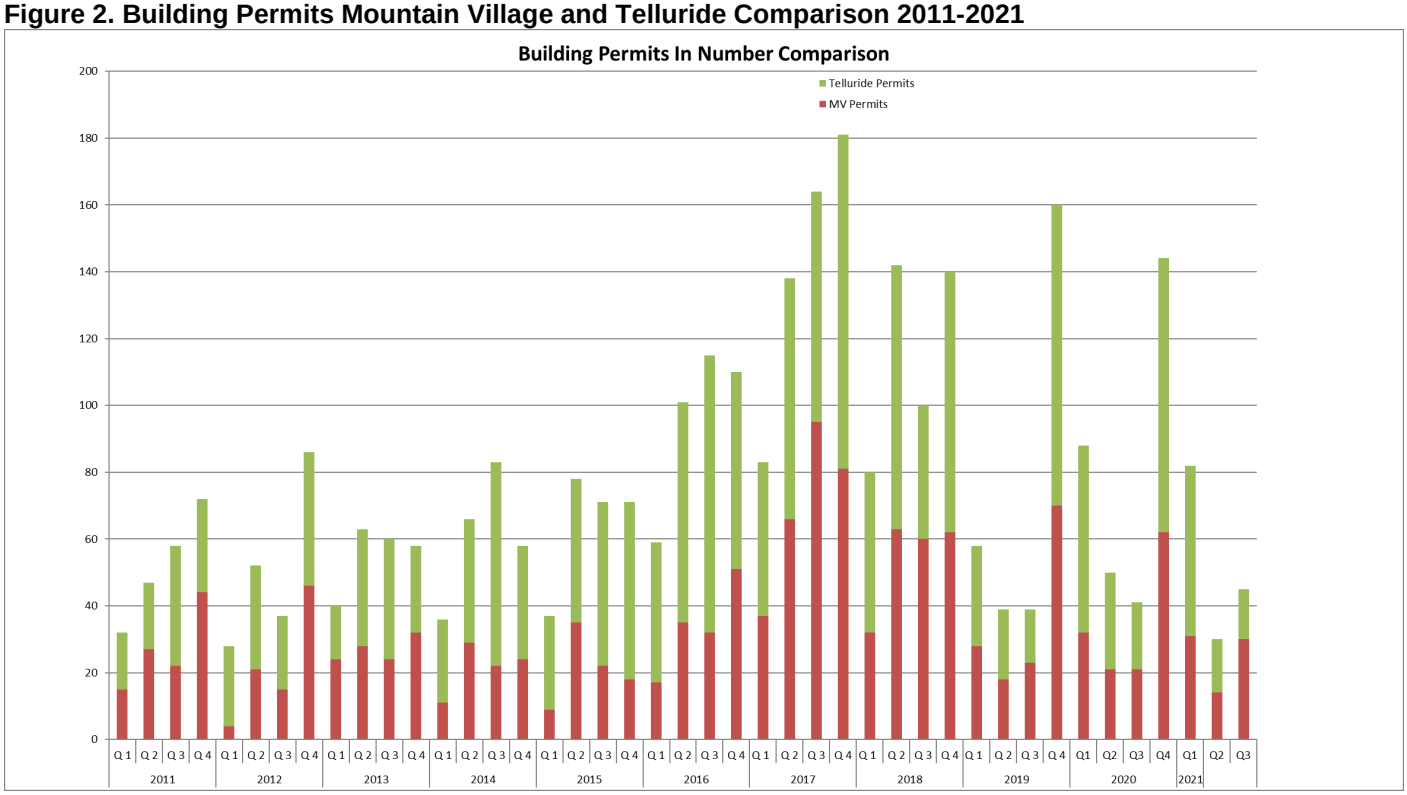
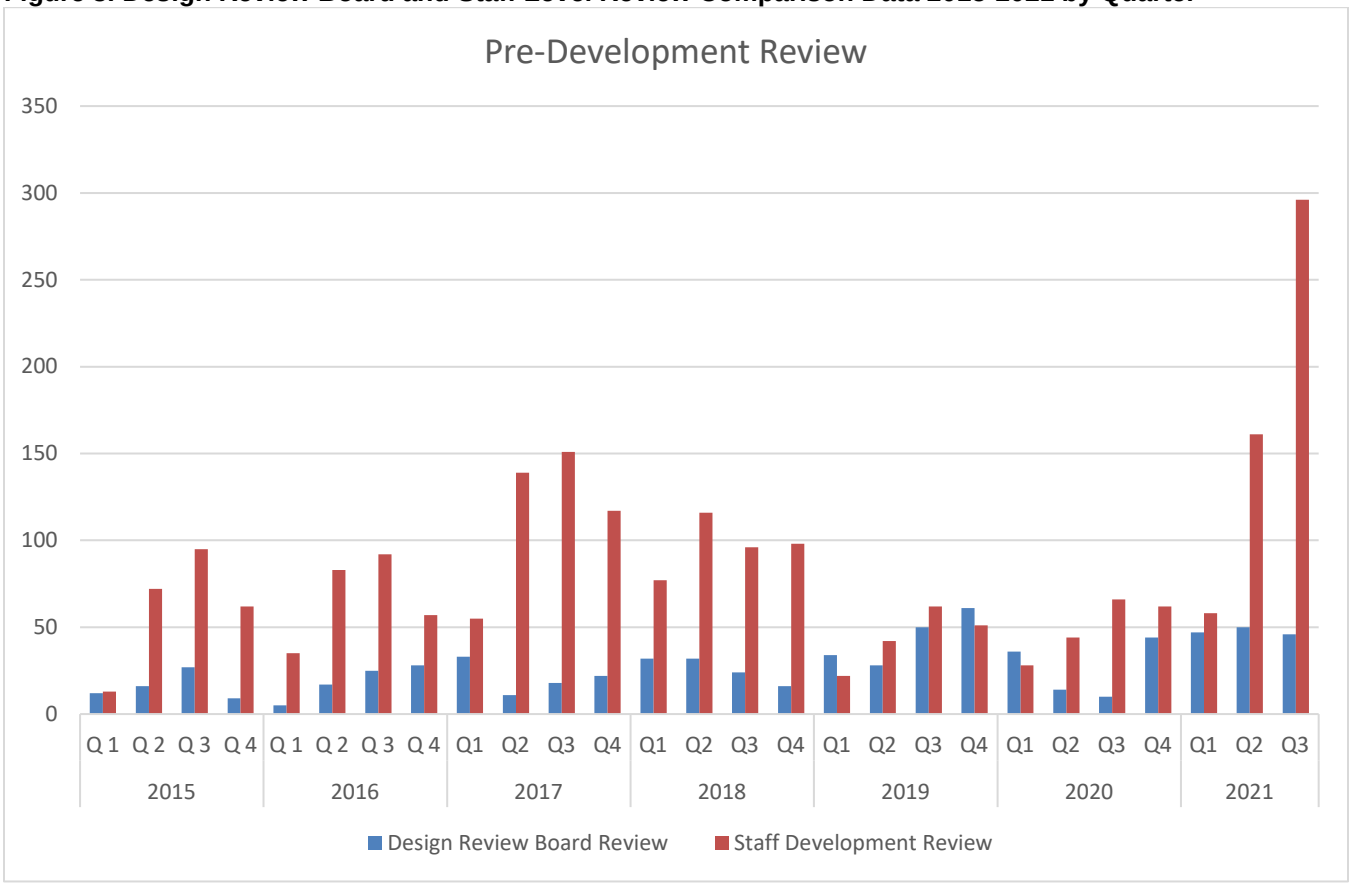


Figure 3. Design Review Board and Staff Level Review Comparison Data 2015-2021 by Quarter



Thank you for your continued support of the Planning, Building and Housing Departments.

Mountain Village Police Department
Semi Annual Report to Town Council
SUMMER: April 2021 through September 2021

DASHBOARD

SUMMARY

- Body Worn Cameras/ In Vehicle Cameras with laptops / Taser 7 all in service and operational
- Successful National Night Out. Thanks to Telluride Fire District and VCA for their support and assistance
- Upgrades to patrol response equipment in progress.
- Ongoing training –
    - in house training – Ground Fighting, firearms, Driving and Patrol Tactics
    - Crisis Intervention Team (CIT) training BB Burk & Nathan Santos. We now have 4 total trained for CIT
    - Mark Martin received a fully funded "scholarship" to attend the week-long 2021 International Association of Auto Theft Investigators (IAATI) conference
- We remained fully staffed for this reporting period. Our office manager tried a different position within the Town for a couple of months and returned to the PD in September.

KEY METRICS & COMPARISONS

	CHANGE	April'21 - Sept '21	April'20 - Sept '20	KEY POINTS
Calls for Service	↑ 1066	2828	1762	▪ This is reflective of both more in-person response after COVID as well as an increase of people in Mountain Village (both Guests and residents) ▪ This is more reflective of 2019 call load
Avg. Response Time (mins)	↓ 2:07	6:53	9:00	▪ Significant decrease; mainly due to in person response
Investigations	↑ 2	61	59	▪ While not a large increase in numbers , cases were more complex
Arrests	← 0	2	2	▪ this is still reflective of the jail not accepting inmates due to COVID ▪ Also the DAs Office and legislature is pushing for less incarceration
Traffic Contacts	↑ 15	60	45	▪ Traffic contacts / violations are proactively enforced through an educate, warn, and cite philosophy

POLICE DEPARTMENT PROGRAM NARRATIVE

The delivery of quality professional service, both timely and courteous, shall be the standard that guides the members of the Mountain Village Police Department while serving and protecting our community.

The Mountain Village Police Department's pledge is to embrace all citizens without bias, continually solicit citizen input, utilize department strengths, and explore improvement measures for weaknesses. It is only through a solid relationship that we can truly exceed our community needs.

DEPARTMENT GOALS

- Maintain a high level of public trust and confidence with the community
- Maintain a high level of visibility while on proactive police patrols
- Maintain a high level of community policing through regular outreach activities
- Respond to calls for service in a courteous, professional, and timely manner

PERFORMANCE MEASURES

- Community engagement events to receive direct feedback from community members (i.e. National Night Out, Coffee with a Cop)
- Officers patrol by vehicle a minimum of 30 miles per shift covering all roads at least once during a 10-hour shift
- Officers are to patrol business/commercial areas on foot an average of 2 hours per shift
- Calls for service are to be handled within 8 minutes of origination and without generation of citizen complaints

PERFORMANCE REPORT

- Community Engagement
    - NNO on August 3. Served approx. 400 hamburgers and 600 hotdogs. A lot of great conversations with our residents. Officers talked to teenagers until almost 9 pm.

- Patrol no less than 30 miles per shift
    - Staff performance exceeded the expectation with a six-month average of **45.3** miles per shift.

- Patrol on foot as average of 2 hours per shift
    - The foot patrol performance measure regarding the Core was met for the season. We continue to focus on the dismount zone enforcement. Compliance is good when we have a presence in the area, but citizen reports indicate that more education is needed when an officer is not present. Common Consumption area continues to function well with no significant issues. Having security staff on a full-time basis has been a great benefit for this program.

- Respond to Calls for service within 8 minutes
    - MVPD average response time this reporting period is **6:53** minutes from the time an officer receives the call until arrival on scene.

LAW ENFORCEMENT ACTIVITY

- Monthly Summary Reports
  This activity is reported to Town Council (BaGAR) monthly and includes activity from Protect and Service categories. Included is the six-month reporting period to demonstrate where staff services are required.

- Call Types and Categories
  Calls are tracked by their type of service and placed in Protect or Service categories.
    - Protect: Criminal investigations that are violations of state, county, and municipal laws.
    - Service: A larger portion of Community Oriented Policing activities; administrative services (fingerprinting), assisting other agencies (police, medical, and fire), animal problems, motorist/citizen assists, and civil matters.

- Call Initiator Categories
  Tracking how calls for service are received and/or initiated this period the numbers are significantly lower due to changes in response protocols.

- Traffic Enforcement
  Traffic enforcement is conducted based on a three-tier philosophy: educate, warn, and cite. This allows officers to engage with community members and visitors to establish trust and confidence while gaining compliance with laws and ordinances.

DEPARTMENT HIGHLIGHTS

- San Miguel County Mental Health Co-Responder program. This program continues to be a vital program for our community. Co- Responders are able to have active safety plans and follow up of needed services. We lost one member of the team this spring, but Sheriff Masters moved a road Deputy to this position to continue coverage

- HB 21-1250 makes changes to SB 20-217 the “Law Enforcement Accountability act” moves some requirements to be effective in July 2022 instead of 2023. More detailed information is available if desired

Respectfully submitted,

Chris G. Broady
Mountain Village Chief of Police

Agenda Item No. 23c
IT & BROADBAND DEPARTMENTS
455 Mountain Village Blvd.
Mountain Village, CO 81435
(970) 729-2654

TO: Mountain Village Town Council
FROM: Jim Soukup, Chief Technology Officer
Steven LeHane, Director Broadband Services
DATE: October 7, 2021
RE: IT and Broadband Report

Summary

This report summarizes general IT operations and broadband services for the Town since September 2021.

Information Technology

- Cybersecurity
  - Last 30 days 96 Total hunting leads generated. 0 Investigated. 0 mitigations.
  - Continue to security patch in a timely fashion. Server 100% and 81% Desktop up to date.
  - Continue to listen to Security Now podcast for latest security events.
  - TMV's phone network suffered intermittently because upstream DDOS attack on voip.ms. This service attacks seems to have passed.
- System Administration
  - Upgraded archive backup storage functionality.
  - Started Incode server upgrade project. Incode's cloud offering is too expensive.
  - Auditing plain old telephone service (POTS) because Granite (phone wholesaler) has a new cost savings offering.
  - Continue to review Gondola people counting systems.
- HR
  - Worked on a various description and job roles.
  - Added password reset functionality during the on boarding process.
- Network Administration
  - Began Heritage Parking Wi-Fi project.
  - TMV private network. Last 30 days Network Uptime 99.99%, Brief Outages 4, and Network Performance Rating High.
  - Altered Wi-Fi network in preparation for the Spartan race.
  - Added temporary APs, dedicated Wifi, and connections for the Spartan race.
  - Began planning adding AP near Telluride Brewery.
- Desktop IT
  - On boarded IT help who is working Wednesdays.
  - Added calendar functionality to TMV ticketing support system.
  - Started training Thirdfloormedia to take over recording Council and DRB meetings.
  - Re-configured the on-call phone system for the water department.
- GIS
  - Open space editing map in ArcGIS Online environment for enterprise editing.

        - Training Planning staff to use editing tool
        - Incorporation AGOL Cloud enterprise with Planning GIS
    - QC, edit, implementation of Planning GIS mapping and editing.
        - Basemap, open space map, TMV Owner properties.
    - Development of Business way finder App – TMVOA; Algoworks (developer)
        - Business precision locator - GPS
    - People counting system with Gondola, Transportation, Business Development.
        - Bosch and AT&T – GPS and determine Camera Locations
    - HUFT – CDOT Road reporting
        - Training and annual report completion
    - Drone Training and FAA Part 107 Certification
        - Licensed for commercial, civil, and public flights
    - Working with Recreation, Planning, and Legal to create accurate trails data.
        - Hosting trail detour map for lot 615 1CR.
    - PLA maps for Plaza space utilization agreements with TMV
        - GPS PLA Boundaries for contracts and documentation.
    - Creating and deploying Water and Sewer Solution
        - Training, implementation, planning.
    - Fiber to the Home Project mapping
        - Decoding Lightworks Google Earth file.

Broadband

- Maintain locating, Water/Sewer, and Facilities Maintenance maps in AGOL Environment
    - Update layers, download GPS Data, Maintain maps.
- Received CDOT permit to pothole on 145 for road crossing to feed West Meadows and Elk run.
- Continue Installing commercial customers in the core.
- Trails edge is last bore to finish main line construction for entire system.
- Have 16 homes on list to put conduit to the house will finish this year.
- 415 Fiber internet customers and 190 Fiber Video customers.
- Scheduling for the spring to add conduit to homes where needed.
- October 25th starting Video migration from traditional to Resort video.
- Continue to work with One Technology on network fixes stemming from the Aug. 28th outage.
- Clearnetworx's internet connection has been signed for service.
- Continue to work through managed services agreement with vendor.

David McConaughy
dmcconaughy@garfieldhecht.com

October 11, 2021

VIA Email
Paul Wisor, Interim Town Manager
Town of Mountain Village
411 Mountain Village Blvd.
Mountain Village, CO 81435
pwisor@mtnvillage.org

Re: LEGAL REPRESENTATION AND FEE AGREEMENT

Dear Paul:

Congratulations on your new position as Interim Town Manager of Mountain Village (the "Town"). You have suggested, and we agree, that we should amend our prior fee agreement with the Town and memorialize our role and billing arrangements going forward. I understand that, at least for now, you will remain as the official Town Attorney, and we will serve as Special Counsel. This letter will replace and supersede any prior fee agreement between Garfield & Hecht, P.C. (the "Firm") and the Town.

1. **Scope of Engagement; You Hire Us To Act As Your Attorney**: Thank you for the opportunity to represent the Town as special counsel. This agreement also covers legal services pertaining to the subject matter hereof rendered prior to your signing this letter and after your appointment as Interim Town Manager on September 16, 2021, except that the rates set forth below will take effect as of October 1, 2021. After completion of this engagement, changes may occur in the applicable laws or regulations that may impact your future rights or liabilities. Unless you specifically engage us to provide additional services after the completion of this engagement, we do not undertake to advise you with respect to future legal developments relating to this engagement.

2. **Fees and Staffing; We Bill By The Hour**: Will bill the Town on a tiered structure depending on the nature of the assignment and the attorneys involved:

- For David McConaughy and any other shareholders of the Firm, the general rate will be $245 per hour.
- For associates, the general rate will be $230 per hour.
- For all work provided on behalf of the Town subject to reimbursement by developers or land use applicants, the rate will be $285 per hour for all attorneys in the firm.
- For litigation and water rights matters, the rate will be $350 per hour for Mr. McConaughy and other shareholders and $295 per hour for associates.

- Travel to and from Mountain Village at your request will be billed one-way only from our Glenwood Springs office for one trip per month by one attorney. Any additional travel time will be billed at the general rate regardless of the nature of the matter. We also charge mileage at the IRS rate. In order to minimize travel expenses, we expect to appear at Town Council meetings or other meetings via Zoom or similar platform whenever practical.

From time to time, we may assign other lawyers, primarily associates, or paralegals for discrete tasks. We agree to keep records of all time spent. Unless otherwise advised, you will be billed monthly. Unless otherwise agreed, you will be billed for professionals' time at increments of $1/10^{th}$ hour. Our rates and fees are based on factors set forth in Rule 1.5(a) of the Colorado Rules of Professional Conduct, applicable to all Colorado attorneys. We periodically review and adjust the hourly rates of our attorneys, paralegals or other timekeepers in response to rising costs, market conditions or other factors law firms typically take into account. By this letter you approve adjustments that do not exceed annually ten percent (10%) over the hourly rate initially quoted to you. Any estimate given regarding fees or costs of your matter are preliminary in nature and unless agreed otherwise are not binding on us and should not be relied upon. Actual fees and costs of your matter may vary substantially from estimates.

3. **Expenses; You Will Reimburse Us For Expenditures On Your Behalf:** You agree to pay promptly for such legal services and to pay all expenses incurred in connection therewith, such as long distance, court reporters, data compilation and management, office copying service, postage, Federal Express or other overnight carriers, filing, recording fees, secretarial overtime, and the like allocated to your legal matter. We may also incur travel, mileage, lodging and subsistence expenses for your legal matter for which you are also responsible. In certain matters, we will need to retain consultants, vendors and experts on your behalf. You authorize us to incur costs on your behalf, but we are not required to do so. We will attempt to obtain your consent before incurring costs in excess of $500.00, but you understand that circumstances may make it impractical to obtain your consent before incurring such costs. You agree that you are solely responsible for any costs incurred on your behalf. In lieu of advancing costs, we may request funds from you for the payment of anticipated costs, which will be kept in our COLTAF account until the costs are incurred. These payments or requested funds for payment must be paid promptly.

4. **Litigation; We Cannot Guarantee Success**: If our representation of you involves a contested or adversarial matter, we intend to assert your position vigorously and efficiently. However, you must understand that, in representing any client in a contested or adversarial matter, we cannot promise or guarantee the ultimate success of your position, whether in a lawsuit, arbitration or any other forum. Our performance also depends, in large part, upon your cooperation and particularly upon prompt receipt of information and instructions from you from time to time as the matter progresses. Further, the level of activity may, in large measure, depend on the steps the other parties may take and their willingness, if any, to resolve your dispute without a full-scale trial. We hereby advise you of the existence of alternative forms of dispute resolution which might reasonably be pursued to attempt to resolve the legal dispute or to reach the legal objective sought.

5. **Town Council as Client**: We represent the Town as a municipal corporation and not any individual elected official or employee. We may undertake defense or representation of an official or employee acting in their official capacity if so directed by the Town Council. We will take day-to-day

direction from you and other staff as you may authorize, but ultimately the decision to hire the Firm or terminate the attorney-client relationship will rest solely with the Town Council. This means it is our duty to place the Town's welfare and interests ahead of the interests of any of the individual officials, employees, or citizens.

6. **Payment; We Charge Interest On Late Payment:** If you are billed for any legal services or expenses, you agree that payment must be made within 30 days of the date of any such bill. You will be charged compounded interest at a periodic monthly rate of 1.5% (this is an annual percentage rate of 18%) on any balance unpaid after 30 days, but in no event less than a 1.5% periodic monthly rate. In the event that you do not pay an invoice within forty-five (45) days and no information is brought to our attention regarding a dispute as to the amount owed, we may elect to take legal action including a collection lawsuit to recover our unpaid legal fees and costs and accrued interest. Under such circumstances you agree to pay our reasonable legal fees and costs incurred in such collection activity and you further agree to submit to the jurisdiction of the County or District Court in Colorado of the county in which our office is located where the primary legal services were provided as reasonably determined by us.

7. **Withdrawal; We Reserve The Right To Withdraw, You May Always Terminate Us**: By written notice, we may withdraw as your counsel for reasons including, but not limited to, failure to pay fees or expenses, failure to cooperate with the Firm, conflicting communications where there is more than one client contact, and those mandated by the Colorado Rules of Professional Conduct or otherwise provided in this agreement. If permission for withdrawal from employment is required by court rules, the Firm shall withdraw upon receiving permission from the court; and you agree to pay all legal fees until such permission is obtained or otherwise incurred incident to the winding up and conclusion of your representation. Upon withdrawal, you shall immediately pay any remaining balance owed on your account. You may also terminate our employment by notifying us in writing that the Town Council has passed an appropriate motion to that effect. The Firm reserves its right to assert a retaining lien or charging lien, as appropriate, on any unpaid balance.

8. **Privacy; Your Assurance Of Confidentiality, When Disclosures Are Permitted**: Subject to professional and ethical standards, all communications between us are protected by the attorney-client privilege. This privilege may be waived by you if you share the communications or advice with third parties. We advise you not to share or disclose attorney-client communications to any third parties without first consulting us. Additionally, we advise that you avoid posting any information related to the scope of our representation on social media, as this may result in a waiver of the attorney-client privilege. Any information that you post on social media may be discoverable by adverse parties; we advise you to avoid posting any information related to the scope of our representation or your underlying legal matter on social media. Confidential information may be shared by us with other attorneys, paralegals, contract attorneys or legal assistants and outside consultants retained on your behalf whose services are necessary in the course of our representation. Confidential information may also be disclosed by us to third parties where such disclosure is implied from the legal services you have requested us to provide such as our outside ethics counsel or our IT provider. Further, if requested, client names may be disclosed to any municipality that is or may become a client of the firm. This disclosure is limited to legal matters within the territorial limits of such municipality or properties that may be eligible for annexation and subject to the requirement that the municipality keep such names confidential to the extent permitted

by law. We protect all such information with physical, electronic, and procedural safeguards that comply with our professional standards. If we are representing multiple clients in this matter, it is your responsibility to advise us if any information you may give us is confidential. Otherwise, all relevant communications received from you may be disclosed to other clients we represent in this matter.

9. **Insurance; We Are Not Responsible For Insurance You May Have**: It is possible you may have insurance policies relating to the matter wherein you have requested our assistance. You should carefully check all policies and, if coverage may be available, notify the insurance company about the matter as soon as possible. We do not undertake any responsibility to advise you as to the existence, applicability or availability of any insurance coverage or to give notice or tender any claims to any insurance company for any of the matters being handled by this firm. If any insurance company undertakes the payment of any portion of our billing statements, you will still remain responsible for any amounts not paid by the insurance company. Finally, if there is insurance involved in any transaction where we represent you, it is your responsibility to determine whether or not the underwriter has adequate resources to pay any claim. We are not financial analysts, and we do not have the expertise to advise you as to the financial condition of any underwriter or insurance agent.

10. **Conflicts of Interest; Conflict Checks; Conflicts That May Arise Later and Waivers**: To protect both of us and to comply with our professional obligations, our representation is subject to clearance of any conflicts of interest with present or former clients of our firm, as well as approval by the firm's management which reviews all new matters. Conflicts of interest may also arise at some later date. If a conflict arises through no fault of our law firm, for example, as a result of a merger or acquisition you enter, you agree that such circumstances will not be a basis to disqualify us in this or any other matter. If a conflict arises because a particular lawyer joins our firm, you agree that it will be a sufficient remedy to screen such lawyer or lawyers from our engagement(s) for you, including any relevant documents. This firm represents many companies, associations, individuals, municipalities and other governmental or quasi-governmental entities. It is possible that during the time we are representing you, some of our current or future clients will have disputes or transactions with you. You agree that we may continue to represent or undertake in the future to represent existing or new clients in any matter, including litigation, even if the interests of such other clients in such other matters are directly adverse to yours, so long as those matters are not substantially related to our work for you. In cases where the attorney handling your case may be acquainted or friendly with the opposing attorney, we will consider if such relationship may interfere with the effective representation you would expect from us absent such relationship. If we do not perceive such interference, you hereby waive any conflict of interest where such relationship may be present. Should we perceive that such relationship might interfere, we will disclose such circumstances to you and discuss whether you would want to waive the conflict or have us withdraw from representing you.

11. **File Retention Policy; When Your Files May Be Disposed Of**: The firm reserves the right to dispose of any file four (4) years after the legal matters described therein have been resolved or four (4) years after the last work on the matter has been performed, whichever is first. If you wish to obtain your file, you must do so by written request within said four (4) year period. You agree to be responsible for the shipping and handling charges incurred in forwarding these files to you or to any third party you may designate.

12. **Dispute Resolution; We Will Try To Resolve Disputes By Mediation And If Not Successful Then By Arbitration**: In the event of any dispute, controversy or claim (a "**Dispute**") arising from or relating to (1) this agreement or breach thereof, including a dispute as to the amount owed for legal fees or (2) any representation or services provided by the firm including possible malpractice where the Dispute cannot be resolved by direct discussions between the parties, you and this firm agree to first endeavor to resolve the Dispute by mediation before resorting to arbitration. Mediation may be initiated by written notice by either party who has authority to resolve the Dispute. If the Dispute is not resolved within sixty (60) days after the beginning of mediation then, upon written notice by either party to the other, the dispute shall be finally resolved by binding arbitration conducted by, and in accordance with the rules of the Judicial Arbiter Group, Inc., or, if such entity is no longer functioning, its successor or such other entity most nearly performing the same function in Colorado as we may reasonably determine. BY AGREEING TO ARBITRATION THIS FIRM AND YOU AGREE TO WAIVE ANY RIGHT TO A TRIAL BY JURY. On balance we believe arbitration is a worthwhile way to resolve Disputes because it can be done expeditiously and with less expense than litigation. The place of mediation and arbitration shall be in the county in Colorado in which our office is located where the primary legal services were provided as reasonably determined by us. Except as may be required by law, a party, mediator or arbitrator may not, with respect to a Dispute, disclose the existence, content or results of any discussions, mediation, or arbitration hereunder without the prior written consent of both parties, and the process of discussions, mediation, if necessary, and arbitration, if necessary, shall, to the fullest extent allowed by law, be the sole means of resolving any Disputes. If we prevail in the arbitration, you agree to pay our reasonable attorney fees and costs incurred. As to non-payment of legal fees only, and provided neither party has requested mediation or arbitration, we reserve the right to file a collection lawsuit. If we have commenced a collection lawsuit for legal fees owed and in the course of that litigation you raise any matters that are required to be resolved in accordance with the dispute resolution procedures set forth herein, we shall dismiss or stay the litigation and submit the dispute to these resolution procedures.

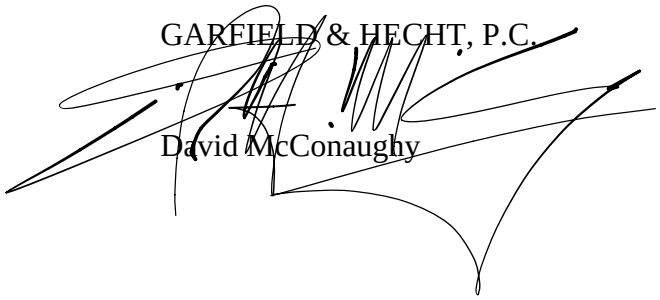
13. **E-Mail Alerts; Website**: If you have provided us with your e-mail or mailing address, we may periodically send to you via e-mail or regular mail alerts involving firm news or changes in laws. If you do not wish to receive these alerts, please let us know, and we will omit your name from our distribution list. Sending such alerts is solely a courtesy to our clients and does not give rise to any duty on our part to keep you informed of changes in laws or constitute legal advice. Documents we send you by e-mail (whether or not containing confidential information) will not be encrypted unless you request us, in writing, to encrypt outgoing e-mail and we are able, without significant additional cost, to agree with you and implement mutually-acceptable encryption standards and protocols. We make reasonable attempts to exclude from our e-mails and any attachments any virus or other defect that might affect any computer or information technology system. However, it is your responsibility to put in place measures to protect your computer system against any such virus or defect, and we do not accept any liability for any loss or damage that may arise from the receipt or use of electronic communication from us. If you are a corporation or other form of entity, your signature below constitutes a consent to include your name in the Representative Client listing appearing on our website. We never post the names of individuals on the list. If you do not wish to have your name appearing on the listing, please let us know.

Please acknowledge your acceptance of the terms set forth herein by executing this letter and returning it to the undersigned by email or facsimile at (970) 925-3008. If you prefer to have an electronic

version I am happy to forward it to you via DocuSign for ease of signing. We look forward to working with you.

Very truly yours,

GARFIELD & HECHT, P.C.



David McConaughy

AGREED TO:

TOWN OF MOUNTAIN VILLAGE

By: _____
Paul Wisor, Interim Town Manager

If a different billing address is not provided below the address at the beginning of this engagement letter will be used for billing purposes. You may also elect to have your billing emailed to you. Please select your preferred method of delivery below.

□ Billing Mailing Address:
_____
_____
_____

□E-Mail – Billing E-mail Address:
_____

2022 Proposed Regular Town Council Meeting Schedule

January 20th

February 17th

March 17th

April 21st

May 19th

June 16th (CML Conference in Breckenridge June 21-24 and Telluride Bluegrass Festival June 16-19)

July 21st

August 18th

September 15th (September 16-18 Telluride Blues & Brews Festival)

October 5th (Wednesday Budget Meeting)

October 20th

November 17th (Thanksgiving is November 24th)

December 8th (second Thursday so budget is adopted by December 15th)