BRIAN HEAD

The Regular Meeting of the Brian Head Town Council
Brian Head Town Hall – Council Chambers
56 North Highway 143 – Brian Head, UT 84719
www.Zoom.us (Click Here)
Via Zoom Meeting ID# 825 5958 7200

TUESDAY, SEPTEMBER 9, 2023 @ 1:00 PM

AGENDA

A. CALL TO ORDER
B. PLEDGE ALLEGIANCE
C. DISCLOSURES
D. APPROVAL OF THE MINUTES:
   1. August 8, 2023 Town Council Meeting

E. **REPORTS / PUBLIC INPUT ON NON-AGENDA ITEMS.** Public input is limited to three (3) minutes on non-agenda items.

F. AGENDA ITEMS:

1. **ZONE AMENDMENT FOR LOTS 3 & 13 IN THE SKI HAVEN CHALETS SUBDIVISION FROM R1 TO R3.** Lester Ross, Building and Planning Official. The Council will consider an ordinance amending the Zone District Map for lots 3 & 13 in the Ski Haven Chalets Subdivision from Single-Family Residential to Multi-Family Residential.

2. **SNOWSHOE/TOBOGGAN SPECIAL ASSESSMENT AREA PUBLIC HEARING.** Shane Williamson, Town Treasurer. The Council will hold a public hearing for the Snowshoe/Toboggan Special Assessment Area.

3. **FISCAL YEAR 2023 SURPLUS DISCUSSION.** Shane Williamson, Town Treasurer. The Council will hold a discussion on allocation of the General Fund surplus from FY 2023.

4. **WATER & SEWER CAPITAL FACILITIES PLAN ADOTPION.** Aldo Biasi, Public Works Director. The Council will consider an ordinance adopting the Capital Facilities Plan for Water & Sewer.

5. **WATER INFRASTRUCTURE PROJECT FUNDING, PROJECT SCHEDULING**. Aldo Biasi, Public Works Director. The Council will give direction on a project construction schedule from the Capital Facilities Plan.

6. **A RESOLUTION CALLING A PUBLIC HEARING AND AUTHORIZING NOT MORE THAN $5,490,000 TAXABLE WATER REVENUE BONDS, TO FINANCE WATER SYSTEM IMPORVEMENTS; PROVIDING FOR THE PUBLICATION OF A NOTICE OF PUBLIC HEARING AND BONDS TO BE ISSUED; FIXING THE MAXIMUM AGGREGATE PRINCIPAL AMOUNT, MATURITY INTEREST RATE AND DISCOUNT OF THE BONDS; PROVIDING FOR THE RUNNING OF A CONTEST PERIOD; AND RELATED MATTERS.** Shane Williamson, Town Treasurer. The Council will consider a resolution for the issuance of bonds to finance water system improvements.

7. **FUTURE AGENDA ITEMS.** The Council will discuss potential items for future agendas.

G. ADJOURNMENT

BRIAN HEAD

Date: September 8, 2023

Available to Board Members as per Ordinance No. 11-003 authorizes public bodies, including the Town, to establish written procedures governing the calling and holding of electronic meetings at which one or more members of the public board may participate by means of electronic communications. In compliance with the Americans with Disabilities Act, persons needing auxiliary communications aids and services for this meeting should call Brian Head Town Hall @ (435) 677-2029 at least three days in advance of the meeting.

CERTIFICATE OF POSTING

I hereby certify that I have posted copies of this agenda in three conspicuous locations; the Post Office, The Mall, and the Brian Head Town Hall and have posted copies on the Utah Meeting Notice Website and the Brian Head Town website and have caused a copy of this notice to be delivered to the Daily Spectrum, a newspaper of general circulation.
Nancy Leigh, Town Clerk

Brian Head Town Council Update

September 1, 2023

BRIAN HEAD MARSHALS OFFICE:

August was a great month for our deputies. A lot of bigger cases have been getting traction and charges are starting to be handed out. One of those cases involved a burglary where two high value items were taken. Both items have been recovered and will be returned to the owner. We also were able to get a positive name and identity of the suspect. We will be issuing warrants for the main suspect as well has having a couple of other players that we will be tracking down and interviewing.

We had a trespassing issue with one of our past residents. He has been since arrested on a warrant and is facing additional charges. A vehicle he was driving that was still licensed under the past owners' name was recovered and returned.

Deputies also handled a stolen vehicle out of Newport Beach, Ca. An arrest was made and the vehicle is in the process of being returned. There were also additional charges and the investigation is still ongoing.

Some narcotics were located in a stash on the mountain. We are conducting an investigation into how it got there and will hopefully be able to turn up some suspects. The drug was identified as Cocaine and we are starting to see a return of it to our area. The drugs we are seeing are often time mixed with fentanyl. Fentanyl is a very dangerous drugs and we are having quite the epidemic with it across the country. A person can overdose on it just by touching it and absorbing it through their skin.

Total Incidents for August – 64

911/Alarms 11

Agency Assist 1

Animal Problem 1

Burglary 1

Citizen/Motorist Assist 13

Disorderly 6

Fire 1

Fire Inspection 11

Medical 4

Parking Problems 1

Suspicious 2

Trespassing 1

Child Abuse/Endangerment 2

Civil 1

Fraud 1

Illegal Dumping 1

Stolen/Recovered Vehicle 1

Stalking 1

Theft 2

Threats 1

Trespassing 1

Vagrancy 1

BRIAN HEAD FIRE DEPARTMENT:

Training is still the topic of this summer. It's great to be able to get out and do some outdoor training. We have been taking advantage of the summer weather and getting the firetrucks out and running some water through them. Deputy Abbott has done a great job with setting up our trainings and refreshing our minds on operating our apparatus.

Deputy Abbott was also able to spend a week in North Carolina where he received certification as an instructor and medic in Tactical Combat Casualty Care. He will be able to instruct us all on the techniques of casualty care for an "Active Shooter" situation. This includes triage as well as wound care and treatment that can and will save lives in the real event. These situations are happening more and more, and we are staying ahead of the event by training and preparing for such a situation.

We have brought Nick Giffin on with us as our summer fuels crew. We are working with the State Forestry and Fire to get him out on a fire. They have offered to help staff an engine if we are unable to find Nick a crew member. As you know, the summer fire season has been slow due to the moisture. But we are looking to send him out in the Western States if we can get a good assignment. In the meantime, he

has done a great job going through all of our equipment. He has cleaned and sharpened our saws, sanded and re-oiled the handles on all of our tools and made numerous small repairs to trucks and items that seem to slip through the cracks. We will also be using him to start cutting some of the dead trees in the meadow as well as along SR 143 and up on the "Archery Range".

BRIAN HEAD

PUBLIC WORKS DEPARMENT UPDATE

September 12, 2023

The summer monsoons have continued to wreak havoc on construction schedules. They have stopped for a short period in the past week and Public Works has made the most of it while there is good weather. Rain is forecasted for a few days next week and Public Works will do its best to accomplish all that it can in the final push of this construction season.

STREETS

- Road work continues to be accomplished as crews have been able to take down trees in the widening of the Forest and Mountain View intersection.
- Operators continue to haul up material to be placed.
- An asphalt repair project on the upper sections of Steam Engine is being put together to repair damaged areas and also repair a damaged culvert that will help stabilize the road erosion. This work has been set back due to the rains, but staff is working towards its completion with Western Rock as they will be returning to the mountain in the next few weeks.
- The road base has been placed on Autumn Drive. The Town has a few more items to complete on the Steam Engine Meadows SAA and that is the installation of a culvert at the Top of Autumn Dr and some final work on the culti-sac. Staff is working with a home owner up there that is correcting their mistakes caused during their construction.

WATER

- Repair of the meter reading system continues with new MXU's being installed as they are arriving from back order.
- Power and fiber have begun with the easing of the rain and the completion of Rocky Mountain Plans
- The water main extension on Granite Court is to begin in the next few weeks.
- The Council has been introduced to the Infrastructure Water projects and engineering will be taking place once the Council approves the project list.

- Staff received an additional grant from the Division of Drinking Water for putting together the requirements for the Lead and Copper Program from the new rules that were approved.
- Power installation at the half million gallon tank is nearing completion.

SEWER

- The Canyon sewer line project has begun, with the first section already completed.
- Staff is working to identify sewer infiltration issues as time permits.
- Annual sewer cleaning will begin in the next few weeks. Staff is begin locating manholes next week.
- Staff has applied to the Division of Water Quality for funding on Sewer projects. Staff received comments from the Division at the initial meeting and will adjust the project list according to their direction as it moves forward in their application process. The next meeting is scheduled in October.

SOLID WASTE

- Public Work Operators have added an additional trash run on Wednesdays to accommodate for the additional visitation to the Town.
- Work is beginning on a test dumpster encloser.

PARKS & TRAILS

- Phase 3 of the paved trail has begun. The Contractor is still pushing for a paving date before Labor Day. The project has been moving along relatively smoothly.
- Repairs to the rail fencing that has been damaged during plowing operations is being repaired.
- Finish Landscaping work continues to happen at the Manzanita restroom site.
- The Manzanita trail lookout project is scheduled to begin next week. Staff has already begun staging building material onsite.

EQUIPMENT

- Repairs to equipment continue as needed.

IN-HOUSE PROJECTS

Public Works will continue to work on in-house projects and maintain buildings and equipment as needed. If you have any questions or concerns, please do not hesitate to call.

STAFF REPORT TO THE TOWN COUNCIL

BRIAN HEAD

ITEM: SKI HAVEN CHALETS LOTS 3 & 13 ZONE CHANGE

AUTHOR: Lester Ross
DEPARTMENT: Administration
DATE: September 12, 2023
TYPE OF ITEM: Legislative Action

SUMMARY:

The Town Council will consider an ordinance for a zone amendment which would change the zoning designation of Ski Haven Chalets Lot 3 & 13 from R1 – Single Family Residential (low density) to R3 – Multi-Family Residential (high density).

BACKGROUND:

On February 20, 2023, staff received an application for zone amendment from Monument Peak LLC, which owns Ski Haven Chalets lots 3, 5, 11, 12 and 13 (located between Alpine Condos and Ponderosa Drive. Lots 5, 11, and 12 are currently zoned R3 – Multi-Family Residential. Lots 3 and 13 are currently zoned R1 – Single Family Residential. The applicant wishes to rezone lots 3 and 13 to R3 in preparation for a multi-family residential development spanning all five lots.

The Planning Commission held a public hearing on March 21, 2023 and the Town Council held the Public hearing on March 28, 2023. Notice was sent to property owners within 300' of the proposed zone amendment on February 28, 2023 and the public hearing was noticed 14 days prior to the public hearings for both the Planning Commission and Town Council, thus meeting the state statutory requirements for public notification. Staff received one written comment, which is attached. Other members of the public commented during the Planning Commission on March 21st with the general thrust of the comments opposing the proposed rezoning, citing potential parking and circulation issues.

On March 28, 2023, the Town Council held a public hearing for the zone change and the general comments were centered on concerns for parking and traffic at the Alpine condos and on Steam Engine Drive. The Town Council voted to table the zone change until the applicant had a preliminary plan for the area.

On September 5, 2023, the Planning Commission held a discussion on the zone change with the proposed layout. The Commission felt that the zone change would be fine as long as in the subdivision process there is a break separating the property from the driveway from Alpine condos. The Commission's main concern is traffic and parking in that area.

ANALYSIS:

The following are the Standards for Review for a Zone Amendment which the Planning Commission must consider:

- Addresses a recognized and demonstrated need in the community;
- Will be compatible with the character of the neighborhood and surrounding structures in use, scale, mass, and circulation;
- Will not result in an over intensive use of the land or excessive depletion of natural resources;
- Will not have a material adverse effect on community capital improvement programs;

- Will not require a level of community facilities and services greater than that which is available, or will be made available;
- Will not result in undue traffic congestion or traffic hazards;
- Will not cause significant air, odor, water, light, or noise pollution; and
- Will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of the town.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

1. Multi-family housing continues to be a need in the community evidenced by market demand.
2. This development would be right on the dividing line between a single family neighborhood (Ponderosa Dr.) and a multi-family neighborhood (Alpine Condos). The General Plan map would allow for these properties to fall either way. ***Depending on how the development is laid out*** (ie: access is off of collector road and circulation into the single family residential neighborhood is limited), the impact of this development on the character of the neighborhood could be mitigated. In the absence of a proposed circulation plan, the Council must determine whether this standard for review is met.
3. The applicant will need to provide water rights for multi-family development or purchase them from the Town's available pool of excess water rights, thus providing for limited resources.
4. No known impact on community capital improvement programs
5. It is not anticipated that the impact on community facilities/services would be greater than what is available.
6. If access is provided off of Steam Engine Drive, then the project should not result in undue traffic congestion or hazards.
7. No known significant pollution impact if development follows Town standards
8. No known detrimental impact to health, safety, or welfare of residents.

STAFF RECOMMENDATION:

Staff recommends approval of the proposed zone amendment to the degree it is consistent with the Town's General Plan and provisions have been made in the Town Code to mitigate impacts of the development, which will be applied at the time of subdivision application.

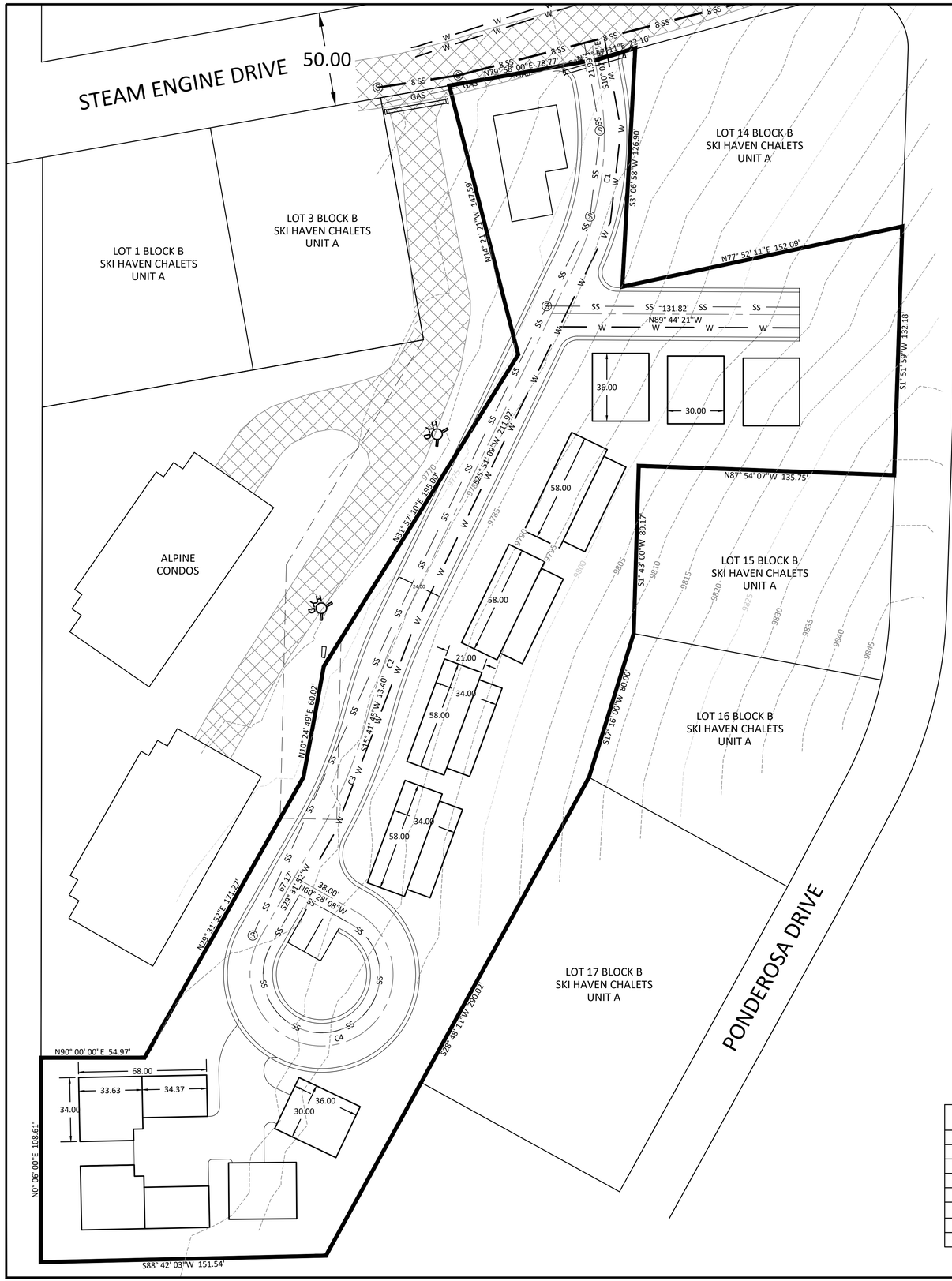
It should be noted that this is a legislative action, not an administrative application of an existing law. Unlike an administrative action, the Council is under no obligation to approve the zone amendment, even if there is an argument that the standards for review have been met.

PROPOSED MOTION:

I move to adopt ordinance No. 23-011 an ordinance amending the Land Management Code, Chapter 6, Zone District Map, changing the zone for lots 3 & 13 in the Ski Haven Chalets subdivision from Single-Family Residential to Multi-Family Residential as presented.

ATTACHMENTS:

A – Preliminary site plan
B – Ordinance w/Zone District Map



PRELIMINARY PLAN FOR BASECAMP PUD

72 NORTH AND HIGHWAY 56
WITHIN SECTION ##, T## S., R. ## W., SLB&M
BRIAN HEAD, UTAH

PROJECT LOCATION



VICINITY PLAN
NOT TO SCALE

GENERAL NOTES

1. PROPERTY OWNERS: MONUMENT PEAK LLC
2. THE PROPERTY IS ZONED R-3-M.
3. CONTAINS 2.25 ACRES
4. THE BASIS OF BEARINGS, COORDINATES, AND ELEVATIONS FOR THIS PROJECT ARE ON A LOCAL COORDINATE SYSTEM.
5. OWNER, OWNER'S REPRESENTATIVE, CONTRACTOR, AND SUB CONTRACTORS TO COMPLY WITH PROJECT GEOTECHNICAL REPORT PERFORMED BY GEM ENGINEERING, PROJECT NUMBER ####, DATED #####.
6. THE PROPERTY IS LOCATED IN FLOOD ZONE C, AREA OF MINIMAL FLOODING BASED ON THE FEMA FLOOD INSURANCE RATE MAP, IRON COUNTY, UTAH (UNINCORPORATED AREAS) COMMUNITY PANEL NUMBER 4900730750B, EFFECTIVE DATE: JULY 17, 1984.
7. STREETS ARE TO BE 28 FEET WIDE.
8. UTILITY EASEMENTS ARE 10 FEET WIDE ALONG ALL ROADS.
9. SEWER MAIN TO BE CONNECTED TO THE EXISTING 8" DIAMETER SEWER MAIN IN ZION VIEW DRIVE.
10. WATER MAIN TO BE CONNECTED TO THE EXISTING 6" DIAMETER WATER MAIN STUB OUTS FROM ZION VIEW DRIVE.
11. TOTAL NUMBER OF TOWN HOMES IS 24.
12. SEE GRADING PLAN FOR EXISTING AND PROPOSED CONTOURS.
13. TYPICAL PARKING STALLS 9' X 18'
14. SNOW REMOVAL PROVIDED BY HOA.
15. BRIAN HEAD TOWN WILL NOT BE HELD RESPONSIBLE FOR PAVEMENT DAMAGED DUE TO TRASH PICKUP.
16. ROAD CROSS SECTIONS PROVIDED IN THE CONSTRUCTION DRAWINGS.

APPROVAL BY CITY OF BRIAN HEAD

PUBLIC WORKS APPROVAL

I, _____ BRIAN HEAD TOWN ENGINEER, DO HEREBY CERTIFY THAT THIS PRELIMINARY PLAN WAS EXAMINED AND ACCEPTED BY ME THIS THE _____ DAY OF _____ 2023.

_____
PUBLIC WORKS

TOWN MANAGER APPROVAL

I, _____ BRIAN HEAD TOWN MANAGER, DO HEREBY CERTIFY THAT THIS PRELIMINARY PLAN WAS EXAMINED AND ACCEPTED BY ME THIS THE _____ DAY OF _____ 2023.

_____
BRIAN HEAD TOWN MANAGER

UTILITY CONTACT INFORMATION

ROCKY MOUNTAIN POWER, KAMERON SHORTT	435-586-3315
DOMINION ENERGY, KEILY HIATT	435-674-6132
CENTURY LINK, BRAXTON PETERSON	435-884-7920
TDS, NATHAN JOHNSON	435-233-7461
BRIAN HEAD PUBLIC WORKS, ALDO BIASI	435-592-0031
BRIAN HEAD TOWN ENGINEER, ALPHA ENGINEERING	435-628-6500
BLUE STAKES	811

LEGEND

- S
- 8 SS
- SL
- 2 W
- 4 W
- 6 W
- 6 W
- 4 W
- 8 W
- OHP

SHEET INDEX

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	97.32	155.00	35.97	S7° 51' 56"W	95.73
C2	43.43	245.00	10.16	S20° 46' 27"W	43.37
C3	60.37	250.00	13.84	S22° 36' 48"W	60.22
C4	179.07	38.00	270.00	N74° 31' 52"E	53.74

AREA TABLE			
CATEGORY	MINIMUM	ACRE/%	TOTAL/REQUIRED
PAVEMENT		###/###%	
DRIVEWAY	### SF PER UNIT	###/###%	
BUILDING	### SF PER UNIT	###/###%	
UNDISTURBED		###/###%	
SNOW STORAGE	20% PAVED & PARKING	###/###%	### ACRE / ### ACRE
TOTAL		###/###%	
RESIDENTIAL PARKING	2 PER UNIT		48 / 48

PLATT & PLATT, INC
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
195 N. 100 E.
CEDAR CITY, UT 84720
TEL: (435) 586-6151
FAX: (435) 586-8567
EMAIL: PLATT@INFOWEST.COM

REVISION:	DESCRIPTION
DATE:	
DATE:	
DATE:	
DATE:	

PRELIMINARY PLAN FOR BASECAMP PUD

72 NORTH AND HIGHWAY 56
WITHIN SECTION ##, T## S., R. ## W., SLB&M
BRIAN HEAD, UTAH

LICENSED PROFESSIONAL ENGINEER
9054682
MICHAEL ROBERT PLATT
STATE OF UTAH

DRAWN BY:
CJ WEAVER

CHECKED BY:
M.R. PLATT

DATE: Mar 21, 2023

SCALE: 1" = 40'

FILE:
P:\Mike\Mike Welker\PUD.dwg

SHEET: C1.0

ORDINANCE NO. 23-____

AN ORDINANCE AMENDING THE BRIAN HEAD LAND MANAGEMENT CODE, CHAPTER 6, ZONE DISTRICT MAP FOR THE SKI HAVEN CHALETS SUBDIVISION, LOTS 3 AND 13 FROM SINGLE-FAMILY RESIDENTIAL (R1) TO MULTI-FAMILY RESIDENTIAL (R3) AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Brian Head Town reviews the Land Management Code to ensure smart and attractive growth in Brian Head Town and the Town Council identified a need to revise the Brian Head Land Management Code in order to regulate land use within the Town limits of Brian Head, Utah; and,

WHEREAS, an application has been received from Monument Peak, LLC requesting a zone change from Single Family Residential to Multi-Family Residential for lots 3 and 13 located in the Ski Have Chalet subdivision; and,

WHEREAS, the Brian Head Planning Commission held a public hearing on March 21, 2023 giving at least fourteen (14) days' notice prior to the public hearing to receive public comment. The Planning Commission hereby forward their recommendation of approval amending the Zone District Map, Chapter 6, Title 9 of the Land Management Code for lots 3 and 13 in the Ski Haven Chalet subdivision from Single-Family Residential (R1) to Multi-Family Residential (R3) to the Brian Head Town Council for their consideration and adoption; and

WHEREAS, the Brian Head Town Council held a public hearing on March 28, 2023 and giving at least fourteen (14) days' notice; and

WHEREAS, Brian Head Town desires to incorporate the Zone District Map regulating land use within the town boundaries; and

WHEREAS, it is in the best interests of Brian Head Town and the health, safety, and general welfare of its citizens to adopt this Ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF BRIAN HEAD, UTAH, COUNTY OF IRON, STATE OF UTAH, AS FOLLOWS:

Section 1. The Brian Head Land Management Code, Chapter 6, Zoning, Zone District Map is hereby amended as Attachment "A".

Section 2. **Effective Date.** This Ordinance shall take effect upon its passage by a majority vote of the Brian Head Town Council and following notice and publication as required by law. Upon this Ordinance being adopted by the Brian Head Town Council of Iron County, Utah, all provisions of this Ordinance shall be incorporated into Title 9 of the Brian Head Town Code.

DRAFT

Section 3. **Conflict.** To the extent of any conflict between other Town, County, State, or Federal laws, ordinances or regulations and this Ordinance, the more restrictive is deemed to be controlling.

Section 4. **Severability Clause**. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.

Section 5. **Repealer.** All provisions of the Brian Head Town Code, Titles one through 9 that are inconsistent with the expressed terms of this Ordinance shall be repealed.

PASSED AND ADOPTED BY THE BRIAN HEAD TOWN COUNCIL OF IRON COUNTY, UTAH this _____ day of September 2023, with the following vote.

Mayor Clayton Calloway	Aye____	Nay_____
Council Member Martin Tidwell	Aye____	Nay_____
Council Member Larry Freeberg	Aye____	Nay_____
Council Member Kelly Marshall	Aye____	Nay_____
Council Member Shaun Kelly	Aye____	Nay_____

BRIAN HEAD TOWN COUNCIL
BRIAN HEAD, UTAH

By: _____
Clayton Calloway, Mayor

ATTEST:

_____
Nancy Leigh, Town Clerk (SEAL)

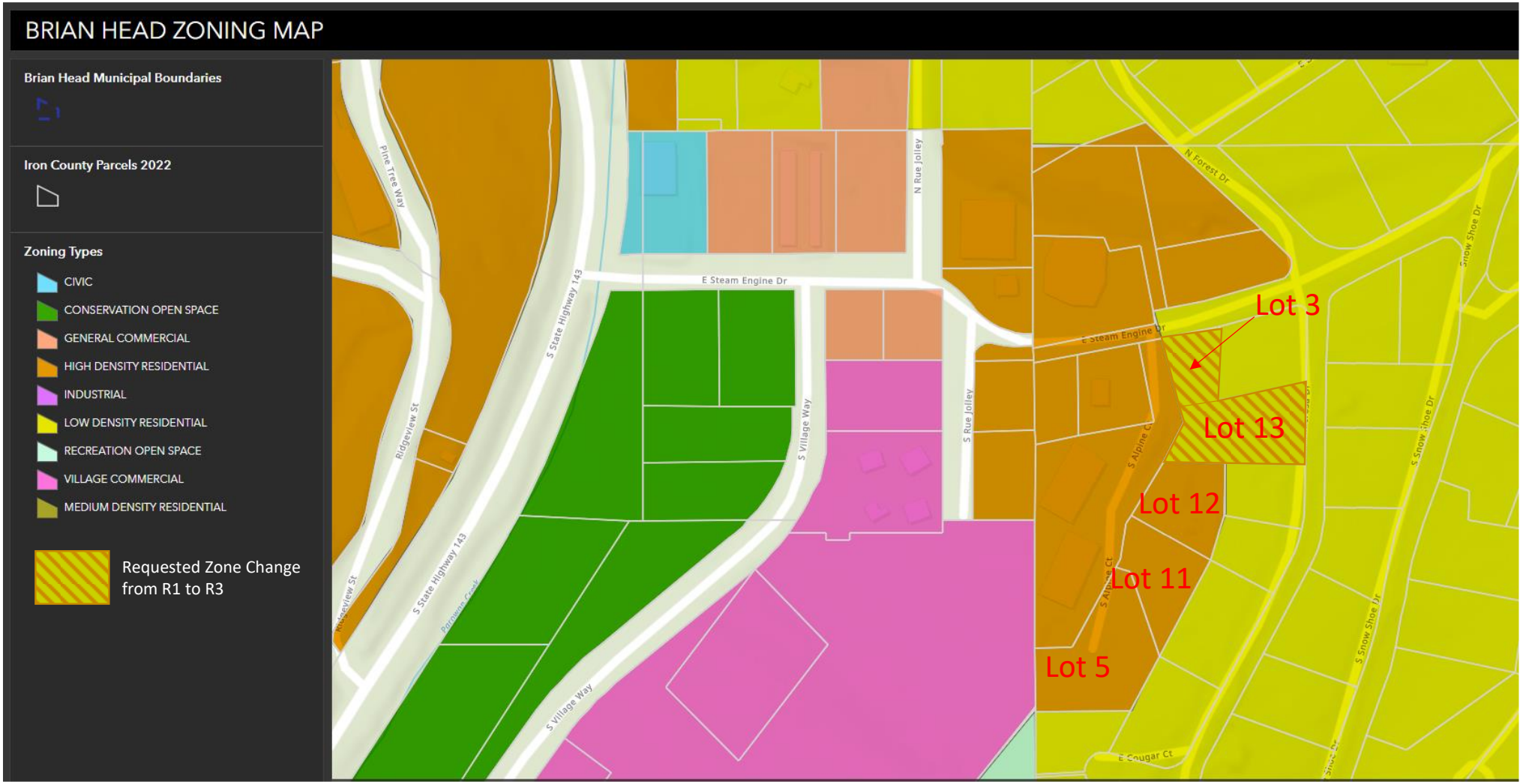
DRAFT

CERTIFICATE OF PASSAGE AND POSTING

I hereby certify that the above Ordinance is a true and accurate copy, including all attachments, of the Ordinance passed by the Town Council on the _____ day of September, 2023, and have posted a summary of this ordinance on the Public Meeting Notice Website, Brian Head Town website and the Brian Head Town Hall.

_____
Nancy Leigh, Town Clerk

BRIAN HEAD ZONING MAP



STAFF REPORT TO THE TOWN COUNCIL

BRIAN HEAD

ITEM: **SNOW SHOE & TOBOGGAN (SKI HAVEN CHALET) SPECIAL ASSESSMENT AREA (SAA) PUBLIC HEARING**

AUTHOR: Shane Williamson, Town Treasurer
DEPARTMENT: Administration
DATE: September 12, 2023
TYPE OF ITEM: Informational

SUMMARY:

The Council will hold a public hearing for the Snow Shoe & Toboggan (Ski Haven Chalets) Special Assessment Area (SAA). The Council has the option to hold a discussion once the public hearing is closed to answer any questions that may have been brought up during the public hearing or if the Council has any questions. No action is needed by the Council for this agenda item.

BACKGROUND:

Jim Vincent, sponsor of the SAA, submitted a petition to the Council in July 2023. This project would include a total of 69 lots and would create a looped water line for this area. In August 2023, the Council adopted a resolution for a Notice of Intent to Create the Snow Shoe & Toboggan SAA. With this resolution, the public hearing date was set along with the 60-day protest period. As part of the state law requirement, the property owners within the SAA were put on notice in writing.

ANALYSIS:

As part of state law requirements, a public hearing is to be held which will officially kick off the 60-day protest period. This will allow any property owner within the proposed SAA to protest the creation of the SAA, in writing.

Staff mailed a written notification to each property owner located within the SAA boundary letting them know the public hearing date and protest requirements. As per state law requirements, if the Town receives 40% written protests, then the SAA automatically fails. During a later Council meeting, the Council will either adopt a resolution creating SAA or a resolution abandoning the SAA based on the number of protests the Town receives.

FINANCIAL IMPLICATIONS:

The public hearing has no direct financial implications itself. However, if the SAA proceeds, the Town will Bond for the project which will be backed by assessments placed on each property.

BOARD/COMMISSION RECOMMENDATION:

N/A

STAFF RECOMMENDATION:

N/A

PROPOSED MOTION:

No motion. Public Hearing only.

ATTACHMENTS:

A – Notice of Intent
B – Map of Snowshoe/Toboggan SAA

TOWN OF BRIAN HEAD, UTAH
NOTICE OF INTENTION TO DESIGNATE TOWN OF BRIAN HEAD, UTAH SPECIAL TAX ASSESSMENT AREA 2023-01 (SNOWSHOE-TOBOGGAN)
August 8, 2023

RESOLUTION NO. 2023-531

A RESOLUTION DECLARING THE INTENTION OF THE TOWN COUNCIL OF THE TOWN OF BRIAN HEAD, IRON COUNTY, UTAH, FOR WATER SYSTEM IMPROVEMENTS AND RELATED IMPROVEMENTS WITHIN THE SNOWSHOE AND TOBOGGAN SUBDIVISONS; TO DESIGNATE OR CREATE THE TOWN OF BRIAN HEAD, UTAH SPECIAL TAX ASSESSMENT AREA NO. 2023-01 (SNOWSHOE-TOBOGGAN); TO FUND THE COST AND EXPENSES OF SAID ASSESSMENT AREA BY SPECIAL TAX ASSESSMENTS TO BE LEVIED AGAINST THE PROPERTY BENEFITTED BY SUCH IMPROVEMENTS; TO PROVIDE NOTICE OF INTENTION TO AUTHORIZE SUCH IMPROVEMENTS AND TO FIX A TIME AND PLACE FOR PROTESTS AGAINST SUCH IMPROVEMENTS OR THE CREATION OF SAID ASSESSMENT AREA; TO DECLARE ITS INTENTION OF FUNDING A RESERVE FUND IN LIEU OF A GUARANTY FUND; AND RELATED MATTERS.

WHEREAS, pursuant to the Utah Assessment Area Act, Title 11, Chapter 42, of the Utah Code, the Town Council of the Town of Brian Head, Iron County, Utah (the Town) has the power to make or cause to be made all of the following improvements, water system improvements that will benefit certain properties in and around the Snowshoe and Toboggan subdivisions (the Improvements); and

WHEREAS, the Town has received petitions from property owners desiring the water system improvements described herein; and

WHEREAS, the Town desires to designate or create a Special Tax Assessment Area and impose a special tax assessment against the portion of the properties in the Town that will be directly or indirectly benefitted by the Improvements:

BE IT RESOLVED by the Town Council of the Town of Brian Head, Iron County, Utah:

Section 1. The Town Council of the Town hereby determines that it will be in the best interest of the Town to finance and install or have installed the Improvements in specified locations of the Town, and to complete the whole in a proper and workmanlike manner according to plans, profiles and specifications that have been presented to the Town and are on file in the Office of the Town Clerk. In order to finance the costs of the Improvements, the Town proposes to create, establish, and designate a Special Tax Assessment Area. A description of the proposed Special Tax Assessment Area is more particularly described in the Notice of Intention to construct the proposed Improvements hereinafter set forth.

Section 2. The proposed Assessment Area shall be known as the Town of Brian Head, Utah Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan) (the "Special Tax Assessment Area).

Section 3. The cost and expenses of the proposed Improvements shall be paid by a special tax assessment to be levied against the properties on a per lot basis for lots that will be benefited directly or indirectly from the Improvements, or which may be affected or specially benefitted, directly, or indirectly, by any of such Improvements, such assessment to be paid in not more than ten (10) annual installments with interest on the unpaid balance until due and paid. An allowance shall be made for corner lots, if applicable, so that such lots are not assessed at the full rate on both streets.

Section 4. The Town Council hereby finds that the water system improvements, including any modifications to streets, that is proposed for Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan) are necessary or convenient to enable the Town to provide the water service that the Town proposes and is authorized to provide in Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan).

Section 5. A public hearing is called for the Town Council meeting on September 12, 2023, at 1:00 p.m., at the Town offices located at 56 N. Highway 143, Brian Head, Utah 84719 to hear from any person desiring to be heard and objections to a) the designation of the proposed

Town of Brian Head, Utah Special Tax Assessment Areas No. 2023-01 (Snowshoe-Toboggan) or the improvements proposed to be provided in said assessment area; b) the amount that a property reasonably and equitably benefits from the improvements; and c) the inclusion of unassessed benefitted government property.

Section 6. Any owner of property that is proposed to be assess and who does not want its property to be included in the proposed Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan) may file a written protest against:

a) The designation of the Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan);
b) The inclusion of the owner's property in the proposed Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan):
c) The proposed improvements to be acquired or constructed; or
d) If applicable, the inclusion of an unassessed benefitted government property, the benefit for which the other assessed properties will collectively pay (of which there are none)

Each written protest shall:

a) Describe or otherwise identify the property owned by the person filing the protest; and
b) Include the signature of the owner of the property.

The failure of a property owner within the proposed Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan) to file a timely written protest constitutes a waiver of any objection to:

a) The designation of the Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan);
b) Any improvement to be provided to property within the Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan);
c) The inclusion of the owner's property within the Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan);
d) The fact, but not amount, of benefit to the to the owner's property; and
e) The inclusion of an unassessed benefitted government property in the assessment areas (of which there are none).

The Town Council hereby directs the Town Clerk to post the total and percentage of the written protests that the Town receives on the Town's website, and at the Town office at least five days before the September 12, 2023 meeting against the proposed Improvements or against the creation of the Special Tax Assessment Area must be presented and filed in the Office of the Town Clerk on or before September 7, 2023, at the hour of 4:00 p.m. Any person desiring to be

heard may file a written protest or objection to a) the designation of the proposed Town of Brian Head, Utah Special Tax Assessment Areas No. 2023-01 (Snowshoe-Toboggan) or the improvements proposed to be provided in said assessment area; b) the amount that a property reasonably and equitably benefits from the improvements; and c) the inclusion of unassessed benefitted government property (of which there is none). Thereafter at 1:00 p.m. on September 12, 2023, at 56 N. Highway 143, Brian Head, Utah, 84719, any such written protests shall be heard and considered by the Town Council.

Section 7. The Town Clerk is hereby directed to give notice of intention to make the proposed improvements and of the public hearing and of the time within which protests against the proposed improvements or the designation of the proposed Special Tax Assessment Area may be filed and the date when such protests will be heard and considered by publishing a notice of intention to create the Assessment Area as a class B notice under Section 63G-30-102 of the Utah Code, no fewer than 20 day and no more than 35 days before the public hearing. The Town Clerk shall also post the Notice of Intention on the Utah Public Notice Website for the same duration and also post the Notice of Intention on the Town's website. Said Notice shall be in substantially the following form:

NOTICE OF INTENTION

PUBLIC NOTICE IS HEREBY GIVEN that the Town Council (the "Town Council") of the Town of Brian Head, Iron County, Utah (the "Town"), intends to create or designate a Special Tax Assessment Area to be known as the Town of Brian Head, Iron County, Utah Special Tax Assessment Area No. 2023-01 (Snowshoe-Toboggan) (the "Special Tax Assessment Area"). Accordingly, the Town Council called a public hearing regarding the creation or designation of the Special Tax Assessment Area to be held on September 12, 2023, at 1:00 p.m. at the Town Office at 56 N. Highway 143, Brian Head, Utah 84719, to hear from any person desiring to be heard and objections to a) the designation of the proposed Town of Brian Head, Utah Special Tax Assessment Areas No. 2023-01 (Snowshoe-Toboggan) or the improvements proposed to be provided in said assessment area; b) the amount that a property reasonably and equitably benefits from the improvements; and c) the inclusion of unassessed benefitted government property (of which there is none). It is the intention of the Town Council to make water system improvements within the Special Tax Assessment Area and to levy special assessments as provided in Title 11, Chapter 42, Utah Code Annotated 1953, as amended, on the real estate lying within the Special Tax Assessment Area as described herein for the benefit of which such assessments are to be assessed in the making of such improvements.

DESCRIPTION OF SPECIAL TAX ASSESSMENT AREA

The proposed Special Tax Assessment Area shall include the following real property in the Town of Brian Head, Iron County, UT and is described as:

The properties in the Snowshoe subdivision and in the Toboggan subdivision and some adjoining properties in the Town of Brian Head, Iron County, Utah. More specifically the following parcel numbers in respective subdivisions as described below. Properties other than the identified parcel numbers will not be included in the proposed Special Tax Assessment Area.

Parcel #	Lot #	Block #	Physical Address
A-1145-0000-000A-06	6	A	201 E STEAM ENGINE DR
A-1215-000A-0001	1	A	235 E SNOW SHOE CIR
A-1216-000C-0002	2	C	202 E STEAM ENGINE DR
A-1215-000B-0002	2	B	224 E SNOW SHOE CIR
A-1215-000B-0003	3	B	238 E SNOW SHOE CIR
A-1215-000B-0011	11	B	265 E SNOWMAN DR
A-1215-000B-0012	12	B	251 E SNOWNAN DR
A-1215-000C-0007	7	C	248 E SNOWMAN DR
A-1215-000B-0013	13	B	237 E SNOWMAN DR
A-1215-000C-0008	8	C	238 E SNOW SHOE DR

A-1215-000C-0015	15	C	295 TOBOGGAN LN
A-1215-000C-0009	9	C	220 E SNOW SHOE DR
A-1215-000B-0014	14	B	231 E SNOWMAN DR
A-1215-000C-0010	10	C	216 E SNOWMAN DR
A-1215-000C-0011	11	C	215 TOBOGGAN LN
A-1215-000B-0015	15	B	225 S SHOW SHOE DR
A-1215-000D-0004	4	D	212 S SNOW SHOE DR
A-1215-000D-0005	5	D	220 S SNOW SHOE DR
A-1215-000D-0006	6	D	228 S SNOW SHOE DR
A-1215-000D-0007	7	D	222 TOBOGGAN LN
A-1215-000D-0008	8	D	238 TOBOGGAN LN
A-1215-000D-0009	9	D	246 TOBOGGAN LN
A-1215-000D-0010	10	D	256 TOBOGGAN LN
A-1215-000D-0011	11	D	266 TOBOGGAN LN
A-1215-000D-0012	12	D	276 TOBOGGAN LN
A-1215-000D-0013	13	D	286 TOBOGGAN LN
A-1215-000B-0008	8	B	315 E SNOWMAN DR
A-1215-000C-0012	12	C	261 TOBOGGAN LN
A-1215-000C-0013	13	C	289 TOBOGGAN LN
A-1215-000D-0019	19	D	296 TOBOGGAN LN
A-1215-000C-0014	14	C	291 TOBOGGAN LN
A-1215-000D-0020	20	D	306 TOBOGGAN LN
A-1215-000D-0021	21	D	316 TOBOGGAN LN
A-1215-000C-0016	16	C	297 TOBOGGAN LN
A-1215-000C-0006	6	C	266 E SNOW SHOE DR
A-1215-000B-0009	9	B	287 E SNOW SHOE DR
A-1214-000A-0001	1	A	301 TOBOGGAN LN
A-1214-000A-0002	2	A	331 TOBOGGAN LN
A-1214-000B-0002	2	B	176 SNOWMOBILE RD
A-1214-000B-0005	5	B	322 TOBOGGAN LN
A-1214-000B-0006	6	B	108 S SNOWMOBILE RD
A-1215-000D-0018	18	D	343 E TOBOGGAN CIR
A-1215-000D-0014	14	D	296 E TOBOGGAN CIR
A-1215-000D-0017	17	D	333 E TOBOGGAN CIR
A-1215-000D-0016	16	D	332 E TOBOGGAN CIR
A-1215-000D-0015	15	D	314 E TOBOGGAN CIR
A-1143-0011-000E-05	5	E	195 SNOWMOBILE RD
A-1214-000E-0006	6	E	183 SNOWMOBILE RD
A-1143-0011-000E-04	4	E	217 SNOWMOBILE RD
A-1143-0011-000E-03	3	E	239 SNOWMOBILE RD
A-1143-0011-000C-44	44	C	347 E SKATE CIR

A-1143-0011-000B-01	1	B	212 S SNOWMOBILE RD
A-1214-000E-0007	7	E	179 SNOWMOBILE RD
A-1214-000E-0008	8	E	165 SNOWMOBILE RD
A-1214-000B-0004	4	B	120 S SNOWMOBILE RD
A-1214-000E-0009	9	E	143 SNOWMOBILE RD
A-1214-000B-0003	3	B	142 S SNOWMOBILE RD
A-1214-000E-0010	10	E	119 SNOWMOBILE RD
A-1214-000E-0011	11	E	92 S SPRING CIR
A-1214-000E-0012	12	E	88 S SPRING CIR
A-1214-000A-0003	3	A	351 TOBOGGAN LN
A-1215-000C-0005	5	C	224 E SNOWMAN DR
A-1215-000B-0010	10	B	279 E SNOWMAN DR
A-1215-000B-0001	1	B	55 S SNOW SHOE DR
A-1216-000D-0001	1	D	91 S SNOW SHOE DR
A-1216-000D-0002	2	D	119 S SOUTH SNOW SHOE DR
A-1216-000D-0003	3	D	137 S SNOW SHOE DR
A-1215-000D-0003	3	D	206 S TOBOGGAN LN
A-1215-000C-0004	4	C	302 E SNOWSHOE DR

INTENDED IMPROVEMENTS

The improvements to be constructed within the Special Tax Assessment Area are as follows:

Water System Improvement: Water System Improvements to extend water lines on Snowshoe Drive, Snowshoe Circle, Snowman Drive, Toboggan Lane, Toboggan Circle, and adjoining streets such as Spring Circle, Steam Engine Drive, Snowmobile Road, and Skate Circle, and related improvements, and complete the whole in a proper and workman like manner with all drainage and other improvement appurtenant and useful to a water system, including street improvements, and associated municipal improvements.

ESTIMATED COST AND METHOD OF ASSESSMENT

Estimated Cost and Method of Assessment: The total cost of Improvements in the Special Tax Assessment Area is currently estimated to be $2,881,000.00, of which the Town will pay $0 leaving a remainder of $2,881,000.00 which shall be paid by special tax assessment on the private property within the Special Tax Assessment Area.

This includes engineering costs, overhead costs and funding of a reserve fund described herein, all of which shall be paid by special tax assessment to be levied against the properties which may be directly or indirectly benefited by the Improvements which benefits need not actually increase the fair market value of the property to be assessed. The property owners' portion of the total estimated cost of the Improvements may be financed during the construction period by the use of interim warrants, in which case the interest on said warrants will be assessed to the property owners.

In lieu of utilizing a guaranty fund, the Town Council intends to create a special reserve fund, if desired by lenders, to secure payment of the special assessment bonds (the "Bonds") anticipated to be issued by the Town to finance the proposed Improvements. The reserve fund will be either initially funded with proceeds of the Bonds in an amount equal to approximately ten percent (10%) of the total principal amount of Bonds to be issued, or by building up a reserve fund over a period of six years until an amount equal to approximately ten percent (10%) of the total principal amount of Bonds to be issued is placed in the reserve fund. The Town Council anticipates applying any moneys remaining in the reserve fund to the final payment on the Bonds which, in turn, would offset the final assessment payments to be made by the owners of property benefited by such Improvements, all of which will be further described in the assessment ordinance to be adopted by the Town. Any money in the reserve fund upon full payment of the Bonds is to be disbursed ratably to each assessed lot owner as of the date of disbursement. In addition, estimated costs of assessment include estimated overhead costs which the Town projects incur in the creation and administration of the Special Tax Assessment Area. If Bonds are issued, the current estimated interest rate is 8.25% per annum and the estimated discount is no more than 2.00%, subject to market rates at the time of issuance and the current estimated term of financing is ten (10) years.

The estimated cost and method of assessment against the properties for the Improvements are as follows:

Improvement	Estimated Assessment	Method of Assessment
Water System Improvement	$2,881,000 total cost or $41,754 per lot.	Per lot.
Total of All Improvements	**$2,881,000 total cost or $41,754 per lot**	**Per lot.**

For assessment purposes, if applicable, an owner of a lot is defined herein to be the owner of a platted lot within the Town of Brian Head, Iron County, Utah according to the official

records of the Town of Brian Head, upon which a residential, commercial, or other structure to be used for human occupancy is now or may be located consistent with the "lot size" requirements of the applicable Town of Brian Head Land Management ordinances in place as of the date this is adopted.

LEVY OF ASSESSMENTS

It is the intention of the Town Council to levy assessments as provided by the laws of Utah on all property, parcels, and lots of real property to be benefited by the proposed improvements within the Special Tax Assessment Area. The purpose of the assessment and levy is to pay those costs of the improvements which the Town will not assume and pay. The method of assessment shall be per lot, as set forth herein.

The assessments may be paid by property owners in not more than ten (10) annual installments with interest on the unpaid balance at a rate or rates fixed by the Town, or the whole or any part of the assessment may be paid without interest within twenty-five (25) days after the ordinance levying the assessment becomes effective. The assessments shall be levied according to the benefits to be derived by each property within the Special Tax Assessment Area. Other payment provisions and enforcement remedies shall be in accordance with Title 11, Chapter 42, Utah Code Annotated 1953, as amended. The assessment method will be by inclusion on a property tax notice issued in accordance with Section 59-2-1317 and in compliance with Section 11-42-401 of the Utah Code.

A map of the proposed Special Tax Assessment Area is on file in the Town offices which will make such information available to all interested persons. Copies of plans, profiles and specifications of the proposed improvements shall be made available by the Town as soon as thy have been prepared.

TIME FOR FILING PROTESTS

Any person who is the owner of record of property to be assessed in the Special Tax Assessment Area described in this Notice of Intention shall have the right to file in writing a protest against the creation of the Special Tax Assessment Area or to make any other objections relating thereto. Protests shall describe or otherwise identify the property owner of record by the person or persons making the protest and shall indicate the total number of lots represented by said protest. Protests shall be filed with the Town Clerk of the Town of Brian Head, Utah, on or before sixty (60) days after the public hearing to be held September 12, 2023, at 1:00 p.m. at the Town Office. The Town Council will meet on November 14, 2023, at 1:00 p.m. in public meeting at the regular meeting place of the Town Council at the Town Office at 56 N. Highway 143, Brian Head, Utah 84719 to consider all protests so filed and hear all objections relating to the proposed improvements. Each protest must be filed in writing and describe or otherwise identify the property owned by the person filing the protest and include the signature of the property owner.

A PROPERTY OWNER MUST PROTEST THE DESIGNATION OF THE SPECIAL TAX ASSESSMENT AREA IN WRITING IF THE OWNER OBJECTS TO (1) THE DESIGNATION OF THE SPECIAL TAX ASSESSMENT AREA, (2) ANY PROPOSED IMPROVEMENT, (3) THE INCLUSION OF THE OWNER'S PROPERTY, OR (4) THE FACT, BUT NOT AMOUNT, OF BENEFIT TO THE OWNER'S PROPERTY. Failure of an owner of property to file a timely written protest can constitute a waiver.

After such consideration and determination, the Town Council shall adopt a resolution either abandoning the Special Tax Assessment Area or creating and designating the Special Tax Assessment Area either as described in this Notice of Intention or with deletions and changes made as authorized by law; but the Town Council shall abandon the Special Tax Assessment Area and not create the same if the necessary number of protests as provided herein have been filed on or before the time specified in this Notice of Intention for the filing of protests after eliminating from such filed protests: (i) protests relating to property or relating to a type of improvement which has been deleted from the Special Tax Assessment Area, and (ii) protests which have been withdrawn in writing prior to sixty (60) days after the public hearing. The necessary number of protests shall mean the aggregate of the protests representing forty percent (40%) of the owners proposed to be assessed, according to the same assessment method by which the assessment is proposed to be levied.

BY ORDER OF THE TOWN COUNCIL OF TOWN OF BRIAN HEAD, IRON COUNTY, UTAH

/s/ Nancy Leigh
Town Clerk

Posted as a Class B notice as provided in Section 63G-30-102 of the Utah Code at least 20 days and not more than 35 days before September 12, 2023.

Section 8. The Town Council reasonably expects to reimburse the Town from proceeds of the Bonds for capital expenditures paid by the Town (whether or not such expenditures are paid from proceeds of interim warrants) with respect to the Improvements.

Section 9. This declaration is intended to be a declaration of official intent under Treasury Regulation ' 1.103-18(1).

Section 10. The maximum principal amount of debt expected to be issued for reimbursement purposes is $2,881,000.00. This amount will be reduced by cash payments received by the Town from property owners who elect to pay their assessment in full during the cash payment period immediately following the effective date of the assessment ordinance.

Section 11. This declaration of official intent is consistent with the Town's budgetary and financial circumstances. No funds from sources other than the Bonds are, or are reasonably expected to be, reserved, allocated on a long-term basis, or otherwise set aside by the Town or by

any member of the same controlled group pursuant to their budget or financial policies with respect to the expenditures to be reimbursed.

ADOPTED BY THE TOWN COUNCIL OF THE TOWN OF BRIAN HEAD, IRON COUNTY, UTAH THIS August 8, 2023.

Clayton Calloway, Mayor

ATTEST:

Nancy Leigh, Town Clerk

BRIAN HEAD TOWN
THE GREAT SEAL OF THE STATE OF UTAH
1896
A MUNICIPAL CORPORATION

RECORD OF PROCEEDINGS

A regular meeting of the Town Council of the Town of Brian Head, Iron County, Utah was held on August 8, 2023, at 1:00 p.m., or as soon thereafter as feasible, at the regular meeting place of said Town Council at 56 N. Highway 143, Brian Head, Utah 84719 at which meeting there were present and answering roll call the following members who constituted a quorum:

Clayton Calloway	Mayor
Martin Tidwell	Council Member
Kelly Marshall	Council Member
Larry Freeberg	Council Member

Also present:

Nancy Leigh	Town Clerk
Bret Howser	Town Manager

Absent:

Shaun Kelly	Council Member

After the meeting had been duly called to order and other matters not pertinent to this resolution had been discussed, the Town Clerk presented to the Town Council a Certificate of Compliance with Open Meeting Law with respect to this August 8, 2023 meeting, a copy of which is attached hereto.

Council Member Marshall introduced the foregoing resolution in writing and moved its adoption. Council Member Tidwell seconded the motion to adopt the foregoing resolution. The motion and resolution were adopted on the following recorded vote:

Those voting AYE: Mayor Calloway
Council Member Marshall
Council Member Tidwell
Council Member Freeberg

Those voting NAY:

Those ABSTAINING:

After the conduct of other business not pertinent to the above, the meeting was adjourned.

STATE OF UTAH)

: ss.

COUNTY OF IRON)

I, Nancy Leigh, the duly chosen, qualified and acting Town Clerk of the Town of Brian Head, Iron County, Utah, do hereby certify as follows:

That the foregoing typewritten pages constitute a full, true and correct copy of the record of proceedings of the Town Council taken at a regular meeting thereof held in said Town on August 8, 2023, at the hour of 1:00 p.m., insofar as said proceedings relate to the consideration and adoption of a resolution declaring the intention of the Town Council to create the Town of Brian Head, Utah Assessment Area No. 2023-01 (Snowshoe-Toboggan) and make certain improvements therein described as the same appears of record in my office; that I personally attended said meeting, and that the proceedings were in fact held as in said minutes specified.

That due, legal, and timely notice of said meeting was served upon all members as required by law and the rules and ordinances of said Town.

That the above resolution was deposited in my office on August 8, 2023, has been recorded by me, and is a part of the permanent records of the Town of Brian Head, Iron County, Utah.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature and affixed the seal of said Town this August 8, 2023.

Nancy Leigh

Nancy Leigh, Town Clerk



(ATTACH POSTING OF CLASS B NOTICE PURSUANT TO SECTION 63G-30-102)

CERTIFICATE OF COMPLIANCE WITH OPEN MEETING LAW

I, Nancy Leigh, the undersigned Town Clerk of the Town of Brian Head, Iron County, Utah (the Town), do hereby certify, according to the records of the Town in my official possession, and upon my own knowledge and belief, that in accordance with the requirements of Section 52-4-6(2), Utah Code Annotated, 1953, as amended, I gave not less than twenty-four (24) hours public notice of the agenda, date, time and place of the August 8, 2023 public meeting held by the Town as follows:

(a) By causing a Notice, in the form attached hereto (the "Meeting Notice"), to be posted at the principal office of the Issuer at least twenty-four (24) hours prior the convening of the meeting, the Meeting Notice having continuously remained so posted and available for public inspection until the completion of the meeting; and

(b) By causing a copy of the Meeting Notice to be posted on the newspaper website at least twenty-four (24) hours prior to the convening of the meeting; and

(c) By causing a copy of the Meeting Notice to be published on the Utah Public Notice Website at least twenty-four (24) hours prior to the convening of the meeting; and

(d) By causing a copy of the Meeting Notice to be posted on the Town Website at least twenty-four (24) hours prior to the convening of the Meeting.

In addition, the Notice of 2023 Annual Meeting Schedule for the Issuer, attached hereto, specifying the date, time and place of the regular meetings of the governing body of the Issuer to be held during the calendar year 2023 was (1) posted on January 26, 2023, at the principal offices of the Issuer; (2) provided for posting on the newspaper website on February 9, 2023; and (3) published on the Utah Public Notice Website on February 9, 2023, and (4) posted on the Town's website on February 9, 2023.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature this August 8, 2023.

BRIAN HEAD TOWN * A MUNICIPAL CORPORATION * 1890 THE GREAT SEAL OF THE STATE OF UTAH

Nancy Leigh

Nancy Leigh, Town Clerk

SCHEDULE "1"

NOTICE OF MEETING and EVIDENCE OF POSTING MEETING NOTICE ON PUBLIC NOTICE WEBSITE

SCHEDULE "2"

NOTICE OF ANNUAL MEETING SCHEDULE

EVIDENCE OF POSTING ANNUAL NOTICE ON PUBLIC NOTICE WEBSITE

PUBLIC NOTICE WEBSITE
DIVISION OF ARCHIVES AND RECORDS SERVICE

Town Council Meeting

General Information

Government Type:

Municipality

Entity:

Brian Head

Public Body:

Brian Head Town Council

Give Feedback

Notice Information

Add Notice to Calendar

Notice Title:

Town Council Meeting

Notice Subject(s):

Public Meetings

Notice Type(s):

Meeting

Event Start Date & Time:

August 8, 2023 01:00 PM

Event End Date & Time:

August 8, 2023 04:00 PM

Description/Agenda:

A. CALL TO ORDER
B. PLEDGE ALLEGIANCE
C. 20 YEAR SERVICE AWARD FOR DEPUTY MARSHAL JARED BURTON
D. DISCLOSURES
E. APPROVAL OF THE MINUTES:
1. July 11, 2023 Town Council Meeting

F. REPORTS / PUBLIC INPUT ON NON-AGENDA ITEMS. Public input is limited to three (3) minutes on non-agenda items.

G. AGENDA ITEMS:

1. A RESOLUTION DECLARING THE INTENTION OF THE TOWN COUNCIL OF THE TOWN OF BRIAN HEAD, IRON COUNTY, UTAH, FOR WATER SYSTEM IMPROVEMENTS AND RELATED IMPROVEMENTS WITHIN THE SNOWSHOE AND TOBOGGAN SUBDIVISONS; TO DESIGNATE OR CREATE THE TOWN OF BRIAN HEAD, UTAH SPECIAL TAX ASSESSMENT AREA NO. 2023-01 (SNOWSHOE-TOBOGGAN); TO FUND THE COST AND EXPENSES OF SAID ASSESSMENT AREA BY SPECIAL TAX ASSESSMENTS TO BE LEVIED AGAINST THE PROPERTY BENEFITTED BY SUCH IMPROVEMENTS; TO PROVIDE NOTICE OF INTENTION TO AUTHORIZE SUCH IMPROVEMENTS AND TO FIX A TIME AND PLACE FOR PROTESTS AGAINST SUCH IMPROVEMENTS OR THE CREATION OF SAID ASSESSMENT AREA; TO DECLARE ITS INTENTION OF FUNDING A RESERVE FUND IN LIEU OF A GUARANTY FUND; AND RELATED MATTERS. Shane Williamson, Town Treasurer. The Council will consider a resolution calling for the Notice of Intent for the Snowshoe/Toboggan Special Assessment Area..

2. A RESOLUTION CALLING A SPECIAL BOND ELECTION TO BE HELD ON NOVEMBER 21, 2023 TO SUBMIT A PROPOSITION TO THE QUALIFIED ELECTORS OF THE TOWN FOR GENERAL OBLIGATION BONDS NOT TO EXCEED $3,500,000 TO FINANCE THE ACQUISITION OF LAND, AND THE CONSTRUCTION OF IMPROVEMENT FOR SAFETY AND BEAUTIFICATION PROJECTS, INCLUDING, BUT NOT LIMITED TO, CROSSWALKS, TRANSIT STOPS, STREET AND TRAIL IMPROVEMENTS AND LIGHTING, UTILITY IMPROVEMENTS, TOWN HALL IMRPOVEMENTS AND ALL REALTED MATTERS, PROVIDING FOR THE POSTING OF A NOTICE OF A PUBLIC HEARING,

Give Feedback

APPROVING THE FORM OF AND DIRECTING THE OSTING OF A NOTICE OF ELECTION AND THE BALLOT PROPOSTION; AND RELATED MATTERS. Shane Williamson, Town Treasurer. The Council will consider a resolution for a special bond election for the Core Beautification Bond.

3. LAND MANAGEMENT CODE AMENDMENT, CHAPTER 7 (ZONE DISTRICT REGULATIONS) & CHAPTER 9 (SUBDIVISIONS) FOR INCLUSIONARY ZONING. Bret Howser, Town Manager. The Council will consider an ordinance amending the LMC for workforce housing.

4. LAND MANAGEMENT CODE AMENDMENT, CHAPTER 7 (ZONE DISTRICT REGULATIONS), BUILDING SPACING & CHAPTER 12 (DESIGN STANDARDS), PARKING REGULATIONS. Lester Ross, Building & Planning Official. The Council will consider an ordinance amending the LMC for building spacing and parking regulations.

5. FUTURE AGENDA ITEMS. The Council will discuss potential items for future agendas.

H. ADJOURNMENT

Notice of Special Accommodations (ADA):

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Nancy Leigh (435) 677-2029 at least three days prior to the meeting.

Notice of Electronic or Telephone Participation:

Available to Board Members as per Ordinance No. 11-003 authorizes public bodies to establish written procedures governing the calling and holding of electronic meetings at which one or more members of the Council may participate by means of electronic com

Give Feedback

Meeting Information

Meeting Location:

Town Hall Council Chambers
56 North SR 143
Brian Head, UT 84719

Show in Apple Maps | Show in Google Maps

Contact Name:

Nancy Leigh

Contact Email:

nleigh@bhtown.utah.gov

Contact Phone:

(435)677-2029

Notice Posting Details

Notice Posted On:

August 07, 2023 09:24 AM

Notice Last Edited On:

August 07, 2023 09:24 AM

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John Smith

Your Email:

user.name@example.com

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BRIAN HEAD

2023

BRIAN HEAD TOWN COUNCIL
MEETING SCHEDULE

LOCATION:

BRIAN HEAD TOWN HALL - COUNCIL CHAMBERS
56 NORTH HIGHWAY 143, BRIAN HEAD, UT 84719

TIME:

ALL MEETINGS ARE SCHEDULED TO BEGIN AT 1:00 P.M. (MST) OR SHORTLY THEREAFTER UNLESS OTHERWISE NOTICED.

DATES:

ALL MEETINGS ARE SCHEDULED FOR THE 2ND & 4TH TUESDAY OF EACH MONTH ON THE FOLLOWING DATES:

JANUARY:	10th & 24th	JULY:	11th & 25th
FEBRUARY:	14th & 28th	AUGUST:	8th & 22nd
MARCH:	14th & 28th	SEPTEMBER:	11th & 25th
APRIL:	11th & 25th	OCTOBER:	10th & 24th
MAY:	9th & 23rd	NOVEMBER	14th
JUNE:	13th & 27th	DECEMBER:	12th

THERE WILL BE ONE COUNCIL MEETING SCHEDULED FOR THE MONTH OF NOVEMBER AND DECEMBER 2023 WHICH WILL BE THE 2ND TUESDAY OF THESE MONTHS, UNLESS OTHERWISE NOTICED.

THE MEETINGS OF THE BRIAN HEAD REDEVELOPMENT AGENCY, BRIAN HEAD SPECIAL SERVICE DISTRICT, AND THE BRIAN HEAD MUNICIPAL BUILDING AUTHORITY WILL BE HELD WHEN NEEDED AND WILL BE POSTED ACCORDINGLY.

For Meeting Packets and more information visit brianheadtown.utah.gov

Dated this 15th day of December 2022

In compliance with the Americans with Disabilities Act, persons needing auxiliary communications aids and services for this meeting should call the Brian Head Town Hall @ 435-677-2029 giving at least three (3) days notice prior to the meeting.

CERTIFICATE OF POSTING

I hereby certify that on February 7, 2023, I have posted copies of this 2023 Meeting Schedule in three public and conspicuous places within the Town limits of Brian Head, to wit: Town Hall, Post Office, and The Mall and have caused a copy of this notice to be delivered to the Daily Spectrum and have posted it on the Utah Public Meeting Notice Website.

Nancy Leigh, Town Clerk

PUBLIC NOTICE WEBSITE
DIVISION OF ARCHIVES AND RECORDS SERVICE

2023 Town Council Meeting Schedule

General Information

Government Type:

Municipality

Entity:

Brian Head

Public Body:

Brian Head Town Council

Give Feedback

Notice Information

Add Notice to Calendar

Notice Title:

2023 Town Council Meeting Schedule

Notice Subject(s):

Public Meetings

Notice Type(s):

Notice

Event Start Date & Time:

January 1, 2023 12:00 AM

Event End Date & Time:

January 1, 2023 12:00 AM

Description/Agenda:

2023 TOWN COUNCIL MEETING SCHEDULE

MEETINGS:

LOCATION: Brian Head Town Hall - Council Chambers - 56 North Highway 143, Brian Head, UT 84719
TIME: Meetings are scheduled to begin at 1:00 pm (MST) or shortly thereafter unless otherwise noticed.
DATES: Meetings are scheduled for the second and fourth Tuesday of each month unless otherwise noticed.

January: 10th & 24th
February: 14th & 28th
March: 14th & 28th
April: 11th & 25th
May: 9th & 23rd
June: 13th & 27th
July: 11th & 25
August: 8th & 22nd
September: 11th & 25th
October: 10th & 24th
November: 14th
December: 12th

Meetings for the Brian Head Redevelopment Agency, Special Service District and Municipal Building Authority will be held when needed and noticed accordinly.

For meeting packets and more information visit brianheadtown.utah.gov

Notice of Special Accommodations (ADA):

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Nancy Leigh (435) 677-2029 at least three days prior to the meeting.

Notice of Electronic or Telephone Participation:

Available to Board Members as per Ordinance No. 11-003 authorizes public bodies to establish written procedures governing the calling and holding of electronic meetings at which one or more members of the Council may participate by means of electronic com

Give Feedback

Meeting Information

Meeting Location:

Town Hall Council Chambers
56 North SR 143
Brian Head, UT 84719

Show in Apple Maps | Show in Google Maps

Contact Name:

Nancy Leigh

Contact Email:

nleigh@bhtown.utah.gov

Contact Phone:

(435)677-2029

Notice Posting Details

Notice Posted On:

February 09, 2023 12:02 PM

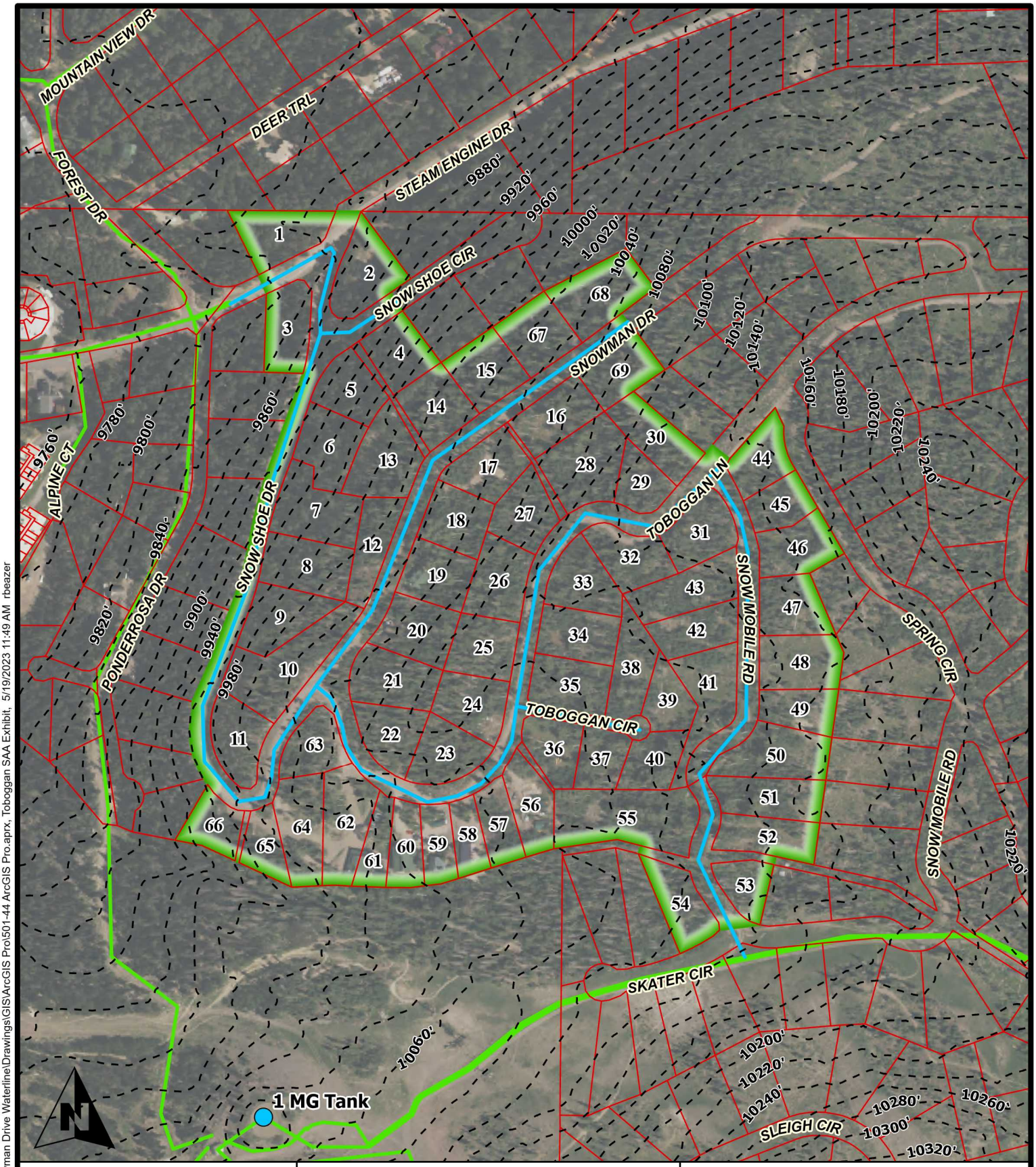
Notice Last Edited On:

March 20, 2023 08:00 AM

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File Name	Category	Date Added
2023 Town Council Meeting Schedule - Copy.pdf	Public Information Handout	2023/02/09 12:01 PM


MOUNTAIN VIEW DR
FOREST DR
DEER TRL
STEAM ENGINE DR
SNOW SHOE CIR
SNOWMAN DR
TOBOGGAN LN
TOBOGGAN CIR
SNOW SHOE DR
SNOW MOBILE RD
ALPINE CT
PONDERROSA DR
SPRING CIR
SKATER CIR
SLEIGH CIR
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Feet
Legend
Proposed 8" Waterline
Water Tanks
Toboggan SAA Boundary
Existing 8" Line
ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com
Toboggan SAA
Brian Head, UT
Spatial Reference: UT83-SF
Drawn By: RKB
Scale: 1" = 300 feet
Date: May 2023
P:\501-44 Toboggan Lane & Snowman Drive Waterline\Drawings\GIS\ArcGIS Pro\501-44 ArcGIS Pro.aprx, Toboggan SAA Exhibit, 5/19/2023 11:49 AM rbeazer

BRIAN HEAD

STAFF REPORT TO THE TOWN COUNCIL

ITEM: FY 2023 GENERAL FUND SURPLUS DISCUSSION

AUTHOR: Shane Williamson, Town Treasurer
DEPARTMENT: Administration
DATE: September 12, 2023
TYPE OF ITEM: Discussion

SUMMARY:

The Council will hold a discussion concerning the available General Fund surplus from Fiscal Year (FY) 2023, including potential allocation of the funds.

BACKGROUND:

Concluding the end of FY 2023, sales tax revenues proved stronger than initial projections when setting the FY 2023 Budget. Therefore, the Town finished the year with a budget surplus. Given the State laws concerning fund balance (1005 of budgeted revenues), considering the allocation of the funds helps keep the Town withing statutory requirements.

ANALYSIS:

Staff calculates that the FY 2023 General Fund surplus to be $575,250. The calculation takes the total collected revenues for the year (excluding the balance forward amount from FY 2022 surplus allocations) and subtracts the total expenses (minus FY 2022 surplus expenditures). In this case, Total revenue $4,156,313 – total expenses $3,581,063 = $575,250.

Some items that Council may consider for surplus allocation include:

- Employee Surplus Bonuses ($1,000 net when surplus is over $100K): $28.5k
- Transit Transportation Investment Fund (TTIF) Grant match (shuttle stops and crosswalks): $75k.
- Save for future Core Transportation Projects matching funds.
- Paved trail maintenance equipment

Staff applied for TTIF funds from UDOT for the shuttle stops and crosswalks. The cost estimate is $500k, for which we'll be responsible for 30% ($150k). If the GO bond passes, then we'll use proceeds from that. If not, we can look at either surplus or RDA funds or a mix of both. However, Staff would recommend earmarking at least $75k from surplus in case the bond fails.

Staff seeks direction from Council for how and where to allocate the FY 2023 General Fund surplus.

FINANCIAL IMPLICATIONS:

No substantial implications, other than maintaining current fund balance totals and funding projects that did not make the FY 2024 budget.

BOARD/COMMISSION RECOMMENDATION:

N/A

STAFF RECOMMENDATION:

Council Discussion

PROPOSED MOTION:

Discussion Item only

ATTACHMENTS:

None

BRIAN HEAD

STAFF REPORT TO THE PLANNING COMMISSION

ITEM: CAPITAL FACILITIES PLAN ADOPTION

AUTHOR: Aldo Biasi, Public Works Director
DEPARTMENT: Public Works
DATE: September 12, 2023
TYPE OF ITEM: Legislative Action

SUMMARY:

The Council will consider adoption of the Capital Facilities Plan that was completed last spring.

BACKGROUND:

The Town contracted with Alpha Engineering to complete a Capital Facilities Plan (CFP) for the Town. This plan has taken longer to complete than originally anticipated, but staff has been working towards completing the projects it had listed and have used this plan in working with Aspen Meadows on the annexation process.

The CFP was completed this Spring, after the Council reviewed and provided comments at the Strategic Planning Retreat that was held, but staff has not brought it back to Council for official adoption.

ANALYSIS:

Staff believes this is a good Capital Facilities Plan. It is a document that will and has provided direction and answers to the Towns needs for current and future growth projects. It is not a document that once completed will just sit on a shelf and collect dust until the next one is completed.

STAFF RECOMMENDATION:

Staff recommends that the Council adopt the Capital Facilities Plan as presented.

PROPOSED MOTION:

I move to adopt ordinance No. 23-012 adopting the Capital Facilities Plan for Water and Sewer as presented (if there are changes, please note the specific changes).

ATTACHMENTS:

A –Capital Facilities Plan ordinance

BRIAN HEAD

ORDINANCE NO. 23-___

AN ORDINANCE ADOPTING A REVISED WATER AND SEWER CAPITAL FACITLITIES PLAN FOR THE TOWN OF BRIAN HEAD, UTAH, AND RELATED MATTERS.

WHEREAS, the Town of Brian Head, Iron County, Utah is a political subdivision of the State of Utah, authorized and organized under the provisions of Utah law, and;

WHEREAS, the Town desires to prioritize how the Town will keep its infrastructure in repair, as well as plan for future growth to enhance the experience of the residents and guests in the form of a Water & Sewer Capital Facilities Plan, and;

WHEREAS, the Capital Facilities Plan is a long-range financial plan that allows the Town to prioritize public projects and identify funding sources; and

WHEREAS, the Council desires to adopt a revised Capital Facilities Plan for water and sewer in which plans shall be used to ensure the health safety and welfare of its citizens and guests.

NOW THEREFORE, it is hereby ordained by the Town Council of the Town of Brian Head, Iron County, Utah, as follows:

Section 1. The Brian Head Water & Sewer Capital Facilities Plan dated February 2023 (Attachment "A") is hereby adopted and incorporated herein by reference in its entirety.

Section 2. Effective Date. This Ordinance shall take effect upon its passage by a majority vote of the Brian Head Town Council.

Section 3. Severability Clause. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held invalid or unconstitutional by any court of competent jurisdiction, such portions shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this Ordinance.

Section 4. Repealed. All provision of the Brian Head Town Code that are inconsistent with the expressed terms of this Ordinance shall be repealed.

Passed and Adopted by the Brian Head Town Council, Iron County, Utah this _____ day of September, 2023 with the following vote**:**

DRAFT

Town Council Vote:

Mayor Clayton Calloway	Aye____	Nay____
Council Member Larry Freeberg	Aye____	Nay____
Council Member Martin Tidwell	Aye____	Nay____
Council Member Kelly Marshall	Aye____	Nay____
Council Member Shaun Kelly	Aye____	Nay____

BRIAN HEAD TOWN COUNCIL
BRIAN HEAD, UTAH

By: _____
Clayton Calloway, Mayor

ATTEST:

_____
Nancy Leigh, Town Clerk (SEAL)

DRAFT

CERTIFICATE OF PASSAGE AND POSTING

I hereby certify that the above Ordinance is a true and accurate copy, including all attachments, of the Ordinance passed by the Town Council on the _____ September 2023, and have posted a complete copy of the ordinance in a conspicuous place within the Town of Brian Head, to-wit: Town Hall and have posted a copy on the Public Meeting Notice Website and on the Town website: brianheadtown.utah.gov as per UCA 63-30-102.

_____
Nancy Leigh, Town Clerk

Design Report

Capital Facilities Plan

Brian Head Town

February 2023

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

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Part I. Executive Summary

Brian Head Town, Utah, desires to provide adequate high-quality public facilities for its residents and visitors. The Town has enjoyed relatively slow growth for several decades and has a 'small mountain and ski community' atmosphere with very limited commercial development. During the winter months, Brian Head becomes a high-volume ski resort.

However, popularity of Iron County as a residential and commercial location has surged in the past few years. The County is noted as one of the fastest growing areas in the state, while Brian Head Town has been on the edge of most of the recent residential and commercial development in the county. Additionally, recent upsurge in visitation to the area's National Parks and Monuments and Brian Head Resort have resulted in increased volumes of traffic on SR-143 and additional non-resident use of the town's facilities.

Town officials are working proactively to provide culinary water and sewer systems and facilities to meet the needs of the anticipated population increases. The Town additionally provides water to the ski resort for snow making.

The Town has identified nine culinary water projects, totaling approximately $7,064,484, and sewer project totaling approximately $5,715,649, to be constructed within the next 10 years:

Table 1: Identified Capital Facilities Projects by Project Type

Project Type	0 to 5 Year Construction	6 to 10 Year Construction
Culinary Water Projects	$4,344,635	$2,719,849
Sanitary Sewer Projects	$1,377,108	$4,338,541
Total	$5,721,743	$7,058,390

Part II. Introduction

A. Location

Brian Head Town is located about 12 miles east of Cedar City and 10 miles south of Parowan. It lies in a valley along Parowan Creek surrounded by Dixie National Forest. Being a mountain community, the elevation of the Town varies significantly. The elevation ranges from 9,800 feet on the north end, 10,625 feet on the east end, 10,245 feet on the west end, and 10,415 feet at south end. State Highway 143 runs through the center of town. This highway is used by tourists to access Cedar Breaks, Brian Head Resort and recreation areas throughout the area.

Brian Head is located in the western reaches of the Colorado Plateau and has a typical "high altitude" climate. Summers are mild, with daytime temperatures reaching 75 degrees and nighttime temperatures around 50 degrees. Winters can be severe, with nighttime temperatures averaging about 13 degrees and daytime temperatures in the 30's. Brian Head averages 360 inches of snow per year.

B. Demographics

The Kem C. Gardner Policy Institute at the University of Utah prepares demographic projections for the State of Utah. Its data estimates the average annual growth rate in Iron County since the year 2010 has been about 1.99% with an estimated total growth of 23.1% from 2010. While the Institute projects growth rates for Iron County to slow over the next several decades, it is still expected to see growth rates per decade of 19.4% from 2015-2025, 12.4% from 2025-2035, 9.9% for 2035-2045, 9% for 2045-2055, and 9.3% for 2055-2065[1]. The projected population for the Brian Head Town was determined using these Iron County growth rates. Population data is included in Table 2.

It should be noted that there are no specific long-term population projections for Brian Head, and that the Town comprises only a small portion of Iron County's population. Future growth rates in the Town can vary significantly from the larger county-wide growth rate.

Since revenues for public facilities (water, sewer, garbage, impact fees, etc.) are normally collected based on residences rather than population, it is needful to estimate the number of residences that will exist in the Town. Since Brian Head has very few permanent residential users on its water system, the most accurate way to estimate the number of residences at any time is

[1] Data source: 2017 Research Brief prepared by the University of Utah, Kem C. Gardner Policy Institute

to compare the number of water meters to the population to determine an estimated number of persons per residence. Table 2 indicates the projected metered units for the Town.

Table 2: Projected Metered Residential Units – Brian Head, Utah

	YEAR	METERED UNITS	ANNUAL UNIT CHANGE	AVERAGE ANNUAL PERCENT CHANGE
Actual Growth	**2010**	1,306	-	-
	2011	1,310	4	0.31%
	2012	1,311	1	0.08%
	2013	1,311	0	0.00%
	2014	1,314	3	0.23%
	2015	1,319	5	0.38%
	2016	1,323	4	0.30%
	2017	1,329	6	0.45%
	2018	1,338	9	0.68%
	2019	1,343	4	0.29%
	2020	1,348	5	0.37%
	2021	1,351	3	0.22%
Projected Growth (1) (2)	**2022**	1,375	24	1.80%
	2023	1,399	23	1.70%
	2024	1,421	22	1.60%
	2025	1,442	21	1.50%
	2030	1,536	19	1.30%
	2035	1,627	17	1.18%
	2040	1,713	16	1.06%
	2045	1,792	15	0.92%
	2050	1,872	15	0.90%
	2055	1,957	16	0.90%
	2060	2,045	17	0.90%
	2065	2,137	18	0.90%

Notes:

(1) Data beyond 2021 was estimated based on projected growth rates for Iron County.
(2) Data beyond 2025 is shown in five-year increments.

Table 3: Projected Metered Residential Units Based on Recent Growth Rate

	YEAR	METERED UNITS*	ANNUAL UNIT CHANGE	AVERAGE ANNUAL PERCENT CHANGE
Actual Growth	**2010**	1,306	-	-
	2011	1,310	4	0.31%
	2012	1,311	1	0.08%
	2013	1,311	0	0.00%
	2014	1,314	3	0.23%
	2015	1,319	5	0.38%
	2016	1,323	4	0.30%
	2017	1,329	6	0.45%
	2018	1,338	9	0.68%
	2019	1,343	4	0.29%
	2020	1,348	5	0.37%
	2021	1,351	3	0.22%
Projected Growth (1) (2)	**2022**	1,355	4	0.31%
	2023	1,359	4	0.31%
	2024	1,364	4	0.31%
	2025	1,368	4	0.31%
	2030	1,389	4	0.31%
	2035	1,411	4	0.31%
	2040	1,432	4	0.31%
	2045	1,455	4	0.31%
	2050	1,477	4	0.31%
	2055	1,500	5	0.31%
	2060	1,523	5	0.31%
	2065	1,547	5	0.31%

Notes:

(1) Data beyond 2021 was estimated based on the average growth rate from Brian Head Town from 2010 to 2020. The average growth for the decade was 0.31% per year.
(2) Data beyond 2025 is shown in five-year increments.

C. Existing Facilities Overview

i. Water System

Brian Head has high quality water available from multiple springs and wells. The water from both the springs and wells is used for culinary water and snow making for Brian Head Resort. The town water system consists of 4 tanks, approximately 24 miles of pipeline, 200 fire hydrants, and 350 water meters. The town installed a chlorination system in 2020.

The existing water system is shown on Figure 1, Appendix A.

ii. Sanitary Sewer

The Town maintains 46,550 lineal feet, or 8.8 miles of sanitary sewer with approximately 247 sewer manholes in town limits. Brian Head Town also maintains approximately 36,355 lineal feet (6.9 miles) of sanitary sewer and 105 sewer manholes that run along Highway 143 from the sewer grinders to Second Left Hand Canyon. The sanitary sewer then runs through the Parowan City sanitary sewer system to the Parowan City Wastewater Treatment Facility.

The existing sanitary sewer system will be shown on Figures 2A and 2B, Appendix A.

iii. Utilities by Others

Power is provided by Rocky Mountain Power, a private utility.

Natural gas is provided by Dominion Energy, a private utility.

Communication services are provided by various private companies.

D. Brian Head Resort

Brian Head Resort is the Town's primary economic base and has been in operation since the winter of 1964-1965. It covers over 650 acres on both private land and National Forest land. There are 71 different runs on the mountain with eight chair lifts. Brian Head Resort draws the majority of its crowd during the winter months but continues to draw a large number of tourists and recreationist during the summer months.

Part III. Water System Capital Facilities Plan

A. Regulatory Requirements

i. Utah Division of Drinking Water

The State of Utah Rules for Public Drinking Water Systems contains Minimum Sizing Requirements under Section R309-510 that are used to determine the required capacity of Brian Head's culinary water system. The system must meet the following three criteria:

(1) R309-510-7 Source Sizing

- The system's source capacity shall be able to provide the Peak Day Demand of 800 gallons per day (gpd) for each residential connection or equivalent residential connection (ERC) for indoor water use.
- The system's source capacity shall be able to provide the Peak Day Demand of 2.26 gallons per minute for each irrigated acre for outdoor water use.
- The system's source capacity shall also be able to provide the Average Yearly Demand of 146,000 gallons for each residential connection or equivalent residential connection for indoor water use, which is an average of 400 gpd/ERC.
- The system's source capacity shall also be able to provide the Average Yearly Demand of 1.17-acre feet of water for each irrigated acre for outdoor use, which is an average of 1,790 gpd/acre based on 213 days of irrigation.

(2) R309-510-8 Storage Sizing

- The system's storage capacity shall provide storage volume to meet the Average Day Demand for water for indoor use (400 gallons/ERC) and for irrigation use (1,782 gallons/acre).
- The system storage capacity shall provide additional storage volume for fire suppression as required by the local fire code (180,000 gallons, see below).

(3) R309-510-9 Distribution System Sizing

- The distribution system shall be adequate to provide Peak Instantaneous Demand for indoor water use. For complex water systems, hydraulic modeling may be used to analyze the pipe network using a peaking factor for Peak Instantaneous Demand. Typical peaking factor is 2 times the Peak Day Demand for each ERC.

  For a single pipeline, such as a transmission pipeline, the Peak Instantaneous Demand shall be based on the formula:

  $$Q = 10.8 \times N^{0.64}$$

  Where N equals the number of ERC's and Q equals the total flow (gpm)

- The distribution system shall also be adequate to provide Peak Instantaneous Demand of 4.52 gpm for each irrigated acre for outdoor water use.

- The minimum pressure within the distribution system shall be (R309-105-9):

  20 psi during Fire Demand simultaneous with Peak Day Demand

  30 psi during Peak Instantaneous Demand

  40 psi during Peak Day Demand

R309-510-5 Reduction of Sizing Requirements permits water systems to use lower quantity values based on acceptable use data.

ii. International Fire Code

The 2012 International Fire Code, Appendix B, contains quantity requirements for minimum fire flow and flow duration for One- and Two-Family Dwellings and dwellings more than 3,600 square feet. The requirements in the code will affect the water storage and distribution system requirements. The Code requires storage capacity for a 2-hour fire flow of 1,000 gpm for a one-to-two dwelling home, which amounts to 120,000 gallons, and a 2-hour fire flow of 1,500 gpm for a building over 3,600 square feet, which amounts to 180,000 gallons. Since the Town has buildings with over 3,600 square feet, the Town should have at least 180,000 gallons of storage capacity for fire protection.

iii. Water Rights

All waters within the State of Utah are declared property of the public, and rights to appropriate and use water are regulated by the Utah Division of Water Rights under Utah Code Title 73. Rights equaling the Average Annual Flow must be secured for use in the water system.

Table 4 summarizes the regulatory requirements referenced above.

Table 4: Regulatory Water Quantity Requirements

WATER SYSTEM	INDOOR USE	OUTDOOR USE	FIRE FLOW REQUIREMENT
Water Right	0.448 acre-feet/year per ERC (400 gallons/day)	1.17 Acre-feet/Year per Irrigated Acre	none
Water Source	800 gallons/day per ERC	2.26 gallons/minute per Irrigated Acre	none
Water Storage	400 gallons per ERC	1,782 gallons per Irrigated Acre	180,000 gallons(2)
Distribution	1.11 gallons/ minute per ERC (2 x 800 gallons/day) Single Pipe $10.8*N^{0.64}$	4.52 gallons/minute per Irrigated Acre	1,500 gallons/minute minimum(1)

Notes:

(1) Required Fire Flow for one-two dwelling home greater than 3,600 square feet at fire hydrant

(2) Required 2-hour storage at fire flow of 1,500 gallons per minute

ERC = Equivalent Residential Connection.

N = Number of Equivalent Residential Connections.

B. Water Usage

i. Current Metering

Table 5 shows water usage by month during 2019 and 2020 based on meter readings.

Table 5: Monthly Water Usage for 2019 and 2020

YEAR/ MONTH	MONTHLY USAGE (GAL)	MONTHLY USAGE (ACRE-FT)	GALLONS PER DAY	GALLONS PER DAY PER ERC
2019				
JAN	10,806,295	33.16	348,590	49.44
FEB	7,406,750	22.73	264,527	49.55
MAR	10,909,362	33.48	351,915	36.75
APR	1,752,547	5.38	58,418	13.30
MAY	1,333,386	4.09	43,012	17.84
JUN	1,442,583	4.43	48,086	27.94
JUL	3,320,189	10.19	107,103	34.19
AUG	11,352,000	34.84	366,194	73.49
SEP	6,699,976	20.56	223,333	349.47
OCT	13,996,212	42.95	451,491	205.68
NOV	35,124,541	107.79	1,170,818	657.03
DEC	12,081,090	37.07	389,713	591.45
2019 Totals	116,224,931	356.67		
Average	9,685,411	29.72	318,600	236.35
2020				
JAN	2,066,042	6.34	66,647	49.33
FEB	1,870,371	5.74	66,799	47.74
MAR	1,535,809	4.71	49,542	36.67
APR	537,766	1.65	17,926	13.27
MAY	745,674	2.29	24,054	17.80
JUN	1,129,806	3.47	37,660	27.88
JUL	1,428,816	4.38	46,091	34.12
AUG	3,070,918	9.42	99,062	73.32
SEP	14,132,548	43.37	471,085	348.69
OCT	8,595,073	26.38	277,260	205.23
NOV	26,570,255	81.54	885,675	655.57
DEC	24,715,493	75.84	797,274	590.14
2020 Totals	86,398,571	265.13		
Average	7,199,881	22.09	236,590	175.12

Metered usage summary

- Average Daily Use: Approximately 236.35 gallons per day per ERC
- Peak Day Use: Approximately 657.03 gallons per day per ERC (winter months)
- Average Annual Use: Approximately 0.265 AF per ERC

All usage figures indicate the town uses less than minimum regulatory supply requirements and efficiently uses its water. Water systems may request reduction of the State's minimum sizing requirements in accordance with R309-510-5.

ii. Outdoor Usage from Culinary System

It should be noted the Town does not provide irrigation water and that the outdoor usage from the culinary system is included in the above meter readings.

Table 6: Comparison of Regulatory Requirements and Metered Use per ERC

PARAMETER	REGULATORY REQUIREMENT	METERED USE [(1)]
Water Rights (Average Annual Use)	0.448 acre-feet/year (400 gallons/day)	0.081 acre-feet/year (73 gallons/day)
Water Source (Peak Day Demand)	800 gallons/day	181 gallons/day
Water Storage (Average Day Demand)	400 gallons	236 gallons

[(1)] Includes Outdoor Use

iii. Snow Making from Culinary System

Brian Head provides water to Brian Head Resort each year for snow making. The amount of water provided to the resort varies each year depending on the precipitation received. Table 7 shows the total water usage for the resort compared to the total amount used by the Town during the winter months. Data for 2018 is not included due to inaccurate meter readings.

Table 7: Brian Head Resort Water Usage for 2017, 2019 and 2020

YEAR/ MONTH	RESORT USAGE (GAL)	RESORT USAGE (ACRE-FT)	RESORT USAGE (GPD)	TOTAL TOWN USAGE (GAL)
2017				
JAN	1,080,000	3.31	34,839	3,542,231
NOV	23,330,000	71.59	777,667	24,700,247
DEC	35,940,000	110.29	1,159.355	38,623,366
2017 Totals	60,350,000	185.19	655,978	66,865,844
2019				
JAN	7,150,000	21.94	230,645	10,806,295
FEB	4,620,000	14.18	165,000	7,406,750
MAR	7,950,000	24.40	256,452	10,909,362
SEP	5,000,000	15.34	166,667	6,699,976
OCT	12,450,000	38.21	401,613	13,996,212
NOV	33,060,000	101.45	1,102	35,124,541
DEC	10,440,000	32.04	336,774	12,081,090
2019 Totals	80,670,000	247.55	380,519	97,024,226
2020				
JAN	460,000	1.41	14,839	2,066,042
FEB	560,000	1.72	19,310	1,870,371
AUG	1,180,000	3.62	38,065	3,070,918
SEP	12,740,000	39.10	424,667	14,132,548
OCT	7,930,000	24.33	255,806	8,595,073
NOV	25,220,000	77.39	255,667	26,570,255
DEC	23,930,000	73.43	771,935	24,715,493
2020 Totals	72,020,000	221	338,122	81,020,700

C. Water Rights

Brian Head Town has a total water right capacity of 965.66 acre-feet either owned or leased by Brian Head Town and currently approved for municipal use and snow making. Currently 815.66 acre-feet are transferred to the mountain for municipal use. An additional 150 acre-feet is reserved for snow making. An additional 94.67 acre-feet is pending approval by the Utah Division of Water Rights, and 243.08 acre-feet is being leased to Parowan Valley.

i. Municipal Use Water Rights

Brian Head receives its water for municipal use from Salt Pile Springs, Decker Springs, Seeps Springs, Mammoth Springs, Bearflat Well, Town Hall Well, Crystal Mountain Well, and the currently unused Gurr Well. The locations for these water sources are shown in

Table 11 under section **D. Water Source** and are all based on SLB&M, in Iron County, Utah.

Table 8: Brian Head Town Municipal Use Water Rights

WATER RIGHT NO.	PRIORITY DATE	POINT OF USE ADDRESS	SOURCE	QUANTITY
75-661 75-662 75-663 75-664 a37313	1889	Town of Brian Head Dry Canyon Agreement	Underground Water Wells	234.66 acre-feet
75-1704 a17198	1860	Town of Brian Head	Underground Water Well Crystal Mountain Summit Drainage	250.00 acre-feet
75-1514 a12265	1860	Parowan Reservoir Company/Brian Head	Springs	31.00 acre-feet
75-1515 a12266	1860	Parowan Reservoir & Irrigation Company/Brian Head	Springs	300.00 acre-feet
			TOTAL	815.66 acre-feet

Water rights service capacity:

- Based on *regulatory* Annual Supply Requirements of 0.448 AF per ERC, current water rights are adequate for 1,820 ERC (400 gpd/ERC).
- Based on *actual metered* Annual Usage of 0.081 AF per ERC, current water rights are adequate for 10,069 ERC.

ii. Brian Head Resort Water Rights

Brian Head Town supplies water to Brian Head Resort for snow making. The water rights dedicated for snow making are sourced from Crystal Mountain Well and Town Hall Well, for a total of 150 acre-feet. Change application a22707 indicated that 22.5 acre-feet of water may be consumed by pond evaporation and other water losses in the snowmaking process, and the remaining 127.50 acre-feet must return to the system as snowmelt.

The Town can supply additional water beyond the snow making water right to Brian Head Resort as long as they possess the required water rights for the town residents.

Table 9: Brian Head Town Snow Making Water Rights

WATER RIGHT NO.	PRIORITY DATE	POINT OF USE ADDRESS	SOURCE	FLOW
75-1693 a22707	1860	Parowan Reservoir Company/Brian Head Town/Brian Head Ski Limited	Underground Water Wells	0.24 CFS or 150.00 acre-feet
			TOTAL	127.50 acre-feet

iii. Brian Head Town Water Rights Leased to Parowan Valley

Brian Head Town currently leases water rights to farmers in the Parowan Valley. These rights were originally purchased as a single water right and were known as the Heil Water Right. This water right was split into two separate rights, 75-2019 and 75-2034. A change application was filed to segregate 156.92 acre-feet from the valley to the mountain (water right 75-2034). With the change in water use from irrigation to culinary use, the state engineer limited Brian Head Town's use to the historically consumed amount, which is 94.67 acre-feet. Additionally, the application and the agreement with the Parowan Reservoir Company limits the use based on the size of Bristlecone Pond. Originally, the Town was allowed to use twice the usable capacity of the pond. That has since been reduced to 1.5 times the capacity, and will decrease to 1 times the useable capacity of the pond in eight years.

If wastewater treatment is provided on the mountain, the limitation based on consumption and storage-based limitations would be removed.

Table 10: Brian Head Town Water Rights Leased to Parowan Valley

WATER RIGHT NO.	PRIORITY DATE	POINT OF USE ADDRESS	SOURCE	FLOW
75-2019 t46905	1945	Brian Head Special Service District	Underground Water Well	243.08 acre-feet
75-2034	1945	Brian Head Special Service District	Underground Water Well	156.92 acre-feet
			TOTAL	400.00 acre-feet

Water rights service capacity provided by the 94.67 acre-feet of water provided by Water Right 75-2034:

- Based on *regulatory* Annual Supply Requirements of 0.448 AF per ERC, the water right is adequate for 211 ERC (400 gpd/ERC).
- Based on *actual metered* Annual Usage of 0.081 AF per ERC, the water right is adequate for 1,168 ERC.

With a conservative reduction of 50% for the remaining 243.08 acre-feet of water rights available to be transferred to the Brian Head area, the quantity available to be used as culinary water amounts to 121.54 acre-feet. Water rights service capacity added from the rights leased to Parowan Valley are shown below:

- Based on *regulatory* Annual Supply Requirements of 0.448 AF per ERC, additional water rights are adequate for another 271 ERC (400 gpd/ERC).
- Based on *actual metered* Annual Usage of 0.081 AF per ERC, additional water rights are adequate for another 1,500 ERC.

iv. Future Water Rights Needs

All estimates of water right needs assume that Brian Head Town will only provide the 150 acre-feet of water to Brian Head Resort for snow making.

Based on *regulatory* requirements, the combination of the Town's current water rights and the Heil water right used for culinary water will be adequate until approximately 2058 when it projected that there will be 2,021 ERCs on the system. When the need for additional water rights is met, the remaining water rights leased to Parowan Valley can be transferred to the Brian Head Area. With the conservative estimate of a water right loss of 50% for the remaining leased water rights, an additional 271 ERCs can be added to the system. With these additional water rights, the Town's water rights will be adequate beyond 2065.

Based on *usage*, it is estimated that the Town's current water right will be adequate beyond 2065. Development of large non-residential users and effective water conservation measures will affect the timing for additional water rights.

Water Rights Needs with Maximum Water Amount Provided to Resort

In 2019, the Town provided an additional 97.55 acre-feet (247.55 acre-feet total) of water to Brian Head Resort for snow making beyond the amount determined in water right 75-1693. If the Town continued to provide this same amount of water, it would decrease the amount of ERCs allowed on the system by 217 ERCs based on *regulatory* requirements. Based on this scenario, the Town's current water right will be adequate until 2045 when there are projected to be 1,800 ERCs on the system. If the additional water rights leased to Parowan Valley are

transferred to the Brian Head area, the Town's water rights will be adequate until 2061 when it is project that 2,078 ERCs will be on the system.

D. Water Source

i. Current Water Sources

Brian Head Town has multiple wells and springs that supply reliable flows. These wells consist of Salt Pile Spring, Decker Spring, Seeps Spring, Mammoth Springs. The total flows from the springs have an estimated minimum yield of 0.3 cubic feet per second (cfs), or 136 gallons per minute (gpm). Water from the springs is shared between Brian Head and Parowan Reservoir Company for irrigation and municipal purposes.

Brian Head's wells consist of Bearflat Well, Crystal Mountain Well, and Town Hall Well. These wells provide 420, 100, and 260 gpm, for a total of 780 gpm, or 1,123,200 gallons per day (gpd). Town Hall Well is currently being pumped at the rate of its original test pump and was installed 1991. Bearflat well is producing at half the initial test pump flows of 1,163 since its installation in 2011. The well collapsed, and an attempt to rehabilitate the well occurred in 2016, which was unsuccessful. Bearflat well currently produces 420 gpm, and will need to be rehabilitated or a new well drilled.

With the climate and natural landscaping of the town, watered landscaping is very minimal. For a conservative estimate, it is assumed that a total of 10 acres are irrigated from the culinary water system.

A summary of Brian Head Town's water sources with their minimum yields are shown in Table 11.

Table 11: Brian Head Water Sources

SOURCE	LOCATION	ELEVATION	RELIABLE FLOWS (gpm)	RELIABLE FLOWS (gpd)
Salt Pile Spring	S 1140' and W 1332' from East Quarter Corner of S01, R36S, R9W	~10,430'	54	77,760
Decker Spring	N 306' and E 438' from SW corner, S01, R36S, R9W	~10,360'	38	54,720
Seeps Spring	S 160' and E 1440' from North Quarter Corner of S11, T36S, R9W	~10,330'	21	30,240
Mammoth Spring #1	N 824' and W 2173' from SE corner, S11, T36S, R9W	~10,450'	23	33,120
Mammoth Spring #2	N 664' and W 2030' from SE corner, S11, T36S, R9W	~10,450'		
Mammoth Spring #3	N 797' and W 1786' from SE corner, S11, T36S, R9W	~10,450'		
Bearflat Well	N 11168' and W 180' from SE corner, S34, T35S, R9W	~9,710'	420	604,800
Crystal Mountain Well	N 300' and W 1100' from E quarter corner of S04, T36S, R9W	~9,580'	100	144,000
Town Hall Well	S 675' and E 162' from NW corner, S11, T36S, R9W	~9,810'	260	674,400
Gurr Well	N 1167' and W 192' from SE corner, S34, T35S, R9W	~9,435	Unknown	Unknown
		TOTAL RELIABLE FLOWS	916	1,319,040

Water source service capacity:

- Based on *regulatory* Peak Day Supply requirements of 800 gpd (0.555 gpm) per ERC for indoor use, the current water sources allow for 1,648 ERCs.
- Based on *metered* Peak Day Usage of 181 gpd (0.126 gpm) per ERC, including outdoor use, the current water sources are adequate for 7,270 ERC.

The Town is currently waiting on an operating permit from the Utah Department of Drinking Water to treat their water system with chlorine using a gas chlorine ejector and auxiliary pressure pump to inject the chlorine solution into the water going into 1 MG Tank, Mammoth Tank, and from Crystal Mountain Well. Chlorine contact time is provided in the 1 MG and Mammoth Tanks, and in the waterline from Crystal Mountain Well to ½ MG Tank. The chlorine is supplied in 150-pound cylinders.

ii. Brian Head Resort

Brian Head Town provided 33,060,000 gallons during the month of November 2019, for an average of 1,102,000 gallons per day, or 765 gallons per minute. Brian Head Resort has indicated that they prefer the Town to have the capability of supplying 1,200 gpm to their snow making pond. This would require the Town to produce at least 1,600 gpm to provide the culinary demand for the residents and the 1,200 gpm requested by the resort. The town is currently unable to provide the flows requested by the resort unless current sources are upgraded, or new sources are obtained.

iii. Future Source Needs

Based on *regulatory* requirements, the current source capacity of 916 gallons per minute is adequate until 2035, when 1,632 ERCs are on the system.

Based on *usage*, the current source will be adequate well beyond 2065.

iv. Recommendations

The existing wells and springs are adequate based on current usage and should be able to meet peak pay demands for the foreseeable future. In order to provide water to Brian Head Resort for snow making, and for the continued growth, current sources need to be upgraded, or new sources need to be obtained.

Pumps generally have an expected service life of approximately 10 years. Replacement pumps should be programmed for the existing pumps as they near the end of their expected service life.

Replacement of chlorinator and auxiliary pumps should be programmed for maintenance and future replacement.

E. Storage Capacity

i. Existing Storage Tanks

Brian Head has 4 water storage tanks in its system, totaling 2,400,000 gallons.

Table 12: Tank Storage Capacity

TANK	ELEVATION	YEAR CONSTRUCTED	CAPACITY (GAL)
½ MG Tank	10,250	1992	500,000
1 MG Tank	10,080	1979	1,000,000
Mammoth Tank	10,380	2010	500,000
Salt Pile Tank	10,625	2001	400,000
		TOTAL STORAGE CAPACITY (GAL)	2,400,000

½ MG Tank

½ MG Tank was built in 1992 and consists of reinforced concrete. The tank is in good condition and is not in need of refurbishment or replacement.

1 MG Tank

1 MG Tank was constructed in 1979 and consists of reinforced concrete. The tank is in good condition and is not in need of refurbishment or replacement.

Mammoth Tank

Mammoth Tank was built in 2010 and consists of reinforced concrete. The tank is in good condition and is not in need of refurbishment or replacement.

Salt Pile Tank

Salt Pile Tank was constructed in 2001 and consists of reinforced concrete. The tank is in good condition and is not in need of refurbishment or replacement.

With the climate and natural landscaping of the town, watered landscaping is very minimal. For a conservative estimate, it is assumed that a total of 10 acres are irrigated from the culinary water system.

Water storage service capacity:

- Based on *regulatory* Storage Requirements of 1,782 gallons per acre for outdoor use, the current storage on the main water system must provide approximately 17,820

gallons for irrigation; additionally, 180,000 gallons of storage must be provided to meet fire code requirements, leaving 2,202,180 gallons available for indoor storage.

- Based on *regulatory* Storage Requirements of 400 gallons per ERC for indoor use, the current main system storage is adequate for 5,505 ERC.

ii. Future Storage Needs

Current storage capacity will be adequate past 2065.

iii. Recommendations

The four concrete tanks are all in good condition and should require little maintenance for several years, but should be examined at a minimum 5-year intervals for cracks or other deterioration.

F. Distribution System

i. Existing Distribution System

Brian Head Town operates as one complete distribution system. This distribution system consists of 4 tanks, approximately 24 miles of pipeline, 200 fire hydrants, and 350 water meters.

ii. Hydraulic Analysis of Water System

Demographic projections have been updated for this Capital Facilities Plan as shown for 2035 and 2050 in Table 2, and repeated on Table 13. Peak Day Demand, is estimated 181 gpd/ERC (0.13 gpm/ERC) based on recent meter readings, and Peak Instantaneous Demand is calculated using a factor of 2 times the Peak Day Demand, or 0.26 gpm/ERC. Outdoor use in assumed to be negligible and is not included in the Peak Instantaneous Flow Requirements.

Table 13: Peak Instantaneous Flow Requirements

YEAR	2020		2035		2050	
	UNITS	FLOW (GPM)	UNITS	FLOW (GPM)	UNITS	FLOW (GPM)
Indoor Use (ERC)	1,348	351	1,627	423	1,872	486
Fire Flow		1,500		1,500		1,500
TOTAL		1,851		1,923		1,986

Notes:
Peak Instantaneous Flow = Peak Day Demand X 2
ERC = Equivalent Residential Connection
GPM = Gallons per Minute

The water distribution system should have the capacity to deliver the combined total flow requirements shown in Table 13, which are peak instantaneous flows combined with fire flow.

The system should be required to maintain a residual pressure of 20 pounds per square inch (psi) in the distribution lines while delivering the total combined flow.

The water distribution system currently has the capacity to deliver the peak day demand, peak instantaneous demand, and peak day demands with fire flow. A computer network analysis of the Brian Head distribution system projects that the system will continue to meet the demands beyond 2035.

iii. Water Distribution in New Development

Brian Head Town policy requires developers of properties within the city to construct culinary water distribution piping, fire hydrants, and control valves within each development. Costs for transmission pipelines to carry water from sources and storage to the development should be proportionally shared through impact fees, or by separate agreement with the Town. The Town also requires that any new building constructed within 300-feet of an existing water line is responsible to extend the waterline to the far edge of their property.

Supplemental hydraulic analysis should be required for developments where pressures in existing waterlines are low. Where insufficient flow is available, larger, or additional waterlines may have to be installed to the proposed development.

iv. Future Distribution Needs

Current main distribution system is in good condition.

v. Recommendations

It is suggested that water distribution piping be considered for replacement if they have been in service for over 25 years, are smaller than 6”, or are any material other than ductile iron. 8-inch ductile iron water lines will be required for all new development.

Impact fees are typically not eligible to fund replacement of existing waterlines, so funding for waterline replacement should be included in the Water Department budget.

G. Proposed Annexation

A developer is currently planning on annexing into Brian Head Town (Aspen Meadows). All water rights, sources, distribution, and storage requirements will need to be met and provided by the developer. A table provided by the developer showing the proposed water demands for the development is included in **Appendix F.**

Part IV. Sanitary Sewer Capital Facilities Plan

Brian Head Town maintains 46,550 lineal feet, or 8.8 miles of sanitary sewer with approximately 247 sewer manholes in town limits. Brian Head Town also maintains approximately 36,355 lineal feet (6.9 miles) of sanitary sewer and 105 sewer manholes that runs along Highway 143 from the sewer grinders to Second Left Hand Canyon. The sanitary sewer then runs through the Parowan City sanitary sewer system to the Parowan City Wastewater Treatment Facility.

A. Regulatory Requirements

i. Utah Division of Environmental Quality

The State of Utah Rules for Environmental Quality, Water Quality contains Design Requirements for Wastewater Collection, Treatment and Disposal Systems under Section R317-3. The Brian Head sanitary sewer system must meet the following criteria:

(1) R317-3-2 Sewer

- The required sewer capacity shall be determined based on maximum hourly domestic sewage flow, additional maximum flow from industrial plants, inflow, ground water infiltration, potential for sulfide generation, topography of area, location of sewage treatment plant, depth of excavation, and pumping requirements.
- New sewer systems shall be designed based on an annual average daily rate of flow of 100 gallons per capita per day unless there are data to indicate otherwise. The per capita rate of flow includes an allowance for infiltration/inflow. The per capita rate of flow may be higher than 100 gallons per day if there is probability of large amounts of infiltration/inflow entering the system.

B. Metered Usage

Brian Head meters its sewer flows at the Brian Head meter located at the bottom of Parowan Canyon. Both the Parowan City and Brian Head Town sewage flows are monitored at the Parowan City Wastewater Treatment Facility (Parowan Lagoons), located in Parowan, Utah. The metering information used in this report is combined information from the meter Brian Head meter and the meter at the Parowan Lagoons.

i. Daily Flows

Table 14 shows the monthly sewer totals during 2021. **Table 15** shows the yearly sewer totals from 2015 to 2021.

Table 14: Monthly Wastewater Flows for 2021

MONTH	BRIAN HEAD MONTHLY TOTAL (GAL)	PAROWAN MONTHLY TOTAL (GAL)	LAGOON MONTHLY TOTAL (GAL)	BRIAN HEAD AVG DAILY FLOW (GPD)	BRIAN HEAD AMOUNT OF TOTAL FLOW
JAN	5,361,000	6,427,000	11,788,000	172,935	45.5%
FEB	4,814,000	5,794,000	10,608,000	171,929	45.4%
MAR	5,265,000	6,529,000	11,794,000	169,839	44.6%
APR	4,552,000	5,954,000	10,506,000	151,733	43.3%
MAY	3,843,000	6,158,000	10,001,000	123,968	38.4%
JUN	3,318,000	6,213,000	9,531,000	110,600	34.8%
JUL	3,919,000	7,314,000	11,233,000	126,419	34.9%
AUG	3,238,000	6,524,000	9,762,000	104,452	33.2%
SEP	2,903,000	6,083,000	8,986,000	96,767	32.3%
OCT	3,185,000	6,557,000	9,742,000	102,742	32.7%
NOV	3,148,000	5,738,000	8,886,000	104,933	35.4%
DEC	4,457,000	6,663,000	11,120,000	143,774	40.3%
2021 Totals	48,003,000	75,954,000	123,957,000	131,515	38.7%

Table 15: Brian Head/Parowan City Sewer Totals - Yearly

YEAR	BRIAN HEAD TOTAL (GAL)	PAROWAN TOTAL (GAL)	LAGOON TOTAL (GAL)	AVG DAILY FLOW (GPD)	BRIAN HEAD AMOUNT OF TOTAL FLOW
2015	39,271,598	80,302,789	119,574,387	107,593	32.8%
2016*	44,534,581	91,902,638	136,437,219	121,679	32.6%
2017	43,425,000	94,002,375	137,427,375	118,973	31.6%
2018	40,014,874	99,333,549	139,348,423	109,630	28.7%
2019	52,779,000	95,638,000	148,417,000	144,600	35.6%
2020*	54,567,000	83,022,503	137,589,503	149,090	39.7%
2021	48,003,000	75,954,000	123,957,000	131,515	38.7%
Average	48,003,000	75,954,000	942,750,907	126,260	34.2%

* 366 days in the year

Table 16 shows the projected sewer connections based off the projected growth for Iron County. **Table 17** shows the projected sewer connections based of the average growth rate of Brian Head Town, or 0.31%. Both Tables show the actual sewer connections from 2015 through 2021.

Table 16: Projected sewer Connections – Brian Head, Utah

	YEAR	SEWER CONNECTIONS	ANNUAL UNIT CHANGE	AVERAGE ANNUAL PERCENT CHANGE
Actual Growth	**2015**	1,290	-	-
	2016	1,292	2	0.15%
	2017	1,303	11	0.84%
	2018	1,300	-3	-0.23%
	2019	1,305	5	0.38%
	2020	1,312	7	0.53%
	2021	1,323	3	0.23%
Projected Growth (1) (2)	**2022**	1,347	24	1.80%
	2023	1,370	23	1.70%
	2024	1,392	22	1.60%
	2025	1,412	21	1.50%
	2030	1,504	92	1.30%
	2035	1,593	18	1.18%
	2040	1,677	17	1.06%
	2045	1,755	15	0.92%
	2050	1,834	16	0.90%
	2055	1,916	17	0.90%
	2060	2,002	17	0.90%
	2065	2,092	18	0.90%

Notes:

(1) Data beyond 2021 was estimated based on projected growth rates for Iron County.
(2) Data beyond 2025 is shown in five-year increments.

Table 17: Projected Sewer Connections Based on Recent Growth Rate

	YEAR	METERED UNITS	ANNUAL UNIT CHANGE	AVERAGE ANNUAL PERCENT CHANGE
Actual Growth	**2015**	1,290	5	0.38%
	2016	1,292	4	0.30%
	2017	1,303	6	0.45%
	2018	1,300	9	0.68%
	2019	1,305	4	0.29%
	2020	1,312	5	0.37%
	2021	1,323	3	0.22%
Projected Growth (1) (2)	**2022**	1,327	4	0.31%
	2023	1,331	4	0.31%
	2024	1,335	4	0.31%
	2025	1,339	4	0.31%
	2030	1,360	4	0.31%
	2035	1,381	4	0.31%
	2040	1,403	4	0.31%
	2045	1,424	4	0.31%
	2050	1,447	4	0.31%
	2055	1,469	5	0.31%
	2060	1,492	5	0.31%
	2065	1,515	5	0.31%

Notes:

(1) Data beyond 2021 was estimated based on the average growth rate from Brian Head Town from 2010 to 2020. The average growth for the decade was 0.31% per year.
(2) Data beyond 2025 is shown in five-year increments.

Table 18 shows the average daily flows per connection.

Table 18: Average Daily Flows per Connection

YEAR	BRIAN HEAD TOTAL (GAL)	AVG DAILY FLOW (GPD)	SEWER CONNECTIONS	DAILY FLOW/ CONNECTION (GPD)
2015	39,271,598	107,593	1290	83
2016*	44,534,581	121,679	1292	94
2017	43,425,000	118,973	1303	91
2018	40,014,874	109,630	1300	84
2019	52,779,000	144,600	1305	111
2020*	54,567,000	149,090	1312	114
2021	48,003,000	131,515	1323	99

The maximum average daily flow per connection is 114 GPD in 2020.

Data provided by Brian Head Town provided the full buildout projected units for the Town with its current boundaries. **Table 19** shows the projected units provided, along with the assumed ERC per units, and the total design flow per the states 100 gallons per capita per day (R317-3-2), and the total design flow with Brian Head's average 114 gallons per day per connection.

Table 19: Full Buildout Flows

UNIT TYPE	PROJECTED UNITS	ERC/UNITS	TOTAL STATE DESIGN FLOW (GPD)*	TOTAL DESIGN FLOW (GPD)**
Single Family	2,494	3.2	798,080	284,316
Condo/Hotel	7,674.5	1	767,450	874,893
Commercial	614	8	491,200	69,996
		Total Flows	2,056,730	1,229,205

*Flows determined following R317-3-2.

**Flows determined using the average 114 gallons per day per connection.

A developer is currently in the planning phase to annex into Brian Head Town. The anticipated flows determined by the developer consist of 595,549 gallons per day for the total average daily sewer flows. The table provided by the developer showing the anticipated sewage generation is included in **Appendix F.**

ii. Maximum Flows

The peak flows in Brian Head occur during spring runoff, when there is a high amount of ground water infiltration from the melting snow. The winter holidays produce the next highest amount of sewage flows. **Table 20** shows the daily sewer totals for the ten highest days since April 4, 2020. The highest total daily amount recorded was 354,309 gallons on May 2, 2020.

Table 20: Highest Daily Total

DATE	MAXIMUM FLOW (GPM)	AVERAGE FLOW (GPM)	TOTAL DAILY AMOUNT (GAL)
May 2, 2020	309.32	246.05	354,309
May 3, 2020	311.98	242.92	349,805
April 30, 2020	312.79	239.48	344,859
May 1, 2020	308.40	238.44	343,362
April 29, 2020	684.29	225.04	324,057
May 4, 2020	288.94	221.39	318,805
April 28, 2020	284.73	216.13	311,228
May 24, 2020	350.50	215.16	309,828
May 7, 2020	277.44	212.24	305,580
May 8, 2020	262.07	209.46	298,792

Table 21 shows the ten days with the highest maximum flow since April 4, 2020. The maximum flow rate recorded was 1,016.95 GPM on April 7, 2020.

Table 21: Highest Maximum Flows

DATE	MAXIMUM FLOW (GPM)	AVERAGE FLOW (GPM)	TOTAL DAILY AMOUNT (GAL)
April 7, 2020	1,016.95	100.64	144,925
March 3, 2021	807.22	132.57	190,906
January 31, 2021	726.30	162.37	233,819
April 29, 2020	684.29	225.04	324,057
August 19, 2021	565.61	101.64	146,359
July 22, 2021	548.01	82.90	134,675
May 22, 2022	501.23	82.90	119,382
August 2, 2020	445.23	112.85	162,514
December 30, 2021	435.39	161.86	233,085
March 14, 2021	429.34	145.19	209,080

As can be seen from **Table 20** and **Table 21**, it can be reasonably assumed that groundwater infiltration accounts for the highest maximum flows, and highest daily flow totals.

C. Collection System

The sanitary sewer collection system design is based off the maximum flow rate. The minimum design flow rate established by the state is 100 gallons per capita per day unless there is data to indicate otherwise. All new sewer lines constructed must follow the regulations shown in **Section A. Regulatory Requirements.**

The critical section for growth in the Brian Head sanitary sewer system is the trunk line that runs down the canyon after the sewer grinder to the Parowan Lagoons. The sewer manholes in the canyon from the grinder to the Parowan City limits (Second Left Hand Road) were surveyed. This is where Parowan City begins maintenance of the sewer line. The most critical sewer pipes, and their maximum full flow capacity are shown in **Table 22**. **Figure 2B** shows the manholes in the canyon and indicates the critical sewer pipes.

Table 22: HWY 143 Full Flow Capacity

PIPE	SIZE (IN)	SLOPE (FT/FT)	FULL FLOW CAPACITY (GPM)
150	8	0.020	758.5
103 (1)	8	0.021	776.5
167	8	0.024	839.3
106	8	0.027	893.2
170	8	0.031	951.5
113	8	0.031	960.5
163	8	0.032	965.0
164	8	0.036	1,027.8
176	8	0.036	1,032.3
160	8	0.037	1,036.8

A breakdown of each surveyed sewer pipe through the canyon with its full-flow capacity and design capacity (75% full) is shown in **Appendix E**.

Table 23 shows when the critical sewer pipes down the canyon need to be replaced, based on the maximum flow of 1,016.95 GPM, shown in **Table 21**. Using the 1312 connections in 2020, the GPM each connection contributed to the maximum flow amounts to 0.775.

Table 23: HWY 143 Replacement Timeline

PIPE	FULL FLOW CAPACITY (GPM)	NUMBER OF CONNECTIONS	YEAR FROM TABLE 16	YEAR FROM TABLE 17
150	758.5	979	Now	Now
103 (1)	776.5	1,002	Now	Now
167	839.3	1,083	Now	Now
106	893.2	1,152	Now	Now
170	951.5	1,228	Now	Now
113	960.5	1,239	Now	Now
163	965.0	1,245	Now	Now
164	1,027.8	1,326	2022	2022
176	1,032.3	1,332	2022	2023
160	1,036.8	1,338	2022	2024

Based off full flow capacity, Pipes 150, 103(1), 167, 106, 170, 113, and 163 need to be upsized as soon as possible. Pipes 164, 176 and 160 will need to be replaced within the next couple years.

Additional manholes were surveyed throughout Brian Head. All manholes located in dirt roads are buried, and coordination with the public works department is required to locate, uncover, and survey these manholes. Due to the work schedule and project load of both parties, not all manholes were uncovered and surveyed. This work to finish surveying the remaining manholes

will be scheduled to begin as soon as the snow melts. **Figure 2A** shows the manholes surveyed, and those still needing to be surveyed.

Twin D has cleaned and ran a sewer camera throughout the entire system. Their findings have shown no sewer lines or manholes that require immediate attention. During the time that the remaining manholes are surveyed, Brian Head Public Works will review the information and reports from Twin D to look for areas with high surface infiltration and will create a plan on how to limit the infiltration from taking up treatment capacity in the lagoons.

Septic (onsite sewer) permits are controlled by the Iron County office of the Southwest Utah Public Health Department. As of the time of this study, the Utah Geological Survey (UGS) is in the process of determining the septic density of various locations around the county, including Parowan, Utah. However, Brian Head Town is not included in this study, and no study has been done to determine the septic density of Brian Head Town. If the Town desires to determine a septic density, additional coordination between the Town and Health Department will be required.

i. Recommendations

In areas of high groundwater infiltration, it is recommended to replace the existing system in that location with full length HDPE pipe, and polymer manholes to reduce the infiltration into the system, or by other repair methods to reduce the infiltration. Sealed lids with manhole vents can be used in areas of surface water infiltration. These areas can be found by the public works department during review of the Twin D reports and videos.

When the maximum sewage flows begin to consistently reach the full flow capacity of the canyon sewer line, it will be necessary to increase the size of pipe to convey these flows.

D. Treatment

Wastewater treatment is accomplished at the Parowan Lagoons. The lagoons currently have 5 cells with 55.8 acres of sewer lagoon surface area, with a design capacity of 0.47 million gallons per day (MGD). Brian Head holds 40% ownership capacity in the lagoons, equating to an average daily capacity of 188,000 gallons per day (GPD). The current retention time is 150 to 271 days. The lagoon bond will be paid off in 2026. Before Brian Head Town reaches average daily flows of 188,000, additional storage/capacity will need to be purchased/developed at the lagoons in Parowan, or a wastewater treatment facility will need to be constructed. **Table 24** and **Table 25** shows the monthly percent of the lagoon capacity used in 2021, and the yearly percent capacity used from 2015 to 2021.

Table 24: 2021 Monthly Lagoon Total Capacity Used

MONTH	BRIAN HEAD MONTHLY TOTAL (GAL)	PAROWAN MONTHLY TOTAL (GAL)	LAGOON MONTHLY TOTAL (GAL)	BRIAN HEAD % OF LAGOON CAPACITY	PAROWAN % OF LAGOON CAPACITY
JAN	5,361,000	6,427,000	11,788,000	36.8%	44.1%
FEB	4,814,000	5,794,000	10,608,000	36.6%	39.8%
MAR	5,265,000	6,529,000	11,794,000	36.1%	44.8%
APR	4,552,000	5,954,000	10,506,000	32.3%	40.9%
MAY	3,843,000	6,158,000	10,001,000	26.4%	42.3%
JUN	3,318,000	6,213,000	9,531,000	23.5%	42.6%
JUL	3,919,000	7,314,000	11,233,000	26.9%	50.2%
AUG	3,238,000	6,524,000	9,762,000	22.2%	44.8%
SEP	2,903,000	6,083,000	8,986,000	20.6%	41.8%
OCT	3,185,000	6,557,000	9,742,000	21.9%	45.0%
NOV	3,148,000	5,738,000	8,886,000	22.3%	39.4%
DEC	4,457,000	6,663,000	11,120,000	30.6%	45.7%
2021 Totals	48,003,000	75,954,000	123,957,000	28.0%	44.3%

Brian Head used an average of 28.0% of the total capacity at the lagoons in 2021. This equates to 70% of their allowed capacity. January accounted for the highest percent at 36.8% of the total lagoon capacity, which equates to 92% of their allowed capacity.

Table 25: Yearly Lagoon Total Capacity Used

YEAR	BRIAN HEAD TOTAL (GAL)	PAROWAN TOTAL (GAL)	LAGOON TOTAL (GAL)	BRIAN HEAD % OF LAGOON CAPACITY	PAROWAN % OF LAGOON CAPACITY
2015	39,271,598	80,302,789	119,574,387	22.9%	46.8%
2016*	44,534,581	91,902,638	136,437,219	25.9%	53.4%
2017	43,425,000	94,002,375	137,427,375	25.3%	54.8%
2018	40,014,874	99,333,549	139,348,423	23.3%	57.9%
2019	52,779,000	95,638,000	148,417,000	30.8%	55.7%
2020*	54,567,000	83,022,503	137,589,503	31.7%	48.3%
2021	48,003,000	75,954,000	123,957,000	28.0%	44.3%
Average	48,003,000	75,954,000	942,750,907	26.9%	51.6%

Brian Head averaged 26.9% of the total capacity at the lagoons between 2015 and 2021. This equates to 67.25% of their allowed capacity. 2020 accounted for the highest yearly percent at 31.7%, which equates to 79.25% of their allowed capacity.

- Based on data gathered from 2021 of 114 GPD per connection, the Parowan Lagoons are adequate for 1,649 connections, or an additional 326 sewer connections.

- Based on the projected growth shown in **Table 16**, the current sewer treatment system is adequate until 2038.
- Based on the projected growth shown in **Table 17**, the current sewer treatment system is adequate beyond 2065.
- Based on the addition of the proposed development (Aspen Meadows), the existing lagoons will be unable to capture the projected daily flows.

i. Recommendations

Options to treat wastewater have been reviewed and discussed with the Utah Department of Environmental Quality. One option is to treat wastewater to be constructed on the hill to discharge into the stream, or to use the effluent for snowmaking. Directly discharging into the stream is not allowed, and using the effluent for snowmaking is not a use identified by the Division of Water Quality (DWQ) in R317-3-11. A variance is possible, but would likely be prohibited under R317-2-3.2, which prohibits new discharge into category 1 waters, which includes forest service land.

Another option is to build a wastewater treatment plant with Parowan in Parowan Valley. This will only be beneficial to the Town if a water credit can be received from the state engineer in accordance with the water management plan currently being studied. This option will require further analysis upon completion of the water management plan. A local real estate agent (Caroline Ray, Century 21) was contacted to determine the current price for an acre-foot of water in the Parowan Valley. She indicated that 100 shares could be purchased for $4,200 per share, or $420,000, if the shares are available. Wolf Creek Water and Sewer Improvement District constructed a wastewater treatment plan in 2008 with a capacity of .4 MGD. At the time of construction, the cost was $6,500,000, or approximately $8,400,000 today, to be split with Parowan City. Parowan is currently under contract with Bowen Collins to determine the allowable amount of discharge from the lagoons to the Little Salt Lake.

The remaining recommendations are related to the existing Parowan Lagoons, and will need to be done in cooperation with Parowan City, and will require a more in-depth analysis of design requirements and cost estimation:

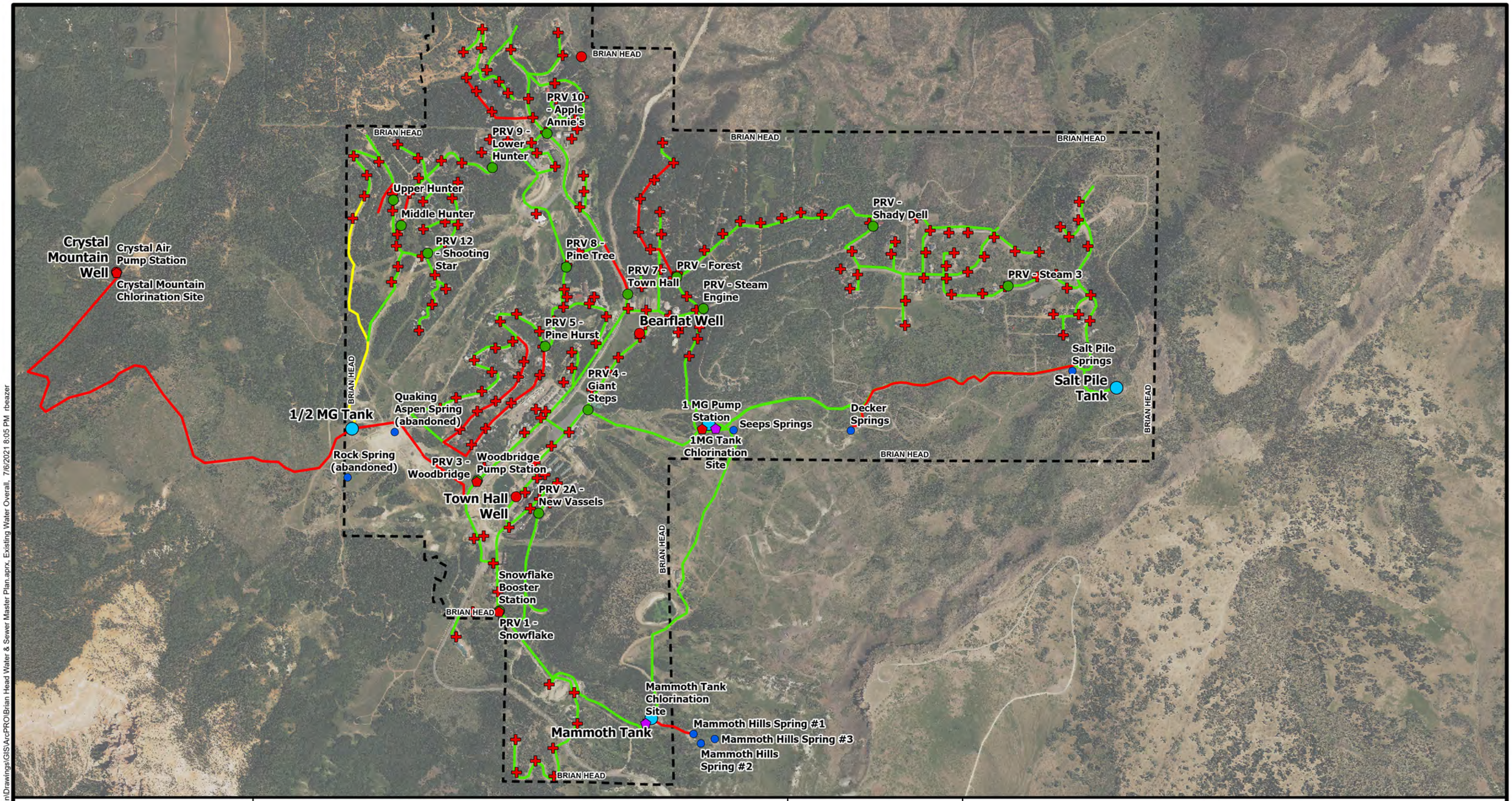
1. Parowan City and Brian Head Town can request a higher discharge rate with the State of Utah with Parowan City recently receiving a permit to discharge to the Little Salt Lake, and the pivot land.
2. Adding aeration to the lagoons would allow a decrease in detention time to a minimum of 30 days (R317-3-10), resulting in additional storage to buffer the effects of days with higher-than-average daily flows.
3. Expanding the size of the lagoons with cooperation between Parowan City will increase Brian Head Town's average maximum daily sewage totals by 40% of the overall increase.

Appendix A. Figures

1. Culinary Water System

2A. Sanitary Sewer System

2B. Canyon Sanitary Sewer System



0 500 1,000 2,000
Feet

Legend

- PRVs
- Fire Hydrants
- Wells
- Springs
- Water Tanks
- Municipal Boundary

Existing Water Line

- Existing 6" Line
- Existing 8" Line
- Existing 12" Line

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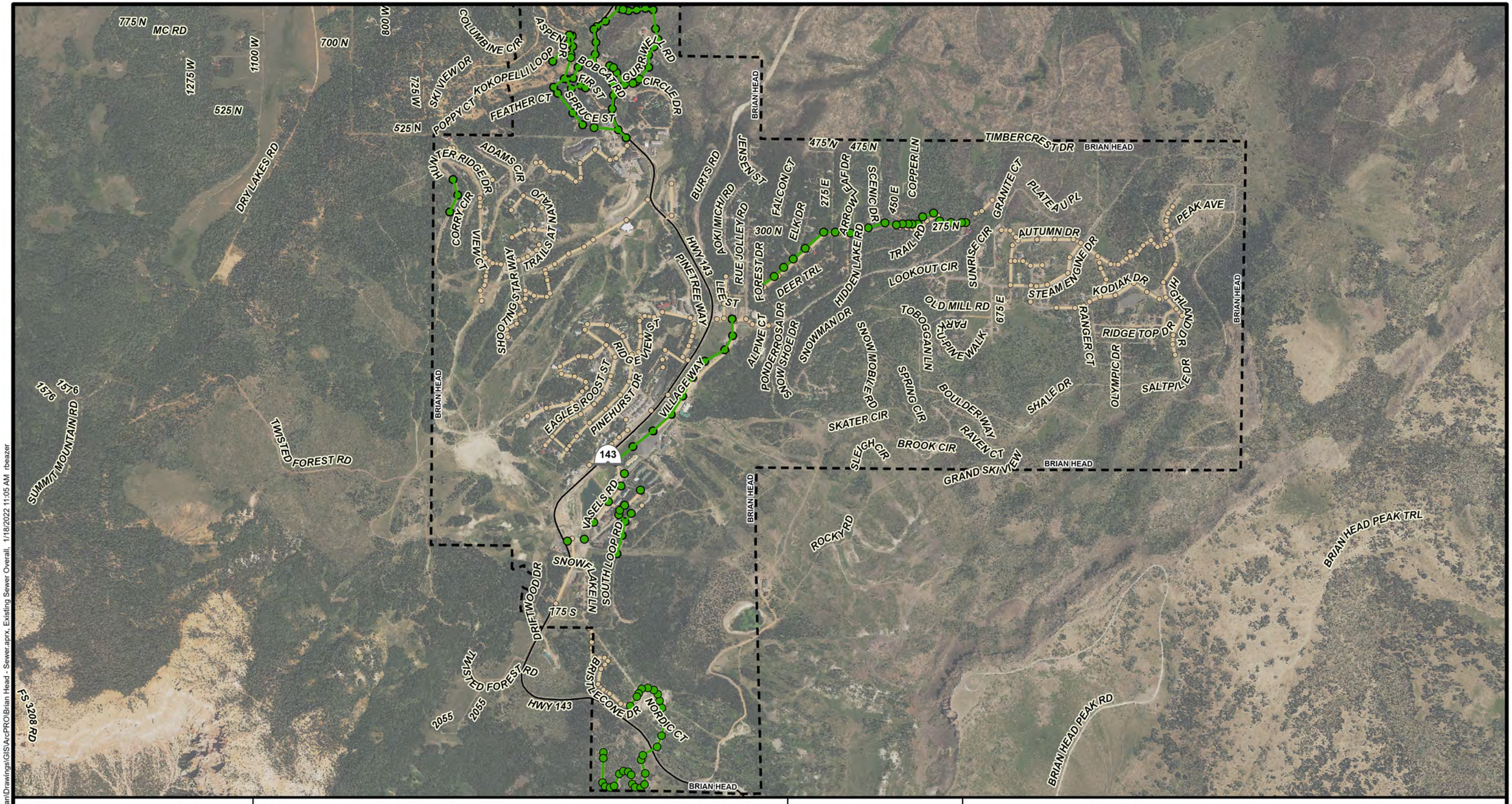
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Overall Existing Water System

Brian Head, Utah

Spatial Reference:	Utah State Plane NAD 83, feet
Drawn By:	RKB
Scale:	1" = 1,500 feet
Date:	March 2021

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0 500 1,000 2,000
Feet

Legend

- Surveyed Sewer Manholes
- Surveyed 8" Sewer Lines
- Existing Sewer Lines
- Existing Sewer Manholes

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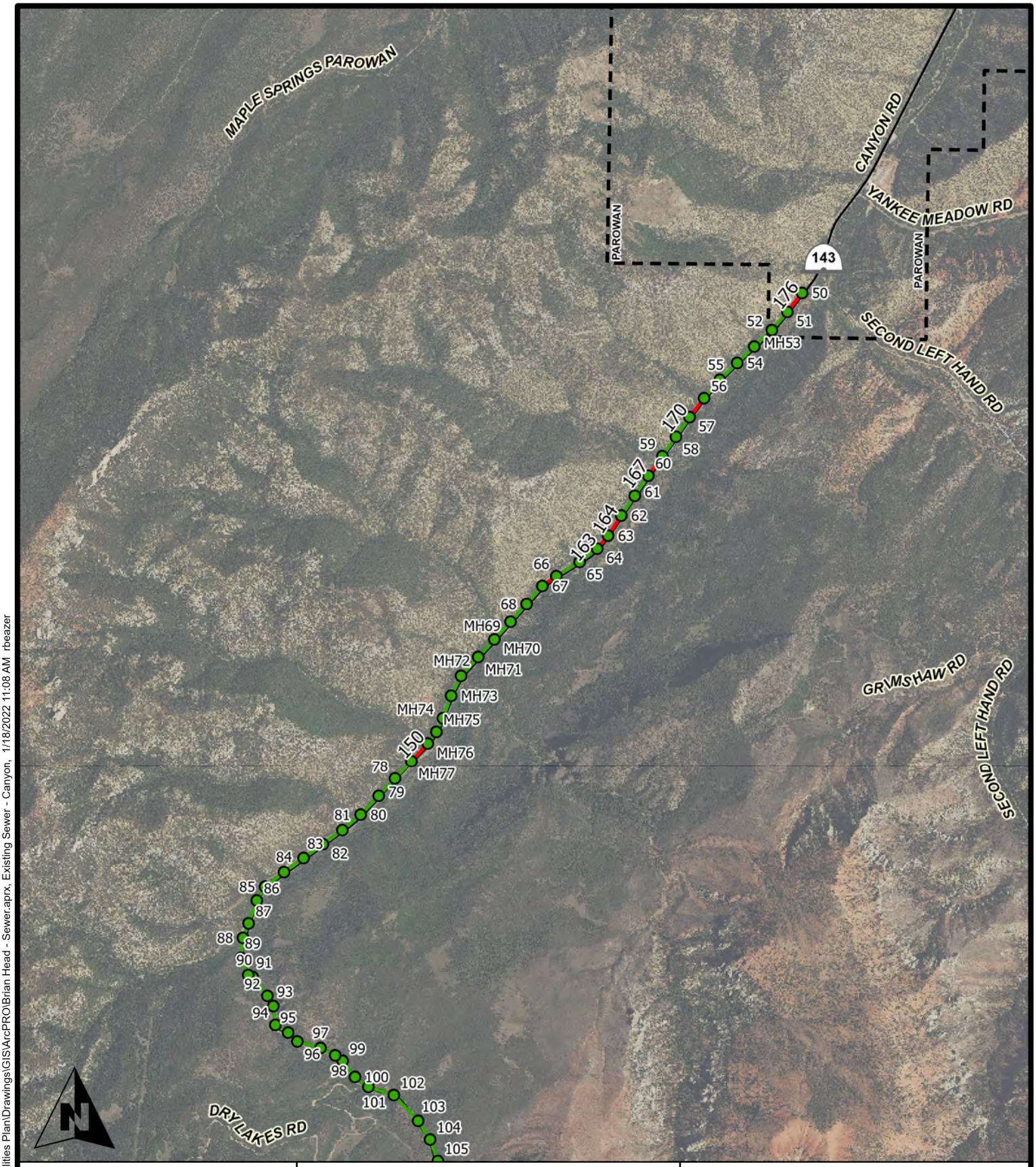
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EXISTING SEWER EXHIBIT

Brian Head, UT

Spatial Reference:	Utah State Plane NAD 83, feet
Drawn By:	RKB
Scale:	1" = 1,500 feet
Date:	JUNE 3, 2021

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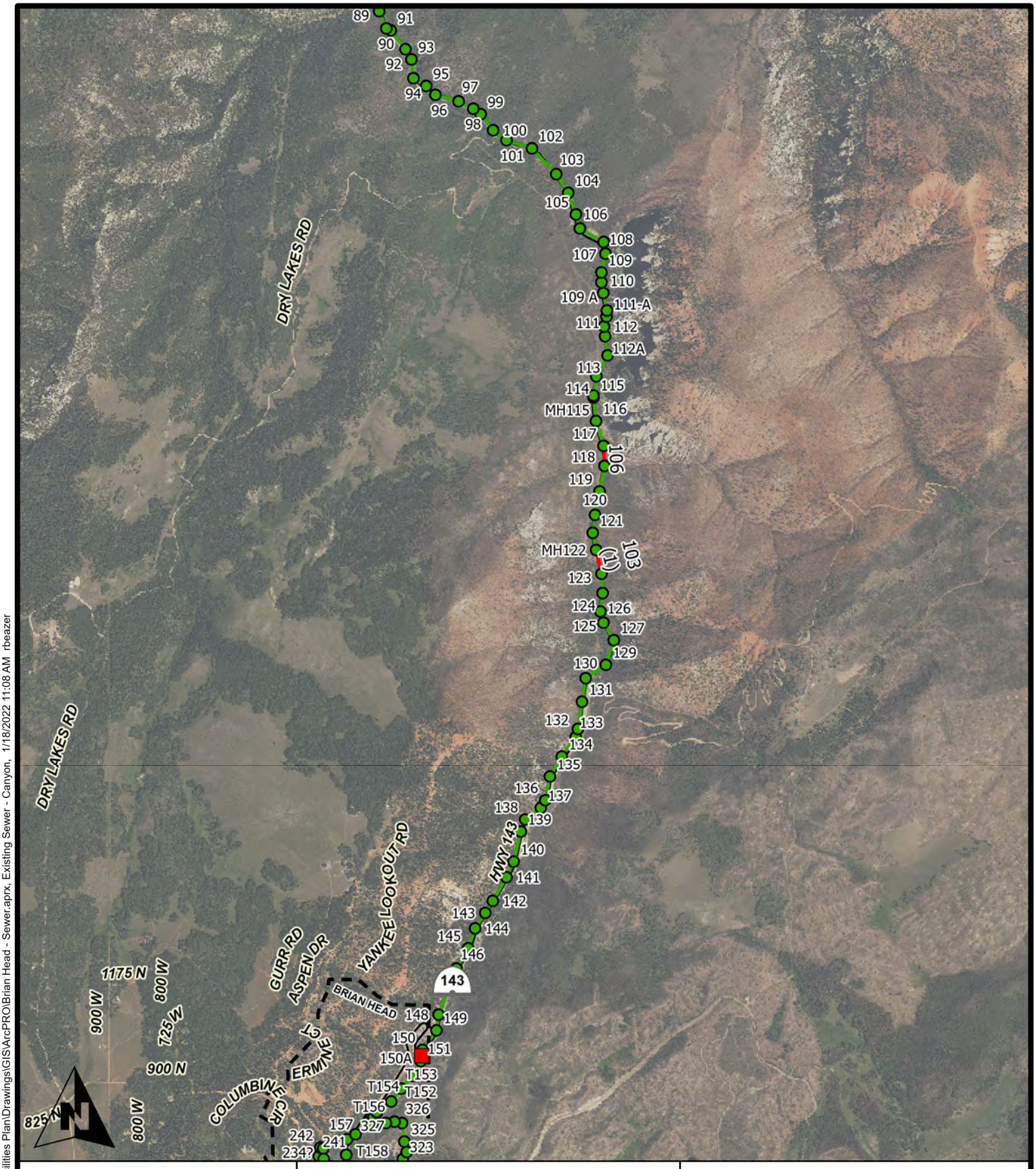
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HWY 143 Existing Sewer

Brian Head Master Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 2,167 feet
Date:	October 2021

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Legend

- Surveyed 8" Sewer Lines
- Limiting Sewer Pipes
- Municipal Boundary
- Sewer Manholes
- Sewer Grinder

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HWY 143 Existing Sewer

Brian Head Master Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 2,167 feet
Date:	October 2021

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Appendix B. Cost Estimates

Project Cost Estimates

Brian Head Town

Table 24: 10-Year Capital Projects List by Type of Project

PROJECT	DESCRIPTION	CONSTRUCTION	CONTINGENCY	ENGINEERING	TOTAL
1 - 5 YEAR HORIZON					
WATER PROJECTS					
Project 01 -- Bearflat Well Rehabilitation					
CW-01	Rehabilitate/Replace the existing Bearflat Well	$1,000,000	$100,000	$187,000	$1,287,000
Project 02 -- Town Hall Well Rehabilitation					
CW-02	Rehabilitate and clean the existing Town Hall Well	$45,000	$4,500	$2,475	$51,975
Project 03 -- Snow Shoe Drive & Toboggan Waterline					
CW-03	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install new 8" waterline (price not included in total)	$546,700	$54,670	$102,233	$703,603
CW-03A	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install new 8" waterline - Alternate	$507,500	$50,750	$94,903	$653,153
Project 04 -- Mountain View Drive Waterline Loops					
CW-04A	Aoki Michi Road and Rue Jolly Road Loop - Install 1,000 feet of new 8" waterline and replace existing water meters	$353,550	$35,355	$66,114	$455,019
CW-04B	Forest Drive and Rue Jolley Drive - Install 1,300 feet of 8" waterline	$190,050	$19,005	$35,539	$244,594
CW-04C	300 North and Falcon Court to Mountain View Drive - Install 970 feet of 8" waterline	$152,600	$15,260	$28,536	$196,396
CW-04D	Falcon Court, 475 North and 275 East to Mountain View Drive Loop - Install 3,050 feet of 8" waterline	$379,050	$37,905	$70,882	$487,837
CW-04E	475 North along Elk Drive - Install 1,790 feet of 8" waterline	$226,750	$22,675	$42,402	$291,827
CW-04F	Forest Drive to Mountain View Drive along Deer Trail and Deer Trail Road - Install 1,670 feet of 8" waterline	$218,450	$21,845	$40,850	$281,145
CW-04G	Mountain View Drive to Deer Trail Road along Quakie Drive - Install 780 feet of 8" waterline	$91,600	$9,160	$17,129	$117,889
CW-04H	Hidden Lake Road and Trail Road - Install 1,630 feet of 8" waterline	$215,850	$21,585	$40,364	$277,799
				WATER PROJECTS TOTAL	**$4,344,635**
SEWER PROJECTS					
Project 09 -- Portable Sewer Camera Crawler					
SS-01	Purchase portable sewer camera crawler for infiltration detection work	$60,000	N/A	N/A	$60,000
Project 10 -- Canyon Sewer Replacement					
SS-02A	Sewer Pipe 150 - Remove and replace 404 feet of 12" sewer and 2 manholes	$54,512	$5,451	$10,194	$70,157
SS-02B	Sewer Pipe 103 (1) - Remove and replace 405 feet of 12" sewer and 2 manholes	$54,590	$5,459	$10,208	$70,257
SS-02C	Sewer Pipe 167 - Remove and replace 401 feet of 12" sewer and 2 manholes	$54,278	$5,428	$10,150	$69,856
SS-02D	Sewer Pipe 106 - Remove and replace 334 feet of 12" sewer and 2 manholes	$48,552	$4,855	$9,079	$62,486
SS-02E	sewer Pipe 170 - Remove and replace 397 feet of 12" sewer and 2 manholes	$53,866	$5,387	$10,073	$69,326
SS-02F	Sewer Pipe 113 - Remove and replace 163 feet of 12" sewer and 2 manholes	$33,814	$3,381	$6,323	$43,519
SS-02G	Sewer Pipes 163 and 164 - Remove and replace 684 feet of 12" sewer and 3 manholes	$86,252	$8,625	$16,129	$111,006
SS-02H	Sewer Pipe 176 - Remove and replace 400 feet of 12" sewer and 2 manholes	$54,200	$5,420	$10,135	$69,755
SS-02I	Sewer Pipe 160 - Remove and replace 285 feet of 12" sewer and 2 manholes	$44,330	$4,433	$8,290	$57,053
Project 11 -- Snow Shoe Drive & Toboggan Sewer - Sewer					
SS-03	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install 3,280 feet of 8" sewer and 16 manholes	$539,000	$53,900	$100,793	$693,693
				SEWER PROJECTS TOTAL	**$1,377,108**
				TOTAL PROJECTS 1 - 5 YEAR HORIZON	**$5,721,743**

6 - 10 YEAR HORIZON					
WATER PROJECTS					
Project 05 -- Ridge Top Drive Loops					
CW-05A	Along Ridge Top Drive to Kodiak Drive - Install 1,330 feet of 8" waterline	$184,500	$18,450	$34,502	$237,452
CW-05B	Along Meadow Drive and Ranger Court - Install 1,440 feet of 8" waterline	$173,150	$17,315	$32,379	$222,844
Project 06 -- Aspen Drive Waterline					
CW-06A	Aspen Drive, Kokopelli Loop and Sky View Drive - Install 6,880 feet of 8" waterline	$1,020,950	$102,095	$190,918	$1,313,963
CW-06B	Aspen Drive, Yankee Lookout Road and Sandstone Drive - Install 3,530 feet of 8" waterline	$478,450	$47,845	$89,470	$615,765
Project 07 -- Highway Waterline Replacement					
CW-07	Replace existing wrapped steel waterline with 8" D.I. pipe including valves and fire hydrant	$148,025	$14,803	$27,681	$190,508
Project 08 -- 12-inch Waterline					
CW-08	Replace existing wrapped steel waterline with 8" D.I. pipe including valves and fire hydrant	$108,250	$10,825	$20,243	$139,318
				WATER PROJECTS TOTAL	**$2,719,849**
SEWER PROJECTS					
Project 12 -- Mountain View Drive Area - Sewer					
SS-04A	Forest Drive and Falcon Court - Install 1,810 feet of 8" sewer and 6 manholes	$269,500	$26,950	$50,397	$346,847
SS-04B	Falcon Ccourt and 275 East - Install 2,810 feet of 8" waterline and 10 manholes	$423,500	$42,350	$79,195	$545,045
SS-04C	Elk Drive - Install 1,630 feet of 8" sewer and 6 manholes	$247,500	$24,750	$46,283	$318,533
SS-04D	Deer Trail - Install 1,080 feet of 8" sewer and 4 manholes	$165,000	$16,500	$30,855	$212,355
SS-04E	Deer trail Road and Quake Drive - Install 1,090 feet of 8" sewer and 4 manholes	$166,100	$16,610	$31,061	$213,771
SS-04F	Trail and Hidden Lake Road - Install 1,580 feet of 8" sewer and 4 manholes	$222,200	$22,220	$41,551	$285,971
Project 13 -- Ridge Top Drive - Sewer					
SS-05A	Along Ridge Top Drive to Kodiak Drive - Install 1,360 feet of 8" sewer and 4 manholes	$188,400	$18,840	$35,231	$242,471
SS-05B	Along Meadow Drive and Ranger Court - Install 1,150 feet of 8" sewer and 3 manholes	$155,450	$15,545	$29,069	$200,064
Project 14 -- Aspen Drive - Sewer					
SS-06A	Aspen Drive, Kokopelli Loop and Sky View Drive - Install 6,090 feet of 8" sewer and 28 manholes	$982,300	$98,230	$183,690	$1,264,220
SS-06B	Aspen Drive, Yankee Lookout Road and Sandstone Drive - Install 3,270 feet of 8" sewer and 17 manholes	$551,100	$55,110	$103,056	$709,266
				SEWER PROJECTS TOTAL	**$4,338,541**
				TOTAL PROJECTS 6 - 10 YEAR HORIZON	**$7,058,391**

Brian Head Town
Project 01 - Bearflat Well Rehabilitation
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-01 Well Rehabilitation					
1	Drill New Well	1	L.S.	$1,000,000.00	$1,000,000
2	Construction Contingency @ 10%				$100,000
				Construction Subtotal	$1,100,000
3	Design Engineering @ 7.5%				$82,500
4	Construction Observation and Testing @ 7.5%				$82,500
5	Administrative Costs @ 2%				$22,000
				PROJECT TOTAL	**$1,287,000**

ALPHA ENGINEERING

Brian Head Town
Project 02 - Town Hall Well Rehabilitation
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-02 Well Rehabilitation					
1	Well Rehab	1	L.S.	$45,000.00	$45,000
2	Construction Contingency @ 10%				$4,500
				Construction Subtotal	$49,500
3	Administrative Costs @ 5%				$2,475
				PROJECT TOTAL	**$51,975**

ALPHA ENGINEERING

Brian Head Town
Project 03 - Snow Shoe Drive & Toboggan Lane Waterline
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

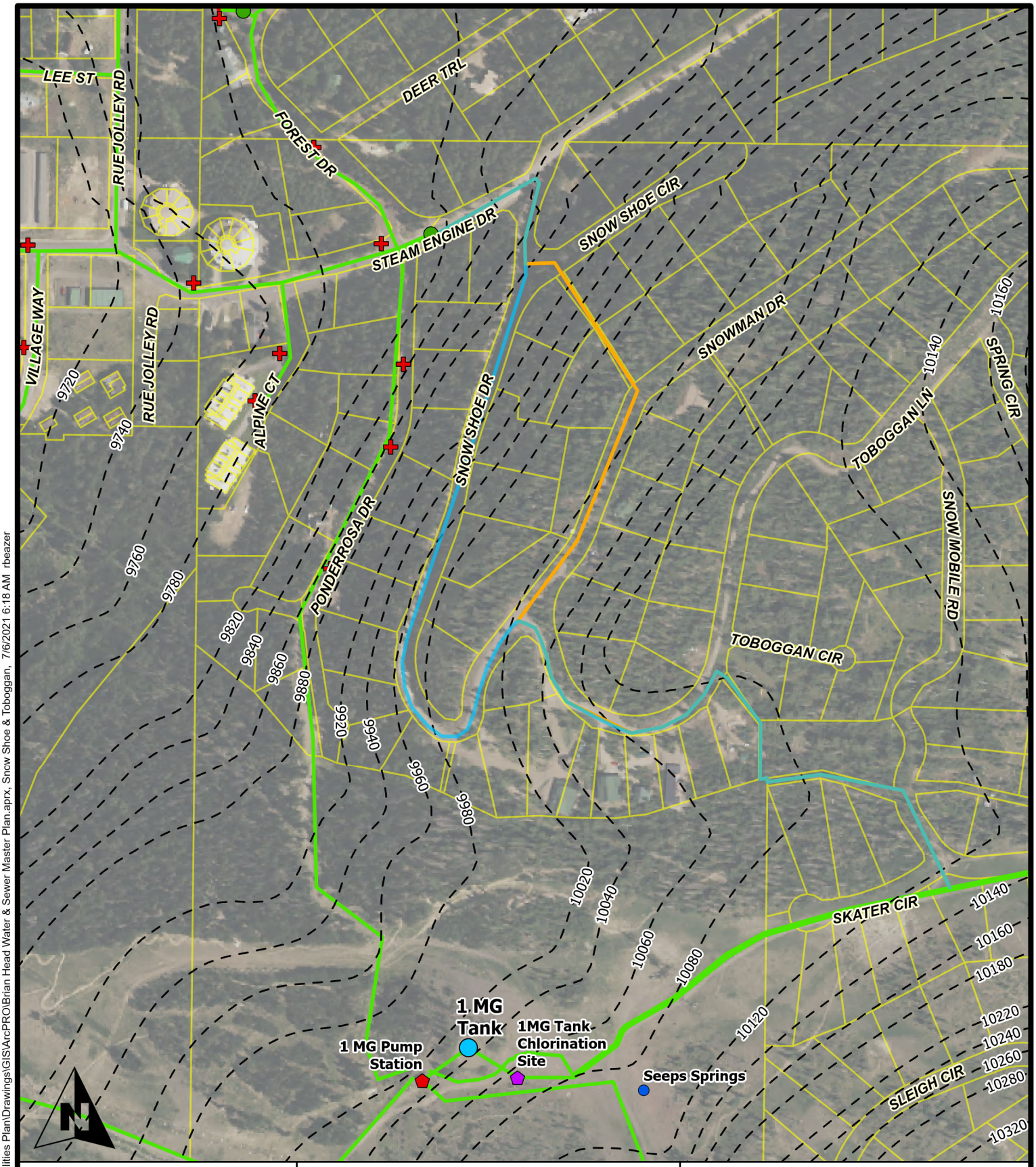
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-03 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$49,700.00	$49,700
2	8" D.I. Waterline	3,520	L.F.	$65.00	$228,800
3	Fire Hydrant Assembly	14	Each	$8,000.00	$112,000
4	8" Cross	1	Each	$1,300.00	$1,300
5	8" Tee	4	Each	$950.00	$3,800
6	90° Bend	2	Each	$700.00	$1,400
7	45° Bend	6	Each	$650.00	$3,900
8	22.5° Bend	4	Each	$600.00	$2,400
9	8" Gate Valves	16	Each	$2,700.00	$43,200
10	Pressure Reducing Station	1	Each	$55,000.00	$55,000
11	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
12	6" Roadbase	35,200	S.F.	$1.00	$35,200
13	Construction Contingency @ 10%				$54,670
				Construction Subtotal	$601,370
14	Design Engineering @ 7.5%				$45,103
15	Construction Observation and Testing @ 7.5%				$45,103
16	Administrative Costs @ 2%				$12,027
				PROJECT TOTAL	**$703,603**

ALPHA ENGINEERING

Brian Head Town
Project 03 - Snow Shoe Drive & Toboggan Lane Waterline Alternate
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-03 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$46,200.00	$46,200
2	8" D.I. Waterline	3,030	L.F.	$65.00	$196,950
3	Fire Hydrant Assembly	13	Each	$8,000.00	$104,000
4	8" Cross	1	Each	$1,300.00	$1,300
5	8" Tee	5	Each	$950.00	$4,750
6	90° Bend	2	Each	$700.00	$1,400
7	45° Bend	6	Each	$650.00	$3,900
8	22.5° Bend	4	Each	$600.00	$2,400
9	8" Gate Valves	19	Each	$2,700.00	$51,300
10	Pressure Reducing Station	1	Each	$55,000.00	$55,000
11	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
12	6" Roadbase	30,300	S.F.	$1.00	$30,300
13	Construction Contingency @ 10%				$50,750
				Construction Subtotal	$558,250
14	Design Engineering @ 7.5%				$41,869
15	Construction Observation and Testing @ 7.5%				$41,869
16	Administrative Costs @ 2%				$11,165
				PROJECT TOTAL	**$653,153**

ALPHA ENGINEERING



0 75 150 300 450

Feet

Legend

- Springs
- PRV
- Water Tanks
- Fire Hydrants
- Proposed 8" Line
- Alternate Proposed 8" Line
- Pump Stations
- Chlorination Sites

Snow Shoe & Toboggan

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 300 feet
Date:	June 2021

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Brian Head Town
Project 04 - Mountain View Drive Loops
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

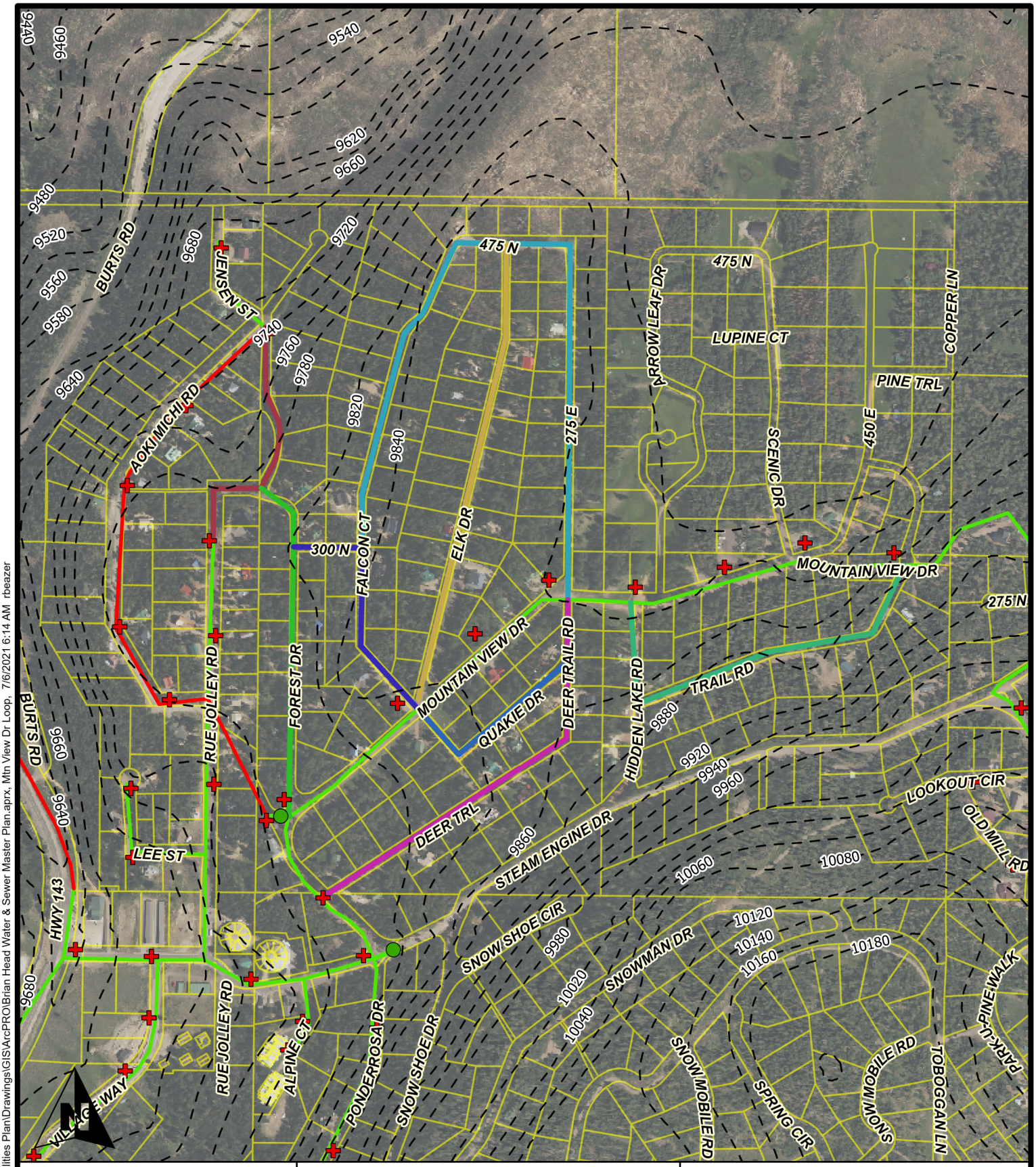
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-04A 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$14,500.00	$14,500
2	8" D.I. Waterline	1,020	L.F.	$65.00	$66,300
3	Fire Hydrant Assembly	4	Each	$8,000.00	$32,000
4	8" Tee	1	Each	$950.00	$950
5	90° Bend	1	Each	$700.00	$700
6	22.5° Bend	1	Each	$600.00	$600
7	8" Gate Valves	3	Each	$2,700.00	$8,100
8	1" Air Vac	2	Each	$7,600.00	$15,200
9	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
10	6" Roadbase	10,200	S.F.	$1.00	$10,200
11	Replace Existing Water Meters	65	Each	$3,000.00	$195,000
12	Construction Contingency @ 10%				$35,355
				Construction Subtotal	$388,905
13	Design Engineering @ 7.5%				$29,168
14	Construction Observation and Testing @ 7.5%				$29,168
15	Administrative Costs @ 2%				$7,778
				CW-04A 8" Waterline Total	**$455,019**
CW-04B 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$17,300.00	$17,300
2	8" D.I. Waterline	1,330	L.F.	$65.00	$86,450
3	Fire Hydrant Assembly	5	Each	$8,000.00	$40,000
4	8" Tee	1	Each	$950.00	$950
5	45° Bend	1	Each	$650.00	$650
6	8" Gate Valves	6	Each	$2,700.00	$16,200
7	1" Air Vac	2	Each	$7,600.00	$15,200
8	6" Roadbase	13,300	S.F.	$1.00	$13,300
9	Construction Contingency @ 10%				$19,005
				Construction Subtotal	$209,055
10	Design Engineering @ 7.5%				$15,679
11	Construction Observation and Testing @ 7.5%				$15,679
12	Administrative Costs @ 2%				$4,181
				CW-04B 8" Waterline Total	**$244,594**

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CW-04C 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$13,900.00	$13,900
2	8" D.I. Waterline	970	L.F.	$65.00	$63,050
3	Fire Hydrant Assembly	4	Each	$8,000.00	$32,000
4	8" Tee	2	Each	$950.00	$1,900
5	45° Bend	1	Each	$650.00	$650
6	8" Gate Valves	6	Each	$2,700.00	$16,200
7	1" Air Vac	2	Each	$7,600.00	$15,200
8	6" Roadbase	9,700	S.F.	$1.00	$9,700
9	Construction Contingency @ 10%				$15,260
				Construction Subtotal	$167,860
10	Design Engineering @ 7.5%				$12,590
11	Construction Observation and Testing @ 7.5%				$12,590
12	Administrative Costs @ 2%				$3,357
				CW-04C 8" Waterline Total	**$196,396**
CW-04D 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$34,500.00	$34,500
2	8" D.I. Waterline	3,050	L.F.	$65.00	$198,250
3	Fire Hydrant Assembly	12	Each	$8,000.00	$96,000
4	8" Tee	1	Each	$950.00	$950
5	90° Bend	1	Each	$700.00	$700
6	45° Bend	1	Each	$650.00	$650
7	22.5° Bend	3	Each	$600.00	$1,800
8	8" Gate Valves	3	Each	$2,700.00	$8,100
9	1" Air Vac	1	Each	$7,600.00	$7,600
10	6" Roadbase	30,500	S.F.	$1.00	$30,500
11	Construction Contingency @ 10%				$37,905
				Construction Subtotal	$416,955
12	Design Engineering @ 7.5%				$31,272
13	Construction Observation and Testing @ 7.5%				$31,272
14	Administrative Costs @ 2%				$8,339
				CW-04D 8" Waterline Total	**$487,837**
CW-04E 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$20,700.00	$20,700
2	8" D.I. Waterline	1,790	L.F.	$65.00	$116,350
3	Fire Hydrant Assembly	7	Each	$8,000.00	$56,000
4	22.5° Bend	1	Each	$600.00	$600
5	1" Air Vac	2	Each	$7,600.00	$15,200
6	6" Roadbase	17,900	S.F.	$1.00	$17,900
7	Construction Contingency @ 10%				$22,675
				Construction Subtotal	$249,425
8	Design Engineering @ 7.5%				$18,707
9	Construction Observation and Testing @ 7.5%				$18,707
10	Administrative Costs @ 2%				$4,989
				CW-04E 8" Waterline Total	**$291,827**

CW-04F 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$19,900.00	$19,900
2	8" D.I. Waterline	1,670	L.F.	$65.00	$108,550
3	Fire Hydrant Assembly	7	Each	$8,000.00	$56,000
4	8" Tee	1	Each	$950.00	$950
5	45° Bend	1	Each	$650.00	$650
6	8" Gate Valves	3	Each	$2,700.00	$8,100
7	1" Air Vac	1	Each	$7,600.00	$7,600
8	6" Roadbase	16,700	S.F.	$1.00	$16,700
9	Construction Contingency @ 10%				$21,845
				Construction Subtotal	$240,295
10	Design Engineering @ 7.5%				$18,022
11	Construction Observation and Testing @ 7.5%				$18,022
12	Administrative Costs @ 2%				$4,806
				CW-04F 8" Waterline Total	**$281,145**
CW-04G 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$8,400.00	$8,400
2	8" D.I. Waterline	780	L.F.	$65.00	$50,700
3	Fire Hydrant Assembly	3	Each	$8,000.00	$24,000
4	90° Bend	1	Each	$700.00	$700
5	6" Roadbase	7,800	S.F.	$1.00	$7,800
6	Construction Contingency @ 10%				$9,160
				Construction Subtotal	$100,760
7	Design Engineering @ 7.5%				$7,557
8	Construction Observation and Testing @ 7.5%				$7,557
9	Administrative Costs @ 2%				$2,015
				CW-04G 8" Waterline Total	**$117,889**
CW-04H 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$19,700.00	$19,700
2	8" D.I. Waterline	1,630	L.F.	$65.00	$105,950
3	Fire Hydrant Assembly	7	Each	$8,000.00	$56,000
4	8" Tee	1	Each	$950.00	$950
5	45° Bend	1	Each	$650.00	$650
6	22.5° Bend	1	Each	$600.00	$600
7	8" Gate Valves	3	Each	$2,700.00	$8,100
8	1" Air Vac	1	Each	$7,600.00	$7,600
9	6" Roadbase	16,300	S.F.	$1.00	$16,300
10	Construction Contingency @ 10%				$21,585
				Construction Subtotal	$237,435
11	Design Engineering @ 7.5%				$17,808
12	Construction Observation and Testing @ 7.5%				$17,808
13	Administrative Costs @ 2%				$4,749
				CW-04H 8" Waterline Total	**$277,799**
PROJECT TOTAL					**$2,352,507**

ALPHA ENGINEERING



0 130 260 520 780

Feet

Legend

- PRV
- Fire Hydrants
- Existing 6" Line
- Existing 8" Line
- Phase A
- Phase B
- Phase C
- Phase D
- Phase E
- Phase F
- Phase G
- Phase H

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Mountain View Drive Loops

Brian Head Capital Facilities Plan

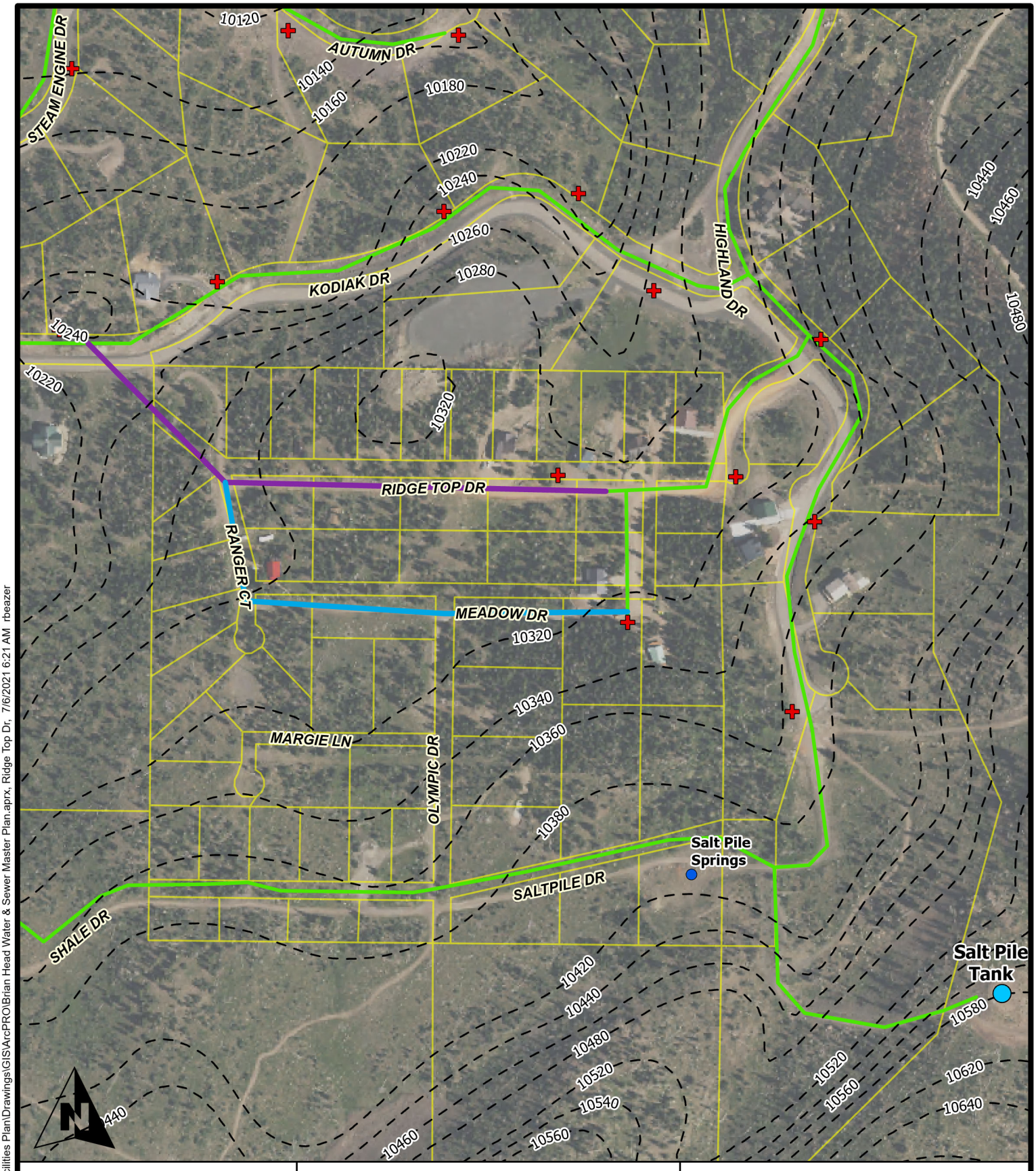
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Drawn By:	RKB
Scale:	1" = 500 feet
Date:	June 2021

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Brian Head Town
Project 05 - Ridge Top Drive Loops
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-05A 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$16,800.00	$16,800
2	8" D.I. Waterline	1,330	L.F.	$65.00	$86,450
3	Fire Hydrant Assembly	5	Each	$8,000.00	$40,000
4	8" Tee	1	Each	$950.00	$950
5	45° Bend	2	Each	$650.00	$1,300
6	8" Gate Valves	3	Each	$2,700.00	$8,100
7	1" Air Vac	1	Each	$7,600.00	$7,600
8	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
9	6" Roadbase	13,300	S.F.	$1.00	$13,300
10	Construction Contingency @ 10%				$18,450
				Construction Subtotal	$202,950
11	Design Engineering @ 7.5%				$15,221
12	Construction Observation and Testing @ 7.5%				$15,221
13	Administrative Costs @ 2%				$4,059
				CW-05A 8" Waterline Total	**$237,452**
CW-05B 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$15,800.00	$15,800
2	8" D.I. Waterline	1,160	L.F.	$65.00	$75,400
3	Fire Hydrant Assembly	6	Each	$8,000.00	$48,000
4	8" Tee	1	Each	$950.00	$950
5	90° Bend	1	Each	$700.00	$700
6	8" Gate Valves	3	Each	$2,700.00	$8,100
7	1" Air Vac	1	Each	$7,600.00	$7,600
8	Tie-ins to Existing Piping	1	Each	$5,000.00	$5,000
8	6" Roadbase	11,600	S.F.	$1.00	$11,600
9	Construction Contingency @ 10%				$17,315
				Construction Subtotal	$190,465
10	Design Engineering @ 7.5%				$14,285
11	Construction Observation and Testing @ 7.5%				$14,285
12	Administrative Costs @ 2%				$3,809
				CW-05B 8" Waterline Total	**$222,844**
PROJECT TOTAL					**$460,296**

ALPHA ENGINEERING



0 75 150 300 450

Feet

Legend

- Springs
- Water Tanks
- Fire Hydrants
- Existing 8" Line
- Phase A
- Phase B

Ridge Top Drive Loops

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 300 feet
Date:	June 2021

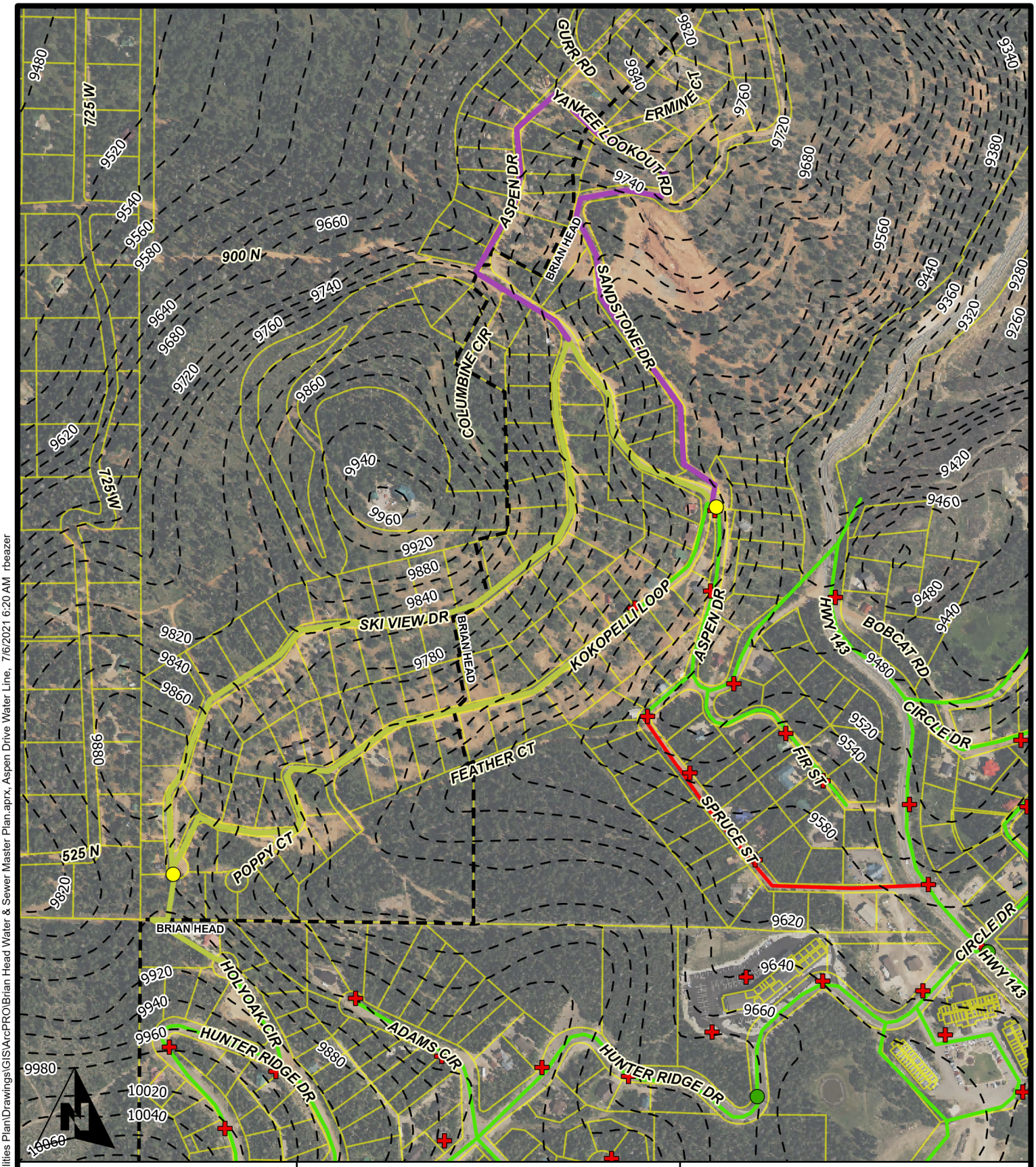
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Brian Head Town
Project 06 - Aspen Drive Waterline
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-06A 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$92,900.00	$92,900
2	8" D.I. Waterline	6,880	L.F.	$65.00	$447,200
3	Fire Hydrant Assembly	28	Each	$8,000.00	$224,000
4	8" Tee	5	Each	$950.00	$4,750
5	90° Bend	3	Each	$700.00	$2,100
6	45° Bend	6	Each	$650.00	$3,900
7	22.5° Bend	7	Each	$600.00	$4,200
8	8" Gate Valves	15	Each	$2,700.00	$40,500
9	1" Air Vac	1	Each	$7,600.00	$7,600
10	Tie-ins to Existing Piping	3	Each	$5,000.00	$15,000
11	Pressure Reducing Station	2	Each	$55,000.00	$110,000
12	6" Roadbase	68,800	S.F.	$1.00	$68,800
13	Construction Contingency @ 10%				$102,095
				Construction Subtotal	$1,123,045
14	Design Engineering @ 7.5%				$84,228
15	Construction Observation and Testing @ 7.5%				$84,228
16	Administrative Costs @ 2%				$22,461
				CW-06A 8" Waterline Total	**$1,313,963**
CW-06B 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$43,500.00	$43,500
2	8" D.I. Waterline	3,530	L.F.	$65.00	$229,450
3	Fire Hydrant Assembly	14	Each	$8,000.00	$112,000
5	8" Tee	4	Each	$950.00	$3,800
6	90° Bend	2	Each	$700.00	$1,400
6	45° Bend	4	Each	$600.00	$2,400
7	22.5° Bend	5	Each	$600.00	$3,000
8	8" Gate Valves	12	Each	$2,700.00	$32,400
9	1" Air Vac	2	Each	$7,600.00	$15,200
11	6" Roadbase	35,300	S.F.	$1.00	$35,300
12	Construction Contingency @ 10%				$47,845
				Construction Subtotal	$526,295
13	Design Engineering @ 7.5%				$39,472
14	Construction Observation and Testing @ 7.5%				$39,472
15	Administrative Costs @ 2%				$10,526
				CW-06B 8" Waterline Total	**$615,765**
PROJECT TOTAL					**$1,929,728**

ALPHA ENGINEERING



0 130 260 520 780

Feet

Legend

- PRV
- Fire Hydrants
- Existing 6" Line
- Existing 8" Line
- Phase A
- Phase B
- Municipal Boundary
- Proposed PRV

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Aspen Drive Water Line

Brian Head Capital Facilities Plan

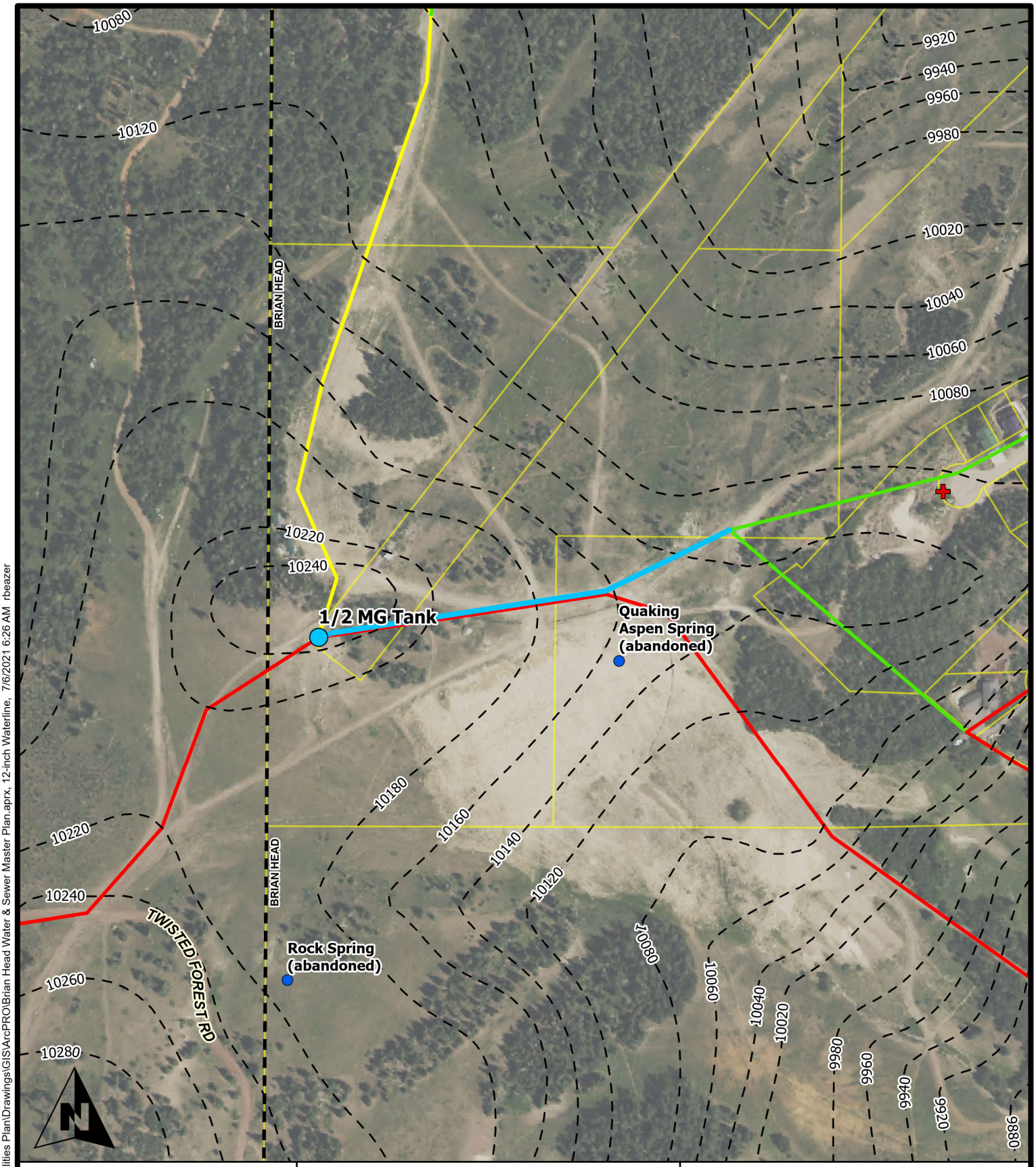
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Drawn By:	RKB
Scale:	1" = 500 feet
Date:	June 2021

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Brian Head Town
Project 07 - Highway Replacement
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-07A 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$13,500.00	$13,500
2	8" D.I. Waterline	1,285	L.F.	$65.00	$83,525
3	Reconnect Fire Hydrant Assembly	2	Each	$8,000.00	$16,000
4	8" Tee	2	Each	$950.00	$1,900
5	45° Bend	2	Each	$650.00	$1,300
6	22.5° Bend	1	Each	$600.00	$600
7	8" Gate Valves	6	Each	$2,700.00	$16,200
8	Tie-ins to Existing Piping	3	Each	$5,000.00	$15,000
9	Construction Contingency @ 10%				$14,803
				Construction Subtotal	$162,828
10	Design Engineering @ 7.5%				$12,212
11	Construction Observation and Testing @ 7.5%				$12,212
12	Administrative Costs @ 2%				$3,257
				PROJECT TOTAL	**$190,508**

ALPHA ENGINEERING



0 75 150 300 450

Feet

Legend

- Fire Hydrants
- Water Tanks
- PRV
- Proposed 12" Line
- Existing 6" Line
- Existing 8" Line
- Existing 12" Line

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12-inch Waterline

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 300 feet
Date:	June 2021

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Brian Head Town
Project 08 - 12" Waterline
Engineer's Preliminary Opinion of Probable Cost
June 14, 2021

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
CW-08 12" Waterline					
1	Mobilization @ 10%	1	L.S.	$9,900.00	$9,900
2	12" D.I. Waterline	990	L.F.	$80.00	$79,200
3	8" Tee	2	Each	$950.00	$1,900
4	45° Bend	1	Each	$650.00	$650
5	22.5° Bend	1	Each	$600.00	$600
6	12" Gate Valves	2	Each	$3,000.00	$6,000
7	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
8	Construction Contingency @ 10%				$10,825
				Construction Subtotal	$119,075
9	Design Engineering @ 7.5%				$8,931
10	Construction Observation and Testing @ 7.5%				$8,931
11	Administrative Costs @ 2%				$2,382
				PROJECT TOTAL	**$139,318**

ALPHA ENGINEERING



0 50 100 200 300

Feet

Legend

- PRV
- Fire Hydrants
- Existing 6" Line
- Existing 8" Line
- New 8" Waterline
- Proposed Waterline Replacement

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Highway Replacement

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 200 feet
Date:	June 2021

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Brian Head Town
Project 09 - Portable Sewer Camera Crawler
Engineer's Preliminary Opinion of Probable Cost
July 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-01 Portable Sewer Camera Crawler					
1	Purchase Portable Sewer Camera Crawler	1	L.S.	$60,000.00	$60,000
				PROJECT TOTAL	**$60,000**

ALPHA ENGINEERING

Brian Head Town
Project 10 - Canyon Sewer Replacement
Engineer's Preliminary Opinion of Probable Cost
January 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-02A Sewer Pipe 150					
1	Mobilization @ 10%	1	L.S.	$5,000.00	$5,000
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	404	L.F.	$75.00	$30,300
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,212	S.F.	$1.00	$1,212
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$5,451
				Construction Subtotal	$59,963
8	Design Engineering @ 7.5%				$4,497
9	Construction Observation and Testing @ 7.5%				$4,497
10	Administrative Costs @ 2%				$1,199
				SS-02A Sewer Pipe 150 Total	**$70,157**
SS-02B Sewer Pipe 103 (1)					
1	Mobilization @ 10%	1	L.S.	$5,000.00	$5,000
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	405	L.F.	$75.00	$30,375
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,215	S.F.	$1.00	$1,215
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$5,459
				Construction Subtotal	$60,049
8	Design Engineering @ 7.5%				$4,504
9	Construction Observation and Testing @ 7.5%				$4,504
10	Administrative Costs @ 2%				$1,201
				SS-02B Sewer Pipe 103 (1) Total	**$70,257**
SS-02C Sewer Pipe 167					
1	Mobilization @ 10%	1	L.S.	$5,000.00	$5,000
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	401	L.F.	$75.00	$30,075
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,203	S.F.	$1.00	$1,203
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$5,428
				Construction Subtotal	$59,706
8	Design Engineering @ 7.5%				$4,478
9	Construction Observation and Testing @ 7.5%				$4,478
10	Administrative Costs @ 2%				$1,194
				SS-02C Sewer Pipe 167 Total	**$69,856**

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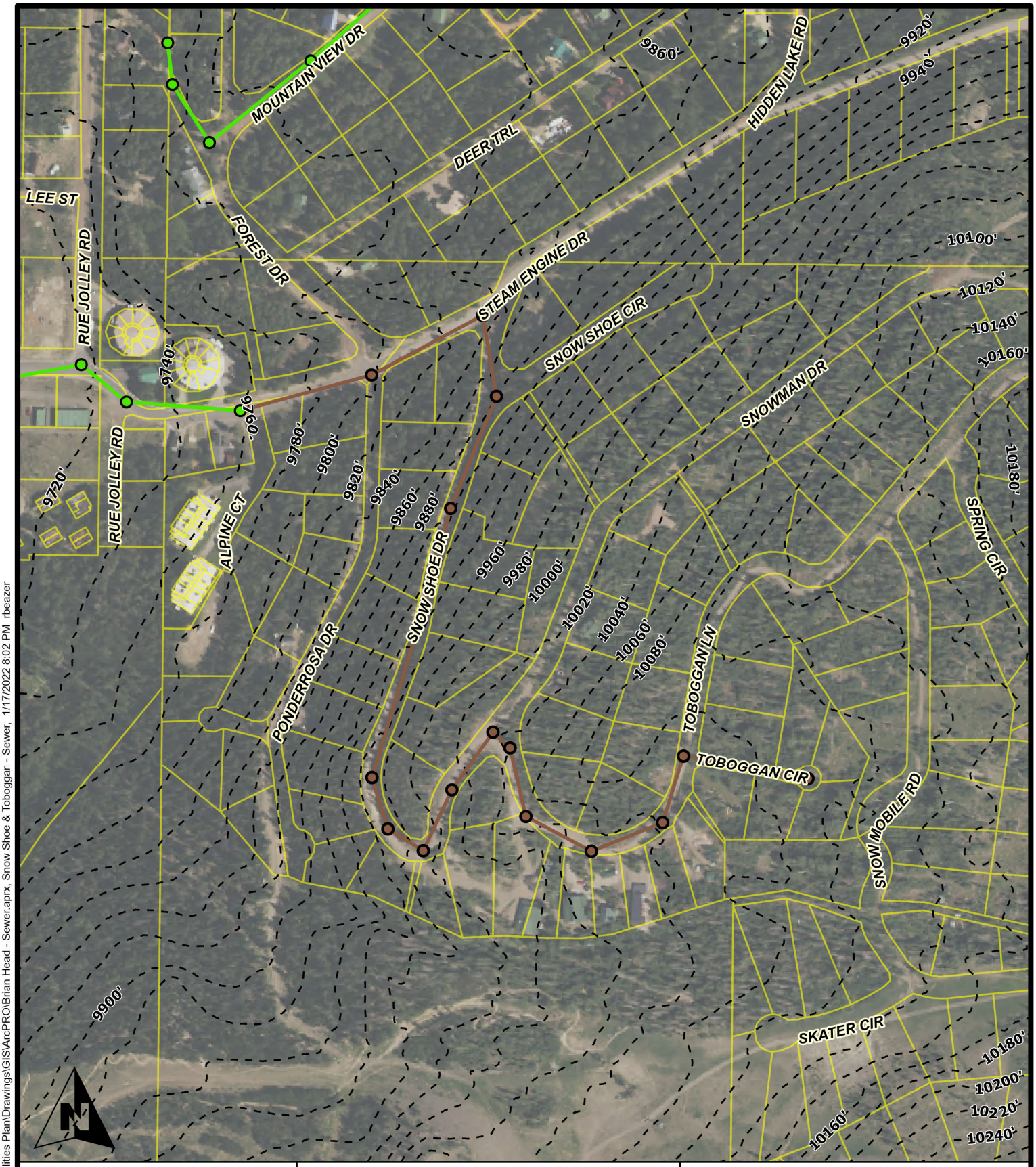
SS-02D Sewer Pipe 106					
1	Mobilization @ 10%	1	L.S.	$4,500.00	$4,500
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	334	L.F.	$75.00	$25,050
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,002	S.F.	$1.00	$1,002
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$4,855
				Construction Subtotal	$53,407
8	Design Engineering @ 7.5%				$4,006
9	Construction Observation and Testing @ 7.5%				$4,006
10	Administrative Costs @ 2%				$1,068
				SS-02D Sewer Pipe 106 Total	**$62,486**
SS-02E Sewer Pipe 170					
1	Mobilization @ 10%	1	L.S.	$4,900.00	$4,900
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	397	L.F.	$75.00	$29,775
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,191	S.F.	$1.00	$1,191
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$5,387
				Construction Subtotal	$59,253
8	Design Engineering @ 7.5%				$4,444
9	Construction Observation and Testing @ 7.5%				$4,444
10	Administrative Costs @ 2%				$1,185
				SS-02E Sewer Pipe 170 Total	**$69,326**
SS-02F Sewer Pipe 113					
1	Mobilization @ 10%	1	L.S.	$3,100.00	$3,100
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	163	L.F.	$75.00	$12,225
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	489	S.F.	$1.00	$489
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$3,381
				Construction Subtotal	$37,195
8	Design Engineering @ 7.5%				$2,790
9	Construction Observation and Testing @ 7.5%				$2,790
10	Administrative Costs @ 2%				$744
				SS-02F Sewer Pipe 113 Total	**$43,519**
SS-02G Sewer Pipes 163 & 164					
1	Mobilization @ 10%	1	L.S.	$7,900.00	$7,900
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	684	L.F.	$75.00	$51,300
3	Remove & Replace 60" Manhole	3	Each	$7,000.00	$21,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	2,052	S.F.	$1.00	$2,052
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$8,625
				Construction Subtotal	$94,877
8	Design Engineering @ 7.5%				$7,116
9	Construction Observation and Testing @ 7.5%				$7,116
10	Administrative Costs @ 2%				$1,898
				SS-02G Sewer Pipe 163 & 164 Total	**$111,006**

SS-02H Sewer Pipe 176					
1	Mobilization @ 10%	1	L.S.	$5,000.00	$5,000
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	400	L.F.	$75.00	$30,000
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	1,200	S.F.	$1.00	$1,200
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$5,420
				Construction Subtotal	$59,620
8	Design Engineering @ 7.5%				$4,472
9	Construction Observation and Testing @ 7.5%				$4,472
10	Administrative Costs @ 2%				$1,192
				SS-02H Sewer Pipe 176 Total	**$69,755**
SS-02I Sewer Pipe 160					
1	Mobilization @ 10%	1	L.S.	$4,100.00	$4,100
2	Remove & Replace 12" PVC SDR35 Sewer Pipe	285	L.F.	$75.00	$21,375
3	Remove & Replace 60" Manhole	2	Each	$7,000.00	$14,000
4	Bypass Pumping	1	L.S.	$2,000.00	$2,000
5	6" Roadbase (3' Wide)	855	S.F.	$1.00	$855
6	Traffic Control	1	L.S.	$2,000.00	$2,000
7	Construction Contingency @ 10%				$4,433
				Construction Subtotal	$48,763
8	Design Engineering @ 7.5%				$3,657
9	Construction Observation and Testing @ 7.5%				$3,657
10	Administrative Costs @ 2%				$975
				SS-02I Sewer Pipe 160 Total	**$57,053**
PROJECT TOTAL					**$623,415**

Brian Head Town
Project 11 - Snow Shoe Drive & Toboggan Lane Sewer
Engineer's Preliminary Opinion of Probable Cost
January 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-03 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$49,000.00	$49,000
2	Install 8" PVC SDR35 Sewer Pipe	3,280	L.F.	$90.00	$295,200
3	Install 60" Sewer Manhole	16	Each	$10,000.00	$160,000
4	Connecting to Existing Sewer Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	32,800	S.F.	$1.00	$32,800
6	Construction Contingency @ 10%				$53,900
				Construction Subtotal	$592,900
7	Design Engineering @ 7.5%				$44,468
8	Construction Observation and Testing @ 7.5%				$44,468
9	Administrative Costs @ 2%				$11,858
				PROJECT TOTAL	**$693,693**

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0 75 150 300 450

Feet

Legend

- Existing Sewer Manhole
- Existing Sewer Line
- Proposed Sewer Manhole
- Proposed Sewer Pipe

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Snow Shoe - Sewer

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 300 feet
Date:	January 2022

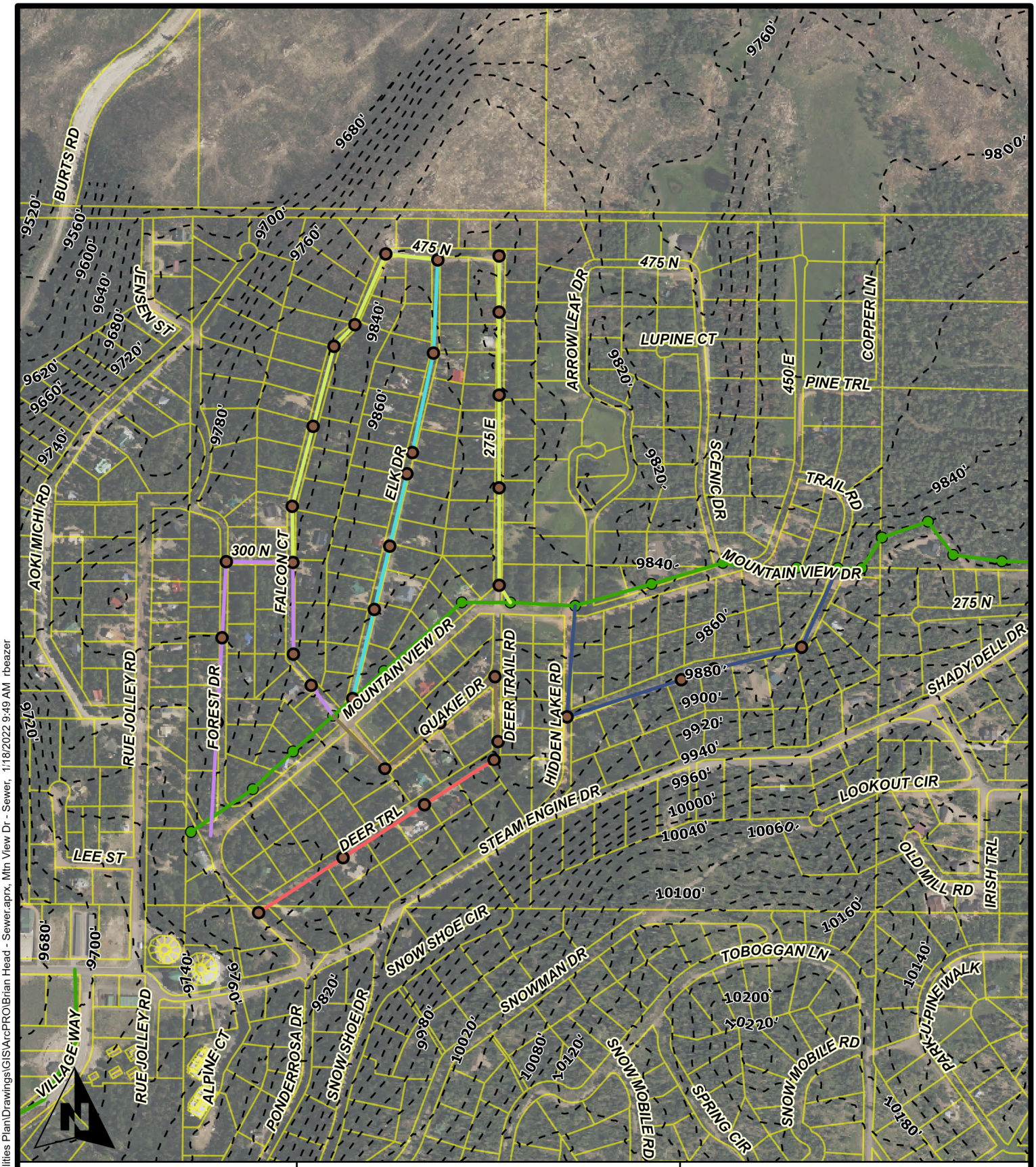
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Brian Head Town
Project 12 - Mountain View Drive Area Sewer
Engineer's Preliminary Opinion of Probable Cost
January 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-04A 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$24,500.00	$24,500
2	8" PVC SDR35 Sewer Pipe	1,810	L.F.	$90.00	$162,900
3	60" Manhole	6	Each	$10,000.00	$60,000
4	Connect to Existing Manhole	2	Each	$2,000.00	$4,000
5	6" Roadbase	18,100	S.F.	$1.00	$18,100
6	Construction Contingency @ 10%				$26,950
				Construction Subtotal	$296,450
7	Design Engineering @ 7.5%				$22,234
8	Construction Observation and Testing @ 7.5%				$22,234
9	Administrative Costs @ 2%				$5,929
				SS-04A 8" Sewer Total	**$346,847**
SS-04B 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$38,500.00	$38,500
2	8" PVC SDR35 Sewer Pipe	2,810	L.F.	$90.00	$252,900
3	60" Manhole	10	Each	$10,000.00	$100,000
4	Connect to Existing Manhole	2	Each	$2,000.00	$4,000
5	6" Roadbase	28,100	S.F.	$1.00	$28,100
6	Construction Contingency @ 10%				$42,350
				Construction Subtotal	$465,850
7	Design Engineering @ 7.5%				$34,939
8	Construction Observation and Testing @ 7.5%				$34,939
9	Administrative Costs @ 2%				$9,317
				SS-04B 8" Sewer Total	**$545,045**
SS-04C 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$22,500.00	$22,500
2	8" PVC SDR35 Sewer Pipe	1,630	L.F.	$90.00	$146,700
3	60" Manhole	6	Each	$10,000.00	$60,000
4	Connect to Existing Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	16,300	S.F.	$1.00	$16,300
6	Construction Contingency @ 10%				$24,750
				Construction Subtotal	$272,250
7	Design Engineering @ 7.5%				$20,419
8	Construction Observation and Testing @ 7.5%				$20,419
9	Administrative Costs @ 2%				$5,445
				SS-04C 8" Sewer Total	**$318,533**

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SS-04D 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$15,000.00	$15,000
2	8" PVC SDR35 Sewer Pipe	1,080	L.F.	$90.00	$97,200
3	60" Manhole	4	Each	$10,000.00	$40,000
4	Connect to Existing Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	10,800	S.F.	$1.00	$10,800
6	Construction Contingency @ 10%				$16,500
				Construction Subtotal	$181,500
7	Design Engineering @ 7.5%				$13,613
8	Construction Observation and Testing @ 7.5%				$13,613
9	Administrative Costs @ 2%				$3,630
				SS-04D 8" Sewer Total	**$212,355**
SS-04E 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$15,100.00	$15,100
2	8" PVC SDR35 Sewer Pipe	1,090	L.F.	$90.00	$98,100
3	60" Manhole	4	Each	$10,000.00	$40,000
4	Connect to Existing Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	10,900	S.F.	$1.00	$10,900
6	Construction Contingency @ 10%				$16,610
				Construction Subtotal	$182,710
7	Design Engineering @ 7.5%				$13,703
8	Construction Observation and Testing @ 7.5%				$13,703
9	Administrative Costs @ 2%				$3,654
				SS-04E 8" Sewer Total	**$213,771**
SS-04F 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$20,200.00	$20,200
2	8" PVC SDR35 Sewer Pipe	1,580	L.F.	$90.00	$142,200
3	60" Manhole	4	Each	$10,000.00	$40,000
4	Connect to Existing Manhole	2	Each	$2,000.00	$4,000
5	6" Roadbase	15,800	S.F.	$1.00	$15,800
6	Construction Contingency @ 10%				$22,220
				Construction Subtotal	$244,420
7	Design Engineering @ 7.5%				$18,332
8	Construction Observation and Testing @ 7.5%				$18,332
9	Administrative Costs @ 2%				$4,888
				SS-04F 8" Sewer Total	**$285,971**
PROJECT TOTAL					**$1,922,521**



0 130 260 520 780

Feet

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Legend

- Surveyed Sewer Manholes
- Surveyed 8" Sewer Lines
- Proposed Sewer Manhole
- Phase A
- Phase B
- Phase C
- Phase D
- Phase E
- Phase F

Mountain View Dr - Sewer

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 500 feet
Date:	January 2022

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Brian Head Town
Project 13 - Ridge Top Drive Sewer
Engineer's Preliminary Opinion of Probable Cost
January 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-05A 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$17,200.00	$17,200
2	8" PVC SDR35 Sewer Pipe	1,360	L.F.	$85.00	$115,600
3	60" Manhole	4	Each	$10,000.00	$40,000
4	Connect to Existing Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	13,600	S.F.	$1.00	$13,600
6	Construction Contingency @ 10%				$18,840
				Construction Subtotal	$207,240
7	Design Engineering @ 7.5%				$15,543
8	Construction Observation and Testing @ 7.5%				$15,543
9	Administrative Costs @ 2%				$4,145
				SS-05A 8" Sewer Total	**$242,471**
SS-05B 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$14,200.00	$14,200
2	8" PVC SDR35 Sewer Pipe	1,150	L.F.	$85.00	$97,750
3	60" Manhole	3	Each	$10,000.00	$30,000
4	Connect to Existing Manhole	1	Each	$2,000.00	$2,000
5	6" Roadbase	11,500	S.F.	$1.00	$11,500
6	Construction Contingency @ 10%				$15,545
				Construction Subtotal	$170,995
7	Design Engineering @ 7.5%				$12,825
8	Construction Observation and Testing @ 7.5%				$12,825
9	Administrative Costs @ 2%				$3,420
				SS-05B 8" Sewer Total	**$200,064**
PROJECT TOTAL					**$442,535**

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0 75 150 300 450

Feet

Legend

- Existing Sewer Manhole
- Existing Sewer Line
- Proposed Sewer Manhole
- Phase A
- Phase B

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Ridge Top Drive - Sewer

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 300 feet
Date:	January 2022

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Brian Head Town
Project 14 - Aspen Drive Sewer
Engineer's Preliminary Opinion of Probable Cost
January 17, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	ITEM PRICE
SS-06A 8" Sewer					
1	Mobilization @ 10%	1	L.S.	$89,300.00	$89,300
2	8" PVC SDR35 Sewer Pipe	6,090	L.F.	$90.00	$548,100
3	60" Manhole	28	Each	$10,000.00	$280,000
4	Connect to Existing Manhole	2	Each	$2,000.00	$4,000
5	6" Roadbase	60,900	S.F.	$1.00	$60,900
6	Construction Contingency @ 10%				$98,230
				Construction Subtotal	$1,080,530
7	Design Engineering @ 7.5%				$81,040
8	Construction Observation and Testing @ 7.5%				$81,040
9	Administrative Costs @ 2%				$21,611
				CW-06A 8" Waterline Total	**$1,264,220**
CW-06B 8" Waterline					
1	Mobilization @ 10%	1	L.S.	$50,100.00	$50,100
2	8" PVC SDR35 Sewer Pipe	3,270	L.F.	$90.00	$294,300
3	60" Manhole	17	Each	$10,000.00	$170,000
4	Connect to Existing Manhole	2	Each	$2,000.00	$4,000
5	6" Roadbase	32,700	S.F.	$1.00	$32,700
6	Construction Contingency @ 10%				$55,110
				Construction Subtotal	$606,210
7	Design Engineering @ 7.5%				$45,466
8	Construction Observation and Testing @ 7.5%				$45,466
9	Administrative Costs @ 2%				$12,124
				CW-06B 8" Waterline Total	**$709,266**
PROJECT TOTAL					**$1,973,486**

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0 130 260 520 780

Feet

Legend

- Surveyed Sewer Manholes
- Surveyed 8" Sewer Lines
- Proposed Sewer Manhole
- Phase A
- Phase B
- Municipal Boundary

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Aspen Drive - Sewer

Brian Head Capital Facilities Plan

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 500 feet
Date:	January 2022

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Appendix C. Readings

A. Water Meter Readings

B. Sanitary Sewer Flows

Brian Head Town
Usage Summary - 01/01/2020 to 12/31/2020

Service	Rate	Period	Quantity	Demand
Water - Metered	Chalet Village - Water Meter	01/2020	138,000	0
Water - Metered	Chalet Village - Water Meter	02/2020	115,000	0
Water - Metered	Chalet Village - Water Meter	03/2020	196,000	0
Water - Metered	Chalet Village - Water Meter	04/2020	140,000	0
Water - Metered	Chalet Village - Water Meter	05/2020	152,000	0
Water - Metered	Chalet Village - Water Meter	06/2020	140,000	0
Water - Metered	Chalet Village - Water Meter	07/2020	81,000	0
Water - Metered	Chalet Village - Water Meter	08/2020	75,000	0
Water - Metered	Chalet Village - Water Meter	09/2020	69,000	0
Water - Metered	Chalet Village - Water Meter	10/2020	73,000	0
Water - Metered	Chalet Village - Water Meter	11/2020	55,000	0
Water - Metered	Chalet Village - Water Meter	12/2020	37,000	0
Water - Metered	Commercial Water	01/2020	27,050	0
Water - Metered	Commercial Water	02/2020	26,527	0
Water - Metered	Commercial Water	03/2020	38,825	0
Water - Metered	Commercial Water	04/2020	9,833	0
Water - Metered	Commercial Water	05/2020	40,971	0
Water - Metered	Commercial Water	06/2020	26,946	0
Water - Metered	Commercial Water	07/2020	40,857	0
Water - Metered	Commercial Water	08/2020	43,151	0
Water - Metered	Commercial Water	09/2020	33,090	0
Water - Metered	Commercial Water	10/2020	32,691	0
Water - Metered	Commercial Water	11/2020	74,239	0
Water - Metered	Commercial Water	12/2020	55,273	0
Water - Metered	Condo Water	01/2020	934,905	0
Water - Metered	Condo Water	02/2020	796,322	0
Water - Metered	Condo Water	03/2020	870,675	0
Water - Metered	Condo Water	04/2020	198,730	0
Water - Metered	Condo Water	05/2020	157,253	0
Water - Metered	Condo Water	06/2020	257,393	0
Water - Metered	Condo Water	07/2020	271,855	0
Water - Metered	Condo Water	08/2020	327,666	0
Water - Metered	Condo Water	09/2020	273,702	0
Water - Metered	Condo Water	10/2020	142,484	0
Water - Metered	Condo Water	11/2020	688,035	0
Water - Metered	Condo Water	12/2020	367,072	0
Water - Metered	Construction Water	01/2020	0	0
Water - Metered	Construction Water	02/2020	0	0
Water - Metered	Construction Water	03/2020	0	0
Water - Metered	Construction Water	04/2020	0	0
Water - Metered	Construction Water	05/2020	0	0
Water - Metered	Construction Water	06/2020	0	0
Water - Metered	Construction Water	07/2020	0	0
Water - Metered	Construction Water	08/2020	0	0
Water - Metered	Construction Water	09/2020	0	0
Water - Metered	Construction Water	10/2020	0	0
Water - Metered	Construction Water	11/2020	0	0
Water - Metered	Construction Water	12/2020	0	0
Water - Metered	Office Water	11/2020	0	0
Water - Metered	Residential Water	01/2020	506,087	0
Water - Metered	Residential Water	02/2020	372,522	0
Water - Metered	Residential Water	03/2020	430,309	0
Water - Metered	Residential Water	04/2020	189,203	0
Water - Metered	Residential Water	05/2020	395,450	0
Water - Metered	Residential Water	06/2020	705,467	0
Water - Metered	Residential Water	07/2020	1,035,104	0
Water - Metered	Residential Water	08/2020	1,445,101	0
Water - Metered	Residential Water	09/2020	1,016,756	0
Water - Metered	Residential Water	10/2020	416,898	0
Water - Metered	Residential Water	11/2020	532,981	0
Water - Metered	Residential Water	12/2020	326,148	0
Water - Metered	Snowmaking Pond	01/2020	460,000	0
Water - Metered	Snowmaking Pond	02/2020	560,000	0
Water - Metered	Snowmaking Pond	03/2020	0	0
Water - Metered	Snowmaking Pond	04/2020	0	0
Water - Metered	Snowmaking Pond	05/2020	0	0
Water - Metered	Snowmaking Pond	06/2020	0	0
Water - Metered	Snowmaking Pond	07/2020	0	0
Water - Metered	Snowmaking Pond	08/2020	1,180,000	0
Water - Metered	Snowmaking Pond	09/2020	12,740,000	0

Brian Head Town
Usage Summary - 01/01/2020 to 12/31/2020

Service	Rate	Period	Quantity	Demand
Water - Metered	Snowmaking Pond	10/2020	7,930,000	0
Water - Metered	Snowmaking Pond	11/2020	25,220,000	0
Water - Metered	Snowmaking Pond	12/2020	23,930,000	0
			86,398,571	**0**
Water - Metered			**86,398,571**	**0**

Brian Head Town
Usage Summary - 01/01/2019 to 12/31/2019

Service	Rate	Period	Quantity	Demand
Water - Metered	Chalet Village - Water Meter	01/2019	115,000	0
Water - Metered	Chalet Village - Water Meter	02/2019	94,000	0
Water - Metered	Chalet Village - Water Meter	03/2019	131,000	0
Water - Metered	Chalet Village - Water Meter	04/2019	104,000	0
Water - Metered	Chalet Village - Water Meter	05/2019	132,000	0
Water - Metered	Chalet Village - Water Meter	06/2019	93,000	0
Water - Metered	Chalet Village - Water Meter	07/2019	142,000	0
Water - Metered	Chalet Village - Water Meter	08/2019	116,000	0
Water - Metered	Chalet Village - Water Meter	09/2019	116,000	0
Water - Metered	Chalet Village - Water Meter	10/2019	149,000	0
Water - Metered	Chalet Village - Water Meter	11/2019	145,000	0
Water - Metered	Chalet Village - Water Meter	12/2019	130,000	0
Water - Metered	Commercial Water	01/2019	368,075	0
Water - Metered	Commercial Water	02/2019	266,665	0
Water - Metered	Commercial Water	03/2019	381,657	0
Water - Metered	Commercial Water	04/2019	220,405	0
Water - Metered	Commercial Water	05/2019	95,976	0
Water - Metered	Commercial Water	06/2019	109,889	0
Water - Metered	Commercial Water	07/2019	231,449	0
Water - Metered	Commercial Water	08/2019	128,847	0
Water - Metered	Commercial Water	09/2019	107,992	0
Water - Metered	Commercial Water	10/2019	64,332	0
Water - Metered	Commercial Water	11/2019	98,507	0
Water - Metered	Commercial Water	12/2019	19,903	0
Water - Metered	Condo Water	01/2019	2,316,299	0
Water - Metered	Condo Water	02/2019	1,671,098	0
Water - Metered	Condo Water	03/2019	1,703,088	0
Water - Metered	Condo Water	04/2019	1,045,739	0
Water - Metered	Condo Water	05/2019	881,933	0
Water - Metered	Condo Water	06/2019	935,081	0
Water - Metered	Condo Water	07/2019	2,048,726	0
Water - Metered	Condo Water	08/2019	1,287,468	0
Water - Metered	Condo Water	09/2019	1,031,898	0
Water - Metered	Condo Water	10/2019	855,254	0
Water - Metered	Condo Water	11/2019	565,108	0
Water - Metered	Condo Water	12/2019	944,309	0
Water - Metered	Construction Water	01/2019	0	0
Water - Metered	Construction Water	02/2019	0	0
Water - Metered	Construction Water	03/2019	0	0
Water - Metered	Construction Water	04/2019	0	0
Water - Metered	Construction Water	05/2019	0	0
Water - Metered	Construction Water	06/2019	0	0
Water - Metered	Construction Water	07/2019	0	0
Water - Metered	Construction Water	08/2019	0	0
Water - Metered	Construction Water	09/2019	0	0
Water - Metered	Construction Water	10/2019	0	0
Water - Metered	Construction Water	11/2019	0	0
Water - Metered	Construction Water	12/2019	0	0
Water - Metered	Office Water	06/2019	0	0
Water - Metered	Office Water	07/2019	0	0
Water - Metered	Office Water	08/2019	0	0
Water - Metered	Office Water	09/2019	0	0
Water - Metered	Office Water	11/2019	0	0
Water - Metered	Residential Water	01/2019	856,921	0
Water - Metered	Residential Water	02/2019	754,987	0
Water - Metered	Residential Water	03/2019	743,617	0
Water - Metered	Residential Water	04/2019	382,403	0
Water - Metered	Residential Water	05/2019	223,477	0
Water - Metered	Residential Water	06/2019	304,613	0
Water - Metered	Residential Water	07/2019	898,014	0
Water - Metered	Residential Water	08/2019	9,819,685	0
Water - Metered	Residential Water	09/2019	444,086	0
Water - Metered	Residential Water	10/2019	477,626	0
Water - Metered	Residential Water	11/2019	1,255,926	0
Water - Metered	Residential Water	12/2019	546,878	0
Water - Metered	Snowmaking Pond	01/2019	7,150,000	0
Water - Metered	Snowmaking Pond	02/2019	4,620,000	0
Water - Metered	Snowmaking Pond	03/2019	7,950,000	0
Water - Metered	Snowmaking Pond	04/2019	0	0
Water - Metered	Snowmaking Pond	05/2019	0	0

Brian Head Town
Usage Summary - 01/01/2019 to 12/31/2019

Service	Rate	Period	Quantity	Demand
Water - Metered	Snowmaking Pond	06/2019	0	0
Water - Metered	Snowmaking Pond	07/2019	0	0
Water - Metered	Snowmaking Pond	08/2019	0	0
Water - Metered	Snowmaking Pond	09/2019	5,000,000	0
Water - Metered	Snowmaking Pond	10/2019	12,450,000	0
Water - Metered	Snowmaking Pond	11/2019	33,060,000	0
Water - Metered	Snowmaking Pond	12/2019	10,440,000	0
			116,224,931	**0**
Water - Metered			**116,224,931**	**0**

MONTH/YR. 2021	BRIAN HEAD TOTAL	PAROWAN CITY TOTAL	LAGOON TOTAL	PUMP STATION TOTAL
JANUARY	5,361,000	6,427,000	11,788,000	
FEBRUARY	4,814,000	5,794,000	10,608,000	
MARCH	5,265,000	6,529,000	11,794,000	11,938,935 *
APRIL	4,552,000	5,954,000	10,506,000	9,801,696 *
MAY	3,843,000	6,158,000	10,001,000	
JUNE	3,318,000	6,213,000	9,531,000	
JULY	3,919,000	7,314,000	11,233,000	
AUGUST	3,238,000	6,524,000	9,762,000	
SEPTEMBER	2,903,000	6,083,000	8,986,000	3,152,749
OCTOBER	3,185,000	6,557,000	9,742,000	1,503,033
NOVEMBER	3,148,000	5,738,000	8,886,000	2,454,697
DECEMBER	4,457,000	6,663,000	11,060,000	
	YR. TOTAL	YR. TOTAL	YR. TOTAL	YR. TOTAL
	48,003,000	75,954,000	123,897,000	28851110

*Discharge

Parowan City/ Brian Head Sewer Totals

Year	Parowan Total	Brianhead Total	Combined Total	Parowan Daily Average	Brian head Daily Average	Combined Daily Average
2015	80302789	39271598	119,574,387	220007.6411	107593.4192	327601.0603
2016	91902638	44534581	136,437,219	251788.0493	122012.5507	373800.6
2017	94002375	43425000	137,427,375	257540.7534	118972.6027	376513.3562
2018	99333549	40014874	139,348,423	272146.7096	109629.7918	381776.5014
2019	95638000	52779000	148,417,000	262021.9178	144600	406621.9178
2020	83022503	54567000	137,589,503	227458.9123	149498.6301	376957.5425
2021	75954000	48003000	123,897,000	208093.1507	131515.0685	339443.8356

Split 39 %

Appendix D. Water Right Information

A. Brian Head Town Municipal Use Water Rights - Wells

B. Brian Head Town Municipal Use Water Rights Leased from Reservoir Company – Springs

C. Brian Head Town Snow Making Water Rights

D. Brian Head Town Water Rights Being Leased to Parowan Valley (Heil Water Right)

Brian Head Water Rights Summary

As of June 2021

Brian Head Town Munical Use Water Rights - Wells

Water Right #	Record Owner	Status	Quantity (acre-ft)	Priority Date	Certificate Date	Well #	Change Application	Change Application Priority	Proof Due Date*	Notes
75-661	Town of Brian Head	Certificated	234.66	1889	6/26/1998	Gurr (14017), Town Hall (3954), & Bear Flat (434816)	a37313	4/5/2011	6/30/2025	These water rights are based on the Dry Canyon Agreement. Only the amount of water avaliable under this agreement can be diverted, limited to 234.66 acre-feet.
75-662	Town of Brian Head	Certificated		1889	6/26/1998					
75-663	Town of Brian Head	Certificated		1889	6/26/1998					
75-664	Town of Brian Head	Certificated		1889	6/26/1998					
75-1704	Town of Brian Head	Approved	250	1860	N/A	Crystal Mountain (3918)	a17198	10/19/2010	8/31/2030	

Brian Head Town Munical Use Water Rights Leased From Reservoir Company - Springs

Water Right #	Record Owner	Status	Flow (acre-ft)	Priority Date	Certificate Date	Source	Change Application	Change Application Priority	Proof Due Date*	Notes
75-1514	Parowan Reservoir Company/Brian Head	Water User's Claim	31	1860	11/7/1991	Salt Pile, Decker, Quaking Aspen, Rock, Brian Head Seeps, Mammoth Hills #1 - #3	a12265	4/28/1982	N/A	Election filed in adjudication, proof is not required
75-1515	Parowan Reservoir & Irrigation Company/Brian Head	Water User's Claim	300	1860	11/7/1991	Salt Pile, Decker, Quaking Aspen, Rock, Brian Head Seeps, Mammoth Hills #1 - #3	a12266	4/28/1982	N/A	Election filed in adjudication, proof is not required

Brian Head Town Snow Making Water Rights

Water Right #	Record Owner	Status	Quantity (acre-ft)	Priority Date	Certificate Date	Well #	Change Application	Change Application Priority	Proof Due Date*	Notes
75-1693	Parowan Reservoir Company/Brian Head Town/ Brian Head Ski Limited	Certificated	150	1860	8/30/2002	Crystal Mountain (3198) & Town Hall (3954)	a22707	10/30/1998	N/A	150 ac-ft can be pumped and 22.5 ac-ft consumed for snowmaking. Certificated after change application (08-30/2002), proof is not required.

Brian Head Town Water Rights Being Leased to Parowan Valley (Heil Water Right)

Water Right #	Record Owner	Status	Quantity (acre-ft)	Priority Date	Certificate Date	Location	Change Application	Change Application Priority	Proof Due Date*	Notes
75-2019	Brian Head Special Service District	Water User's Claim	243.08	12/1/1945	N/A	Located in Parowan Valley (Well ID# 13999)	t46905	3/16/2021	N/A	
75-2034	Brian Head Special Service District	Water User's Claim	156.92	12/1/1945	N/A	Gurr (14017), Bear Flat (434816), & Town Hall (39	a47416	6/9/2021	N/A	A pending change application seeks to transfer to the Biran Head area. With change from irrigation to culinary, the useable amount is reduced to the historically consumed amount, which is 94.67 acre-feet.

* If the Change Application proof due date is not met, the water right will be reverted to its original source and location.

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a13560** WATER RIGHT: 75-661 CERT. NO.: AMENDATORY? Yes COUNTY TAX ID#:
BASE WATER RIGHTS: 75-661
RIGHT EVIDENCED BY: 75-661,75-662,75-663,75-664, Diligence
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Town of Brian Head a municipal corporation
ADDR: P. O. Box 68
Brian Head UT 84719
REMARKS:

DATES, ETC.

FILED: 06/20/1985|PRIORITY: 06/20/1985|ADV BEGAN: 07/25/1985|ADV ENDED: |NEWSPAPER: The Spectrum
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd:09/07/1985|PROTESTED: [Yes]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:07/18/1986|PROOF DUE: 12/31/1993
EXTENSION: |ELEC/PROOF:[Proof]|ELEC/PROOF:03/25/1993|CERT/WUC: 06/26/1998|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**
Status: Certificated

**********************H E R E T O F O R E********************** | **********************H E R E A F T E R**********************

FLOW: 234.66 acre-feet	FLOW: 234.66 acre-feet
SOURCE: Underground Water Well	SOURCE: Underground Water Well
COUNTY: Iron	COUNTY: Iron COM DESC: at Brianhead
	This water right is based on a permanent change/exchange known as the "Gurr" water right out of Dry Canyon. Only that amount of water available at the Dry Canyon measuring point is available for pumping and use at Brianhead.
POINT(S) OF DIVERSION ------> MAP VIEW****	**SAME AS HERETOFORE, AND IN ADDITION TO: (Click link for WRPLAT)**
Point Underground:	UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 1167 ft W 192 ft from SE cor, Sec 34, T 35S, R 9W, SLBM	(1) N 1167 ft W 192 ft from SE cor, Sec 34, T 35S, R 9W, SLBM
Diameter: 8 ins. Depth: 600 to ft. WELL ID#: 000000	Diameter: 8 ins. Depth: 600 to ft. WELL ID#: 14017
	(2) S 675 ft E 162 ft from NW cor, Sec 11, T 36S, R 9W, SLBM
	Diameter: 6 ins. Depth: 700 to ft. WELL ID#: 3954

PLACE OF USE ------>

	--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S||N N S S||N N S S||N N S S
	W E W E||W E W E||W E W E||W E W E
Sec 27 T 35S R 9W SLBM	* : : : ** : : : ** : : : ** : :X:X*
Sec 34 T 35S R 9W SLBM	* : : :X**X:X:X: ** :X: :X**X:X:X: *

CHANGED as follows:

	--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S||N N S S||N N S S||N N S S
	W E W E||W E W E||W E W E||W E W E

NATURE OF USE ------>

IRR = values are in acres.
STK = values are in ELUs meaning Cattle or Equivalent.
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).

SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
DOM: 322.0000 USED 01/01 - 12/31	MUN: Brian Head USED 01/01 - 12/31

CHANGED as follows:

E N D O F D A T A

Water Right Details for 75-661

Utah Division of Water Rights 2/11/2021 4:21 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-661 Application/Claim: Certificate:

Changes:

a12469	(Filed: 09/17/1982)	Withdrawn
a13560	(Filed: 06/20/1985)	Certificated
t87-75-57	(Filed: 09/30/1987)	Expired
t90-75-1	(Filed: 01/26/1990)	Expired
a37313	(Filed: 04/05/2011)	Approved

Owners:

Name: Town of Brian Head (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest:
Remarks:

General:

Type of Right: Diligence Claim Source of Info.: Certificate Status: Certificated
Quantity of Water: 234.66 ACFT

Source: Underground Water Wells (2)
County: Iron
Common Description:
Proposed Det. Book: 75-2 Map: 36 Pub. Date:

Land Owned by Appl.: County Tax Id#:

Distribution System:

Dates:

Filing:
Filed:
Priority: / /1889 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 06/26/1998 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1168 ft. W 180 ft. from SE corner, Sec 34 T 35S R 9W SLBM

Well Diameter: 8 in. Depth: 600 to ft. Year Drilled: 1977 Well Log: Yes Well Id#:

Elevation: UTM: 336711.549, 4175174.276 (NAD83)

Source/Cmnt:

(2) S 164 ft. E 679 ft. from NW corner, Sec 11 T 36S R 9W SLBM

Well Diameter: 12 in. Depth: 700 to ft. Year Drilled: 1991 Well Log: Yes Well Id#: 3954

Elevation: UTM: 336940.519, 4173148.929 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 607351

Water Rights Appurtenant to the following use(s):

75-661(CERT), 75-662(CERT), 75-663(CERT), 75-664(CERT),

Water Use Types:

Municipal: Brian Head Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: 234.66

Use Totals:

Municipal sole-supply total: 234.66 acft

Other Comments:

This water right is based on the Dry Canyon Agreement. Only the amount of water available under this agreement can be diverted, limited to 234.66 acre-feet.

Nonuses

Filed: 08/11/1989 Expiration Date: 08/31/1994

Advertising:

Publication Began: 10/19/1989 Publication End: Newspaper:

Protested: Not Protested Protest End Date: Hearing Held:

Approval:

SE Action: Approved Action Date: 02/12/1990

Comments:

Proof submitted in conjunction with proof of change on a9915, a13560

Water Right Details for 75-662

Utah Division of Water Rights 2/11/2021 4:24 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-662 Application/Claim: Certificate:

Changes:

13560	(Filed:	Certificated
a37313	(Filed: 04/05/2011)	Approved

Owners:

Name: Town of Brian Head (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest:
Remarks:

General:

Type of Right: Diligence Claim Source of Info.: Certificate Status: Certificated
Quantity of Water:

Source: Underground Water Wells (2)
County: Iron
Common Description:
Proposed Det. Book: 75- Map: 36 Pub. Date:

Land Owned by Appl.: County Tax Id#:

Distribution System:

Dates:

Filing:
Filed:
Priority: / /1889 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 06/26/1998 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1168 ft. W 180 ft. from SE corner, Sec 34 T 35S R 9W SLBM

Well Diameter: 8 in. Depth: 600 to ft. Year Drilled: 1977 Well Log: Yes Well Id#:

Elevation: UTM: 336711.549, 4175174.276 (NAD83)

Source/Cmnt:

(2) S 164 ft. E 679 ft. from NW corner, Sec 11 T 36S R 9W SLBM

Well Diameter: 6 in. Depth: 700 to ft. Year Drilled: 1991 Well Log: Yes Well Id#: 3954

Elevation: UTM: 336940.519, 4173148.929 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 607351

Water Rights Appurtenant to the following use(s):

75-661(CERT), 75-662(CERT), 75-663(CERT), 75-664(CERT),

Water Use Types:

Municipal: Brian Head Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Other Comments:

See 75-661 for flow.

This water right is based on the Dry Canyon Agreement. Only the amount of water available under this agreement can be diverted, limited to 234.66 acre-feet.

Water Right Details for 75-663

Utah Division of Water Rights 2/11/2021 4:25 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-663 Application/Claim: Certificate:

Changes:

a37313 (Filed: 04/05/2011) Approved

Owners:

Name: Town of Brian Head (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest: 100%
Remarks:

General:

Type of Right: Diligence Claim Source of Info.: Certificate Status: Certificated
Quantity of Water:
Source: Underground Water Wells (2)
County: Iron
Common Description:
Proposed Det. Book: 75- Map: 36 Pub. Date:
Land Owned by Appl.: County Tax Id#:
Distribution System:

Dates:

Filing:
Filed:
Priority: / /1889 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 06/26/1998 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1168 ft. W 180 ft. from SE corner, Sec 34 T 35S R 9W SLBM

Well Diameter: 8 in. Depth: 600 to ft. Year Drilled: 1977 Well Log: Yes Well Id#:

Elevation: UTM: 336711.549, 4175174.276 (NAD83)

Source/Cmnt:

(2) S 164 ft. E 679 ft. from NW corner, Sec 11 T 36S R 9W SLBM

Well Diameter: 6 in. Depth: 700 to ft. Year Drilled: 1991 Well Log: Yes Well Id#: 3954

Elevation: UTM: 336940.519, 4173148.929 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 607351

Water Rights Appurtenant to the following use(s):

75-661(CERT), 75-662(CERT), 75-663(CERT), 75-664(CERT),

Water Use Types:

Municipal: Brian Head Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Other Comments:

See 75-661 for flow.

This water right is based on the Dry Canyon Agreement. Only the amount of water available under this agreement can be diverted, limited to 234.66 acre-feet.

Water Right Details for 75-664

Utah Division of Water Rights 2/11/2021 4:26 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-664 Application/Claim: Certificate:

Changes:

a9915 (Filed:
a37313 (Filed: 04/05/2011) Approved

Owners:

Name: Town of Brian Head (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest:
Remarks:

General:

Type of Right: Diligence Claim Source of Info.: Certificate Status: Certificated
Quantity of Water:

Source: Underground Water Wells (2)
County: Iron
Common Description:
Proposed Det. Book: 75- Map: 36 Pub. Date:

Land Owned by Appl.: County Tax Id#:

Distribution System:

Dates:

Filing:
Filed:
Priority: / /1889 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 06/26/1998 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1168 ft. W 180 ft. from SE corner, Sec 34 T 35S R 9W SLBM

Well Diameter: 8 in. Depth: 600 to ft. Year Drilled: 1977 Well Log: Yes Well Id#:

Elevation: UTM: 336711.549, 4175174.276 (NAD83)

Source/Cmnt:

(2) S 164 ft. E 679 ft. from NW corner, Sec 11 T 36S R 9W SLBM

Well Diameter: 6 in. Depth: 700 to ft. Year Drilled: 1991 Well Log: Yes Well Id#: 3954

Elevation: UTM: 336940.519, 4173148.929 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 607351

Water Rights Appurtenant to the following use(s):

75-661(CERT), 75-662(CERT), 75-663(CERT), 75-664(CERT),

Water Use Types:

Municipal: Brian Head Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Other Comments:

See 75-661 for flow.

This water right is based on the Dry Canyon Agreement. Only the amount of water available under this agreement can be diverted, limited to 234.66 acre-feet.

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/13/2021 Page 1

CHANGE: **a37313** WATER RIGHT: 75-661 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:

BASE WATER RIGHTS: 75-661
75-662
75-663
75-664

RIGHT EVIDENCED BY: 75-661, 75-662, 75-663, 75-664

CHANGES: Point of Diversion [X], Place of Use [ ], Nature of Use [ ], Reservoir Storage [ ], Split Season [ ].

NAME: Town of Brian Head (Public Water Supplier)
ADDR: P.O. Box 190068
Brian Head UT 84719

REMARKS:

DATES, ETC.

FILED: 04/05/2011|PRIORITY: 04/05/2011|ADV BEGAN: 04/21/2011|ADV ENDED: 04/28/2011|NEWSPAPER: The Spectrum
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd:05/18/2011|PROTESTED: [No]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:06/27/2011|PROOF DUE: 06/30/2025
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: 09/11/2014|RECON REQ: |TYPE: [ ]

***STATUS LINE**

Status: Approved

H E R E T O F O R E	**H E R E A F T E R**
FLOW: 234.66 acre-feet	FLOW: 234.66 acre-feet
SOURCE: Underground Water Wells (2)	SOURCE: Underground Water Wells (3) 2 Existing - 1 new
COUNTY: Iron	COUNTY: Iron COM DESC: Serv. area Town of Brian Head
	This application adds a new well for the Town as part of a major update to the Town`s water system. The total diversion under this application from the three wells will be no more than 234.66 acre-feet, and all diversions under this application are subject to the Dry Canyon Agreement.

POINT(S) OF DIVERSION ------> MAP VIEW****	**SAME AS HERETOFORE, AND IN ADDITION TO: (Click link for WRPLAT)**
Point Underground:	UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 1168 ft W 180 ft from SE cor, Sec 34, T 35S, R 9W, SLBM	(1) S 568 ft E 2182 ft from W4 cor, Sec 02, T 36S, R 9W, SLBM
Diameter: 8 ins. Depth: 600 to ft. WELL ID#: 14017	Diameter: 16 ins. Depth: 1500 to ft. WELL ID#: 434816
(2) S 164 ft E 679 ft from NW cor, Sec 11, T 36S, R 9W, SLBM	
Diameter: 12 ins. Depth: 700 to ft. WELL ID#: 3954	

NATURE OF USE ------>	**SAME AS HERETOFORE**
IRR = values are in acres.	
STK = values are in ELUs meaning Cattle or Equivalent.	
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	

SUPPLEMENTAL to Other Water Rights: Yes	SUPPLEMENTAL to Other Water Rights: No
MUN: Brian Head USED 01/01 - 12/31	

EXTENSIONS OF TIME WITHIN WHICH TO FILE PROOF

FILED: 08/11/2016	PUB BEGAN:	PUB ENDED:	NEWSPAPER: No Adv Required
ProtestEnd:	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [Approved] ActionDate:10/12/2016 PROOF DUE: 06/30/2025

END OF DATA

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a17198** WATER RIGHT: 75-1704 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1704
RIGHT EVIDENCED BY: a deeded portion of 75-1562 (a13135)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Town of Brian Head
ADDR: P.O. Box 190068
Brian Head UT 84719
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 02/09/1993|PRIORITY: 10/19/2010|ADV BEGAN: 03/04/1993|ADV ENDED: |NEWSPAPER: The Spectrum
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd:04/17/1993|PROTESTED: [Hear Hel]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:08/13/1993|PROOF DUE: 09/30/2020
EXTENSION: 09/29/2020|ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:10/15/2010
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**
Status: Approved

H E R E T O F O R E

FLOW: 250.0 acre-feet
SOURCE: Seven Springs,Browns Creek, New Well
COUNTY: Iron

The irrigation will include a golf course and landscaping around the place of use for the recreational development.

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Surface:
(1) N 1219 ft E 374 ft from SW cor, Sec 03, T 36S, R 9W, SLBM
Dvrting Wks: Spring collection boxes
Source:
(2) N 971 ft W 1448 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Dvrting Wks: Spring Collection Boxes
Source:
(3) N 1066 ft W 1414 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Dvrting Wks: Spring Collection Boxes
Source:
(4) N 1181 ft W 1934 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Dvrting Wks: Spring Collection Boxes
Source:
(5) N 2255 ft E 1539 ft from W4 cor, Sec 04, T 36S, R 9W, SLBM
Dvrting Wks: Spring Collection Boxes
Source:
(6) N 36 ft W 2140 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Dvrting Wks: Spring collection box
Source:
(7) S 560 ft E 1040 ft from NW cor, Sec 09, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Browns Creek
(8) S 1230 ft E 680 ft from NW cor, Sec 09, T 36S, R 9W, SLBM
Dvrting Wks: Spring Collection Box
Source:

Point Underground:
(1) N 300 ft W 1100 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Diameter: 12 ins. Depth: 400 to ft. WELL ID#: 000000

PLACE OF USE ------>

H E R E A F T E R

FLOW: 250.0 acre-feet
SOURCE: Underground Well/Spring Aquifer
COUNTY: Iron COM DESC: near Brian Head

The 250 acre feet of water will be pumped from a well developed in an aquifer that contributes to the spring flows and natural flow of the Brown's Creek drainage area. The water will be transported through a 6 inch pipeline to the existing Brian Head Town culinary water system or into a private pipeline, and then distributed to places of use as described. This application for change is being filed in the names of the Town of Brian Head and Brian Head North Development Corporation, subject to a purchase agreement.

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 300 ft W 1100 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Diameter: 8 ins. Depth: 100 to 400 ft. WELL ID#: 3198

CHANGED as follows:

	--NW¼-- --NE¼-- --SW¼-- --SE¼--		--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S||N N S S||N N S S||N N S S		N N S S||N N S S||N N S S||N N S S
	W E W E||W E W E||W E W E||W E W E		W E W E||W E W E||W E W E||W E W E
Sec 03 T 36S R 9W SLBM	* : : : ** : : : **X: : : ** : : : *	Sec 24 T 35S R 9W SLBM	* : : : ** : : : ** : : : ** : : :X*
Sec 04 T 36S R 9W SLBM	*LOT 5	Sec 25 T 35S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 04 T 36S R 9W SLBM	*LOT 6	Sec 26 T 35S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 04 T 36S R 9W SLBM	*LOT 9	Sec 27 T 35S R 9W SLBM	* : : : ** : : : **X:X:X:X**X:X:X:X*
Sec 04 T 36S R 9W SLBM	*LOT 10	Sec 34 T 35S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 04 T 36S R 9W SLBM	*LOT 11	Sec 35 T 35S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 04 T 36S R 9W SLBM	*LOT 12	Sec 36 T 35S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
		Sec 01 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
		Sec 02 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
		Sec 03 T 36S R 9W SLBM	* : : : **X:X:X:X** : : : **X:X:X:X*
		Sec 10 T 36S R 9W SLBM	* : : : **X:X:X:X** : : : ** : : : *
		Sec 11 T 36S R 9W SLBM	*X:X:X:X** : : : **X:X:X:X** : : : *

NATURE OF USE ------>	CHANGED as follows:
IRR = values are in acres.	
STK = values are in ELUs meaning Cattle or Equivalent.	
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
IRR: 20.0000 USED 03/01 - 10/31	
	MUN: Brian Head USED 01/01 - 12/31
OTH: OTHER: Resort, restaurants, USED 01/01 - 12/31 hotels, condominiums, snowmaking, and recreation.	OTH: OTHER: Resort, restaurants, USED 01/01 - 12/31 hotels, condominiums, cabins, snowmaking, and recreation.

SEGREGATION HISTORY

This Change was Segregated from a13135a, WRNUM: 75-1704, Approval Date: Sep 07, 1984 under which Proof is to be submitted.
a17198 was originally filed for:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES: IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)
	250.000			

OTHER: Municipal, Recreation
Resort,restaurants,hotels,condos,cabins,snowmaking and recreation.

PROTESTANTS

NAME: State of Utah Division of Wildlife Resources
ADDR: c/o Timothy H. Provan
1594 West North Temple, Ste 2110
Salt Lake City UT 84114-6301
TYPE: APPL
RCVD: 04/16/1993

NAME: Summit Special Service District
ADDR: c/o Ralph Green
P. O. Box 152
Summit UT 84772
TYPE: APPL
RCVD: 04/12/1993

EXTENSIONS OF TIME WITHIN WHICH TO FILE PROOF

FILED: 09/04/1998	PUB BEGAN: 04/13/2000	PUB ENDED:	NEWSPAPER: The Spectrum
ProtestEnd:05/10/2000	PROTESTED: [Yes]	HEARNG HLD:	SE ACTION: [Approved] ActionDate:10/05/2000 PROOF DUE: 09/30/2002
FILED: 09/30/2002	PUB BEGAN: 10/24/2002	PUB ENDED: 10/17/2002	NEWSPAPER: The Spectrum
ProtestEnd:11/20/2002	PROTESTED: [Yes]	HEARNG HLD:	SE ACTION: [Approved] ActionDate:03/27/2003 PROOF DUE: 09/30/2005
FILED: 08/25/2005	PUB BEGAN: 09/15/2005	PUB ENDED: 09/22/2005	NEWSPAPER: The Spectrum
ProtestEnd:10/12/2005	PROTESTED: [ ]	HEARNG HLD:	SE ACTION: [Approved] ActionDate:02/17/2006 PROOF DUE: 09/30/2010
FILED: 10/20/2010	PUB BEGAN: 11/11/2010	PUB ENDED: 11/18/2010	NEWSPAPER: The Spectrum
ProtestEnd:12/08/2010	PROTESTED: [ ]	HEARNG HLD:	SE ACTION: [Approved] ActionDate:12/15/2010 PROOF DUE: 09/30/2020
FILED: 09/29/2020	PUB BEGAN: 10/15/2020	PUB ENDED: 10/22/2020	NEWSPAPER: The Spectrum
ProtestEnd:11/11/2020	PROTESTED: [No]	HEARNG HLD:	SE ACTION: [ ] ActionDate: PROOF DUE:

END OF DATA

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a13135a** WATER RIGHT: 75-1704 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1704
RIGHT EVIDENCED BY: 75-1704 which is a portion of 75-1562 (a13135)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Town of Brian Head
ADDR: P.O. Box 190068
Brian Head UT 84719
REMARKS: Interest to be conveyed under contract

DATES, ETC.

FILED: 01/29/1993|PRIORITY: 03/22/1984|ADV BEGAN: |ADV ENDED: |NEWSPAPER:
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:09/07/1984|PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**
Status: Approved

H E R E T O F O R E | **H E R E A F T E R**

HERETOFORE	HEREAFTER
FLOW: 250.0 acre-feet	FLOW: 250.0 acre-feet
SOURCE: Summit Creek	SOURCE: Seven Springs, Browns Creek & Well
COUNTY: Iron	COUNTY: Iron COM DESC:
This is a companion filing with that of Change Application a13135 (75-1562), filed in the name of Summit Irrigation & Stock Company and Change Applications a13136 (75-1563),a13138 (75-303), and a13139 (75-342) filed by Thomas D. Robinson & Ola Robinson and Change Application a9265a, a13137 (75-1564) filed by Alpine Resort Investments. Through the filing of these change applications, the parties intend to create a domestic water supply for use within a multi-purpose destination resort to be built on the above described property. The water development plan calls for a two-setp process in establishing the right to divert and use water at the development property. First, the water rights involved in Change Applications a13136 (75-1563), a13138 (75-303), a13139 (75-342) and a9265a a13137 (75-1564) will be transferred to an under-ground water well to be constructed and equipped by Alpine Resort Investments. Alpine will maintain this well and will also pump and deliver into Summit Creek 400.0 acre feet of water each year for the use and benefit of Summit Irrigation & Stock Company. This will protect the water rights of Summit from interference. The Second step in the process contemplates Alpine developing a domestic water supply for the resort under the Summit Irrigation & Stock Company change application (a13135) (75-1562). The multi-purpose destination resort developed by Alpine will use water for the irrigation of a golf course, incidental landscaping and domestic consumption. To protect water quality in the drainage, Alpine will pipe the sewage effluent to the Town of Brianhead and from there contractually arrange for piping down Parowan Canyon to Parowan Valley. Alpine will provide water meters to measure it's water use both at the development property and at the underground water well near Summit. Sewage effluent generated by development within the defined water use area described on change Application a13135	

(75-1562) will be piped, via a properly sized water tight outfallline, from the development sites to a suitable connection point with the existing Brianhead sewage outfall fine located adjacent to the State Route 143 in Parowan Canyon, for eventual transmission to the Parowan City Lagoons for final disposal.	

POINT(S) OF DIVERSION ------> MAP VIEW****	CHANGED AS FOLLOWS: (Click Location link for WRPLAT)
Point Surface:	Point Surface:
(1) N 680 ft E 1090 ft from W4 cor, Sec 06, T 35S, R 9W, SLBM	(1) N 1219 ft E 374 ft from SW cor, Sec 03, T 36S, R 9W, SLBM
Dvrting Wks: Rubble masonry diversion dam	Dvrting Wks:
Source: Summit Creek	Source:
	(2) N 36 ft W 2140 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(3) N 971 ft W 1448 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(4) N 971 ft W 1448 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(5) N 1181 ft W 1934 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(6) N 2255 ft E 1539 ft from W4 cor, Sec 04, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(7) S 1230 ft E 680 ft from NW cor, Sec 09, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source:
	(8) S 560 ft E 1040 ft from NW cor, Sec 09, T 36S, R 9W, SLBM
	Dvrting Wks:
	Source: Browns Creek
	Stream Alt?: No
Point Underground:	UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
	(1) N 300 ft W 1100 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
	Diameter: ins. Depth: to ft. WELL ID#: 3198

PLACE OF USE ------>

	--NW¼-- --NE¼-- --SW¼-- --SE¼--	
	N N S S N N S S N N S S N N S S	N N S S N N S S N N S S N N S S
	W E W E W E W E W E W E W E W E	W E W E W E W E W E W E W E W E
Sec 25 T 34S R 10W SLBM	*X: :X:X** : : : **X:X:X:X** : : : *	Sec 03 T 36S R 9W SLBM * : : : ** : : : **X: : : ** : : : *
Sec 26 T 34S R 10W SLBM	* : : : ** : :X:X** :X:X:X**X:X:X:X*	Sec 04 T 36S R 9W SLBM *LOT 5
Sec 27 T 34S R 10W SLBM	* : : : ** : : : ** : : : **X:X:X:X*	Sec 04 T 36S R 9W SLBM *LOT 6
Sec 35 T 34S R 10W SLBM	*X:X:X:X**X:X:X:X** : : : **X:X: : *	Sec 04 T 36S R 9W SLBM *LOT 9
Sec 36 T 34S R 10W SLBM	*X:X:X:X**X: :X: **X:X:X:X**X: : : *	Sec 04 T 36S R 9W SLBM *LOT 10
Sec 01 T 35S R 10W SLBM	*X: : : ** : : : ** : : : ** : : : *	Sec 04 T 36S R 9W SLBM *LOT 11
Sec 02 T 35S R 10W SLBM	* : : : **X:X: : ** : : : ** : : : *	Sec 04 T 36S R 9W SLBM *LOT 12

NATURE OF USE ------>	CHANGED as follows:
IRR = values are in acres.	
STK = values are in ELUs meaning Cattle or Equivalent.	
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
IRR: 62.5000 USED 03/01 - 10/31	IRR: and 20.0000 Group Total USED 03/01 - 10/31
	OTH: COMMERCIAL: resort, restaurants, USED 01/01 - 12/31
	hotels, condominiums, snowmaking, and recreation

SEGREGATION HISTORY**********

This Change was Segregated from a13135, WRNUM: 75-1562, Approval Date: Sep 07, 1984 under which Proof is to be submitted.
a13135a was originally filed for:

FLOW IN CFS	QUANTITY IN ACRE-FEET	*---------W A T E R U S E S---------* IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES)
	250.000	20.0000		

OTHER: Other
Resort, restaurants, hotels, condominiums, snowmaking, and recreation

The following Changes have been Segregated from a13135a:

(1)	CHANGE: a00000 NAME: Same	WRNUM: 75-1704	250.000

```
         FILED:              STATUS: WD    APPR/REJ:
        OTHER: Municipal, Recreation
               see a17198.Segregation entry to link this change to prior change on same right
*-------------------------------------------------------------------------------------------------------------------------------*
*-------------------------------------------------------------------------------------------------------------------------------*
                                                          CFS          ACRE-FEET     IRRIGATED       STOCK          DOMESTIC
                                                                                      ACREAGE        (ELUs)       (FAMILIES)
a13135a currently has: --------------------------------->                ERROR          20.0000
           COMMERCIAL-IN CHANGE but NOT SEGMASTER
*********************************************************************************************************************************
*********************************************************E N D   O F   D A T A*********************************************************
*********************************************************************************************************************************
```

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240
Utah.gov | Natural Resources | Contact | Terms of Use | Privacy Policy | Accessibility Policy | Translate Utah.gov

Water Right Details for 75-1704

Utah Division of Water Rights 2/11/2021 4:16 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-1704 Application/Claim: Certificate:

Changes:

a13135a	(Filed: 01/29/1993)	Approved
a17198	(Filed: 02/09/1993)	Approved

Owners:

Name: Town of Brian Head
Address: P.O. Box 190068
Brian Head UT 84719
Interest: 100%
Remarks:

General:

Type of Right: Decree Source of Info.: Ownership Segregation Status:
Quantity of Water: 250 ACFT
Source: Summit Creek
County: Iron
Common Description:
Proposed Det. Book: 75- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:
Distribution System:

Dates:

Filing:
Filed:
Priority: / /1860 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required: No

(1) N 680 ft. E 1090 ft. from W4 corner, Sec 06 T 35S R 9W SLBM

Diverting Works: Rubble masonry diversion Source: Summit Creek

Elevation: UTM: 331105.894, 4184164.901

Proposed Water Uses:

Proposed Water Uses - Group Number: 606746

Water Use Types:

Irrigation-Beneficial Use Amount: 62.5 acres Group Total: 62.5 Period of Use: 03/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 25 T 34S R 10W	X		X	X					X	X	X	X					
Sec 26 T 34S R 10W							X	X		X	X	X	X	X	X	X	
Sec 27 T 34S R 10W													X	X	X	X	
Sec 35 T 34S R 10W	X	X	X	X	X	X	X	X					X	X			
Sec 36 T 34S R 10W	X	X	X	X	X		X		X	X	X	X	X				
Sec 01 T 35S R 10W	X																
Sec 02 T 35S R 10W					X	X											
																Group Acreage Total :	

Use Totals:

Irrigation sole-supply total: 62.5 acres for a group total of: 62.5 acres

Segregation History:

This Right was Segregated from: 75-1562, with Appl.#:, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
as originally filed:			250.0	62.5						

Comment: See change application a17198

	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
This Right as currently calculated:			250.0	62.5						

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a12265** WATER RIGHT: 75-1514 CERT. NO.: AMENDATORY? Yes COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1514
RIGHT EVIDENCED BY: 75-1514,a5618 (Portion of 75-974)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Parowan Reservoir Company
ADDR: c/o Donna Mitchell
PO Box 541
Parowan UT 84761
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 04/28/1982|PRIORITY: 04/28/1982|ADV BEGAN: |ADV ENDED: |NEWSPAPER:
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: [ ]|ActionDate:08/30/1982|PROOF DUE: 12/31/1988
EXTENSION: |ELEC/PROOF:[Election]|ELEC/PROOF:12/20/1988|CERT/WUC: 11/07/1991|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**

Status: Water User's Claim

**********************H E R E T O F O R E********************** **********************H E R E A F T E R**********************

FLOW: 31.0 acre-feet
SOURCE: Parowan Main Creek
COUNTY: Iron

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Surface:
(1) S 210 ft E 1500 ft from N4 cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source:

	--NW¼--	--NE¼--	--SW¼--	--SE¼--
	N N S S W E W E	N N S S W E W E	N N S S W E W E	N N S S W E W E
Sec 02 T 36S R 9W SLBM	*X:X:X:X**	: : : **	:X: :X**	: :X: *
Sec 03 T 36S R 9W SLBM	* : : : **	: : :X**	: : : **	:X:X:X*
Sec 10 T 36S R 9W SLBM	* : : : **	:X: :X**	: : : **	: : : *
Sec 11 T 36S R 9W SLBM	*X:X: : **	: : : **	: : : **	: : : *

NATURE OF USE ------>

IRR = values are in acres.
STK = values are in ELUs meaning Cattle or Equivalent.
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).

FLOW: 31.0 acre-feet
SOURCE: Eight Springs
COUNTY: Iron COM DESC: Brianhead

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

Point Surface:
(1) N 430 ft E 438 ft from SW cor, Sec 01, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Decker Spring
(2) S 1140 ft W 1332 ft from E4 cor, Sec 01, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Salt Pile Spring
(3) N 306 ft E 867 ft from S4 cor, Sec 03, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Quaking Aspen Spring
(4) S 266 ft 0 ft from N4 cor, Sec 10, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Rock Spring
(5) S 160 ft E 1440 ft from N4 cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Brian Head Seeps Spring
(6) N 824 ft W 2173 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mammoth Hills Spring #1
(7) N 797 ft W 1786 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mammoth Hills Spring #3
(8) N 664 ft W 2030 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mommoth Hills Springs #2

Stream Alt?: No

CHANGED as follows:

	--NW¼--	--NE¼--	--SW¼--	--SE¼--
	N N S S W E W E	N N S S W E W E	N N S S W E W E	N N S S W E W E
Sec 27 T 35S R 9W SLBM	* : : : **	: : : **	: : : **	: : :X*
Sec 34 T 35S R 9W SLBM	* : : : **	X:X:X:X**	: : : **	X:X:X:X*
Sec 35 T 35S R 9W SLBM	* : : : **	: : : **	: :X: **	: : : *
Sec 02 T 36S R 9W SLBM	*X:X:X:X**	: : : **	X:X:X:X**	: : : *
Sec 03 T 36S R 9W SLBM	* : : : **	X:X:X:X**	: : : **	X:X:X:X*
Sec 10 T 36S R 9W SLBM	* : : : **	X:X: :X**	: : : **	: : : *
Sec 11 T 36S R 9W SLBM	*X:X:X:X**	: : : **	X:X:X:X**	: : : *

CHANGED as follows:

SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
STK: 15.0000 USED 01/01 - 12/31	
	MUN: Brian Head USED 01/01 - 12/31

**********END OF DATA**********

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Water Right Details for 75-1514

Utah Division of Water Rights 2/11/2021 4:33 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-1514 Application/Claim: Certificate:

Changes:

a5618	(Filed: 09/07/1968)	Water User's Claim
a12265	(Filed: 04/28/1982)	Water User's Claim

Owners:

Name: Brian Head Municipal Corporation (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brianhead UT 84719 Interest: 0%
Remarks: (Municipal User & Lessee)

Name: Parowan Reservoir (Public Water Supplier)
Address: c/o Donna Mitchell
PO Box 541
Parowan UT 84761 Interest: 100%
Remarks:

General:

Type of Right: Decree Source of Info.: Water User's Claim Status:
Quantity of Water: 31 ACFT

Source: Natural springs (8)
County: Iron
Common Description: Near Brian Head Town
Proposed Det. Book: 75- Map: 42-43 Pub. Date:

Land Owned by Appl.: No County Tax Id#:

Distribution System:

Dates:

Filing:
Filed:
Priority: / /1860 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 11/07/1991 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required: No

(1) S 1140 ft. W 1332 ft. from E4 corner, Sec 01 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Salt Pile Spring
Elevation: — UTM: 339564.75, 4173591.31 (NAD83)

(2) N 430 ft. E 438 ft. from SW corner, Sec 01 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Decker Spring
Elevation: — UTM: 338477.072, 4173294.8 (NAD83)

(3) N 306 ft. E 867 ft. from S4 corner, Sec 03 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Quaking Aspen Spring
Elevation: — UTM: 336199.45, 4173304.103 (NAD83)

(4) S 266 ft. E 0 ft. from N4 corner, Sec 10 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Rock Spring
Elevation: — UTM: 335935.188, 4173129.757

(5) N 824 ft. W 2173 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #1
Elevation: — UTM: 337651.541, 4171810.764

(6) N 664 ft. W 2030 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #2
Elevation: — UTM: 337695.127, 4171761.996

(7) N 797 ft. W 1786 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #3
Elevation: — UTM: 337769.498, 4171802.535

(8) S 160 ft. E 1440 ft. from N4 corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Brian Head Seeps Spring
Elevation: — UTM: 337977.807, 4173129.352

Proposed Water Uses:

Proposed Water Uses - Group Number: 622714

Water Rights Appurtenant to the following use(s):
75-1514(DEC), 75-1515(DEC),

Water Use Types:

Municipal: Brian Head — Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: 31

Use Totals:

Municipal sole-supply total: 31 acft

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a6655** WATER RIGHT: 75-1515 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1515
RIGHT EVIDENCED BY: 75-1515 (Portion 75-974, Greenwood Decree,
2 Feb. 1914)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Parowan Reservoir & Irrigation Co.
ADDR: c/o Harold S. Mitchell
41 South 100 East
Parowan UT 84761
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 09/07/1971|PRIORITY: 09/07/1971|ADV BEGAN: |ADV ENDED: |NEWSPAPER:
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:01/14/1972|PROOF DUE: 12/31/1976
EXTENSION: |ELEC/PROOF:[Election]|ELEC/PROOF:01/05/1977|CERT/WUC: 11/07/1991|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**
Status: Water User's Claim

********************H E R E T O F O R E********************

FLOW: 300.0 acre-feet
SOURCE: Parowan Main Creek (Center Creek)
COUNTY: Iron

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Surface:
(1) N 1480 ft W 930 ft from SE cor, Sec 36, T 34S, R 9W, SLBM
Dvrting Wks: Pipeline & ditches
Source: Parowan Main Creek

PLACE OF USE ------>

	--NW¼--	--NE¼--	--SW¼--	--SE¼--
	N N S S W E E W	N N S S W E E W	N N S S W E E W	N N S S W E E W
Sec 02 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	X X X X X X X X
Sec 09 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	X X X X X X X X
Sec 10 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	X X X X X X X X
Sec 11 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	X X X X X X X X
Sec 14 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 15 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 16 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 17 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 20 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 21 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 22 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	
Sec 23 T 34S R 9W SLBM	X X X X X X X X	X X X X X X X X	X X X X X X X X	

NATURE OF USE ------>

IRR = values are in acres.
STK = values are in ELUs meaning Cattle or Equivalent.
DOM = values are in EDUs meaning Equivalent Domestic Units
(or Families).

SUPPLEMENTAL to Other Water Rights: Yes

IRR: 3765.9500 USED 04/01 - 10/31
STK: 3310.0000 USED 01/01 - 12/31

********************H E R E A F T E R********************

FLOW: 300.0 acre-feet
SOURCE: Developed springs (8)
COUNTY: Iron COM DESC: Near Brian Head Town

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

Point Surface:
(1) N 1930 ft W 395 ft from S4 cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks: Developed springs & pipeline
Source: Mammoth Hill Springs

Stream Alt?: No

CHANGED as follows:

	--NW¼--	--NE¼--	--SW¼--	--SE¼--
	N N S S W E E W	N N S S W E E W	N N S S W E E W	N N S S W E E W
Sec 02 T 36S R 9W SLBM	X X X X ** : : : **	:X: :X** : :X: *		
Sec 03 T 36S R 9W SLBM	* : : : ** : : :X**	: : : ** :X:X:X*		
Sec 10 T 36S R 9W SLBM	* : : : ** :X: :X**	: : : ** : : : *		
Sec 11 T 36S R 9W SLBM	*X:X: : ** : : : **	: : : ** : : : *		

CHANGED as follows:

SUPPLEMENTAL to Other Water Rights: Yes

OTH: COMMERCIAL: Summer homes, USED 01/01 - 12/31
recreation community, sanitation purposes as ski lodge

E N D O F D A T A********************************

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Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a12266** WATER RIGHT: 75-1515 CERT. NO.: AMENDATORY? Yes COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1515
RIGHT EVIDENCED BY: 75-1515 (a6655), (Portion 75-974)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Parowan Reservoir and Irrigation Company
ADDR: c/o Harold S. Mitchell
Parowan UT 84761
REMARKS:

DATES, ETC.

FILED: 04/28/1982|PRIORITY: 04/28/1982|ADV BEGAN: |ADV ENDED: |NEWSPAPER:
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: [ ]|ActionDate:08/30/1982|PROOF DUE: 12/31/1988
EXTENSION: |ELEC/PROOF:[Election]|ELEC/PROOF:12/20/1988|CERT/WUC: 11/07/1991|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**
Status: Water User's Claim

**********************H E R E T O F O R E********************** | **********************H E R E A F T E R**********************

FLOW: 300.0 acre-feet
SOURCE: Mammoth Hills Springs
COUNTY: Iron

FLOW: 300.0 acre-feet
SOURCE: Eight Springs
COUNTY: Iron COM DESC: Near Brian Head Town

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Surface:
(1) N 1930 ft W 395 ft from S4 cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source:

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

Point Surface:
(1) N 430 ft E 438 ft from SW cor, Sec 01, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Decker Spring
(2) N 306 ft E 867 ft from S4 cor, Sec 03, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Quaking Aspen Spring
(3) S 1140 ft W 1332 ft from E4 cor, Sec 03, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Salt Pile Spring
(4) S 266 ft 0 ft from N4 cor, Sec 10, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Rock Spring
(5) S 160 ft E 1440 ft from N4 cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Brian Head Seeps Spring
(6) N 824 ft W 2173 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mammoth Hills Spring #1
(7) N 664 ft W 2030 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mammoth Hills Spring #2
(8) N 797 ft W 1786 ft from SE cor, Sec 11, T 36S, R 9W, SLBM
Dvrting Wks:
Source: Mammoth Hills Spring #3

Stream Alt?: No

PLACE OF USE ------>

	--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S||N N S S||N N S S||N N S S
	W E W E||W E W E||W E W E||W E W E
Sec 02 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 03 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 10 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 11 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*

CHANGED as follows:

	--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S||N N S S||N N S S||N N S S
	W E W E||W E W E||W E W E||W E W E
Sec 27 T 35S R 9W SLBM	* : : : ** : : : ** : : : ** : : :X*
Sec 34 T 35S R 9W SLBM	* : : : **X:X:X:X** : : : **X:X:X:X*
Sec 35 T 35S R 9W SLBM	* : : : ** : : : ** : :X: ** : : : *
Sec 02 T 36S R 9W SLBM	*X:X:X:X** : : : **X:X:X:X** : : : *
Sec 03 T 36S R 9W SLBM	* : : : **X:X:X:X** : : : **X:X:X:X*
Sec 10 T 36S R 9W SLBM	* : : : **X:X: :X** : : : ** : : : *
Sec 11 T 36S R 9W SLBM	*X:X:X:X** : : : **X:X:X:X** : : : *

NATURE OF USE ------>

IRR = values are in acres.
STK = values are in ELUs meaning Cattle or Equivalent.
DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).

CHANGED as follows:

SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
STK: 25.0000 USED 01/01 - 12/31	
	MUN: Brian Head USED 01/01 - 12/31
OTH: RECREATION: Summer homes & development of Brian Head Recreation community and sanitati USED 01/01 - 12/31	

**********END OF DATA**********

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Water Right Details for 75-1515

Utah Division of Water Rights 2/11/2021 4:37 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-1515 Application/Claim: Certificate:

Changes:

a6655	(Filed: 09/07/1971)	Water User's Claim
a12266	(Filed: 04/28/1982)	Water User's Claim

Owners:

Name: Brian Head Municipal Corporation (Public Water Supplier)
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest: 0%
Remarks: (Municipal User & Lessee)

Name: Parowan Reservoir & Irrigation Co. (Public Water Supplier)
Address: c/o Harold S. Mitchell
41 South 100 East
Parowan UT 84761 Interest: 100%
Remarks: (Owner & Lessor)

General:

Type of Right: Decree Source of Info.: Water User's Claim Status:
Quantity of Water: 300 ACFT

Source: Natural springs (8)
County: Iron
Common Description: Near Brian Head Town
Proposed Det. Book: 75- Map: 42-43 Pub. Date:

Land Owned by Appl.: No County Tax Id#:

Distribution System:

Dates:

Filing:
Filed:
Priority: / /1860 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 11/07/1991 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required: No

(1) S 1140 ft. W 1332 ft. from E4 corner, Sec 01 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Salt Pile Spring
Elevation: — UTM: 339564.75, 4173591.31 (NAD83)

(2) N 430 ft. E 438 ft. from SW corner, Sec 01 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Decker Spring
Elevation: — UTM: 338477.072, 4173294.8 (NAD83)

(3) N 306 ft. E 867 ft. from S4 corner, Sec 03 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Quaking Aspen Spring
Elevation: — UTM: 336199.45, 4173304.103 (NAD83)

(4) S 266 ft. E 0 ft. from N4 corner, Sec 10 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Rock Spring
Elevation: — UTM: 335935.188, 4173129.757

(5) S 160 ft. E 1440 ft. from N4 corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Brian Head Seeps Spring
Elevation: — UTM: 337977.807, 4173129.352

(6) N 824 ft. W 2173 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #1
Elevation: — UTM: 337651.541, 4171810.764

(7) N 664 ft. W 2030 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #2
Elevation: — UTM: 337695.127, 4171761.996

(8) N 797 ft. W 1786 ft. from SE corner, Sec 11 T 36S R 9W SLBM
Diverting Works: Developed spring — Source: Mammoth Hills Spring #3
Elevation: — UTM: 337769.498, 4171802.535

Proposed Water Uses:

Proposed Water Uses - Group Number: 622714

Water Rights Appurtenant to the following use(s):
75-1514(DEC), 75-1515(DEC),

Water Use Types:

Municipal: Brian Head — Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: 300

Use Totals:

Municipal sole-supply total: 300 acft

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a16693** WATER RIGHT: 75-1693 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1693
RIGHT EVIDENCED BY: WUC 75-1693 (portion of 75-974, Greenwood Decree)
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Parowan Reservoir Company
ADDR: c/o Harold S. Mitchell
41 South 100 East
Parowan UT 84761
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 04/20/1992|PRIORITY: 04/20/1992|ADV BEGAN: 04/30/1992|ADV ENDED: |NEWSPAPER: The Spectrum
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd:06/13/1992|PROTESTED: [Hear Hel]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:01/08/1993|PROOF DUE: 12/31/1996
EXTENSION: |ELEC/PROOF:[Proof]|ELEC/PROOF:12/24/1996|CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**

Status: **Amended by Subsequent Change**

H E R E T O F O R E

FLOW: 0.24 cfs OR 150.0 acre-feet

SOURCE: Parowan Main Creek

COUNTY: Iron

H E R E A F T E R

FLOW: 150.0 acre-feet

SOURCE: Underground Water Wells (5)
Well location No. 5 is an existing well.

COUNTY: Iron COM DESC: Brian Head Area

This amount of water is being
transferred out of the Parowan Reservoir Company
system on behalf of Brian Head Town,
who have a 28 year lease.

Out of the 150.0 acre feet proposed to
be diverted, only 22.50 acre feet will
be consumed. 127.50 acre feet will be
returned through snowmelt and runoff.
The consumptive water usage due to the
proposed artificial snowmaking system,
including the storage reservoir has
been calculated as follows:
1. Evaporation and sublimation during
snowmaking
2.4% x 150 acre
feet = 3.60 acre feet
2. Evaporation and sublimation from
artificial snow pack
In Fall 2.1% x 150 acre
feet = 3.15 acre feet
In Spring 5.3% x 150 acre
feet = 7.95 acre feet
3. Evaporation from storage reservoir
= 7.80 acre feet

Total
22.50 acre feet

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Surface:
(1) S 495 ft E 300 ft from NW cor, Sec 24, T 34S, R 9W, SLBM
Dvrting Wks: (For flow too high for pipe)
Source: Parowan Main Creek
(2) N 1480 ft W 930 ft from SE cor, Sec 36, T 34S, R 9W, SLBM
Dvrting Wks: Dam, reservoir & pipeline
Source: Parowan Main Creek

Point Underground:

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 2240 ft W 1990 ft from SE cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#:
(2) N 3780 ft W 3650 ft from SE cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#:
(3) N 950 ft E 400 ft from SW cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#:

	(4) S 2020 ft E 1450 ft from NW cor, Sec 02, T 36S, R 9W, SLBM Diameter: 16 ins. Depth: 700 to ft. WELL ID#: (5) S 675 ft E 162 ft from NW cor, Sec 11, T 36S, R 9W, SLBM Diameter: 12 ins. Depth: 700 to ft. WELL ID#: 3954

PLACE OF USE ------>	CHANGED as follows:

	--NW¼-- --NE¼-- --SW¼-- --SE¼--		--NW¼-- --NE¼-- --SW¼-- --SE¼--
	N N S S N N S S N N S S N N S S		N N S S N N S S N N S S N N S S
	W E W E W E W E W E W E W E W E		W E W E W E W E W E W E W E W E
Sec 02 T 34S R 9W SLBM	*X:X:X:X**X: :X:X**X:X:X:X**X:X:X:X*	Sec 02 T 36S R 9W SLBM	* : : : ** : : : ** : :X:X** : :X:X*
Sec 03 T 34S R 9W SLBM	* : : : ** : : : ** : : : ** :X: :X*	Sec 10 T 36S R 9W SLBM	* : : : **X:X:X:X** : : : ** : : : *
Sec 09 T 34S R 9W SLBM	* : : : ** : : : ** :X:X:X**X:X:X:X*	Sec 11 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*
Sec 10 T 34S R 9W SLBM	* : : : ** :X:X:X** : :X: **X:X:X:X*		
Sec 11 T 34S R 9W SLBM	*X:X:X:X**X:X:X: **X:X:X:X**X: :X:X*		
Sec 14 T 34S R 9W SLBM	*X:X:X:X**X:X: : **X:X:X:X** : : : *		
Sec 15 T 34S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*		
Sec 16 T 34S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*		
Sec 17 T 34S R 9W SLBM	* : : : ** : : :X** : : : ** :X: :X*		
Sec 20 T 34S R 9W SLBM	* : : : **X:X:X:X** : : : ** : : : *		
Sec 21 T 34S R 9W SLBM	*X:X: :X**X:X:X:X** :X: : **X:X: : *		
Sec 22 T 34S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X: : ** : : : *		
Sec 23 T 34S R 9W SLBM	*X:X:X:X** : : : ** : : : ** : : : *		

NATURE OF USE ------>	CHANGED as follows:
IRR = values are in acres. STK = values are in ELUs meaning Cattle or Equivalent. DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
IRR: 37.5000 USED 03/15 - 10/31	
	OTH: OTHER: Snowmaking project, including reservoir. Total annual consumptive use 22.50 AF USED 10/01 - 03/31

RESERVOIR STORAGE -->	SAME AS HERETOFORE
	Storage 10/01 to 04/30, in Regulating Reservoir with a maximum capacity of 100.000 acre-feet, located in:
	Height of Dam: 20 ft Area Inunda 10.0000 acs
	Sec 36 T 35S R 9W SLBM * : : : ** : : : **X: :X: ** : : : * (--NW¼-- --NE¼-- --SW¼-- --SE¼-- / N N S S N N S S N N S S N N S S / W E W E W E W E W E W E W E W E)
	Small Dam Permit Required?: No

PROTESTANTS

NAME: Alma Adams
ADDR: Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Dixie Farms
ADDR: Parowan UT 84761
TYPE:

NAME: Clair L. Halterman
ADDR: 40 North 100 West
Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Glen L. Halterman
ADDR: 52 North 100 West
Parowan UT 84761
TYPE:

NAME: Sam W. Halterman
ADDR: Box 456
Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Jones Waldo Holbrook and McDonough
ADDR: ATTN D William Ronnow
1 Interstate Plaza, 170 South Main
Salt Lake City UT 84107
TYPE:

NAME: Tony Orton
ADDR: 245 East 400 North
Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Parowan Valley Pumpers Association
ADDR: c/o Kendrick J. Hafen, Attorney
P. O. Box 1902
St. George UT 84771
TYPE:

NAME: Parsons Behle and Latimer
ADDR: ATTN Dallin Jensen
201 South State Street P.O. Box 11898
Salt Lake City UT 84147
TYPE:
RCVD: RCVD:

NAME: J.W. Pickett
ADDR: Box 94
Parowan UT 84761
TYPE:

NAME: Leon Robinson
ADDR: 80 North 30 West
Parowan UT 84761
TYPE:

NAME: State of Utah Division of Wildlife Resources
ADDR: c/o Timothy H. Provan (late protest)
1594 West North Temple, Ste 2110
Salt Lake City UT 84114-6301
TYPE:

RCVD: RCVD:

NAME: Alan Stubbs
ADDR: 55 South 400 West
Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Scott Stubbs
ADDR: 26 East 400 North
Parowan UT 84761
TYPE:

NAME: John Sturdevant
ADDR: Box 1027
Parowan UT 84761
TYPE:
RCVD: RCVD:

NAME: Gayle Wood
ADDR: Parowan UT 84761
TYPE:

****

**********E N D O F D A T A**********

****

Services Agencies Search Utah.gov

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 02/11/2021 Page 1

CHANGE: **a22707** WATER RIGHT: 75-1693 CERT. NO.: AMENDATORY? Yes COUNTY TAX ID#:
BASE WATER RIGHTS: 75-1693
RIGHT EVIDENCED BY: 75-1693 (a portion of 75-974, Decree)
CHANGES: Point of Diversion [X], Place of Use [ ], Nature of Use [ ], Reservoir Storage [ ], Split Season [ ].

NAME: Parowan Reservoir Company
ADDR: c/o Harold S. Mitchell
41 South 100 East
Parowan UT 84761
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 10/30/1998|PRIORITY: 10/30/1998|ADV BEGAN: 11/26/1998|ADV ENDED: 12/03/1998|NEWSPAPER: The Spectrum
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd:12/23/1998|PROTESTED: [No]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:04/16/1999|PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: 08/30/2002|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

***STATUS LINE**

Status: Certificated

H E R E T O F O R E

FLOW: 150.0 acre-feet

SOURCE: Underground Water Wells (5)
Well location No. 5 is an existing well.

COUNTY: Iron

This amount of water is being transferred out of the Parowan Reservoir Company system on behalf of Brian Head Town, who have a 28 year lease.

Out of the 150.0 acre feet proposed to be diverted, only 22.50 acre feet will be consumed. 127.50 acre feet will be returned through snowmelt and runoff. The consumptive water usage due to the proposed artificial snowmaking system, including the storage reservoir has been calculated as follows:
1. Evaporation and sublimation during snowmaking
2.4% x 150 acre
feet = 3.60 acre feet
2. Evaporation and sublimation from artificial snow pack
In Fall 2.1% x 150 acre
feet = 3.15 acre feet
In Spring 5.3% x 150 acre
feet = 7.95 acre feet
3. Evaporation from storage reservoir
= 7.80 acre feet

Total
22.50 acre feet

H E R E A F T E R

FLOW: 150.0 acre-feet

SOURCE: Underground Water Wells (2) Both Existing

COUNTY: Iron COM DESC: Brian Head Area

This Amendatory Change Application is required to correct the location of the points of diversion. This is based on the proof that was submitted on change application a16693.

This water right is used together with water from the Brian Head Municipal water rights.

POINT(S) OF DIVERSION ------> MAP VIEW****

Point Underground:
(1) N 950 ft E 400 ft from SW cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#: 000000
(2) N 3780 ft W 3650 ft from SE cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#: 000000
(3) N 2240 ft W 1990 ft from SE cor, Sec 36, T 35S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#: 000000
(4) S 2020 ft E 1450 ft from NW cor, Sec 02, T 36S, R 9W, SLBM
Diameter: 16 ins. Depth: 700 to ft. WELL ID#: 000000
(5) S 675 ft E 162 ft from NW cor, Sec 11, T 36S, R 9W, SLBM
Diameter: 12 ins. Depth: 700 to ft. WELL ID#: 3954

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 300 ft W 1100 ft from E4 cor, Sec 04, T 36S, R 9W, SLBM
Diameter: 10 ins. Depth: 355 to ft. WELL ID#: 3198
(2) S 675 ft E 162 ft from NW cor, Sec 11, T 36S, R 9W, SLBM
Diameter: 12 ins. Depth: 700 to ft. WELL ID#: 3954

PLACE OF USE ------>

SAME AS HERETOFORE

	--NW¼-- --NE¼-- --SW¼-- --SE¼--	
	N N S S N N S S N N S S N N S S	
	W E W E W E W E W E W E W E W E	
Sec 02 T 36S R 9W SLBM	* : : : ** : : : ** : :X:X** : :X:X*	
Sec 10 T 36S R 9W SLBM	* : : : **X:X:X:X** : : : ** : : : *	
Sec 11 T 36S R 9W SLBM	*X:X:X:X**X:X:X:X**X:X:X:X**X:X:X:X*	

NATURE OF USE ------>	SAME AS HERETOFORE
IRR = values are in acres. STK = values are in ELUs meaning Cattle or Equivalent. DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
OTH: OTHER: Snowmaking project, including reservoir. Total annual consumptive use 22.50 AF	USED 10/01 - 03/31

RESERVOIR STORAGE -->	SAME AS HERETOFORE
Storage 10/01 to 04/30, in Regulating Reservoir with a maximum capacity of 100.000 acre-feet, located in:	Storage 01/01 to 12/31, in Regulating Reservoir with a maximum capacity of 47.000 acre-feet, located in:
Height of Dam: 20 ft Area Inunda 10.0000 acs	Height of Dam: 13 ft Area Inunda 6.3700 acs
	Sec 11 T 36S R 9W SLBM * : : :X** : : : ** :X: : ** : : : *
	Small Dam Permit Required?: No

**********END OF DATA**********

Water Right Details for 75-1693

Utah Division of Water Rights 2/11/2021 4:12 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-1693 Application/Claim: Certificate:

Changes:

a16693	(Filed: 04/20/1992)	Amended by Subsequent Change
a22707	(Filed: 10/30/1998)	Certificated

Stock Company:

Stock Companies associated with this water right:

Parowan West Fields Irrigation, Inc. - Company (Base) Water Right

Owners:

Name: Brian Head Town and Brian Head Ski Limited
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest:
Remarks:

Name: Parowan Reservoir Company
Address: c/o Harold S. Mitchell
41 South 100 East
Parowan UT 84761 Interest: 100%
Remarks:

General:

Type of Right: Decree Source of Info.: Certificate Status: Certificated
Quantity of Water: 0.24 CFS OR 150 ACFT
Source: Underground Water Wells (2)
County: Iron
Common Description:
Proposed Det. Book: 75- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:
Distribution System:

Dates:

Filing:

Filed:

Priority: / /1860 Decree/Class:

Advertising:

Publication Began: Publication End: Newspaper:

Protest End Date: Protested: Not Protested Hearing Held:

Approval:

State Eng. Action: Action Date:

Recon. Req. Date: Recon. Req Action:

Certification:

Proof Due Date: Extension Filed Date:

Election or Proof: Election/Proof Date:

Certificate Date: 08/30/2002 Lapsed, Etc. Date: Lapsed Letter

Wells:

Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 300 ft. W 1100 ft. from E4 corner, Sec 04 T 36S R 9W SLBM

Well Diameter: 10 in. Depth: 355 to ft. Year Drilled: 1993 Well Log: Yes Well Id#: 3198

Elevation: UTM: 334810.979, 4174116.663 (NAD83)

Source/Cmnt:

(2) S 675 ft. E 162 ft. from NW corner, Sec 11 T 36S R 9W SLBM

Well Diameter: 12 in. Depth: 700 to ft. Year Drilled: 1991 Well Log: Yes Well Id#: 3954

Elevation: UTM: 336782.938, 4172993.176 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 606734

Water Use Types:

Other: Snowmaking. Total annual consumptive use 14.70 acre-feet. Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: 150

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 02 T 36S R 9W	X		X								X	X			X	X	
Sec 03 T 36S R 9W						X	X	X					X	X	X		
Sec 11 T 36S R 9W	X	X		X	X	X	X	X					X	X			
Sec 12 T 36S R 9W	X		X						X								
												Group Acreage Total :					

Use Totals:

Other sole-supply total: 150 acft

Other Comments:

75-1693 is limited to the total consumptive use of 22.5 acre-feet which includes 7.8 acre-feet for reservoir evaporation.

Reservoirs:

Small Dam Required: No

Reservoir/Storage Name: Regulating Reservoir Dam Number:

Capacity: 47 acre-feet Area Inundated: 6.37 acres

Dam Height: 13 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 11 T 36S R 9W SLBM													X			

Segregation History:

This Right was Segregated from: 75-974, with Appl.#:, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
as originally filed:	0.24		150.0	37.5						
This Right as currently calculated:	0.24		150.0	37.5						

Water Right Details for 75-2019

Utah Division of Water Rights 2/11/2021 4:43 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-2019 Application/Claim: A17090 Certificate:

Changes:

t37411	(Filed: 04/26/2011)	Lapsed
t38143	(Filed: 04/27/2012)	Lapsed
t40087	(Filed: 07/29/2014)	Lapsed
t41848	(Filed: 07/18/2016)	Lapsed
t42499	(Filed: 04/11/2017)	Lapsed
t43435	(Filed: 03/07/2018)	Lapsed
t44497	(Filed: 03/05/2019)	Lapsed

Owners:

Name: Brian Head Special Service District, Utah
Address: 56 North Highway 143
PO Box 190068
Brian Head UT 84719 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Ownership Segregation Status: Water User's Claim
Quantity of Water: 243.08 ACFT

Source: Underground Water Wells (2)
County: Iron
Common Description: 5-6 mi. west of Parowan City
Proposed Det. Book: 75- Map: 30c Pub. Date:

Land Owned by Appl.: County Tax Id#:

Distribution System: 37: PAROWAN VALLEY

Dates:

Filing:
Filed: 12/01/1945
Priority: 12/01/1945 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date: 08/23/1946
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 145 ft. W 850 ft. from S4 corner, Sec 18 T 34S R 9W SLBM

Well Diameter: 12 in. Depth: 275 to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 331430.375, 4189669.389 (NAD83)

Source/Cmnt:

(2) N 30 ft. E 1320 ft. from W4 corner, Sec 18 T 34S R 9W SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 331301.72, 4190465.914 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 606969

Water Rights Appurtenant to the following use(s):

75-53(WUC), 75-116(WUC), 75-2019(WUC), 75-2034(WUC), 75-2140(WUC), 75-2150(WUC), 75-2151(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 60.77 acres Group Total: 145.35 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 18 T 34S R 9W	X	X	X	X					X	X	X	X					
																Group Acreage Total :	

Use Totals:

Irrigation sole-supply total: 60.77 acres for a group total of: 145.35 acres

Segregation History:

This Right was Segregated from: 75-53, with Appl.#:A17090, Approval Date:08/23/1946 under which Proof is to be submitted.

as originally filed:	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
			400.0	100.0						

The following Water Rights have been Segregated from 75-2019:

(1) WrNum: 75-2034			[156.92]	[39.23]						

AppNum: A17090

Name: Brian Head Special Service District, Utah

Filed: 12/20/2012

Commen

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses: Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
			243.08	60.77						

Water Right Details for 75-2034

Utah Division of Water Rights 2/11/2021 4:44 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 75-2034 Application/Claim: A17090 Certificate:

Changes:

a38675 (Filed: 01/23/2013) Lapsed

Owners:

Name: Brian Head Special Service District, Utah
Address: 56 North Highway 143
Brian Head, UT 84719

Interest:

Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Ownership Segregation Status: Water User's Claim
Quantity of Water: 156.92 ACFT

Source: Underground Water Wells (2)
County: Iron
Common Description: 5-6 mi. west of Parowan City
Proposed Det. Book: 75- Map: 30c Pub. Date:

Land Owned by Appl.: County Tax Id#:

Distribution System: 37: PAROWAN VALLEY

Dates:

Filing:
Filed: 12/01/1945
Priority: 12/01/1945 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date: 08/23/1946
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 145 ft. W 850 ft. from S4 corner, Sec 18 T 34S R 9W SLBM

Well Diameter: 12 in. Depth: 275 to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 331430.375, 4189669.389 (NAD83)

Source/Cmnt:

(2) N 30 ft. E 1320 ft. from W4 corner, Sec 18 T 34S R 9W SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 331301.72, 4190465.914 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 606969

Water Rights Appurtenant to the following use(s):

75-53(WUC), 75-116(WUC), 75-2019(WUC), 75-2034(WUC), 75-2140(WUC), 75-2150(WUC), 75-2151(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 39.23 acres Group Total: 145.35 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 18 T 34S R 9W	X	X	X	X					X	X	X	X					
																Group Acreage Total :	

Use Totals:

Irrigation sole-supply total: 39.23 acres for a group total of: 145.35 acres

Segregation History:

This Right was Segregated from: 75-2019, with Appl.#:A17090, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
as originally filed:			156.92	39.23						
This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
			156.92	39.23						

Select Related Information

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 06/02/2021 Page 1

CHANGE: **t46905** WATER RIGHT: 75-2019 CERT. NO.: AMENDATORY? No COUNTY TAX ID#:
BASE WATER RIGHTS: 75-2019
RIGHT EVIDENCED BY: 75-2019, A17090
CHANGES: Point of Diversion [X], Place of Use [X], Nature of Use [X], Reservoir Storage [ ], Split Season [ ].

NAME: Brian Head Special Service District
ADDR: 56 North Highway 143
PO Box 190068
Brian Head UT 84719
INTEREST: 100% REMARKS:

DATES, ETC.

FILED: 03/16/2021|PRIORITY: 03/16/2021|ADV BEGAN: |ADV ENDED: |NEWSPAPER: No Adv Required
ImpairDesig[NO]|IMP NOTICE:
Water Rights which the State Engineer has Identified may Experience Quantity Impairment:

ProtestEnd: |PROTESTED: [No]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:03/23/2021|PROOF DUE:
EXTENSION: |ELEC/PROOF:[ ]|ELEC/PROOF: |CERT/WUC: |LAP, ETC: 10/31/2021|LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: [ ]

*STATUS LINE
Status: Approved
Related Distribution System: 37-PAROWAN VALLEY

H E R E T O F O R E

FLOW: 243.08 acre-feet
SOURCE: Underground Water Well
COUNTY: Iron

H E R E A F T E R

FLOW: 243.08 acre-feet
SOURCE: Underground Water Well (existing)
COUNTY: Iron COM DESC: LDS farm & David Burton Farm

75-2019 contains the use for irrigating 60.77 acres (243.08 AF) by this temporary change application. The water right under this application will be used supplementally with other water rights owned by the LDS Church, David M. Burton, Carl T. Evans and Roberts Legacy farms. This application is being filed for the 2021 irrigation season.

See temporary change application t44497 for map.

POINT(S) OF DIVERSION ------> MAP VIEW**

Point Underground:
(1) N 145 ft W 850 ft from S4 cor, Sec 18, T 34S, R 9W, SLBM
Diameter: 12 ins. Depth: 275 to ft. WELL ID#: 000000
(2) N 30 ft E 1320 ft from W4 cor, Sec 18, T 34S, R 9W, SLBM
Diameter: ins. Depth: to ft. WELL ID#: 000000

CHANGED AS FOLLOWS: (Click Location link for WRPLAT)

UNDERGROUND: (Click Link for PLAT data, Well ID# link for data.)
(1) N 140 ft E 1350 ft from W4 cor, Sec 22, T 33S, R 8W, SLBM
Diameter: 14 ins. Depth: 511 to ft. WELL ID#:
(2) S 15 ft E 1296 ft from NW cor, Sec 22, T 33S, R 8W, SLBM
Diameter: 16 ins. Depth: 500 to ft. WELL ID#:
(3) S 1289 ft E 20 ft from NW cor, Sec 22, T 33S, R 8W, SLBM
Diameter: 16 ins. Depth: 630 to ft. WELL ID#:
(4) N 100 ft E 1320 ft from W4 cor, Sec 31, T 33S, R 8W, SLBM
Diameter: 16 ins. Depth: to ft. WELL ID#:
(5) N 75 ft E 300 ft from SW cor, Sec 31, T 33S, R 8W, SLBM
Diameter: 16 ins. Depth: to ft. WELL ID#:
(6) N 80 ft E 340 ft from SW cor, Sec 31, T 33S, R 8W, SLBM
Diameter: 12 ins. Depth: 450 to ft. WELL ID#:
(7) N 2400 ft E 1310 ft from SW cor, Sec 31, T 33S, R 8W, SLBM
Diameter: 16 ins. Depth: 550 to ft. WELL ID#:
(8) S 55 ft W 950 ft from N4 cor, Sec 32, T 33S, R 8W, SLBM
Diameter: 8 ins. Depth: 100 to 600 ft. WELL ID#:
COMMENT: Proposed under a44112
(9) S 5 ft W 1045 ft from NE cor, Sec 32, T 33S, R 8W, SLBM
Diameter: 8 ins. Depth: 100 to 600 ft. WELL ID#:
COMMENT: Proposed under a44112
(10) N 45 ft W 605 ft from S4 cor, Sec 03, T 34S, R 9W, SLBM
Diameter: 12 ins. Depth: 297 to ft. WELL ID#:
(11) N 140 ft W 40 ft from SE cor, Sec 04, T 34S, R 9W, SLBM
Diameter: 12 ins. Depth: 297 to ft. WELL ID#:
(12) S 1220 ft E 1320 ft from NW cor, Sec 07, T 34S, R 9W, SLBM
Diameter: 16 ins. Depth: 594 to ft. WELL ID#:
(13) N 25 ft E 1235 ft from S4 cor, Sec 07, T 34S, R 9W, SLBM
Diameter: 14 ins. Depth: 450 to ft. WELL ID#:
(14) N 55 ft E 230 ft from SW cor, Sec 07, T 34S, R 9W, SLBM
Diameter: 14 ins. Depth: 275 to ft. WELL ID#:
(15) S 2620 ft E 10 ft from N4 cor, Sec 08, T 34S, R 9W, SLBM

	Diameter: 14 ins. Depth: 600 to ft. WELL ID#:
	(16) N 2635 ft E 680 ft from S4 cor, Sec 09, T 34S, R 9W, SLBM
	Diameter: 14 ins. Depth: 600 to ft. WELL ID#:
	(17) N 860 ft E 1210 ft from W4 cor, Sec 09, T 34S, R 9W, SLBM
	Diameter: 14 ins. Depth: 600 to ft. WELL ID#:
	(18) N 1410 ft E 795 ft from SW cor, Sec 13, T 34S, R 10W, SLBM
	Diameter: ins. Depth: to ft. WELL ID#:
	(19) S 1270 ft E 45 ft from N4 cor, Sec 24, T 34S, R 10W, SLBM
	Diameter: 8 ins. Depth: 104 to ft. WELL ID#:
	(20) S 1280 ft W 1270 ft from NE cor, Sec 24, T 34S, R 10W, SLBM
	Diameter: 18 ins. Depth: 300 to ft. WELL ID#:
	(21) S 200 ft E 1695 ft from W4 cor, Sec 24, T 34S, R 10W, SLBM
	Diameter: 12 ins. Depth: 240 to ft. WELL ID#:
	(22) S 1190 ft E 1260 ft from NW cor, Sec 24, T 34S, R 10W, SLBM
	Diameter: 16 ins. Depth: 610 to ft. WELL ID#:
	(23) S 1260 ft E 650 ft from W4 cor, Sec 24, T 34S, R 10W, SLBM
	Diameter: 12 ins. Depth: 203 to ft. WELL ID#:

PLACE OF USE ------>	CHANGED as follows:
--NW¼-- --NE¼-- --SW¼-- --SE¼--	--NW¼-- --NE¼-- --SW¼-- --SE¼--
N N S S||N N S S||N N S S||N N S S	N N S S||N N S S||N N S S||N N S S
W E W E||W E W E||W E W E||W E W E	W E W E||W E W E||W E W E||W E W E
Sec 18 T 34S R 9W SLBM *X:X:X:X** : : : **X:X:X:X** : : : *	Sec 15 T 33S R 8W SLBM * : : : ** : : : **X:X:X:X**X: :X: *
	Sec 22 T 33S R 8W SLBM *X:X:X:X**X: :X: **X:X: : ** : : : *
	Sec 31 T 33S R 8W SLBM * :X: :X** : : : ** :X: :X** : : : *
	Sec 31 T 33S R 8W SLBM *LOT 1
	Sec 31 T 33S R 8W SLBM *LOT 2
	Sec 31 T 33S R 8W SLBM *LOT 3
	Sec 31 T 33S R 8W SLBM *LOT 4
	Sec 32 T 33S R 8W SLBM *X:X:X:X**X:X:X:X** : : : ** : : : *
	Sec 03 T 34S R 9W SLBM * : : : ** : : : **X:X:X:X** : : : *
	Sec 04 T 34S R 9W SLBM * : : : ** : : : ** : : : ** :X:X:X*
	Sec 06 T 34S R 9W SLBM * : : : ** : : : ** :X: :X** : : : *
	Sec 06 T 34S R 9W SLBM *LOT 7
	Sec 07 T 34S R 9W SLBM * :X: :X** : :X:X** :X: :X**X:X:X:X*
	Sec 07 T 34S R 9W SLBM *LOT 2
	Sec 07 T 34S R 9W SLBM *LOT 3
	Sec 08 T 34S R 9W SLBM * : :X:X** : :X:X**X:X: : **X:X: : *
	Sec 09 T 34S R 9W SLBM * : :X:X**X:X:X: **X:X:X: **X: : : *
	Sec 12 T 34S R 10W SLBM * : : : ** : : : **X: :X:X** : :X: *
	Sec 13 T 34S R 10W SLBM *X:X:X: ** : : : **X: :X:X** : :X:X*
	Sec 14 T 34S R 10W SLBM * : : : ** : : :X** : : : **X:X: : *
	Sec 24 T 34S R 10W SLBM *X:X:X:X**X:X: : **X:X:X: ** : : : *
	Sec 25 T 34S R 10W SLBM *X: : : ** : : : ** : : : ** : : : *

NATURE OF USE ------>	CHANGED as follows:
IRR = values are in acres. STK = values are in ELUs meaning Cattle or Equivalent. DOM = values are in EDUs meaning Equivalent Domestic Units (or Families).	
SUPPLEMENTAL to Other Water Rights: No	SUPPLEMENTAL to Other Water Rights: No
Historical Uses to be Discontinued during the Implementation of this Application:	
IRR: 60.7700 USED 04/01 - 10/31	IRR: 60.7700 and 60.7700 Group Total USED 04/01 - 10/31

**********END OF DATA**********

Appendix E. Model Reports

A. SewerGEMS Reports

B. FlowMaster Reports

FlexTable: Conduit Table (501-38 SewerGEMS Sanitary - Canyon Analysis.swc)

Current Time: 0.000 hours

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Material	Diameter (in)	Length (ft)	Slope (ft/ft)	Capacity (Full Flow) (gpm)	Capacity (Design) (gpm)
SEWER Pipe - (150)	MH77	7,164.30	MH76	7,156.38	PVC	8.0	404.0	0.020	759.36	692.44
SEWER Pipe - (103) (1)	123	8,259.72	MH122	8,251.40	PVC	8.0	405.0	0.021	777.34	708.84
SEWER Pipe - (167)	60	6,848.55	59	6,838.97	PVC	8.0	401.0	0.024	838.27	764.40
SEWER Pipe - (106)	118	8,133.44	117	8,124.38	PVC	8.0	334.0	0.027	893.23	814.52
SEWER Pipe - (170)	57	6,800.82	56	6,788.63	PVC	8.0	397.0	0.031	950.34	866.60
SEWER Pipe - (113)	112A	8,000.98	112	7,995.86	PVC	8.0	163.0	0.031	961.20	876.50
SEWER Pipe - (163)	64	6,907.93	63	6,898.93	PVC	8.0	283.0	0.032	967.17	881.94
SEWER Pipe - (164)	63	6,898.93	62	6,884.57	PVC	8.0	401.0	0.036	1,026.31	935.87
SEWER Pipe - (176)	51	6,703.81	OF-2	6,689.36	PVC	8.0	400.0	0.036	1,030.81	939.97
SEWER Pipe - (160)	67	6,959.00	66	6,948.57	PVC	8.0	285.0	0.037	1,037.51	946.09
SEWER Pipe - (80)	150A	9,112.10	150	9,109.46	PVC	8.0	71.0	0.037	1,045.80	953.64
SEWER Pipe - (174)	MH53	6,736.27	52	6,721.23	PVC	8.0	401.0	0.038	1,050.33	957.77
SEWER Pipe - (168)	59	6,838.97	58	6,824.11	PVC	8.0	395.0	0.038	1,051.93	959.23
SEWER Pipe - (146)	81	7,253.03	80	7,237.85	PVC	8.0	400.0	0.038	1,056.53	963.42
SEWER Pipe - (149)	78	7,179.78	MH77	7,164.30	PVC	8.0	400.0	0.039	1,066.92	972.90
SEWER Pipe - (171)	56	6,788.63	55	6,772.86	PVC	8.0	402.0	0.039	1,074.18	979.52
SEWER Pipe - (109)	115	8,055.47	MH115	8,054.12	PVC	8.0	34.0	0.040	1,080.69	985.46
SEWER Pipe - (166)	61	6,864.97	60	6,848.55	PVC	8.0	403.0	0.041	1,094.73	998.26
SEWER Pipe - (173)	54	6,752.39	MH53	6,736.27	PVC	8.0	394.0	0.041	1,097.01	1,000.34
SEWER Pipe - (99)	129	8,348.11	127	8,330.45	PVC	8.0	431.0	0.041	1,097.82	1,001.08
SEWER Pipe - (114)	112	7,995.86	111-A	7,988.65	PVC	8.0	171.0	0.042	1,113.64	1,015.50
SEWER Pipe - (151)	MH76	7,156.38	MH75	7,146.15	PVC	8.0	242.0	0.042	1,115.08	1,016.81
SEWER Pipe - (156)	MH71	7,047.39	MH70	7,030.60	PVC	8.0	397.0	0.042	1,115.33	1,017.05
SEWER Pipe - (155)	MH72	7,065.65	MH71	7,047.39	PVC	8.0	426.0	0.043	1,122.85	1,023.90
SEWER Pipe - (175)	52	6,721.23	51	6,703.81	PVC	8.0	399.0	0.044	1,133.21	1,033.35
SEWER Pipe - (54)	151	9,117.27	150A	9,112.10	PVC	8.0	117.0	0.044	1,140.06	1,039.59
SEWER Pipe - (98)	130	8,366.37	129	8,348.11	PVC	8.0	403.0	0.045	1,154.44	1,052.71
SEWER Pipe - (100)	127	8,330.45	126	8,314.97	PVC	8.0	339.0	0.046	1,158.94	1,056.81
SEWER Pipe - (129)	89	7,445.33	88	7,429.75	PVC	8.0	334.0	0.047	1,171.35	1,068.12
SEWER Pipe - (157)	MH70	7,030.60	MH69	7,011.10	PVC	8.0	400.0	0.049	1,197.46	1,091.94

FlexTable: Conduit Table (501-38 SewerGEMS Sanitary - Canyon Analysis.swc)

Current Time: 0.000 hours

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Material	Diameter (in)	Length (ft)	Slope (ft/ft)	Capacity (Full Flow) (gpm)	Capacity (Design) (gpm)
SEWER Pipe - (112)	113	8,016.64	112A	8,000.98	PVC	8.0	321.0	0.049	1,197.89	1,092.33
SEWER Pipe - (162)	65	6,925.92	64	6,907.93	PVC	8.0	367.0	0.049	1,200.76	1,094.95
SEWER Pipe - (165)	62	6,884.57	61	6,864.97	PVC	8.0	399.0	0.049	1,202.03	1,096.11
SEWER Pipe - (110) (1)	114	8,036.44	113	8,016.64	PVC	8.0	397.0	0.050	1,211.19	1,104.46
SEWER Pipe - (161)	66	6,948.57	65	6,925.92	PVC	8.0	454.0	0.050	1,211.38	1,104.63
SEWER Pipe - (172)	55	6,772.86	54	6,752.39	PVC	8.0	405.0	0.051	1,219.29	1,111.84
SEWER Pipe - (128)	90	7,461.31	89	7,445.33	PVC	8.0	311.0	0.051	1,229.37	1,121.04
SEWER Pipe - (105)	119	8,156.78	118	8,133.44	PVC	8.0	434.0	0.054	1,257.71	1,146.88
SEWER Pipe - (110)	MH115	8,054.12	114	8,036.44	PVC	8.0	324.0	0.055	1,266.90	1,155.26
SEWER Pipe - (115) (1)	110	7,964.91	109 A	7,954.95	PVC	8.0	181.0	0.055	1,272.23	1,160.12
SEWER Pipe - (114) (1)	111-A	7,988.65	111	7,982.82	PVC	8.0	103.0	0.057	1,290.30	1,176.59
SEWER Pipe - (169)	58	6,824.11	57	6,800.82	PVC	8.0	398.0	0.059	1,311.95	1,196.34
SEWER Pipe - (130) (1)	84	7,330.12	83	7,306.42	PVC	8.0	402.0	0.059	1,316.85	1,200.80
SEWER Pipe - (101)	126	8,314.97	125	8,303.58	PVC	8.0	193.0	0.059	1,317.52	1,201.42
SEWER Pipe - (115)	111	7,982.82	110	7,964.91	PVC	8.0	297.0	0.060	1,331.82	1,214.45
SEWER Pipe - (130)	85	7,354.77	84	7,330.12	PVC	8.0	399.0	0.062	1,348.02	1,229.23
SEWER Pipe - (147)	80	7,237.85	79	7,210.78	PVC	8.0	436.0	0.062	1,351.37	1,232.29
SEWER Pipe - (129) (1)	88	7,429.75	87	7,413.63	PVC	8.0	258.0	0.062	1,355.65	1,236.19
SEWER Pipe - (158)	MH69	7,011.10	68	6,986.03	PVC	8.0	398.0	0.063	1,361.16	1,241.21
SEWER Pipe - (131)	83	7,306.42	82	7,280.85	PVC	8.0	396.0	0.065	1,378.14	1,256.69
SEWER Pipe - (116) (1)	108	7,918.05	107	7,905.27	PVC	8.0	197.0	0.065	1,381.36	1,259.63
SEWER Pipe - (115) (1) (1)	109 A	7,954.95	109	7,944.06	PVC	8.0	165.0	0.066	1,393.31	1,270.52
SEWER Pipe - (159)	68	6,986.03	67	6,959.00	PVC	8.0	400.0	0.068	1,409.83	1,285.60
SEWER Pipe - (102)	125	8,303.58	124	8,282.33	PVC	8.0	308.0	0.069	1,424.55	1,299.02
SEWER Pipe - (126)	93	7,512.08	92	7,498.45	PVC	8.0	196.0	0.070	1,430.19	1,304.16
SEWER Pipe - (132)	82	7,280.85	81	7,253.03	PVC	8.0	400.0	0.070	1,430.29	1,304.25
SEWER Pipe - (103)	124	8,282.33	123	8,259.72	PVC	8.0	324.0	0.070	1,432.69	1,306.44
SEWER Pipe - (117)	107	7,905.27	106	7,872.61	PVC	8.0	457.0	0.071	1,449.86	1,322.09
SEWER Pipe - (127)	91	7,467.17	90	7,461.31	PVC	8.0	81.0	0.072	1,458.75	1,330.20

FlexTable: Conduit Table (501-38 SewerGEMS Sanitary - Canyon Analysis.swc)

Current Time: 0.000 hours

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Material	Diameter (in)	Length (ft)	Slope (ft/ft)	Capacity (Full Flow) (gpm)	Capacity (Design) (gpm)
SEWER Pipe - (108)	116	8,084.39	115	8,055.47	PVC	8.0	393.0	0.074	1,471.22	1,341.57
SEWER Pipe - (122) (1)	100	7,667.63	99	7,642.48	PVC	8.0	339.0	0.074	1,477.22	1,347.04
SEWER Pipe - (123)	99	7,642.48	98	7,630.82	PVC	8.0	154.0	0.076	1,492.33	1,360.82
SEWER Pipe - (153)	MH74	7,126.14	MH73	7,095.83	PVC	8.0	398.0	0.076	1,496.67	1,364.78
SEWER Pipe - (125) (1)	96	7,575.41	95	7,559.03	PVC	8.0	213.0	0.077	1,503.98	1,371.44
SEWER Pipe - (118)	106	7,872.61	105	7,853.84	PVC	8.0	243.0	0.077	1,507.31	1,374.49
SEWER Pipe - (96)	132	8,435.29	131	8,399.70	PVC	8.0	458.0	0.078	1,511.84	1,378.61
SEWER Pipe - (148)	79	7,210.78	78	7,179.78	PVC	8.0	398.0	0.078	1,513.61	1,380.23
SEWER Pipe - (126) (1)	92	7,498.45	91	7,467.17	PVC	8.0	398.0	0.079	1,520.43	1,386.45
SEWER Pipe - (152)	MH75	7,146.15	MH74	7,126.14	PVC	8.0	254.0	0.079	1,522.23	1,388.09
SEWER Pipe - (124)	98	7,630.82	97	7,609.16	PVC	8.0	274.0	0.079	1,524.86	1,390.48
SEWER Pipe - (116)	109	7,944.06	108	7,918.05	PVC	8.0	320.0	0.081	1,546.21	1,409.96
SEWER Pipe - (154)	MH73	7,095.83	MH72	7,065.65	PVC	8.0	370.0	0.082	1,548.94	1,412.44
SEWER Pipe - (104) (1)	120	8,189.26	119	8,156.78	PVC	8.0	398.0	0.082	1,549.32	1,412.79
SEWER Pipe - (122)	101	7,690.38	100	7,667.63	PVC	8.0	278.0	0.082	1,551.47	1,414.75
SEWER Pipe - (125) (1) (1)	95	7,559.03	94	7,538.36	PVC	8.0	249.0	0.083	1,562.59	1,424.89
SEWER Pipe - (125) (1) (1) (1)	94	7,538.36	93	7,512.08	PVC	8.0	316.0	0.083	1,564.03	1,426.20
SEWER Pipe - (125)	97	7,609.16	96	7,575.41	PVC	8.0	402.0	0.084	1,571.44	1,432.96
SEWER Pipe - (97)	131	8,399.70	130	8,366.37	PVC	8.0	396.0	0.084	1,573.42	1,434.77
SEWER Pipe - (129) (1) (1)	87	7,413.63	86	7,379.28	PVC	8.0	405.0	0.085	1,579.47	1,440.28
SEWER Pipe - (118) (1)	105	7,853.84	104	7,821.33	PVC	8.0	382.0	0.085	1,582.16	1,442.74
SEWER Pipe - (121)	102	7,728.60	101	7,690.38	PVC	8.0	446.0	0.086	1,587.64	1,447.74
SEWER Pipe - (94)	134	8,485.05	133	8,449.13	PVC	8.0	400.0	0.090	1,625.22	1,482.00
SEWER Pipe - (129) (1) (1) (1)	86	7,379.28	85	7,354.77	PVC	8.0	268.0	0.091	1,640.13	1,495.60
SEWER Pipe - (89)	139	8,634.78	138	8,615.27	PVC	8.0	213.0	0.092	1,641.40	1,496.75
SEWER Pipe - (93)	135	8,521.61	134	8,485.05	PVC	8.0	397.0	0.092	1,645.82	1,500.79
SEWER Pipe - (107)	117	8,124.38	116	8,084.39	PVC	8.0	434.0	0.092	1,646.29	1,501.21

FlexTable: Conduit Table (501-38 SewerGEMS Sanitary - Canyon Analysis.swc)

Current Time: 0.000 hours

Label	Start Node	Invert (Start) (ft)	Stop Node	Invert (Stop) (ft)	Material	Diameter (in)	Length (ft)	Slope (ft/ft)	Capacity (Full Flow) (gpm)	Capacity (Design) (gpm)
SEWER Pipe - (104)	121	8,217.23	120	8,189.26	PVC	8.0	302.0	0.093	1,650.51	1,505.06
SEWER Pipe - (120)	103	7,784.78	102	7,728.60	PVC	8.0	590.0	0.095	1,673.55	1,526.08
SEWER Pipe - (119)	104	7,821.33	103	7,784.78	PVC	8.0	370.0	0.099	1,704.58	1,554.37
SEWER Pipe - (92)	136	8,561.73	135	8,521.61	PVC	8.0	404.0	0.099	1,709.09	1,558.48
SEWER Pipe - (95)	133	8,449.13	132	8,435.29	PVC	8.0	139.0	0.100	1,711.34	1,560.53
SEWER Pipe - (88)	140	8,688.51	139	8,634.78	PVC	8.0	516.0	0.104	1,750.08	1,595.86
SEWER Pipe - (90)	138	8,615.27	137	8,579.83	PVC	8.0	325.0	0.109	1,790.94	1,633.11
SEWER Pipe - (81)	150	9,109.46	149	9,065.77	PVC	8.0	400.0	0.109	1,792.40	1,634.45
SEWER Pipe - (82)	149	9,065.77	148	9,036.56	PVC	8.0	264.0	0.111	1,804.01	1,645.03
SEWER Pipe - (87) (2)	142	8,775.57	141	8,723.69	PVC	8.0	455.0	0.114	1,831.34	1,669.96
SEWER Pipe - (86)	144	8,842.22	143	8,806.17	PVC	8.0	309.0	0.117	1,852.46	1,689.21
SEWER Pipe - (103) (1) (1)	MH122	8,251.40	121	8,217.23	PVC	8.0	292.0	0.117	1,855.26	1,691.77
SEWER Pipe - (85)	145	8,884.33	144	8,842.22	PVC	8.0	349.0	0.121	1,883.89	1,717.87
SEWER Pipe - (83)	148	9,036.56	146	8,936.94	PVC	8.0	824.0	0.121	1,885.75	1,719.57
SEWER Pipe - (87) (1)	141	8,723.69	140	8,688.51	PVC	8.0	287.0	0.123	1,898.81	1,731.48
SEWER Pipe - (91)	137	8,579.83	136	8,561.73	PVC	8.0	147.0	0.123	1,903.07	1,735.37
SEWER Pipe - (23)	T154	9,255.24	T153	9,220.54	PVC	8.0	273.0	0.127	1,933.56	1,763.17
SEWER Pipe - (87)	143	8,806.17	142	8,775.57	PVC	8.0	236.0	0.130	1,952.90	1,780.80
SEWER Pipe - (22)	T155	9,294.66	T154	9,255.24	PVC	8.0	295.0	0.134	1,982.54	1,807.83
SEWER Pipe - (84)	146	8,936.94	145	8,884.33	PVC	8.0	392.0	0.134	1,986.85	1,811.77
SEWER Pipe - (42)	T152	9,162.95	151	9,117.27	PVC	8.0	287.0	0.159	2,163.70	1,973.03
SEWER Pipe - (31)	T153	9,220.54	T152	9,162.95	PVC	8.0	279.0	0.206	2,464.03	2,246.89

8" Sewer @ 2.0%

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.010	
Channel Slope	0.02000	ft/ft
Normal Depth	8.00	in
Diameter	8.00	in

Results

Discharge	997.09	gpm
Flow Area	0.35	ft²
Wetted Perimeter	2.09	ft
Hydraulic Radius	2.00	in
Top Width	0.00	ft
Critical Depth	0.64	ft
Percent Full	100.0	%
Critical Slope	0.01740	ft/ft
Velocity	6.36	ft/s
Velocity Head	0.63	ft
Specific Energy	1.30	ft
Froude Number	0.00	
Maximum Discharge	2.39	ft³/s
Discharge Full	2.22	ft³/s
Slope Full	0.02000	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	in
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	in
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	8.00	in
Critical Depth	0.64	ft
Channel Slope	0.02000	ft/ft
Critical Slope	0.01740	ft/ft

10" Sewer @ 0.3%

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.010	
Channel Slope	0.00300	ft/ft
Normal Depth	10.00	in
Diameter	10.00	in

Results

Discharge	700.17	gpm
Flow Area	0.55	ft²
Wetted Perimeter	2.62	ft
Hydraulic Radius	2.50	in
Top Width	0.00	ft
Critical Depth	0.56	ft
Percent Full	100.0	%
Critical Slope	0.00477	ft/ft
Velocity	2.86	ft/s
Velocity Head	0.13	ft
Specific Energy	0.96	ft
Froude Number	0.00	
Maximum Discharge	1.68	ft³/s
Discharge Full	1.56	ft³/s
Slope Full	0.00300	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	in
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	in
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	10.00	in
Critical Depth	0.56	ft
Channel Slope	0.00300	ft/ft
Critical Slope	0.00477	ft/ft

12" Sewer @ 0.25%

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.010	
Channel Slope	0.00250	ft/ft
Normal Depth	12.00	in
Diameter	12.00	in

Results

Discharge	1039.36	gpm
Flow Area	0.79	ft²
Wetted Perimeter	3.14	ft
Hydraulic Radius	3.00	in
Top Width	0.00	ft
Critical Depth	0.65	ft
Percent Full	100.0	%
Critical Slope	0.00434	ft/ft
Velocity	2.95	ft/s
Velocity Head	0.14	ft
Specific Energy	1.14	ft
Froude Number	0.00	
Maximum Discharge	2.49	ft³/s
Discharge Full	2.32	ft³/s
Slope Full	0.00250	ft/ft
Flow Type	SubCritical	

GVF Input Data

Downstream Depth	0.00	in
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	in
Profile Description		
Profile Headloss	0.00	ft
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	12.00	in
Critical Depth	0.65	ft
Channel Slope	0.00250	ft/ft
Critical Slope	0.00434	ft/ft

Appendix F. Model Reports

A. Aspen Meadows Water Demands

B. Aspen Meadows Sewage Generation

ASPEN MEADOWS AT BRIAN HEAD, UTAH

WATER DEMANDS

ENSIGN PROJECT NUMBER 10752

FULLY DEVELOPED WATER SYSTEM DEMANDS AT 245GPD/ERC, 70% IRRIGATION EFFICIENCY AND 115 ACRES OF SNOWMAKING

AVERAGE ELEVATION = 9500 TO 10,000 FT ABOVE MSL

ITEM NO.	TYPE OF USE	Units	% of ERC	Weighted ERCs	PEAK DAY SOURCE DEMAND					STORAGE DEMAND				PEAK INSTANTANEOUS DEMAND		ANNUAL WATER RIGHTS DEMAND	
					ERC UNIT DEMAND		TOTAL PEAK DAILY DEMAND			UNIT DEMAND		TOTAL DEMAND				UNIT DEMAND	OCCUPANCY RATE 100.00%
					WINTER	SUMMER	WINTER	SUMMER		WINTER	SUMMER	WINTER	SUMMER	WINTER	SUMMER		TOTAL
I. POTABLE WATER DEMANDS					(GPD)	(GPD)	(GPM)	(GPM)	(GPD)	(GAL)	(GAL)	(GAL)	(GAL)	(GPM)	(GPM)	(AC-FT)	(AC-FT)
		(a)		(b)	(c)	(d)	(e)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
	(FORMULAS)						(b)*(c)/1440	(b)*(d)/1440	(g)*1440mpd	((c)/2)*1.05	((c)/2)*1.05	(b)*(i)	(b)*(j)	(10.8*(b)^0.64)		((c)*0.5*365)/(43,560*7.48)	(b*(o)*100%)
ASPEN MEADOWS ART VILLAGE - RESIDENTIAL				bb													
1.	3-4 bedroom 3.5 bath Condominum	700	100.00%	700	245	245	119	119	171,500	129	129	90,038	90,038			0.137	96.06
ASPEN MEADOWS FOUNDERS NEIGHBORHOOD																	
2.	Single family 6-8 BR 4.5 baths on 2.0 - 2.5 acre lots	56	133.33%	75	245	245	13	13	18,293	129	129	9,604	9,604			0.137	10.25
3.	3 -4 bedroom 3.5 bath townhome	24	100.00%	24	245	245	4	4	5,880	129	129	3,087	3,087			0.137	3.29
4.	3 -4 bedroom 3.5 bath cabins	20	100.00%	20	245	245	3	3	4,900	129	129	2,573	2,573			0.137	2.74
ASPEN MEADOWS LONG MEADOW NEIGHBORHOOD																	
5.	Single family 6 - 8 BR 4.5 baths on 3 - 9 acre lots	60	133.33%	80	245	245	14	14	19,600	129	129	10,290	10,290			0.137	10.98
6.	Single family 5-6 BR 3.5 baths on 1.9 - 2 acre lots	30	112.50%	34	245	245	6	6	8,269	129	129	4,341	4,341			0.137	4.63
ASPEN MEADOWS UPPER VILLAGE																	
7.	3 -4 bedroom 3.5 bath townhome	235	100.00%	235	245	245	40	40	57,575	129	129	30,227	30,227			0.137	32.25
8.	Hotel/Condo Units 1-2 Bedroom 2 bath	200	54.17%	108	245	245	18	18	26,542	129	129	13,934	13,934			0.137	14.87
ASPEN MEADOWS SOUTHEAST NEIGHBORHOOD																	
9.	Single family 5-6 BR 3.5 baths on 1.9 - 2 acre lots (note these lots are exempt as they were a previously approved subdivision with water provided by the town)	65	112.50%	73	0	0	0	0	0	0	0	0	0			0.000	0.00
10.	Single family estate lots 8 - 10 BR 4.5 baths on 10+ acre lots	2	133.33%	3	245	245	0	0	653	129	129	343	343			0.137	0.37
ASPEN MEADOWS RANCH NEIGHBORHOOD										0	0						
11.	Single family 8 - 10 BR 4.5 baths on 10+ acre lots	46	133.33%	61	245	245	10	10	15,027	129	129	7,889	7,889			0.137	8.42
12.	Guest houses 4 - 5 BR 3.5 baths on same lot as ranch house	29	100.00%	29	245	245	5	5	7,105	129	129	3,730	3,730			0.137	3.98
	Residential Totals	**1,467**		**1,442**			**233**	**233**	**335,344**			**176,055**	**176,055**				**188**
ASPEN MEADOWS ART VILLAGE HOTEL AND COMMERCIAL																	
13.	Hotel rooms (DDW rule 150 GPD/room)	200	29.17%	58	245	245	10	10	14,292	129	129	7,503	7,503			0.137	8.00
14.	Hotel restaurant 7500 SF 200 seats (DDW rule 35 gpd) - 200 seats*35gpd/seat/800gpd/ERC = 8.75 ERCs use 9 ERCs	200	4.38%	9	245	245	1.5	1.5	2,144	129	129	1,125	1,125			0.137	1.20
15.	Hotel convention center center 22,500 SF assume 500 seats (no DDW rule use 10 gpd/seat like ski area) - 500 seats * 10 gpd per seat/800 gpd/ERC = 6.25 ERCs	500	1.25%	6	245	245	1	1	1,531	129	129	804	804			0.137	0.86
16.	Office 160,000 SF/300SF/person = 534 people (DDW rule 15 gpd/person w/no cafeteria) - 534 capita * 15 gpd/capita/800 gpd/ERC = 10 ERCs	160,000	0.006%	10	245	245	2	2	2,450	129	129	1,286	1,286			0.137	1.37
17.	Retail 31,000 SF/3100SF/store= 10 stores X 1 shared public toilet = 10 public toilet rooms (DDW rule 500gpd/public toilet) - 10 PT * 500gpd/PT/800gpd/ERC = 6.25 ERCs	6	100.00%	6	245	245	1	1	1,296	129	129	804	804			0.137	0.86
ASPEN MEADOWS LONG MEADOW NEIGHBORHOOD SID'S CABIN RESTURANT																	
18.	Sid's Cabin Restaurant 3000 SF 100 seats (DDW rule 35 gpd) - 100 seats*35gpd/seat/800gpd/ERC = 4 ERCs	100	4.38%	4	245	245	0.7	0.7	1,072	129	129	563	563			0.137	0.60
ASPEN MEADOWS UPPER VILLAGE COMMERCIAL																	
19.	Hotel restaurants 7500 SF 200 seats (DDW rule 35 gpd) - 200 seats*35gpd/seat800 gpd/ERC = 9 ERCs	200	4.38%	9	245	245	1.5	1.5	2,144	129	129	1,125	1,125			0.137	1.20
20.	Hotel convention center center 22,500 SF assume 500 seats (no DDW rule use 10 gpd/seat like ski area) - 500 seats * 10 gpd per seat/800gpd/ERC = 10 ERCs	500	1.25%	6	245	245	1	1	1,531	129	129	804	804			0.137	0.86
21.	Skier services	16,000	0.006%	1	245	245	0.17	0.17	245	129	129	129	129			0.137	0.14
ASPEN MEADOWS OFFICES / TOWN OF BRIAN HEAD																	
22.	Aspen Meadows Property Management Office 3000 SF/300SF/person = 10 people (DDW rule 15 gpd/person w/no cafeteria) - 10 capita * 15 gpd/capita /800gpd/ERC = 0.2 ERCs (use 0.5 ERC)	3,000	0.006%	0.500	245	245	0.09	0.09	123	129	129	64	64			0.137	0.07
23.	Aspen Meadows Development Office 3000 SF/300SF/person = 10 people (DDW rule 15 gpd/person w/no cafeteria) - 10 capita * 15 gpd/capita/800 gpd/ERC = 0.2 ERCs (use 0.5 ERC)	3,000	0.01%	0.500	245	245	0.09	0.09	123	129	129	64	64			0.137	0.07
24.	Brian Head Town Public Works / Fire station and EMS Building, assume showers and food prep facilities with a daily staff of 15 people at 70 gpd/cap - 15 cap*70gpd/cap/800 gpd/ERC = 1.31 ERCs (use 1.3 ERCs)	15	8.75%	1.313	245	245	0.22	0.22	322	129	129	169	169			0.137	0.18
	Subtotal Hotel and Commercial ERCs			**112.3**			19	19	27,271			14,441	14,441				15
ASPEN MEADOWS TOTAL ERCs POTABLE SUBTOTAL				**1554.1**			**252**	**252**	**362,615**			**190,496**	**190,496**	**1,191**	**1,191**		**203.24**

II. ASPEN MEADOWS OUTDOOR WATER DEMANDS		IRRIGATED ACRES	IRRIG. AREA % OF TOTAL		TOTAL AREA IRRIG. (ACRES)	Irrig. Peak Day Unit Demand (GPM/acre)	PEAK DAY IRRIG DEMAND(GPM)	PEAK DAY IRRIG. DEMAND (GPD)		Unit storage reqmt(GAL/ Irrig. Acre)		(GAL)		(GPM)	USING 70% EFFICIENCY IRRIGATION DEMAND CALCULATION SHEET (AC-FT/ACRE)	(AC-FT)
		(aa)	(bb)		(dd)		(ff)	(gg)		(hh)		(ii)		(jj)	(kk)	(ll)
(FORMULAS)					(aa)*(bb)		(dd)*(ee)	(ff)*1440		((ee)/2)*1440		(dd)*(hh)		(ff)*2		(cc)*(kk)
ASPEN MEADOWS																
25.	Incidental outdooor water use for village 700 condominiums	0.50	100%		0.50	3.96	1.98	2,851		2,849		1,425		4.0	1.69	0.8
26.	Incidental outdooor water use for hotel, commercial and office	0.50	100%		0.50	3.96	1.98	2,851		2,849		1,425		4.0	1.69	0.8
27.	Incidental outdooor water use for BH public works and offices	0.10	100%		0.10	3.96	0.40	570		2,849		285		0.8	1.69	0.2
28.	Incidental outdooor water use for 259 single family homes assume 200 sq ft per house hold	1.19	100%		1.19	3.96	4.71	6,781		2,849		3,388		9.4	1.69	2.0
		2.29														
ASPEN MEADOWS - IRRIGATION DEMANDS SUBTOTAL					**2.29**		**9.1**	**13,053.7**				**6,522.1**		**18.1**		**3.9**
ASPEN MEADOWS - PEAK DAY SOURCE, STORAGE AND WATER RIGHT DEMAND FOR POTABLE AND IRRIGATION COMBINED						**252**	**260.9**	**375,668.6**			**190,496.3**	**197,018.4**		**1,209.3**		**207.1**
III. FIRE FLOW/STORAGE RESERVES		(GPM)		(HOURS)	190											
29.	Fire Flow (2,000 GPM for 2 hrs)	**2,000**		**2**	N/A	N/A	**2,000**	**2,000**				**240,000**	**240,000**			
ASPEN MEADOWS-PEAK SYSTEM DEMAND = PEAK DAY DEMAND PLUS FIRE FLOW						**2,252**	**2,261**				**430,496**	**437,018**				**207.10**

IV. ASPEN MEADOWS SNOWMAKING WATER DEMANDS		SNOW AUGMENTED ACRES	SNOW AUGMENTED AREA % OF TOTAL		TOTAL SNOW AUGMENTED AREA (ACRES)	SNOWMAKING Peak Day Unit Demand (GPM/acre)	PEAK DAY SNOWMAKING DEMAND(GPM)	PEAK DAY SNOWMAKING DEMAND (GPD)	AVAILABLE SOURCE FOR SNOW MAKING GPM	SOURCE GPM FOR 60 DAYS (ACRE-FEET)		SNOWMAKING POND STORAGE REQM'T (ACRE-FEET)		ASSUME SNOWMAKING PUMPS AT 12 HRS/DAY (GPM)	UNIT SNOWMAKING DEMAND 40% DENSITY 1.5' DEEP (ACRE-FEET/ACRE)	(AC-FT)
		(aa)	(bb)		(dd)		(ff)	(gg)	(hh)	(ii)		(jj)		(kk)	(ll)	(mm)
(FORMULAS)					(aa)*(bb)		(dd)*(ee)	(ff)*1440		(hh)/448.8* 1.98*60		(mm)-(ii)		(ff)*2		(cc)*(kk)
ASPEN MEADOWS SNOWMAKING																
30.	Snowmaking on 100 acres 1.5' deep of compacted snow, assume 40% density	100.00	100%		100.00	4.50	450.00	648,000	50.00	13.24		46.76		900.0	0.60	**60.0**
31.	Snowmaking on 15 acres 1.5' deep of compacted snow, assume 40% density	15.00	100%		15.00	4.50	67.50	97,200	8.00	2.12		6.88		135.0	0.60	**9.0**
ASPEN MEADOWS - TOTAL SNOWMAKING DEMANDS		115.			115.00		517.50	745,200	58.00	15.35		53.65		1,035.0		**69.0**
ASPEN MEADOWS - PEAK DAY SOURCE AND WATER RIGHT DEMANDS FOR INDOOR, OUTDOOR, AND SNOWMAKING									309.98							**276.1**
Less 80% of snowmaking water that returns to augment groundwater & streamflows in the spring																**-55.2**
ASPEN MEADOWS -TOTAL WATER RIGHT DEMAND FOR POTABLE, IRRIGATION, AND SNOWMAKING COMBINED																**220.9**

NOTES:

1. The Irrigation Demand spreadsheet calculates an annual demand for turf grass and 70% irrigation efficiency to be 1.69 ac-ft /year.
2. The irrigation demand spreadsheet calculates the peak day demand for turf grass at 3.96 gpm @ 70% irrigation efficiency.
3. Peak potable system demand is defined by State Code R309-510 as required fire flow plus peak day potable, & irrigation source demand.
4. Institutional peak day demands were converted to ERCs using the DDW unit demands for each type of use/800 gpd/ERC.
5. The peak day ERC source requirment of 245 gallons per peak day (GPD) as determined by Tooele recent water use study. It is felt that this is a reasonable and realistic number because Herriman City determined their unit demand to be 241 gpd/REC. Aspen Meadow's unit demand could be even lower because all units will have low flow water saving fixtures.
6. An ERC for potable demand calculations is assumed to be a single family home with 4 to 5 bedrooms and 3 baths.
7. The unit type's percentage of an ERC is based on the unit type's number fixture units divided by the number of fixture units in a standard ERC being a single family home with 4 to 5 bedrooms and 3 baths.
8. The owner has provided the acreage of snow making we need to make snow on.
9. The average snowmaking demand is the 60 acre-feet in 60 days (November thru December) or 1 ac-ft/day which is 0.5 cfs (225 gpm) flowing for 24 hours.
10. The assumed peak day demand is 2 X average day demand or 2 X 225 = 450 gpm
11. The assumed source available to make snow for the two month snowmaking period is 58 gpm which would make 15.35 ac- ft in the two month period
12. Subtracting the 15.35 ac-ft from the required 69 ac-ft needed to make 1.5' of 40 % density snow on 115 acres gives 53.65 ac-ft the required snowmaking pond capacity.
13. In order to make snow during a 12 hour period on really cold days the snowmaking pumping system may have to be able to pump 2 x peak day or 2 X 517.5 =1035 gpm
14. Studies of snowmaking systems have shown that they are at most only 20% consumptive as some water is lost to the atmosphere with wind and sublimation. Therefor 80% of the water diverted for snowmaking will be returned to groundwater recharge and stream runof in the spring and early summer.

ASPEN MEADOWS AT BRIAN HEAD, UTAH
SEWAGE GENERATION - 07711/2022
ENSIGN PROJECT NUMBER 10752
FULLY DEVELOPED SEWAGE SYSTEM GENERATION
AVERAGE ELEVATION = 9,500 to 10,000 FT ABOVE MSL

ITEM NO.	TYPE OF USE	Units	% of ERC	Weighted ERCs	UNIT AVERAGE DAY SEWAGE FLOW GENERATION	TOTAL AVERAGE DAILY SEWAGE FLOW		PEAK SEWAGE GENERATION FLOWS				
								POPULATION		PEAKING FACTOR	TOTAL PEAK HOURLY FLOWS	
								CAP/ ERC	POPULATION PER UNIT TYPE	4.0 for <15-inch pipe per SBWRD		
					WINTER/SUMMER	WINTER/SUMMER						
I. SEWAGE FLOW GENERATION					(GPD/ERC)	(GPM)	(GPD)				(GPD)	(GPM)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	(FORMULAS)			(a)*(b)		(c)*(d)/1440	(e)*1440 mpd		(c)*(g)	4.0 for <15-inch pipe per Snyderville Basin	(f)*(i)	((j)/1440)
ASPEN MEADOWS ART VILLAGE - RESIDENTIAL												
1.	3-4 bedroom 3.5 bath Condominum (assume 25% 4 BR)	700	108%	756	320	168.00	241,920	3.2	2,419	4.00	967,680	672.0
ASPEN MEADOWS FOUNDERS NEIGHBORHOOD												
2.	Single family 6-8 BR 4.5 baths on 2.0 - 2.5 acre lots	56	200%	112	320	24.89	35,840	3.2	358	4.00	143,360	99.6
3.	3 -4 bedroom 3.5 bath townhome (assume 25% 4 BR)	24	108%	26	320	5.76	8,294	3.2	83	4.00	33,178	23.0
4.	3 -4 bedroom 3.5 bath cabins (assume 25% 4 BR)	20	108%	22	320	4.80	6,912	3.2	69	4.00	27,648	19.2
ASPEN MEADOWS LONG MEADOW NEIGHBORHOOD												
5.	Single family 6 - 8 BR 4.5 baths on 3 - 9 acre lots	70	200%	140	320	31.11	44,800	3.2	448	4.00	179,200	124.4
6.	Single family 5-6 BR 3.5 baths on 1.9 - 2 acre lots	28	167%	47	320	10.39	14,963	3.2	150	4.00	59,853	41.6
ASPEN MEADOWS UPPER VILLAGE												
7.	3 -4 bedroom 3.5 bath townhome (assume 25% 4 BR)	235	108%	254	320	56.40	81,216	3.2	812	4.00	324,864	225.6
8.	Hotel/Condo Units 1-2 Bedroom 2 bath (assume 50% 2 BR)	200	50%	100	320	22.22	32,000	3.2	320	4.00	128,000	88.9
ASPEN MEADOWS SOUTHEAST NEIGHBORHOOD												
9.	Single family 5-6 BR 3.5 baths on 1.9 - 2 acre lots	65	167%	109	320	24.12	34,736	3.2	347	4.00	138,944	96.5
10.	Single family estate lots 8 - 10 BR 4.5 baths on 10+ acre lots	2	267%	5	320	1.19	1,709	3.2	17	4.00	6,835	4.7
ASPEN MEADOWS RANCH NEIGHBORHOOD												
11.	Single family 8 - 10 BR 4.5 baths on 10+ acre lots	46	267%	123	320	27.29	39,302	3.2	393	4.00	157,210	109.2
12.	Guest houses 4 - 5 BR 3.5 baths on same lot as ranch house (assume 50% are 4 BR)	29	150%	44	320	9.67	13,920	3.2	139	4.00	55,680	38.7
	Aspen Meaows Residential Totals	**1,475**		**1,736**		**385.84**	**555,613**		**5,556**	**4.00**	**2,222,451**	**1,543.4**

ASPEN MEADOWS ART VILLAGE HOTEL AND COMMERCIAL												
13.	Hotel rooms (DDW rule 150 GPD/room)	*200*	*33%*	*66.00*	*320*	*14.67*	*21,120*	*3.2*	*211*	*4.00*	*84,480*	*58.7*
14.	Hotel restaurant 7500 SF 200 seats (DDW rule 35 gpd) - 200 seats*35gpd/seat/800gpd/ERC = 8.75 ERCs use 9 ERCs	9	100%	9.00	320	2.00	2,880	3.2	29	4.00	11,520	8.0
15.	Hotel convention center center 22,500 SF assume 500 seats (no DDW rule use 10 gpd/seat like ski area) - 500 seats * 10 gpd per seat/800 gpd/ERC = 6.25 ERCs	6	100%	6.25	320	1.39	2,000	3.2	20	4.00	8,000	5.6
16.	Office 160,000 SF/300SF/person = 534 people (DDW rule 15 gpd/person w/no cafeteria) - 534 capita * 15 gpd/capita/800 gpd/ERC = 10 ERCs	10	100%	10.00	320	2.22	3,200	3.2	32	4.00	12,800	8.9
17.	Retail 31,000 SF/3100SF/store= 10 stores X 1 shared public toilet = 10 public toilet rooms (DDW rule 500gpd/public toilet) - 10 PT * 500gpd/PT/800gpd/ERC = 6.25 ERCs	6	100%	6.25	320	1.39	2,000	3.2	20	4.00	8,000	5.6
ASPEN MEADOWS LONG MEADOW NEIGHBORHOOD SID'S CABIN RESTURANT												
18.	Sid's Cabin Restaurant 3000 SF 100 seats (DDW rule 35 gpd) - 100 seats*35gpd/seat/800gpd/ERC = 4 ERCs	4	100%	4.00	320	0.89	1,280	3.2	13	4.00	5,120	3.6
ASPEN MEADOWS UPPER VILLAGE COMMERCIAL												
19.	Hotel restaurants 7500 SF 200 seats (DDW rule 35 gpd) - 200 seats*35gpd/seat800 gpd/ERC = 9 ERCs	9	100%	9.00	320	2.00	2,880	3.2	29	4.00	11,520	8.0
20.	Hotel convention center center 22,500 SF assume 500 seats (no DDW rule use 10 gpd/seat like ski area) - 500 seats * 10 gpd per seat/800gpd/ERC = 10 ERCs	10	100%	10.00	320	2.22	3,200	3.2	32	4.00	12,800	8.9
21.	Skier services (men's and women's restroom for patrons and employees - assume 2 ERCs)	2	100%	2.00	320	0.44	640	3.2	6	4.00	2,560	1.8
ASPEN MEADOWS OFFICES / TOWN OF BRIAN HEAD												
22.	Aspen Meadows Property Management Office 3000 SF/300SF/person = 10 people (DDW rule 15 gpd/person w/no cafeteria) - 10 capita * 15 gpd/capita /800gpd/ERC = 0.2 ERCs (use 0.5 ERC)	0.5	100%	0.50	320	0.11	160	3.2	2	4.00	640	0.4
23.	Aspen Meadows Development Office 3000 SF/300SF/person = 10 people (DDW rule 15 gpd/person w/no cafeteria) - 10 capita * 15 gpd/capita/800 gpd/ERC = 0.2 ERCs (use 0.5 ERC)	0.5	100%	0.50	320	0.11	160	3.2	2	4.00	640	0.4
24.	Brian Head Town Public Works / Fire station and EMS Building, assume showers and food prep facilities with a daily staff of 15 people at 70 gpd/cap - 15 cap*70gpd/cap/800 gpd/ERC = 1.31 ERCs (use 1.3 ERCs)	1.3	100%	1.30	320	0.29	416	3.2	4	4.00	1,664	1.2
	Aspen Meadows Subtotal Hotel, Office, Commercial ERCs			**124.8**		**27.73**	**39,936**		**399**	**4.00**	**159,744**	**111**
	ASPEN MEADOWS TOTAL ERCs TOTAL SEWAGE FLOWS			**1861**		**413.58**	**595,549**		**5,955**	**4.00**	**2,382,195**	**1,654**
									PEAK HOURLY FLOW USING TEN STATE STANDARD FORMULA (18+SQRT(P))/(4+SQRT(P))		**5,955**	**3.17**	**1,890,142**	**1,313**

NOTE 1. Assume average occupancy per ERC = 3.2 people
2. R317-3-2 requires 100 gpd per capita
3. Average daily flow per ERC = 3.2 cap/ERC X100 gpd/cap = 320 gpd per ERC
4. Peaking factor set at 4.0 for all lines 15-inches and smaller per Snyderville Basin standards
5. Residential connections are based on number of bedrooms, with a one bedroom being 1/3 ERC, two bedrooms being 2/3 ERC, and three bedrooms being 3/3 ERC or 1 ERC

STAFF REPORT TO THE TOWN COUNCIL

BRIAN HEAD

ITEM: **WATER INFRASTRUCTURE PROJECT FUNDING, PROJECT SCHEDULE**

AUTHOR: Aldo Biasi, Public Works Director
DEPARTMENT: Public Works
DATE: September 12, 2023
TYPE OF ITEM: Administrative Action

SUMMARY:

The Council will provide staff with directions on the project construction schedule that staff has provided in the analysis section of this report. Once staff has the Council's approval, staff will begin to move forward on the engineering of these projects, so they are ready to bid in February 2024. The Council will discuss if needed the funding provided by the Division of Drinking Water for the Water Infrastructure Projects. These projects are taken from the list that was generated from the Capital Facilities Plan (CFP). The council will consider the option of going into debt to do all these projects at once and using the money it is currently setting aside each year for cash financing of the capital program to instead make 0% interest loan payments.

BACKGROUND:

The Council discussed the funding provided by the Division of Drinking Water for the Water Infrastructure Projects back in late July of this year. The Council directed staff to bring back the projects in a construction priority list. These projects are taken from the list that was generated from the Capital Facilities Plan (CFP). The council considered the option of going into debt to do all these projects at once and using the money it is currently setting aside each year for cash financing of the capital program to instead make 0% interest loan payments.

In 2013, the Town Council engaged in a rigorous review of the financial position of the Town's utility funds. At that time, staff developed a Utility Fund Financial Model which still serves as the basis of the Town's financial planning for the Water, Sewer, and Solid Waste Funds. In each subsequent budget year, the Council has considered a schedule of rate increases generated by the model. These rates are calculated to cover the cost of operating expenses, existing debt service expense, and an annual cash set-aside for capital projects while maintaining a debt coverage ratio over the required 125%. Essentially, it was the direction of Council at the time to switch from a policy of debt financing for capital expenditures to a cash pay-as-you-go methodology. So, over the past 10 years, the Town has been funding water projects largely with cash (using the annual set-aside as well as grant funding) and retiring over $3M in water revenue bonds.

In 2022, the Town update its water CFP which resulted in a new slate of projects for the next 10 years. The CFP found that the Town's water storage facilities should be sufficient for many years, and the existing delivery infrastructure has mostly minor replacement needs. However, water source should be expanded (particularly to meet the needs of snowmaking). Also, due to the newly enforced rules of the Southwest Utah Dept of Health requiring all new residential buildings in year-round subdivisions (note: they consider all subdivisions in Brian Head year-round), there is growing need to expand water lines into residential subdivisions which currently lack water infrastructure to render those lots buildable and to provide additional fire protection for the Town.

In May 2023, staff took a list of projects from our CFP and applied to the Division of Drinking Water (DDW) for funding. The board made the decision to provide the Town with funding for the projects in the total amount of approximately $5.6M (70% zero-interest construction loan [up to 40 years] and 30% grant). The staff is now seeking direction from Council whether to pursue this grant/loan or whether to continue our policy of pay-as-you-go.

ANALYSIS:

Project list (Attachment A)

Projects	Name	Engineers Estimated Cost	Engineering and Management	Contingency	Construction
1	New Well	$ 2,598,750.00	$ 288,750.00	$ 385,000.00	$ 1,925,000.00
2	Highway Replacement	$ 644,155.00	$ 44,941.00	$ 99,869.00	$ 499,345.00
3	Rue Jolly Waterline Loop	$ 1,438,325.00	$ 100,348.00	$ 222,996.00	$ 1,114,981.00
4	Blue Jay Way Waterline Loop	$ 204,279.00	$ 14,252.00	$ 31,671.00	$ 158,356.00
5	Million Gallon Pump Station /Generator Project	$ 450,865.00	$ 60,808.00	$ 67,407.20	$ 322,650.40
6	Town Hall Well Repair	$ 519,750.00	$ 57,750.00	$ 77,000.00	$ 385,000.00
7	Crystal Mountain Well Repair	$ 519,750.00	$ 57,750.00	$ 77,000.00	$ 385,000.00
8	Towers Software for radio read meters	$ 140,495.00			$ 140,495.00
9	New SCADA System	$ 198,000.00			$ 198,000.00
	Project Totals	**$ 6,714,369.00**	$ 624,599.00	$ 960,943.20	$ 5,128,827.40
				Construction Cost Only	
				Sources	$ 2,695,000.00
				Distribution	$ 2,111,177.00
				Pump Station	$ 322,650.40

As the Council can see, the project list totals $6,714,369 and the remainder $1,285,458 was looking to be funded by CIB. The project list does not include expansion projects into currently unserved neighborhoods which were identified in the CFP, consistent with the current direction of Council to handle such projects with SAAs. The staff intends to scale the project list down to the amount provided by the Division of Drinking Water. The staff intends to remove the well repairs to Crystal Mountain and also the Town Hall Well and possible Blue Jay Way Loop line unless additional funding becomes available. Staff believes it is important to pursue the new well. Staff would like to engineer Blue Jay Way Loop in case it can be fitted into the budget once bidding has taken place. If the Town receives favorable bidding and enough contractors, Staff recommends doing all of the projects in 2024. These projects total 12,715 ft of new water main and potential 6,425 ft of Sewer main to be installed. The past projects of Salt Pile water line and the Mountain View water line that were completed in a build season totaled approx. 11,058 ft. Currently, the Town does not have a trail project, park project or a major street project scheduled so focus could be directed to managing these infrastructure projects. If the Town does not get enough contractors to handle the projects, then Staff recommends the following construction schedule.

Summer 2024

- Drill New Well
- Install New Scada
- Install Meter Reading Towers
- Million Gallon Pump Station Generator Project
- Highway Line Replacement (2,875 ft)
- Blue Jay Way Loop (475 ft, if funds are available)

(Reminder Snowshoe Toboggan SAA also summer 2024, (Water 6,425 ft Sewer 6,425 ft if funded)

Summer 2025

- Rue Jolly Water Line Loop
- Blue Jay Way Loop (if funds are available)

For descriptions of each of the projects please see the attachment C

A funding meeting was held with the Division of Drinking Water staff on July 13th, 2023, and staff learned the following points.

- All Project Engineering is to be completed before the closing date for the funds (which is before the bid as per the State).
- All Projects are bid together at the same time even though they will possible not be constructed at the same time. This could present some logistical problems, but staff believes they can be sorted out.

In learning these two important points the Town would need to begin designing these projects sooner rather than later and also begin working on the bonding resolutions needed for the closing of the loans.

FINANCIAL IMPLICATIONS:

The current Utility Fund Financial Model has approximately $340,000 per year being put towards existing debt service and $225,000 per year being set aside for pay-as-you-go capital projects.

The zero-interest offer from DDW is difficult to pass up. It's about as close to free money as you can get. Given the inflation we've seen on project costs in recent years, doing the projects upfront and paying for them over time at 0% will actually save us money.

One option would be to bond for the entire $3.9M (70% of $5.6M) over 40 years, resulting in $97,500 annual debt payments. That would actually be a reduction from our current annual cash set-aside and might allow us to reduce water rates in the short term. However, in 10 or so years when we need to begin cash financing projects again – that debt payment would still be hanging over our heads for another 30 years. The Town already entered a 40 year bond with USDA about 10 years ago, and we recently refinanced it for fewer years to try to give ourselves some flexibility in the future.

Another option would be to finance the well over 30 years and the remaining projects over 15 years. That would result in a debt service payment of approximately $200k for the next 15 years, and then $60,000 from years 16 thru 30. It would leave us $25,000 per year cash funding for small capital projects, and $140k would become available again for cash financing of projects in 15 years. It should also be noted that the 2021 water refunding bond is set to be retired in 2035, which would be right around 10 years from the time these new bonds would be in place – which helps us get back to pay-as-you-go a little quicker.

BOARD/COMMISSION RECOMMENDATION:
N/A

STAFF RECOMMENDATION:
Staff recommends that Council directs staff to begin engineering the projects.

PROPOSED MOTION:
N/A

ATTACHMENTS:
A – Project List
B – Funding Letter
C- Project Application Packet with Project Descriptions

Projects	Name	Engineers Estimated Cost	Engineering and Construction Management	Contingency	Construction
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Sources	$ 2,695,000.00
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State of Utah

SPENCER J. COX
Governor

DEIDRE HENDERSON
Lieutenant Governor

Department of
Environmental Quality

Kimberly D. Shelley
Executive Director

DIVISION OF DRINKING WATER
Tim Davis
Director

Drinking Water Board
Kristi Bell, Chair
Eric Franson, P.E., Vice-Chair
Dawn Ramsey
Justin Maughan
Robert Rolfs
Jeff Coombs
David O. Pitcher
Blake Tullis, Ph.D.
Kimberly D. Shelley
Tim Davis
Executive Secretary

June 12, 2023

Aldo Biasi, Public Works Director, abiasi@bhtown.utah.gov
Brian Head Town
56 North Highway 143
PO Box 190068
Brian Head, Utah 84719

Subject: **Federal SRF Loan Authorization and Procedures for Committal of Funds;** Brian Head Town, System #11001, Loan #3F1910

Dear Aldo Biasi:

On May 16, 2023, the Drinking Water Board (hereinafter called the "Board") authorized a construction loan of $5,483,748 with $1,645,748 in principal forgiveness, for a net repayable amount of $3,838,000 for 40 years at 0% interest, to Brian Head Town (hereinafter called the "Recipient") for the following infrastructure improvements; drilling of a new well, existing well improvements on two wells, replacement of a steel wrapped main line, looping of current dead end water mains for improved fire flow, a generator for an existing pump station, and SCADA and meter upgrades (hereinafter called the "Project"). The loan from the Board will be secured by General Obligation bond(s), Non-voted Water Revenue bond(s), or a combination thereof; issued by the Recipient as incremental disbursement bond(s) (hereinafter referred to as Bonds) disbursed on a monthly or quarterly basis. The Board has determined the retirement period for the Bonds to be no more than **forty (40) years**, with interest/fee assessment payable on the unpaid principal from the date of each advance of loan funds. The annual **Interest Rate is 0%.** The Board will require annual principal payments on the Bonds, plus interest assessments totaling approximately $96,000. Enclosed is the proposed bond repayment schedule. If a revenue bond is used, a debt service reserve fund equal to this annual amount must be established by no more than ten equal annual deposits.

Principal forgiveness will be applied to the loan. Net repayable amount will be deposited into the escrow account mentioned in item 2 along with other funds after completion and signing of the enclosed principal forgiveness agreement and completion of bonding requirements for the loan.

Special Conditions

This financial assistance was authorized subject to the availability of funds. The assistance represented by this authorization will be funded, in whole or in part, from the proceeds of a federal SRF Capitalization Grant (Section 1452 SDWA) to the State of Utah. Under the SRF Capitalization Grant Program, federal funds are to be made available to the State by way of authorized draws on a letter of credit over the construction period of the Project. Therefore, this authorization is expressly subject to the continued availability of federal funds through the SRF Capitalization Grant and the letter of credit related thereto.

Neither the Board nor the State of Utah shall be bound by this authorization or by any obligation to provide further loan funds to or purchase any bonds from the Recipient if the SRF Capitalization Grant funds to which this authorization relates are not awarded or if payments under the letter of credit are withheld for any reason.

As a condition of this authorization, the Board will require the Recipient to provide a schedule of estimated engineering and construction time for the Project within ninety (90) days of the date of this letter. If the Project has not progressed sufficiently for the Recipient to issue the Bond within twelve months of the date of authorization, authorized funding may be withdrawn.

As a condition of this loan, the Board will require the Recipient to establish a capital facilities replacement reserve account. Deposits to that account shall be made at least annually in the amount of five percent (5%) of the Recipient's annual drinking water system budget, including depreciation, and must continue until the Bonds are redeemed. Failure to maintain the reserve account will constitute a technical default on the Bonds and may result in penalties being assessed.

The Bonds may be prepaid, in whole or in part, at any time in minimum amounts of $1,000 or any integral multiple thereof, with the prepayments applied against the Bond principal in inverse order of maturities. In addition, if any Bond proceeds remain after the Project is completed, those remaining proceeds shall be used to redeem Bond principal in inverse order of maturities. The Bond documents must contain the following provisions:

i] The Bonds will initially be in the form of a single, fully-registered bond in the amount of $3,838,000 with provisions for incremental advances quarterly, based on a schedule that coincides with the rate at which engineering/construction related costs are expected to be incurred for the Project. However, provisions shall be made which would allow the Bonds to be exchanged for separate serial bonds in minimum denominations of $1,000.

ii] If revenue bonds are used the Bonds must be secured by a pledge by the Recipient of 100% of the net revenue produced by the Recipient's water system, and the Recipient will be required to warrant and demonstrate that those net revenues equal or exceed 125% of the total annual debt service requirements on the Bonds and any other obligations secured by a pledge of those revenues.

iii] If interest is payable on the Bonds, that interest must be tax-exempt, and delivery of the Bonds must be accompanied by an opinion of recognized bond counsel that the interest is not subject to state or federal income taxes.

iv] If a revenue bond is used, and if the Recipient has previously issued bonds or other obligations secured by a pledge of water system revenues, the Bonds to be purchased by the Board shall be issued on a parity with those prior bonds or obligations with respect to the revenue. If it is not possible for the Bonds to be issued on a parity basis, the Recipient shall contact Michael J. Grange immediately at (801) 536-4200.

Based on the information presented to the Board, the following sources of funding will be available for the construction of the Project:

Agency	Share	% of Total
DWB Loan (0%, 40 yr)	$3,838,000	57%
DWB PF	$1,645,748	24%
CIB	$1,285,458	19%
Total Project Cost	$6,769,206	100%

As a condition to the purchase of the Bonds by the Board, **the Recipient must submit plans and specifications to the Division of Drinking Water for review and approval prior to advertising for bids**, must advertise for bids for the construction of the Project, must open the bids, and must demonstrate that the available sources of funding are adequate to cover the cost of the Project and the bond insurance costs. In addition, prior to bond closing the Recipient must make arrangements for all loan proceeds and all other Project funds to be available for deposit into the escrow account described below at the time the Board delivers funds unless other acceptable arrangements have been previously made.

The financial assistance is conditioned upon the availability of funds at the time of closing, satisfaction of the conditions specified in this letter, and adherence to the project schedule approved at that time. If the Project does not proceed according to the project schedule, the Board may withdraw project authorization, so that other projects ready to proceed can obtain necessary funding. The Board may consider extensions to the project schedule. Any extension requested must be fully justified. After the Project's construction bids have been opened and the below listed requirements have been met, and if the project remains substantially as approved, loan closing will proceed subject to funds available at that time. But, if substantial changes in the Project are required, they must be considered by the Board for committal of funds.

As the Recipient you will need to complete the following items before the Board will purchase your Bonds:

1. The State of Utah has appointed William L. Prater Esq. as special legal counsel to the Board (the "Board's Attorney") and has assigned to him the responsibility of reviewing all proceedings and documents relating to the sale of bonds to the Board. His address is 6925 Union Park Center, Suite 265, Midvale, Utah 84047: telephone number (801) 566-8882 or mail to P.O. Box 71368, Salt Lake City, Utah 84171. The Recipient's bond counsel shall submit the following items to his office at the times indicated below. A copy of the transmittal letter for the items indicated below must also be sent to the Division of Drinking Water to document project progress.

    a. No later than one week prior to the meeting at which the Recipient intends to adopt its Resolution for the issuance of the Bonds, a complete copy of the Resolution shall be submitted for review.

    b. No later than two weeks after the adoption of the Resolution, the following items shall be submitted:

        1) A true and complete photocopy of the Resolution as adopted, showing signatures of the appropriate officials of the Recipient on the Resolution and on the Notice of Meeting, Acknowledgment of Notice and Consent, Certificate of Publication, Open Meeting Certificate, and other similar documents relating to the Resolution.

        2) A true and complete photocopy of the minutes, notices, resolutions, and other documents relating to the Bonds, showing signatures of the appropriate officials.

        3) A complete copy of the proposed documents to be signed at Closing, including (but not necessarily limited to) General Certificate, Signature Identification and Non-Litigation Certificate, Receipt, Arbitrage Certificate (if required), Recipient Attorney's Non-Litigation Certificate, Certificate of Clerk (or Recorder) as to contents of Bond Transcript File, Escrow Agreement, and the Bond Attorney's Opinion.

        4) A copy of the water rate structure described in paragraph 3 below of this letter.

        5) A copy of the proposed opinion letter of the Recipient's attorney described in paragraph 7 of this letter.

    The procedures for bond approval will be substantially the same as required by the Utah Local Government Bonding Act as it applies to cities and towns. The opinion of the bond attorney must accompany delivery of the Bonds to the Board before proceeds of the loan will be released.

At or after the Closing, the Board's Attorney will bill the Recipient, and the Recipient must pay those legal fees. This is an eligible project expenditure. If the Recipient fails to close the loan after this authorization, it will nonetheless be by billed for the actions taken by the Board's Attorney prior to loan cancellation.

2. Consistent with requirements of the law and the covenants of applicable bond resolutions, the actual payment of funds by the Board to the Recipient will not take place until the Board has assurance the funds will be used for Project costs and the Project will actually be completed. To assure this, all monies to be expended on the Project, including the Recipient's share shall be placed in an escrow account supervised by the Recipient and the Board, unless other acceptable arrangements have been made. In general, the Board will make incremental advances into the account on a monthly or quarterly basis. A copy of the proposed escrow agreement shall be submitted to the Board and the Board's Attorney for review.

   Disbursements from the escrow account will be reviewed and approved by the Division of Drinking Water. A Disbursement Request Form must be completed and submitted along with each request. **Disbursement amounts must be authorized in writing by the Recipient and the State prior to any funds being released from the escrow account.**

3. At the time of the adoption of the bond resolution, the Recipient shall have passed an ordinance or resolution establishing reasonable water use rates and collection enforcement remedies, taking into account many factors including the need to have sufficient revenue income for all outstanding water system debts, operation and maintenance costs, and any reserve funds. It will then be necessary to implement effective collection procedures. A copy of the rate ordinance and collection enforcement procedures shall be submitted to the Board and the Board's Attorney for review.

4. The Recipient's contract with its engineer shall include the cost of developing the plans and specifications and the construction inspection of the Project. The contract shall be submitted to the Division of Drinking Water for review. (This requirement is to assure the Board that adequate and appropriate arrangements are made for completing and inspecting the project within the guidelines set by the Board.)

5. The project engineer shall submit, *in accordance with R309-500,* plans and specifications, bidding documents, and general conditions to the Division of Drinking Water for review *and Plan Approval* prior to soliciting bids on the Project. The engineer shall submit project documents via ddwpnf@utah.gov per *https://deq.utah.gov/drinking-water/general-plan-approval-process* for the expeditious assignment and review of the plans and specifications. Any changes to approved plans and specifications prior to finalizing the Recipient Agreement must be reviewed and approved by the Division of Drinking Water. These funds cannot be disbursed until after the bid opening *has occurred and a copy of the bid tabulation has been reviewed by the Division* to assure that sufficient funds are authorized to complete the Project. If substantial changes in the Project are required, they must be considered by the Board for committal of additional funds. The following shall be included in the specifications:

a. The Recipient shall require contractors hired to perform work on their project to pay prevailing wage rates according to Davis-Bacon labor wage requirements. See attached Reference Page for document location.

b. The Recipient shall comply with either the American Iron and Steel provision or the Build America Buy America Act requirements. See attached Reference Page for document location.

6. Rights-of-way and easements for construction, and operation and maintenance of the Project shall be acquired. The Recipient, through its engineer, shall furnish its attorney a right-of-way map showing the location of all sources, buildings, structures, pipelines, and other pertinent facilities not only in the Project but also for the entire water system. The engineer and presiding officer of the Recipient will sign this map and a copy provided to the Recipient's attorney as a basis for the certification described below.

7. The Recipient's attorney shall certify the following items in writing to the Board:

a. The Recipient is a legal entity as of the date of loan closing.

b. The Recipient has valid legal title to the rights-of-way designated and shown on the rights-of-way map, including rights-of-way both for the project to be constructed and the remainder of the existing water system as of the date of loan closing.

c. The Recipient has established the ownership of water rights to any and all water used in the system and such rights are summarized with associated water right numbers.

d. The bidding process and contract documents for the construction of the Project have the proper and legal format and are in compliance with the Utah Code Annotated 1953 (including, but not limited to Title 34, Chapter 30).

e. After the completed and executed construction contract, along with the performance and payment bonds and evidence of necessary insurance, has been reviewed by the Recipient 's attorney, the Recipient 's attorney shall furnish to the Board his legal opinion that all of such items are legal and binding and in compliance with the Utah Code.

As indicated earlier, a draft of this letter is to be submitted to the Board and the Board's Attorney two weeks after the adoption of the resolution.

8. If interest is payable on the Bonds, the Bonds must be accompanied by a legal opinion of recognized municipal bond counsel that interest on the bond obligations is exempt from federal income taxation.

Unless otherwise covered, the opinion must also include a statement that the project to be constructed with the Bond proceeds is not for private activity and that the Recipient has complied with all the requirements of the Board with respect to the Utah Federal State Revolving Fund (SRF) Program (R309-705 of the Utah Administrative Code).

9. The Recipient must obtain and maintain continuously throughout the loan repayment period, a fidelity bond on the positions handling the Recipient's funds, in an amount at least equal to the total amount of funds that will be on hand at any one time, exclusive of loan funds. This amount should be at least twice an annual payment or $192,000. This fidelity bond must be obtained and furnished to the Board prior to the loan closing date. The names of the insured on the position fidelity bond will be "Brian Head Town Water System and the State of Utah acting through the Drinking Water Board."

10. As a condition to the acceptance by the Board of a non-voted revenue bond, the issuer must:

    a. Publish notice and conduct a public hearing consistent with the requirements of the Utah Local Government Bonding Act, and

    b. Mail notices to System users in the Issuer's service area informing them of that public hearing. In addition to the time and location of the public hearing, the notices which are mailed to System users shall inform System users of the issuer's intent to issue a non-voted revenue bond to the Board, shall describe the face amount of the Bond, the rate of interest, the repayment schedule and shall describe the impact of the Project. User charge rates and connection fees shall be noted in that notice. That notice shall state that System users may respond to the Issuer in writing or in the public hearing. A copy of all written responses and a certified record of a public hearing shall be forwarded to the Board. If the Board feels that there is significant opposition to the proposed project, or if required by the Utah Local Government Bonding Act, it may be necessary for the Issuer to hold a bond election before the Board's funds will be made available.

11. As a condition of this loan, the Board will require the Recipient to complete a Water Conservation Plan. If your system has less than 500 connections, the plan must be submitted to the Division of Drinking Water prior to loan closing. If your system has more than 500 connections, the plan must be submitted to the Division of Water Resources for review and approval, and the approved plan must be adopted (completing the *Certification of Adoption*) prior to loan closing. If the Recipient has already adopted such a plan, that plan and its certification of adoption may be submitted to the Division of Drinking Water for verification.

12. In compliance with Utah Code Annotated 9-8-404 and 36 CFR 800.3(g), the project engineer shall submit a report to the Division of Drinking Water that demonstrates a reasonable and good faith effort was made to identify and gather information to determine if cultural resources are present in the area of potential effects, including a Class III Survey. The report format shall meet SHPO State of Utah Archaeological Compliance Guidance. Cultural

resource reporting guidance is outlined in the Utah SHPO Short Cultural Resources Inventory Report Form. See attached Reference page for document location.

13. The Recipient must agree to comply with the above Federal laws, executive orders, and government-wide policies that apply to the Project and complete the following:

a. Ensure, to the fullest extent possible, that Disadvantaged Business Enterprise procurement requirements are achieved in all procurements for prime contractors, subcontractors, suppliers, and others. For your information, refer to these forms for DBE utilization: DBE Contact Log for Bidders, Subcontractor Participation, Performance, and Utilization forms, Suggested Sources for Locating Certified MBE/WBE Contractors in Utah. See attached Reference page for document locations.

Ensure that the "six affirmative steps" are taken to assure compliance with the State's "fair share goals" in all procurements. The Division will specify the required language, documents, and instructions.

(1) Bid solicitations shall state that this is a federally funded project requiring compliance with the State's "fair share goals" and federal EEO regulations. See attached Reference Page for document location.

(2) The "Special Conditions" or "Supplemental Conditions" in the bid documents shall contain the language and instructions specifying the MBE and WBE procurement requirements, provided by the Division.

(3) The same bid documents shall also contain the federal EEO requirements.

b. Report MBE/WBE utilization for construction services on "EPA Form 5700-52A." See attached Reference Page for document location. This is a requirement for projects that exceed the Simplified Acquisition Threshold set by the Office of Management and Budget. Annual reports are due by October 30th of each year.

c. Include the following certification in the bond resolution:

"The Issuer agrees, in accepting the proceeds of the Series ____ Bonds, to comply with all applicable state and federal regulations related to the Utah State Revolving Fund administered by the Drinking Water Board. These requirements include, but are not limited to, Title XIV of the Safe Drinking Water Act of 1996, OMB Circular A-133, the Utah Federal State Revolving Fund (SRF) Program (R309-705 of the Utah Administrative Code), the Utah Municipal Bond Act, the Utah Money Management Act, the Utah Procurement Code and the State of Utah Legal Compliance Audit Guide."

14. The Recipient shall submit a cash drawdown schedule prepared and certified by their consulting engineer to be a schedule that coincides with the rate at which expected construction related costs are incurred by the project.

15. The Recipient must get a Unique Entity ID from SAM.gov. Once the entity record has been validated, submit a copy of the Unique Entity ID to the Division of Drinking Water.

16. The Recipient shall comply with the Single Audit Act requirements in accordance with OMB Circular A-133.

17. The Recipient is required to comply with the Federal Project Signage Requirements. See attached Reference Page for document location.

18. In compliance with Utah Code Annotated 73-10g-402, water systems applying for federal financial assistance for improvements to capital assets related to water infrastructure shall commit to adopt a capital asset management plan. The Asset Management Plan shall be submitted to the Division for review and approval prior to loan closing, unless preparing an Asset Management Plan is included as part of the project for which the Recipient has applied for financial assistance. In which case, the Asset Management Plan shall be submitted to the Division as soon as it is completed or prior to the entity submitting its final project reimbursement request.

To facilitate the timely completion of the financial assistance requirements outlined in this letter, the Recipient and its attorney and engineer shall submit to the Division of Drinking Water all of the items required before loan closing no later than 30 days before the bond closing, and the Recipient's bond attorney shall submit to the Board's Attorney the items listed in subsection "b" of paragraph 1 on or before the due date specified.

These requirements must be completed on or before May 16, 2024. If the Recipient fails to reasonably comply with the Project schedule, the Authorization may be withdrawn in accordance with R309-705-7.

These requirements may not cover all the matters pertaining to the Project. We anticipate that specific questions on matters relating to your Project will arise, and we are confident that a cooperative effort can resolve any issues.

If you have any questions concerning these requirements, please contact Kjori Shelley at (385) 227-1638 or me at (801) 674-2563.

Sincerely,

DRINKING WATER BOARD

Michael J. Grange, P.E.
Assistant Executive Secretary

MJG/ks/lr

Enclosures
1. Reference Page
2. Brian Head Loan Repayment Schedule

cc: William Prater, Esq., William L. Prater, LLC, PO Box 71368, SLC, UT 84171, bill@billprater.com
Shane Williamson, Brian Head Town, scwilliamson@bhtown.utah.gov
Todd Gardner, Alpha Engineering, toddgardner@alphaengineering.com
Kjori Shelley, Division of Drinking Water, kashelley@utah.gov
Eric Johnson, Blaisdell, Church & Johnson, eric@bcjlaw.net
DDW Finance

Reference Page

*Davis-Bacon labor wage requirements - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000538.pdf.

*American Iron and Steel Provision - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000536.pdf

*Build America Buy America Act - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-004136.pdf

*Utah SHPO Short Cultural Resources Inventory Report form - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2020-038201.pdf#page=53

*Disadvantaged Business Enterprise procurement requirements - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000522.pdf

*DBE Contact Log for Bidders - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000526.pdf

*Subcontractor Participation, Performance, and Utilization forms - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000526.pdf

*Suggested Sources for Locating Certified MBE/WBE Contractors in Utah - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000532.pdf

*Federal EEO regulations - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000530.pdf

*" EPA Form 5700-52A" - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000524.pdf

*Federal Project Signage Requirements - https://documents.deq.utah.gov/drinking-water/financial-assistance/Federal%20SRF/DDW-2022-000520.pdf

Brian Head Town Water System

PROPOSED BOND REPAYMENT SCHEDULE

70 % Loan & 30 % P.F.

PRINCIPAL	$3,838,000.00	ANTICIPATED CLOSING DATE	April 1, 2024
HARDSHIP GRANT ASSESSMENT FEE	0.00%	FIRST P&I PAYMENT DUE	October 1, 2025
TERM	40	REVENUE BOND	$3,838,000
NOMIN. PAYMENT	$95,950.00	PRINC. FORGIVE.:	$1,645,748.00

YEAR	BEGINNING BALANCE	DATE OF PAYMENT	PAYMENT		PRINCIPAL	INTEREST	ENDING BALANCE	PAYM NO.
2025	$3,838,000.00	January 1, 2025	$0.00	*	$0.00	$0.00	$3,838,000.00	0
2026	$3,838,000.00	October 1, 2026	$96,000.00		$96,000.00	$0.00	$3,742,000.00	1
2027	$3,742,000.00	October 1, 2027	$96,000.00		$96,000.00	$0.00	$3,646,000.00	2
2028	$3,646,000.00	October 1, 2028	$96,000.00		$96,000.00	$0.00	$3,550,000.00	3
2029	$3,550,000.00	October 1, 2029	$96,000.00		$96,000.00	$0.00	$3,454,000.00	4
2030	$3,454,000.00	October 1, 2030	$96,000.00		$96,000.00	$0.00	$3,358,000.00	5
2031	$3,358,000.00	October 1, 2031	$96,000.00		$96,000.00	$0.00	$3,262,000.00	6
2032	$3,262,000.00	October 1, 2032	$96,000.00		$96,000.00	$0.00	$3,166,000.00	7
2033	$3,166,000.00	October 1, 2033	$96,000.00		$96,000.00	$0.00	$3,070,000.00	8
2034	$3,070,000.00	October 1, 2034	$96,000.00		$96,000.00	$0.00	$2,974,000.00	9
2035	$2,974,000.00	October 1, 2035	$96,000.00		$96,000.00	$0.00	$2,878,000.00	10
2036	$2,878,000.00	October 1, 2036	$96,000.00		$96,000.00	$0.00	$2,782,000.00	11
2037	$2,782,000.00	October 1, 2037	$96,000.00		$96,000.00	$0.00	$2,686,000.00	12
2038	$2,686,000.00	October 1, 2038	$96,000.00		$96,000.00	$0.00	$2,590,000.00	13
2039	$2,590,000.00	October 1, 2039	$96,000.00		$96,000.00	$0.00	$2,494,000.00	14
2040	$2,494,000.00	October 1, 2040	$96,000.00		$96,000.00	$0.00	$2,398,000.00	15
2041	$2,398,000.00	October 1, 2041	$96,000.00		$96,000.00	$0.00	$2,302,000.00	16
2042	$2,302,000.00	October 1, 2042	$96,000.00		$96,000.00	$0.00	$2,206,000.00	17
2043	$2,206,000.00	October 1, 2043	$96,000.00		$96,000.00	$0.00	$2,110,000.00	18
2044	$2,110,000.00	October 1, 2044	$96,000.00		$96,000.00	$0.00	$2,014,000.00	19
2045	$2,014,000.00	October 1, 2045	$96,000.00		$96,000.00	$0.00	$1,918,000.00	20
2046	$1,918,000.00	October 1, 2046	$96,000.00		$96,000.00	$0.00	$1,822,000.00	21
2047	$1,822,000.00	October 1, 2047	$96,000.00		$96,000.00	$0.00	$1,726,000.00	22
2048	$1,726,000.00	October 1, 2048	$96,000.00		$96,000.00	$0.00	$1,630,000.00	23
2049	$1,630,000.00	October 1, 2049	$96,000.00		$96,000.00	$0.00	$1,534,000.00	24
2050	$1,534,000.00	October 1, 2050	$96,000.00		$96,000.00	$0.00	$1,438,000.00	25
2051	$1,438,000.00	October 1, 2051	$96,000.00		$96,000.00	$0.00	$1,342,000.00	26
2052	$1,342,000.00	October 1, 2052	$96,000.00		$96,000.00	$0.00	$1,246,000.00	27
2053	$1,246,000.00	October 1, 2053	$96,000.00		$96,000.00	$0.00	$1,150,000.00	28
2054	$1,150,000.00	October 1, 2054	$96,000.00		$96,000.00	$0.00	$1,054,000.00	29
2055	$1,054,000.00	October 1, 2055	$96,000.00		$96,000.00	$0.00	$958,000.00	30
2056	$958,000.00	October 1, 2056	$96,000.00		$96,000.00	$0.00	$862,000.00	31
2057	$862,000.00	October 1, 2057	$96,000.00		$96,000.00	$0.00	$766,000.00	32
2058	$766,000.00	October 1, 2058	$96,000.00		$96,000.00	$0.00	$670,000.00	33
2059	$670,000.00	October 1, 2059	$96,000.00		$96,000.00	$0.00	$574,000.00	34
2060	$574,000.00	October 1, 2060	$96,000.00		$96,000.00	$0.00	$478,000.00	35
2061	$478,000.00	October 1, 2061	$96,000.00		$96,000.00	$0.00	$382,000.00	36
2062	$382,000.00	October 1, 2062	$96,000.00		$96,000.00	$0.00	$286,000.00	37
2063	$286,000.00	October 1, 2063	$95,000.00		$95,000.00	$0.00	$191,000.00	38
2064	$191,000.00	October 1, 2064	$96,000.00		$96,000.00	$0.00	$95,000.00	39
2065	$95,000.00	October 1, 2065	$95,000.00		$95,000.00	$0.00	$0.00	40
			$3,838,000.00		$3,838,000.00	$0.00		

*Interest Only Payment

Brian Head Town Water System
Presented to the Drinking Water Board
May 16, 2023

DRINKING WATER BOARD
BOARD PACKET FOR CONSTRUCTION ASSISTANCE

APPLICANT'S REQUEST:

The Brian Head Town Water System is requesting financial assistance for the following infrastructure improvements; drilling of a new well, existing well improvements on two wells, replacement of a steel wrapped main line, looping of current dead end water mains for improved fire flow, a generator for an existing pump station, and SCADA and meter upgrades.

This project scored 77.1 points on the Project Priority List.

The total project cost is estimated at $6,769,206. Brian Head Town will be applying to the Community Impact Board (CIB) for the public works building portion of the project for a total of $1,285,458, requesting a mix 50% loan and 50% grant. They are requesting the balance of $5,483,748 from the Drinking Water Board.

STAFF COMMENTS:

The local MAGI for Brian Head Town is $24,900, which is 54% of the State MAGI. The current average water bill is $78.45/ERC, which is 3.78% of the local MAGI. The estimated after-project water bill at full loan for 30 years at 2.5% interest would be $102.72/ERC or 4.95% of the local MAGI. Based on MAGI and the after-project water bill, Brian Head Town qualifies to be considered for additional subsidy.

Option	Loan / PF	Principal Forgiveness	Loan	Term	Interest Rate	Water Bill	% Local MAGI
1	100 / 0	0	$3,838,000	30 yrs	2.5%	$102.72	4.95%
2	70 / 30	$1,645,748	$3,838,000	30 yrs	0%	$93.77	4.52%
3	70 / 30	$1,645,748	$3,838,000	40 yrs	0%	$91.65	4.42%

STAFF RECOMMENDATION:

The Financial Assistance Committee recommends the Drinking Water Board authorize a construction loan of $5,483,748 with $1,645,748 in principal forgiveness to Brian Head Town, for a repayable loan amount of $3,838,000 at 0% interest for 40 years.

APPLICANT'S LOCATION:

The Brian Head Town Water System is located in Iron County approximately 31 miles northeast from Cedar City.

MAP OF APPLICANT'S LOCATION:



PROJECT DESCRIPTION:

This infrastructure project will consist of the following improvements. A new well will be drilled and equipped. Replacement of steel wrapped main line. Looping of current dead end water mains for improved fire flow. Installation of new upgraded SCADA system. Installation of meter reading towers for improved meter reading, catching leaks sooner for better water management. Existing well maintenance/improvements on two wells. Generator project for existing central pump station and an upgrade to the current Public Works Facility.

POPULATION GROWTH:

Year	Population	Connections
2020	160	1348
2030	201	1411
2040	265	1432

COST ESTIMATE:

Legal/Bonding/Admin	
Engineering - Design	$624,599
Construction	$5,128,827
Contingency (~15%)	$1,015,780
1% Loan Origination Fee	Moved To Contingency
Total	**$6,769,206**

COST ALLOCATION:

Funding Source	Cost Sharing	Percent of Project
DWB Loan (0%, 40yr)	$3,838,000	57%
DWB PF	$1,645,748	24%
CIB	$1,285,458	19%
Total	**$6,769,206**	**100%**

IMPLEMENTATION SCHEDULE:

DWB Funding Authorization:	May 2023
Complete Design	September 2023
DDW Plan Approval:	December 2023
Advertise for Bids:	February 2024
Bid Opening:	March 2024
Begin Construction:	June 2024
Complete Construction:	October 2024

IPS SUMMARY: The system has no IPS points

CONTACT INFORMATION:

APPLICANT:	Brian Head Town 56 North Highway 143 PO Box 190068 Brian Head, UT 84719 Phone: 435-667-2029 Fax: 435-667-3661 abiasi@bhtown.utah.gov
PRESIDING OFFICIAL & CONTACT PERSON:	Aldo Biasi Public Works Director 56 North Highway 143 PO Box 190068 Brian Head, UT 84719 Phone: 435-667-2029 Fax: 435-667-3661 abiasi@bhtown.utah.gov
TREASURER/RECORDER:	Shane Williamson Phone: 435-667-2029 Fax: 435-667-3661 scwilliamson@bhtown.utah.gov
CONSULTING ENGINEER:	Todd Gardner Alpha Engineering 43 South 100 East St. George, UT 84770 Phone: 435-628-6500 Fax: 435-628-6553 toddgardner@alphaengineering.com
BOND ATTORNEY:	Eric Johnson Blaisdell, Church & Johnson 5995 South Redwood Road Salt Lake City, UT 84123 Phone: 801-261-3407 Fax: 801-261-3503 eric@bcjlaw.net

Brian Head Town

Table 24: 10-Year Capital Projects List by Type of Project

PROJECT	DESCRIPTION	CONSTRUCTION	CONTINGENCY	ENGINEERING	TOTAL
1 - 5 YEAR HORIZON					
WATER PROJECTS					
Project 01 -- Bearflat Well Rehabilitation					
CW-01	Rehabilitate/Replace the existing Bearflat Well	$1,000,000	$100,000	$187,000	$1,287,000
Project 02 -- Town Hall Well Rehabilitation					
CW-02	Rehabilitate and clean the existing Town Hall Well	$45,000	$4,500	$2,475	$51,975
Project 03 -- Snow Shoe Drive & Toboggan Waterline					
CW-03	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install new 8" waterline (price not included in total)	$546,700	$54,670	$102,233	$703,603
CW-03A	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install new 8" waterline - Alternate	$507,500	$50,750	$94,903	$653,153
Project 04 -- Mountain View Drive Waterline Loops					
CW-04A	Aoki Michi Road and Rue Jolly Road Loop - Install 1,000 feet of new 8" waterline and replace existing water meters	$353,550	$35,355	$66,114	$455,019
CW-04B	Forest Drive and Rue Jolley Drive - Install 1,300 feet of 8" waterline	$190,050	$19,005	$35,539	$244,594
CW-04C	300 North and Falcon Court to Mountain View Drive - Install 970 feet of 8" waterline	$152,600	$15,260	$28,536	$196,396
CW-04D	Falcon Court, 475 North and 275 East to Mountain View Drive Loop - Install 3,050 feet of 8" waterline	$379,050	$37,905	$70,882	$487,837
CW-04E	475 North along Elk Drive - Install 1,790 feet of 8" waterline	$226,750	$22,675	$42,402	$291,827
CW-04F	Forest Drive to Mountain View Drive along Deer Trail and Deer Trail Road - Install 1,670 feet of 8" waterline	$218,450	$21,845	$40,850	$281,145
CW-04G	Mountain View Drive to Deer Trail Road along Quakie Drive - Install 780 feet of 8" waterline	$91,600	$9,160	$17,129	$117,889
CW-04H	Hidden Lake Road and Trail Road - Install 1,630 feet of 8" waterline	$215,850	$21,585	$40,364	$277,799
				WATER PROJECTS TOTAL	**$4,344,635**
SEWER PROJECTS					
Project 09 -- Portable Sewer Camera Crawler					
SS-01	Purchase portable sewer camera crawler for infiltration detection work	$60,000	N/A	N/A	$60,000
Project 10 -- Canyon Sewer Replacement					
SS-02A	Sewer Pipe 150 - Remove and replace 404 feet of 12" sewer and 2 manholes	$54,512	$5,451	$10,194	$70,157
SS-02B	Sewer Pipe 103 (1) - Remove and replace 405 feet of 12" sewer and 2 manholes	$54,590	$5,459	$10,208	$70,257
SS-02C	Sewer Pipe 167 - Remove and replace 401 feet of 12" sewer and 2 manholes	$54,278	$5,428	$10,150	$69,856
SS-02D	Sewer Pipe 106 - Remove and replace 334 feet of 12" sewer and 2 manholes	$48,552	$4,855	$9,079	$62,486
SS-02E	sewer Pipe 170 - Remove and replace 397 feet of 12" sewer and 2 manholes	$53,866	$5,387	$10,073	$69,326
SS-02F	Sewer Pipe 113 - Remove and replace 163 feet of 12" sewer and 2 manholes	$33,814	$3,381	$6,323	$43,519
SS-02G	Sewer Pipes 163 and 164 - Remove and replace 684 feet of 12" sewer and 3 manholes	$86,252	$8,625	$16,129	$111,006
SS-02H	Sewer Pipe 176 - Remove and replace 400 feet of 12" sewer and 2 manholes	$54,200	$5,420	$10,135	$69,755
SS-02I	Sewer Pipe 160 - Remove and replace 285 feet of 12" sewer and 2 manholes	$44,330	$4,433	$8,290	$57,053
Project 11 -- Snow Shoe Drive & Toboggan Sewer - Sewer					
SS-03	Steam Engine Drive through Toboggan Lane and Snow Shoe Drive - Install 3,280 feet of 8" sewer and 16 manholes	$539,000	$53,900	$100,793	$693,693
				SEWER PROJECTS TOTAL	**$1,377,108**
				TOTAL PROJECTS 1 - 5 YEAR HORIZON	**$5,721,743**

6 - 10 YEAR HORIZON					
WATER PROJECTS					
Project 05 -- Ridge Top Drive Loops					
CW-05A	Along Ridge Top Drive to Kodiak Drive - Install 1,330 feet of 8" waterline	$184,500	$18,450	$34,502	$237,452
CW-05B	Along Meadow Drive and Ranger Court - Install 1,440 feet of 8" waterline	$173,150	$17,315	$32,379	$222,844
Project 06 -- Aspen Drive Waterline					
CW-06A	Aspen Drive, Kokopelli Loop and Sky View Drive - Install 6,880 feet of 8" waterline	$1,020,950	$102,095	$190,918	$1,313,963
CW-06B	Aspen Drive, Yankee Lookout Road and Sandstone Drive - Install 3,530 feet of 8" waterline	$478,450	$47,845	$89,470	$615,765
Project 07 -- Highway Waterline Replacement					
CW-07	Replace existing wrapped steel waterline with 8" D.I. pipe including valves and fire hydrant	$148,025	$14,803	$27,681	$190,508
Project 08 -- 12-inch Waterline					
CW-08	Replace existing wrapped steel waterline with 8" D.I. pipe including valves and fire hydrant	$108,250	$10,825	$20,243	$139,318
				WATER PROJECTS TOTAL	**$2,719,849**
SEWER PROJECTS					
Project 12 -- Mountain View Drive Area - Sewer					
SS-04A	Forest Drive and Falcon Court - Install 1,810 feet of 8" sewer and 6 manholes	$269,500	$26,950	$50,397	$346,847
SS-04B	Falcon Ccourt and 275 East - Install 2,810 feet of 8" waterline and 10 manholes	$423,500	$42,350	$79,195	$545,045
SS-04C	Elk Drive - Install 1,630 feet of 8" sewer and 6 manholes	$247,500	$24,750	$46,283	$318,533
SS-04D	Deer Trail - Install 1,080 feet of 8" sewer and 4 manholes	$165,000	$16,500	$30,855	$212,355
SS-04E	Deer trail Road and Quake Drive - Install 1,090 feet of 8" sewer and 4 manholes	$166,100	$16,610	$31,061	$213,771
SS-04F	Trail and Hidden Lake Road - Install 1,580 feet of 8" sewer and 4 manholes	$222,200	$22,220	$41,551	$285,971
Project 13 -- Ridge Top Drive - Sewer					
SS-05A	Along Ridge Top Drive to Kodiak Drive - Install 1,360 feet of 8" sewer and 4 manholes	$188,400	$18,840	$35,231	$242,471
SS-05B	Along Meadow Drive and Ranger Court - Install 1,150 feet of 8" sewer and 3 manholes	$155,450	$15,545	$29,069	$200,064
Project 14 -- Aspen Drive - Sewer					
SS-06A	Aspen Drive, Kokopelli Loop and Sky View Drive - Install 6,090 feet of 8" sewer and 28 manholes	$982,300	$98,230	$183,690	$1,264,220
SS-06B	Aspen Drive, Yankee Lookout Road and Sandstone Drive - Install 3,270 feet of 8" sewer and 17 manholes	$551,100	$55,110	$103,056	$709,266
				SEWER PROJECTS TOTAL	**$4,338,541**
				TOTAL PROJECTS 6 - 10 YEAR HORIZON	**$7,058,391**

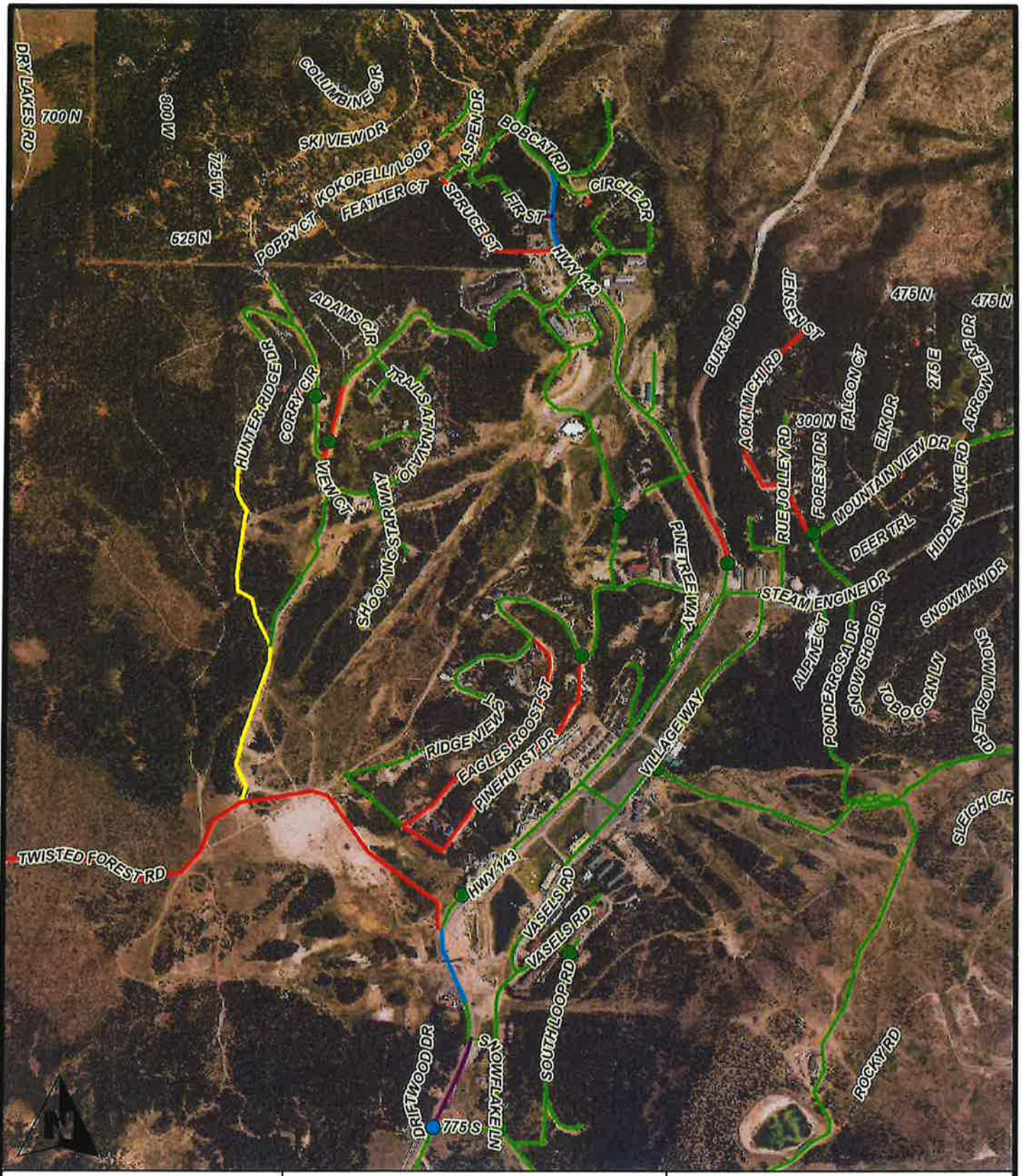
Bear Flat Well
Brian Head, Utah
Preliminary Engineer's Opinion of Probable Construction Costs
November 2, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$175,000.00	$175,000
2	Well Drilling & Development (1200' Depth)	1	L.S.	$1,000,000.00	$1,000,000
3	Well Pump Station Building	1	L.S.	$400,000.00	$400,000
4	Equip Well Pump Station	1	L.S.	$200,000.00	$200,000
5	Grading	1	L.S.	$50,000.00	$50,000
6	Power	1	L.S.	$100,000.00	$100,000
				SUBTOTAL	$1,925,000
				20% CONTINGENCY	$385,000
				15% ENGINEERING, LEGAL, FISCAL & CONSTRUCTION MANAGEMENT	$288,750
				TOTAL	$2,598,750

ALPHA ENGINEERING

Highway Waterline Replacement
Brian Head, Utah
Preliminary Engineer's Opinion of Probable Construction Costs
November 7, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$45,395.00	$45,395
2	Replace Existing 8" Wrapped Steel Waterline with 8" D.I. Waterline	1,750	L.F.	$95.00	$166,250
3	8" D.I. Waterline	1,125	L.F.	$86.00	$96,750
4	Reconnect Fire Hydrant Assembly	2	Each	$8,000.00	$16,000
5	8" D.I. Tee	4	Each	$2,000.00	$8,000
6	8" 45° D.I. Bend	2	Each	$650.00	$1,300
7	8" 22.5° D.I. Bend	1	Each	$650.00	$650
8	8" Gate Valves	12	Each	$5,000.00	$60,000
9	Pressure Reducing Station	1	Each	$70,000.00	$70,000
10	Tie-ins to Existing Piping	7	Each	$5,000.00	$35,000
				SUBTOTAL	$499,345
				20% CONTINGENCY	$99,869
				9% ENGINEERING & CONSTRUCTION MANAGEMENT	$44,941
				TOTAL	$644,155



0 300 600 1,200 1,800

Feet

Legend

- Existing PRVs
- Existing 6" Line
- Existing 8" Line
- Existing 12" Line
- New 8" Waterline
- Remove & Replace 8" Waterline
- Proposed PRV

Highway Replacement

Brian Head, Utah

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 1,200 feet
Date:	November 7, 2022

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

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0 100 200 400 600

Feet

ALPHA ENGINEERING

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Legend

- Existing PRVs
- Existing 6" Line
- Existing 8" Line
- Proposed PRV
- New 8" Waterline
- Remove 6" & Replace 8" Waterline

Rue Jolly Waterline Loop

Brian Head, Utah

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 400 feet
Date:	November 7, 2022

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Rue Jolley Waterline Loop
Brian Head, Utah
Preliminary Engineer's Opinion of Probable Construction Costs
December 3, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$87,371.00	$87,371
2	Replace Existing 6" Waterline with 8" D.I. Waterline	1,620	L.F.	$95.00	$153,900
3	8" D.I. Waterline	1,310	L.F.	$86.00	$112,660
4	Fire Hydrant Assembly	4	Each	$12,300.00	$49,200
5	Reconnect Fire Hydrant Assembly	3	Each	$5,000.00	$15,000
6	8" D.I. Tee	4	Each	$2,000.00	$8,000
7	8" 45° D.I. Bend	1	Each	$650.00	$650
8	8" 22.5° D.I. Bend	3	Each	$650.00	$1,950
9	8" Gate Valves	4	Each	$5,000.00	$20,000
10	Pressure Reducing Station	1	Each	$70,000.00	$70,000
11	Tie-ins to Existing Piping	3	Each	$5,000.00	$15,000
12	Replace 3/4" Water Service (Aoki Michi, Lee St, & Rue Jolley)	60	Each	$4,500.00	$270,000
13	3" Asphalt w/ 8" Base (26' Wide - Rue Jolley & Aoki Michi)	62,250	S.F.	$5.00	$311,250
				SUBTOTAL	$1,114,981
				20% CONTINGENCY	$222,996
				9% ENGINEERING & CONSTRUCTION MANAGEMENT	$100,348
				TOTAL	$1,438,325

ALPHA ENGINEERING

Blue Jay Way Waterline
Brian Head, Utah
Preliminary Engineer's Opinion of Probable Construction Costs
November 7, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$22,196.00	$22,196
2	8" D.I. Waterline	485	L.F.	$86.00	$41,710
3	Fire Hydrant Assembly	1	Each	$12,300.00	$12,300
4	8" 45° D.I. Bend	3	Each	$650.00	$1,950
5	Tie-ins to Existing Piping	2	Each	$5,000.00	$10,000
6	3" Asphalt w/ 8" Base (26' Wide)	31,200	S.F.	$5.00	$156,000
				SUBTOTAL	$244,156
				20% CONTINGENCY	$48,831
				9% ENGINEERING & CONSTRUCTION MANAGEMENT	$21,974
				TOTAL	$314,961

ALPHA ENGINEERING



0 50 100 200 300
Feet

Legend

- Existing PRVs
- Existing 8" Line
- New 8" Waterline

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

Blue Jay Way Waterline

Brian Head, Utah

Spatial Reference:	UT83-SF
Drawn By:	RKB
Scale:	1" = 200 feet
Date:	November 7, 2022

P:\501-01-2022-01 Brian Head General\Drawings\GIS\ArcGIS Pro\501-01-2022-01 ArcGIS Pro.aprx, Blue Jay Way Waterline Loop, 11/10/2022 8:01 AM rbeazer

ROSENBERG ASSOCIATES
CIVIL ENGINEERS • LAND SURVEYORS

PROJECT NO. 13489-22

PROJECT: Brian Head Million Gallon Generator BY: JDW DATE: 08-Nov-22

SUBJECT: Conceptual Cost Estimate CHKD: RAR DATE: 08-Nov-22

General

	Item	Total
1	Engineering	$ 29,300
2	Mobilization	$ 5,508
3	Testing	$ 3,000
4	Insurance	$ 3,000
General Total		$40,808

Concrete Generator Building

Concrete

	Item	Length (ft)	Width (ft)	Thickness (in)	Quantity	Unit Cost	Total
1	Lid	26	18	10	1	$ 1,000	$ 14,444
2	Floor	24.67	16.67	8	1	$ 1,000	$ 10,153
3	Side Wall	26	14	8	2	$ 1,000	$ 8,988
4	Back Wall	16.67	14	8	1	$ 1,000	$ 5,762
5	Footing	93.34	2.5	12	1	$ 1,000	$ 8,642
6	Apron	10.00	18	6	1	$ 1,000	$ 3,333
7	Retaining Wall	22.00	5	8	1	$ 1,000	$ 2,716
8	Retaining Wall Footing	22	2	12	1	$ 1,000	$ 1,630
Concrete Total							$55,669

Bunker Interior

	Item	Quantity	Unit	Unit Cost	Total
7	Gate	2	EA	$ 600.00	$ 1,200
8	Electrical	411	SF	$ 6.00	$ 2,467
Interior Total					$3,667

Exterior

	Item	Quantity	Unit	Unit Cost	Total
9	Electrical	250	LF	$ 50.00	$ 12,500
10	Earthwork	77	Cu Yd	$ 12.00	$ 924
11	Exterior Aesthetic Treatment	30	SF	$ 70.00	$ 2,100
Exterior Total					$15,524

Grand Total	$115,668



GENERATOR BUILDING
FOR
BRIAN HEAD

BRIAN HEAD, UTAH

ROSENBERG
ASSOCIATES
CIVIL ENGINEERS • LAND SURVEYORS

SHEET CTS

ROSENBERG ASSOCIATES
CIVIL ENGINEERS • LAND SURVEYORS

AGREEMENT
FOR PROFESSIONAL SERVICES

CLIENT **Brian Head Town**
P.O. Box 190068
Brian Head, UT 84719

ENGINEER **Rosenberg Associates**
352 East Riverside Drive, Suite A-2
St. George, UT 84790

PROJECT **13489-22**
Brian Head Town Generator Bunker
Brian Head, UT

EFFECTIVE DATE November 17, 2022

THIS IS AN AGREEMENT between the above-named Client and Engineer. The Client's project, of which the Engineer's services are a part, is generally described as follows:

Provide land surveying, civil engineering, and structural engineering for design of a new reinforced concrete generator bunker to be constructed for Brian Head Town.

The Client and the Engineer agree as follows:

ARTICLE 1 – ENGINEER'S SERVICES

1.1 Work Plan: The Engineer shall provide services outlined in the following Work Plan:

WORK PLAN

100 PROJECT DEVELOPMENT RESEARCH AND CONSULTATION: Conduct a site visit and consult with the Client to define the project requirements and available data. *The cost for this work is estimated. Actual cost will vary, and work will be invoiced based on the Engineer's hourly rate.*

110 CONCEPTUAL OPINION OF COST: Prepare an engineer's opinion of probable construction cost for the project grant application based on the Town's existing generator building.

120 BASE MAP: Perform a field mapping and/or aerial drone survey to determine project topography and existing site features, including fences, trees, above ground utilities, structures, and adjacent roadway features. Prepare a project base map using the field survey and existing available project boundary and topographic information.

250 GEOTECHNICAL STUDY: Perform a field investigation consisting of 1-2 exploratory excavations with a backhoe to depths on the order of up to 10 feet, or refusal, below existing site grade. Collect, package, and label representative soil samples from the explorations at selected intervals. Evaluate the nature and engineering properties of the on-site soils and present opinions and recommendations based on the findings of the field and laboratory investigations regarding 1) general surface and subsurface conditions at the site, including depths to groundwater and/or bedrock, if encountered; 2) site preparation and grading, including the suitability of any on-site soils for use as structural fill; and 3) suitable foundation type(s) and depth(s). Present results, opinions, and recommendations in a written report complete with logs of the explorations, a site plan, and laboratory test results. *The Town will provide the backhoe and perform the field excavations.*

260 CIVIL CONSTRUCTION PLANS: Research, evaluate, design, and develop project civil construction plans for the elements listed below. Review completed plans with the Client.

10 Site Layout: Develop the initial site layout utilizing the project base mapping and known site constraints.

20 Grading and Drainage: Prepare a grading and drainage plan for the project site to show existing and proposed contours, and cross-sections. Establish required grading for building pads. Correlate design with the drainage study. Determine earthwork quantities.

40 Utility: Prepare a project utility construction plan to include water, storm water, and electrical service to the project site. Review plan design with the local utility service providers. *Utility mapping will be based upon information obtained from utility service providers.*

80 Opinion of Cost: Prepare an engineer's opinion of probable construction cost for developing the project Bid Schedule.

262 STRUCTURAL CONSTRUCTION PLANS: Perform structural design and prepare drawings for the reinforced concrete structure to include building foundation, walls, and roof elements. Review project construction plans with the Client and the building department staff, then finalize. Furnish two complete sets of plan drawings and bound calculations to the Client.

270 CONSTRUCTION CONTRACT DOCUMENTS: Prepare material and construction specifications for the preliminary design plans. Prepare bidding documents and work agreement forms. Compile into a contract bidding package to include with the project general conditions and construction specifications.

360 PLAN REVIEWS: Assemble the project construction package to consist of the project construction plans and contract documents, if prepared. Submit the package to the local governing agency and follow through with the review process. Following acceptance of the civil construction plans, provide three (3) sets of hard copies in 24 x 36 format for project construction. *The cost for this work is estimated, assuming one round of reviews with minor corrections, if needed. Actual cost will vary, and work will be invoiced based on the Engineer's hourly rate.*

410 PROJECT BID AND CONTRACTOR SELECTION: Assist the Client in advertising for and obtaining bids for the project. Receive and process contractor deposits or charges for the bidding documents and maintain a record of prospective bidders. Attend the pre-bid conference and issue addenda to clarify, correct, or change the bidding documents. Attend the bid opening, prepare bid tabulation sheets, and assist the Client in evaluating the bids. *The cost for this work is estimated. Actual cost will vary, and work will be invoiced based on the Engineer's hourly rate.*

The following services are not included in the Work Plan:

- Hydrology/drainage study.
- Design of access roads. It is assumed that the existing dirt road access will be adequate.
- Construction engineering support or construction contract administration.
- Construction surveying and field staking.
- Final drawing of record.

ARTICLE 2 – FEES AND INVOICING

2.1 Fees: The Client shall pay the Engineer for the Engineer's services on a Lump Sum basis, except for work specifically noted in the Work Plan as being provided on an hourly-rate basis.

BREAKOUT OF LUMP SUM FEE

100	**PROJECT DEVELOPMENT CONSULTATION**	*Invoiced on an hourly basis with an estimated cost of*	**$2,000**
110	**CONCEPTUAL OPINION OF COST**		**$2,000**
120	**BASE MAP**		**$2,000**
250	**GEOTECHNICAL STUDY**		**$4,200**
260	**CIVIL CONSTRUCTION PLANS**		**$7,000**
	10 Site Layout	$1,600	
	20 Grading and Drainage	$2,000	
	40 Utility	$2,000	
	80 Opinion of Cost	$1,400	
262	**STRUCTURAL CONSTRUCTION PLANS**		**$4,000**
270	**CONSTRUCTION CONTRACT DOCUMENTS**		**$3,800**

360 PLAN REVIEWS	*Invoiced on an hourly basis with an estimated cost of*	**$2,500**
410 PROJECT BID AND CONTRACTOR SELECTION	*Invoiced on an hourly basis with an estimated cost of*	**$1,800**
PROJECT TOTAL		**$29,300**

2.1.1 *Breakout of Lump Sum Fee:* If a Breakout of Lump Sum Fee is included in this Agreement, the Engineer and the Client agree that the Breakout of Lump Sum Fee is an estimate only, and is not a guaranteed maximum fee or a billing cap; however, the Engineer shall not exceed the total estimated compensation amount of the Breakout of Lump Sum Fee unless agreed to by the Client. The Engineer may alter the estimated distribution of compensation in breakdown by phases and tasks set forth in the Breakout of Lump Sum Fee to be consistent with services actually rendered.

2.1.2 *Fee Exclusions:* The Client shall pay fees charged by governing agencies or others not specifically listed in the Cost Estimate or the Breakout of Lump Sum Fee that are required to complete the project services, such as government submittal fees, review fees, permit fees, title company charges, etc.

2.2 Fee Schedule: The Engineer's rates for Time and Materials billings are set forth in the following Fee Schedule. The Fee Schedule rates may be adjusted annually to reflect equitable changes in the compensation payable to the Engineer.

FEE SCHEDULE

ENGINEERING		
Principal Engineer 2	hour	$180
Principal Engineer 1	hour	$170
Project Engineer 2	hour	$155
Project Engineer 1	hour	$130
Staff Engineer 3	hour	$120
Staff Engineer 2	hour	$100
Staff Engineer 1	hour	$80
DESIGN		
Designer 3	hour	$140
Designer 2	hour	$100
Designer 1	hour	$90
Drafter 3	hour	$80
Drafter 2	hour	$70
Drafter 1	hour	$50
TECHNICIAN		
Technician 3	hour	$100
Technician 2	hour	$90
Technician 1	hour	$70
SURVEY		
Land Surveyor 3	hour	$170
Land Surveyor 2	hour	$150
Land Surveyor 1	hour	$125
Survey Crew 1-Man	hour	$125
Survey Crew 2-Man	hour	$160
Survey Crew Drone	hour	$180
ADMINISTRATIVE		
Admin 1	hour	$130
Admin 2	hour	$70
OTHER FEES		
Travel	mile	$0.58
Large Copies	sheet	$3.50
Outside Services	invoice + 10%	

2.3 Invoicing: The Engineer will generally prepare and submit its invoices to the Client on a monthly basis, or when work is complete if all work takes place within one month or less.

2.3.1 *Time and Materials Invoicing:* Invoices prepared in a time and materials format shall be an amount equal to the cumulative hours times hourly rates for each applicable staff type for services performed on the project, plus any applicable reimbursable expenses and outside consultant charges accumulated during the billing period.

2.3.2 *Lump Sum/Percent Complete Invoicing:* Invoices prepared in a lump sum/percent complete format shall be based on an estimated distribution of compensation as set forth in the Cost Estimate. The portion of the amount billed will be based upon the Engineer's estimate of the percentage of services completed during the billing period.

2.3.3 *Reimbursable Expenses or Outside Consultant Services Invoicing:* The amounts payable to the Engineer for outside reimbursable expenses or consultant services allocable to the project may be multiplied by a factor of 10% to account for the administration of such expenses and services.

2.4 Invoices Due: Invoices are due and payable within 30 days of receipt, or when work is complete if all work takes place within one month or less. Payment will be credited first to any interest owed to the Engineer and then to the principal. If the Client fails to make any payment due the Engineer for services and expenses within 30 days after receipt of Engineer's invoice, then:

2.4.1 Amounts due the Engineer will be increased at the rate of 1.5% per month (or the maximum rate of interest permitted by law, if less) from said thirtieth day; and

2.4.2 The Engineer may, after giving seven days written notice to the Client, suspend services under this Agreement until the Client has paid in full all amounts due for services, expenses, and other related charges. The Client waives any and all claims against Engineer for any such suspension.

2.5 Disputed Invoices: If the Client contests an invoice, the Client shall promptly advise the Engineer of the specific basis for doing so, may withhold only that portion so contested, and must pay the undisputed portion.

ARTICLE 3 – TIME SCHEDULE

3.1 The Engineer is authorized to begin rendering services as of the Effective Date and shall complete its obligations within a reasonable time.

3.1.1 The Client understands and acknowledges that elements outside the control of the Engineer may lengthen the project time, such as longer than anticipated staff reviews, scheduling conflicts with public hearings, extensions made by the public body, etc.

3.1.2 If, through no fault of the Engineer, such periods of time or dates are changed, or the orderly and continuous progress of the Engineer's services is impaired, or the Engineer's services are delayed or suspended, then the time for completion of the Engineer's services, and the rates and amounts of the Engineer's compensation, shall be adjusted equitably.

3.1.3 If the Client authorizes changes in the scope, extent, or character of the project, then the time for completion of Engineer's services, and the rates and amounts of the Engineer's compensation, shall be adjusted equitably.

3.1.4 If the Engineer fails, through its own fault, to complete the performance required in this agreement within the time set forth, as duly adjusted, then the Client shall be entitled, as its sole remedy, to the recovery of direct damages, if any, resulting from such failure.

3.2 The Client shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the Engineer's performance of its services.

ARTICLE 4 – EXHIBITS AND SPECIAL PROVISIONS

4.1 Exhibits: The below named exhibits, if applicable to this Agreement, are included as follows:

4.1.1 *General Conditions.* The General Conditions include additional terms and conditions which are incorporated into this Agreement including limitation of the Engineer's liability for the services.

4.1.2 *Certificate of Insurance*, if requested by the Client.

4.2 Total Agreement: This Agreement, (together with the exhibits identified above) constitutes the entire agreement between the Client and the Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

4.3 Designated Representatives: With the execution of this Agreement, the Engineer and the Client shall designate specific individuals to act as representatives with respect to the services to be performed or furnished by the Engineer and responsibilities of the Client under this Agreement. Such an individual shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of the respective party whom the individual represents.

4.4 Engineer's Certifications: The Engineer certifies that it has not engaged in corrupt, fraudulent, or coercive practices in competing for or in executing this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

CLIENT	**ENGINEER**
By: Aldo Biasi	By: Robert A Reid
Title: Public Works Director	Title: Principal
Date Signed:	Date Signed: November 3, 2022

ROSENBERG ASSOCIATES
CIVIL ENGINEERS • LAND SURVEYORS

GENERAL CONDITIONS

CLIENT **Brian Head Town**
P.O. Box 190068
Brian Head, UT 84719

PROJECT **13489-22**
Brian Head Town Generator Bunker
Brian Head, UT

ARTICLE 1 – ADDITIONAL CLIENT RESPONSIBILITIES

1.1 In addition to other responsibilities of the Client as set forth in this Agreement, the Client shall at its expense:

1.1.1 *Client Project Requirements:* Provide the Engineer with all criteria and full information as to the Client's requirements for the project, including design objectives, constraints, performance requirements, and any budgetary limitations.

1.1.2 *Available Site and Project Information:* Furnish to the Engineer any other available information pertinent to the project including data relative to previous designs, or investigation at or adjacent to the project site. The Client shall be responsible for, and the Engineer may rely upon, the accuracy and completeness of furnished information pursuant to this Agreement, and the Engineer may use such information in performing services under this Agreement.

1.1.3 *Site Access:* Arrange for safe access to the project property for the Engineer to perform services under the Agreement.

1.1.4 *Client Furnished Information.* If Client furnishes to Engineer designs, drawings or specifications for use, reproduction, modification or completion by Engineer in the performance of the Engineer's services, then (i) Client represents and warrants to Engineer that Client possesses the rights, licenses and/or authorizations including, without limitation, all intellectual property rights, licenses and authorizations, required for Engineer to use, reproduce, modify and complete such designs, drawings and/or specifications in the performance of the Engineer's services; and (ii) Client agrees to indemnify, defend and hold harmless Engineer and the Consultants and their past and current owners, officers, directors, employees and agents, and each of them, from and against all claims, liabilities, damages, costs and expenses (including reasonable attorneys' fees and costs and expenses of dispute resolution) caused by, arising out of or based in whole or in part upon any claim alleging that the Engineer and/or the Consultants were not authorized to use, reproduce, modify or complete such designs, drawings or specifications delivered to Engineer for the performance of Engineer's services.

ARTICLE 2 – STANDARDS OF PERFORMANCE

2.1 Standard of Care: The standard of care for all professional engineering and related services performed or furnished by the Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. The Engineer makes no warrantles, express or implied, under this Agreement or otherwise, in connection with the Engineer's services.

2.2 Technical Accuracy: The Client shall not be responsible for discovering deficiencies in the technical accuracy of the Engineer's services. The Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in the Client-furnished information.

2.3 Consultants: The Engineer may employ consultants to assist in the performance or furnishing of the services, subject to reasonable, timely, and substantive objections by the Client. The Engineer's consultants may employ subconsultants. As used in these General Conditions, the term "Consultant" shall mean collectively the Engineer's consultants, and the subconsultants of any tier engaged directly or indirectly by or under the Engineer's consultants.

2.4 Reliance on Others: Subject to the standard of care set forth in Paragraph 2,1, the Engineer and the Consultants may use or rely upon information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.

2.5 Compliance with Laws and Regulations, and Policies and Procedures: The Engineer and the Client shall comply with applicable laws and regulations. This Agreement is based on laws and regulations and the Client-provided written policies and procedures as of the effective date. Changes after the effective date to these laws and regulations, or to the Client-provided written policies and procedures, may be the basis for modifications to the Client's responsibilities or the Engineer's scope of services.

2.6 The Engineer shall not be required to sign any documents that would result in the Engineer having to certify, guarantee, or warrant conditions whose existence the Engineer cannot ascertain. The Client agrees not to make resolution of any dispute with the Engineer or payment to the Engineer contingent upon the Engineer signing any such documents.

2.7 Opinions of Probable Construction Cost: The Engineer's opinions of probable construction cost are to be made on the basis of the Engineer's experience and qualifications and represent the Engineer's best judgment as an experienced and qualified professional generally familiar with the construction industry. However, because the Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, the Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by the Engineer.

2.8 Design Without Construction Phase Services: The Engineer shall be responsible only for those Construction Phase services expressly required of the Engineer in this Agreement. With the exception of such expressly required services, the Engineer shall have no design, shop drawing review, or other obligations during construction and the Client assumes all responsibility for the application and interpretation of the construction standards, review and response to Contractor claims, contract administration, revisions

during construction, construction surety bonding and insurance requirements, construction observation and review, review of payment applications, and all other necessary Construction Phase engineering and professional services. The Client waives all claims against the Engineer that may be connected in any way to Construction Phase engineering or professional services except for those services that are expressly required herein.

2.9 Construction Engineering Site Presence: If the Engineer provides a site presence during project construction as part of this Agreement, the purpose of such visits is to observe as an experienced and qualified design professional the progress of Contractor's executed work. Based on information obtained during such visits and observations, the Engineer will determine in general if the Work is proceeding in accordance with the construction standards, and the Engineer shall keep the Client informed of the progress of the work.

2.9.1 Such visits by the Engineer are not intended to be exhaustive or to extend to every aspect of Contractor's work or to involve detailed inspections of Contractor's work beyond the responsibilities specifically assigned to the Engineer in this Agreement, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the work based on the Engineer's exercise of professional judgment.

2.9.2 The Engineer shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall the Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety at the site, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the work. Accordingly, the Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish or perform the work.

2.9.3 While at the project site, the Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's and the Client's safety programs of which the Engineer has been informed in writing.

2.10 Limitation of Responsibilities: The Engineer shall not be responsible for the acts or omissions of any contractor, supplier, or others performing or furnishing any of the work, for safety or security at the site, or for safety precautions and programs incident to contractor's work, during the Construction Phase or otherwise. The Engineer shall not be responsible for the failure of any contractor to perform or furnish the work in accordance with the contract documents.

ARTICLE 3 – USE OF DOCUMENTS

3.1 All documents authored by Engineer and/or the Consultants, in the performance of the Engineer's services are instruments of service (the "Instruments of Service") in respect to the project, and the author of the Instruments of Service shall retain the ownership, reserved rights and property interests therein (including the copyright and the right of reuse) whether or not the project is completed. The Client shall not rely on any Instrument of Service unless it is in printed form, signed by the Engineer or one of the Consultants.

3.2 Files in electronic media format of text, data, graphics, or other types that are furnished by one party to the other are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such files will be at the user's sole risk. Hard copies govern on any discrepancy with the electronic files.

3.3 The Client may make and retain copies of the Instruments of Service in connection with use on the project. The Engineer grants the Client a limited license to use the Instruments of Service on the project, subject to receipt by the Engineer of full payment for all the Engineer's services relating to the project. The Client acknowledges that such Instruments of Service are not intended or represented to be suitable for use on the project unless completed by the Engineer, or for use by the Client or others on extensions of the project, on other projects, or for other purposes, without written verification by the Engineer.

3.4 If the Engineer at the Client's request verifies the suitability of the Instruments of Service for use by the Client or others on extensions of the project, on other projects, or for other purposes, or adapts them for any other purpose, then the Client shall compensate the Engineer in an amount to be agreed upon by the Client and the Engineer.

3.5 Unauthorized Use of Instruments of Service: The Client shall not alter or amend any Instrument of Service without the written authorization of the Engineer. To the fullest extent permitted by law, the Client shall indemnify, defend and hold harmless the Engineer and the Consultants and their past and current owners, officers, directors, employees and agents, and each of them, from and against any and all claims, liabilities, damages, costs and expenses (including reasonable attorneys' fees and costs and expenses of dispute resolution) arising out of or based in whole or in part upon any unauthorized use or modification of the Instruments of Service by the Client or any person or entity that obtained the Instruments of Service from or through the Client or the Client's agents or representatives.

ARTICLE 4 – INSURANCE

4.1 The Engineer represents that it now carries – and will continue to carry during the term of this Agreement – insurance policies to cover Worker's Compensation, Employer's Liability, Commercial General Liability, and Business Automobile Liability. If requested, the Engineer shall provide to the Client certificates of the aforementioned insurance.

ARTICLE 5 – SUSPENSION AND TERMINATION

5.1 Suspension: The Client may suspend the project for up to 90 days upon advance written notice to the Engineer. The Engineer may, after giving advance written notice to the Client, suspend services if the Engineer's performance is substantially delayed through no fault of the Engineer.

5.2 Termination: Services under this Agreement may be terminated for the following:

5.2.1 *For Cause:* Termination may be made by either party upon 30-day written notice in the event of failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

5.2.2 *For Convenience:* Termination may be made by the Client effective upon the Engineer's receipt of notice from the Client.

5.3 Payments Upon Suspension/Termination: In the event of suspension/termination, the Engineer will be entitled to receive full payment for all services performed or furnished in accordance with this Agreement incurred through the effective date of suspension/termination. If the Client terminates this Agreement without cause, the Client shall pay to the Engineer the Engineer's reasonable fees and expenses on a time and materials basis to wind down the project in the Engineer's office.

ARTICLE 6 – SUCCESSORS, ASSIGNS, AND BENEFICIARIES

6.1 the Client and the Engineer are hereby bound and the successors, executors, administrators, and legal representatives of the Client and the Engineer are hereby bound to the other party to this Agreement and to the successors, executors, administrators and legal representatives of such other party, in respect of all Agreement covenants and obligations.

6.2 Assignment: Neither the Client nor the Engineer shall transfer or assign this Agreement, whether before or after the completion of the Engineer's services, without the prior written consent of the other. Neither the Client nor the Engineer shall transfer or assign any right, interest or claim for damages arising under this Agreement, whether before or after the completion of the Engineer's services, without the prior written consent of the other. Any assignment of this Agreement or any right, interest or claim for damages without such prior written consent shall be null, void and of no effect.

6.3 Third-Party Beneficiaries: Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Client or the Engineer. The Engineer's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against the Engineer because of this Agreement or the performance or nonperformance of services hereunder. The Client and the Engineer agree to require a similar provision in all contracts with contractors, subcontractors, Consultants, vendors and other entities involved in the work of this Agreement to carry out the intent of this provision.

ARTICLE 7 – DISPUTE RESOLUTION

7.1 The Client and the Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice. If the parties fail to resolve a dispute through negotiation, the Engineer and the Client agree to submit any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Disputes") to mediation. If such mediation is unsuccessful in resolving a Dispute, then the parties may exercise their rights under law.

7.2 Legal Action by the Client: All legal actions by the Client against the Engineer or the Consultants alleging any failure to perform the Engineer's services in accordance with this Agreement or in accordance with the standard of care required by applicable law, or alleging any other cause of action arising out of the Engineer's services, shall be barred two years from the date the Client knew or should have known of Client's claim, provided, however, no such legal action shall under any circumstances be asserted by the Client more than four years after the substantial completion date of Engineer's services.

ARTICLE 8 – INDEMNIFICATION AND LIMITATION OF LIABILITY

8.1 Indemnification:

8.1.1 The Engineer agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Client, and its present and former officers, directors, partners, employees, shareholders and owners from and against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Engineer's negligent performance of professional services under this Agreement and that of the Consultants or anyone for whom the Engineer is legally liable.

8.1.2 The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Engineer, and its present and former officers, directors, partners, employees, shareholders, owners and the Consultants from and against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Client's negligent acts in connection with the Project and the acts of its contractors, subcontractors or consultants or anyone for whom the Client is legally liable.

8.1.3 Neither the Client nor the Engineer shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence or for the negligence of others.

8.2 Limitation of Liability: In recognition of the relative risks and benefits of the Project to both the Client and the Engineer, the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of the Engineer and the Consultants, and their present and former officers, directors, partners, employees, shareholders, owners and subconsultants for any and all claims, losses, costs, damages or liabilities of any nature whatsoever, or claims expenses from any cause or causes, including attorneys' fees and costs and expert-witness fees and costs, so that the total aggregate liability of the Engineer and the Consultants, and their present and former officers, directors, partners, employees, shareholders, owners and subconsultants shall not exceed $50,000, or the Engineer's total fees for services rendered on the Project, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising (including, without limitation, breach of contract, tort, strict liability or statutory liability), unless otherwise prohibited by law.

8.3 Consequential Damages: Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client, the Engineer not the Consultants, nor their respective present or former officers, directors, partners, employees, contractors or subconsultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to this Agreement or services performed pursuant to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of express or implied warranty. Both the Client and the Engineer shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

ARTICLE 9 – CONFIDENTIALITY

9.1 The Engineer agrees to keep confidential and not to disclose to any person or entity, other than the Engineer's employees, the Consultants and the general contractor and subcontractors, if appropriate, any data or information not previously known to or generated by the Engineer that is furnished to the Engineer and marked "Confidential" by the Client. These provisions shall not apply to information in whatever form that is in the public domain, nor shall they restrict the Engineer from giving notices required by law or complying with an order to provide information or data when such an order is issued by a court, administrative agency or other legitimate authority, or if disclosure is reasonably necessary for the Engineer to defend itself from any legal action or claim.

ARTICLE 10 – EXPERT INVESTIGATION, EXPERT CONSULTING AND EXPERT WITNESS SERVICES

10.1 Indemnification for Claims by Parties or Participants to Dispute: If the Client has requested that the Engineer's services include expert investigation, expert consulting or expert witness services for or in connection with any distress to any structure, or any real or personal property, any possible or alleged defect in any structure or any real or personal property, or any possible or alleged negligence or other fault of any person or entity that may have caused injury or damage to the Client, the Client agrees to indemnify, defend and hold harmless the Engineer and the Consultants and their past and current owners, officers, directors, employees and agents, and each of them (the "Indemnitees"), from and against any and all claims, liabilities, damages, costs and expenses (including reasonable attorneys' fees and costs and expenses of dispute resolution) arising out of or based in whole or in part upon any claims or demands made or threatened against the Indemnitees, or any one or more of them, by any persons or entities a party to, a participant in or associated with any dispute, lawsuit, arbitration or other legal or administrative proceeding concerning the distress, defect, or negligence or other fault that is the subject of the expert investigation, expert consulting and/or expert witness services of this Agreement, which claims or demands are in whole or in part based upon or arise out of, or are in any manner related to, the expert investigation, expert consulting, or expert witness services provided by the Indemnitees, or any one or more of them, provided, however, the Client shall not be required to indemnify or hold harmless the Indemnitees, or any one or more of them, from or against any claim or demand if the Indemnitees, or any one or more of them, are adjudicated in a final unappealed or unappealable judgment to have engaged in fraud, perjury or other intentional wrongful conduct in the performance of the expert investigation, expert consulting or expert witness services of this Agreement.

10.2 Repair or Remediation Recommendations: If the Client has requested that the Engineer's services include expert investigation, expert consulting or expert witness services for or in connection with any distress to any structure or any real or personal property, if the Engineer provides any recommendations for the repair or remediation of any structure or any real or personal property in the performance of such expert investigation, expert consulting or expert witness services, the Client understands and agrees that such repair or remediation recommendations are made for the sole purpose of the preparation by others of final engineering plans and specifications of the repair or remediation recommended by the Engineer and/or of the preparation by others of cost of repair estimates or reports of the repair or remediation recommended by the Engineer. Such repair or remediation recommendations made by the Engineer are not final engineering plans or specifications and are not issued by the Engineer for construction of the repair or remediation recommended by the Engineer. Unless the Engineer enters into a separate written agreement with the Client or others to provide the final engineering plans and specifications for a repair or remediation of a structure or other real or personal property recommended by the Engineer and the Engineer issues for construction final professionally sealed plans and specifications for the repair or remediation, the Engineer is not the engineer of record of any repair or remediation of any structure or real or personal property performed by Client or others following Engineer's issuance of repair or remediation recommendations.

ARTICLE 11 – MISCELLANEOUS PROVISIONS

11.1 Controlling Law: This Agreement is to be governed by the law of the state or jurisdiction in which the project is located.

11.2 Notices: Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, by fax, by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

11.3 Survival: All representations, waivers, indemnifications, and limitations of liability included in this Agreement will survive the completion of the Engineer's services for the project and the termination of the Agreement for any reason.

11.4 Severability: Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Client and the Engineer, which agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

11.5 Waiver: A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

Sourcewell Quote

* Estimated updated quote amount in the excel spreadsheet

Customer Name: Brian Head

Customer Sourcewell Number: 155348

Sourcewell Contract #120617-CAT

From focus program letter OIL2019 (See Discounts Below)

Last Update 3/30/2022

Total Quote $ 217,555

Cat Generator	C15GCABR
Generator List Price	$ 104,498
SW Member Discount %	31%
SW Member Discount $	$ 32,394
Generator Total	**$ 72,103**

*CAT ATS 1	
List Price	$ 8,936
SW Member Discount (20%)	$ 1,787
Total	**$ 7,149**

*CAT ATS 2	
List Price	$ -
SW Member Discount (20%)	$ -
Total	**$ -**

Services / Source Goods	
Freight	$ 8,421
Start Up	$ 5,923
Electrical Contractor	$ 120,191
ATS Freight	$ 601
Exhaust Contractor	$ 10,225
UL Listing	$ 221
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -
0	$ -

Sub Total	$ 145,582
SW Member Discount	5%
SW Member Discount	$ 7,279
Services Total	**$ 138,303**

3/30/2022

Quote: 31011788

Brian Head Million Gallon Well Generator and ATS install

ATTN: Aldo Biasi
abiasi@bhtown.utah.gov
435-592-0031

We are pleased to submit this quotation for the following quality equipment:

*450 KW Package Generator. Open design with 24-hour fuel supply

Model: C15 GCABR
Quantity: 1
Rating: 450
Certification: U.S. EPA Stationary Emergency Use Only
Excitation: PM
Frequency: 60 Hz
Duty: STANDBY

The following features will be included:

Quantity	Characteristic Name	Feature Code	Feature Description
1	PGS EMISSION CERTIFICATION	CERTESE_I	EPA STATIONARY EMERGENCY
1	VOLTAGE OPTION	60H0480_I	60HZ 480 VOLT (WYE)
1	APPLICATION INDICATOR	STANDBY_I	STANDBY POWER
1	ENGINE RATING	KW00450_I	450ekW, 60Hz, 1800rpm
1	CONFIGURATION	C15DEQA_I	C15 D450GC PGS PSB
1	UL LISTING	ULLIST_I	UL 2200 LISTED PACKAGE GEN SET
1	DECAL LANGUAGE	LANENGO_I	ENGLISH INSTRUCTION LANGUAGE
1	GOVERNOR TYPE	ADEMA4_I	ADEM A4 GOVERNOR
1	MARKET SEGMENT CODES	MSEPGGN_I	GENERAL EPG
1	CUSTOMER SEGMENT	MSCEC77_I	PUBLIC OR CIVIL SERVICES
1	MARKET WORK CODE	MWCODEF_I	STANDBY POWER
1	AUTHORIZED APPROVAL NUMBER	WELL	AUTHORIZED APPROVAL NUMBER
1	PERMANENT MAGNET	PMEXCI3_I	PERMANENT MAGNET GENERATOR
1	SPACE (ALT) HEATER KITS	SHK0012_I	SPACE HEATER 12
1	ALTERNATOR	OGNSEDN_I	ALT M3136L4 SE DN
1	ALT POWER	FULLPWR_I	FULL POWER
1	BASE TYPE (MOUNTING OPTION)	FTDW037_I	C15 INTEGRAL TANK (24HR)UL142
1	FUEL TANK OPTIONS	FFLCK_I	FUEL TANK FILL PIPE & LOCK CAP
1	LOW FUEL LEVEL ALARM	FAHL90_I	AUDIO & FUEL ALARM (90% LEVEL)
1	NFPA110 BUNDLE	NFPA01_I	NFPA BUNDLE
1	GEN RUNNING & FAULT RELAY	EMCCAS5_I	GEN RUNNING & FAULT RELAY
1	PANEL MOUNTED AUDIBLE ALARM	PAA1_I	PANEL MOUNTED AUDIBLE ALARM
1	GROUND FAULT RELAY	GFR001_I	GROUND FAULT RELAY INDICATION
1	LOAD CENTER	LDC100A_I	100A LOAD CENTER
1	GFCI AC RECEPTACLE & WIRING	GFCICS1_I	20A GFCI (CONTROLS SIDE)
1	BATTERY OPTIONS	BAT2456_I	OVERSIZED WET BATTERY
1	BATTERY CHARGERS	BTC1028_I	BATTERY CHARGER 10 AMP
1	JACKET WATER HEATER	WHHH01_I	JACKET WATER HTR (PUMP STYLE)

1	CURRENT TRANSFORMER	CT0805A_I	800:5 CT RATIO
1	1ST CIRCUIT BREAKER	CBK0602_I	800A SINGLE MANUAL CB LS/I
1	CIRCUIT BREAKER AUX CONTACTS	CBAUX1_I	1ST BREAKER AUXILIARY CONTACTS
1	NEUTRAL BARS	NTS800_I	NEUTRAL BAR 800A
1	RADIATOR	STDRAD_I	STANDARD RADIATOR
1	MUFFLERS	MUFCR36_S	8" MUFFLER - 25 DBA ATTEN 36
1	EXHAUST FLEX FITTING-ADAPTERS	EXCFF25_S	FLEXIBLE EXHAUST CONNECTION 25
0	REMOTE ANNUNCIATOR	ANNR01_S	REMOTE ANNUNCIATOR
1	CELLULAR BAND	AM_I	AMERICAS BAND
1	TELEMATICS HARDWARE	PL444_I	PRODUCT LINK 4G LTE TELEMATICS
1	TELEMATICS HARDWARE CERTIFIED	TCVYES_I	ACCEPT - REVIEW LINK IN DESC
1	TESTING - GENERATOR SET	STDTEST_I	STD TEST - PKG GEN SET 0.8 PF
1	SHRINK WRAP PROTECTION	SWP0021_I	SHRINK WRAP PROTECTION 21

600AMP Transfer switch. NEMA3R With Delay Transition

Model: ATSGABN
Quantity: 1
Frequency: 60 Hz

The following features will be included:

Quantity	Characteristic Name	Feature Code	Feature Description
1	ATS CONTROLLER	TRU01CG_I	TRUONE CG CONTROLLER
1	ATS TRANSITION TYPE	DELATRA_I	DELAYED TRANSITION
1	ATS OPERATION TYPE	STANBYP_I	STANDARD - NO BYPASS
1	ATS ENCLOSURE	N3R8012_I	NEMA 3R 800A - 1200A
1	ATS AMPERAGE RATING	0800AMP_I	800 AMPS
1	MECHANICAL LUGS	ATSMLS0_I	MECHANICAL LUGS - STANDARD
1	ATS VOLTAGE	208T408_I	208 - 480V; 50/60Hz
1	PHASE	THREEPH_I	THREE PHASE
1	NEUTRAL	SN08120_I	SOLID NEUTRAL 800A - 1200A
1	ATS MECHANISM TYPE	CONTACT_I	CONTACTOR
1	PRICING - TRUONE	CGDM3XX32	PRICING - TRUONE
1	GROUND BUS	TRU0GB1_I	TRUONE 3-#8-1/0 CABLES
1	EKIP MODULES	EKIP0R2_I	MODBUS RTU + 2 IO
1	AUXILLARY POSITION CONTACTS	POSCONB_I	2 NO and 2 NC

Total Price: USD 217,555.07

Notes,

- Genset and ATS commissioning is included.
- 2-hour load testing for the genset at the time of startup and commissioning is included.
- Training and demonstration of the Generator and ATS's will be provided.
- Provides Caterpillar standard warranty, 2 years on standby units. With additional 3 year Extended Coverage
- Infrared imaging if needed will be provided by others.
- Fuel is not included.
- Offloading of equipment at F.O.B. point is the responsibility of others.
- Force Majeure - WPS will not be held liable for events beyond their control. That may delay their delivery, such as Acts of God, fire, strikes, floods, accidents, or similar causes beyond our control.
- Wheeler Machinery Co. will not be responsible for any coordination studies or the setting of circuit breakers or protective relays.

- Taxes are not included in this quotation and may or may not apply.
- This proposal is confined to the Bill of Materials stated above.

Clarifications/Exclusions,

- Exhaust insulation is not included.
- Electrical contractor work includes:
  - Conduit, wire, fittings, support, set and secure genset W/ATS in place, inlet and outlet louvers, and labor to complete electrical install.
- Electrical Contractor work excludes:
  - Any permits or fees, provide or install exhaust piping, D450GC Genset and ATS, Delivery or Transport of Gen to Brian Head Town, Gen Enclosure or Pad.
- Mechanical contractor: to install the Caterpillar supplied muffler, supply and install exhaust piping to exit and stub out of the front of the building similar to the bear flat installation. No exhaust insulation is provided.

Availability & Lead Times:

Please allow approximately 2-3 weeks for submittal drawings. Lead-time will be estimated when order is placed and is currently about 41 - 45 weeks

Tim Minor
Sales Representative
Power Systems Sales
(801) 558-4675
Tminor@wheelercat.com

Cat® D450 GC DIESEL GENERATOR SETS

CAT®

Standby: 60 Hz, 480V & 600V



Engine Model	Cat® C15 In-line 6, 4-cycle diesel
Bore x Stroke	137mm x 171mm (5.4in x 6.8in)
Displacement	15.2 L (928 in³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Standby	Performance Strategy
450 ekW, 562.5 kVA	EPA Certified for Stationary Emergency Application

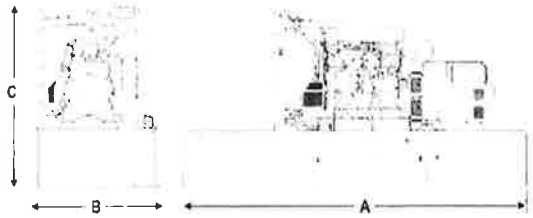
PACKAGE PERFORMANCE

Performance	Standby	
Frequency	60 Hz	
Genset Power Rating	562.5 kVA	
Gen set power rating with fan @ 0.8 power factor	450 ekW	
Emissions	EPA TIER 3	
Performance Number	DM8153	
Fuel Consumption		
100% load with fan	131.7 L/hr	34.8 gal/hr
75% load with fan	106.1 L/hr	28.0 gal/hr
50% load with fan	79.1 L/hr	20.9 gal/hr
25% load with fan	45.1 L/hr	11.9 gal/hr
Cooling System[1]		
Radiator air flow restriction (system)	0.12 kPa	0.48 in. Water
Radiator air flow	720 m³/min	25426 cfm
Engine coolant capacity	20.8 L	5.5 gal
Radiator coolant capacity	54 L	14 gal
Total coolant capacity	75 L	20 gal
Inlet Air		
Combustion air inlet flow rate	41.9 m³/min	1479.3 cfm
Max. Allowable Combustion Air Inlet Temp	48 °C	118 °F
Exhaust System		
Exhaust stack gas temperature	491.3 °C	916.3 °F
Exhaust gas flow rate	111.3 m³/min	3929.1 cfm
Exhaust system backpressure (maximum allowable)	10.0 kPa	40.0 in. water
Heat Rejection		
Heat rejection to jacket water	177 kW	10047 Btu/min
Heat rejection to exhaust (total)	505 kW	28699 Btu/min
Heat rejection to aftercooler	133 kW	7546 Btu/min
Heat rejection to atmosphere from engine	70 kW	4000 Btu/min
Heat rejection from alternator	26 kW	1462 Btu/min

Cat® D450 GC DIESEL GENERATOR SETS

Emissions (Nominal)[2]	Standby	
NOx	2105.4 mg/nm³	4.54 g/bhp-hr
CO	303.9 mg/nm³	0.63 g/bhp-hr
HC	8.9 mg/nm³	0.02 g/bhp-hr
PM	9.5 mg/nm³	0.03 g/bhp-hr
Alternator[3]		
Voltages	**480V**	**600V**
Motor Starting Capability @ 30% Voltage Dip	871	1103
Current	676.6	541.3
Frame Size	M3136L4	M3136L4
Excitation	S.E	AREP
Temperature Rise	105°C	105°C

WEIGHTS & DIMENSIONS – OPEN SET



Base	Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Generator Set Weight kg (lb)
Skid (Wide Base)	4815 (189.6)	1630 (64.2)	2034 (80.1)	3707 (8172.5)
Integral Tank Base	4815 (189.6)	1630 (64.2)	2584 (101.7)	4644 (10238.3)

FUEL TANK CAPACITY

Tank Design	Total Capacity		Useable Capacity	
	Litre	Gallon	Litre	Gallon
Integral	3671	969.7	3323	877.8

DEFINITIONS AND CONDITIONS

[1] For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

[2] Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & F and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

[3] UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

RATINGS: Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Fuel Rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

LEHE2010-04 (05-20)

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Cat® GC INTEGRAL FUEL TANKS



INTEGRAL FUEL TANKS
D250 GC – D600 GC

FEATURES

- UL Listed for United States (UL 142) and Canada (CAN/ULC S601)
- Facilitates compliance with NFPA 30 code, NFPA 37 and 110 standards and CSA C282 code
- Dual wall
- Low fuel level warning standard, customer configurable warning or shutdown
- Primary tank leak detection switch in containment basin
- Tank design provides capacity for thermal expansion of fuel
- Fuel supply dip tube is positioned so as not to pick up fuel sediment
- Fuel return and supply dip tube is separated by an internal baffle to prevent immediate re-supply of heated return fuel
- Pressure washed with an iron phosphate solution
- Interior tank surfaces coated with a solvent-based thin-film rust preventative
- Heavy gauge steel gussets with internal lifting rings
- Primary and secondary tanks are leak tested at 20.7 kPa (3 psi) minimum
- Compatible with open packages and enclosures
- Gloss black polyester alkyd enamel exterior paint
- Welded steel containment basin (minimum of 110% of primary tank capacity)
- Direct reading fuel gauge with variable electrical output
- Emergency vents on primary and secondary tanks are sized in accordance with NFPA 30.

INTEGRAL

- Integral diesel fuel tank is incorporated into the generator set base frame
- Robust base design includes linear vibration isolators between tank base and engine generator.

OPTIONS

- Audio/visual fuel level alarm panel
- 5gal (18.9 L) spill containment*
- Locking Fuel Fill
- Overfill prevention Valve*

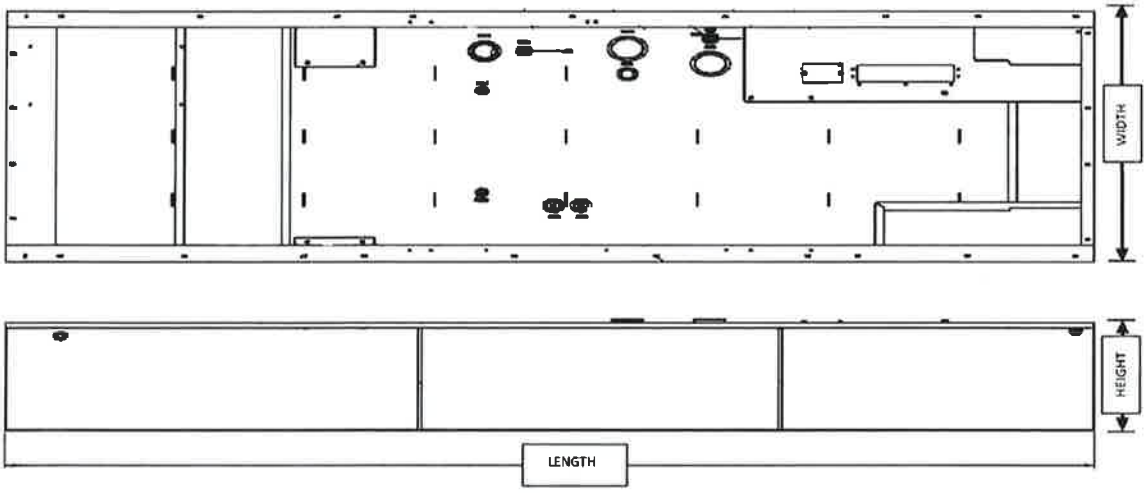
*Applicable for D350GC-D600GC Models only

Cat® GC INTEGRAL FUEL TANKS

CAT®

Integral Fuel Tank Base Useable Capacities with Fuel Tank Dimensions & Weights

Standby ekW	Width mm	Width in
250-300	1430	56.3
350-400	1630	64.1
450-500	1630	64.1
550-600	1865	73.4



The heights listed above do not include lumber used during manufacturing and shipping

A. Open Set & Sound Attenuated Enclosure

Tank Design	Feature Code	Total Capacity		Useable Capacity		Tank Only						Overall Package Height with Tank			
						Dry Weight		Height 'H'		Length 'L'		Open		Enclosure	
		Litre	Gallon	Litre	Gallon	kg	lb	mm	in	mm	in	mm	in	mm	in
Integral Tank	FTDW035	2270.7	599.8	2059.9	543.9	970	2138	762.4	30.0	3958	155.8	2202	86.7	2487	97.9
	FTDW036	2820	744.9	2553	674.4	1165	2568	818.8	32.2	4625	182.1	2584	101.7	2644	104
	FTDW037	3671	969.7	3323	877.8	1331	2934	668.2	26.3	4622	181.9	2456	96.7	2644	104
	FTDW038	4292	1133.8	3889	1027.3	1657	3653	816.4	32.1	4980	196	2560	100.7	2721	107.1

B. Estimated Run Time (Hours)

Tank Design	Feature Code	Standby Ratings (kVA) ekW	100%		75%		50%	
			Hrs	L/hr	Hrs	L/hr	Hrs	L/hr
Integral Tank	FTDW035	250	28.1	73.3	35	58.8	47	43.8
		300	24	86.0	30.8	66.8	40	51.5
	FTDW036	350	27.1	94.3	31.2	81.9	42.4	60.2
		400	24.1	105.9	28.1	90.7	38.6	66.2
	FTDW037	450	25.2	131.7	31.3	106.1	42.0	79.1
		500	24.3	137	30.1	110.5	46.6	71.3
	FTDW038	550	25.7	151.1	32.9	118.1	45.2	86.1
		600	24.1	161.6	30.0	129.6	42.4	91.7

Tanks with full electrical stub-up area include removable end channel. Tanks with RH stub-up include stubup area directly below the circuit breaker or power terminal strips.

Fuel tanks and applicable options facilitate compliance with the following United States NFPA Code and Standards:
NFPA 30: Flammable and Combustible Liquids Code
NFPA 37: Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines
NFPA 110: Standard for Emergency and Standby Power Systems

Fuel tanks and applicable options facilitate compliance with the following Canadian Standard and Code:
CSA C282 – Emergency Electrical Power Supply for Buildings
CSA B139-09 – Installation Code for Oil-Burning Equipment

www.Cat.com/electricpower
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Automatic Transfer Switch



Picture shown may not reflect actual configuration

Cat® CG Series

The Cat® CG Automatic Transfer Switch offers open- and delayed-transfer functionality for critical emergency power applications in commercial and light industrial applications, with an enhances feature set and LCD HMI interface.

The innovative design of the CG provides a durable mechanism that is tested up to 6,000 cycles in an assembly that weighs up to 30% less than comparable models yet offers up to 25% more wire bending space.

An innovative auto-configuration via the HMI sets electrical system parameters in seconds, minimizing on-site setup time. Premade configuration file upload is also available via USB or Bluetooth connection. Any programming changes can be done from the HMI with a few keystrokes, making commissioning quick and painless.

Features

- Available 30 to 3000A
- Wide Control Voltage Range (200V-480V)
- USB port to upload/download settings
- Available Bluetooth connection and enhanced communication capabilities
- Password protection LCD HMI
- Integrated help button and menu
- Automatic Configuration Function
- UL1008, NFPA 70, 99, 101 and 110
- NEMA ICS 10
- cUL

Primary Functions

- Monitor normal and emergency source voltages and frequencies
- Provision of transfer & re-transfer control signals
- Provision of engine/generator start and shutdown signals
- Permit user programming of set points
- Display real time and historical information
- Permit system testing
- Store all parameters in nonvolatile memory
- Provide at-a-glance source status indication

Specifications

Cat CG Features

System Information	
Product nodes (amperes)	30, 60, 100, 125, 160, 200, 260, 400, 600, 800, 1000, 1200, 1600, 2000, 2600, 3000
Rated voltage & frequency	200-480Vac, 50/60 Hz
Phase system	Single and Three (three phase only >600A)
Number of poles	2, 3 and 4 (3 & 4 pole only >600A)
Neutral configuration	Optional Solid or Switched neutral
Product type	Open transition (I-II), Delayed Transition (I-O-II)
Voltage and frequency settings	
Pick up Voltage Source 1	71-99%,101-119%
Drop out Voltage Source 1 *	70-98%, 102-120%
Pick up Voltage Source 2	71-99%, 101-119%
Drop out Voltage Source 2 *	70-98%, 102-120%
Pick up Frequency Source 1	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 1	80-99%, 101-120%
Pick up Frequency Source 2	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 2	80-99%, 101-120%
Time delay settings	
Override momentary Source 1 Outage, sec	0-60
Transfer from Source 1 to Source 2, sec	0-3600
Override momentary Source 2 Outage, sec	0-60
Transfer from Source 2 to Source 1, min	0-120
Generator stop delay, min	0-60
Center-OFF delay, sec	0-300
Pre-transfer delay S1 to S2, sec	0-300
Post-transfer delay S1 to S2, sec	0-300
Pre-transfer delay S2 to S1, sec	0-300
Post-transfer delay S2 to S1, sec	0-300
Elevator Pre-signal delay S1 to S2, sec	0-60
Elevator Pre-signal delay S2 to S1, sec	0-60
Elevator Post-signal delay S1 to S2, sec	0-60
Elevator Post-signal delay S2 to S1, sec	0-60
Load shed delay, sec	0-300
Source failure detections	
No voltage	yes
Undervoltage	yes
Overvoltage	yes
Phase missing	yes
Voltage unbalance	yes
Invalid frequency	yes
Incorrect phase sequence	yes

Specifications

Additional Features	
Controls	LCD + keys
LED indications for ATS, S1 and S2 status	Yes
Open transition - Standard digital inputs/outputs	1/1
Delayed transition - Standard digital inputs/outputs	2/1
Programmable digital inputs/outputs	Yes
Auto config (voltage, frequency, phase system)	Yes
Source priority	Source 1/2, No priority
Manual re-transfer	Yes
In-phase monitor (synchro check)	Yes
Genset exercising: on-load, off-load	Yes
In-built power meter module	No
Load shedding	Yes
Real time clock	Yes
Event log	Yes
Predictive maintenance	No
Voltage and current harmonics measuring	No
Field-mount accessories	
Auxiliary contacts for position indication	Optional
Additional digital input/output contacts	Optional, adding up to 6 each
12-24 Vdc aux supply module for controller	Optional
Communication modules	Optional
Connectivity capability	
Modbus RTU (RS-485)	Optional
Modbus/TCP	Optional
Profibus DP	Optional
ProfiNet Yes	Optional
DeviceNet	Optional
Ethernet IP	Optional

Specifications

Cat CG series technical data

Criteria	Units	Switch Size			
		30-260A	400A	600-1200A	1600-3000A
Rated operational voltage	Vac	200-480			
Operating voltage range	Vac	160-576			
Rated frequency	Hz	50-60			
Rated for 'Total System Loads', or 'Motor Loads' at nameplate rating	A	Compliant			
Contact transfer time I-II, II-I (load interrupting time)	ms	<50			<100
Operating transfer time I-II, II-I	ms	<500			
Mechanical Endurance (includes cycles during OL testing)	No. of operating cycles	6050	4050	3050	2550
Suitable for applications		Utility-to Utility, or Utility-to-Generator			

Cat CG series Coordinated Breaker Withstand and Close-on Ratings (WCR)

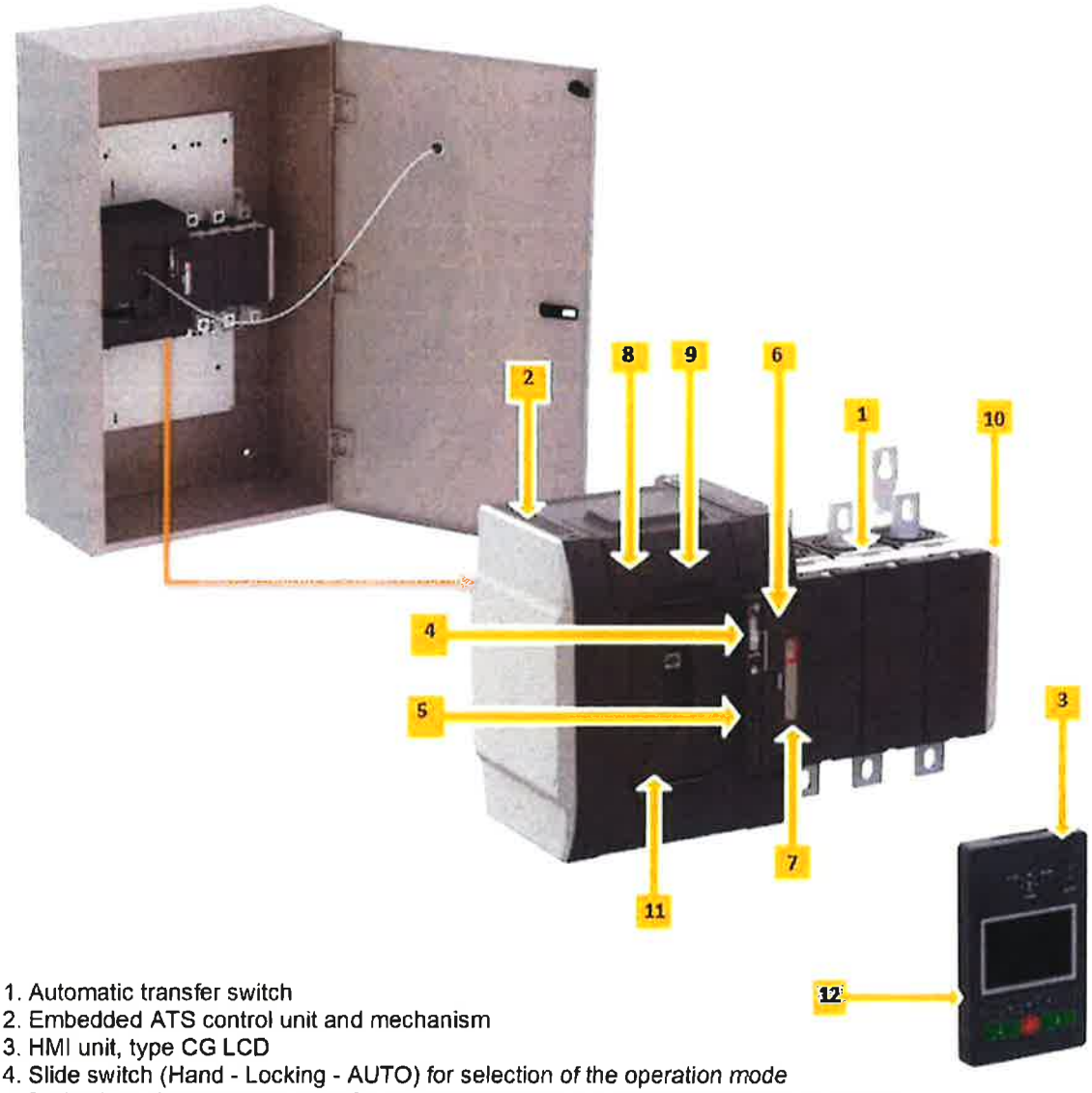
ATS Rating (A)	Max Voltage	Max Coordinated Breaker WCR (A)	Breaker Manufacturers[1]
30 - 200	480	30000	ABB, GE, Schneider, Eaton, Siemens
260	480	35000	ABB, GE, Schneider, Eaton, Siemens
400	480	50000	ABB, GE, Schneider, Eaton, Siemens
600	480	50000	ABB, GE, Schneider, Eaton, Siemens
800 - 1200	480	65000	ABB, GE, Schneider, Eaton, Siemens
1600 - 3000	480	100000	Any

1. For detailed WCR ratings by ATS and breaker type, please refer to Caterpillar supplemental ratings guide

Cat CG AL/CU UL Listed Solderless Screw-Type Terminals for External Power Connections

ATS Rating (A)	Cables per phase & neutral	Range of wire sizes
30 - 200	1	6 AWG - 300 kcmil (14 - 152 mm^2)
260	1	2 AWG - 600 kcmil (34 - 304 mm^2)
400	1	2 AWG - 600 kcmil (34 - 304 mm^2)
600	2	2 AWG - 600 kcmil (34 - 304 mm^2)
800 - 1200	4	2 AWG - 600 kcmil (34 - 304 mm^2)
1600 - 3000	8	2 AWG - 600 kcmil (34 - 304 mm^2)

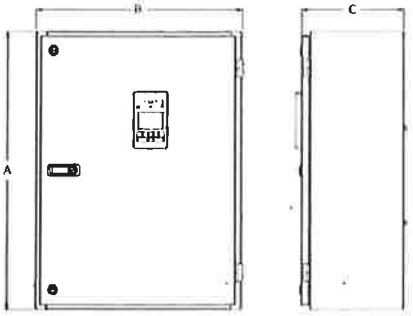
Units 30 to 1200A Leverage Unique Modular Construction...



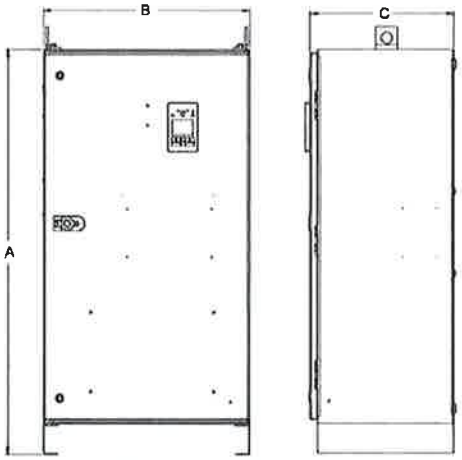
1. Automatic transfer switch
2. Embedded ATS control unit and mechanism
3. HMI unit, type CG LCD
4. Slide switch (Hand - Locking - AUTO) for selection of the operation mode
5. Padlocking the automatic transfer switch to prevent automatic and manual operation
6. Handle for manual operation
7. Position indication
8. Terminals for control circuit connections (behind the cover)
9. Place for connectivity modules (aux power supply, com and signaling)
10. Place for auxiliary contact block
11. Location of product identification label
12. Programming port, only for Ekip Programming module and Ekip Connect software

Weights and Dimensions

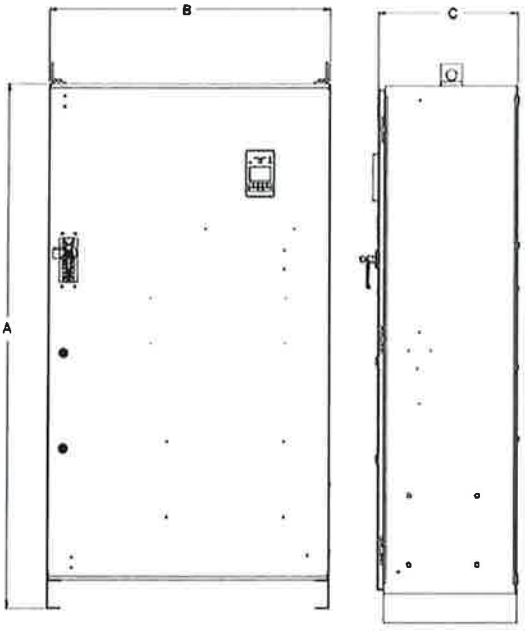
30-400 Amps



600 Amps



800-1200 Amps

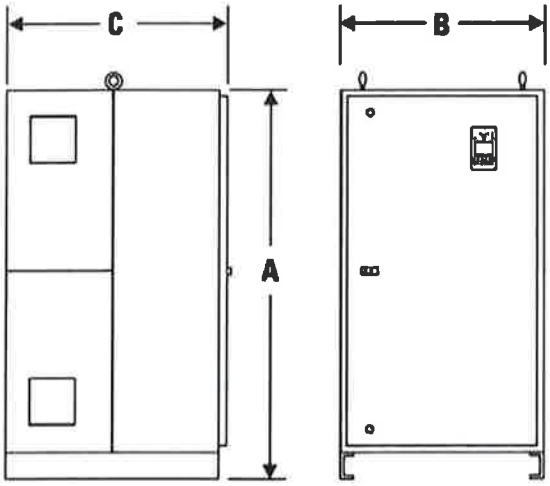


CG Series dimensions and weights, UL Type 1 Enclosure					
Ampere Rating	Poles	Weight[1] lb (kg)	Dimensions[2] in (mm)		
			Height (A)	Width (B)	Depth (C)
30-200	2	89 (40)	32 (813)	24 (610)	12 (305)
	3	93 (42)	32 (813)	24 (610)	12 (305)
	4	98 (44)	32 (813)	24 (610)	12 (305)
260	2	145 (66)	46 (1168)	24 (610)	14 (356)
	3	150 (68)	46 (1168)	24 (610)	14 (356)
	4	155 (70)	46 (1168)	24 (610)	14 (356)
400	2	153 (69)	46 (1168)	24 (610)	14 (356)
	3	159 (72)	46 (1168)	24 (610)	14 (356)
	4	290 (131)	54 (1372)	28 (711)	19.5 (495)
600	2	278 (126)	54 (1372)	28 (711)	19.5 (495)
	3	284 (129)	54 (1372)	28 (711)	19.5 (495)
	4	290 (131)	54 (1372)	28 (711)	19.5 (495)
800-1200	[illegible]	482 (219)	74 (1880)	40 (1016)	19.5 (495)
	4	515 (234)	74 (1880)	40 (1016)	19.5 (495)

1. Special Enclosures Type 3R, 12, 4, and 4X weights are up to 22% greater than Type 1 Enclosures
2. Special Enclosures Type 3R, 12, 4, and 4X dimensions may differ. Consult Caterpillar Switchgear Technical Support for details.
3. Packing materials must be added to weights shown. Allow 15% additional weight for cartons, skids, crates, etc.
4. All dimensions and weights are approximate and subject to change without notice.

Weights and Dimensions

1600 - 3000 Amps



CG Series dimensions and weights, UL Type 1 Enclosure					
Ampere Rating	Poles	Weight[1] lb (kg)	Dimensions[2] in (mm)		
			Height (A)	Width (B)	Depth (C)
1600 - 3000	3	1150 (522)	90 (2286)	35.5 (902)	48 (1219)
	4	1400 (635)	90 (2286)	35.5 (902)	48 (1219)

1. Add 3" in height for lifting eyes.
2. Special Enclosure dimensions may differ (Type 3R, 12, 4, and 4X). Consult Caterpillar for details.
3. Packing materials must be added to weights shown. Allow 15% additional weight for cartons, skids, crates, etc.
4. All dimensions and weights are approximate and subject to change without notice.

Materials and specifications are subject to change without notice.
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Project Sizing Report

Sizing Id	10764934	Electricity Supply	60 Hz 480/277 V
Project Name	Million Gallon	Connection	STAR
Customer Name	Brian Head	Max. Ambient Temperature	100.0 F
Region	U.S.	Altitude	10,000.0 Ft. A.S.L
Prepared By	Tim Minor	Humidity	30%
Modified Date	3-Jan-2022		

Load Analysis Summary

Max Transient Load Step	51.5 SkVA / 50.6 SkW
Peak Transient Load Step	278.7 SkVA / 256.3 SkW
Final Running Load	255.9 kVA / 235.7 kW / 0.92 PF
Max Running Non Linear Load	228.6 RkVA
Selection Criteria	Exceeds Generator Set Capacity Limit

Generator Set

Generator Set Model	(1) of C15		
Model Type	D450 GC	Nameplate Rating	450.0 ekW / 562.5 kVA / 0.8 PF
Voltage Regulator and Slope	D350 2:1 slope;	Site Output Rating	356.8 ekW / 445.9 kVA
Feature Code	C15DEQA	Rating Type	Standby
Fuel	Diesel	Open / Enclosure	Open
Sizing Methodology	Conventional	UL Listed	UL Listed
		Capacity Used	66.1%

Engine

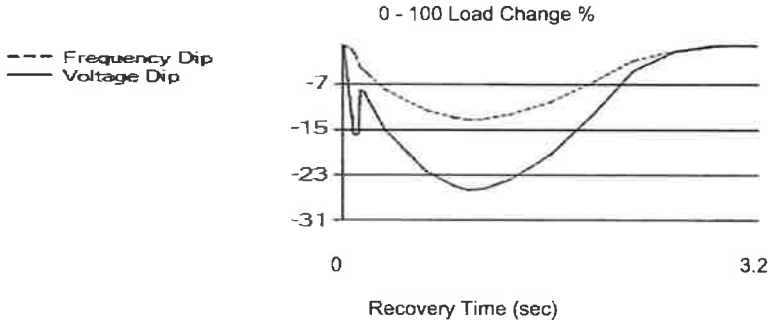
Make/Model	C15	Emissions / Certifications	EPA ESE
Aspiration	TA	Governor	ELEC
Cylinder Configuration	INLINE - 6	Aftercooler Type	ATAAC
Speed	1800 RPM	Displacement	928 Cubic Inch / 15 Liter
Engine Performance Number	DM8153	Bore	137.16
Fuel Consumption at 100% Load	34.3 gph	Stroke	171.45

Alternator			
Alternator Type/Frame Size	SR500 / M3136L4	Insulation Class	H
Alternator Winding Pitch	0.6667	Temperature Rise	105 C
Excitation/Winding Type	PM / RANDOM	Number Of Poles	4
Alternator Arrangement Number	5652329	Number of Leads	6
Subtransient Reactance X"d	0.1433	Rated Amps	676.6

**** See your Caterpillar dealer and/or Spec Sheet for technical information.

***** Package Power Tolerance: +/- 5%

Block Load(Only) Transient Response *			
Load Change %	FDip %	VDip %	Recovery Time (sec)
0 - 25	<5%	<5%	< 3
0 - 50	<5%	8.7	< 3
0 - 75	8.3	15.7	< 3
0 - 100	13.2	25.6	3.2



Transient Performance

Block Load (only) Transient Response values are at factory conditions with a resistive load. This information is representative of a typical Cat generator set, but is not guaranteed. Generator set block load capabilities at site conditions may vary from factory transient response test results due to site altitude, site ambient, and engine to engine variation.

Load Report

Project Name	Million Gallon	Electricity Supply	60 Hz 480/277 V
Customer Name	Brian Head	Rating Type	Standby
Region	U.S.	Max. Ambient Temperature	100.0 F
Prepared By	Tim Minor	Altitude	10,000.0 Ft. A.S.L
Modified Date	3-Jan-2022	Humidity	30%
Generator Set Model	(1) of C15	Nameplate Rating	450.0 ekW / 562.5 kVA / 0.8 PF

Load Details		Permitted		Predicted		Transient Inrush		Running		Resultant Peak		Cumulative Running	
Load Step	Load Description	FDip	VDip	FDip	VDip	SkVA	SkW	kVA	kW	SkVA	SkW	kVA	kW
Step 1													
1.1	2x60.00 HP - Centrifugal Pump Load: NEMA, Centrifugal Pump, VFD, 110% Current Limit, Single	20%	20%			11.4	10.3	114.3	102.9				
1.2	1x30.00 kW - Resistive Load: Resistive, 3-Phase	30%	30%			30.0	30.0	30.0	30.0				
1.3	2x60.00 HP - Centrifugal Pump Load: NEMA, Centrifugal Pump, VFD, 110% Current Limit, Single	20%	20%			11.4	10.3	114.3	102.9				
	Step 1 Total	20%	20%	<5%	<5%	51.5	50.6	255.9	235.7				
	Total Through Step 1									278.7	256.3	255.9	235.7

Load Analysis Summary : Generator set meets site requirements

Maximum Step		Maximum Peak		Final Running	
SkVA	SkW	SkVA	SkW	kVA	kW
51.5	50.6	278.7	256.3	255.9	235.7

Engine Room Tools Summary

Project Name	Million Gallon	Electricity Supply	60 Hz 480/277 V
Customer Name	Brian Head	Rating Type	Standby
Region	U.S.	Max. Ambient Temperature	100.0 F
Prepared By	Tim Minor	Altitude	10,000.0 Ft. A.S.L
Modified Date	3-Jan-2022	Humidity	30%
Generator Set Model	(1) of C15	Nameplate Rating	450.0 ekW / 562.5 kVA / 0.8 PF

Fuel Tank Summary

Running Hours	hr	Fuel Tank Size	Data coming soon
Fuel Consumption @ 100% Load	34.33 US gal/hr		

Radiator Duct and Room Fresh Air Louver Designer Summary

Duct Dimensions from Radiator Side (Length)	102.90 in	Combustion Airflow	1,479.32 ft^3/min
Duct Dimensions from Radiator Side (Width)	64.17 in	Minimum Louver Area	0.22 ft^2
Heat Radiation from Engine & Alternator	97.04 kW	Temp Rise	14.11 Deg. F
Engine & Alternator Airflow	24,887.00 ft^3/min	Radiator Duct Area	0.11 ft^2

Exhaust Back Pressure Summary

Total Straight Pipe Length	0 ft	Exhaust Gas Flow	3,929.55 ft^3/min
Total Number Of 90 Deg Long Radius Elbow	0	Muffler Pressure Drop	0.40 psi
Total Number Of 90 Deg Short Radius Elbow	0	Pressure Drop in Exhaust	0.00 psi
Total Number Of 45 Deg Elbow	0	Max Allowable Pressure Drop	Data coming soon
Minimum Exhaust Pipe Diameter	Data coming soon		
Stack Temperature	916.30 Deg. F		
Gas Density	0.03 lb/ft^3		

Town Hall Well Repair
Brian Head, Utah
Preliminary Engineer's Opinion of Probable Construction Costs
December 3, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$35,000.00	$35,000
2	Pull Well / Reset	1	L.S.	$50,000.00	$50,000
3	Camera Well	1	L.S.	$6,000.00	$6,000
4	New Drive / Panel	1	L.S.	$30,000.00	$30,000
5	Pump Bowl Set & Motor	1	L.S.	$40,000.00	$40,000
6	Wire	1	L.S.	$70,000.00	$70,000
7	Test Pump	1	L.S.	$100,000.00	$100,000
8	New Column (100')	1	L.S.	$9,000.00	$9,000
10	Upgrade Booster Station	1	L.S.	$45,000.00	$45,000
				SUBTOTAL	$385,000
				20% CONTINGENCY	$77,000
				15% ENGINEERING, LEGAL, FISCAL & CONSTRUCTION MANAGEMENT	$57,750
				TOTAL	$519,750

ALPHA ENGINEERING

Crystal Mountain

~~Town Hall~~ Well Repair

Brian Head, Utah

Preliminary Engineer's Opinion of Probable Construction Costs

December 3, 2022

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNITS	UNIT PRICE Dollars & Cents	ITEM PRICE Dollars & Cents
1	Mobilization @ 10%	1	L.S.	$35,000.00	$35,000
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3	Camera Well	1	L.S.	$6,000.00	$6,000
4	New Drive / Panel	1	L.S.	$30,000.00	$30,000
5	Pump Bowl Set & Motor	1	L.S.	$40,000.00	$40,000
6	Wire	1	L.S.	$70,000.00	$70,000
7	Test Pump	1	L.S.	$100,000.00	$100,000
8	New Column (100')	1	L.S.	$9,000.00	$9,000
10	Upgrade Power	1	L.S.	$45,000.00	$45,000
				SUBTOTAL	$385,000
				20% CONTINGENCY	$77,000
				15% ENGINEERING, LEGAL, FISCAL & CONSTRUCTION MANAGEMENT	$57,750
				TOTAL	$519,750

Same as Town Hall
Both Estimated

Tyson Allsop
Tech Sales & Support

1505 W 130 S
Orem, UT 84058

T: 385.312.4574
F: 801.484.6954
tyson.allsop@mountainland.com
www.mountainland.com

MOUNTAINLAND SUPPLY COMPANY

Bill to Customer:

Town of Brain Head
56 North HWY 143
Brian Head, UT 84719

Ship to Customer:

Town of Brain Head
56 North HWY 143
Brian Head, UT 84719

Reference: Flexnet Light AMI (350 Services)
Salesman: Walter Okobia
Terms: Net 30 Days

Effective: 3/23/2023

Line	Description	Qty	U/M	Unit Price	Extension
	Base Stations and Infrastructure				
1	Sensus Flexnet M400B2 BaseStation	1	ea	$32,750.00	$32,750.00
2	Sensus R100 Outdoor Basestation	1	ea	$6,400.00	$6,400.00
2	Sensus BaseStation Installation	2	ea	$25,000.00	$50,000.00
3	Cellular Backhaul Device and Installation	1	ea	$1,500.00	$1,500.00
4	Sensus Archer 3 Handheld	1	ea	$4,575.00	$4,575.00
5	Sensus Commandlink II	1	ea	$710.00	$710.00
6	Sensus M400B2 BaseStation Ext. Warranty (Starts Year 2)	1	ea	$1,500.00	
7	Sensus R100 BaseStation Ext. Warranty (Starts Year 2)	1	ea	$375.00	
8	Sensus Propagation Study	1	ea	$600.00	$600.00
			TOTAL:		**$96,535.00**
	Software One-Time Costs				
1	Sensus RNI SAAS Setup Fee	1	ea	$ 7,350.00	$ 7,350.00
2	RNI Core Education - Performed by Mountainland	1	ea	$ 750.00	$ 750.00
3	Sensus Analytics Setup	1	ea	$ 3,350.00	$ 3,350.00
4	Sensus Analytics Education - Performed by Mountainland	1	ea	$ 1,000.00	$ 1,000.00
5	Sensus RNI SAAS and SA Inegration by P.S.	1	ea	$ 1,800.00	$ 1,800.00
			TOTAL:	**$**	**14,250.00**
	Software SAAS Costs				
1	Sensus RNI SAAS and Sensus Analytics Annual Fee ($0.80 per meter per month) **All annual fees are subject to a 3.5% increase over a prior year*	1	ea	$3,360.00	$3,360.00
2	Sensus Analytics Unlimited Text Messages Annual Fee **All annual fees are subject to a 3.5% increase over a prior year*	1	ea	$225.00	$225.00
			TOTAL:		**$3,585.00**
			Infrastructure and Software:		**$114,370.00**

Customer Portal Costs (Optional Feature)

1	Customer Portal Annual Min. Users Fee **All annual fees are subject to a 3.5% increase over a prior year*	1	ea	$6,150.00	$6,150.00
2	Customer Portal Annual Text Messages Unlimited **All annual fees are subject to a 3.5% increase over a prior year*	1	ea	$225.00	$225.00
3	Customer Portal System Setup - One Time Fee	1	ea	$6,250.00	$6,250.00
4	Customer Portal Customer Information Integration - One Time	1	ea	$11,500.00	$11,500.00
5	Customer Portal Training - Remote - One Time Fee	1	ea	$2,000.00	$2,000.00
			TOTAL:		**$26,125.00**

Notes:

1. Meter quantities are estimated. A more accurate price for meters can be provided given the actual quantities and sizes of existing meters.

2. This is a material estimate only and there are no guarantees as to the estimated quantities and all quantities should be reviewed prior to bidding or ordering.

3. ALL Special Order Material is Non-Returnable.

4. All prices quoted herein supersede all prior quotes and are subject to change without prior notice, without exception.

5. Prices are good for 7 days unless specifically noted within the estimate provided.

6. Stock material must be returned in the original package and must bin in resalable condition to be considered for credit.

7. All non-stock, special order and fabricated product returned for credit are subject to the manufacturer's return policy. All re-stock, handling and freight charges are the responsibility of the purchaser. No guarantee of credit should be assumed for any returned material.

8. Customer is fully responsible to provide sufficient electrical connections within 1' of base station location. Price does not include communication link to the RNI.

9. Spectrum license agreement is required for all infrastructure purchases.

10. Unit provides two way functionality for electric and North American two way (NA2W-M2 technology) for water and gas SmartPoints.

11. Customers upgrading from legacy one-way solution to NA2W functionality will require base stations to be NA2W compliant. Customers must contact Tech Support to initiate base station assessment for NA2W compliance requirements. Once assessment is complete, separate quote for parts and installiation will be provided.

13. Requires customer to meet minimum guidelines for installation. Please contact Sensus for customer requirements and Sensus responsibilities.

14. Payment required upon completion of standard integration workshop. Custom integration requires special quote.

15. One-Time RNI Setup Fee includes setup of the Head End Software within the utility's network, and configuring the AMI network infrastructure to properly communicate with the Head End Software. Customer will be invoiced upon receipt of order.

16. First year of support is included under Standard Warranty. Customer must purchase Extended Warranty prior to the end of Standard Warranty period.

17. Extended warranties are an optional service. Products have a one (1) year warranty with the initial purchase. If purchased, extended warranties will go into affect in year two (2). Prices listed are per year. Customer must purchase extended warranties prior to the end of year one. Extended warranties are not available after year one (1) expires.

18. SaaS Extended Warranty is an optional service that will be effective throughout the contract term (5 years). First year warranty included in purchase. Payment for years 2-5 is to be included with annual SaaS payment.

19. Extended Warranty does not include batteries.

20. Standard SaaS Contract Term is 5 years.

Dorsett Controls

Eric Turner
Regional Sales Engineer

Aldo Biasi
Public Works Director
56 North Hwy 143
Brian Head, UT 84719

March 27, 2023

Reference: Dorsett SCADA Solution

Aldo:

I have adjusted this proposal and changed the number to reflect a budget number for your project. Please let me know how the funding goes and if the project is going to move forward I can get a more detailed price for the project.

Dorsett Technologies is pleased to be considered for the Brian Head SCADA system. Our approach is to meet all the needs we mutually identified.

Highlights from the discovery call and developed Mutual Action Plan (MAP)

- Utopian SCADA Vision
  - Accessibility
  - Easy to
    - Use
    - Maintain
    - Understand
    - Monitor
    - Control
    - expand
- Usability
  - A system the Town can perform the day-to-day operations and maintenance.
  - Access support when it's needed.
    - Get the support we ask for, not what they think we need.
- Reports and data
  - Critical.
  - State reports.
  - Inaccuracy.
  - Cost of accessing our data.
  - The cost associated with inaccurate data.
- Reliability
  - Communications.
  - Ensure flow readings match the flow meter.
- Windows update needed this year.

- Cost (of doing nothing)
    - SCADA has been on the back burner due to cost.
    - The cost of doing nothing could be substantial.
        - It impacts what we pay for water, possibly 5k per year.
        - If we can't provide snowmaking water, City loses money. Resort, Community Could Be substantial
        - SCADA meter readings don't match the flow meter reading.
        - Communication failures.
        - Sewer flows.
- Prefer not to change the SCADA in phases if possible.
- Evaluating Dorsett to determine the overall fit
- Capital facilities plan
    - Replacing the SCADA system.
- MAP
    - Screenshots from the existing system.
    - KMZ file.
    - Pictures of panels.
    - Funding spreadsheet
    - Points list and proposal
    - Proposal review meeting
    - Cost analysis

With the Dorsett InfoScan and MicroScan products, your team will be empowered to expand, operate, maintain and service your SCADA as you see fit. You will have access to free 24/7/365 high-quality phone, remote support to assist your team. 97% of our calls in 2020 were handled by remote support and empowered municipalities. When you need onsite support, we will be there.

Like Cedar City, you will have access to your data for years to come. The data reports are customizable, and we will work with you to design the reports you need and train you to create the reports you don't know you want or need at this time.

There is a cost to upgrading your SCADA. When it comes to the precious resource and commodity of water, there can often be a significant hidden cost of doing nothing.

- Unreliable communications
- Lack of water to produce snow
- Pumped water that is leaking out of the system
- Delayed maintenance or support
- Charges for phone and remote support
- Yearly Maintenance contracts
- Fees to access your data
- Hardware and software that's out of date
- Security risks with out-of-date software

Dorsett Controls will Provide:

- The InfoScan SCADA software and configuration.
- IT coordination to maximize existing resources.
    - Ensures security and other Town needs are addressed.
- Communications planning and optimization.
- Replacement of the existing RCS controllers with MicroScan UNVs
    - An option to reduce cost and work with the Town to do the inhouse installation.
- Work with the Town to develop a low-impact implementation plan.
- Reports:
    - Peak Day demand.
        - Water use.
        - Well drawdown level
        - Flow
    - Pump start and runtime
    - Pressure
    - Chemical usage
    - Tank time to fill time to empty
- Graphics and display generation will be coordinated with you to ensure the screen configuration and Graphics meet your needs.
    - We have a library of general 3 D representations that can be used at no additional charge.

The pricing is based on:

- The Dorsett Control Items above.
- The points list.
- Brian Head SCADA document.

Price without taxes and bonds: $ 198,000.00

The following is additional information about Dorsett Controls, InfoScan, MicroScan, and our differentiators.

About Dorsett Technologies:

Dorsett Technologies has been designing and installing automated electronic control systems since 1983. We started manufacturing our own line of control equipment in 1987

and software in 1989. Since then, we have become a premier supplier to NASA, the Department of Defense, municipalities, and special services districts.

We designed and sold our first municipal SCADA system in 1999 to the Town of Yadkinville, NC, which had an older, inoperable PLC-based system for which the Town could no longer obtain support. We installed our InfoScan and MicroScan products on their wastewater and water treatment plants and have since expanded the system to include wells, tanks, boosters, and lift stations.
Dorsett Technologies has been working in Utah since 1993, performing work on some of the most demanding and complex control systems for Hill Air Force Base. In 2000, we established a full-time presence amid expanding opportunities at the base, where we now have designed and installed hundreds of automated monitoring and control systems. We provided SCADA for numerous municipalities and districts in Utah and Wyoming. Most of these customers had many SCADA issues, all of which have been resolved with Dorsett Technologies' total solution.

A Well Qualified Team:

All our team members are highly qualified with many years of proven, demanding, real-world experience. Our strength is in our employees, and we strive to enhance their knowledge daily and show our appreciation by providing a workplace that values them personally.

We employ skilled engineers, electricians, programmers, designers, IT/networking professionals, and project managers.

- 80+ total employees (16 in Utah office)
- »50% have five or more years tenure
- »25% have ten or more years tenure

This ensures that you will enjoy a consistent and unique customer experience when you work with Dorsett Technologies; not only will you come to know us, we will know you and your SCADA system. We have worked with many customers and engineering firms to design SCADA systems.

InfoScan:

- A user may access the InfoScan system, whether connected to the local network or remotely, using the InfoScan desktop application (Windows only) or via a mobile device. Both access methods require an authorized user to login to the InfoScan system using a defined username and password. All passwords are required to have a minimum complexity (based on the Windows complexity requirements) and are saved encrypted/hashed in the database.
- The desktop application may be installed on the desired machines. Surfaces or laptops can be a good option for mobile when the use of the application is preferred. The application

provides an authorized user with full access to the InfoScan system after a successful login and two-factor authentication.

- Mobile phones and tablet access provides limited access to the system after a successful login and two-factor authentication. You will be able to view system displays, alarm management; and acknowledgment.
- We use Splashtop for our remote access support software, installation, and setups.
- Unattended is used only during setup and installation. Once the system has been handed over to the customer, Splashtop unattended will be uninstalled from your SCADA system.
- Attended access is a one-time generated code by the customer used for 24/7 InfoScan support. The attended software is a portable installer and does not stay on the system. Once the remote session has disconnected, the software is no longer on the Scada system.
- Splashtop software meets Industry standards using TLS 1.2 with AES 256-bit encryption.
- All-inclusive software
    - Graphics display builder
    - Graphical programming language (GPL) editor
    - History data
        - Data Store
        - Information is stored indefinitely and is only limited by your system's storage capacity.
    - Reports
    - Trend Plots
    - Alarms
    - Notification
        - Phone call
        - SMS
        - Email
    - Operator logs
    - Free software updates

MicroScan:

- Universal (MS5-UNV) controllers are all low voltage.
- Easy troubleshooting.
- 1-year warranty.
- Firmware is always forward and backward compatible, so there is no worry that an upgrade in the software will require a new controller's purchase.
- Communications BACnet, an open-source technology used in many devices.
    - Modbus TCP/IP and RTU.

Ultra-low Life-Cycle Costs:

- No software, seat, or licensing fees.
- Free software and firmware updates for life; your software is never outdated.

- Free 24/7/365 phone and remote support.
- Extreme hardware reliability; the expected support life of a MicroScan 5 UNV controller is over 20 years!
- Backward and forwards compatibility; we still provide support for customers that are using controllers that are over 30 years old.
- Total solution provider; Dorsett hardware and software are all manufactured in-house, and using industry-standard open protocols ensures compatibility with all control needs.
- Extreme data protection; customer data is protected using multiple redundancies. Safe data prevent costly downtime.
- Unlimited expansion; Dorsett systems can be expanded at any time to include tens of thousands of points. No software limit on expansion; nothing new to buy.

Ease of Use and Special Features:

- Graphic makes navigating the software easy and familiar.
- Easy updates; firmware updates are done remotely from any workstation.
- Simple controller swap; easily replace controllers in the field. Set the IP address and replace it, no need to reprogram.
- Easy-to-understand animations, data, and charts make monitoring your system a breeze.
- Programming is made simple via graphical programming language; you don't have to be an expert programmer to customize your system.
- Access system history; see the entire history of events, operator logs, equipment monitoring points, and more.
- Secure data; a variety of security strategies protect your system.

This proposal and associated terms and conditions accepted by:

_____	_____
Signature	Title
_____	_____
Name	Date

Respectfully,

Eric Turner

Mobile – 801-710-1753
1485 West Hill Field Rd. #201
Layton, Utah 84041

STAFF REPORT TO THE TOWN COUNCIL

BRIAN HEAD

ITEM: 2023 WATER REVENUE BONDS PARAMETERS RESOLUTION

AUTHOR: Shane Williamson, Town Treasurer
DEPARTMENT: Administration
DATE: September 12, 2023
TYPE OF ITEM: Legislative Action

SUMMARY:

The Council will consider a resolution authorizing Water Revenue Bonds, Series 2023 in an amount not to exceed $5,490,000 to fund the Town's Capital Facilities Plan Water Projects List.

BACKGROUND:

Earlier this spring, the Town's Public Works Director, Aldo Biasi, applied for and received funding from the Utah Division of Drinking Water to help fund various water projects found in the new capital facilities plan. With the approval of the funding, the Town must go through the statutory bonding process to receive the funds, which begins with this parameters resolution.

ANALYSIS:

This parameters resolution serves as the first technical step in issuing water revenue bonds which will be used to fund various water projects found the capital facilities plan. The parameters resolution sets the maximum terms of the bonds and begins the public review process.

Parameters set for the bonds:

- Maximum Principal: in the aggregate principal amount of not to exceed $5,490,000 (This is typically set higher than the amount you intend to issue, just in case something comes up and you need to increase)
- Maximum Term: to mature in not more than forty (40) years from their date or dates.
- Maximum Rate: rate or rates of not to exceed 0.00% per annum.
- Maximum Discount: 99% (Sometimes bonds are sold at less than their face value to make them more attractive to buyers or get a lower rate.)
- $1,645,748 of the $5,490,000 is principal forgiveness and will not be required to be repaid.
-

FINANCIAL IMPLICATIONS:

Issuing the bonds will require the town to repay $3,838,000. Currently, the Town has around $5,781,064 in outstanding water debt secured by a pledge of water revenues.

BOARD/COMMISSION RECOMMENDATION:

N/A

STAFF RECOMMENDATION:

Staff recommends that the Council approve the attached parameters resolution. If the Council chooses to do so, staff will follow the steps to appropriately notify residents and gather public input and return with the Final Bond Resolution.

PROPOSED MOTION:

I move to adopt Resolution No. 23-533, a resolution calling for a public hearing and authorizing not more than $5,490,000 taxable water revenue bonds to finance water system improvements; providing for the publication of a notice of public hearing and bonds to be issued; fixing the maximum aggregate principate amount, maturity, interest rate and discount of the bonds; providing for the running of a contest period; and related matters.

ATTACHMENTS:

A – Parameters Resolution

TOWN OF BRIAN HEAD, UTAH

TAXABLE WATER REVENUE BONDS
PARAMETERS RESOLUTION

SEPTEMBER 12, 2023

RESOLUTION NO. _____

A RESOLUTION CALLING A PUBLIC HEARING AND AUTHORIZING NOT MORE THAN $5,490,000 TAXABLE WATER REVENUE BONDS, TO FINANCE WATER SYSTEM IMPROVEMENTS; PROVIDING FOR THE PUBLICATION OF A NOTICE OF PUBLIC HEARING AND BONDS TO BE ISSUED; FIXING THE MAXIMUM AGGREGATE PRINCIPAL AMOUNT, MATURITY, INTEREST RATE AND DISCOUNT OF THE BONDS; PROVIDING FOR THE RUNNING OF A CONTEST PERIOD; AND RELATED MATTERS.

WHEREAS, pursuant to the provisions of the Utah Local Government Bonding Act, Title 11, Chapter 14, Utah Code Annotated 1953, as amended (the "Act"), The Town of Brian Head, Utah (the "Issuer"), has authority to issue revenue bonds for the municipal purposes set forth therein; and

WHEREAS, the Act provides for the publication of a Notice of Public Hearing and Bonds to be Issued, and the Issuer desires to publish such a notice at this time in compliance with the Act with respect to bonds to be issued by the Issuer pursuant to this Resolution and the Final Bond Resolution and associated General Indenture of Trust and Second Supplemental Indenture of Trust (as defined below);

NOW, THEREFORE, it is hereby resolved by the Town Council of the Town of Brian Head, Iron County, Utah, (the "Council") as follows:

Section 1. The Council of the Issuer hereby finds and determines that it is in the best interests of the Issuer and its residents for the Issuer to issue not more than $5,490,000 aggregate principal amount of its Taxable Water Revenue Bonds, in one or more series, which shall be designated as "Town of Brian Head, Utah, Taxable Water Revenue Bonds" (herein, the "Bonds"), the Bonds to bear no interest, to mature in not more than 40 years from their date or dates, and to be sold at a price not less than ninety-nine percent (99%) of the total principal amount thereof for the purpose of financing, in part, improvements to the Issuer's water system, including a new well, improvements to existing wells, water lines and related improvements (the "Project"), all pursuant to this Resolution and a restated resolution to be adopted by the Council authorizing and confirming the issuance and sale of the Bonds (herein referred to as the "Final Bond Resolution" which approves a Second Supplement of Indenture amending and supplementing the General Indenture of Trust dated as of May 1, 2021, by and between

the Issuer and U.S. Bank, National Association, as Trustee, substantially in the forms attached hereto as Exhibits A, B, and C), and the Issuer hereby declares its intention to issue the Bonds according to the provisions of this Resolution and the Final Bond Resolution and Indenture, when adopted.

Section 2. The Issuer hereby calls a public hearing on October 10, 2023, at 1:00 p.m., or as soon thereafter as feasible, at the offices of the Issuer, to invite comment on the proposed Bonds and the economic impact of the Project on the private sector.

Section 3. The Issuer hereby authorizes and approves the issuance and sale of the Bonds pursuant to the provisions of this Resolution and the Final Bond Resolution to be adopted by the Council at a later date, with such changes thereto as shall be approved by the Council upon the adoption of the Final Bond Resolution, provided that the principal amount, the interest rate, maturity, and discount shall not exceed the maximums set forth in Section 1 hereof.

Section 4. In accordance with the provisions of the Act, the Town Clerk of the Issuer is hereby authorized and directed to cause a "Notice of Public Hearing and Bonds to be Issued" substantially in the form attached hereto as Exhibit D (the "Notice") to be (1) posted on the Utah Public Notice Website at least 14 days before the Public Hearing, (2) posted on the Town Website at least 14 days before the Public Hearing, and (3) to be posted at the Town Hall and posted as a class A notice on the Newspaper website at least 14 days prior to the Public Hearing, and to cause a copy of this Resolution (together with all exhibits hereto) to be kept on file in the office of the Issuer's Town Clerk in Brian Head, Utah, for public examination during regular business hours of the Issuer, i.e., between 9:00 a.m. and 4:30 p.m. Monday through Friday, for at least thirty (30) days from and after the date of publication of the Notice.

Section 5. All parts of this Resolution are severable, and if any section, clause, or provision of this Resolution shall, for any reason, be held to be invalid or unenforceable, the invalidity or unenforceability of any such section, clause or provision shall not affect the remaining sections, clauses or provisions of this Resolution.

Section 6. All parts of this Resolution are severable, and if any section, clause, or provision of this Resolution shall, for any reason, be held to be invalid or unenforceable, the invalidity or unenforceability of any such section, clause or provision shall not affect the remaining sections, clauses or provisions of this Resolution.

Section 7. All resolutions or parts thereof in conflict herewith are, to the extent of such conflict, hereby repealed and this Resolution shall be in full force and effect immediately upon its approval and adoption.

Section 8. The Issuer hereby retains Eric Todd Johnson, partner with Johnson, Patterson & Yellowhorse, as bond counsel for the Bonds and directs its officials and staff to assist him and his professionals.

Section 9. The Town Clerk of the Issuer is directed to complete and execute the Record of Proceedings attached hereto to officially record the proceedings at which this Parameters Resolution was considered for adoption.

APPROVED AND ADOPTED: September 12, 2023.

_____
Clayton Calloway, Mayor

ATTEST:

_____
Nancy Leigh, Town Clerk

(SEAL)

EXHIBIT A

FINAL BOND RESOLUTION

(See Transcript Document No. __)

EXHIBIT B

GENERAL INDENTURE

(See Transcript Document No. ___)

EXHIBIT C

SECOND SUPPLEMENTAL INDENTURE

(See Transcript Document No. ___)

EXHIBIT D

NOTICE OF PUBLIC HEARING AND BONDS TO BE ISSUED

NOTICE IS HEREBY GIVEN pursuant to the provisions of the Utah Local Government Bonding Act, Title 11, Chapter 14, Utah Code Annotated 1953, as amended, that on September 12, 2023, the Town Council (the "Council") of the Town of Brian Head, Utah (the "Issuer"), adopted a resolution (the "Resolution") in which it authorized the issuance and sale of the Issuer's Taxable Water Revenue Bonds (herein, the "Bonds") in an aggregate principal amount not to exceed $5,490,000, to bear no interest, to mature in not more than 40 years from their date or dates, and to be sold at a price not less than ninety-nine percent (99%) of the total principal amount thereof. If Bonds are issued in the full amount above, and carried to maximum maturity, at the maximum interest rate, then the amount to be repaid will be approximately $5,490,000. However, the Issuer anticipates that the Bonds will not be issued in a repayable principal amount in excess of $3,838,000, bearing no interest, to be repaid over 40 years, in which event the amount to be repaid will be $3,838,000. The Issuer has obtained a commitment in the amount of $1,645,748 for principal forgiveness for the Project, none of which will need to be repaid. Presently, the Issuer has no more than $5,781,064 in outstanding bonds secured by a pledge of water revenues.

NOTICE IS FURTHER GIVEN that the Issuer called a public hearing for the purpose of inviting public comment on the proposed issuance of the Bonds and the economic impact that the improvements proposed to be financed with the Bonds will have on the private sector. No taxes will be pledged to secure the Bonds. The public hearing will be held on October 10, 2023 at 1:00 p.m., or as soon thereafter as feasible, at Brian Head Town Hall located at 56 North Highway 143, Brian Head, UT 84719.

The Bonds will be issued pursuant to the Resolution and a Final Bond Resolution to be adopted authorizing and confirming the sale of the Bonds (the "Final Bond Resolution") and approving a Second Supplemental Indenture, supplementing and amending a General Indenture of Trust by and between the Issuer and U.S. Bank, National Association, as Trustee, for the purposes of financing, in part, (i) improvements to the Issuer's water system, including drilling a new well, improvements to exiting wells, water lines and related improvements (the "Project"), and (ii) paying the costs of issuing the Bonds.

A draft of the Final Bond Resolution and Indenture in substantially final form was before the Council and was part of the Resolution at the time of the adoption of the Resolution by the Council (collectively, the "Bond Resolutions"). The Final Bond Resolution and Indenture are to be adopted by the Council in such form and with such changes thereto as shall be approved by the Council upon the adoption thereof; provided that the principal amount, the interest rate, maturity, and discount of the Bonds will not exceed the maximums set forth above.

Copies of the Bond Resolutions, including Indenture, are on file in the office of the Town Clerk of the Issuer in Brian Head, Utah, where they may be examined during

regular business hours, i.e., between 9:00 a.m. and 4:30 p.m., Monday through Friday, for at least thirty (30) days from and after the date of publication of this notice.

NOTICE IS FURTHER GIVEN that, for a period of thirty (30) days from and after the date of the publication of this notice, any person in interest shall have the right to contest the legality of the Bond Resolutions or the Bonds, or any provision made for the security and payment of the Bonds by filing a verified written complaint in the district court of their county of residence, and that after such 30-day period, no one shall have any cause of action to contest the regularity, formality or legality thereof for any reason.

DATED: September 12, 2023.

/s/ Nancy Leigh
Town Clerk

EXHIBIT C

RECORD OF PROCEEDINGS

The Town Council (the "Council") of the Town of Brian Head, Iron County, Utah (the "Issuer"), met in public session at the regular meeting place of the Town Council in Brian Head, Utah, on September 12, 2023 (the "Meeting"), at the hour of 1:00 p.m., or as soon thereafter as feasible, with the following members of the Council being present:

Clayton Calloway	Mayor
Larry Freeberg	Council Member
Lynn Mulder	Council Member
Shaun Kelly	Council Member
Kelly Marshall	Council Member

Also present:

Nancy Leigh	Town Clerk
Bret Howser	Town Manager

Absent:

which constituted all the members thereof.

After the Meeting had been duly called to order and after other matters were discussed, the foregoing resolution (the "Resolution") was introduced in written form and fully discussed.

A motion to adopt the Resolution was then duly made by Council Member _____ and seconded by Council Member _____, and the Resolution was put to a vote and carried, the vote being as follows:

Those voting YEA:

Those voting NAY:

Those Abstaining:

Other business not pertinent to the Resolution appears in the minutes of the Meeting. Upon the conclusion of all business on the Agenda and motion duly made and carried, the Meeting was adjourned.

CERTIFICATE OF TOWN CLERK

I, Nancy Leigh, the duly appointed and qualified Town Clerk of the Town of Brian Head, Iron County, Utah (the "Issuer"), do hereby certify that the attached Resolution is a true, accurate and complete copy thereof as adopted by the Town Council of the Issuer at a public meeting duly held on September 12, 2023 (the "Meeting"). The persons present and the result of the vote taken at the Meeting are all as shown above. The Resolution, with all exhibits attached, was deposited in my office on September 12, 2023 and is officially of record in my possession.

IN WITNESS WHEREOF, I have hereunto subscribed my signature and impressed hereon the official seal of the Issuer, this September 12, 2023.

_____

Nancy Leigh, Town Clerk

(SEAL)

CERTIFICATE OF COMPLIANCE WITH
OPEN MEETING LAW

I, Nancy Leigh, the undersigned Town Clerk of the Town of Brian Head, Iron County, Utah (the "Issuer"), do hereby certify, according to the records of the Issuer in my official possession, and upon my own knowledge and belief, that in accordance with the requirements of Section 52-4-202, Utah Code Annotated 1953, as amended, I gave not less than twenty-four (24) hours public notice of the agenda, date, time and place of the September 12, 2023, public meeting (the "Meeting") held by the governing body of the Issuer as follows:

(a) By causing a notice, in the form attached hereto (the "Meeting Notice"), to be posted at the principal office of the Issuer at least twenty-four (24) hours prior to the convening of the Meeting, the Meeting Notice having continuously remained so posted and available for public inspection until the completion of the Meeting; and

(b) By causing a copy of the Meeting Notice to be delivered to a newspaper of general circulation in the geographic jurisdiction of the Issuer at least twenty-four (24) hours prior to the convening of the Meeting; and

(c) By causing the Meeting Notice to be posted on the Utah Public Notice Website at least twenty-four (24) hours prior to the convening of the Meeting.

(d) By causing a copy of the Meeting Notice to be delivered to each member of the Town Council of the Issuer at least twenty-four (24) hours prior to the convening of the Meeting.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature this September 12, 2023.

_____
Nancy Leigh, Town Clerk

(SEAL)

(Attach Meeting Notice, including proof of posting thereof on the Utah Public Notice Website)