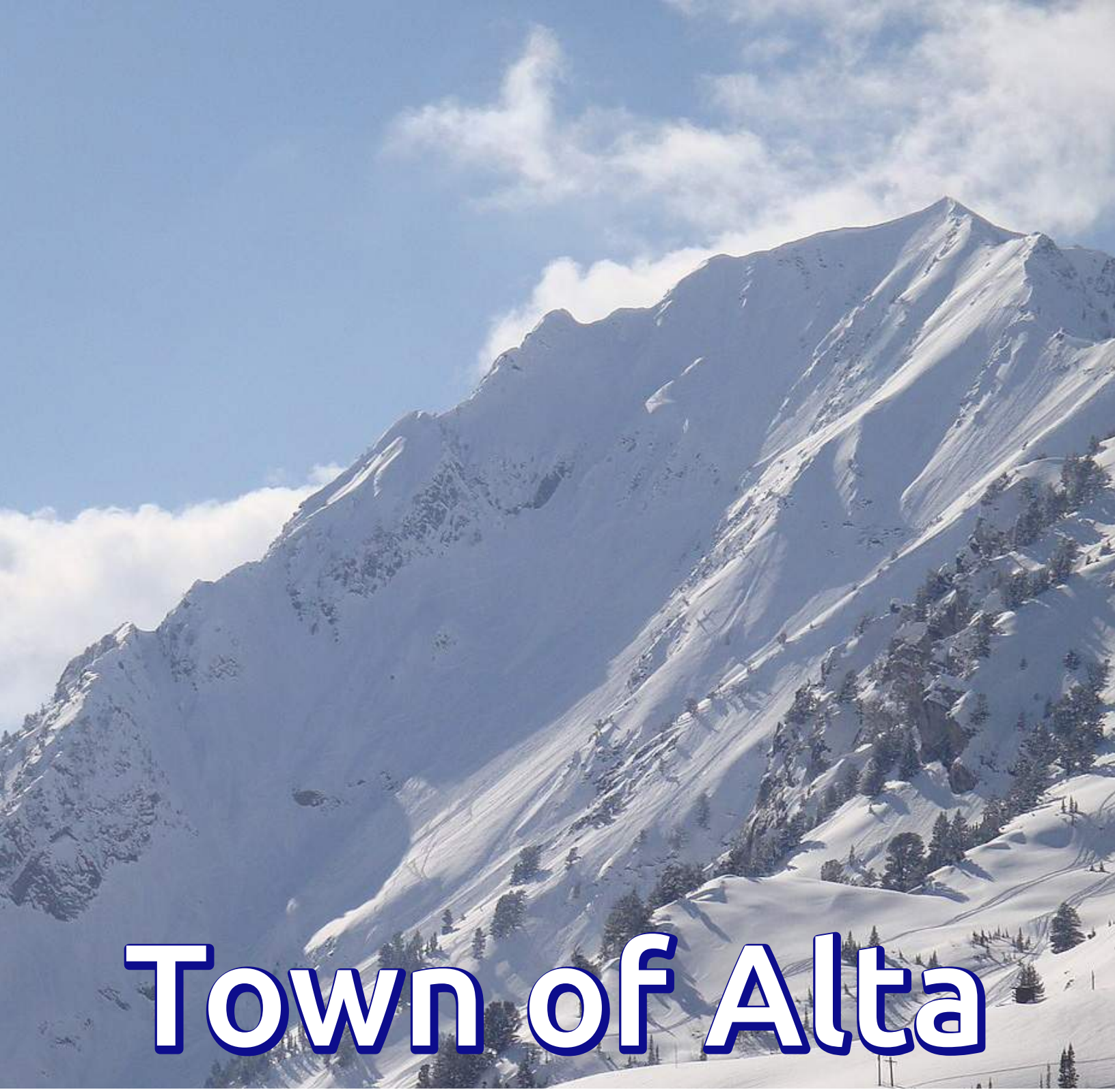

Town of Alta

Facilities Master Plan

+ FFKR ARCHITECTS

AUGUST 2025

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Alta Town Office Building
Alta Central
Community Center

Acknowledgments

Town of Alta Staff & Community Members

Chris Cawley – Town Manager

Molly Austin – Assistant Town Manager

Jen Clancy – Town Clerk

Ann Berumen – Postal Clerk

Mike Morey – Town Marshal

Sarah McCloskey – Lead Dispatcher for the Town Marshal Office

Cameron Platt – Town Attorney

Polly McLean – Town Attorney

Sara Gibbs – Alta Community Enrichment Executive Director

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Executive Summary

Introduction

Summary of Process

FFKR Architects was selected by the Town of Alta (TOA) to complete Consulting and Design Services for a Facilities Master Plan. The intent of the comprehensive Facilities Master Plan (FMP) is to serve as a guide for the Town of Alta to:

- Determine the maintenance needed to extend the useful life of the existing facilities
- Plan for future facility improvements or facility replacement through construction of new facilities
- Develop a comprehensive Facilities Master Plan

The agreed-upon scope of work included:

Facilities Conditions Assessment for three (3) municipal buildings:

- William Levitt Town Office Building (referred to as Town Office)
- Alta Central (a.k.a Marshals Building)
- Community Center

Facilities Master Plan

- Examine current program spaces utilized by the Town and identify any deficiencies with what the Town would need in modern facilities
- Based on information gathered from the Facilities Conditions Assessment, provide a recommendation for each building to be:
  - Demolished with a new building constructed
  - Renovated
  - To remain in place
- Provide phasing information and program massing models for the recommendation for each Town facility
- Include cost estimates and financing options for recommendations.

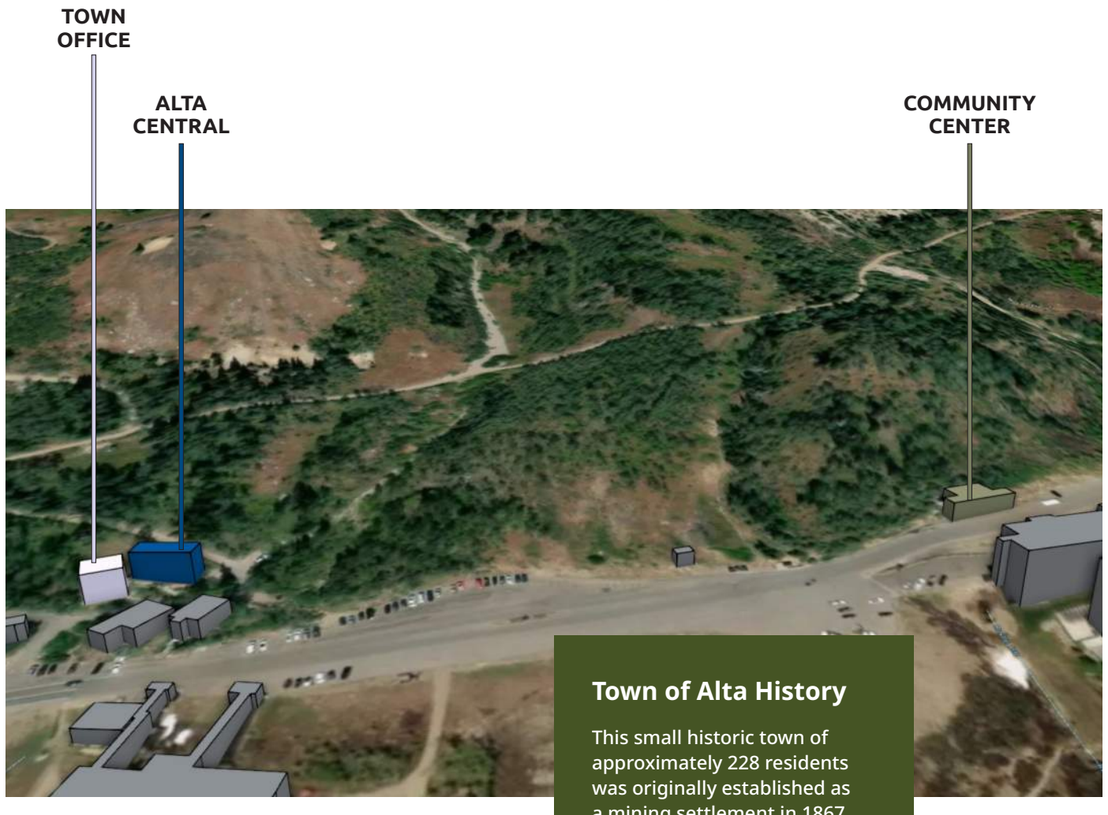
About Town of Alta

The Town of Alta (TOA) is a small mountain community located at the head of Little Cottonwood Canyon in the Wasatch-Cache National Forest.

Little Cottonwood Canyon is a west-facing break in the Wasatch mountain range which rises from an elevation of 5,000 feet above sea level at the mouth of the canyon to over 11,000 feet at the top of the watershed.

State Highway 210, a designated Scenic Byway, provides access to Alta from the Salt Lake Valley. The Town itself ranges in elevation from 7,500 ft to over 11,000 ft. above sea level.

An annual average of over 500 inches of snowfall provides for enthusiastic powder hounds and spectacular downhill skiing extending from November into May. Backcountry skiers enjoy an even longer season. Hikers and bikers use the extensive network of trails through meadows and forests to lakes, snowfields, mountaintops and over passes.



Town of Alta History

This small historic town of approximately 228 residents was originally established as a mining settlement in 1867, formally incorporated as a municipality in 1970, and is centered around Alta Ski Area.

Town of Alta Facilities

William Levitt Town Office Building

A two-story, reinforced concrete structure built by the Town in 1993. The building footprint is about 40’ x 40’. The structure is designed to withstand and protect occupants from avalanches.
The Town Office contains :

- office space for four administrative staff
- mayors office
- one meeting room
- an office space currently leased to a non-profit
- a “plans room”
- bathrooms on each story
- other accessory programming

The town retains original construction drawings and other plan documents for this facility.

This facility was designed with avalanche loads in mind; an avalanche study was conducted for this site during design of the building.

Alta Central / Marshals Office

A wood-framed building originally transported to Alta for use by Alta Ski Area and the USFS as employee housing in the 1950s. The Town took ownership of the building in the 1970s and originally it was the Town’s only building.

Presently, it houses the Alta Marshals Office, including:

- 24-7-365 police dispatch center
- administrative space for the Town Marshal
- eight (8) dorm-style sleeping quarters for on-duty dispatchers and Marshals deputies
- a kitchen and living room
- other accessory programming such as storage, laundry, and emergency generators

The building is two stories on top of a semi-below grade basement, and the footprint is roughly 30’ x 65’.

The building is not built to withstand or protect occupants from avalanches, and it is presumably exposed to significant avalanche hazard.

The town does not possess plans or drawings for

Town of Alta Facilities

Community Center

The Alta Town Community Center is a reinforced concrete block facility constructed by the Town in 1984. The building is two stories with a 20' ceiling on the ground floor. The primary structure footprint is about 50' x 50', not including two wood-framed annexes on the east and west sides of the building which contain stairwells to access the upper floor.

The facility is a valuable multi-purpose space for the town and the community which houses:

- A contract U.S. Post Office
- Three (3) garage bays historically used by Alta's volunteer fire department but now housing Alta Marshals Office equipment and other town equipment and property
- A two-bedroom apartment used as on-duty quarters for Marshals deputies
- A community center space that functions as Alta Town Council meeting chambers
- Cubicle-delineated office space for a non-profit organization
- A designated Salt Lake County Library reading room / space
- UDOT stores three (3) pieces of road maintenance and snow removal equipment at the facility during winter months, which is UDOT's only equipment staged in Little Cottonwood Canyon.

There are obvious potential critical failures associated with this facility, including:

- The erosion control system behind the building is well beyond its useful life and would be extremely costly, technically challenging, and highly impactful to replace.
- It is unknown if the building was designed to withstand avalanches, but it is assumed the building may have less exposure than other structures in the area.

The town does not possess plans or drawings for this facility.

Alta Fire Department

Founded in 1974 and operated for 28 years out of the Alta Fire Station, a building which currently houses the Alta Post Office and the Alta Community Center. Since the Alta Fire Department closed in 2002, the Town has contracted with the Unified Fire Authority of Greater Salt Lake (UFA) to provide all fire and hazardous materials protection, medical emergency response, and to enforce fire codes within Town limits.

Project Schedule

The Town of Alta selected FFKR Architects in September 2024 to complete a Facilities Master Plan (FMP).The scope of work includes three phases (3) completed over 26 weeks with monthly client and consultant coordination meetings. The phases are not linear, but iterative in nature with new information circling back to be incorporated and change or improve the final outcome.

The three phases are:

1. Facility Assessment
2. Programming Needs Assessment
3. Facility Master Plan

Town of Alta Facilities Master Plan

Phase 1 Facility Assessment

In this phase, the architects and engineers conducted building assessments of the Town's three (3), buildings (the Town Offices, Alta Central, and Community Center), and documented their findings into reports including images and narratives. Tasks include:

- Develop building as-built drawings
- Building assessments for each discipline
- Maintenance schedules and costs

Phase 2 Programming Needs Assessment

In this phase the team reviews previously completed studies and engages with stakeholders. The first Facilities Master Plan draft is distributed with the facility assessments. Specific engagement tasks include:

- Workshop with Town Council
- Interviews with staff and building users
- Public community outreach (to be completed)
- Development of facilities guiding framework

Phase 3 Facilities Master Plan

In this phase the team provides recommendations for keeping, repairing, or replacement of the Town's buildings and compares the recommendations with cost estimates and the stakeholders priorities. Deliverables in this phase include:

- Recommendations for each facility
- Space Plans
- Cost estimates and financing options
- Presentation to Town Council
- Compilation and delivery of final report

Cost Comparison

CBI #	Description		Test Fit 1		Test Fit 1 Total	Test Fit 2		Test Fit 2 Total
			New Building	Remodel		New Building	Remodel	
	Building Cost Summary							
2	Existing Conditions		$108,000.00	$6,684.00	$114,684.00	$108,000.00	$13,101.00	$121,101.00
3	Concrete		$2,009,356.00	$547.00	$2,009,903.00	$2,089,767.00	$5,681.00	$2,095,447.00
4	Masonry							
5	Metals		$1,163,827.00		$1,163,827.00	$1,254,751.00		$1,254,751.00
6	Woods & Plastics		$106,550.00	$1,915.00	$108,466.00	$116,502.00	$19,883.00	$136,385.00
7	Thermal & Moisture Protection		$354,902.00	$862.00	$355,764.00	$350,268.00	$8,947.00	$359,215.00
8	Doors & Windows		$795,666.00	$4,487.00	$800,153.00	$837,674.00	$46,583.00	$884,256.00
9	Finishes		$1,389,975.00	$21,693.00	$1,411,667.00	$1,501,585.00	$225,206.00	$1,726,791.00
10	Specialties		$50,339.00	$1,368.00	$51,707.00	$55,040.00	$14,202.00	$69,242.00
11	Equipment							
12	Furnishings							
13	Special Construction							
14	Conveying Systems							
21	Fire Suppression		$109,067.00	$2,189.00	$111,256.00	$119,254.00	$22,723.00	$141,977.00
22	Plumbing		$151,016.00	$2,462.00	$153,479.00	$165,121.00	$25,564.00	$190,685.00
23	HVAC		$1,090,674.00	$21,341.00	$1,112,015.00	$1,192,542.00	$221,551.00	$1,414,093.00
26	Electrical		$774,404.00	$15,504.00	$789,908.00	$835,525.00	$122,736.00	$958,261.00
27	Communication		$151,016.00	$4,925.00	$155,941.00	$165,121.00	$51,127.00	$216,248.00
28	Electronic Safety & Security		$109,067.00	$2,736.00	$111,803.00	$119,254.00	$28,404.00	$147,658.00
31	Earthwork		$107,377.00		$107,377.00	$109,905.00		$109,905.00
32	Exterior Improvements		$362,160.00		$362,160.00	$354,390.00		$354,390.00
33	Utilities		$156,000.00		$156,000.00	$156,000.00		$156,000.00
	Estimated Subtotal		$8,989,398.00	$86,713.00	**$9,076,111.00**	$9,530,700.00	$805,707.00	**$10,336,408.00**
	General Conditions	7%	$629,258.00	$6,070.00	$635,328.00	$667,149.00	$56,400.00	$723,549.00
	Bonds & Insurance	2.20%	$197,767.00	$1,908.00	$199,674.00	$209,675.00	$17,726.00	$227,401.00
	Overhead & Profit	3.50%	$314,629.00	$3,035.00	$317,664.00	$333,575.00	$28,200.00	$361,774.00
	Design Contingency	15%	$1,348,410.00	$13,007.00	$1,361,417.00	$1,429,605.00	$120,856.00	$1,550,461.00
	Total Construction Cost		$11,479,462.00	$110,732.00	**$11,590,194.00**	$12,170,704.00	$1,028,888.00	**$13,199,593.00**
	Plan Check Fees				$42,053.00			$47,634.00
	Building Permit				$64,697.00			$73,284.00
	1% State Permit Fee				$647.00			$733.00
	Utility Connection Fees & Impact Fees		1 Allowance		$30,000.00			$30,000.00
	Furniture, Fixtures, and Equipment		6%		$695,412.00			$791,976.00
	A/E Fees		5.85%		$678,026.00			$772,176.00
	Reimbursables		4% of A/E Fee		$27,121.00			$30,887.00
	Geotechnical		1 Allowance		$15,000.00			$15,000.00
	Commissioning Agent		1 Allowance		$20,000.00			$20,000.00
	Survey		1 Allowance		$15,000.00			$15,000.00
	Project Management Fees		2%		$231,804.00			$263,992.00
	Owner's Construction Contingency		10%		$1,159,019.00			$1,319,959.00
	Special Inspections & Testing		0.50%		$57,951.00			$65,998.00
	Energy Modeling		1 Allowance		$30,000.00			$30,000.00
	LEED Documentation A/E				TBD			TBD
	LEED Registration				TBD			TBD
	Total Estimated Project Cost				**$14,656,925.00**			**$16,676,231.00**

Cost Comparison

A key scope item in this project was obtaining preliminary costs for work that could be completed as part of the facility condition assessment and providing cost estimates of conceptual plans. Both items are intended to provide the Town of Alta with a high-level line that could be used for future budgetary planning efforts. To accomplish this task, FFKR retained the services of Construction Control Corp. (CCC), a Salt Lake City based construction cost estimating firm.

CCC understood that prices in Alta would be higher than typical civic or municipal work in the Salt Lake Valley. When the project began, the cost of construction for new town halls averaged approximately $550-650 a square foot in the Salt Lake Valley. Because of the shortened construction window and higher structural requirements due to avalanche exposure, CCC estimated that new construction for municipal buildings in Alta would cost between $650-800 a square foot.

As appropriate, $800 a square foot was used for high level cost discussions during the project. At the conclusion of the facility condition assessment, narratives were provided that allowed for a high-level breakdown of different components within each recommendation for each building. Additionally, narratives were provided by our engineering team to help establish a possible baseline for new construction. These narratives were used to estimate the cost of two new construction buildings.

The Estimated Subtotal" refers to the total estimated cost for the construction of the building. The "Total Estimated Construction Cost" refers to the estimated subtotal plus the cost of the contractor performing the work with some design contingency. the "Total Estimated Project Cost" is the total estimated construction cost plus the soft costs that include design, furniture, permits, and other fees.

Recommendations

After careful consideration from the facility condition assessment, conversations with Town staff, and evaluation of the cost estimates, our team recommends the following (in no particular order):

1. The community center is demolished.

2. Alta Central is decommissioned.
   - This facility could continue to serve a purpose other than the home of the Alta Marshals Office, but it is recommended that some improvements be completed.

3. A new facility is constructed.
   - After evaluating the two options, it is recommended that test fit #2 is the option that be constructed. This is based off of the ability to move all public facing Town functions into a single facility that can be accessible from the road for public access as well as configured to maximize internal accessibility. Initial estimates put the total cost of test fit #2 as $16,676,231.

Engage

Introduction

Summary of Process

During the Engage phase of the project, our team interacted with town staff in a number of ways. We were on-site in Alta in September 2024 to conduct a preliminary space survey where we obtained building measurements. This allowed us to create basic floor plans that could then be used for annotation and analysis during the facility condition assessment; the floor plans are included in the appendix of this document. In other instances when our team was in Alta, we interviewed key members of Town staff, and engaged in a visioning workshop with the Town Council.

We have reviewed previous studies that have been completed by the Town to ascertain themes and other information that can still be pertinent to the future of Alta's facilities.

Town of Alta Past Studies Reviewed for the Facilities Master Plan

- 2021 Ennead Community Center Study
- 2016 Commercial Core Plan
- 2016 Commercial Core Plan Appendices
- 2015 Alta Vision and Values Workshop
- 2015 Town Center Concept Sketch and Massing Study
- 2008 Community Center Study
- 2003 Community Center Feasibility Study

Interview Summaries

Mayor Summary

» Concerned with Alta Central and Community Center

» Character of the community is not easy to describe or capture but essential.

» Many are invested in keeping Alta, Alta
  • Hard to do in a region (Wasatch Front) that is experiencing rapid population growth and others come to Alta to escape from the city.

Town Manager Summary

» Lots of standard city/town functions are outsourced

» Challenge to remove snow around the town buildings

» Town Office Building
  • All buildings have significant accessibility challenges. The TOA owns no parking, relies on historic and sometimes unpermitted use of private property, USFS lands, and UDOT easements. Individuals wishing to visit the Town Office or Alta Central much climb steep slopes which are snow packed in winter.
  • No one needs additional space/room
  • Level 1 could be used more efficiently
  • Concerned about accessibility and security

» Alta Central
  • Critical infrastructure
  • The Alta Marshals Office is are a beloved Alta institution

» Community Center
  • Most concerning facility to town manager
  • USPS pays the town to staff the post office
  • Post office helps the town feel like a town

Town Clerk Summary

» Office space is sufficient
  • Additional needs include quality internet connections, possibly some additional space for storage of records.
    ◦ Town working to clean up the plans and records room, but could consider high density storage solution to not require additional space.

» Concerned about accessibility to the post office or council chambers in the winter
  • No safe area to park or have safe walking path in/out of the building
    ◦ The town office building is a great facility
    ◦ Space within could be better utilized

Post Office Summary

» Small space upgrades would be nice
  • Additional package area for the winter months
  • Better storage space for boxes that can be purchased
  • More counter space for organizing items
  • A few additional mailboxes – more people want to rent one than is available

» Space usually runs a little cool

» Door and door knob into the employee area don't work quite right

Marshal Summary

» Smallest police force in Salt Lake County and they run extended shifts for the dispatchers and deputies to maintain coverage
  • Staffing is increasing trying to hire a 5th deputy currently to help with investigations and patrol

» Need a small space for training purposes – arrest practice, taser use, et cetera

» Vehicle and Mobile Unit storage
  • Conduct most of their own vehicle maintenance
  • Need quick access to the road to maintain response times
  • Should be enclosed to protect from snow (having to dig out or defrost windows to respond to calls)

» Marshal Morey has had snow in his quarters from an avalanche previously.
  • Currently Marshals shovel their roof a lot and hire a snowcat operator to move snow around the building, but there is still a lot of snow that pushes on the structure.

» Security should be increased for the Marshals building since it has a dispatch center.
  • Future building/upgrades to include a system to lock the whole building and have cameras throughout the interior and exterior

» Additional spaces needed to maintain or improve operations and provide the level of service that the community should expect
  • Everything has been previously crammed into a space that the Marshals can access. But the world has changed since that happened and the Marshals should be more accessible to the public.

» The Marshals are in the business of getting it right; getting it wrong could ruin the town.

Dispatch Summary

» Legislative changes might force technology upgrades in the future.
  • Could impact space needs slightly.
  • Town shifting to have everything be web-based.

» Worried about the flow (circulation) and feel of any potential new space – keep it home-y, not industrial.
  • Retention of quarters is critical due to having to stay up in Alta on shift for days at a time possibly during winter due to road closures

» Dispatch center can remain as is, but having a small, enclosed office would be good for lead dispatcher to use for manager responsibilities.
  • Could share with others when not on shift.

Alta Community Enrichment (ACE) Summary

» Events are held at Our Lady of the Snows and is perfect for what ACE needs
  • Don't foresee moving events into a new facility
  • ACE would possibly use a new facility if Our Lady was double booked

» Currently has space in the Community Center.
  • Don't take up lots of space due to a lack of storage
  • Doesn't use the office all the time.

» Recreation rooms are not necessary

» Concerned about public access to all facilities and lack of public restrooms in the winter

» If new construction is considered, possibly make it an essential services/building only.

Summary of Past Studies

Our team reviewed past studies and projects that the Town has completed over the last two decades to identify any common themes and critical pieces of information that would inform the facilities master plan. A summary of our key findings is listed below.

Alta Community Center Feasibility Study – Ennead Architects, 2021

- Beginning of identifying what "Alta-centric" might be (see image #001)
- Related to the community center, having a multi-purpose space is a top priority. Other priorities include: food and beverage location, trailhead amenities, space for ACE*, and a town welcome center (see image #002).
- Guiding principles for a new community center were environmental stewardship, history and ecology of Alta, and a resource for the gathering and wellbeing of residents.**

*Based on conversations with ACE Executive Director Sara Gibbs for the Facilities Master Plan, ACE would likely not rent space in a new facility.

**These guiding principles were very similar to some of the values established in the visioning workshop for this project as they relate to all buildings. Refer to Visioning Workshop pages for more information.

Commercial Core Plan – Landmark Design, 2016

- uses listed in the Commercial Core Plan for the community center are similar to those listed in other studies such as: trailhead amenities and locker space, café/bakery/restaurant/bar, classroom and flex space.
- Architectural and Built Form Guidelines – It is assumed that the areas the Town would build a new facility in would fall within the adopted space of the Commercial Core Plan and thus conform, at least in part, to these guidelines.
  - Materials to include timber, concrete, stone, glass, and metal.
  - Should be three stories or less.
  - Functional and practical use of spaces with minimal decorations for aesthetics.

Community Center Feasibility Study – EMA Architects, 2003

- The community center site was inadequately prepared for the building.
- Recommended to tear down the second story and the two additions on the east and west sides respectively that have the staircases.
- North exterior wall not properly sealed to protect from water infiltration.

Image #001: Ennead Document [source]

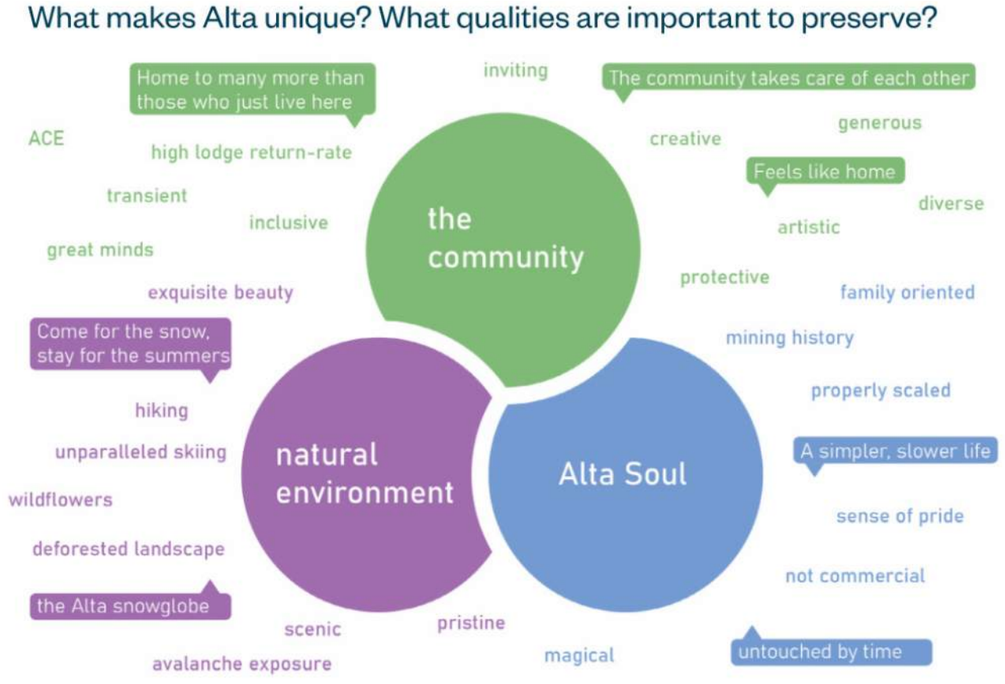
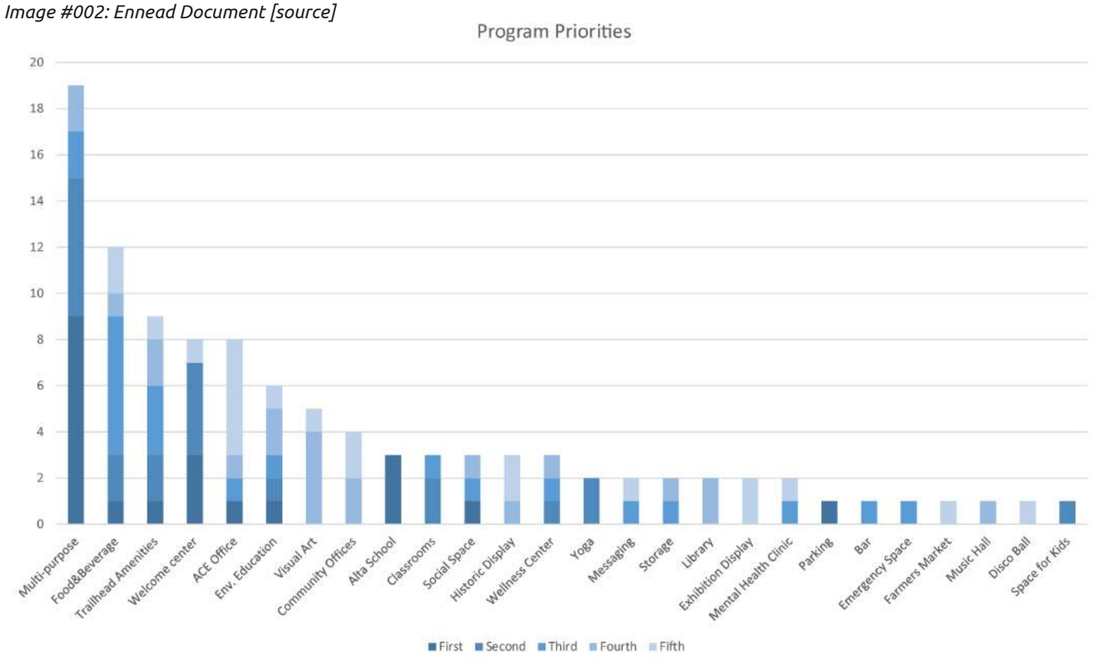


Image #002: Ennead Document [source]



Town Council Visioning

The team engaged in a visioning discussion on November 13, 2024, with the Mayor, Town Council, and Town staff to define the general guiding values for the future facilities of the Town of Alta.

The four guiding values and the corresponding descriptions are consistent with past priorities of previous Town Councils over the last twenty years.

A poll to the Mayor and Town Council showed that the Alta Central (or current Marshals building) is the first priority based on needs of the building.

The Town Council is aware of the need for housing for Town staff, Marshals, and others that live or work in the Town of Alta. Although not under the scope of work for the Facilities Master Plan, the concept for housing was discussed in length.

As part of the Visioning Workshop, town council members, town staff, and members of FFKR's team were assigned a color. This color would be used for that individuals comments throughout the workshop and allow for easy document of who said what.

- Roger Bourke
- Carolyn Anctil
- John Byrne
- Elise Morgan
- Dan Schilling
- Staff of TOA
- FFKR Architects

Guiding Values for the Town of Alta Facilities

ALTA-CENTRIC IDENTITY

- Consistent with the past
- Mining town
- Rustic
- Blends with environment
- Built into environment
- Withhold avalanches
- Appropriate to environment

STEWARDSHIP

- Sustainable for generations
- Educational
- Energy efficient
- Environmentally efficient
- Environmental conscious
- Love where we live
- Efficiency

AESTHETICS

- Beautiful
- Quality
- Welcoming
- Inspiring
- Modest
- Outdoors
- Aesthetically aligned with mountain environment

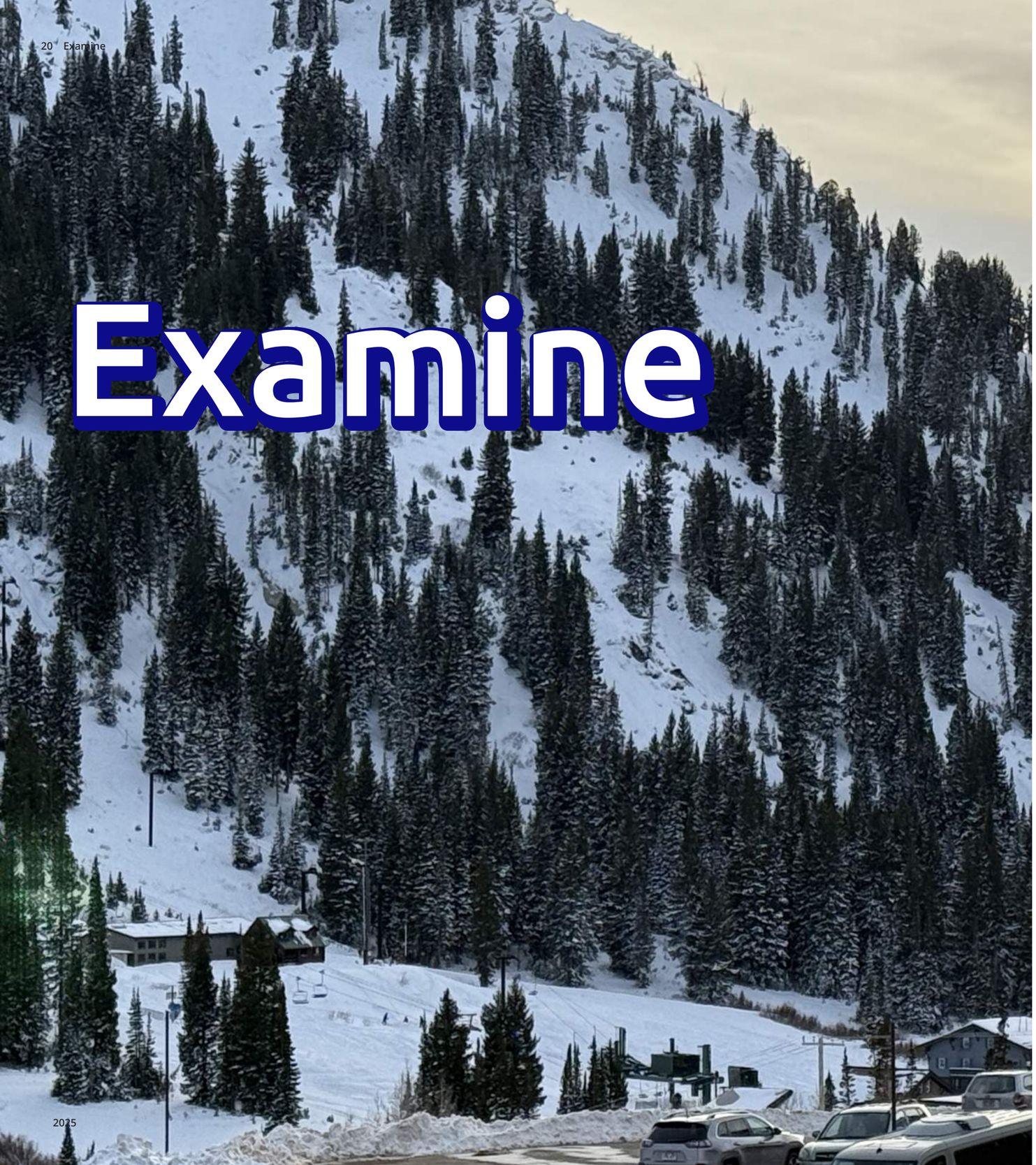
FUNCTIONAL

- Safe
- Accessible
- Expandable
- Convenient
- Basic
- Multi-functional
- Community
- Recreation & Entertainment
- Public bathrooms
- Modernized meeting spaces
- Credible
- Financially viable

Town Council Visioning

Description of Theme / Values

	ALTA-CENTRIC IDENTITY	STEWARDSHIP	AESTHETICS	FUNCTIONAL
User / Mayor & Council	• Ski area is main theme here, building should be consistent • Historically consistent • Unique to this place. Captivating Views.	• Environmentally efficient	• Build into environment • Simple • Blends the community history (primarily mining) with the natural environment	• Serves multiple purposes • It works • Buildings that are accessible to the public and town staff
Operator / Staff	• The buildings should "fit-in" in Alta and act as a reminder of our mining/skiing history/and natural environment	• Defend against increased human pressure. • Responsibly facilitate opportunities for public access. • Energy efficiency, dark skies lighting	• Consistent with design themes throughout Alta • Only as big as we need to provide essential services. Need vs. want. Fantasy/kitchen sink vs. reality and afford-ability.	• Space that adapts as the town and community needs change • Buildings with safer and less labor intensive snow removal needs • Enables the complete delivery of services, work, and products • Supports mission



Examine

Introduction

Facilities Condition Assessment

In October 2024, the project team conducted a site visit to the Town of Alta to review and investigate the overall condition of three buildings: the Town Office, Alta Central, and the Community Center.

Following the site visits, the state of each building system component was documented by each discipline —architectural, structural, mechanical, and electrical— and compiled into the reports. Included in the reports are estimated time lines until large equipment (generally for HVAC) will need to be replaced.

Full Reports in Appendix

The Appendix includes the complete documentation of the facilities structures reports for architectural, structural, mechanical/plumbing, and electrical engineering for all three buildings. These detailed reports include narrative and reference images.

Approach to Component & Building Score

Component Score – *Ranking Systems from Low to High Priority*

Each discipline ranked their system components on a scale of one to three, with one (1) identifying work of high priority, and three (3) referring to work of low priority.

Three (3): Low Priority Work

» Recommendation: Remain and Maintain
- Complete at owner's discretion

Two (2): Medium Priority Work

» Recommendation: Remodel / Renovate
- Borderline code violations based on current codes
- Upgrade provides improved comfort, performance, or value

One (1): High Priority Work

» Recommendation: Demolish and Replace with New Construction
- Code violations based on current codes
- Life safety concerns
- Outdated or failing systems

Building Score – *Building Health*

The accumulative Component Scores of all disciplines are divided by the total number of components and then multiplied by the ranking score of three (to remain and maintain) to establish an overall Building Score. A higher Building Score indicates the building could remain and function. The lower the Building Score, the more the building is prioritized for replacement or repair.

$$\frac{\text{Total Component Scores (all disciplines)}}{\text{Total Possible Component Score } \mathbf{x}\ 3}$$

By converting each building score into a percentage, we are able to examine and compare each building to each other without any bias related to the number of components.

Cost Estimates

Using the team's facilities condition assessment, Construction Control Corporation (CCC) estimated the cost of repairs for each component. Where the component had multiple solutions to improve deficiencies (using a good, better, best system), the best option was used to determine the total repair cost.

CCC provided a range of $660-800 per square foot for new construction in Little Cottonwood Canyon and around the Town of Alta. Comparatively, new construction of civic buildings in the Salt Lake Valley are estimated in the range of $550-650 per square foot. The Town of Alta provided information that some of the commercial projects being completed in the area have been running $800-1,300 per square foot.

Based on the culmination of information, we applied $800 per square foot cost of new construction as it was the project team's feeling that the commercial projects were likely applying much higher end or specialty finishes than would be expected in a Town facility. It is estimated that standard renovation would cost $240-360 a square foot. However, the buildings within the Town's portfolio would require more stringent upgrades than is typical due to their avalanche exposure and it is likely that the actual cost of renovation per square foot would be greater.

Exposure to avalanche hazards and snow loading are major variables for construction in Alta. buildings with exposure to significant avalanche hazard will require additional steel and concrete and more elaborate engineering, and may have functional limitations during periods of extreme hazard. For instance, Alta Central dispatchers move to the Town Office when "maximum security interlodge" is imposed, because Alta Central is in an avalanche path and not building to withstand the avalanches, whereas the Town Office is built to withstand avalanches. The Town should consider relative exposure between sites to reduce the cost of new construction and maintain continuity of operations when hazard is elevated.

Calculating FCI Index

Facility Condition Index (FCI)

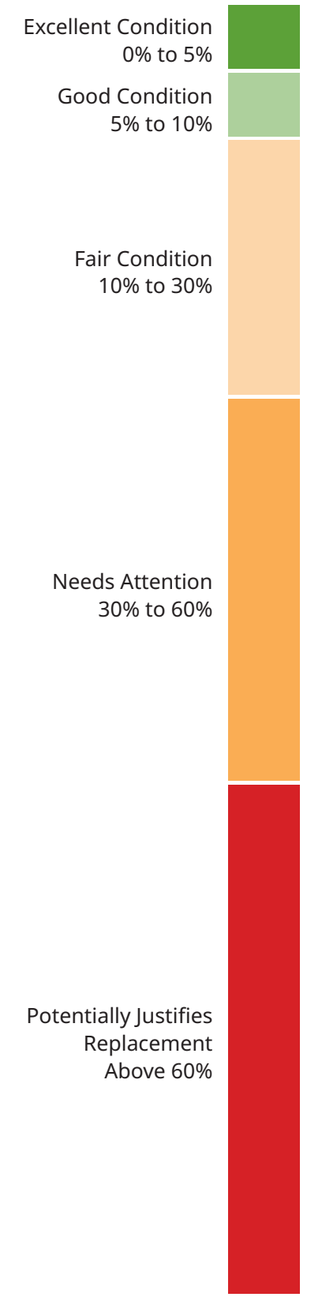
The Facility Condition Index (FCI) is an industry-standard measure used to compare and establish the relative condition of a building based on costs and not professional recommendations. It is assumed that the items that are more urgently needed will have a larger cost. The FCI provides a percentage that is used along a scale (as shown in the graphic on the right) to establish what should happen to each building.

The FCI is determined by obtaining the total cost of the existing deficiencies (or repairs) that a building has and dividing that number by the current replacement value (how much it would cost to build that building new today).

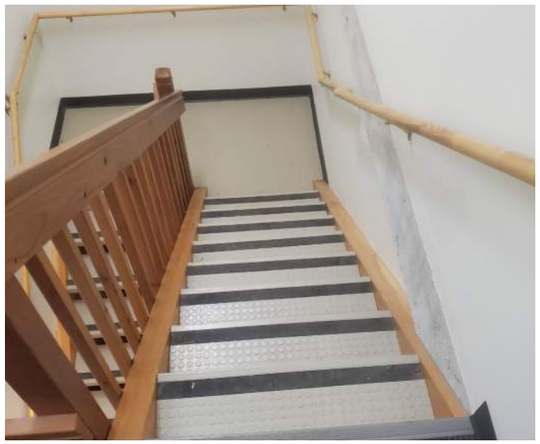
$$\mathbf{FCI} = \frac{\text{Total Cost of Recommended Repairs (renovation)}}{\text{Cost of Current SF Replacement (new building construction)}}$$

The total cost used for the Cost of Recommended Repairs was calculated by selecting some of the recommendations and their accompanying cost for each facility. Not all recommendations and costs were used due to the possibility of duplication in costs between items, or because the recommendation selected included or was more robust than the other recommendations in the category. Items that are bolded in the tables listing the cost and accompanying recommendations were used to calculate the cost of recommended repairs. The full cost breakdown for each facility and each discipline is included in the Appendix.

FCI Indicator



Town Office



Building Assessment Approach

Town Office

Our team specifically addressed components unique to the Town Office including the following itemized components:

Architectural – FFKR Architects
(6) Components x 3 = Total 18

01. Visible Foundation System
02. Building Envelope and Finish Materials
03. Exterior Window and Door Openings
04. Roofing
05. Interior Features and Finishes
06. Site Access and Overall Accessibility

Structural – Calder Richards
(4) Components x 3 = 12 Total

07. Foundation
08. Wall Structure
09. Roof Structure
10. Floor Loading

Mechanical – Spectrum Engineering
(5) Components x 3 = 15 Total

11. Main Level - Mechanical Ducting
12. Second Level - Mechanical Ducting
13. Building Mechanical
14. Building Plumbing
15. Building Fire Suppression

Electrical – Envision Engineering
(12) Components x 3 = 36 Total

16. Electrical Distribution
17. Surge Protection
18. Electrical Equipment Clearance
19. Grounding and Bonding
20. GFCI Outlets
21. Lighting
22. Lighting Controls
23. Telecommunication System
24. Security System
25. Audio/Video System 1
26. Audio/Video System 2
27. Audio/Video System 3

The total possible Component Score for Town Office is 81 points.

Based on the Ranking System of High Priority (1) to Low Priority (3) for each system, the Town Office building received a Component Score of 60 points or 74% Building Score.

Total Component Scores = **60 pts**

(27 components) x 3 = **81 pts**

The project team recommendation (without taking cost into account) is to Remain in Place. Based on decisions related to the other buildings, this facility could undergo some renovations and be used to house other town needs.

Town Office Building Score	
Component Score:	**60 / 81**
Building Score (%):	**74%**
Average Component Score:	**3**
Recommendation:	**Remain in Place**

Architectural & Structural Assessment Summary

Architectural	Cost	Score (18)
01. Visible Foundation System		2
F1 - Wash/Inspection of Foundation	**$5,253**	
F2 - Clean & Regrade Around Foundation	**$23,639**	
02. Building Envelope and Finish Materials		1
BE1 - Wash/Caulking of Exterior	**$13,789**	
03. Exterior Window and Door Openings		2
BE2 - Window Maintenance	$6,019	
BE3 - Replace Glazing with Solar Ban 90	$36,772	
BE4 - Replace Glazing System with Spectrally Selective System	**$113,818**	
04. Roofing		1
BE5 - Clean Roof Membrane	$5,472	
BE6 - Replace Pipe/Vent Boots	**$100,530**	
05. Interior Features and Finishes		1
I1 - Replace Lamps with LED	$13,420	
I2 - Replace Light Fixtures	**$65,609**	
I3 - Replace Stair Guardrails	**$23,530**	
06. Site Access and Overall Accessibility		1
S1 - New Concrete at Site	$20,976	
S2 - Add Vertical Grab Bars at Restrooms	$2,663	
S3 - Redo Sidewalks, Lobby Reception, and Restroom for (Current) Compliance	**$243,504**	

Component Score:	**14 / 18**
Avg Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

Structural	Cost	Score (12)
07. Foundation		3
08. Wall Structure		3
09. Roof Structure		3
10. Floor Loading		3

Component Score:	**12 / 12**
Avg Component Score:	**3**
Recommendation:	**Remain in Place**

Mechanical Assessment Summary

Mechanical	Cost	Score (15)
11. Main Level - Mechanical Ducting		3
12. Second Level - Mechanical Ducting		3
M1 - Clean Ducts	**$5,666**	
13. Building Mechanical		3
M2 - Building Automation	**$47,716**	
14. Building Plumbing		3
M3 - Replace Plumbing Fixtures	**$30,096**	
15. Building Fire Suppression		3
M4 - Install Fire Suppression System	**$210,490**	3

Component Score:	**15 / 15**
Avg Component Score:	**3**
Recommendation:	**Remain in Place**

Electrical Assessment Summary

Electrical	Cost	Score (27)
16. Electrical Distribution		1
E1 - Field Investigation	**$5,837**	
17. Surge Protection		2
E2 - Surge Protection	**$5,198**	
18. Electrical Equipment Clearance		1
E3 - Relocate Boiler Switch	**$11,856**	
19. Grounding and Bonding		1
E4 - Review Bonding & Grounding	**$6,931**	
20. GFCI Outlets		1
E5 - Install GFCI Outlets	**$2,873**	
21. Lighting		1
22. Lighting Controls		1
E6 - Install Lighting Controls	**$23,858**	
23. Telecommunication System		2
E7 - Provide Dedicated Telecom Room	**$58,368**	
24. Security System		3
25. Audio/Video System 1		2
26. Audio/Video System 2		2
27. Audio/Video System 3		2
E8 - Audio Visual Modification	**$31,646**	

Component Score:	**19 / 27**
Avg Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

Town Office - Facility Condition Index

The Town Office building is an approximately 2,700 square foot building that currently houses most of the administration functions of the Town including the mayor's office, town manager's office, et cetera, and the newest of the Town's buildings.

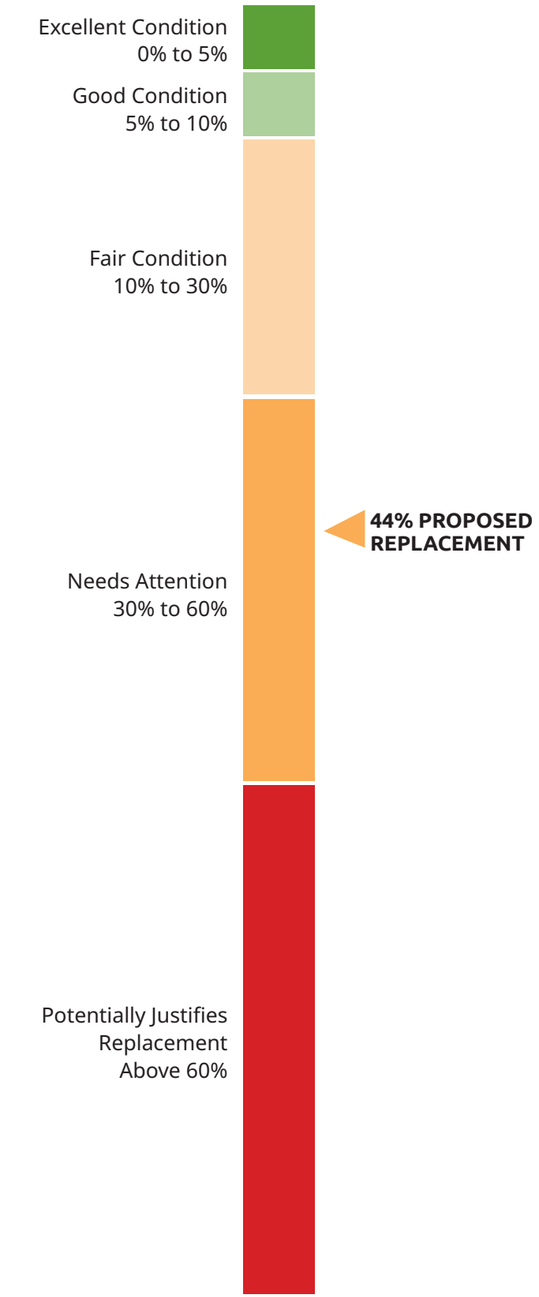
The repair costs for this building are estimated to be $1,022,207. The current replacement value for the current square footage (same size building) is approximately $2,297,550.

$$\text{FCI Score} = \frac{\$1{,}022{,}207 \text{ (repair costs)}}{\$2{,}297{,}550 \text{ (replacement cost)}} = 44\%$$

Based on the FCI score, this building could use attention as outlined in the full facility condition assessment within the appendix.

Note: Percentages are a ratio of the Cost of Recommended Repairs: Cost of Current Square Footage Replacement.

Alta Central Facility Condition Index



Alta Central

Building Assessment Approach

Alta Central

Our team specifically addressed components unique to Alta Central including the following itemized components:

Architectural – FFKR Architects
(6) Components x 3 = Total 18

01. Visible Foundation System
02. Building Envelope and Finish Materials
03. Exterior Window and Door Openings
04. Roofing
05. Interior Features and Finishes
06. Site Access and Overall Accessibility

Structural – Calder Richards
(4) Components x 3 = Total 12

07. Foundation
08. Wall Structure
09. Roof Structure
10. Floor Loading

Mechanical – Spectrum Engineering
(17) Components x 3 = Total 51

11. Building Envelope
12. Main Level - Fire Place
13. Basement - Mechanical 1
14. Basement - Mechanical 2
15. Main Level - Mechanical Ducting
16. Main Level - Exhaust
17. Second Level - Mechanical
18. Second Level - Mechanical Ducting
19. Building Mechanical
20. Building Plumbing 1
21. Building Plumbing 2
22. Basement Plumbing
23. Building Plumbing 3
24. Building Plumbing 4
25. Roof Plumbing
26. Building Plumbing 5
27. Building Fire Suppression

Electrical – Envision Engineering
(13) Components x 3 = Total 39

28. General
29. Electrical Distribution
30. Surge Protection
31. Electrical Equipment
32. Electrical Wiring and Devices
33. Grounding and Bonding
34. GFCI Outlets
35. Lighting
36. Lighting Controls
37. Telecommunication System
38. Security System
39. Audio/Video System 1
40. Audio/Video System 2

The total possible component score for Alta Central is 120 points. Based on the Ranking System of High Priority (1) to Low Priority (3) for each system, the Alta Central Building received a Component Score of 64 points or 53% Building Score.

Based on the building score, the project team recommends to renovate/upgrade the building.

Total Component Scores = **64 pts**

(40 components) x 3 = **120 pts**

Alta Central Building Score	
Component Score:	**64 / 120**
Building Score (%):	**53%***
Average Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

* To allow the Marshals to continue to operate out of this facility an extensive and expensive renovation would be required to bring the building up to code; refer to the FCI on page 35.

Architectural & Structural Assessment Summary

Architectural	Cost	Score (18)
01. Visible Foundation System		2
F1 - Remove Vegetation Around Perimeter	**$2,906**	
F2 - Clean & Regrade Around Foundation	**$23,245**	
02. Building Envelope and Finish Materials		1
BE1 - Scrape & Repaint/Stain Exterior Siding, Trim, & Stair Finishes	**$63,370**	
BE2 - Replace Stair/Deck Guardrails	$46,512	
03. Exterior Window and Door Openings		2
BE3 - Replace Door and Gaskets	**$7,624**	
04. Roofing		1
BE4 - Roof Inspection & New Tie Off Point	**$20,064**	
BE5 - Replace Roof	**$32,504**	
05. Interior Features and Finishes		1
I1 - Upgrade Interior Finishes	$366,722	
I2 - Complete Interior Renovation	**$2,706,761**	
06. Site Access and Overall Accessibility		1
S1 - Change Door Hardware to (Current) ADA Compliant	$30,132	
S2 - Remove Deck & Install Ramps	**$201,400**	
S3 - Renovate Restrooms	$196,992	

Component Score:	**8 / 18**
Avg Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Structural	Cost	Score (12)
07. Foundation		2
08. Wall Structure		1
09. Roof Structure		1
10. Floor Loading		3
ST1 - Structural Upgrade	**$785,834**	

Component Score:	**7 / 12**
Avg Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

Mechanical Assessment Summary

Mechanical	Cost	Score (51)
11. Building Envelope		2
M1 - Upgrade Building Envelope	**$419,111**	
12. Main Level - Fire Place		2
M2 - Clean Chimney	**$4,560**	
13. Basement - Mechanical 1		1
M3 - Replace Furnace	**$19,699**	
14. Basement - Mechanical 2		1
M4 - Replace Furnace	**$8,846**	
15. Main Level - Mechanical Ducting		3
M5 - Clean Ducts/Grilles	**$16,590**	
16. Main Level - Exhaust		1
M6 - Replace Kitchen Exhaust Hood	**$6,658**	
17. Second Level - Mechanical		1
M7 - Replace Furnace	**$19,699**	
18. Second Level - Mechanical Ducting		3
19. Building Mechanical		3
M8 - Building Automation	**$69,852**	
20. Building Plumbing 1		1
21. Building Plumbing 2		1
M9 - Secure Piping to Wall	**$1,824**	
22. Basement Plumbing		1
M10 - Replace Natural Gas Piping	**$4,560**	
23. Building Plumbing 3		2
24. Building Plumbing 4		3
M11 - Replace Piping	**$436,574**	
25. Roof Plumbing		1
26. Building Plumbing 5		3
M12 - Replace Plumbing Fixtures	**$30,096**	
27. Building Fire Suppression		2
M13 - Install Fire Suppression System	**$265,830**	

Component Score:	**31 / 51**
Avg Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

Electrical Assessment Summary

Electrical	Cost	Score (39)
28. General		1
E1 - Remove Abandoned Electrical	**$6,931**	
29. Electrical Distribution		1
E2 - Electrical Distribution	**$18,058**	
30. Surge Protection		1
E3 - Surge Protection	**$5,198**	
31. Electrical Equipment		1
E4 - Replace Existing Panelboards	**$20,611**	
32. Electrical Wiring and Devices		1
E5 - Replace Electrical Wiring and Devices	**$163,279**	
33. Grounding and Bonding		1
E6 - Reviewing Bonding and Grounding	**$6,931**	
34. GFCI Outlets		1
E7 - Install GFCI Outlets	**$2,873**	
35. Lighting		1
E8 - Replace Lighting	**$250,594**	
36. Lighting Controls		1
E9 - Install Lighting Controls	**$34,926**	
37. Telecommunication System		2
E10 - Provide Dedicated Telecom Room	**$58,368**	
38. Security System		3
E12 - Security System	**$133,303**	
39. Audio/Video System 1		2
40. Audio/Video System 2		2
E11 - Audio Visual Modifications	**$78,698**	

Component Score:	**18 / 39**
Avg Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Note: While the $800/SF estimate was used to calculate the cost of replacement for Alta Central, the actual costs for replacement could be higher due to additional avalanche safety factors. While the assessment team has tried to account for this, it is nearly impossible to provide accurate estimates with the avalanche loading without some level of structural design which did not occur as part of the scope of this project.

Alta Central - Facility Condition Index

Alta Central is an approximately 3,150 square foot structure that is the home to the Alta Marshal Office, including their dispatch center and some storage.

The repair costs for this building are estimated to be $5,927,377. The current replacement value for the current square footage (same size building) is approximately $2,521,600.

$$\text{FCI Score} = \frac{\$5{,}927{,}377 \text{ (repair costs)}}{\$2{,}521{,}600 \text{ (replacement cost)}} = 235\%$$

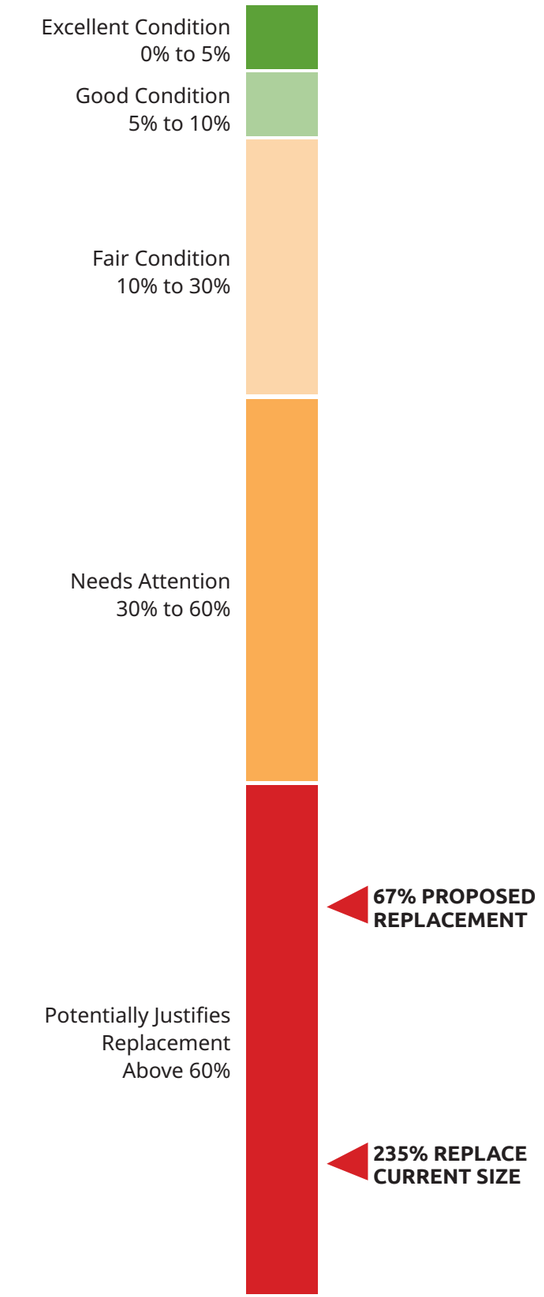
However, as shown further in this document, the needs of the Marshals exceeds the space of Alta Central; they currently are using space at the Community Center for a few Marshals quarters and storage facilities. They require more square footage to be able to function and operate as a standard, albeit small, police force. It is estimated that a new Marshals building, housing all of their needs in one location, would be approximately 10,000 square feet. The cost to construct that building is estimated at $8,004,800.

$$\text{FCI Score} = \frac{\$5.927{,}377 \text{ (repair costs to existing space)}}{\$8{,}004{,}800 \text{ (10,000 sq ft new build)}} = 67\%$$

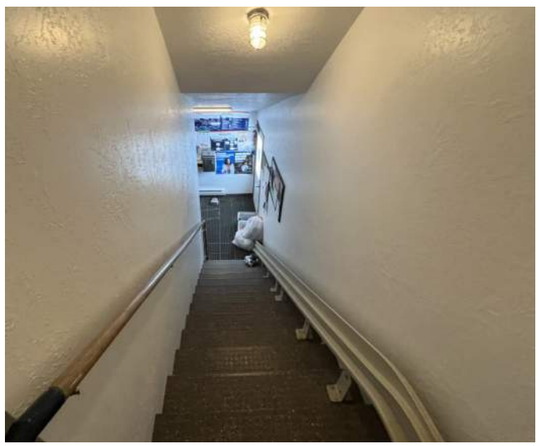
Based on the scale provided by the FCI, in both instances the cost of replacing Alta Central is likely justified when compared to the cost of repairs.

Note: Percentages are a ratio of the Cost of Recommended Repairs: Cost of Current Square Footage Replacement

Alta Central Facility Condition Index



Community Center



Building Assessment Approach

Community Center

Our team specifically addressed components unique to the Community Center including the following itemized components:

Architectural – FFKR Architects
(6) Components x 3 = Total 18

01. Visible foundation system
02. Building envelope and finish materials
03. Exterior window and door openings
04. Roofing
05. Interior features and finishes
06. Site access and overall accessibility

Structural – Calder Richards
(4) Components x 3 = Total 12

07. Foundation
08. Wall Structure
09. Roof Structure
10. Floor Loading

Mechanical – Spectrum Engineering
(12) Components x 3 = Total 36

11. Building Envelope
12. Garage - Mechanical 1
13. Garage - Mechanical 2
14. Garage - Mechanical 3
15. Second Level - Mechanical 1
16. Second Level - Mechanical Ducting
17. Second Level - Mechanical 2
18. Building Mechanical
19. Building Plumbing 1
20. Roof Plumbing
21. Building Plumbing 2
22. Building Fire Suppression

Electrical – Envision Engineering
(12) Components x 3 = Total 36

23. General
24. Electrical Distribution
25. Surge Protection
26. Electrical Equipment
27. Electrical Wiring and Devices
28. Grounding and Bonding
29. GFCI Outlets
30. Lighting
31. Lighting Controls
32. Telecommunciation System
33. Security System
34. Audio/Video System

The total possible component score for Community Center is 102 points.

Based on the Ranking System of High Priority (1) to Low Priority (3) for each system, the Community Center building received a Component Score of 54 points or 53% Building Score.

The project team recommendation is to demolish and construct new.

Total Component Scores = **54 pts**

(34 components) x 3 = **102 pts**

Alta Central Building Score	
Component Score:	**54 / 102**
Building Score (%):	**53%**
Average Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Architectural & Structural Assessment Summary

Architectural	Cost	Score (18)
01. Visible Foundation System		1
F1 - Repair Damaged CMU by Plastering	**$12,403**	
F2 - Reinstall Rockfall Protection Measures	**$31,008**	
02. Building Envelope and Finish Materials		1
BE1 - Touch-up Peeling/Flaking Paint, Clear Large Rocks	**$25,943**	
BE2 - Re-attach Post Office Addition, Add Garage Insulation	$64,934	
BE3 - Demolish, Re-build Post Office, 2nd Floor Additions	**$1,030,834**	
03. Exterior Window and Door Openings		2
BE4 - Replace Exterior Man Doors	**$11,218**	
BE5 - Remodel, Relocate Man Doors	$377,086	
04. Roofing		1
BE6 - Roof Safety Line & Rain Gutter	**$20,064**	
BE7 - New snow Fence, Patch Membrane	**$32,504**	
05. Interior Features and Finishes		2
I1 - Upgrade Interior Finishes	**$352,320**	
I2 - Upgrade Anchorage of East/West Additions	$74,054	
I3 - Replace East/West Additions	$645,696	
06. Site Access and Overall Accessibility		1
S1 - New Door Hardware, Railings	**$37,242**	

Component Score:	**8 / 18**
Avg Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Structural	Cost	Score (12)
07. Foundation		2
08. Wall Structure		1
09. Roof Structure		1
10. Floor Loading		1
ST1 - Hillside Retention	**$310,992**	
ST2 - East/West Additions	$164,160	

Component Score:	**5 / 12**
Avg Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Mechanical Assessment Summary

Mechanical	Cost	Score (36)
11. Building Envelope		2
M1 - Upgrade Building Envelope	**$402,652**	
12. Garage - Mechanical 1		2
M2 - Replace Vehicle Exhaust System	**$20,064**	
13. Garage - Mechanical 2		2
M3 - Service UDOT Exhaust System	**$9,120**	
14. Garage - Mechanical 3		1
M4 - Replace Radiant Tube Heaters	**$14,501**	
15. Second Level - Mechanical 1		1
M5 - Replace Furnaces & Humidifiers	**$44,870**	
16. Second Level - Mechanical Ducting		3
M6 - Clean Ducts & Grilles	**$15,938**	
17. Second Level - Mechanical 2		3
M7 - Replace Electric Baseboard Heaters	**$14,592**	
18. Building Mechanical		3
M8 - Add BMS System	**$67,109**	
19. Building Plumbing 1		1
M9 - Replace Tankless Water Heater	**$6,384**	
20. Roof Plumbing		1
M10 - Replace Plumbing Vents	**$10,032**	
21. Building Plumbing 2		3
M11 - Replace Plumbing Fixtures	**$18,058**	
22. Building Fire Suppression		2
M12 - Add Fire Suppression	**$258,972**	

Component Score:	**24 / 36**
Avg Component Score:	**2**
Recommendation:	**Renovate/Upgrade**

Electrical Assessment Summary

Electrical	Cost	Score (36)
23. General		1
E1 - Remove Abandoned Electrical	**$6,931**	
24. Electrical Distribution		1
E2 - Electrical Distribution	**$18,058**	
25. Surge Protection		1
E3 - Surge Protection	**$5,198**	
26. Electrical Equipment		2
E4 - Replace Existing Panelboards	**$10,306**	
27. Electrical Wiring and Devices		1
E5 - Replace Electrical Wiring and Devices	**$156,866**	
28. Grounding and Bonding		1
E6 - Reviewing Bonding and Grounding	**$6,931**	
29. GFCI Outlets		1
E7 - Install GFCI Outlets	**$2,873**	
30. Lighting		1
E8 - Replace Lighting	**$240,752**	
31. Lighting Controls		1
E9 - Install Lighting Controls	**$33,554**	
32. Telecommunciation System		2
E10 - Provide Dedicated Telecom Room	**$58,368**	
33. Security System		3
E12 - Security System	**$78,583**	
34. Audio/Video System		2
E11 - Audio Visual Modifications	**$18,240**	

Component Score:	**17 / 36**
Avg Component Score:	**1**
Recommendation:	**Demolition/New Construction**

Community Center - Facility Condition Index

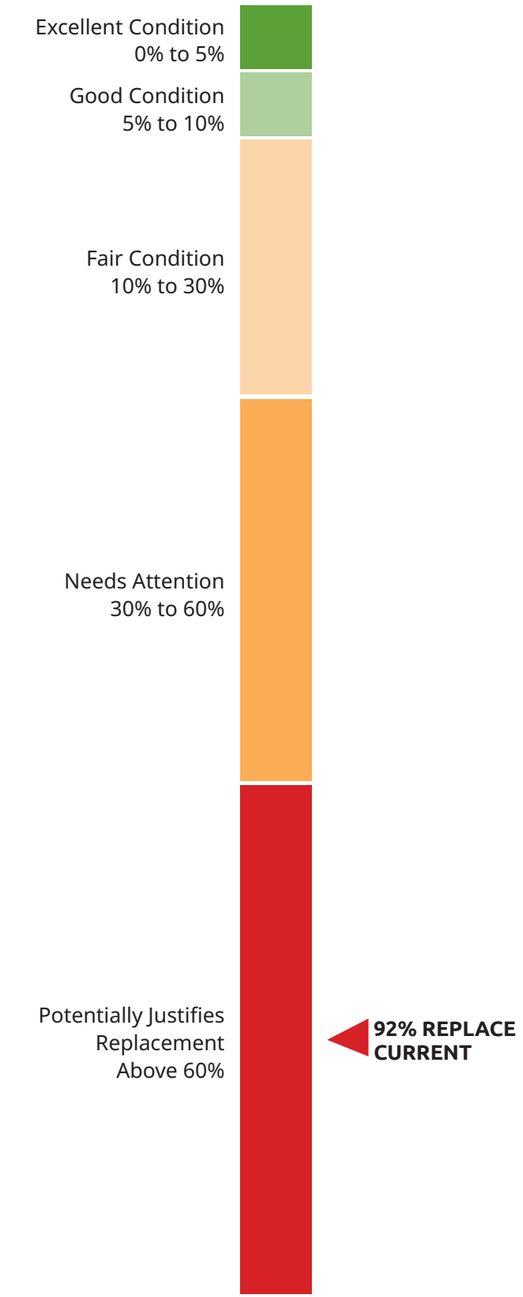
The Community Center is an approximately 4,600 square foot building used for storage by both the Town administration and the Marshals Office. It also houses the Town's contract post office, a few Marshal quarters, the Alta Reading Room, and the Town Council Chambers.

The repair costs for this building are estimated to be $3,383,480. The current replacement value for the current square footage (same size building) is approximately $3,676,800.

$$\text{FCI Score} = \frac{\$3{,}383{,}480 \text{ (repair costs)}}{\$3{,}676{,}800 \text{ (replacement cost)}} = 92\%$$

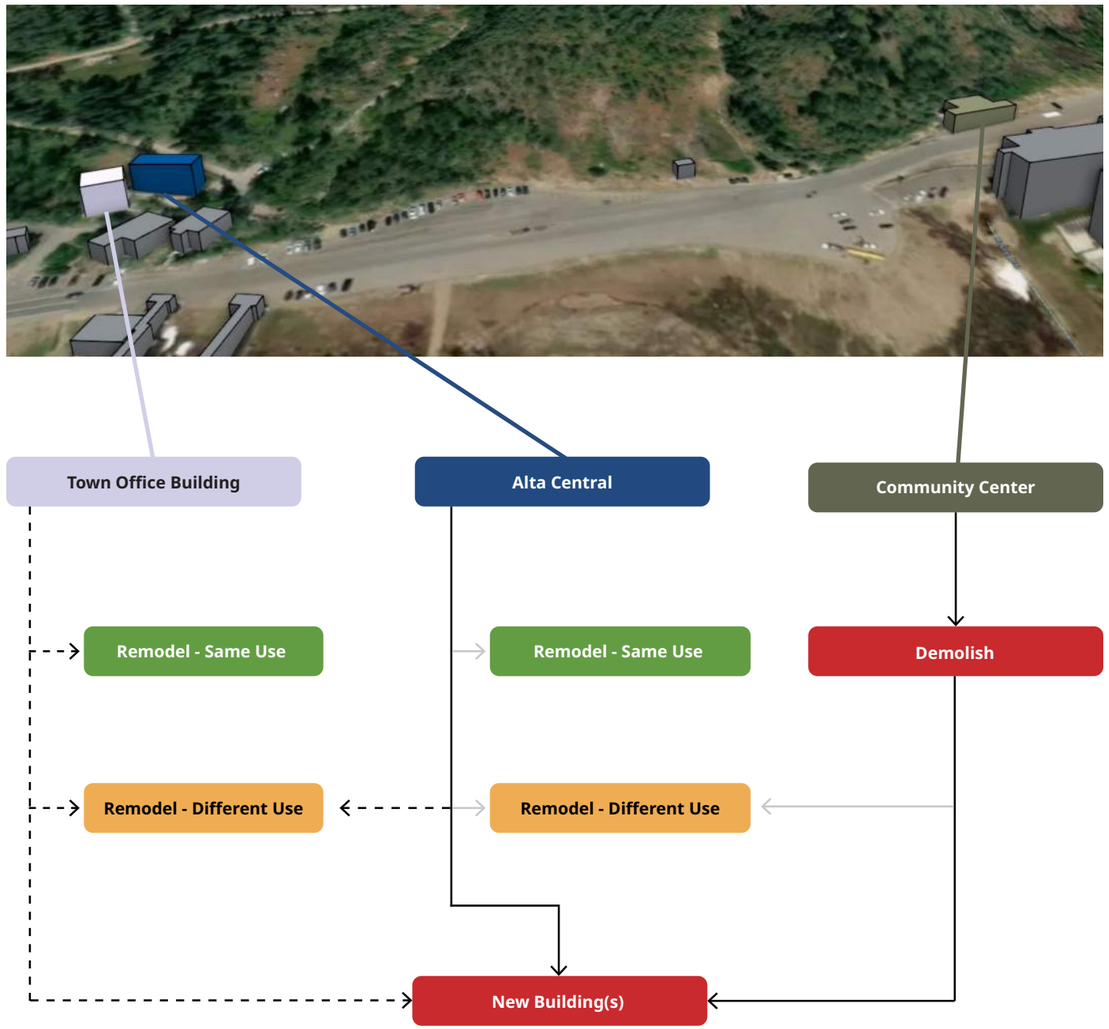
Note: Percentages are a ratio of the Cost of Recommended Repairs: Cost of Current Square Footage Replacement.

Community Center Facility Condition Index



Overall Facility Recommendation

Recommended Decision Tree



Note: Recommendations are made after considering the facility condition index score as well as the assessment team's understanding of the building "health" and Town priorities

Key:

- Recommend Option
- Potential Option
- Non-desirable Option

Overall Facility Recommendation

From the information derived from the facility condition assessment engineer evaluations and associated cost of repairs, it is our recommendation that the Town Office building continue to serve the staff and citizens of Alta. It is the newest building that the town owns and is in good condition. It was designed with avalanches in mind and serves as a critical operation center for the Alta Marshals Office during the most severe interlodges.

Alta Central is in remarkably good condition considering its unknown original construction date, its move up the canyon from the University of Utah, and its placement in the path of an avalanche. However, the building has several deficiencies related to its electrical design, fire protection, structural components, accessibility, and overall finishes. Based on current codes for existing buildings, undertaking the significant amount of work that is needed for this building would likely trigger bringing the entire facility up to current code standards which would likely be cost prohibitive. Since this structure serves as the police headquarters for the Alta Marshals Office, it would also need to be renovated to be categorized as a Risk Category IV building under Table 1604.5 of the 2021 International Building Code. Based on these factors, it is recommended that Alta Central be decommissioned as the home of the Marshals. Another use for the building could be considered, but it is still recommended that some work be carried out to minimize the risks that future occupants might have.

The Community Center is in the worst condition of the buildings that the Town owns. The building is exposed to falling rocks on the north side and the non-original structures (the east and west additions as well as level 2) are showing signs of separating from the main structure. This facility serves as a very public facing venue for the town as it has the Town council chambers, post office, and Alta reading room, but the building has accessibility concerns. Because of these items, it is recommended that the community center be demolished.

Space Matrix

Introduction

Space Matrix

To organize the spaces that are within the three facilities the Town owns, our team sorted them into functional groups. These functional groups include: Administration, Community Services, Marshal, 3rd Party Tenant, Support Spaces, Building Systems, and Circulation. Spaces across all facilities have been categorized as one of these functional groups after reviewing plans that were created for this project, facility tours, and interviews with staff. Information provided includes a space name and room number, rough dimensions of the room from wall to wall, and square footage.

This information, shown in tables on the following pages, provides the project team and Town with an understanding of how space is currently allocated and used throughout all facilities as some functional groups are spread between two or more buildings.

Existing Space Matrix

Community Services

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Community Center	Post Office 105	10'-6" x 23'-6"	1	226
B	Community Center	Mailboxes & Community Boards 106	8'-0" x 10'-6"	1	88
C	Community Center	Town Council Chamber 107	18'-0" x 26'-0"	1	489
D	Community Center	Alta Reading Room 121	13'-6" x 27'-0"	1	320
			NSF Combined Total		1,123

3rd Party Tenant

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Town Office	Friends of Alta 102	14'-6" x 19'-0"	1	233
B	Town Office	Storage 103	4'-0" x 11'-0"	1	41
C	Community Center	ACE Space 120	9'-0" x 26'-0"	1	242
			NSF Combined Total		516

Existing Space Matrix

Administration

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Town Office	Planning and Zoning 104	10'-6" x 19'-6"	1	207
B	Town Office	Storage 105	11'-0" x 12'-0"	1	135
C	Town Office	Mayors Office 211*	12'-6" x 20'-6"	1	230
D	Town Office	Town Manager 210	10'-6" x 12'-0"	1	121
E	Town Office	Town Clerk 209	10'-6" x 12'-0"	1	121
F	Town Office	Assistant Town Manager 208	8'-0" x 10'-6"	1	82
G	Town Office	Assistant Town Clerk 213	6'-0" x 10'-6"	1	61
			NSF Combined Total		957

*Doubles as a conference room for staff when Mayor is not in office

Building Systems

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Town Office	Restroom 106	6'-6" x 6'-6"	1	43
B	Town Office	Restroom 110	4'-6" x 11'-0"	1	53
C	Town Office	Mechanical/Electrical 107	6'-0" x 11'-0"	1	68
D	Town Office	Restroom 204	5'-6" x 8'-6"	1	46
E	Town Office	Janitor 203	3'-6" x 6'-0"	1	21
F	Town Office	Restroom 214	3'-6" x 11'-0"	1	36
G	Alta Central	Electrical & Generator 105	8'-0" x 11'-6"	1	92
H	Alta Central	Mechanical 104	9'-0" x 11'-6"	1	114
I	Alta Central	Restroom & Storage 111	6'-0" x 9'-6"	1	47
J	Alta Central	Restroom 113	8'-0" x 9'-6"	1	77
K	Alta Central	Restroom 123	9'-6" x 9'-6"	1	67
L	Alta Central	Restroom 125	9'-0" x 9'-6"	1	84
M	Community Center	Public Restroom 110	6'-0" x 7'-0"	1	42
N	Community Center	Mechanical 108	4'-0" x 9'-0"	1	34
			NSF Combined Total		824

Existing Space Matrix

Marshals

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Alta Central	Living Room 108	15'-0" x 23'-0"	1	380
B	Alta Central	Kitchen 109	9'-6" x 13'-0"	1	127
C	Alta Central	Office 118	8'-6" x 9'-6"	1	82
D	Alta Central	Office 117	8'-6" x 9'-6"	1	81
E	Alta Central	Dispatch 116	16'-6" x 9'-6"	1	158
F	Alta Central	On-Call Dispatch 114	9'-6" x 19'-6"	1	185
H	Alta Central	Evidence Storage 115	9'-0" x 9'-6"	1	86
I	Alta Central	Marshal's Room 119	16'-6" x 23'-0"	1	355
J	Alta Central	Lead Dispatcher Room 131	9'-6" x 17'-6"	1	164
K	Alta Central	Bedroom 121	9'-0" x 9'-6"	1	84
L	Alta Central	Bedroom 126	9'-0" x 9'-6"	1	84
M	Alta Central	Bedroom 127	9'-0" x 9'-6"	1	84
N	Alta Central	Bedroom 128	8'-0" x 9'-6"	1	76
O	Alta Central	Bedroom 129	8'-6" x 9'-6"	1	82
P	Alta Central	Bedroom 130	8'-6" x 9'-6"	1	81
Q	Community Center	Marshal Storage 102	28'-0" x 39'-6"	1	1,060
R	Community Center	Marshal Storage 103	5'-6" x 8'-0"	1	46
S	Community Center	Deputy Marshal Entry & Laundry 111	9'-0" x 11'-0"	1	92
T	Community Center	Deputy Marshal Restroom 112	7'-6" x 9'-0"	1	54
U	Community Center	Deputy Marshal Storage 119	2'-0" x 3'-0"	1	6
V	Community Center	Deputy Marshal Living Space 113	10'-6" x 15'-0"	1	157
W	Community Center	Deputy Marshal Bedroom 114	7'-6" x 10'-0"	1	73
X	Community Center	Deputy Marshal Bedroom 115	7'-6" x 10'-0"	1	72
		NSF Combined Total			3,669

Existing Space Matrix

Circulation

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Town Office	Hall 101	5'-0" x 30'-6"	1	159
B	Town Office	Hall 108	6'-6" x 16'-0"	1	128
C	Town Office	Vestibule 201	7'-0" x 7'-6"	1	58
D	Town Office	Lobby 202	9'-0" x 13'-6	1	97
E	Town Office	Stairs 207	6'-6" x 16'-0"	1	99
F	Alta Central	Hallway 110	3'-0" x 48'-0"	1	144
G	Alta Central	*Hallway 120*	*3’-0” x 47’-6”*	*1*	*175*
H	*Community Center*	*West Stairway*	*3’-6” x 39’-0”*	*1*	*118*
I	*Community Center*	*East Stairway*	*3’-6” x 44’-0”*	*1*	*136*
		NSF Combined Total			1,114

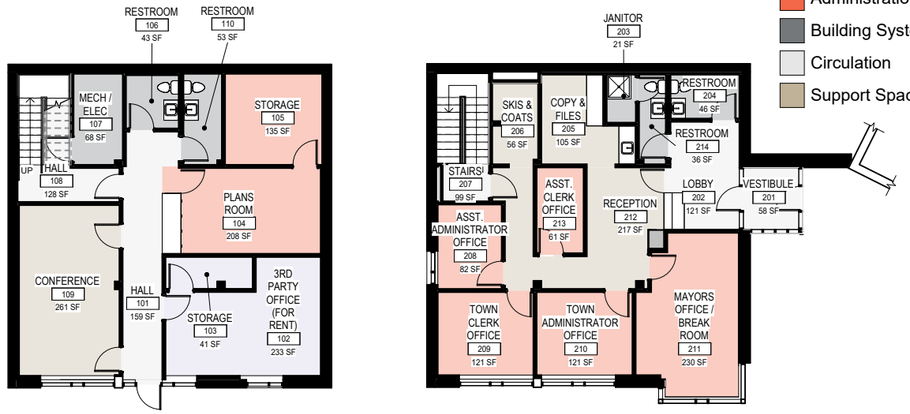
Support Spaces

	BUILDING	ROOM / SPACE NAME	EXISTING		
			ROUGH DIMENSION	QUANTITY (# OF SPACES)	PROGRAM AREA (EXISTING SF)
A	Town Office	Conference 109	12'-6" x 21'-0"	1	261
B	Town Office	Copy & Files 205	11'-0" x 11'-6"	1	105
C	Town Office	Reception 212	10'-0" x 17'-6"	1	217
D	Town Office	Skis & Coats 206	5'-6" x 10'-0"	1	56
E	Alta Central	Vestibule 103	6'-6" x 8'-0"	1	50
F	Alta Central	Storage / Laundry 102	9'-0" x 23'-0"	1	232
G	Alta Central	Storage / Mechanical 106	6'-0" x 10'-0"	1	61
H	Alta Central	Tool Storage & Workshop 101	9'-0" x 23'-0"	1	207
I	Alta Central	Storage 112	1'-0" x 2'-0"	1	2
J	Alta Central	Storage 122	1'-6" x 2'-6"	1	3
K	Alta Central	Closet 124	2'-0" x 2'-6"	1	5
L	Community Center	Sign Storage 104	7'-6" x 19'-6"	1	143
M	Community Center	Town Storage 101	14'-6" x 39'-6"	1	579
N	Community Center	Storage 117	4'-0" x 11'-0"	1	43
O	Community Center	Storage 109	6'-0" x 7'-6"	1	44
P	Community Center	Storage 118	4'-6" x 9'-0"	1	38
Q	Storage Facility	Storage Unit in Sandy City	10'-0" x 40'-0"	1	400
		NSF Combined Total			2,446

Alta Town Office Building

Existing Plans

Town Offices - Floor Plans



Department Legend

- 3rd Party Office
- Administration
- Building Systems
- Circulation
- Support Spaces

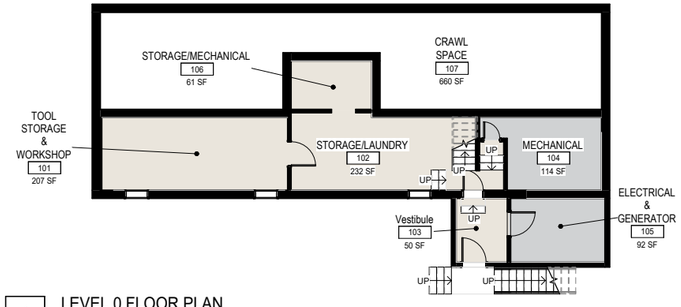
1 LEVEL 1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

2 LEVEL 2 FLOOR PLAN
SCALE: 1/8" = 1'-0"

Alta Central

Existing Plans

Alta Central - Floor Plans

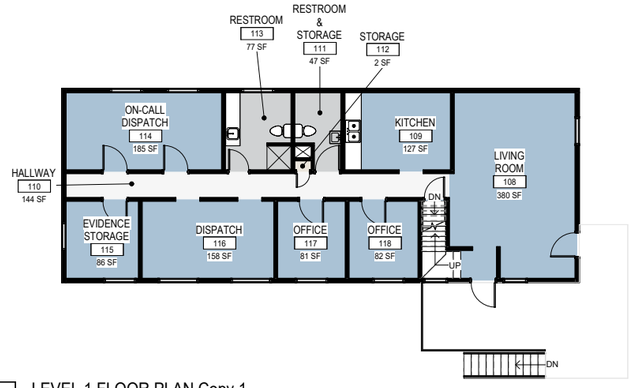


Department Legend

- Building Systems
- Support Spaces

1 LEVEL 0 FLOOR PLAN
SCALE: 1/8" = 1'-0"

Alta Central - Floor Plans



Department Legend

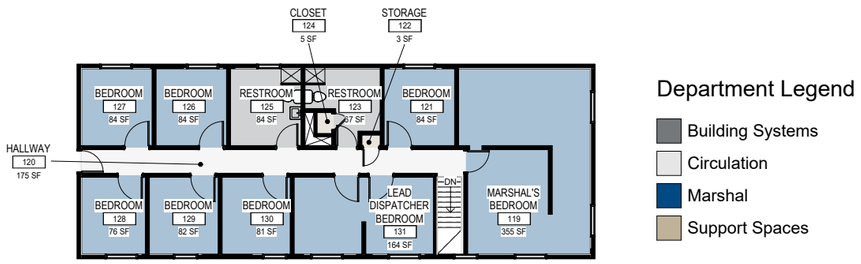
- Building Systems
- Circulation
- Marshal
- Support Spaces

1 LEVEL 1 FLOOR PLAN Copy 1
SCALE: 1/8" = 1'-0"

Alta Central

Existing Plans

Alta Central - Floor Plans



1 LEVEL 2 FLOOR PLAN

SCALE: 1/8" = 1'-0"

Community Center

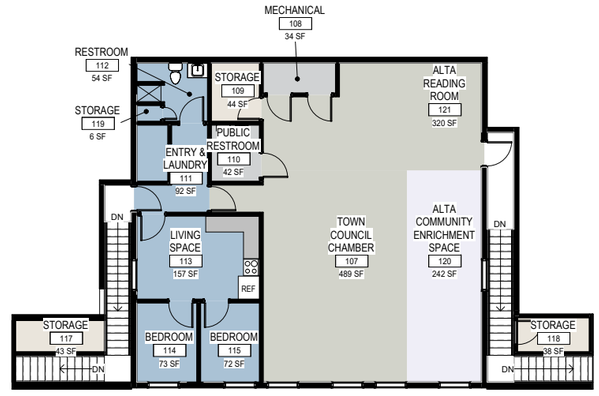
Existing Plans

Community Center - Floor Plans

1 LEVEL 1 FLOOR PLAN

SCALE: 1/8" = 1'-0"

Community Center - Floor Plans



1 LEVEL 2 FLOOR PLAN

SCALE: 1/8" = 1'-0"

Introduction

Space Matrix

The following pages contain a summary of the proposed spaces that should be included throughout all Town of Alta facilities in the future. Spaces are broken down by functional group and follow the same formatting and color key as was established for the existing space summaries. In addition to providing space names, rough dimensions, and square footage, some spaces also have additional notes referring to other spaces they should be adjacent to, functional requirements, or furniture requirements. If the space name has a space number in the same cell, it is an existing space. The proposed square footage value and size is used to gauge any space deficiencies, as well as to use in any test fit option where the space is relocated from its current position. This could be due to renovating a building for a different use or the recommendation to demolish a building and move spaces to a different or new facility.

At the end of each functional group is a total net square footage, the multiplier used to obtain the gross square footage, and the gross square footage.

Definitions:

NSF = Net Square Footage

» The usable square footage of program space (measured from wall to wall)

GSF = Gross Square Footage

» The square footage of program spaces is multiplied by a set multiplier to account for wall thickness, circulation between spaces (i.e. hallways), mechanical spaces, restrooms, et cetera.

Note: While circulation and building system spaces were broken down space by space in the existing space summary's, these spaces were not designated in the proposed space summary's as they are to be determined based on the design requirements for the building systems (such as the size needed for mechanical equipment) and building code requirements and thus are not part of this scope of work.

Storage needs were categorized as their own independent category and named for the functional group that would use the space.

Proposed Space Matrix

Administration

	ROOM / SPACE NAME	PROPOSED			
		ROUGH DIMENSION	PROGRAM AREA (SF)	QUANTITY (# OF SPACES)	PROGRAM SF SUBTOTAL
A	Planning and Zoning 104	10'-0" x 15'-0"	150	1	150
B	Storage 105	10'-0" x 15'-0"	150	1	150
C	Mayors Office 211*	15'-0" x 17'-0"	255	1	255
D	Town Manager 210	10'-0" x 12'-0"	120	1	120
E	Town Clerk 209	10'-0" x 12'-0"	120	1	120
F	Assistant Town Manager 208	10'-0" x 10'-0"	100	1	100
G	Assistant Town Clerk 213	10'-0" x 10'-0"	100	1	100

NSF Combined Total	995
NSF to GSF Multiplier	1.65
Total GSF	1,642

*Doubles as a conference room for staff when Mayor is not in office

Community Services

	ROOM / SPACE NAME	PROPOSED			
		ROUGH DIMENSION	PROGRAM AREA (SF)	QUANTITY (# OF SPACES)	PROGRAM SF SUBTOTAL
A	Post Office 105	14'-0" x 20'-0"	280	1	280
B	Mailboxes & Community Boards 106	8'-0" x 14'-0"	112	1	112
C	Town Council Chamber 107	20'-0" x 26'-0"	520	1	520
D	Alta Reading Room 121	8'-0" x 10'-0"	80	1	80

NSF Combined Total	992
NSF to GSF Multiplier	1.65
Total GSF	1,637

Proposed Space Matrix

Marshals					
	ROOM / SPACE NAME	PROPOSED			
		ROUGH DIMENSION	PROGRAM AREA (SF)	QUANTITY (# OF SPACES)	PROGRAM SF SUBTOTAL
A	Living Room 108	18'-0" x 20'-0"	360	1	360
B	Kitchen 109	12'-0" x 20'-0"	240	1	240
C	Office 118	10'-0" x 12'-0"	120	1	120
D	Office 117	10'-0" x 12'-0"	120	1	120
E	Dispatch 116	12'-0" x 14'-0"	168	1	168
F	On-Call Dispatch 114	10'-0" x 10'-0"	100	1	100
H	Evidence Storage 115	12'-0" x 20'-0"	240	1	240
I	Marshal's Room 119	10'-0" x 15'-0"	150	1	150
J	Lead Dispatcher Room 131	12'-0" x 12'-0"	120	1	120
K	Bedroom 121	10'-0" x 12'-0"	120	1	120
L	Bedroom 126	10'-0" x 12'-0"	120	1	120
M	Bedroom 127	10'-0" x 12'-0"	120	1	120
N	Bedroom 128	10'-0" x 12'-0"	120	1	120
O	Bedroom 129	10'-0" x 12'-0"	120	1	120
P	Bedroom 130	10'-0" x 12'-0"	120	1	120
Q	Marshal Storage 102	30'-0" x 40'-0"	1200	1	1200
R	Deputy Marshal Entry & Laundry 111	6'-0" x 8'-0"	48	1	48
S	Deputy Marshal Bedroom 114	10'-0" x 12'-0"	120	1	120
T	Deputy Marshal Bedroom 115	10'-0" x 12'-0"	120	1	120
U	Additional Bedroom	10'-0" x 12'-0"	120	3	360
V	Interview Room	10'-0" x 10'-0"	100	1	100
W	Soft Interview Room	8'-0" x 10'-0"	80	1	80
X	Server	10'-0" x 10'-0"	100	1	100
Y	Training Room	14'-0" x 26'-0"	364	1	364
Z	Records Room	10'-0" x 15'-0"	150	1	150
AA	Work/Copy Room	6'-0" x 10'-0"	60	1	60
AB	Secure Vestibule	10'-0" x 12'-0"	120	1	120
AC	Secure Waiting*	10'-0" x 10'-0"	100	1	100
AD	Secure Parking (enclosed)	20'-0" x 25'-0"	500	1	500
AE	Armory*	10'-0" x 12'-0"	240	1	120
AF	Mud Room	10'-0" x 16'-0"	160	1	160
AG	Fingerprinting Alcove*	4'-0" x 6'-0"	24	1	24

Proposed Space Matrix

NSF Combined Total	6,064
NSF to GSF Multiplier	1.65
Total GSF	10,006

***Secure Waiting**

FF&E (Furnishing, Fixtures, and Equipment) Requirements:
» Detention bench (someone can be handcuffed to).

***Armory**

Functional Requirements:
» Floor weight able to handle weight of loaded safes

FF&E (Furnishing, Fixtures, and Equipment) Requirements:
» Three (3) gun safes

Note:
» Basis of Design https://browningsafes.com/products/u-s-series-49

***Fingerprinting Alcove**

Adjacent Space:
» Lobby

Functional Requirements:
» Plugged into networked computer

Proposed Space Matrix

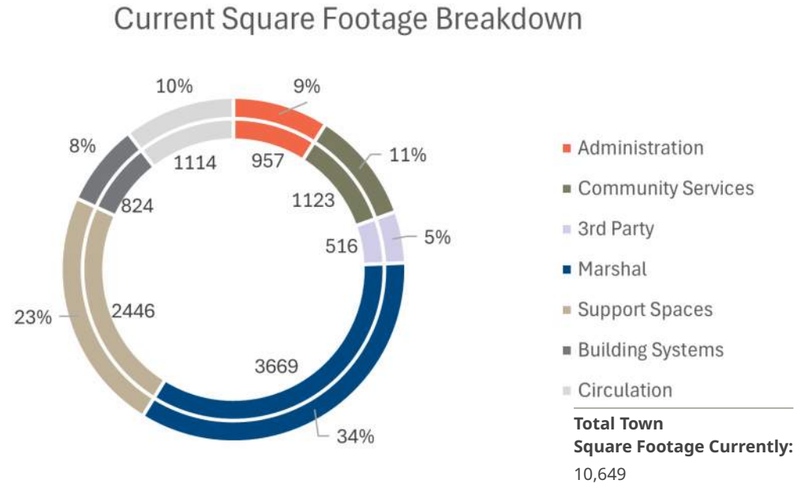
Support Spaces					
	ROOM / SPACE NAME	PROPOSED			
		ROUGH DIMENSION	PROGRAM AREA (SF)	QUANTITY (# OF SPACES)	PROGRAM SF SUBTOTAL
A	Conference 109	16'-0" x 24'-0"	384	1	384
B	Copy & Files 205	10'-0" x 12'-0"	120	1	120
C	Reception 212	10'-0" x 20'-0"	200	1	200
D	Skis & Coats 206	8'-0" x 10'-0"	80	1	80
E	Vestibule 103	8'-0" x 8'-0"	64	1	64
F	Storage / Laundry 102	10'-0" x 12'-0"	120	1	120
G	Storage / Mechanical 106	10'-0" x 20'-0"	200	1	200
H	Tool Storage & Workshop 101	10'-0" x 20'-0"	200	1	200
I	Storage 112	6'-0" x 10'-0"	60	1	60
J	Sign Storage 104	10'-0" x 14'-0"	140	1	140
K	Town Storage 101	20'-0" x 40'-0"	800	1	800
L	Storage 117	10'-0" x 16'-0"	160	1	160
M	Storage Unit in Sandy City	20'-0" x 24'-0"	480	1	480

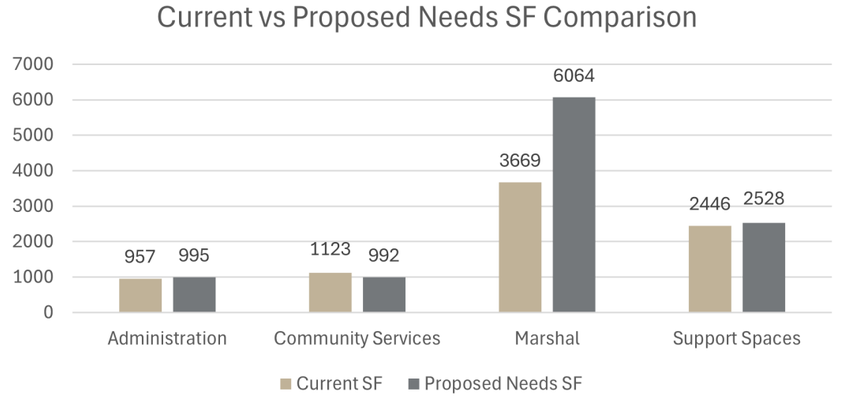
NSF Combined Total	2,528
NSF to GSF Multiplier	1.65
Total GSF	4,171

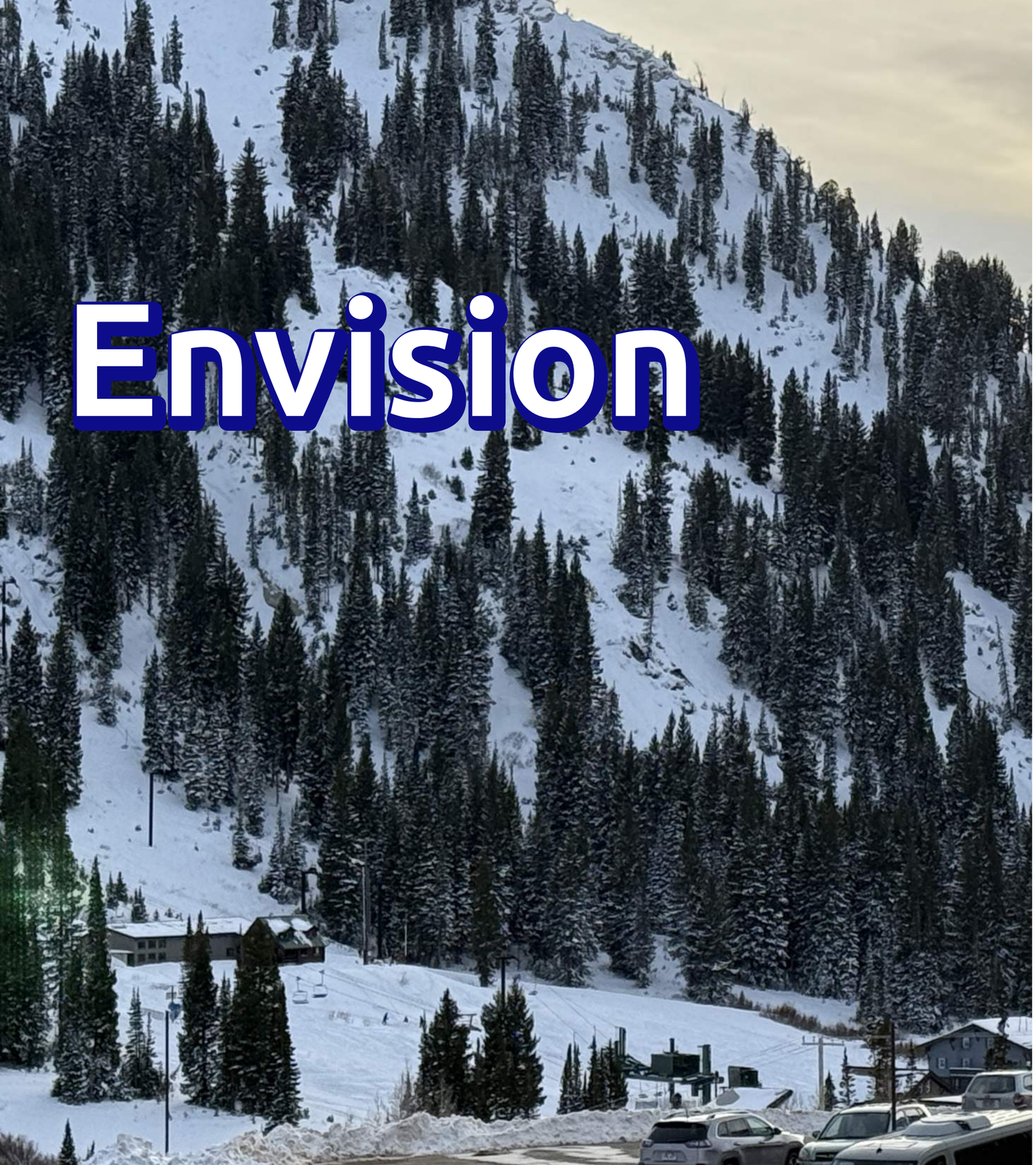
Space Deficiency

Upon comparison of the existing (current) and proposed spaces, three of the four functional groups have a similar amount of space needs in the future. However, the Alta Marshals Office space needs are recommended to double from their current space. A large amount of this space is for street-side and enclosed parking, secure transfer areas and interview rooms, additional officer quarters to accommodate a growing force, et cetera. These proposed, new spaces will remedy long-standing deficiencies in the Alta Marshals Office security, communications, and functional independence from other agencies and down-canyon facilities.

Some of the additional spaces for the Marshals, such as the training room, could be a multi-purpose room shared with the rest of the Town when the Marshals do not need it. In general, the Marshals Office, as well as administrative staff, have expressed a strong preference to prioritize all-season accessibility in future town facilities.







Introduction

Facilities Condition Assessment

In October 2024, the project team conducted a site visit to the Town of Alta to review and investigate the overall condition of three buildings: the Town Office, Alta Central, and the Community Center.

Following the site visits, the state of each building system component was documented by each discipline —architectural, structural, mechanical, and electrical— and compiled into the reports. Included in the reports are estimated time lines until large equipment (generally for HVAC) will need to be replaced.

In the “Envision” section, we start to imagine more of what could be. This section includes adjacency diagrams were we identify spaces or uses that need to be next to each other, preliminary test fit options where we explore how the adjacency diagrams would translate into a conceptual plan, take the 3D massing of the conceptual plans and overlay that over an existing 3D model that shows the approximate massing of existing structures and the surrounding topography, provide narratives for future building systems, and gather cost estimates.

This section is where the possible future project(s) start to unfold and become more real for the end users. From here we can start to identify a future path forward and key objectives, discussions, and decisions that should be completed before a full design and construction project is issued to the public.

Full Reports in Appendix

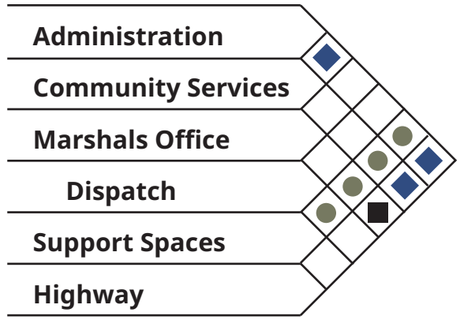
The Appendix includes the complete documentation of the facilities structures reports for architectural, structural, mechanical, and electrical engineering for all three buildings. These detailed reports include narrative and reference images.

Adjacency Matrix

One of the biggest issues facing the Town when it comes to their facilities is access. The Marshal Office, Administration, and Community Services spaces should both be accessible by the general public. This requirement is most easily met by having facilities for these functional groups along Highway 210, with the Marshals having the most pressing need to ensure fast response times.

All functional groups require use of support spaces to some degree.

The graphics shown on this page help to illustrate the needs of these functional groups into a required, should have, and desired range, which helps to inform the following space plans.



Key

Required ■

Should Have ◆

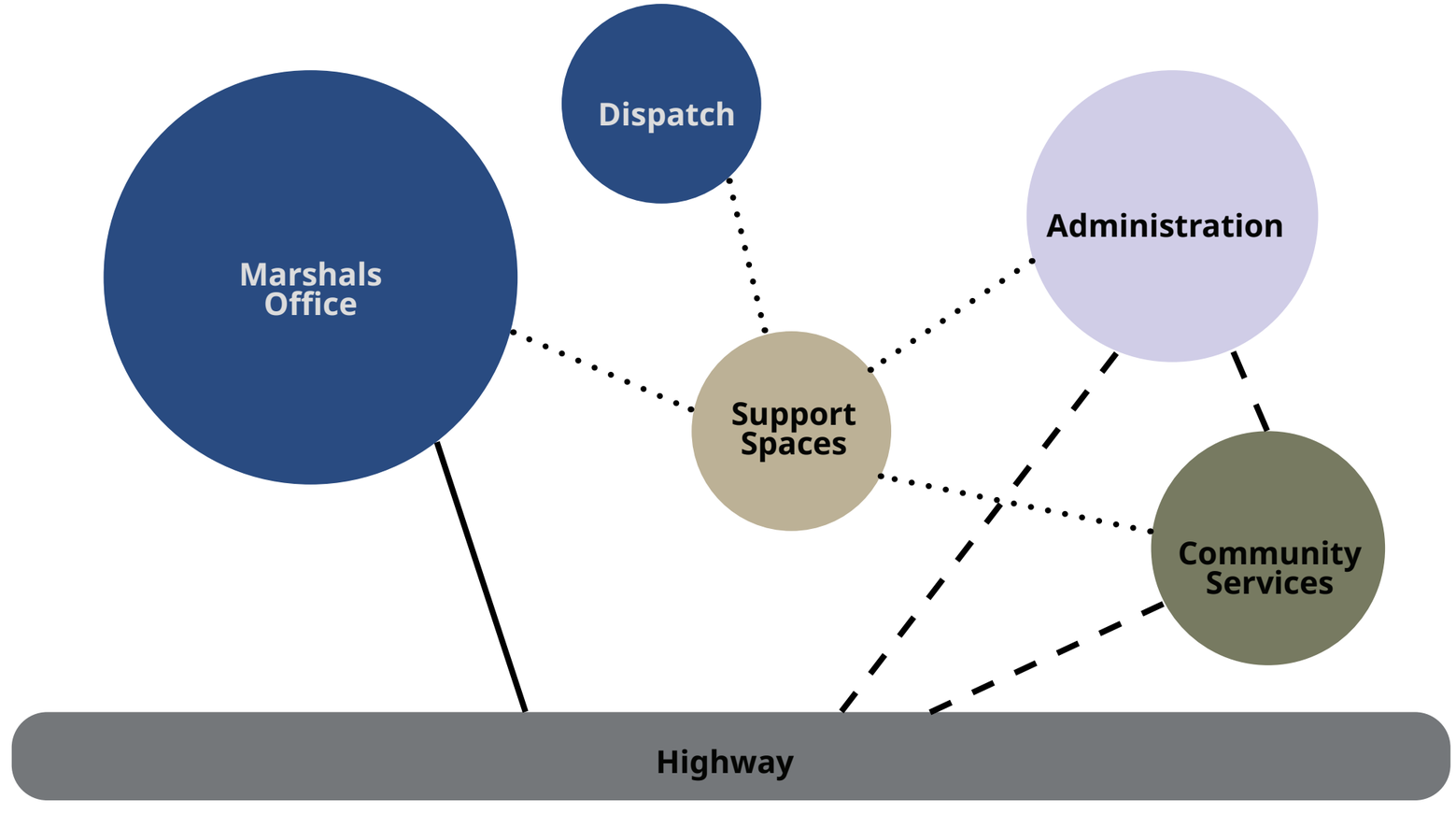
Desired ●

Key

Required ——

Should Have – – –

Desired • • • • • • • •



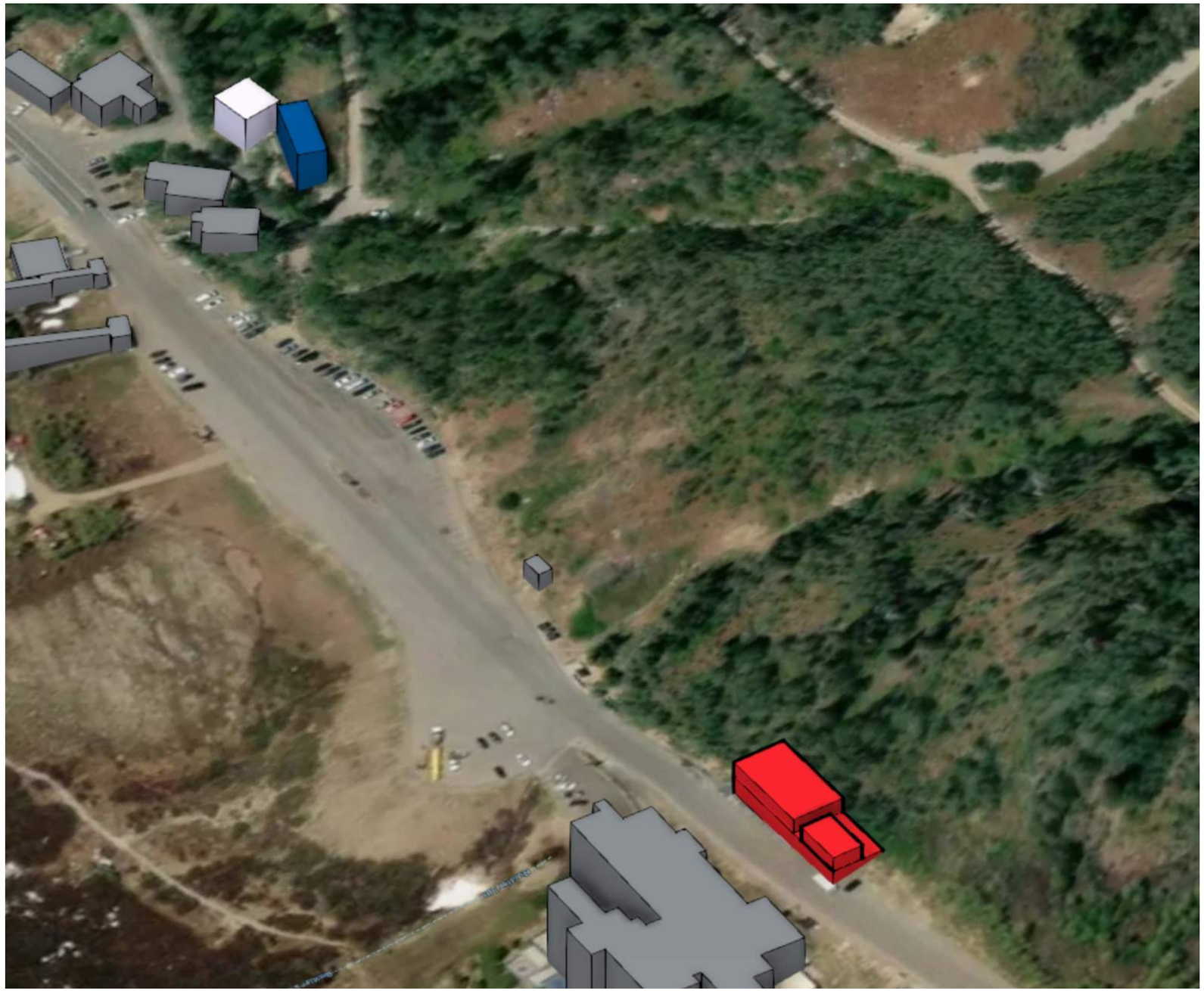
Test Fit #1 - v1.0

Overview

Test Fit #1 revolves around the Town Office building largely remaining as it is with administrative staff remaining. 3rd Party Tenant space on level 1 could be repurposed in the future, allowing for some additional uses, such as storage, to occur. This would allow for very minimal upgrades to the Town Office building. It is still recommended in this test fit that work be undertaken to make the facility more accessible to the public (see full facility condition assessment in the Appendix).

Alta Central would be abandoned by the Alta Marshals Office. It's future is up for the Town to decide as it could serve another purpose, but is too costly to maintain as a essential services building.

The cost of repairs for the Community Center are also substantial. Because of this and it's location along Highway 210, it is recommended that the building be demolished and a new joint community center and Marshals Office be built in its place.



Town Office Building

Alta Central

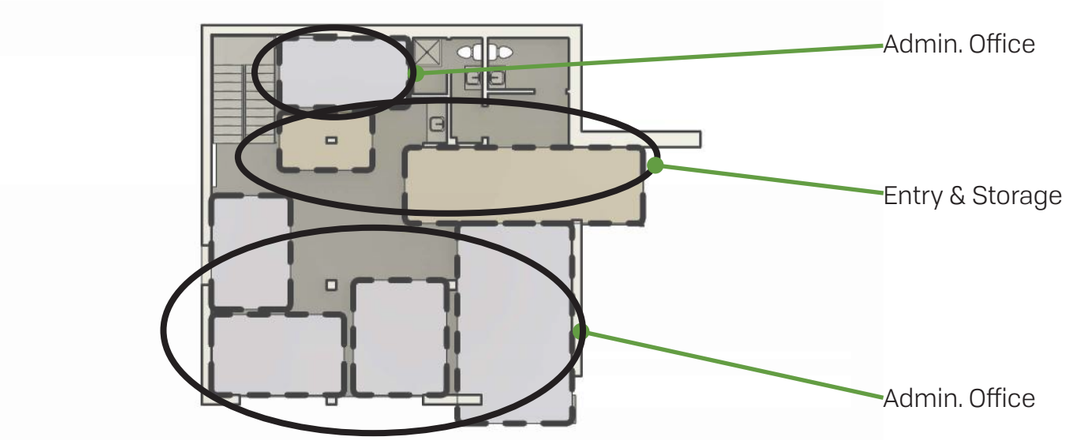
New Construction

Existing Building (Not in Scope)

Test Fit #1 - v1.0

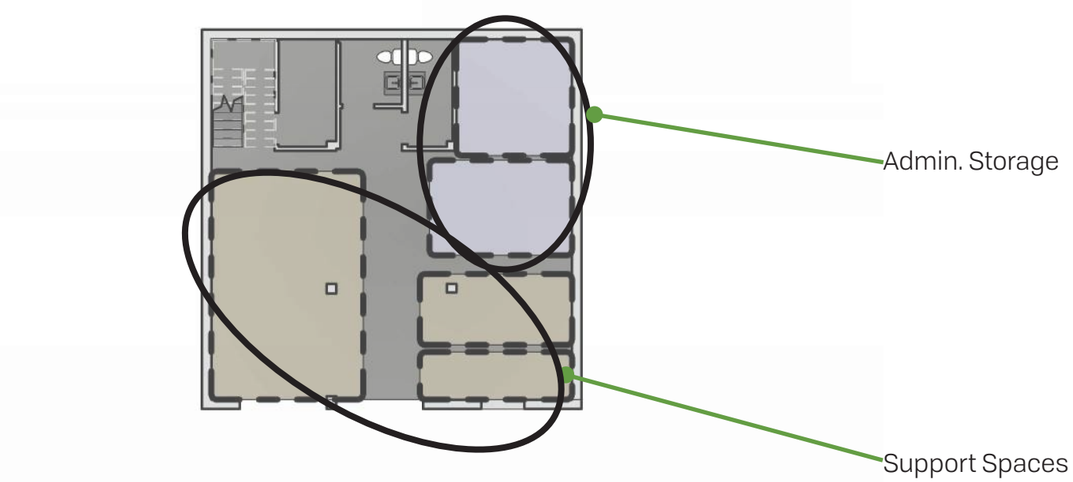
Town Office Building

- Administration
- Support Spaces
- Standard security requirements
  i.e. door hardware
- Additional security requirements
  i.e. camera, badge reader acccess



TEST FIT #1 - LEVEL 2 TOWN OFFICE BLDG

SCALE: 1/16" = 1'-0"



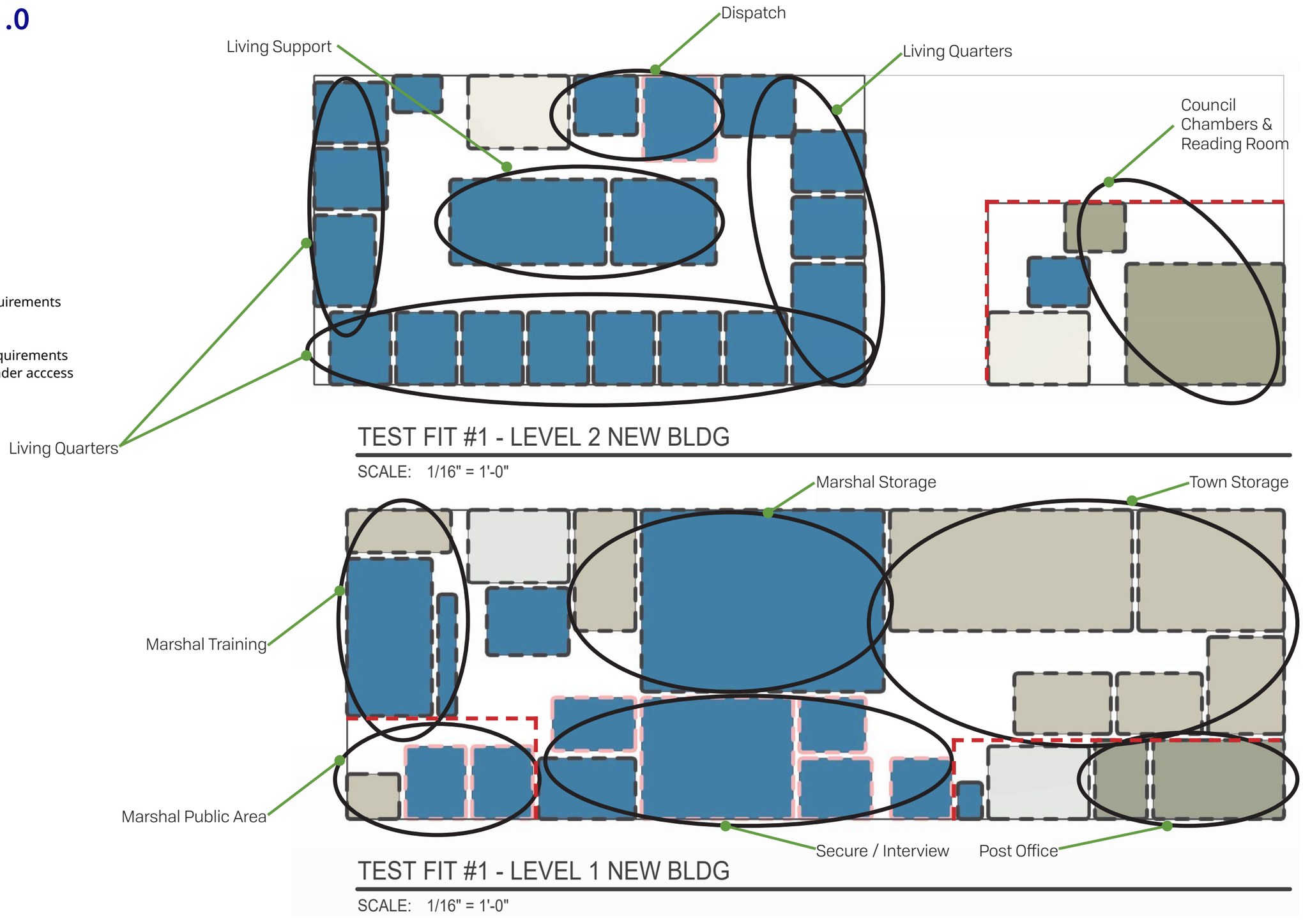
TEST FIT #1 - LEVEL 1 TOWN OFFICE BLDG

SCALE: 1/16" = 1'-0"

Test Fit #1 - v1.0

New Building

- Marshals Office
- Community Servies
- Support Spaces
- Circulation
- Security Line
- Standard security requirements i.e. door hardware
- Additional security requirements i.e. camera, badge reader acccess



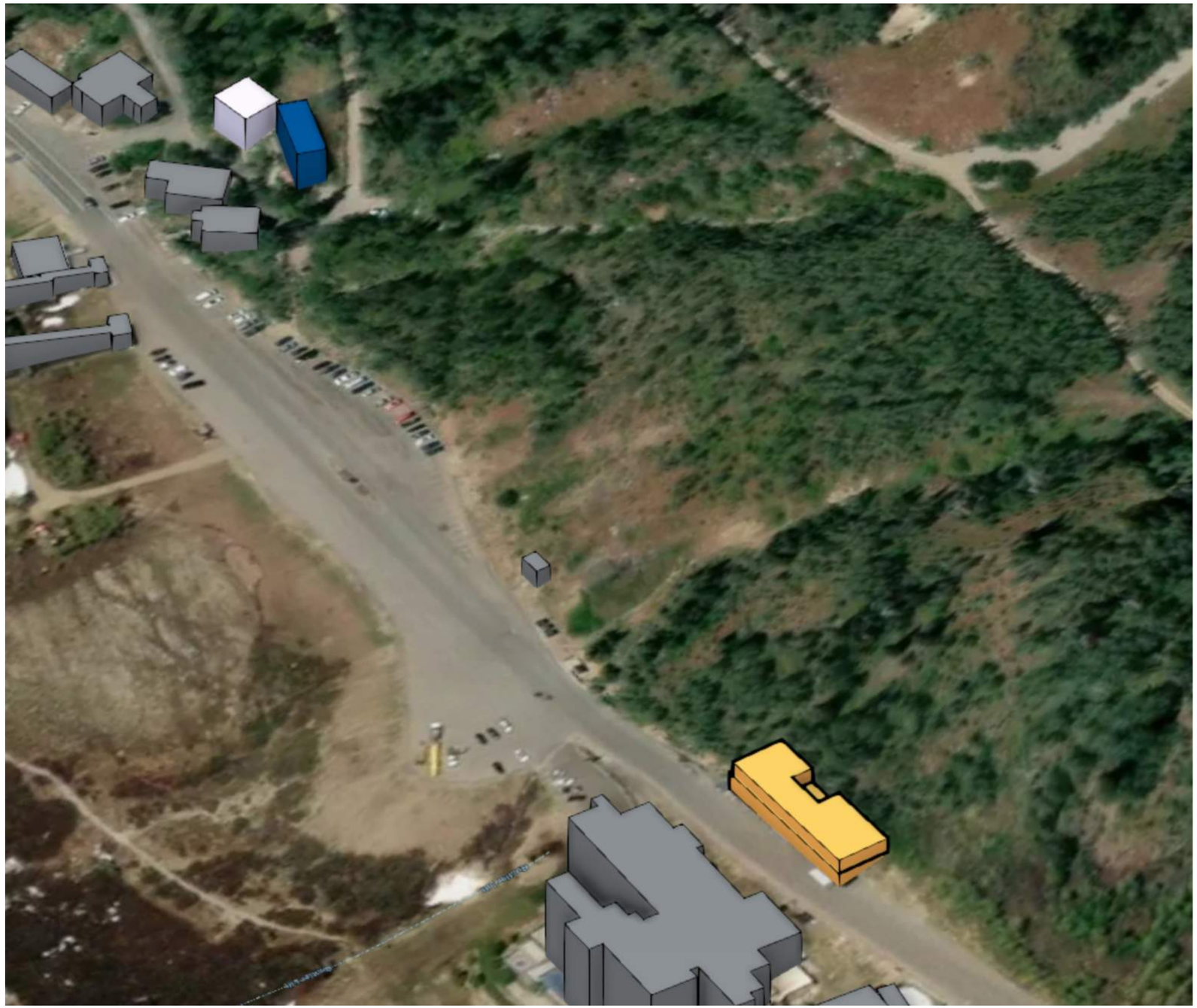
Test Fit #2 - v1.0

Overview

Test fit #2 differs from #1 in that the Town Office building is converted to the dispatch center for Alta. This would include remodeling both levels to add in the living quarters for the dispatchers, a dispatch room, an office, and living spaces.

Alta Central would be handled in an identical fashion to test fit #1 by being abandoned, with its future to be determined by the Town as it is cost prohibitive to continue to function as an essential services building.

Again, the Community Center is recommended to be demolished. In this test fit, the new facility would house the existing community center spaces, but include the town office functions, and the non-dispatch spaces of the Marshals Office. This creates a “one-stop shop” for citizens as they can find all of the public facing functions of the Town under one roof.



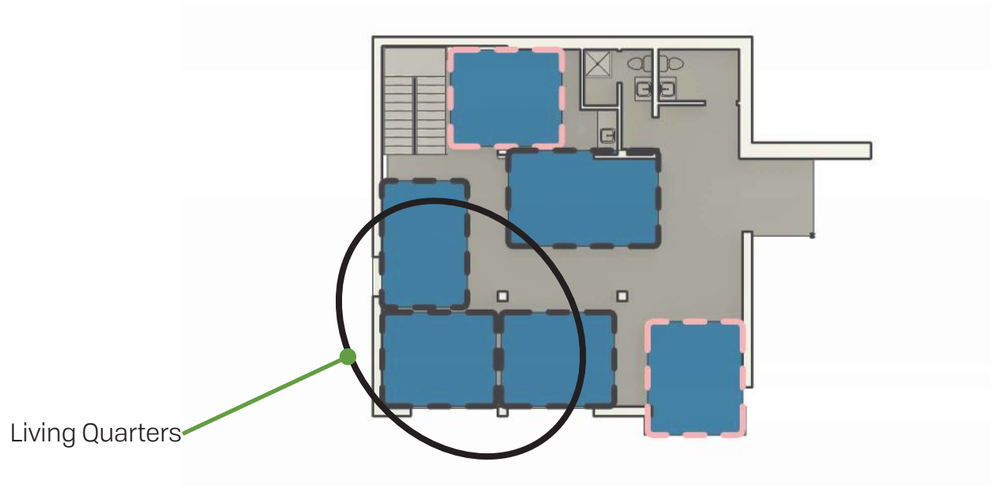
Test Fit #2 - v1.0

Town Office Building

Marshals Office

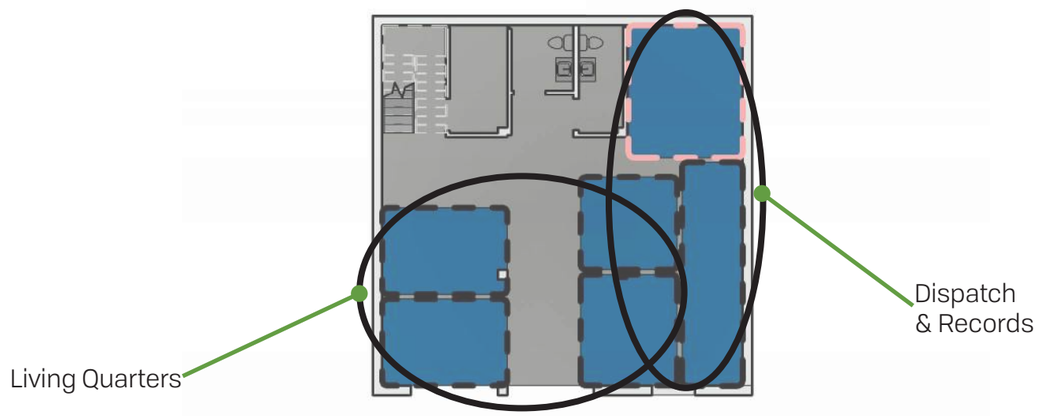
Standard security requirements
i.e. door hardware

Additional security requirements
i.e. camera, badge reader acccess



TEST FIT #2 - LEVEL 2 TOWN OFFICE BLDG

SCALE: 1/16" = 1'-0"



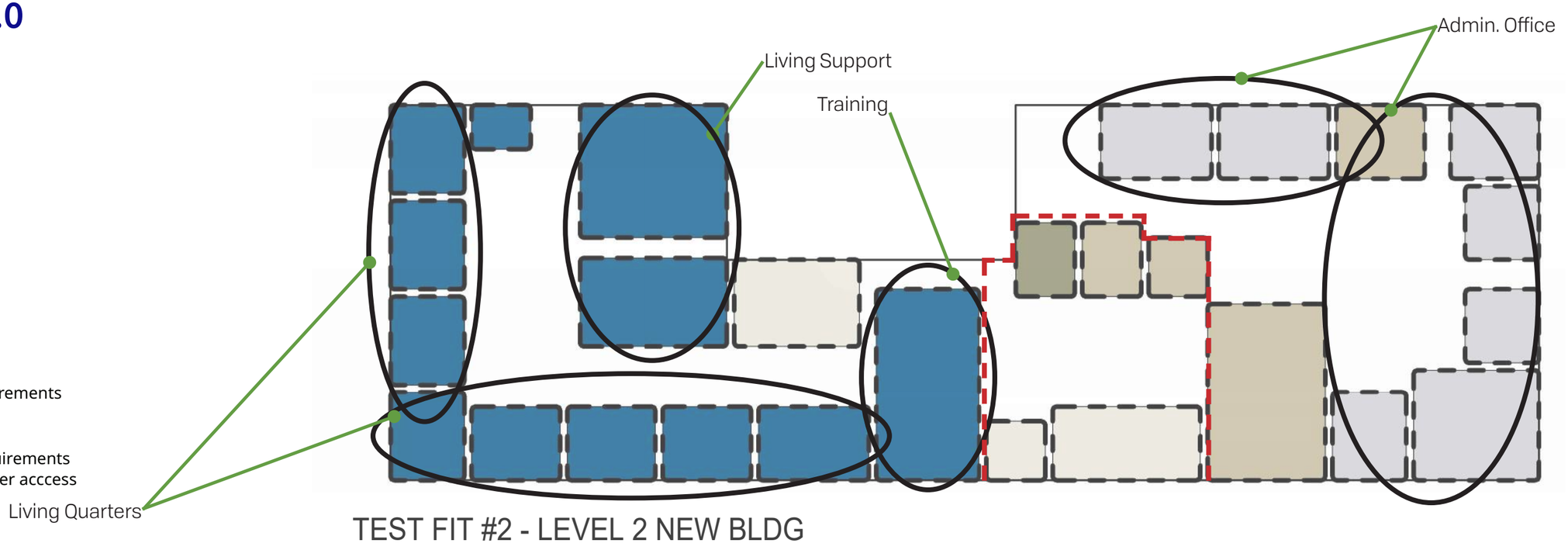
TEST FIT #2 - LEVEL 1 TOWN OFFICE BLDG

SCALE: 1/16" = 1'-0"

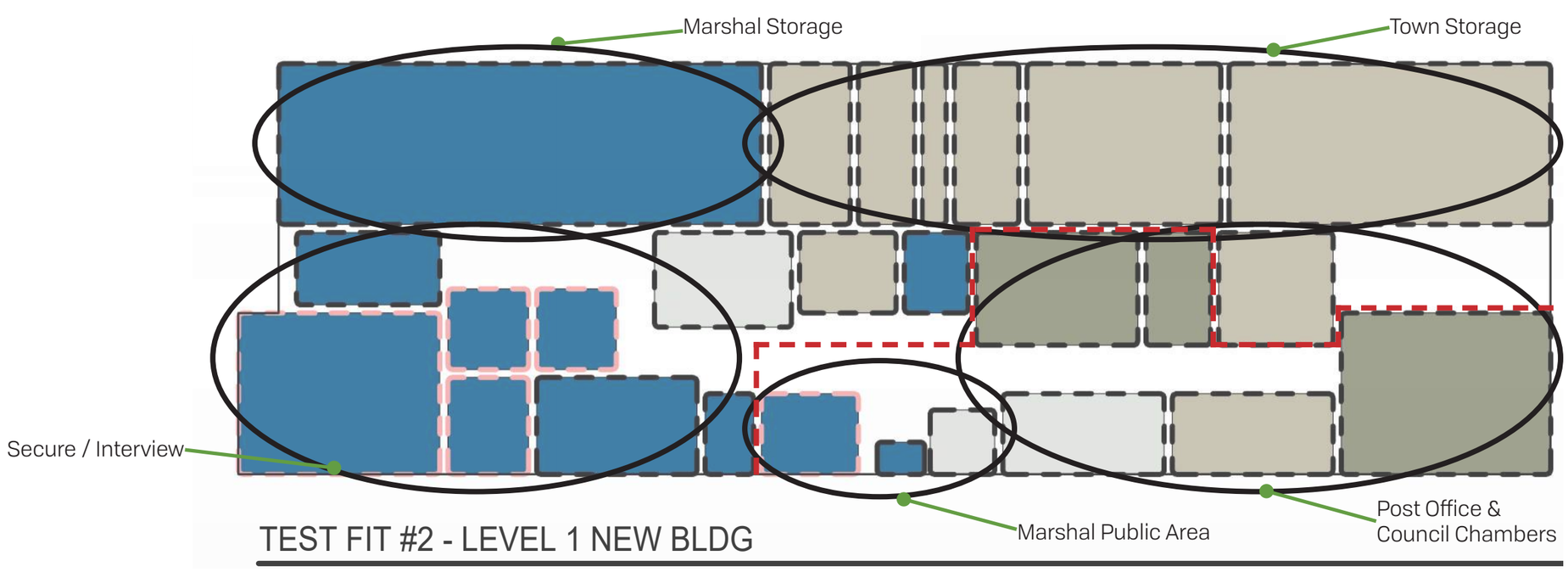
Test Fit #2 - v1.0

New Building

- Administration
- Marshals Office
- Community Servies
- Support Spaces
- Circulation
- Security Line
- Standard security requirements i.e. door hardware
- Additional security requirements i.e. camera, badge reader acccess



TEST FIT #2 - LEVEL 2 NEW BLDG



TEST FIT #2 - LEVEL 1 NEW BLDG

Test Fit Comparison

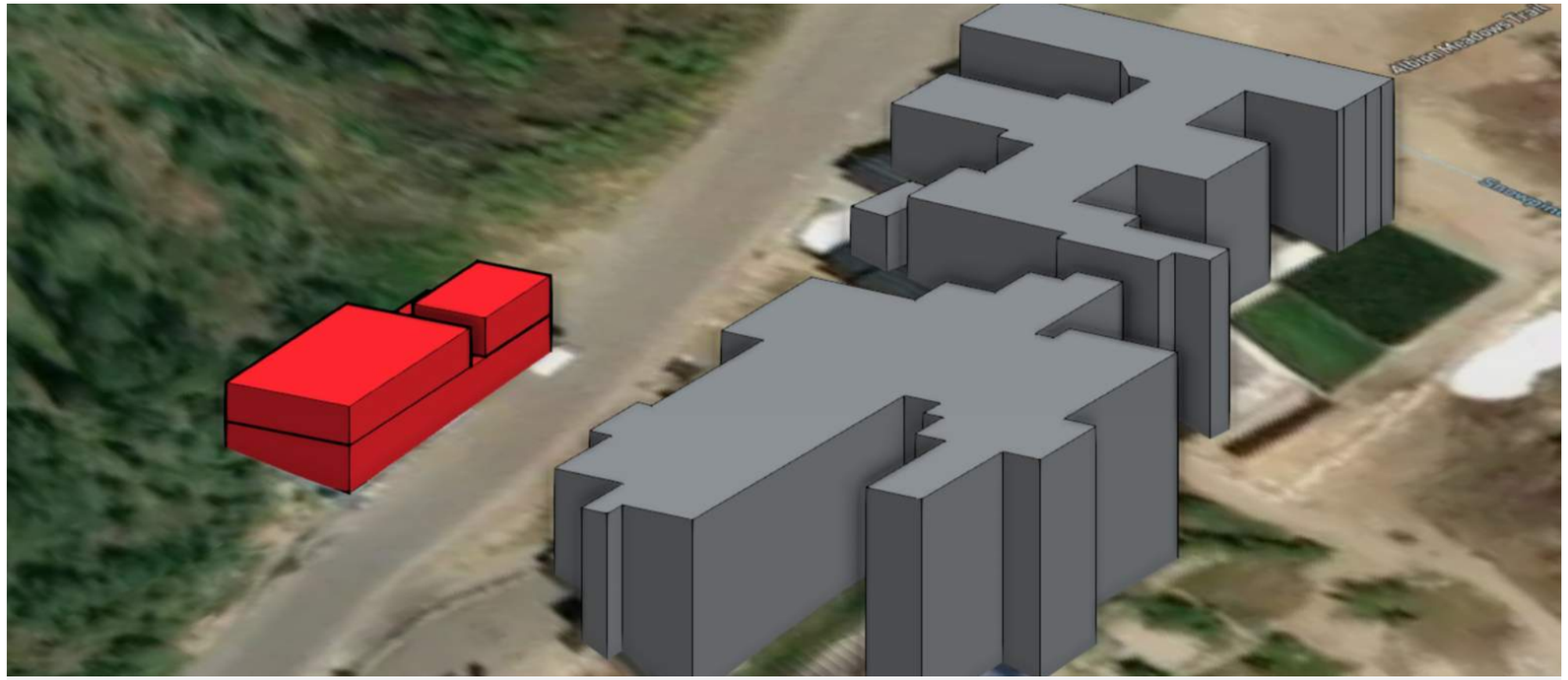
Test Fit #1

Security considerations to separate public vs private functions of the Marshals office, as well as secure vs non-secure.

Minor renovations to the Town Office building as 3rd Party Tenant space is taken back over by the Town at a future date, in addition to accessibility updates.

All storage areas for the Town are under one roof.

Total New Square Footage:	13,983
Renovated Square Footage:	228
Total Square Footage Disturbed:	14,211



Test Fit #2

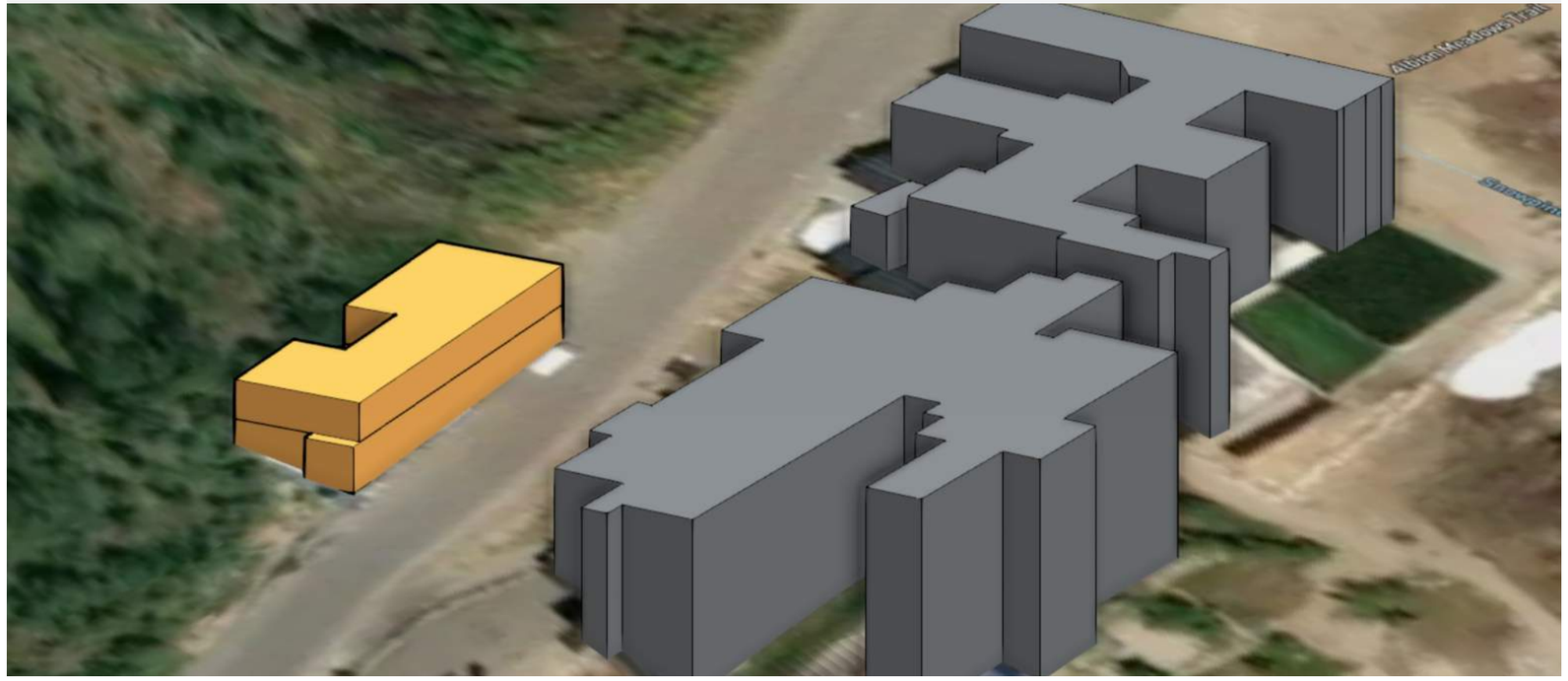
Security considerations to separate public vs private functions of the Marshals office, as well as secure vs non-secure.

Major renovations to the Town Office building compared to test fit #1.

All storage areas for the Town are under one roof.

Public facing town functions, including administrative office, marshal public facing tasks, post office, reading room, and council chambers, are in one central lcoation.

Total New Square Footage:	15,289
Renovated Square Footage:	2,367
Total Square Footage Disturbed:	17,656



Schematic Structural Design Narrative

CALDER RICHARDS
CONSULTING ENGINEERS

Town of Alta
New Marshal's Office & Community Center Building
Schematic Structural Design Narrative

Project Description

The project involves construction of a new building containing the Marshall's Office, Law Enforcement Living Quarters, and Community Center. The building will be regarded as an emergency response facility since Marshall's dispatch call center will be included as part of the building.

This narrative describes the structural design criteria for the area as well as the anticipated structural gravity and lateral system for the building.

Structural Design Criteria

Governing Code: 2024 International Building Code
ASCE 7-22

Risk Category: IV – Essential Facility

Dead Loads:
Dead loads for the floors and roof will be the self-weight of the structural elements as well as permanently attached items including mechanical, plumbing, and electrical equipment.

Floors Live Loads:
Lobbies, Corridors, Exit Ways, Stairs: 100 psf
Assembly Areas: 100 psf
Living Quarters: 40 psf
Offices: 50 psf

Ground Snow Load: Approx. 375 psf - ASD level, based on site elevation 8,700 feet, risk category IV.

Wind:
Basic Wind Speed: 113 mph – LRFD level, risk category IV.
Exposure: C

Seismic:
S_s = 0.82 S_1 = 0.27
S_{DS} = 0.69 S_{D1} = 0.46
Site Class = D (assumed)
Response Modification Coefficient R = 5 (special reinforced concrete walls)

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Schematic Structural Design Narrative

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Structural System

Due to the heavy snow loading in the area, the potential for exposure to avalanche, and the need for an emergency response facility, the proposed structural system will need to be robust.

The roof system will be steel framed or cast in place concrete slab, or a composite system of steel and concrete. The floor system will be of the same materials used for the roof but will be less robust because of the lighter loading. Spacing of interior columns supporting floor and roof will be determined based on planning of the spaces with efforts made to create an economical structural layout.

The anticipated structural exterior wall system will be poured in place, reinforced concrete to support possible hillside soil retention and impact snow flow loading associated with a potential avalanche event, if the building is placed near an avalanche path. These walls will also support earthquake and wind loading for the building.

Soils conditions in the area are typically considered firm soils or fractured bedrock without the potential for liquefaction. For this reason, it is anticipated that the foundation system will be a conventional spread foundation system bearing on undisturbed natural soils or fractured bedrock. Soil nailing into the hillside may be investigated to eliminate or reduce soil loading against the building structure if the building is cut deep into the hillside creating a tall soil retention condition.

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MECHANICAL & PLUMBING NARRATIVE

Project: Town of Alta FMP
April 2025
Principal Engineer: Vinnie Figlioli, PE

1. CODES AND STANDARDS

Codes and Standards which are directly applicable to design of the mechanical and plumbing systems are listed below:

- ADA, Americans with Disabilities Act
- ASHRAE: Standard 15: Safety Code for Mechanical Refrigeration
- ASHRAE: Standard 55: Thermal Environmental Conditions for Human Occupancy
- ASHRAE: Standard 62: Ventilation for Acceptable Indoor Air Quality
- ASHRAE: Standard 90.1: Energy Standard for Buildings Except Low-Rise Residential Buildings.
- IECC, International Energy Conservation Code
- IMC, International Mechanical Code
- IPC, International Plumbing Code
- IFGC, International Fuel Gas Code
- IBC, International Building Code
- NFPA 13, National Fire Protection Association Standard for the Installation of Sprinkler Systems
- Utah State Fire Marshal Laws, Rules and Regulations

Temperature

Outdoor design conditions:
(ASHRAE Fundamentals, Alta (Heber Valley), UT)
Winter -6.0° F (99.6%)
Summer 93.3 DB/ 58.5 MCWB °F (0.4%)

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2. Mechanical

This narrative outlines the proposed Heating, Ventilation, and Air Conditioning (HVAC) system for the new Alta Marshals office with a focus on providing reliable and efficient climate control for both the standard police department functions and a large community space. The design prioritizes occupant comfort, indoor air quality, energy efficiency, and ease of maintenance. The system will utilize packaged rooftop units (RTUs) with advanced controls to meet the diverse needs of the facility.

Proposed HVAC System

The proposed HVAC system will consist of the following:

1. **Rooftop Units (RTUs):** Multiple, high-efficiency packaged RTUs will be installed on the building's roof. The specific number and capacity of the RTUs will be determined based on detailed load calculations, considering the unique requirements of each zone within the police department.
   a. Each RTU will be sized to handle specific zones:
      i. RTU-1: Administrative Offices
      ii. RTU-2: Detention Area
      iii. RTU-3: Community Space
      iv. RTU-4: Dispatch and Emergency Operations Center
   b. RTUs will have the following features:
      i. High-efficiency compressors (e.g., scroll compressors)
      ii. Economizers to utilize outdoor air for cooling when conditions are favorable, reducing mechanical cooling loads.
      iii. Multi-stage heating to match heating output to demand. This could be gas heating or electric heat.
      iv. Advanced filtration (MERV-13 filters) to enhance indoor air quality.
      v. Direct Digital Controls (DDC) for increased temperature control.

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Mechanical & Plumbing Narrative

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2. **Ductwork:** Ductwork will all be of galvanized metal and will follow SMACNA standards. Both supply and return will be fully ducted. All concealed ductwork will be insulated to minimize energy losses. Any exposed ducting within the building will be sealed from the inside allowing for a better look of the final product.

3. **Air Distribution:** Diffusers and registers will be provided to ensure proper air distribution and occupant comfort.

4. **Community Space Considerations:** The community space, being a large, multi-purpose area, will have specific HVAC requirements:

    a. **Zoning:** The community space will be served by at least one dedicated RTU (RTU-3) and may be further zoned to allow for independent temperature control in different areas or during different events.

    b. **Ventilation:** CO2 sensors will be implemented to ensure adequate fresh air supply, especially during periods of high occupancy. This will likely include a demand-controlled ventilation (DCV) strategy. If it is determined that the RTUs cannot provide the needed fresh air supply then a dedicated outside air unit will need to be incorporated.

    c. **Sound Levels:** RTU and ductwork design will consider sound attenuation to minimize noise levels in the community space, ensuring a comfortable environment for meetings and events.

5. **Controls**
    a. The HVAC system will be managed by a Direct Digital Control (DDC) system. The DDC system will provide the following:

    b. Open protocol type system. Not proprietary controls allowed.

    c. Precise temperature control in all zones.

    d. Scheduling of equipment operation to match occupancy patterns.

    e. Monitoring of system performance, including energy consumption and equipment status.

    f. Fault detection and alarm notification for prompt maintenance.

    g. Remote access for monitoring and control.

Mechanical & Plumbing Narrative

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    h. Demand-controlled ventilation (DCV) in the community space, adjusting ventilation rates based on CO2 levels.

    i. Integration with occupancy sensors, particularly in the community space, to optimize HVAC operation based on actual occupancy.

6. **Exhaust System**
    a. All bathrooms will have quiet ceiling mounted exhaust fans with ducting exiting the roof or side of the building.

3. Plumbing

1. **Piping:** The domestic water piping will be either copper or type A pex. All waste and vent piping will be cast iron or PVC type piping.

2. **Water Heating:** The domestic hot water system will be one of the following options:

    a. **Natural Gas or Electric Tank Type**

    b. **Natural Gas or Electric Tankless**

3. **Recirculating Pump**: A recirculating pump ensures minimal wait time for hot water at fixtures.

4. **Plumbing Fixtures**: Fixtures will be med grade and should allow for low flow water saving features.

4. Fire Protection

1. Fire protection will be a deferred submittal and only a performance specification will be provided.
2. Wet Pipe System with riser, alarm, panel, piping and heads.
3. Thin wall piping is not acceptable
4. All heads shall be concealed type within ceiling areas
5. Exposed heads shall have protective wire guards.

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Electrical Narrative

Town of Alta – New Construction
Electrical Systems

May 8, 2025

CODES AND STANDARDS

Codes, Standards, and Guidelines, which are applicable to the design of the electrical systems, are listed below. Comply with each of the latest adopted publications:

International Building Code (IBC)
International Fire Code (IBC)
NFPA, National Fire Protection Association (applicable sections including but not limited to):
- NFPA 70, National Electrical Code
- NFPA 72, National Fire Code
- NFPA 101, Life Safety Code

Underwriters Laboratories (UL)
International Energy Conservation Code (IECC)
Institute of Electrical and Electronic Engineers (IEEE)
Illuminating Engineering Society of North America (IESNA) Handbook
Electronics Industrial Association / Telecommunications Industry Association 568/569 (EIA/TIA)
ADA Accessibility Guidelines
Utah OSHA Regulations
Ogden City Codes and Ordinances
Laws, Rules, and Regulations of the Utah State Fire Marshal
Electronics Industrial Association / Telecommunications Industry Association 568/569 - EIA/TIA
ANSI/TIA/EIA 606-A – Administration Standards for Telecommunications Infrastructures.
ANSI/TIA/EIA Joint Standard – 607-A – Commercial Building Grounding and Bonding requirements for Telecommunications.
Building Industry consulting services International (BICSI) Distribution Methods Manual (TDMM).
Building Industry consulting services International (BICSI) Customer Owned Outside Design Manual.
National Electrical Manufacturers Association (NEMA).
Underwriters Laboratories (UL) Cable Certification and Follow-up Program
American Society for Testing Materials (ASTM)
American National Standards Institute (ANSI)
Utah State Fire Marshal Laws, Rules and Regulations
Utah State Uniform Construction Code
Utah State Labor and Industry Code
Utah State Department of Environmental Quality

ELECTRICAL SERVICE AND DISTRIBUTION

Power to the new facility shall be provided by Rocky Mountain Power (RMP). A new 4” underground conduit shall be installed from the nearby existing medium voltage equipment or overhead pole to the new pad or pad-vault.

A new medium voltage pad mount, oil filled transformer (12470:208/120V) shall be provided by RMP.

The new electrical service entrance for the building will consist of a pad-mounted CT, meter, and a main service disconnect section (MSD). The CT, meter, and ‘MSD’ will be located outside the building. The preliminary estimated electrical service size is between 600A and 800A, 208/120V, 3-phase, 4-wire.

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Electrical Narrative

The main service disconnect will feed a 208/120V main distribution panel (MDP) in an electrical or mechanical room inside the building. MDP circuit breakers shall supply feeders to branch circuit panelboards, larger mechanical loads, etc.

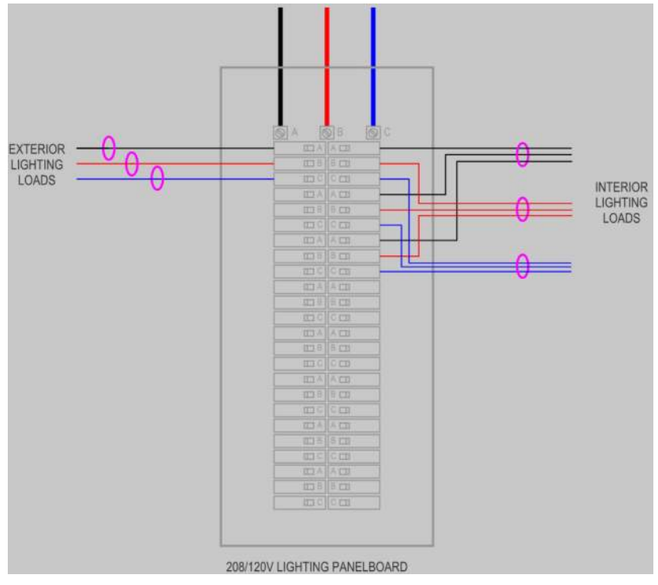
The branch circuit panelboards will be strategically located throughout the building as required to minimize the voltage drop. The maximum allowable voltage drop from the service equipment to all panelboards shall be 2%. When calculating voltage drop, the load shall be assumed to be 80% of the ampacity of the branch circuit. All panelboards have 25% excess capacity for future growth and flexibility. Panelboards shall be provided with door-in-door construction. Panelboards with isolated ground shall be provided for sensitive loads (telecom rooms and audio/visual equipment).

MDP and all panelboards shall have aluminum bussing.

Feeder conductors shall be aluminum where 100A or greater and copper where less than 100A. Aluminum conductors shall be Alcan Stabiloy or equivalent. Mechanical-type lugs are acceptable for both aluminum and copper conductors. All grounding electrode conductors and equipment grounding conductors shall be copper only.

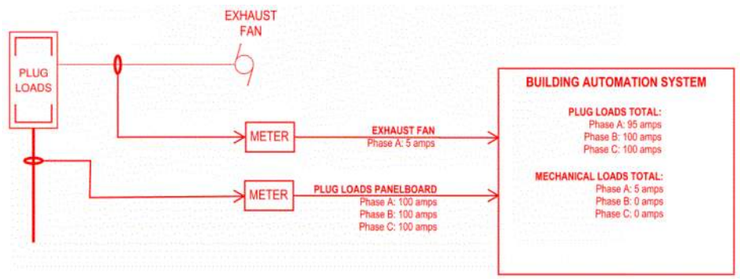
As required by IECC 2024, section C405.13 Energy Monitoring, for buildings over 10,000 sf, meters shall be provided to collect energy use of the following load categories: HVAC loads, interior lighting, exterior lighting, plug loads, process loads, building operations and other miscellaneous loads, and electric hot water heating loads. To comply with this requirement, the electrical distribution shall be designed as follows:

- Interior and exterior lighting loads shall be fed from the same panelboards. Since these loads are required to be separately metered per IECC 2024, the metered loads will then be separated using current transformers that meter individual or grouped circuits, as shown in the sketch below.



Electrical Narrative

- Plug loads shall be fed from dedicated panelboards via step-down transformers. Plug loads shall include general purpose outlets, workstations, appliances, audio/visual equipment, outlets for telecom equipment, electric water coolers, restroom equipment such as hand dryers, paper towel dispensers, and soap, security equipment, etc.
- HVAC system loads will be fed directly from the main distribution panel or dedicated HVAC panelboards. Where feasible, small mechanical loads located further from the HVAC panelboards will be fed from the nearest plug load panelboards and separated via metering management software or BAS as shown in the sketch below.



- Building operations and other miscellaneous loads shall be fed either from dedicated panelboards or, where feasible, from the nearest plug load panelboards and separated via metering management software or BAS.
- Electric hot water heating loads shall be fed from the nearest HVAC or plug load panelboards and separated via metering management software or BAS.

EMERGENCY AND STANDBY DISTRIBUTION

A 208/120V emergency/standby diesel engine generator shall be provided and located outside the building in the utility yard. If a 25 ft clearance between the generator and the utility transformer cannot be provided, a blast wall shall be constructed between the two.

The estimated generator size to back up the entire building is 250kW/312kVA. The generator will be specified with a weather-protective, level 2, sound attenuated enclosure, a 48-hour sub-base fuel tank, with remote monitoring through the BAS system.

There will be two automatic transfer switches, one for life safety power (egress lighting) and one for the other building loads (standby loads). The life safety portion of the emergency distribution will be required to be run through a Quick Connect Distribution Panel so that the engine generator power can be backed up during engine maintenance/replacement. Dedicated, bypass, open transition, automatic transfer switches shall be provided for emergency and standby branches.

BRANCH CIRCUITS AND OUTLETS

Branch circuits shall be loaded to no more than 80% of what is allowed by NFPA 70. Where outlets are intended for a specific equipment or appliance, the load of the outlet shall be based on the equipment nameplate. Otherwise, allow no more than six convenience outlets per circuit for general-purpose use. Each branch circuit homerun shall have no more than 3 circuits per raceway. All branch circuits shall be provided with dedicated neutrals.

Electrical Narrative

Conductors for branch circuits shall be sized to prevent voltage drop exceeding 3% at the farthest load. The total voltage drop on both feeders and branch circuits shall not exceed 5%. When calculating the voltage drop, the load shall be assumed to be 80% of the ampacity of the branch circuit.

Branch circuit conductor shall be copper installed in conduit, ¾" minimum. Type MC Cable shall be allowed for connection of wiring devices, light fixtures, and equipment at load end and in dry and concealed locations only. All homeruns shall be Type THHN/THWN-2, single conductors in raceway.

Receptacles shall utilize standard NEMA configurations, and the minimum rating shall be 20 amps.

Outlets for equipment such as electric water coolers, all outlets within 6 feet of sinks, and in other areas defined by code shall be GCFI-protected. GFCI breakers in lighting and appliance panelboards or blank-face GFCI receptacles will be utilized in lieu of GFCI receptacles where they are not readily accessible. Each outlet location shall be coordinated with the design team and end-user .

RACEWAYS

All raceways should be a minimum of 3/4" except communications and security systems raceways shall be 1" minimum. All site branch circuit raceway shall be 1" minimum.

Raceways and boxes shall be provided for telecommunication cabling as well as for all electronic safety and security systems (fire alarm, access control, and video surveillance cameras). A 200lb. nylon pull string shall be provided in all empty conduits.

Rigid metal conduit or intermediate metal conduit shall be used in areas where conduit is subject to damage or moisture. Schedule 40 PVC conduit shall be used in location below grade or under slabs on grade. All below grade or under slab elbows shall be rigid galvanized conduits.

GROUNDING

A main Intersystem Bonding Termination (IBT) ground bus shall be provided next to 'MDP' and shall be bonded to all grounding electrodes.

As a minimum, the grounding electrodes shall consist of building steel, building cold water pipe, a concrete-encased electrode, and a minimum of two ground rods located outside the building. A copper grounding electrode conductor sized per the NEC shall be extended from the IBT to the TMGB in the main telecom room and to the lightning protection system.

LIGHTNING PROTECTION

A lightning protection system is typically provided for buildings of this kind. Although the code does not require an LPS, the design team shall perform a lightning risk assessment to determine the need for such a system. The assessment shall be based on the average lightning flash density for the area, relative structure location, building dimensions and materials, building occupancy, and the value of the building content.

SURGE SUPPRESSION

Surge protective devices (SPD) shall be installed at the main service disconnect, switchboards, distribution panels, all panelboards supplied from step-down transformers, and in all emergency system panelboards. The SPD devices shall be sized for the level of exposure that is encountered.

SHORT CIRCUIT, SELECTIVE COORDINATION, AND ARC FLASH STUDIES

A fault current, selective coordination, and arc flash study will be required for the new electrical service. The available fault current shall be obtained from RMP. All equipment shall be rated adequately to

Electrical Narrative

withstand the current that may be available during any fault or overload condition. The selective coordination study shall extend to all distribution panels rated at 100A and above. Settings for all adjustable trip breakers as well as arc flash labels shall be provided to the Contractor prior to the electrical system startup.

LIGHTING

All lighting shall meet or exceed the current energy code for lighting power density, control requirements, and other requirements. All lighting shall utilize the most efficient fixtures available to meet the project requirement and budget. We propose that LED light fixtures shall be used exclusively throughout the building to meet the illumination requirements, to maintain high efficiency and require minimal maintenance. All fixtures shall have a minimum of 50,000-hour life at 90% lumen maintenance and be tested in accordance with IESNA LM79. Daylight harvesting with variable dimming shall be employed in spaces that receive natural daylight where practical and as may be required to meet the applicable energy code. The Kelvin temperature of LED's for interior fixtures shall be 4,000 degrees. LED shall also be employed for exterior site lighting fixtures. LED's for exterior fixtures shall be specified to have a Kelvin Temperature of 4,000 degrees.

Interior lighting shall utilize lighting fixtures that are highly efficient, high quality, and that meet the needs of each type of space within the building. Light fixtures selected should complement the architecture of the space.

The exterior lighting fixtures should be selected to harmonize with the architectural style of the building. In general, all outdoor lighting shall have low BUG ratings as defined by the IESNA. Wall mounted decorative fixtures may be used to draw attention to main entry or circulation areas. All fixtures shall be LED and have a minimum of 50,000-hour life at 90% lumen maintenance and be tested in accordance with IES LM79. All exterior light fixtures should be robust and suitable for the harsh exterior environment.

Lighting levels shall be in accordance with the Recommended Illuminance Categories and Illuminance Values for Lighting Design, IES Lighting Handbook.

Emergency lighting shall be provided on all paths of egress. Illuminated exit signs shall be provided in locations as required by the NFPA Life Safety Code, IBC, and local codes. The exit signs shall be cast aluminum LED type and shall be on dedicated branch circuiting from the emergency power branch.

The lighting controls shall comply with the latest energy code requirements. Occupancy and vacancy sensors shall be utilized in spaces such as offices, corridors, training room, restrooms, etc. Exterior lighting shall be controlled by a programmable lighting relay control system with the capability of timed control, Manual switches shall be provided to allow for on/off override to suit the specific needs of the building occupants.

FIRE ALARM SYSTEM

The fire alarm system shall be designed to comply with the requirements of the IBC, IFC, NFPA, and local codes. An intelligent addressable system shall be provided.

Initiation Devices: Monitor modules shall be provided for monitoring flow, tamper switches, and the fire protection system in the kitchen. Duct smoke detectors and fan shutdown shall be provided where required by NFPA and the IMC, including detection of smoke at all return air shafts servicing multiple floors. Smoke detectors shall be provided in elevator lobbies, above fire alarm and NAC panels, and in elevator machine room and elevator shaft. Heat detectors shall be provided in elevator machine rooms and elevator shafts and mechanical rooms. Pull stations shall be provided in fire riser room, electrical rooms, and manufacturing areas. Initiating circuits shall be Class A, Style D.

Notification Devices: Strobes shall be visible from all locations except private offices. It is proposed that horns be located in ceilings where allowable. Horn installation shall comply with NFPA including for higher ambient noise requirements. A weatherproof horn strobe shall be installed exterior to the fire riser room

Electrical Narrative

for FDC. Control modules shall be provided for the control of fire smoke dampers. Indicating circuits shall be Class A, Style Z.

The fire alarm wiring shall be installed in a Class A loop configuration in metal conduit, minimum size of 3/4". Generally, minimum wire size shall be 16-gauge for audible alarm circuits, and 18-gauge for signal initiation circuits. Strobes shall be wired separately from audible devices.

TELECOMMUNICATION SYSTEM

Basket-type cable tray or j-hooks shall be provided in common areas with an accessible ceiling. It is anticipated that an 12" wide by 4" deep tray should be sufficient. The tray should be trapeze-hung and seismically braced. Mechanical fire stop systems shall be utilized where the cable tray passes through fire-rated partitions to allow for moves, additions, and changes in a flexible and easy manner.

Each telephone/data outlet shall utilize a 4" square by 2-1/8" deep junction box with a single-gang plaster–ring. One 1" conduit with nylon pull rope shall be run from each junction box to the accessible ceiling space, and a protective bushing should be provided at the end of the conduit. J-hooks shall be utilized to route cables between stub-ups and the cable tray. Wall Sleeves shall be provided for routing cables through the wall that extend above ceilings.

The structured cabling system shall be designed to support high-speed voice/data/video and future high bandwidth applications. The system should be a Category 6A solution. Each telephone/data outlet shall have Category 6A RJ-45 4-pair ports (number of ports as determined by the Owner) with dedicated horizontal Category 6A cable ran from the communication room to each port.

SECURITY SYSTEMS

Access Control: If required, the access control system shall consist of proximity card readers, electric strikes, and door position switches. The will control entry to perimeter entry/exit points and specific indoor areas as determined by the Owner. Card readers will be the proximity type.

Video Surveillance: If required, the video surveillance system shall include cameras, mounts, hardware, software, and a server. The camera location shall be determined by the Owner.

AUDIO/VIDEO SYSTEMS

AV systems shall be designed to conform with the latest Industry best practices and standards. Relevant Standards include:

- Building Industry Consulting Service International (BISCI):
  - Information Technology Systems Installation Methods Manual (ITSIMM) (7th Edition).
  - Telecommunications Distribution Methods Manual (TDMM) (14th Edition).
- Reference Standards:
  - American National Standards Institute/InfoComm International Association:
    - ANSI/INFOCOMM 2M:2010, 'Standard Guide for Audiovisual Systems Design and Coordination Processes'.
    - ANSI/INFOCOMM 3M:2011, 'Projected Image System Contrast Ration'.
    - ANSI/INFOCOMM 4:2012, 'Audiovisual Systems Energy Management'.
  - Telecommunications Industry Association:
    - TIA-568.1 'Commercial Building Telecommunications Infrastructure Standard' (Revision D, 2019)

Electrical Narrative

TIA-568.2, 'Balanced Twisted-Pair Telecommunications Cabling and Components Standards' (Revision D, 2018).

TIA-568.4 ‘Broadband Coaxial Cabling and Components Standard (Revision D, 2017)

Marshall Offices: AV systems will include satellite signal distribution, and conference room AV systems. The satellite signal distribution system will provide feeds from a roof mounted satellite dish (dish network or similar) to common areas, individual sleeping rooms quarters and conference room(s). This system may be shared with the town council chambers as needed. The conference room will include a simple video conference (VC) system capable of supporting both local presentations, and video conferencing. This includes a wall mounted display, and video conference bar with integrated microphone, camera, and speakers.

Town Council Chambers: The AV system will provide capability to present local content and remote content from remote participants. System will seamlessly integrate video conferencing to enable remote participants actively participate in council meetings, listening, and viewing the meetings, and where appropriate visually and audibly present. To support these functions, the system will include individual wired microphones for the council members, the council chair, and local presenters. Video inputs will be available to local presenters, meeting moderators, and council members. Video content will be shown on a large format video display. This may be either a high lumen projector and screen, or a large video monitor. The system will include the moderation capabilities. These capabilities will allow the meeting moderator, or manager to view video content prior to displaying it on the public monitors, mute and unmute local microphones, and remote participants. Additionally, the system will include a master mute button at the chairperson’s seat. When pressed, the system will mute all microphones except the chair. A PTZ camera will be included with presets to moderators to easily select which views are sent to far end video conference participants. The system should allow the ability to overflow audio to other large meeting rooms within the building in the case of a large meeting or event.

Digital Signage: If required by the Owner, a digital signage display will serve as an announcement board for upcoming meetings and events hosted in the facility.

Paging/Intercom/and Background Music systems are not anticipated for this facility.

SUSTAINABLE FEATURES

Photovoltaic System: The electrical service will be prepared for a future Photovoltaic system by providing a 200A breaker space in the main distribution panel.

Electric Vehicle Charging Stations: Level 2 Electric Vehicle Charging Stations (EVCS) will be provided at locations directed by the Owner.

Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……ALTA TOWN OFFICE BUILDING
LOCATION……ALTA, UTAH
ARCHITECT……FFKR
STAGE OF DESIGN……MASTERPLANNING

CSI #	DESCRIPTION		TEST FIT 1 NEW BUILDING	TEST FIT 1 REMODEL	TEST FIT 1 TOTAL	TEST FIT 2 NEW BUILDING	TEST FIT 2 REMODEL	TEST FIT 2 TOTAL
	BUILDING COST SUMMARY							
02	EXISTING CONDITIONS		$ 108,000	$ 6,684	$ 114,684	$ 108,000	$ 13,101	$ 121,101
03	CONCRETE		$ 2,009,356	$ 547	$ 2,009,903	$ 2,089,767	$ 5,681	$ 2,095,447
04	MASONRY		$ -	$ -	$ -	$ -	$ -	$ -
05	METALS		$ 1,163,827	$ -	$ 1,163,827	$ 1,254,751	$ -	$ 1,254,751
06	WOODS & PLASTICS		$ 106,550	$ 1,915	$ 108,466	$ 116,502	$ 19,883	$ 136,385
07	THERMAL & MOISTURE PROTECTION		$ 354,902	$ 862	$ 355,764	$ 350,268	$ 8,947	$ 359,215
08	DOORS & WINDOWS		$ 795,666	$ 4,487	$ 800,153	$ 837,674	$ 46,583	$ 884,256
09	FINISHES		$ 1,389,975	$ 21,693	$ 1,411,667	$ 1,501,585	$ 225,206	$ 1,726,791
10	SPECIALTIES		$ 50,339	$ 1,368	$ 51,707	$ 55,040	$ 14,202	$ 69,242
11	EQUIPMENT		$ -	$ -	$ -	$ -	$ -	$ -
12	FURNISHINGS		$ -	$ -	$ -	$ -	$ -	$ -
13	SPECIAL CONSTRUCTION		$ -	$ -	$ -	$ -	$ -	$ -
14	CONVEYING SYSTEMS		$ -	$ -	$ -	$ -	$ -	$ -
21	FIRE SUPPRESSION		$ 109,067	$ 2,189	$ 111,256	$ 119,254	$ 22,723	$ 141,977
22	PLUMBING		$ 151,016	$ 2,462	$ 153,479	$ 165,121	$ 25,564	$ 190,685
23	HVAC		$ 1,090,674	$ 21,341	$ 1,112,015	$ 1,192,542	$ 221,551	$ 1,414,093
26	ELECTRICAL		$ 774,404	$ 15,504	$ 789,908	$ 835,525	$ 122,736	$ 958,261
27	COMMUNICATION		$ 151,016	$ 4,925	$ 155,941	$ 165,121	$ 51,127	$ 216,248
28	ELECTRONIC SAFETY & SECURITY		$ 109,067	$ 2,736	$ 111,803	$ 119,254	$ 28,404	$ 147,658
31	EARTHWORK		$ 107,377	$ -	$ 107,377	$ 109,905	$ -	$ 109,905
32	EXTERIOR IMPROVEMENTS		$ 362,160	$ -	$ 362,160	$ 354,390	$ -	$ 354,390
33	UTILITIES		$ 156,000	$ -	$ 156,000	$ 156,000	$ -	$ 156,000
	SUBTOTAL		$ 8,989,398	$ 86,713	$ 9,076,111	$ 9,530,700	$ 805,707	$ 10,336,408
	GENERAL CONDITIONS	7%	$ 629,258	$ 6,070	$ 635,328	$ 667,149	$ 56,400	$ 723,549
	BONDS & INSURANCE	2.2%	$ 197,767	$ 1,908	$ 199,674	$ 209,675	$ 17,726	$ 227,401
	OVERHEAD & PROFIT	3.5%	$ 314,629	$ 3,035	$ 317,664	$ 333,575	$ 28,200	$ 361,774
	DESIGN CONTINGENCY	15%	$ 1,348,410	$ 13,007	$ 1,361,417	$ 1,429,605	$ 120,856	$ 1,550,461
	TOTAL CONSTRUCTION COST		$ 11,479,462	$ 110,732	$ 11,590,194	$ 12,170,704	$ 1,028,888	$ 13,199,593

ESTIMATE CONTAINS CONSTRUCTION COSTS ONLY - SOFT COSTS ARE NOT INCLUDED

ESCALATION IS NOT INCLUDED

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Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……ALTA TOWN OFFICE BUILDING
LOCATION……ALTA, UTAH
ARCHITECT……FFKR
STAGE OF DESIGN……MASTERPLANNING

TEST FIT 1
NEW BUILDING - CONCRETE
13,983 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	BUILDING COST SUMMARY				
02	EXISTING CONDITIONS			$ 7.72	$ 108,000
03	CONCRETE			$ 143.70	$ 2,009,356
04	MASONRY			$ -	$ -
05	METALS			$ 83.23	$ 1,163,827
06	WOODS & PLASTICS			$ 7.62	$ 106,550
07	THERMAL & MOISTURE PROTECTION			$ 25.38	$ 354,902
08	DOORS & WINDOWS			$ 56.90	$ 795,666
09	FINISHES			$ 99.40	$ 1,389,975
10	SPECIALTIES			$ 3.60	$ 50,339
11	EQUIPMENT			$ -	$ -
12	FURNISHINGS			$ -	$ -
13	SPECIAL CONSTRUCTION			$ -	$ -
14	CONVEYING SYSTEMS			$ -	$ -
21	FIRE SUPPRESSION			$ 7.80	$ 109,067
22	PLUMBING			$ 10.80	$ 151,016
23	HVAC			$ 78.00	$ 1,090,674
26	ELECTRICAL			$ 55.38	$ 774,404
27	COMMUNICATION			$ 10.80	$ 151,016
28	ELECTRONIC SAFETY & SECURITY			$ 7.80	$ 109,067
31	EARTHWORK			$ 7.68	$ 107,377
32	EXTERIOR IMPROVEMENTS			$ 25.90	$ 362,160
33	UTILITIES			$ 11.16	$ 156,000
	SUBTOTAL			$ 642.88	$ 8,989,398
	GENERAL CONDITIONS	7%		$ 45.00	$ 629,258
	BONDS & INSURANCE	2.2%		$ 14.14	$ 197,767
	OVERHEAD & PROFIT	3.5%		$ 22.50	$ 314,629
	DESIGN CONTINGENCY	15%		$ 96.43	$ 1,348,410
	TOTAL CONSTRUCTION COST			$ 820.96	$ 11,479,462

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
NEW BUILDING - CONCRETE
13,983 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Site Demolition, Clear and Grub Site	20,000	SF	$ 3.00	$ 60,000
	Temporary Shoring, Rockfall Protection	8,000	SF	$ 6.00	$ 48,000
	TOTAL EXISTING CONDITIONS				**$ 108,000**
03	**CONCRETE**				
	Continuous Footing	61	CY	$ 750.00	$ 45,778
	Spot Footing	61	CY	$ 762.00	$ 46,510
	Foundation Wall - 18"	14,535	SF	$ 114.00	$ 1,656,990
	Slab On Grade	7,928	SF	$ 11.40	$ 90,379
	SOMD Topping Slab	6,055	SF	$ 12.00	$ 72,660
	Concrete Roof Slab	7,928	SF	$ 12.00	$ 95,136
	Vapor Barrier	7,928	SF	$ 0.24	$ 1,903
	TOTAL CONCRETE				**$ 2,009,356**
05	**METALS**				
	Floor Structural Steel (14 LBS/SF)	84,770	LB	$ 3.96	$ 335,689
	Roof Structural Steel (20 LBS/SF)	158,560	LB	$ 3.96	$ 627,898
	Metal Floor Deck	6,055	SF	$ 9.54	$ 57,765
	Metal Roof Deck	7,928	SF	$ 9.18	$ 72,779
	Metal Pan Stairs	300	SF	$ 150.00	$ 45,000
	Freestanding Railing	44	LF	$ 354.00	$ 15,576
	Wall Railing	80	LF	$ 114.00	$ 9,120
	TOTAL METALS				**$ 1,163,827**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	13,983	SF	$ 0.42	$ 5,873
	Subtotal for Carpentry				**$ 5,873**
	Millwork	13,983	SF	$ 7.20	**$ 100,678**
	TOTAL WOOD & PLASTICS				**$ 106,550**
07	**THERMAL & MOISTURE PROTECTION**				
	Roof Membrane	7,928	SF	$ 9.18	$ 72,779
	Rigid Roof Insulation	7,928	SF	$ 10.80	$ 85,622
	Roof Weather Barrier	7,928	SF	$ 4.62	$ 36,627
	Roof Protection Board	7,928	SF	$ 3.60	$ 28,541
	Spray Foam Wall Insulation	12,825	SF	$ 4.80	$ 61,560
	Weather Barrier				N/A
	Sound Batt	19,576	SF	$ 1.38	$ 27,015
	Metal Wall Cap	855	LF	$ 23.94	$ 20,469
	Flashing & Sheet Metal	1,710	SF	$ 9.60	$ 16,416
	Fireproofing				N/A
	Caulking & Sealing	13,983	SF	$ 0.42	$ 5,873
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 354,902**
08	**DOORS & WINDOWS**				
	Doors - Interior & Exterior, Overhead Doors	13,983	SF	$ 7.20	$ 100,678
	Exterior Glazing - Triple Pane	3,848	SF	$ 144.00	$ 554,040
	Interior Glazing	1,958	SF	$ 72.00	$ 140,949
	TOTAL DOORS & WINDOWS				**$ 795,666**
09	**FINISHES**				
	Exterior Wall Furring	12,825	SF	$ 10.80	$ 138,510

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
NEW BUILDING - CONCRETE
13,983 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Interior Partition Wall Framing	19,576	SF	$ 10.80	$ 211,423
	Gyp. Wallboard	51,977	SF	$ 3.58	$ 185,871
	Gyp. Wallboard - 2nd Layer	12,994	SF	$ 2.39	$ 31,031
	Secure Wall Assemblies	10,395	SF	$ 18.00	$ 187,119
	Ceilings	13,983	SF	$ 12.00	$ 167,796
	Flooring	13,983	SF	$ 12.00	$ 167,796
	Base	3,465	LF	$ 8.40	$ 29,107
	Paint Gyp.	51,977	SF	$ 1.62	$ 84,203
	Wall Finishes, Wall Protection	51,977	SF	$ 3.60	$ 187,119
	TOTAL FINISHES				**$ 1,389,975**
10	**SPECIALTIES**				
	Building Specialties	13,983	SF	$ 3.60	$ 50,339
	TOTAL SPECIALTIES				**$ 50,339**
21	**FIRE SUPPRESSION SYSTEM**	13,983	SF	$ 7.80	**$ 109,067**
22	**PLUMBING**				
	Building Plumbing	13,983	SF	$ 10.80	$ 151,016
	TOTAL PLUMBING				**$ 151,016**
23	**HVAC**				
	HVAC - RTU	13,983	SF	$ 78.00	$ 1,090,674
	TOTAL HVAC				**$ 1,090,674**
26	**ELECTRICAL**				
	Service & Distribution	13,983	SF	$ 10.80	**$ 151,016**
	PV Array	1	Allow	$ 120,000.00	**$ 120,000**
	Power	13,983	SF	$ 12.00	**$ 167,796**
	Lighting	13,983	SF	$ 24.00	**$ 335,592**
	TOTAL ELECTRICAL				**$ 774,404**
27	**COMMUNICATIONS**				
	Telecommunications	13,983	SF	$ 6.00	**$ 83,898**
	A/V	13,983	SF	$ 4.80	**$ 67,118**
	TOTAL COMMUNICATIONS				**$ 151,016**
28	**ELECTRONIC SAFETY & SECURITY**				
	Fire Alarm	13,983	SF	$ 4.20	**$ 58,729**
	Security System, Surveillance	13,983	SF	$ 3.60	**$ 50,339**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 109,067**

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
NEW BUILDING - CONCRETE
13,983 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
31	**EARTHWORK**				
	Building Excavation	1,175	CY	$ 18.00	$ 21,141
	Backfill & Compaction w/ Imported Fill	235	CY	$ 90.00	$ 21,141
	Haul Away Excess	1,175	CY	$ 18.00	$ 21,141
	Building Grading	7,928	SF	$ 1.20	$ 9,514
	Gravel Under Slab	155	Ton	$ 90.00	$ 13,953
	Site Grading	12,072	SF	$ 1.20	$ 14,486
	SWPPP	1	LS	$ 6,000.00	$ 6,000
	TOTAL EARTHWORK				**$ 107,377**
32	**SITE IMPROVEMENTS**				
	Site Repair, Site Improvements	12,072	SF	$ 30.00	$ 362,160
	TOTAL SITE IMPROVEMENTS				**$ 362,160**
33	**UTILITIES**				
	Water Line	1	Allow	$ 18,000.00	$ 18,000
	Fire Line	1	Allow	$ 24,000.00	$ 24,000
	Sewer Line	1	Allow	$ 24,000.00	$ 24,000
	Storm Drainage	20,000	SF	$ 3.00	$ 60,000
	Gas Line	1	Allow	$ 12,000.00	$ 12,000
	Communications Utility	1	Allow	$ 18,000.00	$ 18,000
	TOTAL SITE IMPROVEMENTS				**$ 156,000**

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
REMODEL
228 REMODEL SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	BUILDING COST SUMMARY				
02	**EXISTING CONDITIONS**			**$ 29.32**	**$ 6,684**
03	**CONCRETE**			**$ 2.40**	**$ 547**
04	**MASONRY**			**$ -**	**$ -**
05	**METALS**			**$ -**	**$ -**
06	**WOODS & PLASTICS**			**$ 8.40**	**$ 1,915**
07	**THERMAL & MOISTURE PROTECTION**			**$ 3.78**	**$ 862**
08	**DOORS & WINDOWS**			**$ 19.68**	**$ 4,487**
09	**FINISHES**			**$ 95.14**	**$ 21,693**
10	**SPECIALTIES**			**$ 6.00**	**$ 1,368**
11	**EQUIPMENT**			**$ -**	**$ -**
12	**FURNISHINGS**			**$ -**	**$ -**
13	**SPECIAL CONSTRUCTION**			**$ -**	**$ -**
14	**CONVEYING SYSTEMS**			**$ -**	**$ -**
21	**FIRE SUPPRESSION**			**$ 9.60**	**$ 2,189**
22	**PLUMBING**			**$ 10.80**	**$ 2,462**
23	**HVAC**			**$ 93.60**	**$ 21,341**
26	**ELECTRICAL**			**$ 68.00**	**$ 15,504**
27	**COMMUNICATION**			**$ 21.60**	**$ 4,925**
28	**ELECTRONIC SAFETY & SECURITY**			**$ 12.00**	**$ 2,736**
31	**EARTHWORK**			**$ -**	**$ -**
32	**EXTERIOR IMPROVEMENTS**			**$ -**	**$ -**
33	**UTILITIES**			**$ -**	**$ -**
	SUBTOTAL			**$ 380.32**	**$ 86,713**
	GENERAL CONDITIONS	**7%**		**$ 26.62**	**$ 6,070**
	BONDS & INSURANCE	**2.2%**		**$ 8.37**	**$ 1,908**
	OVERHEAD & PROFIT	**3.5%**		**$ 13.31**	**$ 3,035**
	DESIGN CONTINGENCY	**15%**		**$ 57.05**	**$ 13,007**
	TOTAL CONSTRUCTION COST			**$ 485.67**	**$ 110,732**

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
REMODEL
228 REMODEL SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Interior Finishes Demolition	228	SF	$ 3.00	$ 684
	Temporary Protections	1	LS	$ 6,000.00	$ 6,000
	TOTAL EXISTING CONDITIONS				**$ 6,684**
03	**CONCRETE**				
	Patch & Repair Slab	228	SF	$ 2.40	$ 547
	TOTAL CONCRETE				**$ 547**
05	**METALS**				
	TOTAL METALS				**$ -**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	228	SF	$ 1.20	$ 274
	Subtotal for Carpentry				**$ 274**
	Millwork				
	Misc. Millwork	228	SF	$ 7.20	$ 1,642
	Subtotal Millwork				**$ 1,642**
	TOTAL WOOD & PLASTICS				**$ 1,915**
07	**THERMAL & MOISTURE PROTECTION**				
	Sound Batt	319	SF	$ 2.40	$ 766
	Fireproofing				N/A
	Caulking & Sealing	228	SF	$ 0.42	$ 96
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 862**
08	**DOORS & WINDOWS**				
	Interior Doors	228	SF	$ 9.60	$ 2,189
	Interior Glazing Allowance	32	SF	$ 72.00	$ 2,298
	TOTAL DOORS & WINDOWS				**$ 4,487**
09	**FINISHES**				
	Interior Partition Framing	319	SF	$ 12.00	$ 3,830
	Gyp. Wall Board	638	SF	$ 4.20	$ 2,681
	Ceilings	228	SF	$ 18.00	$ 4,104
	Flooring	228	SF	$ 24.00	$ 5,472
	Base	43	LF	$ 8.40	$ 358
	Paint Gyp.	638	SF	$ 1.62	$ 1,034
	Wall Finishes	638	SF	$ 3.60	$ 2,298
	Patch & Repair Existing Walls	228	SF	$ 2.40	$ 547
	Adjacent Architectural Repair	228	SF	$ 6.00	$ 1,368
	TOTAL FINISHES				**$ 21,693**
10	**SPECIALTIES**				
	Misc. Building Specialties	228	SF	$ 6.00	$ 1,368
	TOTAL SPECIALTIES				**$ 1,368**

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 1
REMODEL
228 REMODEL SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
21	**FIRE SUPPRESSION & MODIFICATIONS**	228	SF	$ 9.60	**$ 2,189**
22	**PLUMBING**				
	Misc. Plumbing	228	SF	$ 10.80	$ 2,462
	TOTAL PLUMBING				**$ 2,462**
23	**HVAC**				
	HVAC Demolition	228	SF	$ 3.60	**$ 821**
	HVAC	228	SF	$ 90.00	**$ 20,520**
	TOTAL HVAC				**$ 21,341**
26	**ELECTRICAL**				
	Electrical Demolition	40	HRS	$ 114.00	**$ 4,560**
	Service & Distribution Modification	228	SF	$ 12.00	**$ 2,736**
	Power	228	SF	$ 12.00	**$ 2,736**
	Lighting	228	SF	$ 24.00	**$ 5,472**
	TOTAL ELECTRICAL				**$ 15,504**
27	**COMMUNICATIONS**				
	Telecommunications	228	SF	$ 12.00	**$ 2,736**
	A/V	228	SF	$ 9.60	**$ 2,189**
	TOTAL COMMUNICATIONS				**$ 4,925**
28	**ELECTRONIC SAFETY & SECURITY**				
	Fire Alarm	228	SF	$ 6.00	**$ 1,368**
	Security System, Surveillance	228	SF	$ 6.00	**$ 1,368**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 2,736**
31	**EARTHWORK**				
	TOTAL EARTHWORK				**$ -**
32	**SITE IMPROVEMENTS**				
	TOTAL SITE IMPROVEMENTS				**$ -**
33	**UTILITIES**				
	TOTAL SITE IMPROVEMENTS				**$ -**

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Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
NEW BUILDING - CONCRETE
15,289 SF

BUILDING COST SUMMARY

CSI #	DESCRIPTION	UNIT COST	TOTAL
02	EXISTING CONDITIONS	$ 7.06	$ 108,000
03	CONCRETE	$ 136.68	$ 2,089,767
04	MASONRY	$ -	$ -
05	METALS	$ 82.07	$ 1,254,751
06	WOODS & PLASTICS	$ 7.62	$ 116,502
07	THERMAL & MOISTURE PROTECTION	$ 22.91	$ 350,268
08	DOORS & WINDOWS	$ 54.79	$ 837,674
09	FINISHES	$ 98.21	$ 1,501,585
10	SPECIALTIES	$ 3.60	$ 55,040
11	EQUIPMENT	$ -	$ -
12	FURNISHINGS	$ -	$ -
13	SPECIAL CONSTRUCTION	$ -	$ -
14	CONVEYING SYSTEMS	$ -	$ -
21	FIRE SUPPRESSION	$ 7.80	$ 119,254
22	PLUMBING	$ 10.80	$ 165,121
23	HVAC	$ 78.00	$ 1,192,542
26	ELECTRICAL	$ 54.65	$ 835,525
27	COMMUNICATION	$ 10.80	$ 165,121
28	ELECTRONIC SAFETY & SECURITY	$ 7.80	$ 119,254
31	EARTHWORK	$ 7.19	$ 109,905
32	EXTERIOR IMPROVEMENTS	$ 23.18	$ 354,390
33	UTILITIES	$ 10.20	$ 156,000
	SUBTOTAL	$ 623.37	$ 9,530,700
	GENERAL CONDITIONS 7%	$ 43.64	$ 667,149
	BONDS & INSURANCE 2.2%	$ 13.71	$ 209,675
	OVERHEAD & PROFIT 3.5%	$ 21.82	$ 333,575
	DESIGN CONTINGENCY 15%	$ 93.51	$ 1,429,605
	TOTAL CONSTRUCTION COST	$ 796.04	$ 12,170,704

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Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
NEW BUILDING - CONCRETE
15,289 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Site Demolition, Clear and Grub Site	20,000	SF	$ 3.00	$ 60,000
	Temporary Shoring, Rockfall Protection	8,000	SF	$ 6.00	$ 48,000
	TOTAL EXISTING CONDITIONS				**$ 108,000**
03	**CONCRETE**				
	Continuous Footing	63	CY	$ 750.00	$ 47,556
	Spot Footing	63	CY	$ 762.00	$ 48,316
	Foundation Wall - 18"	15,045	SF	$ 114.00	$ 1,715,130
	Slab On Grade	8,187	SF	$ 11.40	$ 93,332
	SOMD Topping Slab	7,102	SF	$ 12.00	$ 85,224
	Concrete Roof Slab	8,187	SF	$ 12.00	$ 98,244
	Vapor Barrier	8,187	SF	$ 0.24	$ 1,965
	TOTAL CONCRETE				**$ 2,089,767**
05	**METALS**				
	Floor Structural Steel (14 LBS/SF)	99,428	LB	$ 3.96	$ 393,735
	Roof Structural Steel (20 LBS/SF)	163,740	LB	$ 3.96	$ 648,410
	Metal Floor Deck	7,102	SF	$ 9.54	$ 67,753
	Metal Roof Deck	8,187	SF	$ 9.18	$ 75,157
	Metal Pan Stairs	300	SF	$ 150.00	$ 45,000
	Freestanding Railing	44	LF	$ 354.00	$ 15,576
	Wall Railing	80	LF	$ 114.00	$ 9,120
	TOTAL METALS				**$ 1,254,751**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	15,289	SF	$ 0.42	$ 6,421
	Subtotal for Carpentry				**$ 6,421**
	Millwork	15,289	SF	$ 7.20	**$ 110,081**
	TOTAL WOOD & PLASTICS				**$ 116,502**
07	**THERMAL & MOISTURE PROTECTION**				
	Roof Membrane	8,187	SF	$ 9.18	$ 75,157
	Rigid Roof Insulation	8,187	SF	$ 10.80	$ 88,420
	Roof Weather Barrier	8,187	SF	$ 4.62	$ 37,824
	Roof Protection Board	8,187	SF	$ 3.60	$ 29,473
	Spray Foam Wall Insulation	13,275	SF	$ 4.80	$ 63,720
	Weather Barrier				N/A
	Sound Batt	21,405	SF	$ 1.38	$ 29,538
	Metal Wall Cap	457	LF	$ 23.94	$ 10,941
	Flashing & Sheet Metal	914	SF	$ 9.60	$ 8,774
	Fireproofing				N/A
	Caulking & Sealing	15,289	SF	$ 0.42	$ 6,421
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 350,268**
08	**DOORS & WINDOWS**				
	Doors - Interior & Exterior, Overhead Doors	15,289	SF	$ 7.20	$ 110,081
	Exterior Glazing - Triple Pane	3,983	SF	$ 144.00	$ 573,480
	Interior Glazing	2,140	SF	$ 72.00	$ 154,113
	TOTAL DOORS & WINDOWS				**$ 837,674**
09	**FINISHES**				
	Exterior Wall Furring	13,275	SF	$ 10.80	$ 143,370

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
NEW BUILDING - CONCRETE
15,289 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Interior Partition Wall Framing	21,405	SF	$ 10.80	$ 231,170
	Gyp. Wallboard	56,084	SF	$ 3.58	$ 200,557
	Gyp. Wallboard - 2nd Layer	14,021	SF	$ 2.39	$ 33,482
	Secure Wall Assemblies	11,217	SF	$ 18.00	$ 201,903
	Ceilings	15,289	SF	$ 12.00	$ 183,468
	Flooring	15,289	SF	$ 12.00	$ 183,468
	Base	3,739	LF	$ 8.40	$ 31,407
	Paint Gyp.	56,084	SF	$ 1.62	$ 90,856
	Wall Finishes, Wall Protection	56,084	SF	$ 3.60	$ 201,903
	TOTAL FINISHES				**$ 1,501,585**
10	**SPECIALTIES**				
	Building Specialties	15,289	SF	$ 3.60	$ 55,040
	TOTAL SPECIALTIES				**$ 55,040**
21	**FIRE SUPPRESSION SYSTEM**	15,289	SF	$ 7.80	**$ 119,254**
22	**PLUMBING**				
	Building Plumbing	15,289	SF	$ 10.80	$ 165,121
	TOTAL PLUMBING				**$ 165,121**
23	**HVAC**				
	HVAC - RTU	15,289	SF	$ 78.00	$ 1,192,542
	TOTAL HVAC				**$ 1,192,542**
26	**ELECTRICAL**				
	Service & Distribution	15,289	SF	$ 10.80	**$ 165,121**
	PV Array	1	Allow	$ 120,000.00	**$ 120,000**
	Power	15,289	SF	$ 12.00	**$ 183,468**
	Lighting	15,289	SF	$ 24.00	**$ 366,936**
	TOTAL ELECTRICAL				**$ 835,525**
27	**COMMUNICATIONS**				
	Telecommunications	15,289	SF	$ 6.00	**$ 91,734**
	A/V	15,289	SF	$ 4.80	**$ 73,387**
	TOTAL COMMUNICATIONS				**$ 165,121**
28	**ELECTRONIC SAFETY & SECURITY**				
	Fire Alarm	15,289	SF	$ 4.20	**$ 64,214**
	Security System, Surveillance	15,289	SF	$ 3.60	**$ 55,040**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 119,254**

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Cost Estimate

PROJECT ESTIMATE | **CONSTRUCTION CONTROL CORPORATION** | **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
NEW BUILDING - CONCRETE
15,289 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
31	**EARTHWORK**				
	Building Excavation	1,213	CY	$ 18.00	$ 21,832
	Backfill & Compaction w/ Imported Fill	243	CY	$ 90.00	$ 21,832
	Haul Away Excess	1,213	CY	$ 18.00	$ 21,832
	Building Grading	8,187	SF	$ 1.20	$ 9,824
	Gravel Under Slab	160	Ton	$ 90.00	$ 14,409
	Site Grading	11,813	SF	$ 1.20	$ 14,176
	SWPPP	1	LS	$ 6,000.00	$ 6,000
	TOTAL EARTHWORK				**$ 109,905**
32	**SITE IMPROVEMENTS**				
	Site Repair, Site Improvements	11,813	SF	$ 30.00	$ 354,390
	TOTAL SITE IMPROVEMENTS				**$ 354,390**
33	**UTILITIES**				
	Water Line	1	Allow	$ 18,000.00	$ 18,000
	Fire Line	1	Allow	$ 24,000.00	$ 24,000
	Sewer Line	1	Allow	$ 24,000.00	$ 24,000
	Storm Drainage	20,000	SF	$ 3.00	$ 60,000
	Gas Line	1	Allow	$ 12,000.00	$ 12,000
	Communications Utility	1	Allow	$ 18,000.00	$ 18,000
	TOTAL SITE IMPROVEMENTS				**$ 156,000**

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Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
REMODEL
2,367 REMODEL SF

BUILDING COST SUMMARY

CSI #	DESCRIPTION		UNIT COST	TOTAL
02	EXISTING CONDITIONS		$ 5.53	$ 13,101
03	CONCRETE		$ 2.40	$ 5,681
04	MASONRY		$ -	$ -
05	METALS		$ -	$ -
06	WOODS & PLASTICS		$ 8.40	$ 19,883
07	THERMAL & MOISTURE PROTECTION		$ 3.78	$ 8,947
08	DOORS & WINDOWS		$ 19.68	$ 46,583
09	FINISHES		$ 95.14	$ 225,206
10	SPECIALTIES		$ 6.00	$ 14,202
11	EQUIPMENT		$ -	$ -
12	FURNISHINGS		$ -	$ -
13	SPECIAL CONSTRUCTION		$ -	$ -
14	CONVEYING SYSTEMS		$ -	$ -
21	FIRE SUPPRESSION		$ 9.60	$ 22,723
22	PLUMBING		$ 10.80	$ 25,564
23	HVAC		$ 93.60	$ 221,551
26	ELECTRICAL		$ 51.85	$ 122,736
27	COMMUNICATION		$ 21.60	$ 51,127
28	ELECTRONIC SAFETY & SECURITY		$ 12.00	$ 28,404
31	EARTHWORK		$ -	$ -
32	EXTERIOR IMPROVEMENTS		$ -	$ -
33	UTILITIES		$ -	$ -
	SUBTOTAL		$ 340.39	$ 805,707
	GENERAL CONDITIONS	7%	$ 23.83	$ 56,400
	BONDS & INSURANCE	2.2%	$ 7.49	$ 17,726
	OVERHEAD & PROFIT	3.5%	$ 11.91	$ 28,200
	DESIGN CONTINGENCY	15%	$ 51.06	$ 120,856
	TOTAL CONSTRUCTION COST		$ 434.68	$ 1,028,888

Cost Estimate

PROJECT ESTIMATE — **CONSTRUCTION CONTROL CORPORATION** — **5/28/2025**

PROJECT NAME……..……ALTA TOWN OFFICE BUILDING
LOCATION……..……ALTA, UTAH
ARCHITECT……..……FFKR
STAGE OF DESIGN……..……MASTERPLANNING

TEST FIT 2
REMODEL
2,367 REMODEL SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Interior Finishes Demolition	2,367	SF	$ 3.00	$ 7,101
	Temporary Protections	1	LS	$ 6,000.00	$ 6,000
	TOTAL EXISTING CONDITIONS				**$ 13,101**
03	**CONCRETE**				
	Patch & Repair Slab	2,367	SF	$ 2.40	$ 5,681
	TOTAL CONCRETE				**$ 5,681**
05	**METALS**				
	TOTAL METALS				**$ -**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	2,367	SF	$ 1.20	$ 2,840
	Subtotal for Carpentry				**$ 2,840**
	Millwork				
	Misc. Millwork	2,367	SF	$ 7.20	$ 17,042
	Subtotal Millwork				**$ 17,042**
	TOTAL WOOD & PLASTICS				**$ 19,883**
07	**THERMAL & MOISTURE PROTECTION**				
	Sound Batt	3,314	SF	$ 2.40	$ 7,953
	Fireproofing				N/A
	Caulking & Sealing	2,367	SF	$ 0.42	$ 994
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 8,947**
08	**DOORS & WINDOWS**				
	Interior Doors	2,367	SF	$ 9.60	$ 22,723
	Interior Glazing Allowance	331	SF	$ 72.00	$ 23,859
	TOTAL DOORS & WINDOWS				**$ 46,583**
09	**FINISHES**				
	Interior Partition Framing	3,314	SF	$ 12.00	$ 39,766
	Gyp. Wall Board	6,628	SF	$ 4.20	$ 27,836
	Ceilings	2,367	SF	$ 18.00	$ 42,606
	Flooring	2,367	SF	$ 24.00	$ 56,808
	Base	442	LF	$ 8.40	$ 3,711
	Paint Gyp.	6,628	SF	$ 1.62	$ 10,737
	Wall Finishes	6,628	SF	$ 3.60	$ 23,859
	Patch & Repair Existing Walls	2,367	SF	$ 2.40	$ 5,681
	Adjacent Architectural Repair	2,367	SF	$ 6.00	$ 14,202
	TOTAL FINISHES				**$ 225,206**
10	**SPECIALTIES**				
	Misc. Building Specialties	2,367	SF	$ 6.00	$ 14,202
	TOTAL SPECIALTIES				**$ 14,202**

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			5/28/2025
PROJECT NAME……..……ALTA TOWN OFFICE BUILDING			**TEST FIT 2**	
LOCATION……..……ALTA, UTAH			**REMODEL**	
ARCHITECT……..……FFKR			2,367 REMODEL SF	
STAGE OF DESIGN……..…..MASTERPLANNING				

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
21	**FIRE SUPPRESSION & MODIFICATIONS**	2,367	SF	$ 9.60	**$ 22,723**
22	**PLUMBING**				
	Misc. Plumbing	2,367	SF	$ 10.80	$ 25,564
	TOTAL PLUMBING				**$ 25,564**
23	**HVAC**				
	HVAC Demolition	2,367	SF	$ 3.60	**$ 8,521**
	HVAC	2,367	SF	$ 90.00	**$ 213,030**
	TOTAL HVAC				**$ 221,551**
26	**ELECTRICAL**				
	Electrical Demolition	80	HRS	$ 114.00	**$ 9,120**
	Service & Distribution Modification	2,367	SF	$ 12.00	**$ 28,404**
	Power	2,367	SF	$ 12.00	**$ 28,404**
	Lighting	2,367	SF	$ 24.00	**$ 56,808**
	TOTAL ELECTRICAL				**$ 122,736**
27	**COMMUNICATIONS**				
	Telecommunications	2,367	SF	$ 12.00	**$ 28,404**
	A/V	2,367	SF	$ 9.60	**$ 22,723**
	TOTAL COMMUNICATIONS				**$ 51,127**
28	**ELECTRONIC SAFETY & SECURITY**				
	Fire Alarm	2,367	SF	$ 6.00	**$ 14,202**
	Security System, Surveillance	2,367	SF	$ 6.00	**$ 14,202**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 28,404**
31	**EARTHWORK**				
	TOTAL EARTHWORK				**$ - **
32	**SITE IMPROVEMENTS**				
	TOTAL SITE IMPROVEMENTS				**$ - **
33	**UTILITIES**				
	TOTAL SITE IMPROVEMENTS				**$ - **

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Finance Encyclopedia

ZIONS PUBLIC FINANCE, INC.

Alta Town

June 2025

Master Plan Funding Options Overview

Finance Encyclopedia

ALTA MASTER PLAN FUNDING OPTIONS - DRAFT

Overview

The purpose of this report is to provide Alta with a wide variety of funding options for infrastructure in the Town. No specific buildings, infrastructure projects or amenities have been identified as part of this overall funding options review.

The funding sources discussed in this analysis include:

- Bonds
  - General Obligation Bonds
  - Revenue Bonds
- Grants
  - Utah Department of Environmental Quality (DEQ)
  - Community Impact Board (CIB)
  - Community Development Block Grant (CDBG)
  - Utah Office of Outdoor Recreation
  - Safe Streets
  - Utah State Revolving Loan Fund
- Special Assessment Areas (SAAs)
- Public Infrastructure Districts (PIDs)
- Tax Increment Areas
  - Community Reinvestment Areas (CRAs)
- Fees
  - Impact Fees
  - User Fees
  - Business License Fees
- Housing
  - Low Income Housing Tax Credits (LIHTC)
  - Home Ownership Promotion Zones (HOPZ) – also uses tax increment
  - First-Time Homebuyer Investment Zones (FHIZ) – also uses tax increment
- Public-Private Partnerships (P3s)

Bonds

General Obligation Bonds

A general obligation (GO) and could be issued by the Town and would require voter approval at an election but would achieve a slightly lower interest rate than other types of bonds such as a sales tax bond. GO bonds are issued against property tax revenue that appears on property tax bills as a distinct levy. The following shows some sample impacts on property owners in Alta given various bonding scenarios to accomplish a variety of capital improvements if a GO bond were to be issued.

TABLE 1: POTENTIAL BONDING SCENARIOS

	Scenario 1	Scenario 2	Scenario 3
Alta Town Taxable Value	$389,622,946	$389,622,946	$389,622,946
Bond Amount Issued	$1,000,000	$5,000,000	$10,000,000

Finance Encyclopedia

	Scenario 1	Scenario 2	Scenario 3
Bond Rate	4.25%	4.25%	4.25%
Bond Term in Years	20	20	20
Payment per Year	$75,220	$376,099	$752,198
Tax Rate Necessary	0.0001931	0.00096529	0.00193058
Annual Property Tax Impact on $500,000 Primary Residential Unit*	$53	$265	$531

*Assumes a 45 percent exemption on a primary residential unit

However, a GO bond would require a general election and these types of bonds are generally more amenable to the public when they are for essential services (i.e., public safety).

Revenue Bonds
A sales tax revenue bond, due to the ease of issuing without an election and voter approval, could be a more likely means of bonding for most infrastructure projects. Outstanding bonds to which sales tax revenues are pledged as the sole source of payment may not at any one time exceed an amount for which the average annual installments of principal and interest will exceed 80 percent of the total sales tax revenues received by the issuing entity from the collection or rebate of the sales tax revenues during the fiscal year of the issuing entity immediately preceding the fiscal year in which the resolution authorizing the issuance of bonds is adopted. See Utah Code 11-14-307.

Alta Town currently has sales tax revenues of approximately $1.9 million. These revenues come mainly from the ski industry and can fluctuate based on yearly snow levels. While the Town would certainly not want to obligate 80 percent of its sales tax revenues, because sales tax revenues are the major funding source for the Town, it could consider obligating a portion of these revenues. At a 20 percent commitment level, the Town could issue debt for roughly $4.5 million.

The Town could also issue Transient Room Tax (TRT) bonds which would have a higher interest rate than sales tax bonds due to the somewhat greater risk associated with the bonds.

Grants

Tourism, Recreation, Cultural, Convention and Airport Facilities (TRCC)
Salt Lake County has imposed a tax under the Tourism, Recreation, Cultural, Convention, and Airport Facilities Tax Act, Utah Code Ann. §§ 59-12-601 et seq. (the "Act"), to support cultural and economic growth within its boundaries. Revenue collected under this tax may be used for the development and maintenance of convention facilities, cultural facilities, recreation facilities, or tourism promotion.

The following projects were funded by Salt Lake County in 2024. It is important to note that all projects were funded for lesser amounts than requested – some significantly so. Therefore, the Town would want to ensure that 1) it makes a request that includes all costs and contingencies; and 2) has additional funding sources to supplement the likely difference between funds requested and those received.

Finance Encyclopedia

Alta | DRAFT Master Plan Funding Options

Application Title	Applicant	Project Budget Total	Requested Amount	Approved Amount
Bluffdale Equestrian Park Improvements	City of Bluffdale	$ 3,566,960.00	$ 2,766,960.00	$ 2,766,960.00
City of Holladay Park Upgrades	City of Holladay	$ 155,000.00	$ 125,000.00	$ 125,000.00
Historic Scott School Arts and Community Center Programming and Design	City of South Salt Lake	$ 200,000.00	$ 100,000.00	$ 100,000.00
Copperton Park Upgrade Project	Copperton Metro Township	$ 102,830.00	$ 77,830.00	$ 77,830.00
Highland Drive Pedestrian Trail - Phase 3	Cottonwood Heights	$ 140,000.00	$ 130,000.00	$ 130,000.00
Jenson Farms Park	Draper City	$ 1,300,000.00	$ 600,000.00	$ 600,000.00
Camp Kearns Historic Walk	Kearns Metro Township	$ 24,800.00	$ 21,500.00	$ 21,500.00
Midvale Art House	Midvale City	$ 47,300.00	$ 40,800.00	$ 40,800.00
Millcreek Master Arts and Culture Plan	Millcreek	$ 223,010.00	$ 75,000.00	$ 75,000.00
Riverview Park Improvements	Murray City Corporation	$ 801,000.00	$ 400,000.00	$ 400,000.00
KOPFC Outdoor Recreation Pool Air Supported Structure and Upgrades	Oquirrh Recreation District	$ 2,126,838.00	$ 300,000.00	$ 300,000.00
USU Bastian Agricultural Center Arenas - Phase 2 and Completion	Utah State University Bastian Agricul	$ 2,526,362.85	$ 500,000.00	$ 500,000.00
National Veterans Golden Age Games	VA Salt Lake City Health Care System	$ 1,079,000.00	$ 50,000.00	$ 50,000.00

Utah Department of Environmental Quality (DEQ)
The Utah Department of Environmental Quality - Utah Division of Water Quality's (DWQ) Clean Water State Revolving Fund Loan Program (SRF) receives, on average, a combined $9 million a year from State and Federal funding and an additional $15 million in funding each year from loan repayments. This money is used to fund water quality and wastewater infrastructure projects in Utah through grants and loans to municipalities in Utah.

In addition, DEQ provides funding from available petroleum brownfields grant funds to persons interested in having their property assessed for environmental contamination.

Community Development Block Grant Funds (CDBG)
These funds can be used to accomplish Town goals that are intended to benefit primarily low and moderate-income families.

Utah Office of Outdoor Recreation
The Utah Office of Outdoor Recreation has several different grant programs, a few of which are listed below.

Utah Outdoor Recreation Grant (UORG) is for new outdoor recreation infrastructure projects which helps communities build recreation amenities that support local economic development. Within the UORG program are the UORG Tier 1 ($15,001-$200,000), Regional Asset Tier (Up to $750,000), Mini-Grant (Up to $15,000), and the Utah Outdoor Classroom Grant (Up to $15,000).

Land and Water Conservation Fund (LWCF) is a federally-funded program established to assist government agencies with the creation of high-quality, public outdoor recreation facilities. LWCF grants have been used to construct golf courses, swimming pools, and parks.

Recreation Restoration Infrastructure Grant (RRI)
The Recreation Restoration Infrastructure (RRI) grant funds the restoration or rehabilitation of existing and developed recreation areas and trails so the public can safely access them. The RRI grant funds from $5,000 to $150,000.

Other grants are available for restoration of high-use and high-priority trails, boating access and motorized recreation.

Finance Encyclopedia

Safe Streets and Roads for All
The United States Department of Transportation has planning and implementation grants available to promote safer transportation routes. The Wasatch Front Regional Council is currently working on a planning document that will allow local communities to submit grant requests for implementation funds.

Botanical, Cultural Zoo Tax (ZAP Tax)
This tax has already been enacted to the full 0.10 percent in Salt Lake County. Alta could apply for these funds for various projects focused on recreation/parks/open space, but obtaining this funding is generally highly competitive.

FHWA – National Recreational Trails Funding Program
The National Recreational Trails Funding Program, also known as the Recreational Trails Program (RTP), is a grant program that helps fund the construction, maintenance, and restoration of recreational trails and trail-related facilities. The program is overseen by the U.S. Department of Transportation's Federal Highway Administration (FHWA) and is funded by gas taxes paid by off-road vehicles.

Bipartisan Infrastructure Law (BIL)
The Bipartisan Infrastructure Law consists of nearly 400 funding opportunities. Visit https://localinfrastructure.org/funding-opportunities/ and type in the type of infrastructure needs to see available funding sources.

State Revolving Loan Fund
The State Revolving Loan Fund helps cities with unique circumstances which make traditional bonding difficult. These loans can be very low interest rates or partial grants and are most often used for water and sewer projects.

Special Assessment Area (SAA)

Special Assessment Areas ("SAAs") are a financing mechanism that allows governmental entities to designate a specific area for the purpose of financing the costs of improvements, operation and maintenance, or economic promotion activities that benefit property within the area. Entities can then levy a special assessment, on parity with a tax lien, to pay for those improvements or ongoing maintenance. The special assessment can be pledged to retire bonds, known as Special Assessment Bonds, if issued to finance construction of a project. Utah Code §11-42 deals with the requirements of special assessment areas.

The underlying rationale of an SAA is that only those property owners who benefit from the public improvements and ongoing maintenance of the properties will be assessed for the associated costs as opposed to other financing structures in which all Town residents pay either through property taxes or increased service fees. With multiple property owners, it may be difficult to gain support for establishing a SAA.

While not subject to a bond election as is required for the issuance of General Obligation bonds, SAAs may not be created if 40 percent or more of those liable for the assessment payment[1] protest its creation. Despite this legal threshold, most local government governing bodies are unwilling to create an SAA if 10-20 percent of property owners oppose the SAA.

[1] Based on the method of assessment selected, i.e. acreage, front footage, per lot, etc.

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Once created, an SAA's ability to levy an assessment has similar collection priority / legal standing as a property tax assessment. However, since it is not a property tax, any financing secured by that levy would likely be done at higher interest rates than general obligation, sales tax revenue or utility revenue bonds. Interest rates will depend on a number of factors including the ratio of the market value to the assessment bond amount, the diversity of property ownership and the perceived willingness and ability of property owners to make the assessment payments as they come due. All improvements financed via an SAA must be owned by the Town and the repayment period cannot exceed twenty (20) years.

Public Infrastructure District (PID)

A public infrastructure district (PID) can be created with the consent of all property owners within a given area to fund capital infrastructure within the district. Once established, a tax rate of up to 15 mills[2] can be levied on property within the PID. In practice, communities in Utah that have used the PID mechanism have opted for much lower tax levies.

With a revenue stream established, bonds can be issued at a cost much lower than other development financing. Plus, the issued bonds are not recorded on the Town's books. In some cases, tax increment is used to make the debt payments and it is not necessary to enact any tax rate within the PID.

Concerns have been voiced about the relative competitiveness of sites with PIDs in comparison to other nearby sites without the added debt obligations.

Community Reinvestment Areas (CRAs)

A tax increment financing (TIF) district, such as a CRA, is a tool used by local governments to encourage development or redevelopment by capturing the future tax revenue generated by increased property values in a specific area. A base property value is established at the time the district is created, and any increase in property values above that base generates additional tax revenue, known as the "increment." This increment is then used to fund improvements within the TIF district, such as infrastructure improvements or redevelopment projects.

Alta currently does not have any tax increment areas but could potentially benefit from one in the future. One of the greatest advantages of CRAs is that tax increment has few restrictions on how it can be spent. However, there are no funds to be spent unless investment occurs in the area, thereby creating tax increment. The Town would need to create a redevelopment agency, if not already created, and then, if a project area is desired, redevelopment agency would need to convince taxing entities to participate in the creation of a CRA which requires some political will.

	CRA
Funding Mechanism	Tax Increment
Taxing Entity Participation	Negotiated with individual taxing entities and participation is not required (§17C-5-204); increment can likely only be triggered 3 times in Salt Lake County based on County policy
Governing Body	Municipal Redevelopment Agency (Alta Town Council) (§17C-5-204)

[2] 1 mill is equal to $1 in property tax levied per $1,000 of a property's assessed value.

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	CRA
Creation of Area	Alta would adopt a survey area resolution designating its intent to study the creation of a project area; specific boundaries are identified in the resolution (§17C-5-103)
Project Area Plan and Budget Creation	Created by Alta Town RDA (§17C-5-105)
Approval of Plan and Budget	Alta RDA Board resolution and City Council adoption (§17C-5-104)
Affordable Housing Requirements	Ten percent affordable set-aside for CRAs generating more than $100,000 in increment annually (§17C-5-307)
Can be Used with Other Tools	Yes
Projects	Project area redevelopment, environmental remediation, housing, incentives, public infrastructure
Bonding	Can sell tax increment bonds secured by the CRA project area increment with the amount of bonds limited by the potential cashflow of future revenue

Impact Fees

Impact fees are one-time fees charged to new development to offset the capital costs associated with new development. They are one source of funding for new capital improvements to maintain service levels and expand capacity for new growth as it occurs. The Town currently does not charge any impact fees. If little growth occurs in a community, it is generally not worth the time and effort to enact impact fees.

Advantages: New development pays its own way – proportionate share of capital costs
Could create separate service area for separate impact fees if extraordinary costs apply
Could be a long-term repayment source for other funding mechanisms

Disadvantages: Receipt of impact fees takes place over many years and is not guaranteed
Fees can only be charged and used for *system* and not *project* improvements
Impact fees are only collected for new growth in a community

User Fees

It is good practice to regularly review fees charged for building permits, business licenses, rentals, recreation programs, etc. to ensure that costs are being covered.[3] If costs are not covered, then General Fund monies are being diverted to uses which could legitimately be covered by fees, thereby reducing funds available for other purposes.

Business License Fees

Utah law allows for the collection of business license fees, including disproportionate and enhanced services fees.

[3] In some cases, such as for youth and senior programs, many cities have the policy of subsidizing some of the costs.

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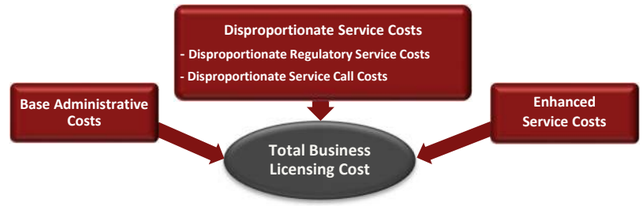
Alta | DRAFT Master Plan Funding Options



There are two types of disproportionate service costs: disproportionate regulatory costs and disproportionate service call costs.

Regulatory service costs occur when a business incurs additional regulatory costs (beyond the base costs) for inspections or other regulatory services. While Alta does have a law-enforcement shift exclusively for alcohol enforcement, the cost of this shift is completely covered by funds received from State programs. Therefore, Alta does not have any disproportionate regulatory service costs that were identified in its most recent business license fee study.

Disproportionate service call costs include the cost of services for police calls above the base level of service multiplied by the cost per call. Disproportionate service call costs were included in Alta's last business license fee study.

Alta provides enhanced service to the Alta Ski Area and Lodges with 20 or more rooms. Based on the Town's most recent business license fee study, the Police Department patrols the parking lots for these areas for approximately one hour each day during peak ski season as well as during peak summer activities to assist with parking problems and the general security of parked cars which may be left unattended for hours at a time. These enhanced costs were included in the Town's most recent business license fee study.

Housing

If the Town decides to pursue housing development or incentivization in the future, the State and federal government have provided a variety of tools to assist with housing development.

Low Income Housing Tax Credits (LIHTC)

Last year, the federal LIHTC program gave State and local LIHTC-allocating agencies the equivalent of approximately $10 billion in annual budget authority to issue tax credits for the acquisition, rehabilitation, or new construction of rental housing targeted to lower-income households. This is an attractive tool to many developers that lowers their overall costs of developing affordable housing. In 2024, the Utah Housing Corporation (UHC) awarded over $13.5 million in 9% federal Low Income Housing Tax Credits (LIHTC) and over $7.1 million in State of Utah Tax Credits.

Home Ownership Promotion Zones (HOPZ)

HOPZs were enacted by the Utah Legislature in its 2024 session in SB168. The basic requirements for a HOPZ are as follows:

- Can be established directly by a municipality;
- Must be 10 acres or less;

Finance Encyclopedia

- Must be zoned for at least 6 units per acre;
- 60 percent of the housing units must be affordable (less than 80 percent of the median county home price); and
- Housing must be deed-restricted for at least five years.

If created, the municipality can receive 60 percent of the tax increment for 15 years.

First Home Investment Zones (FHIZ)
SB268, passed by the Utah Legislature in 2024, allows cities to use tax increment to create a town center, with owner-occupied units, in areas not covered by HTRZs. There must be a minimum of ten acres and a maximum of 100 acres in a FHIZ. The approval process is similar to that of HTRZs, with HTRZ committee approval required.

There is a per-acre minimum residential density requirement of 30 units per acre, and 51 percent of the developable acres in the FHIZ zone must be residential development of which 50 percent must be owner-occupied. However, up to half of these homes can be outside the FHIZ zone. Homes within the zone must be 25 percent owner occupied and homes outside must be 100 percent owner occupied.

At least 12 percent of homes inside the FHIZ zone, and at least 20 percent of homes outside the zone must be affordable. Owner-occupied homes are defined to be affordable at 80 percent of the zip code median home price; rental homes are affordable at 80 percent the county median income.

New homes outside the FHIZ zone, but within the proposing city/town (“extraterritorial homes”), can count towards the requirement of 30 units per acre if they are owner-occupied for at least 25 years and meet other requirements: minimum of six units per acre, single-family owner-occupied, and 80 percent detached units.

If a FHIZ is approved, the municipality can receive up to 60 percent of property tax increment capture from all taxing entities inside the zone for 25 years per parcel (out of 45 years), with a maximum of three tax increment phases. Increment can be used for project and system infrastructure costs for the benefit of the FHIZ and related homes outside the zone.

Public Private Partnerships (P3s)

Public-private partnerships allow governments to complete large projects with private funding. Costs are increased somewhat for consumers due to the need for the private sector to make a profit. However, many also argue that the private sector can be more efficient in constructing new facilities and therefore cost is not a factor.

Under this scenario, there would have to be a means for the private sector to charge fees or rates in order to be paid back construction costs and make a profit.

Pre-Design Checklist

The Pre-Design checklist will help inform the Town of items to be completed before issuing an RFP to design teams. Some of the items listed could be completed by the selected design team, but it is typical for the Owner to provide the majority of the information listed below. As the Town gathers this information and makes decisions, it will start to form the basis of a very thorough and well-thought out RFP. The content below is intended to identify to the Town areas of concern that should be addressed.

- Project Overview -
  - Describe the project and why this project is necessary.
  - What are the goals and objectives of the project? These can be the same or different. Goals might be aspirational and what you want to push for; while objectives might be the minimum acceptable requirements.
  - Who is the Town's representative/project manager? Is it someone on staff or will you hire a third party Owner's representative?
- Project Budget -
  - What is the budget for construction?
  - What is the budget for design?
  - How will the project be funded? Will it utilize grants or other Federal funds?
    - Refer to Zion Public Finance encyclopedia.
    - The utilization of federal funds will likely trigger "Buy America" requirements which requires that contractors utilize materials that are mostly made in the USA. This could have cost impacts.
  - Is there an allowance for contingency or risk?
    - Inflation and political items have caused significant increases in construction costs in the last decade. If a budget is established now for work to be completed in 5 years, ensure it includes escalation costs and contingency to minimize risk to the Town.
- Project Schedule -
  - When would the Town want construction to be completed by?
    - How do winter conditions impact the construction timeline? Is phasing the project allowable?
- Site Information -
  - Site Survey -
    - Understand where easements are, site setbacks, site boundaries, utilities
  - Geotechnical -
    - Bearing capacity of the soil - how tall can the *soil* support?
      - Bore holes or pit sampling.
  - Zoning -
    - Do the parcels need to be rezoned to allow for the building to be built?
  - Title Work and Recording Property Ownership -
  - Environmental Assessments - is the site in a floodplain or part of a protected wetland?
  - Utility Capacity -
    - How much water is available? Does the Town have water rights that can support this?
    - Power requirements/capacity at the top of the canyon
    - Stormwater requirements
  - Avalanche Study -
    - Does this site need a new or updated avalanche study?
    - Avalanche danger will have significant impact on structural design which will impact architectural design (including layouts and massing) which will have a significant impact on construction costs.
- Regulatory Requirements -
  - Building Codes -
    - Currently the State of Utah is utilizing the 2021 International Building Code and the 2009 ANSI A117.1 (accessibility document). This could change in future years.
    - What will be the Town's permitting process? Will they utilize the typical contract reviewers or will a special third-party reviewer need to be hired?
      - Consider if any of the contract reviewers could be on selected design teams.
  - Historic Preservation -
    - While a new building would not be considered historic, what would the town like to do with other properties such as the Tom Moore Toilet or Alta Central?
  - As Little Cottonwood Canyon is part of a watershed, what considerations should be in place to protect it?

Pre-Design Checklist

- Program Requirements -
  - Refer to other sections of this report for space requirements and allocations, functional needs, future expansion identified, adjacencies, security and safety needs, and any other special equipment or infrastructure needs.
    - Design teams will likely want to verify this information again, especially if a number of years has passed since this project was completed and design begins.
  - Alta-centric
    - Define what is Alta in terms of a building.
      - This has been a major hurdle for previous efforts to design and construct new Town facilities. While meeting with Council over the course of this project, one council member said that he couldn't say in the moment what made a building fit in Alta. What fits in Alta and what is acceptable for a building to look like should be defined and documented by the council and/or Town residents before design.
- Sustainability and Energy (Stewardship) Goals -
  - What areas do you want to focus on? Lighting, power, water, building envelope, materials, et cetera
  - Are there certifications that the Town wants to pursue such as LEED, WELL, State of Utah High-Performance Building Standard, et cetera?
  - Are there energy efficiency targets?
    - Does the Town want to integrate renewable energy options such as solar panels?
  - Being part of the watershed, what water conservation efforts should be implemented in a new facility?
  - As part of any demolition and new construction, is there a desire to minimize material waste and maximize material reuse? If so, what targets are they?
  - Does the Town wish to hire a sustainability consultant to oversee this, or have any design or construction team have a dedicated person that can fill this role?
- Stakeholder Engagement -
  - To what extent does the Town want the selected design team to engage with the council? With community residents?
    - How should the design team communicate with residents if that is required?
    - Is a full public/community engagement plan desired?
  - Will the design team need to conduct design workshops and charrettes?
    - Consider if residents become burned out with outreach for new possible facilities.
  - How will decisions be made and integrate feedback from residents, the council, and staff? What hierarchy is there for the design team to follow?
- Design and Construction Constraints -
  - Where can staging and storage of construction material occur - will it be in Little Cottonwood Canyon or will it be in Salt Lake Valley?
  - What areas will require temporary construction to protect the road and passing pedestrians?
  - What materials are desired for construction? Are the selected/desired materials constrained by material availability or cost prohibitive?
  - Where will construction staff be able to park?
- Risk Management -
  - Identify potential risks and mitigation strategies
  - Insurance and liability considerations
  - Safety and emergency response planning
  - Identify potential risks and mitigation strategies.
    - These should be identified early and tracked through every meeting (both in design and construction).
  - Due to the possibility of avalanches to impact winter construction, what insurance and liability requirements should be instituted? Are they higher than what the Town typically requires?
  - Due to the possibility of avalanches to impact winter construction, it is recommended that the Town require safety and emergency response plans for the selected contractor. Coordination should occur between the contractor and the Alta Marshal's Office.
- Project Delivery and Contracting -
  - What is the Town's preferred project delivery method?
    - Design-Bid-Build
    - Design-Build
    - Construction Manager at Risk (CMAR)
    - Construction Manager/General Contractor (CM/GC)

Pre-Design Checklist

- How will the town select the design team and contracting team? Is it low-bid or value-based selection?
- What roles and responsibilities will the Town assign to staff?

Appendix

Introduction

Recommended Solutions

In the Appendix, the full complete description of characteristics and current condition of building systems are documented, along with proposed **“Good”, “Better”, “Best”** approaches for correction/remediation or further action that should be taken to stabilize the components.

As a rule of thumb, the “Good” recommendation would be considered a “low hanging fruit” approach to prevent deterioration or correct a minor issue.

Implementation of the “Better” recommendations would be an approach that would require a moderate expense to correct an issue.

Implementation of the “Best” approach would be an approach to completely replace a problematic condition.

Alta Town Office Building

Built in 1994, the Alta Town Office is a two-story cast in place concrete structure with punched openings for windows and doors. The building is an administrative office building with offices and meeting spaces for town administrative staff, the mayor, town council and other governmental employees.

A. Visible Foundation System

The building is partially recessed into the hillside with the south and east entrance doors at grade. The grading of the hill slopes along the west wall, with the highest portion at the rear (north) and lowest at the front (south) of the building.

The visible portion of the foundation system is cast-in-place concrete stem integral to the building exterior wall. There is no differentiation between foundation and wall. The east entry has a concrete column supported bearing on a concrete grade beam.

The rear (north) wall is only partially exposed above the hillside and forms a site retaining wall. The hill continues to rise behind the building. The grading immediately adjacent to the building has been adjusted to slope away from the wall to a catch basin to capture and direct runoff away from the building. The early autumn timing of the site visit coincided with the trees on the site beginning to drop their leaves. Site landscaping is mostly naturally occurring plants and are right up against the foundation and retaining walls.

The concrete foundation and retaining walls are in good overall condition and do not exhibit areas of spalling, honeycomb or significant cracking.

Definition:
spalling / break off in fragments

Recommended Measures

Good – Periodic pressure wash cleaning and inspection of the foundation and retaining walls.

Better – Loose leaves and other vegetation adjacent to the foundation should be removed to maintain a 3’-0” minimum buffer against the concrete walls. The buffer will prevent water from being held against the foundation and retaining walls and reduce potential water infiltration and concrete damage from freeze/thaw action during cold weather.

Best – No recommendations.

Alta Town Office Building

B. Building Envelope and Exterior Finish Materials

The exterior walls are cast-in-place concrete and are integral with the foundation walls. The concrete is a smooth form finish and has exposed cone tie recesses and defined form lines. The south wall is punctuated by metal panel infill with windows and a door and a large projecting metal panel bay. The interface of the metal panel and the concrete appears to be sealed effectively with an elastomeric sealant.

The east wall acts as a partial retaining wall as the slope of the hill progress from front (south) to rear (north). The main entrance is located at the second floor level and is comprised of an aluminum storefront system vestibule with full height windows and a glass door. The entry is protected by a triangular shaped concrete canopy. The top of the concrete wall is discolored from water resting on the top surface of the wall and then running down the exposed face. It appears that the partial parapet cap (see the Roofing section) has steel components which are rusting as the water streaks from the top of the wall appear to be rust colored. There is surface mounted conduit that wraps over the top of the entry vestibule connecting the electrical meter and service panel on the wall to the right of the entry and a convenience outlet box and additional conduit extending below grade to the left of the entry. At the time of the visit, the main entry door was damaged and in need of repair.

The west wall acts as a partial retaining wall as the slope of the hill progress from front (south) to rear (north). This wall has one punched opening filled with metal panel and a window, similar to the south wall.

The north wall is acting as a retaining wall and only the top of the wall is exposed to view. The hill slopes gently from east to west and the wall exposure increases from about four (4) feet to about seven (7) feet as the slope extends to the west.

Recommended Measures

Good – Periodic pressure wash cleaning and inspection of the foundation and retaining walls. Periodic inspection of the sealant at the metal panel to concrete interface.

Better – Landscape maintenance as describe in the Visible Foundation System section.

Best – No recommendations.

Definition:
elastomeric / rubber-like, liquid coating applied to surfaces to create a flexible, waterproof membrane

Alta Town Office Building

C. Exterior Windows and Doors

There are six (6) windows and two (2) entry doors in the building. The windows and doors are anodized aluminum storefront systems. The windows are all set into metal panel walls that infill punch openings in the cast-in-place concrete walls. Four of the windows are a combination of a narrow, operable casement window which pivots outward, hinged on the left jamb, flanked by wider fixed windows. Two windows are similar but, consist of a single operable casement flanked by one fixed window. The windows have triple glazed insulated glazing units (IGU). The IGU's do not have moisture inside the units, as such, the units appear to remain sealed. The glazing type in the windows is unknown, but their age suggests that the glass would be low-E at a minimum. The windows, which are also assumed to be thermally broken, will have slightly above-average energy conservation performance.

The storefront door systems are also anodized aluminum and match the window sightlines and detailing. Both door systems are mulled together with windows, the main entry also has a transom. It is also assumed that the IGU's have intact internal seals as no moisture was observed between panes of glass.

Definition:
IGU / insulated glazing units

Recommended Measures

Good – Periodic cleaning and inspection of window seals. Any evidence of moisture between panes should be remedied by replacing the IGU. Adopt a periodic maintenance schedule with regular lubrication of operating hardware.

Better – Replace the IGU's with spectrally selective glazing (i.e. SolarBan 90) when internal seal failure occurs.

Best – Immediate replacement of the window IGU's with a spectrally selective glazing. This will increase the window energy performance but the energy cost savings would not likely return the investment in IGU replacement.

Alta Town Office Building

D. Roofing

MEMBRANE

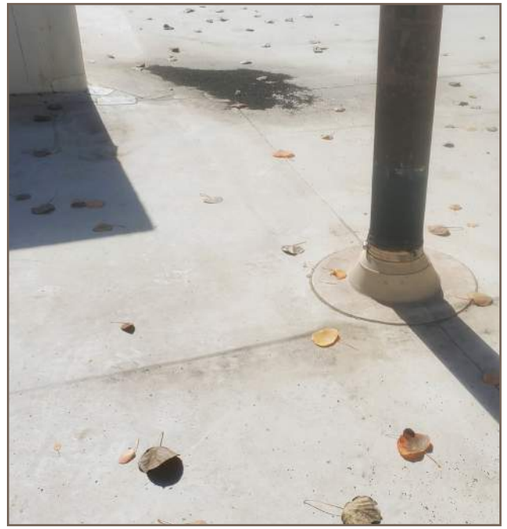
The building has three areas of membrane roofing:

1. The main building
2. The concrete canopy
3. The main entry storefront system

Only the main roof and the concrete canopy roofing were readily accessible for visual inspection. The roofing membrane appears to be a white TPO. The roofing may be PVC, but the typical dark colored line at the membrane seams is missing. The membrane installation is assumed to be a 20-year warranty system as vertical surface termination bar lacks the usual counter flashing required for a 30-year installation warranty. There is no obvious visual indication of exposed scrim, pinholes or seam separation and no obvious signs of roof leaks inside the building. The membrane appears to be in good condition, but based on the age of the building, this is likely the original roof membrane and plans should be made for replacement in the next five (5) years.

Definitions:
TPO / thermoplastic made from rubber and polypropylene

PVC / single-ply membrane used in roofing



DRAINAGE

Drainage is facilitated by a primary roof drain near the north wall of the building supplemented by a trough wall scupper on the west. The drain has heat tracing, but the functionality of the system was not verified. The concrete canopy roof drains onto the main roof through a small (approx. 3" diameter) round scupper. The roof appears to drain reasonably well, there is evidence of small areas of ponding, but these are limited in size and are not suspected of being an issue. The early autumn timing of the site visit coincided with the trees on the site beginning to drop their leaves and the leaves have accumulated along the edges of the parapet walls and roof drain.

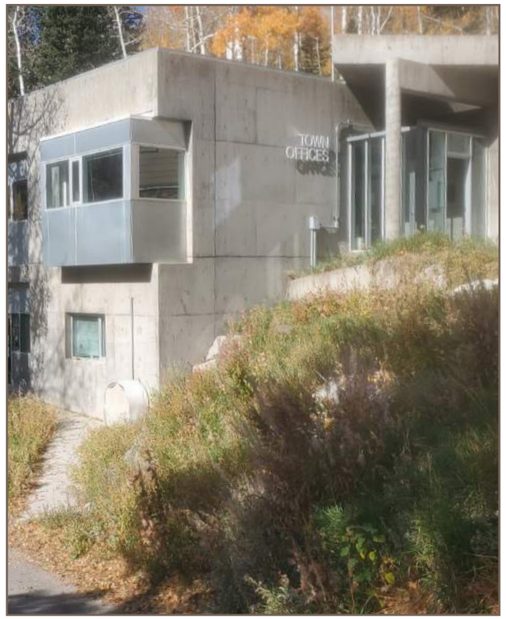
Penetrations through the roof are limited to the roof drain and one four inch (4") pipe flue/vent. The vent has a low pipe jack with a clamping band and sealant.

Alta Town Office Building

PARAPET

The parapet walls are an extension of the cast-in-place concrete walls and terminate with a low slope to the exterior. There is a galvanized parapet cap that covers half the width of the exterior wall and extends down the inside face about four-inch (4”). The cap appears to be in good condition with the vertical seams not exhibiting damage or open gaps. The concrete canopy membrane extends up the face of the parapet, over the top and terminates with a termination bar located about 1/4 the width of the wall from the outside edge. There is no parapet cap at the concrete canopy. The lack of a parapet cap on the canopy and the cap not extending to the outside face of the main parapet walls was a conscious design decision based on the aesthetic of the clean concrete edge at the top of the wall. This decision results in a compromise to the performance of the roofing membrane termination on the top of the wall.

Definition:
Parapet / low wall or railing that extends from a wall at the edge of a structure



Recommended Measures

Good – Frequent removal of the leaves and other debris from the membrane to protect the drain from clogging.

Better – Replacement of the pipe vent sealant.

Best – Replacement of the vent pipe jack boot with a boot that is 12” or taller. Install a Presto-tite roof edge metal system when the roofing membrane is replaced. This is a system where the membrane wraps over the top of the wall and down the face of the exterior three inch (3”) and is covered with a two-piece edge metal. This system provides a much more robust waterproof detail at the top of wall condition.

Alta Town Office Building

E. Interior Features and Finishes

WALLS

The interior of the office is in very good condition. Interior walls are painted gypsum board with exposed concrete columns. There are clerestory windows on the second-level to project as much natural light as possible into the building interior.

CEILING

Ceilings are a combination of exposed concrete and lay-in acoustic tile. Only one area of the first level at the southeast window has any evidence of roof or piping leakage. The leakage is suspected to be caused by the projecting metal panel bay window system on the second-floor. The storage room on the first level is a gypsum board ceiling.

CEILING LIGHTING

Ceiling lighting is a combination of surface mounted and grid mounted fluorescent troffers. There are a few incandescent light fixtures in back-of-house service areas.

FLOORING

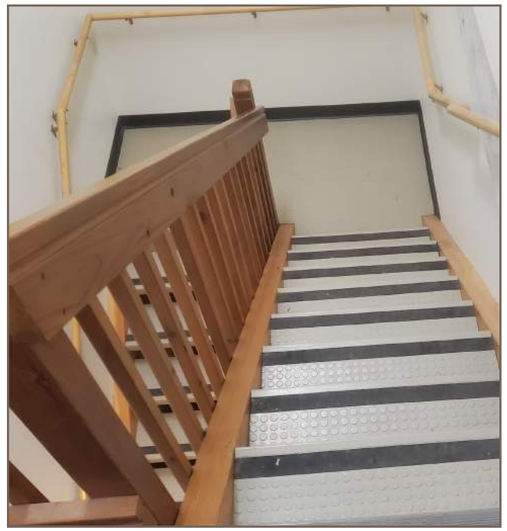
Flooring throughout the hallways and offices are carpet tile and rubber base. The second-floor vestibule and reception area is a walk-off carpet. The second-floor work/breakroom and skis/coats room are VCT tile with rubber base. The restrooms are ceramic or porcelain tile with a cove base.

STAIRS

The interior stairway is rubber treads and risers with a contrasting tread edge. The stairway intermediate landing and floor, janitor’s closets, and mechanical room are exposed concrete. The stair landing has a rubber base, but the janitor’s closet and mechanical rooms have no base. Transitions between flooring types are rubber transition profiles.

HANDRAIL

The handrail and guardrail in the interior stair are wood. The outside of the stair has a code compliant unfinished wood handrail, while the interior is a “bread loaf” railing that is not compliant with the current building code. The rail does not continue around the intermediate landing newel post un-interrupted, nor does the rail extend the required distance at the top and bottom of the stair.



Recommended Measures

Good – Replace incandescent lamps with LED lamps– see electrical narrative.

Better – Replace fluorescent light fixtures with LED – see electrical narrative.

Best – Replace stair guardrail / handrail with a system that is compliant with the current building code.

Alta Town Office Building

F. Site Access and Overall Accessibility

SITE ACCESS

Because the building is built into a steep hill, the building does not have an accessible path from a parking area. The two sidewalk approaches to the entries are both close to being accessible but have glaring failures. Despite the accessibility failures, the walks are comfortable to navigate, and most visitors will likely have no issues gaining access to the building. Of the two walks, the first-level entrance is the closest to an accessible path, but the sidewalk stops short of the road and has a short section of vegetation interrupting the path. The second-level walk has a step at the bottom that also interrupts the walk from the road. Both approach walks appear to be close to the 5% maximum slope, but likely exceed that limit.

BUILDING ACCESSIBILITY

Accessibility within the building is also not compliant with the current accessibility standards in most cases. Both the entry lobby reception desk and the first-level work desk millwork have a decorative projection feature that are too small to act as accessible transaction counters. The first-level restrooms are not accessible as the sink and toilet are too close together to provide the required clearances. The current standards for accessibility also include vertical grab bars in restrooms which are missing in the restrooms in the building. The door hardware is accessible. The building does not have an elevator or wheelchair lift to provide an accessible path between floors. This is not necessarily and issue if the services provided are available in an area on an accessible path.

Recommended Measures

Good – Verify the actual slope of the walks. Remove the vegetation at the first-level entrance walk and pour a concrete strip to connect the walk to the road. Remove the step at the bottom of the second-level entrance walk and pour a concrete strip to connect the walk to the road. Verify clearances in restrooms and remove the accessible restroom signage at restrooms which do not comply.

Better – Add vertical grab bars to the restrooms.

Best – Remove both walks and reconstruct new walks that meet accessibility requirements with proper slopes, edge protection and handrails. Reconfigure the lobby reception desk and the first-level work desk to have an ADA transaction counters that conform to the current accessibility standard. Reconfigure at least one restroom into a multi-gender, single occupant to comply with accessibility requirements.

Alta Town Office Building

Structural Assessment

CALDER RICHARDS
CONSULTING ENGINEERS

TOWN OFFICE BUILDING – Structural Assessment

The building structure is a two-level concrete structure with a concrete roof and floor, interior concrete columns and exterior concrete bearing shear walls. The foundation system is a conventional spread footing foundation. The age of construction is approximately 1993.

As a general assessment, observation indicates that the structure is in excellent condition with no signs of distress and that it has supported snow and avalanche loading during the time of use. Review of the existing structural drawings indicate that the design is well thought out with positive load paths occurring from roof to foundation.

An avalanche hazard and load analysis study was performed for the site prior to design and the structural engineer adequately addressed this loading in his design. This is noted in a correspondence between the structural plan reviewer and Alta's Town Manager. The Governing code at the time of design was the 1991 Uniform Building Code (UBC). The current code is the 2021 International Building Code (IBC). There have been significant changes made for seismic and wind loading criteria since the UBC. In some cases, the loading has decreased slightly. But because the structure was designed for extreme avalanche loading it is reasonable to assume that current IBC earthquake and wind loading would not control the design and except for some required detailing changes, the structure may be close to meeting the current code provisions.

The design considered a floor live loading criteria of 100 pounds per square foot (PSF), which is well above current IBC required loading of 50 PSF for offices. The higher loading is typically required for assembly loading such as meeting halls, restaurants, and auditoriums.

Conclusion - The Town Hall Building is in excellent condition and is anticipated to perform well during a seismic, wind, or avalanche event. The roof structure can support heavy snow loading without the need for shoveling. Thus, continued use of the building can be anticipated for future years.

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MECHANICAL and Plumbing ASSESSMENT

Project: Town of Alta Master Plan – Town Offices
April 2024
Principal Engineer: Vinnie Figlioli, PE

William Levitt Town Office Building – Assessment

Mechanical and Plumbing Overview

The building is a two story concrete building that was built in 1993. The building is conditioned by two natural gas furnaces. One furnace for each level. The furnaces are both located in the first floor mechanical room. Outside air is routed from a side wall louver and ducted to each furnace with associated balancing dampers. Both furnaces were replaced in 2022

The over all plumbing system of the building seems to be in good working order. The water heater is located within the first floor mechanical room and was replaced in 2017. Fixtures are from the original build.

No fire suppression system was found within the building.

Mechanical Assessment

The mechanical system matches the original design intent with some variation to the size of the furnaces. The furnaces have been replaced with slightly larger units. This is not an issue and will not affect the performance or life of the furnaces. The furnaces have been maintained and seem to be in good working order.

All ducting, registers, grilles, and louvers are in good working condition.

Plumbing Assessment

The plumbing system matches the original design intent and does not appear to be modified. Some fixtures have been replaced but the majority of the fixtures are original to the 1993 build out.

The water heater was replaced in 2017 and seems to be in good working condition. PRV station is operational and no visual leaks were observed.

The main plumbing vents through the roof are extended and are intact. The roof drain needs to be cleaned but no damage was observed.

Alta Town Office Building

Mechanical & Plumbing Assessment

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Fire Suppression Assessment

No fire suppression system within the building. It is assumed that this was not required at the time of the original construction.

Equipment Information

Equipment	Age (yrs)	ASHRAE Life Expectancy (yrs)	Size
1st Floor Furnace	4	18	97,000 BTUH
2nd Floor Furnace	4	18	97,000 BTUH
Water Heater	7	12 to 15	(2) 4.5 Kw Elect

Recommendations and Priorities:

Recommendations			
All recommended upgrades are prioritized from 1-3 where:			
1)	Highly recommended upgrades (code violation, life safety, outdated systems, poor conditions, or similar)		
2)	Recommended upgrades (border line code violation, upgrades that provide additional comfort or value, or similar)		
3)	Optional upgrades (owner desired)		
Area	**Systems**	**Recommendation**	**Priority**
First Floor	Mech Ducting	Clean all existing ducting and grilles	3
Second Floor	Mech Ducting	Clean all existing ducting and grilles	3
All	Mechanical	Addition of a Building Automation System for remote access and control	3
All	Plumbing	Replace plumbing fixtures with water saving fixtures.	3
All	Fire suppression	Explore the possibility of adding a fire suppression system.	3

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Alta Town Office Building

Mechanical & Plumbing Assessment

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Summary

The current mechanical and plumbing systems within the building are in good working order. The major equipment has all been replaced within the last 4-7 years and does not appear to have any issues. This building is in good working order.

Thank you for choosing Spectrum Engineers to provide this assessment. If you have any questions or would like further information, please do not hesitate to contact me directly.

Sincerely,

By: _____

Vinnie Figlioli, P.E. Principal Mechanical Engineer

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Alta Town Office Building

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities - Town Offices
Electrical Assessment Report

October 29th, 2024

1. Electrical Service and Power

a. Electrical service is provided by Rocky Mountain Power (RMP).

b. As no other utility equipment is spotted close to the building, ***we have assumed that the building is fed from a nearby pole mounted, single-phase tub transformer*** (*Exhibit 1*). This assumption to be confirmed by the Owner.

c. The meter (meter # 50 823 601) and main service disconnect are located outside the building at the main entry. The as-built drawings indicate the service disconnect size to be 200A, but we have observed a 150A (120/240V, 1ph, 3w) breaker during the site visit (*Exhibit 4*).

Exhibit 1 – Utility transformer (assumed) for Town Office and Marshall Building electrical service

Exhibit 2 – Town Office and Marshall Building electrical service meter and service disconnect

Exhibit 3 – Town Office and Marshall Building electrical service meter

Exhibit 4 – Town Office and Marshall Building electrical service main service disconnect – 150A

d. ***We have also assumed that the Marshall Building is fed from the same service.*** This assumption to be confirmed by the Owner.

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e. The capacity of the existing electrical service has been verified by using the peak demand data from the RMP power bills from July 2023 to August 2024. Since the power factor information has not been provided, ***we have assumed the power factor to be 0.9***. The existing service has 32% spare capacity. The service appears to be adequate for the current electrical loads. If major renovations, additions, or large loads (such as elevator and similar loads) are planned in the future, the service size should be checked again at that time and the transformer size should be coordinated with RMP.

Town of Alta - Town Offices and Marshall Building

Service Capacity Calculations

240 volts — Meter # 50 823 601

1 phase

#	Billing Date From	Peak Demand kW	Power Factor	Peak Demand kVA
1	July 2023	13	0.9000	18
2	August 2023	11	0.9000	15
3	September 2023	11	0.9000	15
4	October 2023	12	0.9000	17
5	November 2023	11	0.9000	15
6	December 2023	13	0.9000	18
7	January 2024	14	0.9000	19
8	February 2024	12	0.9000	17
9	March 2024	11	0.9000	15
10	April 2024	9	0.9000	13
11	May 2024	9	0.9000	13
12	June 2024	8	0.9000	11
13	July 2024	7	0.9000	10
14	August 2024	7	0.9000	10

Highest recorded peak demand in kVA:	19 kVA
NEC safety factor:	1.25
(Peak demand in kVA)*(Safety factor):	**24 kVA**
Peak demand in Amps @ 240V, 1ph:	101 A
Existing service size in Amps:	150 A
Spare cpacity (%):	**32%**
Spare capacity Amps @ 240V, 1ph:	49 A

f. The main service disconnect feeds panelboard A located at the lower level. The panelboard is installed in 1993, it has a few spare circuit breakers, and it appears to be in fair condition. The panelboard has another 10-15 years of useful life.

g. The office building is also backed up by the diesel generator located at the Marshall Building. We were not able to determine during the site visit how the generator connects to the office building. **This will have to be further investigated if the renovations or additions are considered.**

h. Grounding and bonding systems, including grounding electrodes and bonding jumpers, were not completely accessible or visible during the site observations. The only observed grounding electrode was water pipe. These portions of the electrical system are critical to safety and power quality of the system. Further investigation should be done to confirm the existence, resistance readings and condition of the grounding and bonding systems. A licensed electrician will be required to safely open and check these systems.

Alta Town Office Building

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Town Offices
Electrical Assessment Report

Exhibit 5 – Panelboard A

Exhibit 6 – Standby generator in the Marshall Building

i. A large mechanical duct is located above the boiler disconnect switch which not in compliance with *NEC 110.26 (E)*. This should be fixed in by relocating the duct or the disconnect.

j. The wiring devices (light switches, receptacles, etc.) appear to be in good conditions.

k. The women's restroom receptacle outlet is not GFCI protected as required in *NEC 210.8 (B)(1)*. It is unknown if the outlet is protected by an upstream GFCI outlet. This should be further investigated and a proper GFCI protection should be provided.

Exhibit 7 – Mechanical duct above the boiler disconnect

Exhibit 8 – Existing receptacle and data outlet

l. There were no visible surge suppression devices installed in this building. It is recommended to install surge suppression devices on the main service panel and at the selected panelboards that serve sensitive loads or expensive equipment.

2. Lighting System

a. Most of the building has florescent lights. Incandescent bulbs are still present at some locations (janitor closet, for example).

b. The existing light sources are outdated and inefficient. All existing light fixtures and bulbs are recommended to be replaced with new LED lighting. Each space will need to be evaluated individually to determine the extent of the upgrade needed.

c. The as-built drawings indicate the presence of the egress lighting fixtures with the integral battery packs. We were not able to field verify the egress light levels (1 fc average, and 0.1 fc minimum). If the lighting upgrade is considered in the future, the egress lighting should be completely upgraded at that time.

d. Existing lighting controls consist almost solely of the toggle switches. A couple of wall mounted occupancy sensors are observed in the restrooms.

e. Significant upgrades to the interior and exterior lighting control systems are needed to meet the latest energy codes. There are opportunities for energy savings by installing lighting controls such as occupancy sensors and timed relay controls.

Exhibit 9 – Fluorescent surface troffers

Exhibit 10 –Fluorescent light and occupancy sensor switch

3. Fire Alarm System

a. There is no fire alarm system in the building.

4. Telecommunication System

a. The demarcation equipment and main telecom rack are located in the boiler room at the lower level.

Exhibit 11 – Telecom rack

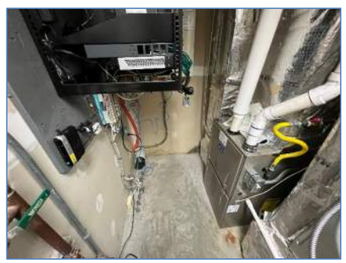

Exhibit 12 - Furnace, duct, and pipes in front of telecom rack

Alta Town Office Building

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Town Offices
Electrical Assessment Report

b. The furnace, mechanical ducts, and pipes are located right in front of the telecom rack, providing barely any clearance for proper access to the telecommunications equipment.

c. There is no dedicated A/C system nor telecommunication ground bus bar.

5. Security Systems

a. Except one camera in the main lobby, no other security system devices are observed.

6. Audio/Video

a. Conference Room Video system consists solely of a wall mounted display. There are no provisions for Video Conferencing, nor connection of video inputs at the conference Table.

b. Assuming display Is used to shop technical content, display is undersized.

c. There are no provisions for in room voice lift. – The room is small enough that the Video Conferencing bar is appropriate

d. There is no floor box below the conference table, limiting cable options.

Exhibit 13 – Conference Room AV System

Exhibit 14 – Conference Room Display Mounting

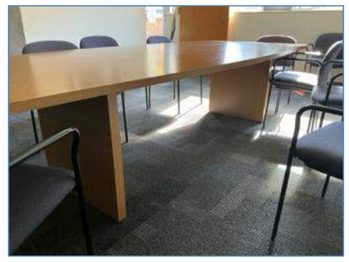

Exhibit 15 Conference Room Table – w/o floor box

Recommendations

The following table summarizes the list of the recommended upgraded. All recommended upgrades are prioritized from 1 to 3, where:

1 → Highly recommended upgrades (code violations, life safety, fire hazards, outdated systems, poor conditions, and similar)

2 → Recommended upgrades (border line code violations, upgrades that provide additional comfort and flexibility, technology upgrades)

3 → Optional upgrades (owner desired upgrades)

System	Recommended Upgrade	Priority
Electrical distribution	• Provide additional field investigation as required to identify and document exact connections between the building electrical service and the generator in the Marshall Building.	1
Surge protection	• Provide surge protection at the main panel.	2
Electrical equipment clearance	• Relocate the boiler disconnect switch.	1
Grounding and bonding	• Hire a licensed electrician to confirm the existence, provide resistance readings, and review the conditions of the grounding and bonding systems.	1
GFCI outlets	• Replace non-GFCI outlets with GFCI outlets in all locations specified in *NEC 210.8 (B)*.	1
Lighting	• Replace all lights with the outdated light sources (fluorescent and incandescent) with new LED lights. • Provide required egress lighting.	1
Lighting controls	• Provide new lighting controls for interior and exterior lighting as needed to comply with the latest adopted energy codes.	1
Telecommunication system	• Provide dedicated telecom room with proper cooling and grounding for all telecom racks and equipment.	2
Security system	• As recommended by the Owner.	3
Audio/Video system 1	• Relocated Video Conference bar from Council Chambers to Conference Room.	2
Audio/Video system 2	• Replace Display with 65” display	2

Alta Town Office Building

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Town Offices
Electrical Assessment Report

Audio/Video system 3	• Add Wireless presenter to extend connections to Conference Table.	2

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/20/2024
PROJECT NAME…….....ALTA TOWN OFFICE FACILITY ASSESSMENT		
LOCATION……..……..ALTA, UT	**TOTALS**	
ARCHITECT…….....FFKR		
STAGE OF DESIGN…….FACILITY ASSESSMENT		

ITEM #	DESCRIPTION		TOTAL
	COST SUMMARY		
	FOUNDATION SYSTEM		
F1	WASH/ INSPECTION OF FOUNDATION	$	5,253
F2	CLEAN & REGRADE AROUND FOUNDATION	$	23,639
	BUILDING EXTERIOR		
BE1	WASH/ CAULKING OF EXTERIOR	$	13,789
BE2	WINDOW MAINTENANCE	$	6,019
BE3	REPLACE GLAZING WITH SOLAR BAN 90	$	36,772
BE4	REPLACE GLAZING SYSTEM WITH SPRECTRALLY SELECTIVE SYSTEM	$	113,818
BE5	CLEAN ROOF MEMBRANE	$	5,472
BE6	REPLACE PIPE/ VENT BOOTS	$	100,530
	INTERIOR		
I1	REPLACE LAMPS WITH LED	$	13,420
I2	REPLACE LIGHT FIXTURES	$	65,609
I3	REPLACE STAIR GUARDRAILS	$	23,530
	SITE AND ACCESSIBILITY		
S1	NEW CONCRETE AT SITE	$	20,976
S2	ADD VERTICAL GRAB BARS AT RESTROOMS	$	2,663
S3	REDO SIDEWALKS, LOBBY RECEPTION AND RESTROOM FOR COMPLIANCE	$	243,504
	MECHANICAL		
M1	CLEAN DUCTS	$	5,666
M2	BUILDING AUTOMATION	$	47,716
M3	REPLACE PLUMBING FIXTURES	$	30,096
M4	INSTALL FIRE SUPPRESSION SYSTEM	$	210,490
	ELECTRICAL		
E1	FIELD INVESTIGATION	$	5,837
E2	SURGE PROTECTION	$	5,198
E3	RELOCATE BOILER SWITCH	$	11,856
E4	REVIEW BONDING AND GROUNDING	$	6,931
E5	INSTALL GFCI OUTLETS	$	2,873
E6	INSTALL LIGHTING CONTROLS	$	23,858
E7	PROVIDE DEDICATED TELECOM ROOM	$	58,368
E8	AUDIO VISUAL MODIFICATIONS	$	31,646

****ESTIMATE IS PRICED IN TODAY'S DOLLARS - ESCALATION IS NOT INCLUDED****

Page 1

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024
PROJECT NAME…….....ALTA TOWN OFFICE FACILITY ASSESSMENT		
LOCATION……..……..ALTA, UT	**ITEM DETAIL**	
ARCHITECT…….....FFKR		
STAGE OF DESIGN…….FACILITY ASSESSMENT		

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	FOUNDATION SYSTEM				
F1	**WASH/ INSPECTION OF FOUNDATION**				
	Pressurewash Foundation	1440	SF	$ 2.40	$ 3,456
	SUBTOTAL				**$ 3,456**
	GENERAL CONDITIONS	**20%**			**$ 691**
	BONDS & INSURANCE	**2%**			**$ 69**
	OVERHEAD & PROFIT	**10%**			**$ 346**
	DESIGN CONTINGENCY	**20%**			**$ 691**
	TOTAL CONSTRUCTION COST				**$ 5,253**
	TOTAL				**$ 5,253**
F2	**CLEAN & REGRADE AROUND FOUNDATION**				
	Regrade and landscape improvement	2160	SF	$ 7.20	$ 15,552
	SUBTOTAL				**$ 15,552**
	GENERAL CONDITIONS	**20%**			**$ 3,110**
	BONDS & INSURANCE	**2%**			**$ 311**
	OVERHEAD & PROFIT	**10%**			**$ 1,555**
	DESIGN CONTINGENCY	**20%**			**$ 3,110**
	TOTAL CONSTRUCTION COST				**$ 23,639**
	TOTAL				**$ 23,639**
	BUILDING EXTERIOR				
BE1	**WASH/ CAULKING OF EXTERIOR**				
	Pressurewash Building Exterior	5040	SF	$ 1.20	$ 6,048
	Caulking/ Sealing	5040	SF	$ 0.60	$ 3,024
	SUBTOTAL				**$ 9,072**
	GENERAL CONDITIONS	**20%**			**$ 1,814**
	BONDS & INSURANCE	**2%**			**$ 181**
	OVERHEAD & PROFIT	**10%**			**$ 907**
	DESIGN CONTINGENCY	**20%**			**$ 1,814**
	TOTAL CONSTRUCTION COST				**$ 13,789**
	TOTAL				**$ 13,789**
BE2	**WINDOW MAINTENANCE**				

Page 2

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Clean & maintain existings windows	6	EA	$ 660.00	$ 3,960
	SUBTOTAL				**$ 3,960**
	GENERAL CONDITIONS	**20%**			**$ 792**
	BONDS & INSURANCE	**2%**			**$ 79**
	OVERHEAD & PROFIT	**10%**			**$ 396**
	DESIGN CONTINGENCY	**20%**			**$ 792**
	TOTAL CONSTRUCTION COST				**$ 6,019**
	TOTAL				**$ 6,019**
BE3	**REPLACE GLAZING WITH SOLAR BAN 70**				
	Remove existing glass	6	EA	$ 576.00	$ 3,456
	Install new solar ban 90 glazing	6	EA	$ 3,456.00	$ 20,736
	SUBTOTAL				**$ 24,192**
	GENERAL CONDITIONS	**20%**			**$ 4,838**
	BONDS & INSURANCE	**2%**			**$ 484**
	OVERHEAD & PROFIT	**10%**			**$ 2,419**
	DESIGN CONTINGENCY	**20%**			**$ 4,838**
	TOTAL CONSTRUCTION COST				**$ 36,772**
	TOTAL				**$ 36,772**
BE4	**REPLACE GLAZING SYSTEM WITH SPRECTRALLY SELECTIVE SYSTEM**				
	Remove existing Window System	6	EA	$ 960.00	$ 5,760
	Install new sprectrally selective glazing system	6	EA	$ 11,520.00	$ 69,120
	SUBTOTAL				**$ 74,880**
	GENERAL CONDITIONS	**20%**			**$ 14,976**
	BONDS & INSURANCE	**2%**			**$ 1,498**
	OVERHEAD & PROFIT	**10%**			**$ 7,488**
	DESIGN CONTINGENCY	**20%**			**$ 14,976**
	TOTAL CONSTRUCTION COST				**$ 113,818**
	TOTAL				**$ 113,818**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
BE5	**CLEAN ROOF MEMBRANE**				
	Clean Existing Roof Membrane	3000	SF	$ 1.20	$ 3,600
	SUBTOTAL				**$ 3,600**
	GENERAL CONDITIONS	**20%**			**$ 720**
	BONDS & INSURANCE	**2%**			**$ 72**
	OVERHEAD & PROFIT	**10%**			**$ 360**
	DESIGN CONTINGENCY	**20%**			**$ 720**
	TOTAL CONSTRUCTION COST				**$ 5,472**
	TOTAL				**$ 5,472**
BE6	**REPLACE PIPE/ VENT BOOTS**				
	Replace Pipe Vent Boot	1	LS	$ 438.00	$ 438
	Remove Existing Roof/ Membrane	3000	SF	$ 1.50	$ 4,500
	New Roof Membrane/ Insulation	3000	SF	$ 20.40	$ 61,200
	SUBTOTAL				**$ 66,138**
	GENERAL CONDITIONS	**20%**			**$ 13,228**
	BONDS & INSURANCE	**2%**			**$ 1,323**
	OVERHEAD & PROFIT	**10%**			**$ 6,614**
	DESIGN CONTINGENCY	**20%**			**$ 13,228**
	TOTAL CONSTRUCTION COST				**$ 100,530**
	TOTAL				**$ 100,530**
	INTERIORS				
I1	**REPLACE LAMPS WITH LED**				
	Remove existing lamps	3270	SF	$ 0.30	$ 981
	Install new LED lamps	3270	SF	$ 2.40	$ 7,848
	SUBTOTAL				**$ 8,829**
	GENERAL CONDITIONS	**20%**			**$ 1,766**
	BONDS & INSURANCE	**2%**			**$ 177**
	OVERHEAD & PROFIT	**10%**			**$ 883**
	DESIGN CONTINGENCY	**20%**			**$ 1,766**
	TOTAL CONSTRUCTION COST				**$ 13,420**
	TOTAL				**$ 13,420**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
I2	**REPLACE LIGHT FIXTURES**				
	Remove existing light fixture	3270	SF	$ 1.20	$ 3,924
	Install new LED Fixtures	3270	SF	$ 12.00	$ 39,240
	SUBTOTAL				**$ 43,164**
	GENERAL CONDITIONS	**20%**			**$ 8,633**
	BONDS & INSURANCE	**2%**			**$ 863**
	OVERHEAD & PROFIT	**10%**			**$ 4,316**
	DESIGN CONTINGENCY	**20%**			**$ 8,633**
	TOTAL CONSTRUCTION COST				**$ 65,609**
	TOTAL				**$ 65,609**
I3	**REPLACE STAIR GUARDRAILS**				
	Remove Free Standing Raling	24	LF	$ 30.00	$ 720
	Remove Wall Mounted Railing	20	LF	$ 12.00	$ 240
	Install New Free Standing Railing	24	LF	$ 480.00	$ 11,520
	Install New Wall Mounted Railing	20	LF	$ 150.00	$ 3,000
	SUBTOTAL				**$ 15,480**
	GENERAL CONDITIONS	**20%**			**$ 3,096**
	BONDS & INSURANCE	**2%**			**$ 310**
	OVERHEAD & PROFIT	**10%**			**$ 1,548**
	DESIGN CONTINGENCY	**20%**			**$ 3,096**
	TOTAL CONSTRUCTION COST				**$ 23,530**
	TOTAL				**$ 23,530**
S1	**NEW CONCRETE AT SITE**				
	Modify concrete at site	2	LOC	$ 6,000.00	$ 12,000
	Restroom Signage Verficaiton	1	Allow	$ 1,800.00	$ 1,800
	SUBTOTAL				**$ 13,800**
	GENERAL CONDITIONS	**20%**			**$ 2,760**
	BONDS & INSURANCE	**2%**			**$ 276**
	OVERHEAD & PROFIT	**10%**			**$ 1,380**
	DESIGN CONTINGENCY	**20%**			**$ 2,760**
	TOTAL CONSTRUCTION COST				**$ 20,976**
	TOTAL				**$ 20,976**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
S2	**ADD VERTICAL GRAB BARS AT RESTROOMS**				
	Install Vertical Grab Bars	4	EA	$ 438.00	$ 1,752
	SUBTOTAL				**$ 1,752**
	GENERAL CONDITIONS	**20%**			**$ 350**
	BONDS & INSURANCE	**2%**			**$ 35**
	OVERHEAD & PROFIT	**10%**			**$ 175**
	DESIGN CONTINGENCY	**20%**			**$ 350**
	TOTAL CONSTRUCTION COST				**$ 2,663**
	TOTAL				**$ 2,663**
S3	**REDO SIDEWALKS, LOBBY RECEPTION AND RESTROOM FOR COMPLIANCE**				
	Reconfigure Exterior Paving/ Access	2500	SF	$ 48.00	$ 120,000
	Lobby Reception Desk Modifications	1	Allow	$ 4,200.00	$ 4,200
	Renovate Restroom	100	SF	$ 360.00	$ 36,000
	SUBTOTAL				**$ 160,200**
	GENERAL CONDITIONS	**20%**			**$ 32,040**
	BONDS & INSURANCE	**2%**			**$ 3,204**
	OVERHEAD & PROFIT	**10%**			**$ 16,020**
	DESIGN CONTINGENCY	**20%**			**$ 32,040**
	TOTAL CONSTRUCTION COST				**$ 243,504**
	TOTAL				**$ 243,504**
	MECHANICAL				
M1	**CLEAN DUCTS**				
	Clean Ducts/ Grills	3270	SF	$ 1.14	$ 3,728
	SUBTOTAL				**$ 3,728**
	GENERAL CONDITIONS	**20%**			**$ 746**
	BONDS & INSURANCE	**2%**			**$ 75**
	OVERHEAD & PROFIT	**10%**			**$ 373**
	DESIGN CONTINGENCY	**20%**			**$ 746**
	TOTAL CONSTRUCTION COST				**$ 5,666**
	TOTAL				**$ 5,666**
M2	**BUILDING AUTOMATION**				

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Install Building Automation System	3270	SF	$ 9.60	$ 31,392
	SUBTOTAL				**$ 31,392**
	GENERAL CONDITIONS	**20%**			**$ 6,278**
	BONDS & INSURANCE	**2%**			**$ 628**
	OVERHEAD & PROFIT	**10%**			**$ 3,139**
	DESIGN CONTINGENCY	**20%**			**$ 6,278**
	TOTAL CONSTRUCTION COST				**$ 47,716**
	TOTAL				**$ 47,716**
M3	**REPLACE PLUMBING FIXTURES**				
	Replace Plumbing Fixtures with water saving	10	EA	$ 1,980.00	$ 19,800
	SUBTOTAL				**$ 19,800**
	GENERAL CONDITIONS	**20%**			**$ 3,960**
	BONDS & INSURANCE	**2%**			**$ 396**
	OVERHEAD & PROFIT	**10%**			**$ 1,980**
	DESIGN CONTINGENCY	**20%**			**$ 3,960**
	TOTAL CONSTRUCTION COST				**$ 30,096**
	TOTAL				**$ 30,096**
M4	**INSTALL FIRE SUPPRESSION SYSTEM**				
	Install Fire Line	1	Allow	$ 60,000.00	$ 60,000
	New Fire Suppression System	3270	SF	$ 12.00	$ 39,240
	Architectural Repair/ Modificaiton	3270	SF	$ 12.00	$ 39,240
	SUBTOTAL				**$ 138,480**
	GENERAL CONDITIONS	**20%**			**$ 27,696**
	BONDS & INSURANCE	**2%**			**$ 2,770**
	OVERHEAD & PROFIT	**10%**			**$ 13,848**
	DESIGN CONTINGENCY	**20%**			**$ 27,696**
	TOTAL CONSTRUCTION COST				**$ 210,490**
	TOTAL				**$ 210,490**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	ELECTRICAL				
E1	**FIELD INVESTIGATION**				
	Field Investigation For Service & Distribution	16	HR	$ 240.00	$ 3,840
	SUBTOTAL				**$ 3,840**
	GENERAL CONDITIONS	**20%**			**$ 768**
	BONDS & INSURANCE	**2%**			**$ 77**
	OVERHEAD & PROFIT	**10%**			**$ 384**
	DESIGN CONTINGENCY	**20%**			**$ 768**
	TOTAL CONSTRUCTION COST				**$ 5,837**
	TOTAL				**$ 5,837**
E2	**SURGE PROTECTION**				
	INSTALL SURGE PROTECTION	1	ls	$ 3,420.00	$ 3,420
	SUBTOTAL				**$ 3,420**
	GENERAL CONDITIONS	**20%**			**$ 684**
	BONDS & INSURANCE	**2%**			**$ 68**
	OVERHEAD & PROFIT	**10%**			**$ 342**
	DESIGN CONTINGENCY	**20%**			**$ 684**
	TOTAL CONSTRUCTION COST				**$ 5,198**
	TOTAL				**$ 5,198**
E3	**RELOCATE BOILER SWITCH**				
	RELOCATE SWITCH	1	LS	$ 7,800.00	$ 7,800
	SUBTOTAL				**$ 7,800**
	GENERAL CONDITIONS	**20%**			**$ 1,560**
	BONDS & INSURANCE	**2%**			**$ 156**
	OVERHEAD & PROFIT	**10%**			**$ 780**
	DESIGN CONTINGENCY	**20%**			**$ 1,560**
	TOTAL CONSTRUCTION COST				**$ 11,856**
	TOTAL				**$ 11,856**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E4	**REVIEW BONDING AND GROUNDING**				
	ELECTRICIAN	40	HR	$ 114.00	$ 4,560
	SUBTOTAL				**$ 4,560**
	GENERAL CONDITIONS	**20%**			**$ 912**
	BONDS & INSURANCE	**2%**			**$ 91**
	OVERHEAD & PROFIT	**10%**			**$ 456**
	DESIGN CONTINGENCY	**20%**			**$ 912**
	TOTAL CONSTRUCTION COST				**$ 6,931**
	TOTAL				**$ 6,931**
E5	**INSTALL GFCI OUTLETS**				
	INSTALL GFCI OUTLETS	7	EA	$ 270.00	$ 1,890
	SUBTOTAL				**$ 1,890**
	GENERAL CONDITIONS	**20%**			**$ 378**
	BONDS & INSURANCE	**2%**			**$ 38**
	OVERHEAD & PROFIT	**10%**			**$ 189**
	DESIGN CONTINGENCY	**20%**			**$ 378**
	TOTAL CONSTRUCTION COST				**$ 2,873**
	TOTAL				**$ 2,873**
E6	**INSTALL LIGHTING CONTROLS**				
	INSTALL LIGHTING CONTROLS	3270	sf	$ 4.80	$ 15,696
	SUBTOTAL				**$ 15,696**
	GENERAL CONDITIONS	**20%**			**$ 3,139**
	BONDS & INSURANCE	**2%**			**$ 314**
	OVERHEAD & PROFIT	**10%**			**$ 1,570**
	DESIGN CONTINGENCY	**20%**			**$ 3,139**
	TOTAL CONSTRUCTION COST				**$ 23,858**
	TOTAL				**$ 23,858**

Alta Town Office Building

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/19/2024

PROJECT NAME……..…..ALTA TOWN OFFICE FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E7	**PROVIDE DEDICATED TELECOM ROOM**				
	New Telecom Room (remodel)	100	sf	$ 384.00	$ 38,400
	SUBTOTAL				**$ 38,400**
	GENERAL CONDITIONS	**20%**			**$ 7,680**
	BONDS & INSURANCE	**2%**			**$ 768**
	OVERHEAD & PROFIT	**10%**			**$ 3,840**
	DESIGN CONTINGENCY	**20%**			**$ 7,680**
	TOTAL CONSTRUCTION COST				**$ 58,368**
	TOTAL				**$ 58,368**
E8	**AUDIO VISUAL MODIFICATIONS**				
	Relocate Video Converence Bar	1	Allow	$ 15,000.00	$ 15,000
	New 65" Display	1	Allow	$ 5,820.00	$ 5,820
	SUBTOTAL				**$ 20,820**
	GENERAL CONDITIONS	**20%**			**$ 4,164**
	BONDS & INSURANCE	**2%**			**$ 416**
	OVERHEAD & PROFIT	**10%**			**$ 2,082**
	DESIGN CONTINGENCY	**20%**			**$ 4,164**
	TOTAL CONSTRUCTION COST				**$ 31,646**
	TOTAL				**$ 31,646**

Alta Central

Architectural Assessment

The Alta Central Building is a two-story wood-framed building with a partial basement housing the Town Marshal's Office. It is reported that the building was moved from Ft. Douglas to its current location in the 1950's. The building is consistent with the basic layout of the type of building built as short-term offices and barracks during the lead-up to WWII. It was not uncommon for these buildings to be considered surplus after the war and many were sold and relocated. The building appears to be in good overall condition but is woefully inadequate for the current use.

A. Visible Foundation System

The building is partially recessed into the hillside with the east entrance door at grade. The grading of the hill slopes along the west wall, with the highest portion at the rear (north) and lowest at the front (south) of the building. At first glance, the foundation appears to be a stone rubble but is actually cast in place concrete faced with stone. The mortar between the stones is in good condition and does not need to be repointed. There are exposed electrical conduits that run the length of the foundation from east to west at the foundation / building interface.

The concrete foundation is board formed and appears to have been built quickly or by relatively unskilled labor. The quality of the pour consolidation is moderate to poor with areas of honeycombing and poorly formed corners. The basement level is only partially excavated, and the interior portions are single side formed against the native soil. The area under the south porch is an addition of unknown date. This is apparent by the exposed stone facing on the main foundation. The addition is a cast-in-place foundation just above grade. There is no indication of the footing system, but it is assumed to be a cast-in-place concrete spread footing.

The hillside behind the building slopes steeply to the foundation such that snow accumulation and spring water runoff appear to collect against the building foundation. There are mineral deposits on the interior face of the concrete foundation walls indicating a history of water infiltration. At the time of the site visit, there were no areas of damp or wet concrete visible.

Recommended Measures

Good – Remove all vegetation in a 3'-0" perimeter around the foundation to facilitate drainage.

Better – Regrade the north hillside and install a drainage system to prevent water collecting against the foundation wall.

Best – No recommendations.

Alta Central

Architectural Assessment

B. Building Envelope and Exterior Finish Materials

exposure and painted/stained wood trim. The wood siding appears to be well maintained. The paint/stain is beginning to appear a bit thin, but only areas at grade or near snow accumulation exhibit peeling paint. A stone chimney matching the foundation protrudes on the east façade an extends above the low-pitched gabled roof. The top of the chimney is terminated with exposed clay flue liners projecting above the stone. The south tile is a chase for a gas-fired appliance flue. A rope acting as a guy wire is wrapped around the chimney and tied to the alarm tower on the roof and extends the full length of the roof to the access ladder on the west end of the building (see Roofing section).

Both building entrances are via deck topped with composite decking material. The east entrance to the main level is at grade with a single step onto the deck. The south entrance is via a short wood stair, a landing at the basement-level and a longer stair that runs along the generator addition to a large deck over the addition at the main-level entrance. The lower stair treads and stringers are wood and in need of repainting. The longer stair has wood stringers and perforated metal treads. The handrail at the stair and deck are metal and do not meet the current code requirements for railings. A projection extends above the main level decking on the southeast corner of the generator addition. The projection is wrapped in siding and capped with a formed sheet metal cap.

Recommended Measures

Good – Scrape and re-paint/stain the damaged wood siding, trim and stair finishes at grade.

Better – Scrape and re-paint/stain all the wood siding, trim and stairs.

Best – Replace the stair and deck railings with code guardrails that conform to the current accessibility standard.

Alta Central

Architectural Assessment

C. Exterior Window and Door Openings

The exterior of the building is articulated with windows at regular intervals providing natural light into all rooms on the main and second floor as well as the main room on the basement south wall. The windows are a mixture of at least three types of windows and appear to all be double-pane insulated glass units. The windows in the basement are white vinyl single-hung windows, while the windows on the main and second floors are dark bronze aluminum windows, some are single-hung and the remaining are sliding. Many of the windows on the east, and south walls have been covered by plywood or sheet acrylic. It is assumed this is a measure to protect the window glass from damage due to snow drifting and ice dam curling from the roof. The result is a negative impact on the quality of the associated interior spaces. The plywood on the windows in the north wall may be as much of a solution for privacy and light control as it is for window glass protection as it seems to only affect windows into private sleeping rooms and a restroom.

The entrance doors, two into the basement, one at each main-level entrance and one at the west end of the interior hallway on each of the main and second-levels are insulated hollow metal doors. All appear to be in good condition and operate effectively, except the door at the west end of the second-floor, which is severely rusted. The door at the west end of the main level has a large step down to grade. The same door at the second-level has a small metal landing and stair to the roof.

Recommended Measures

Good – Verify gasketing at each exterior door. Replace the door at the west end of the second-floor hallway.

Better – Replace the plywood over the windows on the north elevation with acrylic sheet.

Best – Replace the glazing in the covered windows with laminated safety glazing and remove the coverings to improve the light penetration into the interior.

Alta Central

Architectural Assessment

D. Roofing

The main roof of the building is a low-slope hipped roof covered with metal shingles. The metal shingles appear to have neem in place for some time and are in fair condition. There are pipe vents that are damaged or broken. Attached to the roof near the east ridges is a large metal tower supporting an audible alarm. Near the middle of the roof is a collection of antennas. Attached to the west end of the roof, adjacent to the access ladder is a satellite TV dish. The connection to the roofing could not be verified, but it is suspected that the connection waterproofing is likely in need of maintenance.

As described in the exterior materials section, there is a rope that runs the fill length of the building at about waist height, tied around each of the tower and antennas. It is assumed this is a safety line for removing snow from the roof in the winter. The rope and anchorages are not adequate to provide the necessary safety required for this use and presents a very dangerous condition.

The small gable roof over the main entrance is supported by wood brackets and has metal panel roofing. The roofing is not easily visible for inspection but is suspected to be in good condition. The is no obvious signs of water leakage around the gable to wall interfaces.

The main-level entrance deck over the generator addition consists of wood sleepers over a white roofing membrane. It is suspected that the roof membrane, which is almost entirely concealed from view is TPO to match the roof membrane on the City Hall building. The only visual access to this membrane is through the ends of the sleeper joists near the stair. A photo of the area reveals that the roof appears to be in very good condition. No obvious signs of roof leakage were visible inside the generator addition.

Recommended Measures

Good – Inspect roof shingles for potential replacement. Remove the dangerous rope safety line and install adequate roof safety bollards and wire rope safety lines.

Better – No recommendations.

Best – Replace roof panels and shingles.

Alta Central

Architectural Assessment

E. Interior Features and Finishes

The interior of the building is used as the Marshals office, living areas and private sleeping quarters for Marshal personnel. The building finishes are very dated, but in good condition. The building is currently configured to operate as a functional police station and a dormitory for officers. The building could be better configured to accommodate its dual nature.

Interior walls are wood framed covered with a mixture of wood paneling and painted gypsum board. Flooring in the living spaces are carpet. Restrooms and the kitchen have sheet linoleum with a cove base. Ceilings are painted gypsum board and a couple of rooms have lay-in acoustical panels in a suspended grid. The main living space has a large stone faced fireplace. The stone on the north side is stained with what appears to be white paint or mineral deposits. The kitchen and restrooms storage consists of low quality, DIY feeling cabinets. The quality of the cabinetry has a significant contribution to the building's exceedingly rustic feel.

Access to the second floor is via a narrow, winding stair near the main entrance. The flooring on the wood stair treads is ill fitting pre-formed rubber stair treads. The private sleeping rooms are cramped and do not offer much personal space, with the exception of the large "suite" at the east end of the hall. This room is large, seems to have a fair amount of unused space.

The unfinished basement is accessed by an unfinished wood stair. The walls and concrete are exposed concrete and appears to be used as mechanical, utility and workshop space.

Recommended Measures

Good – Upgrade all finishes such as carpeting and wood paneling.

Better – Replacement of the plumbing fixtures and cabinetry in the kitchen and restrooms. Renovation of the Marshals office work areas to comply with current law enforcement office standards.

Best – Complete renovation of the building to better accommodate the Marshals office and dormitory functions.

Alta Central

Architectural Assessment

F. Site Access and Overall Accessibility

Because the building is built into a steep hill, the building does not have an accessible path from a parking area. The east entrance would be the best opportunity to provide an accessible entrance as the transition from grade to the main floor is via only one step. The main entrance to the building cannot be made accessible without a new access point from the east parking area.

Accessibility within the building is not conforming to the current accessibility standard. The first-level restrooms are residential in nature and do not have any of the required grab bars. The restrooms are generally spacious and likely provide the required turning radiuses and clearances.

Other basic accessibility provisions such as hall width and door hardware are completely missing. The building does not have an elevator or wheelchair lift to provide an accessible path between floors.

Recommended Measures

Good – Change door hardware to lever style hardware.

Better – Remove the east deck and replace with an accessible ramp and guardrail.

Best – Renovate the restrooms to commercial quality single-occupant restrooms with all accessible features.

CALDER RICHARDS
CONSULTING ENGINEERS

ALTA CENTRAL (TOWN MARSHALL'S BUILDING) – Structural Assessment

The building structure is a two-level wood framed structure with partial basement. The building was originally built as a barracks building at Fort Douglas but was then moved to Alta in the 1950's. The original date of construction is unknown. Access to the roof structure was not possible but it is assumed to be wood framed, either carpenter trussed, or rafter framed. The floor framing was observed to be 1x8 straight floor sheathing with 1-5/8" x 9" wood joists spaced at 16" on center bearing on interior and exterior 2x4 framed walls. The foundation is a unique combination of stone rubble with concrete facing. ***See Photo #1.***

As a general assessment the structure appears in adequate condition, but due to the type and age of construction there are concerns as noted below.

The floor framing was evaluated, and the results indicate that the floors can support a live load of approximately 55 PSF. Current IBC live loading for residential is 40 PSF and office is 50 PSF. Thus, the existing framing is adequate in supporting current code loading for the existing space uses.

Due to the age and type of construction, it is apparent that the structure does not meet current code and is inadequate in withstanding any significant lateral loads such as seismic and wind loading. Seismic design criteria had not been actively developed in the 1950's and were not included in many codes at that time. Floor framing above the basement (1st floor) rests on the rubble/concrete foundation with no positive anchorage to the foundation. ***See Photo #2.*** This deficiency in anchorage between framing and foundation has historically led to failure during a significant seismic event. The failure occurs when the framing separates from the from the wall and collapses. This would also be the case when exposed to lateral loads from a significant avalanche.

The above deficiency can be remedied as follows:

1. Drill and epoxy treaded rods into the existing foundation.
2. Place Simpson (or similar) straps nailed or bolted to the existing floor framing, attached to the newly placed drill and epoxy anchors.
3. At parallel framing to wall locations, add blocking between the existing framing and apply the same straps and anchors as with the perpendicular framing.
4. The anchorage of framing is typically spaced and 4'-0" on center around the perimeter of structure.

No analysis was performed on the roof structure due to the inaccessibility of the framing, but it is assumed that the wood framing is grossly inadequate in supporting current code snow loading because it was constructed for the Salt Lake Valley location with much lower snow loading potential. The current code roof snow load at the site is approximately 200 PSF where the Salt Lake Valley location is 30 PSF. What also exacerbates the problem is the low pitch of roof that

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Alta Central

Structural Assessment

tends to hold snow rather than shed snow. It is assumed that the only reason the building has not had some failure during heavy snow is that the Town of Alta regularly shovels snow from the roof.

It is possible to strengthen the existing roof structure upon further investigation. This will require removing existing ceilings and sistering new rafters and possibly adding new ridge and hip beams. However, a more definitive upgrade cannot be determined until the framing is exposed for observation and further analysis.

Another major concern is the exposure to avalanche loading. This building sits directly adjacent to the Town Hall Building which had an avalanche hazard study prepared for the site. The report showed that the site may experience significant avalanche loading. Wood framed structures typically do not have the strength nor stiffness to resist these types of dynamic forces.

The building currently serves as an emergency response center for police and rescue. These types of facilities are considered Risk Category IV as defined in the 2021 IBC, whereas typical buildings are Risk Category II. Risk Category IV buildings must be designed to a more stringent structural standard so that the building's use remains functional during a major event such as a significant earthquake or avalanche. As noted above, this subject building does not meet the current code and is deficient in many ways.

For the above reasons it is recommended that the Town of Alta either relocate the Marshall's Office operations to a newer building or construct a new center that meets the more stringent structural design standards associated with Risk Category IV buildings.

It is understood that there may be some immeasurable attributes to the building, such as its unique historic nature and the public's desire to preserve such treasures of our past. If this is the case it is recommended that in lieu of demolition, the building be repurposed for non-essential use. Understanding that the roof and back walls will require periodic snow removal unless strengthening of the roof occurs. Also, there remains a significant risk of structural damage if exposed to a seismic or avalanche event if a major upgrade is not implemented.

Recommendations for strengthening the structure for non-essential use are noted above. However, upgrading the structure to meet standards for Risk Category IV use would require major restructuring of the roof, strengthening of walls and foundations which is costly and most likely economically unfeasible.

Conclusion - The Town Marshall's Building is currently in adequate condition but has serious deficiencies that risk long-term use. A wood framed structure of this type and age is inadequate to support the type of snow and avalanche loading associated with Alta and is not appropriate for use as an emergency response Risk Category IV building.

If the above building is re-purposed for non-essential future use, many upgrades as noted above are recommended. However, there remains the significant risk of structural damage if the building is exposed to a considerable seismic or avalanche event. Upgrading the structure to adequately resist these events, especially avalanches, may be economically unfeasible.

Structural Photos

Photo #1 – Stone Rubble & Concrete Foundation

Photo #2 – Floor Joists Resting on Foundation

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MECHANICAL and Plumbing ASSESSMENT

Project: Town of Alta Master Plan – Marshal's Offices
April 2024
Principal Engineer: Vinnie Figlioli, PE

Marshal's Offices – Assessment

Mechanical and Plumbing Overview

The building is a two story wood framed building that was transported to the current location in the 1950's. The building is conditioned by two natural gas furnaces. One furnace for each level. The main floor furnace is located in the basement and the second floor furnace is located in a closet on the second floor. The building envelope is insufficient and causing a great deal of heat loss.

The over all plumbing system of the building has had several modifications to it over the years and therefore has a variety of material types. The water heater is located within the basement and was replaced in 2020. There is a mixture of plumbing fixtures within the building.

No fire suppression system was found within the building.

Mechanical Assessment

The mechanical system although adequate it is not up to code or in the best of condition. The generator ventilation system is newer and seems to be in good working order.

Main Floor

The first floor furnace was replaced in 2006. It has a humidifier attached to it and is 80% efficient. The combustion air for this furnace is brought into the building using a flex duct through the generator room. This is not an ideal location. There is not fresh air being brought into the system.

The ducting for this system is mostly from the 1950's and is constructed with great craftmanship. Many modifications have been made to the ducting to accommodate the newer furnace and humidifier.

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Kitchen exhaust fan is directly above the kitchen window and is against code. All exhaust vents need to be 3 feet above or 10 feet away from any operable window or intake.

Second Floor

The second floor is conditioned using a downflow furnace located in a closet on the second floor. This furnace was replaced in 2009 and is 90% efficient. All the ducting is conceal so no visual inspection was possible.

Plumbing Assessment

The plumbing system has been modified several times and therefore there are multiply types of materials that have been used. These materials consist of galvanized, copper, and pex piping for the domestic water and cast iron, galvanized and copper piping for the waste piping. The main domestic water line coming into the building is not supported and has the potential of causing issues with the main shut off valve.

The water heater was replaced in 2020 and seems to be in good working condition. The main gas line to the water heater has a flex line that is too long and will need to be replaced.

The water softener appears to be operational.

The PRV is operational and no visual leaks were observed.

The main plumbing vents through the roof are broken or bent. These will need to be repaired or replaced.

Fire Suppression Assessment

No fire suppression system within the building. It is assumed that this was not required at the time of the original construction.

Equipment Information

Equipment	Age (yrs)	ASHRAE Life Expectancy (yrs)	Size
1st Floor Furnace	18	18	135,000 BTUH
2nd Floor Furnace	15	18	97,000 BTUH
Water Heater (NG)	4	12 to 15	42,000 BTUH

Alta Central

Mechanical & Plumbing Assessment

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Recommendations and Priorities:

Recommendations and Priorities				
All recommended upgrades are prioritized from 1-3 where:				
1)	Highly recommended upgrades (code violation, life safety, outdated systems, poor conditions, or similar)			
2)	Recommended upgrades (border line code violation, upgrades that provide additional comfort or value, or similar)			
3)	Optional upgrades (owner desired)			
Area	**Systems**	**Recommendation**		**Priority**
All	Envelope	Upgrade windows, doors, and add insulation. Once complete perform heat loss calculations or energy calculations to size new furnaces properly.		2
Main Level	Fire Place	Clean and inspect chimney liner.		2
Basement	Mechanical	Replace existing furnace and bring in fresh air. Upgrade to a 90% or greater furnace. Eliminate the combustion air duct.	 	1

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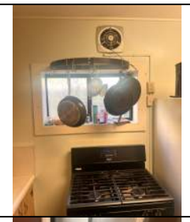
Basement	Mechanical	Replace humidifier		1
Main Level	Mech Ducting	Clean and inspect all existing ducting and grilles. Some grilled will need to be secured		3
Man Level	Exhaust	Remove or replace kitchen exhaust fan.		1
Second Floor	Mechanical	Replace existing furnace and bring in fresh air.		1
Second Floor	Mech Ducting	Clean and inspect all existing ducting and grilles. Some ducting and grilles may need to be replaced or resecured.		3
All	Mechanical	Addition of a Building Automation System for remote access and control		3
All	Plumbing	Secure main water line to the wall. Adjust piping as needed. Piping to be type Apex or copper.		1

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All	Plumbing	Secure main water line to the wall. Adjust piping as needed. Piping to be type Apex or copper.		1
Basement	Plumbing	Repipe the natural gas line going to the water heater and provide a seismic strap securing water heater.		1
All	Plumbing	Repipe the domestic water system to all one material type. Type Apex or copper.		2
All	Plumbing	Repipe the waste water system to all one material type. Cast iron or PVC		3
Roof	Plumbing	Repair or replace plumbing vents through roof.		1
All	Plumbing	Upgrade plumbing fixtures.		3
All	Fire suppression	Explore the possibility of adding a fire suppression system.		2

Alta Central

Mechanical & Plumbing Assessment

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Summary

The current mechanical and plumbing systems within the building have reached or exceeded their life expectancy. It is recommended to replace or upgrade the systems to meet or exceed current energy, mechanical, and plumbing codes. These systems can be upgraded as detailed above or they could be completely replaced. A financial analysis will need to be performed to determine the best course of action.

Thank you for choosing Spectrum Engineers to provide this assessment. If you have any questions or would like further information, please do not hesitate to contact me directly.

Sincerely,

By: _____

Vinnie Figlioli, P.E. Principal Mechanical Engineer

Salt Lake City Office
324 South State Street, Suite 400, Salt Lake City, UT 84111 [p] 801-328-5151 [e] info@spectrum-engineers.com

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Alta Central

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Marshall Building
Electrical Assessment Report

October 29th, 2024

1. Electrical Service and Power

a. Electrical service is provided by Rocky Mountain Power (RMP).

b. We have made the following **assumption** about the Marshall Building electrical service: ***The building is fed from a nearby pole mounted, single-phase tub transformer* (*Exhibit 1*) and Office Building meter/disconnect (*Exhibit 2*)**. This assumption to be confirmed by the Owner.

c. The meter (meter # 50 823 601) and main service disconnect are located outside the Office Building. The as-built drawings indicate the service disconnect size to be 200A, but we have observed a 150A (120/240V, 1ph, 3w) breaker during the site visit.

Exhibit 1 – Utility transformer (assumed) for Town Office and Marshall Building electrical service

Exhibit 2 – Town Office and Marshall Building electrical service meter and service disconnect

Exhibit 3 – Town Office and Marshall Building electrical service meter

Exhibit 4 – Town Office and Marshall Building electrical service main service disconnect – 150A

d. The capacity of the existing electrical service has been verified by using the peak demand data from the RMP power bills from July 2023 to August 2024. Since the power factor information has

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not been provided, ***we have assumed the power factor to be 0.9***. The existing service has 32% spare capacity. The service appears to be adequate for the current electrical loads. If major renovations, additions, or large loads (such as elevator and similar loads) are planned in the future, the service size should be checked again at that time and the transformer size should be coordinated with RMP.

Town of Alta - Town Offices and Marshall Building
Service Capacity Calculations

240 volts — Meter # 50 823 601
1 phase

#	Billing Date From	Peak Demand kW	Power Factor	Peak Demand kVA
1	July 2023	13	0.9000	18
2	August 2023	11	0.9000	15
3	September 2023	11	0.9000	15
4	October 2023	12	0.9000	17
5	November 2023	11	0.9000	15
6	December 2023	13	0.9000	18
7	January 2024	14	0.9000	19
8	February 2024	12	0.9000	17
9	March 2024	11	0.9000	15
10	April 2024	9	0.9000	13
11	May 2024	9	0.9000	13
12	June 2024	8	0.9000	11
13	July 2024	7	0.9000	10
14	August 2024	7	0.9000	10

Highest recorded peak demand in kVA:	19 kVA
NEC safety factor:	1.25
(Peak demand in kVA)*(Safety factor):	**24 kVA**
Peak demand in Amps @ 240V, 1ph:	101 A
Existing service size in Amps:	150 A
Spare cpacity (%):	**32%**
Spare capacity Amps @ 240V, 1ph:	49 A

e. The building disconnect was not observed during the site visit. It appears that the only way to disconnect power to the Marshall Building is at the Office Building main service disconnect. This should be confirmed by the Owner. Although remote disconnect location is permitted by the NEC code (*For installations under single management, where documented safe switching procedures are established and maintained for disconnection, and where the installation is monitored by qualified individuals*), our recommendation is to provide separate, dedicated service disconnect that can disconnect the power for the Marshal Building only.

f. The main panelboard is located at the upper level, and it feeds a subpanel located in the furnace room. Both panels are outdated, past their useful life, and should be replaced. There is a third panelboard located in the generator room. This panelboard is in good conditions and can be reused.

g. The building is backed up by the diesel generator located at the lower level. This generator also feeds the Office Building. The generator (41kVA) is adequate for the current demand. If major

Alta Central

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Marshall Building
Electrical Assessment Report

renovations, additions, or large loads (such as elevator and similar loads) are planned in the future, the generator size should be checked again at that time.

Exhibit 5 – Main panelboard

Exhibit 6 – Subpanel located in the furnace room

Exhibit 7 – Standby generator

Exhibit 8 – Generator nameplate

h. Grounding and bonding systems, including grounding electrodes and bonding jumpers, were not completely accessible or visible during the site observations. The only observed grounding electrode was water pipe. These portions of the electrical system are critical to safety and power quality of the system. Further investigation should be done to confirm the existence, resistance readings and condition of the grounding and bonding systems. A licensed electrician will be required to safely open and check these systems.

i. The outlets in the kitchen and laundry room are not GFCI protected as required by *NEC 210.8(B)*.

j. The life expectancy of electrical wiring is between 50 and 70 years. It is unknown if the building wiring is original to the building. The existing wiring devices appear to be in poor condition. The existing wiring and wiring devices should be replaced if remodels or upgrades are considered in the future.

k. There are abandoned conduits, wiring, and equipment throughout the building. The abandoned equipment and wiring can lead to confusion, clutter, and safety hazards/violations with NEC. These items should be removed from the building.

l. There were no visible surge suppression devices installed at this building. It is recommended to install surge suppression devices on the main service panel and at the selected panelboards that

serve sensitive loads or expensive equipment.

Exhibit 9 – Existing wiring devices and surface raceway

Exhibit 10 – Laundry outlet

2. Lighting System

a. Most of the building has florescent lights. The existing light sources are outdated and inefficient. All existing light fixtures and bulbs are recommended to be replaced with new LED lighting. Each space will need to be evaluated individually to determine the extent of the upgrade needed.

b. The egress lighting is provided using emergency bug-eyes. We were not able to field verify the egress light levels (1 fc average, and 0.1 fc minimum). If the lighting upgrade is considered in the future, the egress lighting should be completely upgraded at that time.

Exhibit 11 – Fluorescent surface light fixture

Exhibit 12 –Emergency bug eye and toggle switch

c. Existing lighting controls consist solely of toggle switches.

d. Significant upgrades to the interior and exterior lighting control systems are needed to meet the latest energy codes. There are opportunities for energy savings by installing lighting controls such as occupancy sensors and timed relay controls.

3. Fire Alarm System

a. There is no fire alarm system in the building.

b. The common areas and sleeping rooms are provided with the standalone smoke detectors.

4. Telecommunication System

a. The telecommunication equipment is located at the lower level and in one of the offices at the upper level (equipment rack with the radio equipment, etc.).

b. A dedicated A/C system and telecommunication ground bus bars were not observed at these locations.

c. Abandoned data and telephone wiring is scattered throughout the building.

Exhibit 13 – Lower-level telecom equipment

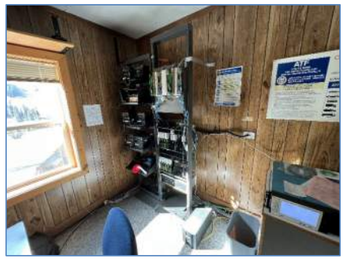

Exhibit 14 – Upper-level telecom equipment

5. Security Systems

a. Currently, there is no security system in the building. The installation of the Verkada Security Camera system is in process.

6. Audio/Video

a. Satellite Cable TV distribution system consists of coax cables run on the outside of the building, punched through external walls, and floors to TVs through the building. Some sleeping rooms do not have distribution.

Exhibit 15 – Coax cable punched through floor

Exhibit 16 – Living quarters w/o Satellite Distribution

Exhibit 17 – External Coax cable routing

Exhibit 18 – Cable Distribution in basement.

b. Commons Area Display system consists of small 32” TV, a DVD Player, and Cable TV connection. While this may be adequate, it is small for current home and hospitality standards.

Exhibit 19 – Commons Area Display

Alta Central

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Marshall Building
Electrical Assessment Report

Recommendations

The following table summarizes the list of the recommended upgraded. All recommended upgrades are prioritized from 1 to 3, where:

1 → Highly recommended upgrades (code violations, life safety, fire hazards, outdated systems, poor conditions, and similar)
2 → Recommended upgrades (border line code violations, upgrades that provide additional comfort and flexibility, technology upgrades)
3 → Optional upgrades (owner desired upgrades)

System	Recommended Upgrade	Priority
General	• Remove all abandoned conduits, wiring, devices, and equipment.	1
Electrical distribution	• Provide additional field investigation as required to identify and document exact connections between the building electrical service and the generator in the Marshall Building. • Provide main service disconnect outside the building.	1
Surge protection	• Provide surge protection at the main panel.	1
Electrical equipment	• Replace existing panelboards.	1
Electrical wiring and devices	• Replace existing electrical wiring and devices.	1
Grounding and bonding	• Hire a licensed electrician to confirm the existence, provide resistance readings, and review the conditions of the grounding and bonding systems.	1
GFCI outlets	• Replace non-GFCI outlets with GFCI outlets in all locations specified in *NEC 210.8 (B)*.	1
Lighting	• Replace all lights with the outdated light sources (fluorescent and incandescent) with new LED lights. • Provide required egress lighting.	1
Lighting controls	• Provide new lighting controls for interior and exterior lighting as needed to comply with the latest adopted energy codes.	1
Telecommunication system	• Provide dedicated telecom room with proper cooling and grounding for all telecom racks and equipment.	2
Security system	• As recommended by the Owner.	1

Alta Central

Electrical Assessment

Audio/Video System 1	• Replace Current Satellite TV System with an IP based system with Wired Data jacks at each device location to reduce bandwidth strain on Wireless Networks. • Remove Satellite Receiver from roof.	2
Audio/Video System 2	• Update Commons Display to larger smart TV (65"). Add Blu-Ray Player, and Data connections.	2

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024
PROJECT NAME.....ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT		
LOCATION.....ALTA, UT	TOTALS	
ARCHITECT.....FFKR		
STAGE OF DESIGN.....FACILITY ASSESSMENT		

ITEM #	DESCRIPTION		TOTAL
	COST SUMMARY		
	FOUNDATION SYSTEM		
F1	REMOVE VEGETATION AROUND PERIMTER	$	2,906
F2	CLEAN & REGRADE AROUND FOUNDATION	$	23,245
	BUILDING EXTERIOR		
BE1	SCRAPE AND REPAINT/STAIN EXTERIOR SIDING TRIM AND STAIR FINISHES	$	63,370
BE2	REPLACE STAIR/DECK GUARDRAILS	$	46,512
BE3	REPLACE DOOR AND GASKETS	$	7,624
BE4	ROOF INSPECTION AND NEW TIE OFF POINT	$	20,064
BE5	REPLACE ROOF	$	32,504
	INTERIOR		
I1	UPGRADE INTERIOR FINISHES	$	366,722
I2	COMPLETE INTERIOR RENOVATION	$	2,706,761
	SITE AND ACCESSIBILITY		
S1	CHANGE DOOR HARDWARE TO ADA COMPLIANT	$	30,132
S2	REMOVE DECK AND INSTALL RAMPS	$	201,400
S3	RENOVATE RESTROOMS	$	196,992
	STRUCTURAL		
ST1	STRUCTURAL UPGRADE	$	785,834
	MECHANICAL		
M1	UPGRADE BUILDING ENVELOPE	$	419,111
M2	CLEAN CHIMNEY	$	4,560
M3	REPLACE FURNACE	$	19,699
M4	REPLACE HUMIDIFIER	$	8,846
M5	CLEAN DUCTS/ GRILLES	$	16,590
M6	REPLACE KITCHEN EXHAUST HOOD	$	6,658
M7	REPLACE FURNACE	$	19,699
M8	BUILDING AUTOMATION	$	69,852
M9	SECURE PIPING TO WALL	$	1,824
M10	REPLACE NATURAL GAS PIPING	$	4,560
M11	REPLACE PIPING	$	436,574
M12	REPLACE PLUMBING FIXTURES	$	30,096
M13	INSTALL FIRE SUPPRESSION SYSTEM	$	265,830
	ELECTRICAL		
E1	REMOVE ABANDONDED ELECTRICAL	$	6,931
E2	ELECTRICAL DISTRIBUTION	$	18,058
E3	SURGE PROTECTION	$	5,198
E4	REPLACE EXISTING PANELBOARDS	$	20,611
E5	REPLACE ELECTRICAL WIRING AND DEVICES	$	163,279
E6	REVIEW BONDING AND GROUNDING	$	6,931
E7	INSTALL GFCI OUTLETS	$	2,873
E8	REPLACE LIGHTING	$	250,594
E9	INSTALL LIGHTING CONTROLS	$	34,926
E10	PROVIDE DEDICATED TELECOM ROOM	$	58,368
E11	AUDIO VISUAL MODIFICATIONS	$	78,698
E12	SECURITY SYSTEM	$	133,303

****ESTIMATE IS PRICED IN TODAY'S DOLLARS - ESCALATION IS NOT INCLUDED****

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT……..FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	FOUNDATION SYSTEM				
F1	**REMOVE VEGETATION AROUND PERIMTER**				
	Clear Vegetation at Builing Perimter	531	SF	$ 3.60	$ 1,912
	SUBTOTAL				**$ 1,912**
	GENERAL CONDITIONS	**20%**			**$ 382**
	BONDS & INSURANCE	**2%**			**$ 38**
	OVERHEAD & PROFIT	**10%**			**$ 191**
	DESIGN CONTINGENCY	**20%**			**$ 382**
	TOTAL CONSTRUCTION COST				**$ 2,906**
	TOTAL				**$ 2,906**
F2	**CLEAN & REGRADE AROUND FOUNDATION**				
	Regrade and landscape improvement	2124	SF	$ 7.20	$ 15,293
	SUBTOTAL				**$ 15,293**
	GENERAL CONDITIONS	**20%**			**$ 3,059**
	BONDS & INSURANCE	**2%**			**$ 306**
	OVERHEAD & PROFIT	**10%**			**$ 1,529**
	DESIGN CONTINGENCY	**20%**			**$ 3,059**
	TOTAL CONSTRUCTION COST				**$ 23,245**
	TOTAL				**$ 23,245**
	BUILDING EXTERIOR				
BE1	**SCRAPE AND REPAINT/STAIN EXTERIOR SIDING TRIM AND STAIR FINISHES**				
	Scrape & Repaint Building Exterior	7392	SF	$ 5.04	$ 37,256
	Caulking/ Sealing	7392	SF	$ 0.60	$ 4,435
	SUBTOTAL				**$ 41,691**
	GENERAL CONDITIONS	**20%**			**$ 8,338**
	BONDS & INSURANCE	**2%**			**$ 834**
	OVERHEAD & PROFIT	**10%**			**$ 4,169**
	DESIGN CONTINGENCY	**20%**			**$ 8,338**
	TOTAL CONSTRUCTION COST				**$ 63,370**
	TOTAL				**$ 63,370**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT……..FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
BE2	**REPLACE STAIR/DECK GUARDRAILS**				
	Remove Free Standing Railing	60	LF	$ 30.00	$ 1,800
	Install New Free Standing Railing	60	LF	$ 480.00	$ 28,800
	SUBTOTAL				**$ 30,600**
	GENERAL CONDITIONS	**20%**			**$ 6,120**
	BONDS & INSURANCE	**2%**			**$ 612**
	OVERHEAD & PROFIT	**10%**			**$ 3,060**
	DESIGN CONTINGENCY	**20%**			**$ 6,120**
	TOTAL CONSTRUCTION COST				**$ 46,512**
	TOTAL				**$ 46,512**
BE3	**REPLACE DOOR AND GASKETS**				
	Replace Exterior Door	1	EA	$ 4,380.00	$ 4,380
	Replace Gaskets at existing doors	2	EA	$ 318.00	$ 636
	SUBTOTAL				**$ 5,016**
	GENERAL CONDITIONS	**20%**			**$ 1,003**
	BONDS & INSURANCE	**2%**			**$ 100**
	OVERHEAD & PROFIT	**10%**			**$ 502**
	DESIGN CONTINGENCY	**20%**			**$ 1,003**
	TOTAL CONSTRUCTION COST				**$ 7,624**
	TOTAL				**$ 7,624**
BE4	**ROOF INSPECTION AND NEW TIE OFF POINT**				
	Inspect roof	1	LS	$ 1,200.00	$ 1,200
	New Tie off points	1	ALLOW	$ 12,000.00	$ 12,000
	SUBTOTAL				**$ 13,200**
	GENERAL CONDITIONS	**20%**			**$ 2,640**
	BONDS & INSURANCE	**2%**			**$ 264**
	OVERHEAD & PROFIT	**10%**			**$ 1,320**
	DESIGN CONTINGENCY	**20%**			**$ 2,640**
	TOTAL CONSTRUCTION COST				**$ 20,064**
	TOTAL				**$ 20,064**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
BE5	**REPLACE ROOF**				
	Remove Existing Roof/ Membrane	1800	SF	$ 1.50	$ 2,700
	New Roofing	1800	SF	$ 10.38	$ 18,684
	SUBTOTAL				**$ 21,384**
	GENERAL CONDITIONS	**20%**			**$ 4,277**
	BONDS & INSURANCE	**2%**			**$ 428**
	OVERHEAD & PROFIT	**10%**			**$ 2,138**
	DESIGN CONTINGENCY	**20%**			**$ 4,277**
	TOTAL CONSTRUCTION COST				**$ 32,504**
	TOTAL				**$ 32,504**
	INTERIORS				
I1	**UPGRADE INTERIOR FINISHES**				
	Selective Interior Demoliition	4787	SF	$ 2.40	$ 11,489
	New Interior Finishes	4787	SF	$ 48.00	$ 229,776
	SUBTOTAL				**$ 241,265**
	GENERAL CONDITIONS	**20%**			**$ 48,253**
	BONDS & INSURANCE	**2%**			**$ 4,825**
	OVERHEAD & PROFIT	**10%**			**$ 24,126**
	DESIGN CONTINGENCY	**20%**			**$ 48,253**
	TOTAL CONSTRUCTION COST				**$ 366,722**
	TOTAL				**$ 366,722**
I2	**COMPLETE INTERIOR RENOVATION**				
	Selective Interior Demoliition	4787	SF	$ 12.00	$ 57,444
	New Interior Finishes	4787	SF	$ 360.00	$ 1,723,320
	SUBTOTAL				**$ 1,780,764**
	GENERAL CONDITIONS	**20%**			**$ 356,153**
	BONDS & INSURANCE	**2%**			**$ 35,615**
	OVERHEAD & PROFIT	**10%**			**$ 178,076**
	DESIGN CONTINGENCY	**20%**			**$ 356,153**
	TOTAL CONSTRUCTION COST				**$ 2,706,761**
	TOTAL				**$ 2,706,761**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
S1	**CHANGE DOOR HARDWARE TO ADA COMPLIANT**				
	Remove Door Hardware	28	LOC	$ 150.00	$ 4,200
	ADA Compliant Door Hardware	28	EA	$ 558.00	$ 15,624
	SUBTOTAL				**$ 19,824**
	GENERAL CONDITIONS	**20%**			**$ 3,965**
	BONDS & INSURANCE	**2%**			**$ 396**
	OVERHEAD & PROFIT	**10%**			**$ 1,982**
	DESIGN CONTINGENCY	**20%**			**$ 3,965**
	TOTAL CONSTRUCTION COST				**$ 30,132**
	TOTAL				**$ 30,132**
S2	**REMOVE DECK AND INSTALL RAMPS**				
	Site/ Deck Demolition	2500	SF	$ 5.00	$ 12,500
	Reconfigure Exterior Paving/ Access	2500	SF	$ 48.00	$ 120,000
	SUBTOTAL				**$ 132,500**
	GENERAL CONDITIONS	**20%**			**$ 26,500**
	BONDS & INSURANCE	**2%**			**$ 2,650**
	OVERHEAD & PROFIT	**10%**			**$ 13,250**
	DESIGN CONTINGENCY	**20%**			**$ 26,500**
	TOTAL CONSTRUCTION COST				**$ 201,400**
	TOTAL				**$ 201,400**
S3	**RENOVATE RESTROOMS**				
	Renovate Restroom	360	SF	$ 360.00	$ 129,600
	SUBTOTAL				**$ 129,600**
	GENERAL CONDITIONS	**20%**			**$ 25,920**
	BONDS & INSURANCE	**2%**			**$ 2,592**
	OVERHEAD & PROFIT	**10%**			**$ 12,960**
	DESIGN CONTINGENCY	**20%**			**$ 25,920**
	TOTAL CONSTRUCTION COST				**$ 196,992**
	TOTAL				**$ 196,992**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	STRUCTURAL				
ST1	**STRUCTURAL UPGRADE**				
	Structural Upgrade	4787	SF	$ 60.00	$ 287,220
	Architectural Repair	4787	SF	$ 48.00	$ 229,776
	SUBTOTAL				**$ 516,996**
	GENERAL CONDITIONS	**20%**			**$ 103,399**
	BONDS & INSURANCE	**2%**			**$ 10,340**
	OVERHEAD & PROFIT	**10%**			**$ 51,700**
	DESIGN CONTINGENCY	**20%**			**$ 103,399**
	TOTAL CONSTRUCTION COST				**$ 785,834**
	TOTAL				**$ 785,834**
	MECHANICAL				
M1	**UPGRADE BUILDING ENVELOPE**				
	Upgrade Building Envelope	4787	SF	$ 57.60	$ 275,731
	SUBTOTAL				**$ 275,731**
	GENERAL CONDITIONS	**20%**			**$ 55,146**
	BONDS & INSURANCE	**2%**			**$ 5,515**
	OVERHEAD & PROFIT	**10%**			**$ 27,573**
	DESIGN CONTINGENCY	**20%**			**$ 55,146**
	TOTAL CONSTRUCTION COST				**$ 419,111**
	TOTAL				**$ 419,111**
M2	**CLEAN CHIMNEY**				
	Clean Chimney	1	LS	$ 3,000.00	$ 3,000
	SUBTOTAL				**$ 3,000**
	GENERAL CONDITIONS	**20%**			**$ 600**
	BONDS & INSURANCE	**2%**			**$ 60**
	OVERHEAD & PROFIT	**10%**			**$ 300**
	DESIGN CONTINGENCY	**20%**			**$ 600**
	TOTAL CONSTRUCTION COST				**$ 4,560**
	TOTAL				**$ 4,560**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M3	**REPLACE FURNACE**				
	Replace Furnace	1	LS	$ 12,960.00	$ 12,960
	SUBTOTAL				**$ 12,960**
	GENERAL CONDITIONS	**20%**			**$ 2,592**
	BONDS & INSURANCE	**2%**			**$ 259**
	OVERHEAD & PROFIT	**10%**			**$ 1,296**
	DESIGN CONTINGENCY	**20%**			**$ 2,592**
	TOTAL CONSTRUCTION COST				**$ 19,699**
	TOTAL				**$ 19,699**
M4	**REPLACE HUMIDIFIER**				
	Replace Humidifier	1	LS	$ 5,820.00	$ 5,820
	SUBTOTAL				**$ 5,820**
	GENERAL CONDITIONS	**20%**			**$ 1,164**
	BONDS & INSURANCE	**2%**			**$ 116**
	OVERHEAD & PROFIT	**10%**			**$ 582**
	DESIGN CONTINGENCY	**20%**			**$ 1,164**
	TOTAL CONSTRUCTION COST				**$ 8,846**
	TOTAL				**$ 8,846**
M5	**CLEAN DUCTS/ GRILLES**				
	Clean Ducts/ Grilles	4787	SF	$ 2.28	$ 10,914
	SUBTOTAL				**$ 10,914**
	GENERAL CONDITIONS	**20%**			**$ 2,183**
	BONDS & INSURANCE	**2%**			**$ 218**
	OVERHEAD & PROFIT	**10%**			**$ 1,091**
	DESIGN CONTINGENCY	**20%**			**$ 2,183**
	TOTAL CONSTRUCTION COST				**$ 16,590**
	TOTAL				**$ 16,590**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M6	**REPLACE KITCHEN EXHAUST HOOD**				
	Replace Kitchen Exhaust Hood	1	LS	$ 4,380.00	$ 4,380
	SUBTOTAL				**$ 4,380**
	GENERAL CONDITIONS	**20%**			**$ 876**
	BONDS & INSURANCE	**2%**			**$ 88**
	OVERHEAD & PROFIT	**10%**			**$ 438**
	DESIGN CONTINGENCY	**20%**			**$ 876**
	TOTAL CONSTRUCTION COST				**$ 6,658**
	TOTAL				**$ 6,658**
M7	**REPLACE FURNACE**				
	Replace Furnace	1	LS	$ 12,960.00	$ 12,960
	SUBTOTAL				**$ 12,960**
	GENERAL CONDITIONS	**20%**			**$ 2,592**
	BONDS & INSURANCE	**2%**			**$ 259**
	OVERHEAD & PROFIT	**10%**			**$ 1,296**
	DESIGN CONTINGENCY	**20%**			**$ 2,592**
	TOTAL CONSTRUCTION COST				**$ 19,699**
	TOTAL				**$ 19,699**
M8	**BUILDING AUTOMATION**				
	Install Building Automation System	4787	SF	$ 9.60	$ 45,955
	SUBTOTAL				**$ 45,955**
	GENERAL CONDITIONS	**20%**			**$ 9,191**
	BONDS & INSURANCE	**2%**			**$ 919**
	OVERHEAD & PROFIT	**10%**			**$ 4,596**
	DESIGN CONTINGENCY	**20%**			**$ 9,191**
	TOTAL CONSTRUCTION COST				**$ 69,852**
	TOTAL				**$ 69,852**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M9	**SECURE PIPING TO WALL**				
	Secure Piping to wall	1	LS	$ 1,200.00	$ 1,200
	SUBTOTAL				**$ 1,200**
	GENERAL CONDITIONS	**20%**			**$ 240**
	BONDS & INSURANCE	**2%**			**$ 24**
	OVERHEAD & PROFIT	**10%**			**$ 120**
	DESIGN CONTINGENCY	**20%**			**$ 240**
	TOTAL CONSTRUCTION COST				**$ 1,824**
	TOTAL				**$ 1,824**
M10	**REPLACE NATURAL GAS PIPING**				
	Replace Natural Gas Piping	1	Allow	$ 3,000.00	$ 3,000
	SUBTOTAL				**$ 3,000**
	GENERAL CONDITIONS	**20%**			**$ 600**
	BONDS & INSURANCE	**2%**			**$ 60**
	OVERHEAD & PROFIT	**10%**			**$ 300**
	DESIGN CONTINGENCY	**20%**			**$ 600**
	TOTAL CONSTRUCTION COST				**$ 4,560**
	TOTAL				**$ 4,560**
M11	**REPLACE PIPING**				
	Replace Domestic Supply Piping	4787	SF	$ 7.20	$ 34,466
	Replace Waste/ Vent Piping	4787	SF	$ 4.80	$ 22,978
	Architectural Repair	4787	SF	$ 48.00	$ 229,776
	SUBTOTAL				**$ 287,220**
	GENERAL CONDITIONS	**20%**			**$ 57,444**
	BONDS & INSURANCE	**2%**			**$ 5,744**
	OVERHEAD & PROFIT	**10%**			**$ 28,722**
	DESIGN CONTINGENCY	**20%**			**$ 57,444**
	TOTAL CONSTRUCTION COST				**$ 436,574**
	TOTAL				**$ 436,574**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M12	**UPGRADE PLUMBING FIXTURES**				
	Upgrade Plumbing Fixtures	10	EA	$ 1,980.00	$ 19,800
	SUBTOTAL				**$ 19,800**
	GENERAL CONDITIONS	**20%**			**$ 3,960**
	BONDS & INSURANCE	**2%**			**$ 396**
	OVERHEAD & PROFIT	**10%**			**$ 1,980**
	DESIGN CONTINGENCY	**20%**			**$ 3,960**
	TOTAL CONSTRUCTION COST				**$ 30,096**
	TOTAL				**$ 30,096**
M13	**INSTALL FIRE SUPPRESSION SYSTEM**				
	Install Fire Line	1	Allow	$ 60,000.00	$ 60,000
	New Fire Suppression System	4787	SF	$ 12.00	$ 57,444
	Architectural Repair/ Modification	4787	SF	$ 12.00	$ 57,444
	SUBTOTAL				**$ 174,888**
	GENERAL CONDITIONS	**20%**			**$ 34,978**
	BONDS & INSURANCE	**2%**			**$ 3,498**
	OVERHEAD & PROFIT	**10%**			**$ 17,489**
	DESIGN CONTINGENCY	**20%**			**$ 34,978**
	TOTAL CONSTRUCTION COST				**$ 265,830**
	TOTAL				**$ 265,830**
	ELECTRICAL				
E1	**REMOVE ABANDONDED ELECTRICAL**				
	Field Investigation For Service & Distribution	40	HR	$ 114.00	$ 4,560
	SUBTOTAL				**$ 4,560**
	GENERAL CONDITIONS	**20%**			**$ 912**
	BONDS & INSURANCE	**2%**			**$ 91**
	OVERHEAD & PROFIT	**10%**			**$ 456**
	DESIGN CONTINGENCY	**20%**			**$ 912**
	TOTAL CONSTRUCTION COST				**$ 6,931**
	TOTAL				**$ 6,931**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT
ARCHITECT…….FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E2	**ELECTRICAL DISTRIBUTION**				
	Field Investigation For Service & Distribution	12	HR	$ 240.00	$ 2,880
	Install Main Service Disconnect	1	LS	$ 9,000.00	$ 9,000
	SUBTOTAL				**$ 11,880**
	GENERAL CONDITIONS	**20%**			**$ 2,376**
	BONDS & INSURANCE	**2%**			**$ 238**
	OVERHEAD & PROFIT	**10%**			**$ 1,188**
	DESIGN CONTINGENCY	**20%**			**$ 2,376**
	TOTAL CONSTRUCTION COST				**$ 18,058**
	TOTAL				**$ 18,058**
E3	**SURGE PROTECTION**				
	Install Surge Protection	1	LS	$ 3,420.00	$ 3,420
	SUBTOTAL				**$ 3,420**
	GENERAL CONDITIONS	**20%**			**$ 684**
	BONDS & INSURANCE	**2%**			**$ 68**
	OVERHEAD & PROFIT	**10%**			**$ 342**
	DESIGN CONTINGENCY	**20%**			**$ 684**
	TOTAL CONSTRUCTION COST				**$ 5,198**
	TOTAL				**$ 5,198**
E4	**REPLACE EXISTING PANELBOARDS**				
	Remove and Replace Panelboards	2	EA	$ 6,780.00	$ 13,560
	SUBTOTAL				**$ 13,560**
	GENERAL CONDITIONS	**20%**			**$ 2,712**
	BONDS & INSURANCE	**2%**			**$ 271**
	OVERHEAD & PROFIT	**10%**			**$ 1,356**
	DESIGN CONTINGENCY	**20%**			**$ 2,712**
	TOTAL CONSTRUCTION COST				**$ 20,611**
	TOTAL				**$ 20,611**

Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E5	**REPLACE EXISTING WIRING AND DEVICES**				
	Electrical Demolition	4787	SF	$ 0.84	$ 4,021
	New Power System	4787	SF	$ 9.60	$ 45,955
	Architectural Repair/ Modification	4787	SF	$ 12.00	$ 57,444
	SUBTOTAL				**$ 107,420**
	GENERAL CONDITIONS	**20%**			**$ 21,484**
	BONDS & INSURANCE	**2%**			**$ 2,148**
	OVERHEAD & PROFIT	**10%**			**$ 10,742**
	DESIGN CONTINGENCY	**20%**			**$ 21,484**
	TOTAL CONSTRUCTION COST				**$ 163,279**
	TOTAL				**$ 163,279**
E6	**REVIEW BONDING AND GROUNDING**				
	Electrician	40	HR	$ 114.00	$ 4,560
	SUBTOTAL				**$ 4,560**
	GENERAL CONDITIONS	**20%**			**$ 912**
	BONDS & INSURANCE	**2%**			**$ 91**
	OVERHEAD & PROFIT	**10%**			**$ 456**
	DESIGN CONTINGENCY	**20%**			**$ 912**
	TOTAL CONSTRUCTION COST				**$ 6,931**
	TOTAL				**$ 6,931**
E7	**INSTALL GFCI OUTLETS**				
	Install GFCI Outlets	7	EA	$ 270.00	$ 1,890
	SUBTOTAL				**$ 1,890**
	GENERAL CONDITIONS	**20%**			**$ 378**
	BONDS & INSURANCE	**2%**			**$ 38**
	OVERHEAD & PROFIT	**10%**			**$ 189**
	DESIGN CONTINGENCY	**20%**			**$ 378**
	TOTAL CONSTRUCTION COST				**$ 2,873**
	TOTAL				**$ 2,873**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	11/21/2024

PROJECT NAME……..…..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……..ALTA, UT **ITEM DETAIL**
ARCHITECT…….....FFKR
STAGE OF DESIGN……FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E8	**REPLACE EXISTING LIGHTING**				
	Electrical Demolition	4787	SF	$ 0.84	$ 4,021
	New Lighting	4787	SF	$ 21.60	$ 103,399
	Architectural Repair/ Modification	4787	SF	$ 12.00	$ 57,444
	SUBTOTAL				**$ 164,864**
	GENERAL CONDITIONS	**20%**			**$ 32,973**
	BONDS & INSURANCE	**2%**			**$ 3,297**
	OVERHEAD & PROFIT	**10%**			**$ 16,486**
	DESIGN CONTINGENCY	**20%**			**$ 32,973**
	TOTAL CONSTRUCTION COST				**$ 250,594**
	TOTAL				**$ 250,594**
E9	**INSTALL LIGHTING CONTROLS**				
	Install Lighting Controls	4787	SF	$ 4.80	$ 22,978
	SUBTOTAL				**$ 22,978**
	GENERAL CONDITIONS	**20%**			**$ 4,596**
	BONDS & INSURANCE	**2%**			**$ 460**
	OVERHEAD & PROFIT	**10%**			**$ 2,298**
	DESIGN CONTINGENCY	**20%**			**$ 4,596**
	TOTAL CONSTRUCTION COST				**$ 34,926**
	TOTAL				**$ 34,926**

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Alta Central

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION			11/21/2024
PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT LOCATION……..ALTA, UT ARCHITECT…….FFKR STAGE OF DESIGN…….FACILITY ASSESSMENT		ITEM DETAIL		
#	DESCRIPTION	QTY UNIT	UNIT COST	TOTAL
E10	**PROVIDE DEDICATED TELECOM ROOM**			
	New Telecom Room (remodel)	100 SF	$ 384.00	$ 38,400
	SUBTOTAL			**$ 38,400**
	GENERAL CONDITIONS	**20%**		**$ 7,680**
	BONDS & INSURANCE	**2%**		**$ 768**
	OVERHEAD & PROFIT	**10%**		**$ 3,840**
	DESIGN CONTINGENCY	**20%**		**$ 7,680**
	TOTAL CONSTRUCTION COST			**$ 58,368**
	TOTAL			**$ 58,368**
E11	**AUDIO VISUAL MODIFICATIONS**			
	Install wired data jacks	4787 SF	$ 4.80	$ 22,978
	Architectural Repair	4787 SF	$ 4.80	$ 22,978
	New 65" Display	1 Allow	$ 5,820.00	$ 5,820
	SUBTOTAL			**$ 51,775**
	GENERAL CONDITIONS	**20%**		**$ 10,355**
	BONDS & INSURANCE	**2%**		**$ 1,036**
	OVERHEAD & PROFIT	**10%**		**$ 5,178**
	DESIGN CONTINGENCY	**20%**		**$ 10,355**
	TOTAL CONSTRUCTION COST			**$ 78,698**
	TOTAL			**$ 78,698**
E12	**SECURITY SYSTEM**			
	Install Security System	4787 SF	$ 6.00	$ 28,722
	Architectural Repair	4787 SF	$ 4.80	$ 22,978
	Secure Server Room Remodel	100 SF	$ 360.00	$ 36,000
	SUBTOTAL			**$ 87,700**
	GENERAL CONDITIONS	**20%**		**$ 17,540**
	BONDS & INSURANCE	**2%**		**$ 1,754**
	OVERHEAD & PROFIT	**10%**		**$ 8,770**
	DESIGN CONTINGENCY	**20%**		**$ 17,540**
	TOTAL CONSTRUCTION COST			**$ 133,303**
	TOTAL			**$ 133,303**

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Community Center

Architectural Assessment

Originally built as a snow removal equipment storage garage, the Community Center is a single CMU structure that has been added to with a residential living unit and community meeting room in a second story addition. Access to the second story residence is provided through a winding stair on the west side of the building. The east side of the building has an addition being used as a contract Post Office, storage and a stair to the second floor.

A. Visible Foundation System

The foundation for the original garage portion of the building is painted and plastered CMU. The paint appears to be in good condition on the south and west sides of the building with only minor areas of peeling or flaking. The areas that are peeling and flaking are located primarily near grade and appear to be from the large rocks piled around the building.

The north elevation of the building has suffered impact damage from rock falls from the adjacent hillside. The most significant damage appears to be focused at the northwest corner, which has extensive damage to the CMU blocks. The main portion of the north wall has been plastered. It is unknown if the plaster on the walls was to repair extensive damage or to provide an additional layer of protection. The hillside has the remnants of a rockfall containment system. The anchor bolts are no longer attached to the hill, and many are missing, and others are dangling loose from the wire mesh netting. The netting itself is severely damaged and inconsistent in coverage of the hillside and likely offers very little protection of the building.

The foundation for the additions visible from the road on the south elevation is cast-in-place concrete. The concrete is not plastered and has some honeycombing and form lines but appears to be in fair condition.

Recommended Measures

Good – Repair damaged CMU by concrete plastering.

Better – Reinstall rockfall protection measures along the hillside north of the building.

Best – No recommendations.

Community Center

Architectural Assessment

B. Building Envelope and Exterior Finish Materials

As discussed in the foundation section above, the exterior material of the main garage block is painted and plastered CMU. The paint appears to be in good condition on the south and west sides of the building with only minor areas of peeling or flaking. The areas that are peeling and flaking are located primarily near grade and appear to be from the large rocks piled around the building. The CMU jambs of the easternmost overhead doors on the south elevation are damaged from vehicle impacts. The damage is covered with paint so no deterioration of the CMU from water intrusion is likely. Steel pipe bollards have been installed to prevent further damage. This damage is unsightly but likely poses little risk to the structural stability of the CMU jambs / piers.

The north wall of the garage spaces is showing signs of efflorescence which indicates that water is possibly penetrating through to the interior of the space. The perimeter of the garage space also lacks visible insulation. This contributes to thermal penetration into the garage space that can then leak into other parts of the building.

The exterior materials for the additions are painted vertical T1-11 wood composite siding. The paint is also in good condition and has very little peeling or flaking. The northern portion of the east elevation of the second-floor addition is beginning to appear as if the paint is thinning or being eroded by the weather and will likely need re-painting in the near future. Google Earth imagery shows snow being piled up against the east wall.

Post office and stair to the second floor addition is separating from the building and creating gaps in the building envelope which will allow energy leakage and water infiltration. The separation is particularly evident while climbing the east stair to the second floor. As one approaches eye-level with the top landing, daylight can be seen through a large gap between the wall and landing. The landing is obviously sloping from a high point on the west to a low point on the east. Building occupants have indicated that maintaining a comfortable temperature is difficult in the post office, which is below the area of the separation.

Both the post office addition on the east and the residential addition to the west overhang the original garage and are supported by a timber brace that is painted to match the T1-11 siding. The braces appear to be in good condition.

Recommended Measures

Good – Touch-up the peeling or flaking paint along the base of the west wall. Clear the large rocks away from the building to form a 3’-0” wide buffer zone along the building foundation on the north and west sides of the building. Repaint the northern portion of the east side of the second-floor addition.

Better – Reattach the post office / stair addition on the east side of the building. Add insulation to the garage building walls to support the intent of the insulated overhead doors.

Best – Remove and rebuild the post office and second floor additions.

Community Center

Architectural Assessment

C. Exterior Window and Door Openings

The building has dark bronze anodized aluminum fixed and sliding windows, which appear to be triple glazed units. Triple glazed units are energy efficient which positively contribute to minimizing heat loads in the building. The town council chambers have operable windows. The Marshal quarters predominantly have operable windows, with one window being fixed. Windows in the post office are fixed.

The exterior man doors are hollow metal doors. It is uncertain if they are insulated or have a hollow core. The man door on the west side of the building, adjacent to the western most overhead door, is beginning to show signs of rust and damage along the bottom. The man door locations could be a potentially safety concern due to the lack of an overhang above either door and the step out directly towards the highway upon exiting the building takes occupants close to west-bound, downhill traffic.

The overhead doors to access the storage area and garage on the main level appear insulated, but this effect is hampered by the remainder of the first level garage being non-insulated construction. Refer to narrative in the “Building Envelope and Exterior Finish Materials” section of this building report.

Recommended Measures

Good – None.

Better – Replace exterior man doors with insulated cores.

Best – Reconfigure space to allow man door to be relocated to a safer position.

Community Center

Architectural Assessment

D. Roofing

The community center has a low slope single-ply membrane roof that slopes from south to north. The membrane, believed to be TPO, is in fair condition. The direction of drainage leads to a damaged and ineffective rain gutter that is on the north wall of the building. The combined effects of the roof slope and a damaged gutter are contributing factors to the damage of the north wall (explained in the Building Envelope section of this report).

A homemade snow fence has been constructed to be over the east edge of the roof and protect the post office entrance. It is currently ballasted with sandbags. Further investigation is warranted to determine how the current roof penetrates the roof membrane, if at all, and the effects on the membranes warranty. It is unclear the use of two penetrations near the northwest corner of the roof. These two penetrations also have a yellow cable wrapped around them (as well as other roof elements). The use of the yellow cord is unclear.

A rope “safety line” is deployed for use from the top of the roof access ladder to the snow fence. It is understood that this is also to help cut snow cornices and other overhangs as it slides off the roof to protect the post office entrance. The rope safety line does not meet current safety standards. Additionally, the access ladder and safety cage do not meet the current OSHA requirements which calls for a fall arrest system. Safety cages are no longer acceptable within the OSHA requirements.

Recommended Measures

Good – Remove rope “safety line”. Install roof anchor bollards and wire rope for safety. Install new rain gutter to control drainage.

Better – Remove homemade snow fence and replace with engineered solution with proper penetration detailing. Patch roof membrane where current penetrations are located. Remove safety cage and install a ladder with fall arrest gear.

Best – No recommendations.

Community Center

Architectural Assessment

E. Interior Features and Finishes

The interior of the community center appears to be mostly original finishes from the 1980’s. Carpet, lighting, and wall finishes contribute to a dated feel of the spaces. A highlight of the original finishes are the post boxes that are inside the east addition. These styles are not readily utilized by USPS currently and provide a unique character to the building that is “Alta-centric”.

There is one storage room partway up the stairways in both the east and west side additions. In the case of the east side storage room, access is reduced due to the existing configuration of the stair handrail.

There is a separation between the floor and wall in the restroom on level 2, which has been addressed in the exterior building envelope section of this report. While not located on an exterior wall, this can lead to energy leakage due to the garage space below being unconditioned and non-insulated. Additionally, as a restroom, there could be water leakage into the garage space from the ceiling. This is concerning as it could damage the items being stored there.

Living quarters for marshal’s are located on the west side, level two of the community center. The quarters are very cramped. Having the marshal quarters adjacent to the community center spaces is an inefficient mix of space.

Recommended Measures

Good – Update finishes throughout facility.

Better – Upgrade the anchorage between the east and west additions and the main CMU wall structure.

Best – Replacement of the east and west additions.

Community Center

Architectural Assessment

F. Site Access and Overall Accessibility

Access to the community room is compromised due to the chair lift in the east stairwell. The chair lift is necessary to maintain accessibility to the room, but also restricts the stairwell width to a degree that could be hard for individuals to manage. This is a partial solution to the accessibility challenges presented by a two story building with no elevator and means of egress only on one floor. Additionally, the handrail in both the east and west stairways do not meet current accessibility standards.

The west stairway cannot be used to access the Community Room, or as a means of egress from the space, due to the locks that are on the doors to secure the marshals quarters. Door hardware for all man doors does not meet current accessibility standards.

The building is located along the north side of Utah Highway 210. There is a matter of feet from the door thresholds to the highway itself. While the facility is accessible from the street, there is a lack of dedicated parking for the community center. This is most noticeable during Town council meetings or events, and in the day to day when residents come to receive their packages from the post office. Safety concerns arise during these times in the winter months when snow and ice restrict places to safely drive, park, and walk.

Recommended Measures

Good – Install new lever style door hardware. Install new handrails at stair that conforms to current accessibility standards.

Better – No recommendations

Best – No recommendations

Community Center

Structural Assessment

CALDER RICHARDS
CONSULTING ENGINEERS

COMMUNITY CENTER BUILDING – Structural Assessment

The building is a two-level structure composed of twelve-inch-thick concrete masonry unit (CMU) exterior bearing walls with 32-inch-deep precast concrete double tee framing at the upper floor and wood timber and rafter framing at the roof. The double tee floor system clear spans the building above the garage area. 6-3/4" by 21-1/2" glue lam roof beams also clear span the building and are spaced at 48 inches on center. It is unknown what size rafter framing occurs between the glue lam beams and what type of sheathing is used. The age of structure is estimated between 1978 to 1984.

A wood framed stair structure to the west and a wood framed structure for stairs and post office at the east were added to the building at some point in time.

As a general assessment, the structure appears in functional condition but shows signs of deterioration and damage in areas as noted below.

The back and side walls of the building are constructed adjacent to a steeply sloped hillside and have been impacted by falling rock and accumulated snow. This condition has led to damage and deterioration of the CMU wall. ***See Photo #3.*** Efforts had been made to retain the hillside by means of metal fencing, but it has failed. The walls have been compromised due to impact from the rock and excessive moisture accumulating next to the walls. This is evident by signs of moisture deteriorating the mortar in joints and penetrating through the wall into the interior spaces at the lower level. ***See Photo #4.***

Correcting the above problem for long term use can be accomplished but will be a major undertaking that will require the following:

1. Stabilizing the hillside by placement of a shotcrete facing anchored into the hillside or placement of a more resilient fencing structure.
2. Repairing and re-pointing the CMU walls then place a waterproofing layer on the back and side walls.
3. Install a positive drainage system at the base of the back and side walls.

Another concern is the roof framing. An analysis of the roof beams indicates that the beams are only capable of supporting a snow load of 120 PSF while current code snow loading for the site is estimated at 204 PSF. If continued use of the building is anticipated, shoveling the accumulated snow during heavy snow years is needed. If the accumulated snow depth on roof exceeds approximately six feet in depth of compacted snow, snow removal will be required.

In lieu of shoveling, another option is to strengthen the existing roof beams by glueing and spiking new micro-lam beams to the side of each existing beam. Due to the lengths involved, erection and placement of this new framing may be difficult.

1805 South Redwood Road, Suite 102, Salt Lake City, Utah 84104 T 801-466-1699 F 801-467-2495

The wood framed additions on the east and west side are also a concern. It is suspect whether the framing can support significant snow loading but due to the pitched roofs, snow accumulation would be greatly reduced. The framing at base was observed to have been impacted by rock fall at a few locations. ***See Photo #5.*** Also, due to the unique skewed vertical supports and the apparent lack of anchorage to the main block building, these additions appear to be pulling away from the main structure and show signs of differential settlement, such as the uneven floors at landings.

Addressing the above potential problems for long-term use will require some selective demolition to observe the structure and further investigation. Possible corrections may include strengthening the roof framing and upgrading the anchorage of the wood framing to the main building's CMU walls.

Due to the age and type of construction, it is assumed that the structure does not meet current IBC provisions for seismic and wind loading. The heavy mass concrete floor with minimal connections to the CMU walls combined with the large open doors (no shear wall), at the front of building creates weak link for resisting lateral loads during a seismic event. The capacity of the structure to resist significant avalanche loading is also questionable.

Corrections can be made to laterally strengthen the building as follows:

1. Provide better anchorage between double tee framing and CMU walls by placing new drill and epoxy bolts and steel angles at each stem of the double tee around the perimeter of main structure.
2. Analyze the shear strength of CMU walls and strengthen if needed by either adding new FRP coatings to wall or placing a thin shotcrete layer to the walls at isolated locations.
3. Laterally strengthen the front of building by placing a reinforced concrete frame at the openings, attached to the existing CMU wall. Another more cost-effective approach is infilling one of the openings or reducing the actual size of opening by placing new reinforced masonry wall.

Conclusion - The Community Center Building currently is in functional condition but shows signs of deterioration and damage due to rock fall from the hillside and water infiltration. The wood framed additions also show signs of distress. Basic repair and upgrade recommendations have been noted for future long-term use of this facility. The priority is correcting problems with the hillside retention and water that will increase with time and jeopardize the structural integrity of the CMU walls if not corrected. The cost of upgrading the overall structure to resist lateral loads from a significant earthquake or avalanche event may be costly.

Photo #3 – Damaged CMU Walls

Photo #4 – Moisture Infiltration in CMU Walls

Community Center

Structural Assessment

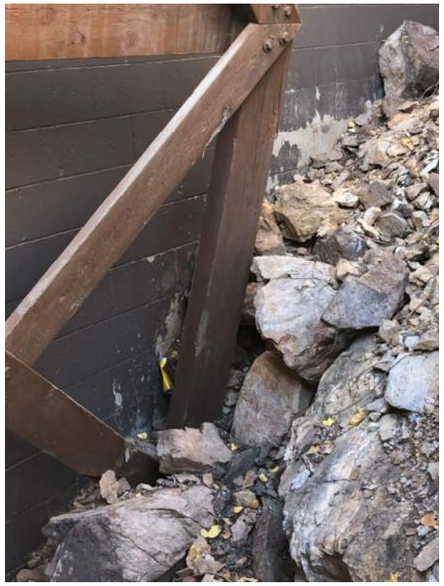

Photo #5 – Rock Fall Damage to Framed Addition Base

Community Center

Structural Assessment

Photo #3 – Damaged CMU Walls

Photo #4 – Moisture Infiltration in CMU Walls

Community Center

Structural Assessment

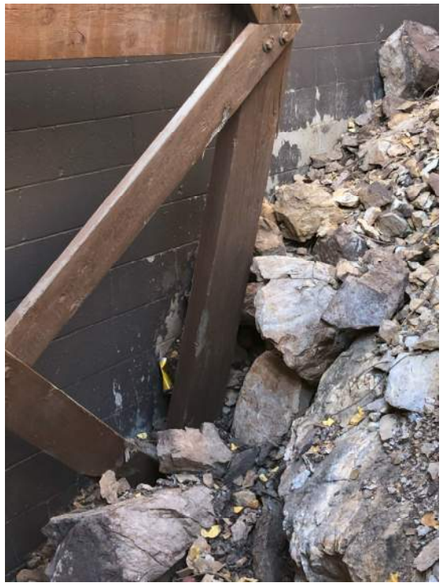

Photo #5 – Rock Fall Damage to Framed Addition Base

Community Center

Mechanical & Plumbing Assessment

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MECHANICAL and Plumbing ASSESSMENT

Project: Town of Alta Master Plan – Community Center
April 2024
Principal Engineer: Vinnie Figlioli, PE

Community Center – Assessment

Mechanical and Plumbing Overview

The building is a two story wood and block framed building that consists of a garage area and a post office on the main level and a community area on the second floor with one small apartment. The garage is conditioned using radiant tube heaters and also includes two vehicle exhaust systems. The top floor of the building is conditioned by two natural gas furnaces. There are also electric baseboard heaters that are located along the perimeter areas of the second floor. The post office is conditioned with electric baseboard heaters. The building envelope is insufficient and causing a great deal of heat loss.

The overall plumbing system of the building seems to be in good working order. There is a tankless water heater located within a closet on the second level that was installed in 2011. There is also a water softener.

No fire suppression system was found within the building.

Mechanical Assessment

The mechanical system, although adequate, is aged. This includes the systems for the garage and the community area on the second floor.

Garage Area

The age of the radiant tube heaters is unknown. However, they are in working condition. It is assumed that these units are past their life expectancy and will need to be replaced.

The vehicle exhaust system is divided into two areas. The first is for the main area and the second is for the area where UDOT parks the plow trucks. Both systems are aged and need to either be serviced or replaced.

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Second Floor

The second floor is conditioned using two natural gas furnaces located in a closet on the second floor. These furnaces was replaced in 2010 and are 90% efficient. Each furnace is equipped with a Humidifier. It does not appear to have any fresh air ducted to the units. All the ducting is in good condition and provides proper distribution to the space.

There are seven (7) electric baseboard heaters located along the perimeter of the space by the windows. These are all in working order, but the age is unknown. It is assumed that these units are as old as the building.

Post Office

There are three (3) electric baseboard heaters located within the space by the windows. These are all in working order, but the age is unknown. It is assumed that these units are as old as the building.

Plumbing Assessment

The plumbing system has is in good working condition. Most of the waste piping is exposed within the garage area and is of cast iron material. The domestic water piping is copper and pex.

The water heater was replaced in 2011 and seems to be in good working condition. It is a tankless type water heater that is not rated to be installed above 4500ft above sea level. This unit should be replaced due to the age and the elevation rating.

The water softener appears to be operational.

The PRV is operational and no visual leaks were observed.

The main plumbing vents through the roof are broken or bent. These will need to be repaired or replaced.

Fire Suppression Assessment

No fire suppression system within the building. It is assumed that this was not required at the time of the original construction.

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Equipment Information

Equipment	Age (yrs)	ASHRAE Life Expectancy (yrs)	Size
Furnace One	14	18	80,000 BTUH
Furnace Two	14	18	80,000 BTUH
Radinat Tube Heaters	Unknown	10 to 13	Unknown
Vehicle Exhaust System	Unknown	20	Unknown
Water Heater (NG)	13	12 to 15	172,000 BTUH

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Recommendations and Priorities:

Recommendations and Priorities				
All recommended upgrades are prioritized from 1-3 where:				
1)	Highly recommended upgrades (code violation, life safety, outdated systems, poor conditions, or similar)			
2)	Recommended upgrades (border line code violation, upgrades that provide additional comfort or value, or similar)			
3)	Optional upgrades (owner desired)			
Area	**Systems**	**Recommendation**		**Priority**
All	Envelope	Upgrade windows, doors, and add insulation. Once complete perform heat loss calculations or energy calculations to size new furnaces properly.		2
Garage	Mechanical	Service or replace existing vehicle exhaust system. The hoses are worn and need to be replaced.		2
Garage	Mechanical	UDOT exhaust system. System should be serviced and checked to ensure proper containment and exhaust is achieved. The current hood may not be capturing all the fumes from the vehicles.		2
Garage	Mechanical	Radiant tube heaters need to be serviced and possibly replaced.		1

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Second Floor	Mechanical	Replace existing furnaces and humidifiers. Bring in fresh air.		1
Second Floor	Mech Ducting	Clean and inspect all existing ducting and grilles.		3
Second Floor	Mechanical	Electric base board heaters. These are in working condition but may need to be replaced in the near future. The age is unknown.		3
All	Mechanical	Addition of a Building Automation System for remote access and control		3
All	Plumbing	Replace existing tankless water heater with a unit that is rated for the proper altitude.		1
Roof	Plumbing	Repair or replace plumbing vents through roof.		1
All	Plumbing	Upgrade plumbing fixtures.		3
All	Fire suppression	Explore the possibility of adding a fire suppression system.		2

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Community Center

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Summary

The current mechanical systems within the building are very close to exceeding their life expectancy. It is recommended to replace or upgrade the systems to meet or exceed current energy, mechanical, and plumbing codes. These systems can be upgraded as detailed above or they could be completely replaced. A financial analysis will need to be performed to determine the best course of action.

Thank you for choosing Spectrum Engineers to provide this assessment. If you have any questions or would like further information, please do not hesitate to contact me directly.

Sincerely,

By: _____

Vinnie Figlioli, P.E. Principal Mechanical Engineer

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Community Center

Electrical Assessment

ENVISION ENGINEERING

Town of Alta Facilities – Community Center
Electrical Assessment Report

October 29th, 2024

1. **Electrical Service and Power**
   a. Electrical service is provided by Rocky Mountain Power (RMP).
   b. We were not able to locate the utility transformer that feeds the Community Center.
   c. There are two meters at the upper level: meter # 50 823 587 (service A) and meter # 50 823 586 (service B). It appears that service A feeds the lower level (panelboard A is in the high bay area at the lower level) and service B feeds the upper level (panelboard B is located next to the meter). There is also a note on panelboard B (*Exhibit 4*) that panel "contains feeders for panel A." An E01 error (*Exhibit 2*) was displayed at the service A meter during the time of the site visit. This is typically an initialization error, meaning the meter has not been initialized. Also, we have only received the demand data for the service B meter. Considering all the above, ***we have assumed that the service B meter is active, the service A meter is inactive, and both panelboards (A and B), are fed from the service B***. This assumption to be confirmed by the Owner.

Exhibit 1 – Service A and B meters and panelboard B

Exhibit 2 – Service A meter with error message E01

Exhibit 3 – Service B meter.

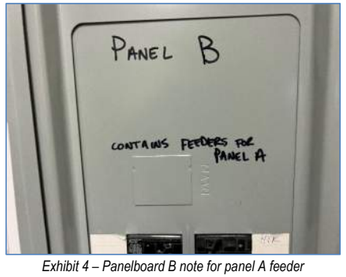

Exhibit 4 – Panelboard B note for panel A feeder

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Community Center

Electrical Assessment

d. The main service disconnect is 200A, the service voltage is 240V, 1ph.

e. The capacity of the existing electrical service has been verified by using the peak demand data from the RMP power bills from July 2023 to August 2024. Since the power factor information has not been provided, ***we have assumed the power factor to be 0.9***. The existing service has 67% spare capacity. The service appears to be adequate for the current electrical loads. If major renovations, additions, or large loads (such as elevator and similar loads) are planned in the future, the service size should be checked again at that time and the transformer size should be coordinated with RMP.

Town of Alta - Community Center
Service Capacity Calculations

240 volts — Meter # 50 823 586
1 phase

#	Billing Date From	Peak Demand kW	Power Factor	Peak Demand kVA
1	July 2023	5	0.9000	7
2	August 2023	5	0.9000	7
3	September 2023	4	0.9000	6
4	October 2023	7	0.9000	10
5	November 2023	5	0.9000	7
6	December 2023	6	0.9000	8
7	January 2024	6	0.9000	8
8	February 2024	5	0.9000	7
9	March 2024	9	0.9000	13
10	April 2024	6	0.9000	8
11	May 2024	5	0.9000	7
12	June 2024	5	0.9000	7
13	July 2024	5	0.9000	7
14	August 2024	4	0.9000	6

Highest recorded peak demand in kVA:	13 kVA
NEC safety factor:	1.25
(Peak demand in kVA)*(Safety factor):	**16 kVA**
Peak demand in Amps @ 240V, 1ph:	65 A
Existing service size in Amps:	200 A
Spare cpacity (%):	**67%**
Spare capacity Amps @ 480V, 3ph:	135 A

f. Panelboard A shows signs of rusting and should be replaced if renovations or upgrades are considered. Panelboard B is in fair condition and has another 10-15 years of useful life.

g. Grounding and bonding systems, including grounding electrodes and bonding jumpers, were not completely accessible or visible during the site observations. The only observed grounding electrode was water pipe. These portions of the electrical system are critical to safety and power quality of the system. Further investigation should be done to confirm the existence, resistance readings and condition of the grounding and bonding systems. A licensed electrician will be required to safely open and check these systems.

Community Center

Electrical Assessment

ENVISION ENGINEERING
Town of Alta Facilities – Community Center
Electrical Assessment Report

Exhibit 5 – Panelboard A.

Exhibit 6 – Panelboard A interior

h. The wiring devices (light switches, receptacles, etc.) appear to be in fair conditions.

i. The outlets in the laundry closet are not GFCI protected as required by *NEC 210.8(B)*.

j. There were no visible surge suppression devices installed at this building. It is recommended to install surge suppression devices on the main service panel and at the selected panelboards that serve sensitive loads or expensive equipment.

2. Lighting System

a. Most of the building has florescent lights. The existing light sources are outdated and inefficient. All existing light fixtures and bulbs are recommended to be replaced with new LED lighting. Each space will need to be evaluated individually to determine the extent of the upgrade needed.

b. The egress lighting is provided using emergency bug-eyes. We were not able to field verify the egress light levels (1 fc average, and 0.1 fc minimum). If the lighting upgrade is considered in the future, the egress lighting should be completely upgraded at that time.

c. Existing lighting controls consist solely of the toggle switches.

d. Significant upgrades to the interior and exterior lighting control systems are needed to meet the latest energy codes. There are opportunities for energy savings by installing lighting controls such as occupancy sensors and timed relay controls.

Exhibit 7 – Fluorescent troffers – upper level

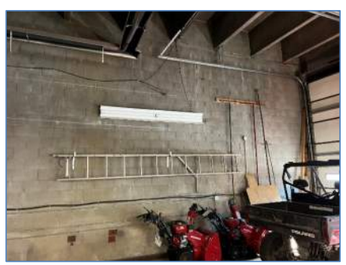

Exhibit 8 – Fluorescent linear utility light – lower level

Exhibit 9 – Toggle switch

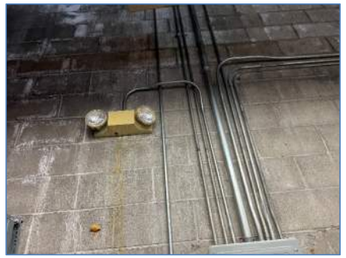

Exhibit 10 – Emergency bug-eye

3. Fire Alarm System

a. There is no fire alarm system in the building.

4. Telecommunication System

a. The telecommunication demarcation equipment is located at the lower level in the high bay area.

b. This environment is not suitable for telecom equipment, it's not properly conditioned. The telecommunication ground bus bar was not observed at the demarc location.

c. A telecommunication pedestal is located in front of the building. The purpose of this pedestal is unknown.

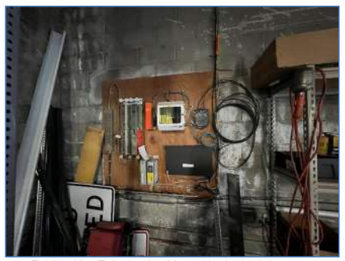

Exhibit 11 – Telecom backboard in the high-bay area

Exhibit 12 – Telecom pedestal

5. Security Systems

a. There are no security systems in the building.

6. Audio/Video

a. Exposed cables are present throughout the space.

b. The council chambers AV system consists of a wall mounted display, video conference bar, and connection cables connected to the back of the display.

1) VC bar is inadequate for the space. Its current location limits the camera site lines for both council members, and public presenters, showing only profile views of presenters, and the council members.

2) Requires the city manager to site next to the display to run the meeting.

3) VC bar limits remote viewers to only see whomever is speaking the loudest.

c. An old 4x3 projection screen hangs from the ceiling at the same location as the as the display.

d. There is no in-room voice lift system, limiting speaker to their own voices.

Exhibit 13 – Council chambers.

Exhibit 14 – Display, VC Bar, and projector screen.

Exhibit 15 - Exposed cables above doorway.

Exhibit 16 – Exposed cables below desks.

Recommendations

The following table summarizes the list of the recommended upgraded. All recommended upgrades are prioritized from 1 to 3, where:

1 → Highly recommended upgrades (code violations, life safety, fire hazards, outdated systems, poor conditions, and similar)
2 → Recommended upgrades (border line code violations, upgrades that provide additional comfort and flexibility, technology upgrades)
3 → Optional upgrades (owner desired upgrades)

System	Recommended Upgrade	Priority
General	• Remove all abandoned conduits, wiring, devices, and equipment.	1
Electrical distribution	• Provide main service disconnect outside the building.	1
Surge protection	• Provide surge protection at the main panel.	1
Electrical equipment	• Replace existing panelboard A.	2
Grounding and bonding	• Hire a licensed electrician to confirm the existence, provide resistance readings, and review the conditions of the grounding and bonding systems.	1
GFCI outlets	• Replace non-GFCI outlets with GFCI outlets in all locations specified in *NEC 210.8 (B)*.	1
Lighting	• Replace all lights with the outdated light sources (fluorescent and incandescent) with new LED lights. • Provide required egress lighting.	1
Lighting controls	• Provide new lighting controls for interior and exterior lighting as needed to comply with the latest adopted energy codes.	1
Telecommunication system	• Provide dedicated telecom room with proper cooling and grounding for all telecom racks and equipment.	2
Security system	• As recommended by the Owner.	3
Audio/Video system	• If accepted by the owner, we recommend the following: • Replacement of the presentation system with a new one consisting of dual screens, one for the public and one for council members to enhance viewing angles. • Two PTZ Cameras, one to show the Council Members, and one for the public presenters.	2

Community Center

Electrical Assessment

ENVISION ENGINEERING
Town of Alta Facilities – Community Center
Electrical Assessment Report

	• Remote Video input so manager does not need to sit beside the display. • Overhead, or tabletop microphone to improve audio pickup. • Overhead speakers to improve intelligibility for public attendees.	

Community Center

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION		1/27/2025
PROJECT NAME……..ALTA TOWN COMMUNITY BUILDING FACILITY ASSESSMENT			
LOCATION……..ALTA, UT		TOTALS	
ARCHITECT……..FFKR			
STAGE OF DESIGN……FACILITY ASSESSMENT			
ITEM #	DESCRIPTION		TOTAL
	COST SUMMARY		
	FOUNDATION SYSTEM		
F1	REPAIR DAMAGED CMU BY PLASTERING	$	12,403
F2	REINSTALL ROCKFALL PROTECTION MEASURES	$	31,008
	BUILDING EXTERIOR		
BE1	TOUCH UP PEELING/FLAKING PAINT, CLEAR LARGE ROCKS	$	25,943
BE2	RE-ATTACH POST OFFICE ADDITION, ADD GARAGE INSULATION	$	64,934
BE3	DEMOLISH, RE-BUILD POST OFFICE, 2ND FLOOR ADDITIONS	$	1,030,834
BE4	REPLACE EXTERIOR MAN DOORS	$	11,218
BE5	REMODEL, RELOCATE MAN DOORS	$	377,086
BE6	ROOF SAFETY LINE & RAIN GUTTER	$	15,808
BE7	NEW SNOW FENCE, PATCH MEMBRANE	$	40,776
	INTERIOR		
I1	UPGRADE INTERIOR FINISHES	$	352,320
I2	UPGRADE ANCHORAGE OF EAST/WEST ADDITIONS	$	74,054
I3	REPLACE EAST/WEST ADDITIONS	$	645,696
	SITE AND ACCESSIBILITY		
S1	NEW DOOR HARDWARE, RAILINGS	$	37,242
	STRUCTURAL		
ST1	HILLSIDE RETENTION	$	310,992
ST2	EAST/WEST ADDITIONS	$	164,160
	MECHANICAL		
M1	UPGRADE BUILDING ENVELOPE	$	402,652
M2	REPLACE VEHICLE EXHAUST SYSTEM	$	20,064
M3	SERVICE UDOT EXHAUST SYSTEM	$	9,120
M4	REPLACE RADIANT TUBE HEATERS	$	14,501
M5	REPLACE FURNACES & HUMIDIFIERS	$	44,870
M6	CLEAN DUCTS & GRILLES	$	15,938
M7	REPLACE ELECTRIC BASEBOARD HEATERS	$	14,592
M8	ADD BMS SYSTEM	$	67,109
M9	REPLACE TANKLESS WATER HEATER	$	6,384
M10	REPLACE PLUMBING VENTS	$	10,032
M11	REPLACE PLUMBING FIXTURES	$	18,058
M12	ADD FIRE SUPPRESSION	$	258,972
	ELECTRICAL		
E1	REMOVE ABANDONDED ELECTRICAL	$	6,931
E2	ELECTRICAL DISTRIBUTION	$	18,058
E3	SURGE PROTECTION	$	5,198
E4	REPLACE EXISTING PANELBOARDS	$	10,306
E5	REPLACE ELECTRICAL WIRING AND DEVICES	$	156,866
E6	REVIEW BONDING AND GROUNDING	$	6,931
E7	INSTALL GFCI OUTLETS	$	2,873
E8	REPLACE LIGHTING	$	240,752
E9	INSTALL LIGHTING CONTROLS	$	33,554
E10	PROVIDE DEDICATED TELECOM ROOM	$	58,368
E11	AUDIO VISUAL MODIFICATIONS	$	18,240
E12	SECURITY SYSTEM	$	78,583

****ESTIMATE IS PRICED IN TODAY'S DOLLARS - ESCALATION IS NOT INCLUDED****

Page 1

Community Center

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION				1/27/2025
PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT					
LOCATION……..ALTA, UT				ITEM DETAIL	
ARCHITECT……..FFKR					
STAGE OF DESIGN……FACILITY ASSESSMENT					
#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	FOUNDATION SYSTEM				
F1	**REPAIR DAMAGED CMU BY PLASTERING**				
	Clean Scrape CMU Wall	1700	SF	$ 1.20	$ 2,040
	Plaster CMU Wall	1700	SF	$ 3.60	$ 6,120
	SUBTOTAL				**$ 8,160**
	GENERAL CONDITIONS	**20%**			**$ 1,632**
	BONDS & INSURANCE	**2%**			**$ 163**
	OVERHEAD & PROFIT	**10%**			**$ 816**
	DESIGN CONTINGENCY	**20%**			**$ 1,632**
	TOTAL CONSTRUCTION COST				**$ 12,403**
	TOTAL				**$ 12,403**
F2	**REINSTALL ROCKFALL PROTECTION MEASURES**				
	Remove Existing Rockfall Netting, Clear Vegetation	1,700	SF	$ 2.40	$ 4,080
	New Rockfall Netting, Anchored to Hill	1,700	SF	$ 9.60	$ 16,320
	SUBTOTAL				**$ 20,400**
	GENERAL CONDITIONS	**20%**			**$ 4,080**
	BONDS & INSURANCE	**2%**			**$ 408**
	OVERHEAD & PROFIT	**10%**			**$ 2,040**
	DESIGN CONTINGENCY	**20%**			**$ 4,080**
	TOTAL CONSTRUCTION COST				**$ 31,008**
	TOTAL				**$ 31,008**
	BUILDING EXTERIOR				
BE1	**TOUCH UP PEELING/FLAKING PAINT, CLEAR LARGE ROCKS**				
	Clear Rocks from Building - Create 3' Buffer Zone	57	CY	$ 150.00	$ 8,500
	Scrape, Clean, & Repaint Building Exterior	1700	SF	$ 5.04	$ 8,568
	SUBTOTAL				**$ 17,068**
	GENERAL CONDITIONS	**20%**			**$ 3,414**
	BONDS & INSURANCE	**2%**			**$ 341**
	OVERHEAD & PROFIT	**10%**			**$ 1,707**
	DESIGN CONTINGENCY	**20%**			**$ 3,414**
	TOTAL CONSTRUCTION COST				**$ 25,943**
	TOTAL				**$ 25,943**

Page 2

Community Center

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
BE2	**RE-ATTACH POST OFFICE ADDITION, ADD GARAGE INSULATION**				
	Demolition, Put Back of Finishes at Attachment Upgrade	128	SF	$ 60.00	$ 7,680
	Upgrade Addition Attachment of Post Office/Stair Addition	64	LF	$ 300.00	$ 19,200
	Add Insulation to Garage Walls	1650	SF	$ 6.00	$ 9,900
	Remove & Replace Wall Items, Electrical in Garage	1650	SF	$ 3.60	$ 5,940
	SUBTOTAL				**$ 42,720**
	GENERAL CONDITIONS	**20%**			**$ 8,544**
	BONDS & INSURANCE	**2%**			**$ 854**
	OVERHEAD & PROFIT	**10%**			**$ 4,272**
	DESIGN CONTINGENCY	**20%**			**$ 8,544**
	TOTAL CONSTRUCTION COST				**$ 64,934**
	TOTAL				**$ 64,934**
BE3	**DEMOLISH, RE-BUILD POST OFFICE, 2ND FLOOR ADDITIONS**				
	Demolish Additions	2225	SF	$ 4.80	$ 10,680
	Rebuild Wood Framed Additions	2225	SF	$ 300.00	$ 667,500
	SUBTOTAL				**$ 678,180**
	GENERAL CONDITIONS	**20%**			**$ 135,636**
	BONDS & INSURANCE	**2%**			**$ 13,564**
	OVERHEAD & PROFIT	**10%**			**$ 67,818**
	DESIGN CONTINGENCY	**20%**			**$ 135,636**
	TOTAL CONSTRUCTION COST				**$ 1,030,834**
	TOTAL				**$ 1,030,834**
BE4	**REPLACE EXTERIOR MAN DOORS**				
	Remove Door	3	EA	$ 300.00	$ 900
	New Insulated HM Man Door	3	EA	$ 1,980.00	$ 5,940
	Paint New Door	3	EA	$ 180.00	$ 540
	SUBTOTAL				**$ 7,380**
	GENERAL CONDITIONS	**20%**			**$ 1,476**
	BONDS & INSURANCE	**2%**			**$ 148**
	OVERHEAD & PROFIT	**10%**			**$ 738**
	DESIGN CONTINGENCY	**20%**			**$ 1,476**
	TOTAL CONSTRUCTION COST				**$ 11,218**
	TOTAL				**$ 11,218**

Page 3

Community Center

Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
BE5	**REMODEL, RELOCATE MAN DOORS**				
	Demolish 1st Floor Building Entry Area	584	SF	$ 4.80	$ 2,803
	Remodel Building Entry, Relocate Entry Doors	584	SF	$ 420.00	$ 245,280
	SUBTOTAL				**$ 248,083**
	GENERAL CONDITIONS	**20%**			**$ 49,617**
	BONDS & INSURANCE	**2%**			**$ 4,962**
	OVERHEAD & PROFIT	**10%**			**$ 24,808**
	DESIGN CONTINGENCY	**20%**			**$ 49,617**
	TOTAL CONSTRUCTION COST				**$ 377,086**
	TOTAL				**$ 377,086**
BE6	**ROOF SAFETY LINE & RAIN GUTTER**				
	Remove Roof Safety Line	226	LF	$ 1.80	$ 407
	New Roof Anchor Bollards & Wire Rope	226	LF	$ 30.00	$ 6,780
	New Rain Gutter & Downspouts, Remove any Existing	153	LF	$ 21.00	$ 3,213
	SUBTOTAL				**$ 10,400**
	GENERAL CONDITIONS	**20%**			**$ 2,080**
	BONDS & INSURANCE	**2%**			**$ 208**
	OVERHEAD & PROFIT	**10%**			**$ 1,040**
	DESIGN CONTINGENCY	**20%**			**$ 2,080**
	TOTAL CONSTRUCTION COST				**$ 15,808**
	TOTAL				**$ 15,808**
BE7	**NEW SNOW FENCE, PATCH MEMBRANE**				
	Remove Homemade Snow Fence	170	LF	$ 6.00	$ 1,020
	Remove Roofing at Fence Anchoring	510	SF	$ 4.20	$ 2,142
	New Engineered Snow Fence, Anchored to Strucure	170	LF	$ 114.00	$ 19,380
	Roof Patching at Fence Anchoring	510	SF	$ 8.40	$ 4,284
	SUBTOTAL				**$ 26,826**
	GENERAL CONDITIONS	**20%**			**$ 5,365**
	BONDS & INSURANCE	**2%**			**$ 537**
	OVERHEAD & PROFIT	**10%**			**$ 2,683**
	DESIGN CONTINGENCY	**20%**			**$ 5,365**
	TOTAL CONSTRUCTION COST				**$ 40,776**
	TOTAL				**$ 40,776**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	INTERIORS				
I1	**UPGRADE INTERIOR FINISHES**				
	Selective Interior Demoliition	4599	SF	$ 2.40	$ 11,038
	New Interior Finishes	4599	SF	$ 48.00	$ 220,752
	SUBTOTAL				**$ 231,790**
	GENERAL CONDITIONS	**20%**			**$ 46,358**
	BONDS & INSURANCE	**2%**			**$ 4,636**
	OVERHEAD & PROFIT	**10%**			**$ 23,179**
	DESIGN CONTINGENCY	**20%**			**$ 46,358**
	TOTAL CONSTRUCTION COST				**$ 352,320**
	TOTAL				**$ 352,320**
I2	**UPGRADE ANCHORAGE OF EAST/WEST ADDITIONS**				
	Demolition, Put Back of Finishes at Attachment Upgrade	232	SF	$ 60.00	$ 13,920
	Upgrade Addition Attachment of Post Office/Stair Addition	116	LF	$ 300.00	$ 34,800
	SUBTOTAL				**$ 48,720**
	GENERAL CONDITIONS	**20%**			**$ 9,744**
	BONDS & INSURANCE	**2%**			**$ 974**
	OVERHEAD & PROFIT	**10%**			**$ 4,872**
	DESIGN CONTINGENCY	**20%**			**$ 9,744**
	TOTAL CONSTRUCTION COST				**$ 74,054**
	TOTAL				**$ 74,054**
I3	**REPLACE EAST/WEST ADDITIONS**				
	Demolish Additions	1000	SF	$ 4.80	$ 4,800
	Rebuild Wood Framed Additions	1000	SF	$ 420.00	$ 420,000
	SUBTOTAL				**$ 424,800**
	GENERAL CONDITIONS	**20%**			**$ 84,960**
	BONDS & INSURANCE	**2%**			**$ 8,496**
	OVERHEAD & PROFIT	**10%**			**$ 42,480**
	DESIGN CONTINGENCY	**20%**			**$ 84,960**
	TOTAL CONSTRUCTION COST				**$ 645,696**
	TOTAL				**$ 645,696**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
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STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
S1	**CHANGE DOOR HARDWARE TO ADA COMPLIANT**				
	Remove Door Hardware	17	LOC	$ 150.00	$ 2,550
	ADA Compliant Door Hardware	17	EA	$ 558.00	$ 9,486
	Remove Stair Railing	106	LF	$ 3.60	$ 382
	New Wall Railing	106	LF	$ 114.00	$ 12,084
	SUBTOTAL				**$ 24,502**
	GENERAL CONDITIONS	**20%**			**$ 4,900**
	BONDS & INSURANCE	**2%**			**$ 490**
	OVERHEAD & PROFIT	**10%**			**$ 2,450**
	DESIGN CONTINGENCY	**20%**			**$ 4,900**
	TOTAL CONSTRUCTION COST				**$ 37,242**
	TOTAL				**$ 37,242**
	STRUCTURAL				
ST1	**HILLSIDE RETENTION**				
	Remove Existing Rockfall Netting, Site Clearing	1700	SF	$ 2.40	$ 4,080
	Excavate, Grade Away from Building	2000	SF	$ 12.00	$ 24,000
	Shotcrete Retaining Wall	2040	SF	$ 48.00	$ 97,920
	Repair, Repoint CMU Walls	1700	SF	$ 6.00	$ 10,200
	CMU Wall Waterproofing, Drain Board	1700	SF	$ 18.00	$ 30,600
	Foundation Drain System	220	LF	$ 90.00	$ 19,800
	Site Repair	3000	SF	$ 6.00	$ 18,000
	SUBTOTAL				**$ 204,600**
	GENERAL CONDITIONS	**20%**			**$ 40,920**
	BONDS & INSURANCE	**2%**			**$ 4,092**
	OVERHEAD & PROFIT	**10%**			**$ 20,460**
	DESIGN CONTINGENCY	**20%**			**$ 40,920**
	TOTAL CONSTRUCTION COST				**$ 310,992**
	TOTAL				**$ 310,992**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME…….ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……ALTA, UT
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
ST2	**EAST/WEST ADDITIONS STRUCTURAL UPGRADE**				
	Structural Upgrade	1000	SF	$ 60.00	$ 60,000
	Architectural Repair	1000	SF	$ 48.00	$ 48,000
	SUBTOTAL				**$ 108,000**
	GENERAL CONDITIONS	**20%**			**$ 21,600**
	BONDS & INSURANCE	**2%**			**$ 2,160**
	OVERHEAD & PROFIT	**10%**			**$ 10,800**
	DESIGN CONTINGENCY	**20%**			**$ 21,600**
	TOTAL CONSTRUCTION COST				**$ 164,160**
	TOTAL				**$ 164,160**
	MECHANICAL				
M1	**UPGRADE BUILDING ENVELOPE**				
	Upgrade Building Envelope	4599	SF	$ 57.60	$ 264,902
	SUBTOTAL				**$ 264,902**
	GENERAL CONDITIONS	**20%**			**$ 52,980**
	BONDS & INSURANCE	**2%**			**$ 5,298**
	OVERHEAD & PROFIT	**10%**			**$ 26,490**
	DESIGN CONTINGENCY	**20%**			**$ 52,980**
	TOTAL CONSTRUCTION COST				**$ 402,652**
	TOTAL				**$ 402,652**
M2	**REPLACE VEHICLE EXHAUST SYSTEM**				
	Demolish Existing Exhaust System	1	LS	$ 1,800.00	$ 1,800
	New Exhaust System	1	Allow	$ 11,400.00	$ 11,400
	SUBTOTAL				**$ 13,200**
	GENERAL CONDITIONS	**20%**			**$ 2,640**
	BONDS & INSURANCE	**2%**			**$ 264**
	OVERHEAD & PROFIT	**10%**			**$ 1,320**
	DESIGN CONTINGENCY	**20%**			**$ 2,640**
	TOTAL CONSTRUCTION COST				**$ 20,064**
	TOTAL				**$ 20,064**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME…….ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..……ALTA, UT
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M3	**SERVICE UDOT EXHAUST SYSTEM**				
	Service, Repair UDOT Exhaust System, Hood	1	Allow	$ 6,000.00	$ 6,000
	SUBTOTAL				**$ 6,000**
	GENERAL CONDITIONS	**20%**			**$ 1,200**
	BONDS & INSURANCE	**2%**			**$ 120**
	OVERHEAD & PROFIT	**10%**			**$ 600**
	DESIGN CONTINGENCY	**20%**			**$ 1,200**
	TOTAL CONSTRUCTION COST				**$ 9,120**
	TOTAL				**$ 9,120**
M4	**REPLACE RADIANT TUBE HEATERS**				
	Remove Existing Heaters	3	EA	$ 180.00	$ 540
	New Radiant Tube Heaters, Connect to Existing	100	LF	$ 90.00	$ 9,000
	SUBTOTAL				**$ 9,540**
	GENERAL CONDITIONS	**20%**			**$ 1,908**
	BONDS & INSURANCE	**2%**			**$ 191**
	OVERHEAD & PROFIT	**10%**			**$ 954**
	DESIGN CONTINGENCY	**20%**			**$ 1,908**
	TOTAL CONSTRUCTION COST				**$ 14,501**
	TOTAL				**$ 14,501**
M5	**REPLACE FURNACES & HUMIDIFIERS**				
	Remove Existing Furnace & Humidifier	2	EA	$ 1,800.00	$ 3,600
	New Furnace & Humidifier	2	EA	$ 12,960.00	$ 25,920
	SUBTOTAL				**$ 29,520**
	GENERAL CONDITIONS	**20%**			**$ 5,904**
	BONDS & INSURANCE	**2%**			**$ 590**
	OVERHEAD & PROFIT	**10%**			**$ 2,952**
	DESIGN CONTINGENCY	**20%**			**$ 5,904**
	TOTAL CONSTRUCTION COST				**$ 44,870**
	TOTAL				**$ 44,870**

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PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
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STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M6	**CLEAN DUCTS/ GRILLES**				
	Clean Ducts/ Grilles	4599	SF	$ 2.28	$ 10,486
	SUBTOTAL				**$ 10,486**
	GENERAL CONDITIONS	**20%**			**$ 2,097**
	BONDS & INSURANCE	**2%**			**$ 210**
	OVERHEAD & PROFIT	**10%**			**$ 1,049**
	DESIGN CONTINGENCY	**20%**			**$ 2,097**
	TOTAL CONSTRUCTION COST				**$ 15,938**
	TOTAL				**$ 15,938**
M7	**REPLACE ELECTRIC BASEBOARD HEATERS**				
	Remove Existing Baseboard Heater	10	EA	$ 180.00	$ 1,800
	New Baseboard Heater	10	EA	$ 780.00	$ 7,800
	SUBTOTAL				**$ 9,600**
	GENERAL CONDITIONS	**20%**			**$ 1,920**
	BONDS & INSURANCE	**2%**			**$ 192**
	OVERHEAD & PROFIT	**10%**			**$ 960**
	DESIGN CONTINGENCY	**20%**			**$ 1,920**
	TOTAL CONSTRUCTION COST				**$ 14,592**
	TOTAL				**$ 14,592**
M8	**BUILDING AUTOMATION**				
	Install Building Automation System	4599	SF	$ 9.60	$ 44,150
	SUBTOTAL				**$ 44,150**
	GENERAL CONDITIONS	**20%**			**$ 8,830**
	BONDS & INSURANCE	**2%**			**$ 883**
	OVERHEAD & PROFIT	**10%**			**$ 4,415**
	DESIGN CONTINGENCY	**20%**			**$ 8,830**
	TOTAL CONSTRUCTION COST				**$ 67,109**
	TOTAL				**$ 67,109**
M9	**REPLACE TANKLESS WATER HEATER**				
	Remove & Replace Tankless Water Heater	1	EA	$ 4,200.00	$ 4,200
	SUBTOTAL				**$ 4,200**
	GENERAL CONDITIONS	**20%**			**$ 840**
	BONDS & INSURANCE	**2%**			**$ 84**
	OVERHEAD & PROFIT	**10%**			**$ 420**
	DESIGN CONTINGENCY	**20%**			**$ 840**
	TOTAL CONSTRUCTION COST				**$ 6,384**
	TOTAL				**$ 6,384**

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PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
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#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
M10	**REPLACE ROOF PLUMBING VENTS**				
	Remove & Replace Roof Plumbing Vent, Vent Caps	10	EA	$ 660.00	$ 6,600
	SUBTOTAL				**$ 6,600**
	GENERAL CONDITIONS	**20%**			**$ 1,320**
	BONDS & INSURANCE	**2%**			**$ 132**
	OVERHEAD & PROFIT	**10%**			**$ 660**
	DESIGN CONTINGENCY	**20%**			**$ 1,320**
	TOTAL CONSTRUCTION COST				**$ 10,032**
	TOTAL				**$ 10,032**
M11	**UPGRADE PLUMBING FIXTURES**				
	Upgrade Plumbing Fixtures	6	EA	$ 1,980.00	$ 11,880
	SUBTOTAL				**$ 11,880**
	GENERAL CONDITIONS	**20%**			**$ 2,376**
	BONDS & INSURANCE	**2%**			**$ 238**
	OVERHEAD & PROFIT	**10%**			**$ 1,188**
	DESIGN CONTINGENCY	**20%**			**$ 2,376**
	TOTAL CONSTRUCTION COST				**$ 18,058**
	TOTAL				**$ 18,058**
M12	**INSTALL FIRE SUPPRESSION SYSTEM**				
	Install Fire Line	1	Allow	$ 60,000.00	$ 60,000
	New Fire Suppression System	4599	SF	$ 12.00	$ 55,188
	Architectural Repair/ Modification	4599	SF	$ 12.00	$ 55,188
	SUBTOTAL				**$ 170,376**
	GENERAL CONDITIONS	**20%**			**$ 34,075**
	BONDS & INSURANCE	**2%**			**$ 3,408**
	OVERHEAD & PROFIT	**10%**			**$ 17,038**
	DESIGN CONTINGENCY	**20%**			**$ 34,075**
	TOTAL CONSTRUCTION COST				**$ 258,972**
	TOTAL				**$ 258,972**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
LOCATION……..ALTA, UT **ITEM DETAIL**
ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	ELECTRICAL				
E1	**REMOVE ABANDONDED ELECTRICAL**				
	Field Investigation For Service & Distribution	40	HR	$ 114.00	$ 4,560
	SUBTOTAL				**$ 4,560**
	GENERAL CONDITIONS	**20%**			**$ 912**
	BONDS & INSURANCE	**2%**			**$ 91**
	OVERHEAD & PROFIT	**10%**			**$ 456**
	DESIGN CONTINGENCY	**20%**			**$ 912**
	TOTAL CONSTRUCTION COST				**$ 6,931**
	TOTAL				**$ 6,931**
E2	**ELECTRICAL DISTRIBUTION**				
	Field Investigation For Service & Distribution	12	HR	$ 240.00	$ 2,880
	Install Main Service Disconnect	1	LS	$ 9,000.00	$ 9,000
	SUBTOTAL				**$ 11,880**
	GENERAL CONDITIONS	**20%**			**$ 2,376**
	BONDS & INSURANCE	**2%**			**$ 238**
	OVERHEAD & PROFIT	**10%**			**$ 1,188**
	DESIGN CONTINGENCY	**20%**			**$ 2,376**
	TOTAL CONSTRUCTION COST				**$ 18,058**
	TOTAL				**$ 18,058**
E3	**SURGE PROTECTION**				
	Install Surge Protection	1	LS	$ 3,420.00	$ 3,420
	SUBTOTAL				**$ 3,420**
	GENERAL CONDITIONS	**20%**			**$ 684**
	BONDS & INSURANCE	**2%**			**$ 68**
	OVERHEAD & PROFIT	**10%**			**$ 342**
	DESIGN CONTINGENCY	**20%**			**$ 684**
	TOTAL CONSTRUCTION COST				**$ 5,198**
	TOTAL				**$ 5,198**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

PROJECT NAME……..ALTA TOWN CENTRAL BUILDING FACILITY ASSESSMENT
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ARCHITECT…..FFKR
STAGE OF DESIGN…….FACILITY ASSESSMENT

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E4	**REPLACE EXISTING PANELBOARDS**				
	Remove and Replace Panelboards	1	EA	$ 6,780.00	$ 6,780
	SUBTOTAL				**$ 6,780**
	GENERAL CONDITIONS	**20%**			**$ 1,356**
	BONDS & INSURANCE	**2%**			**$ 136**
	OVERHEAD & PROFIT	**10%**			**$ 678**
	DESIGN CONTINGENCY	**20%**			**$ 1,356**
	TOTAL CONSTRUCTION COST				**$ 10,306**
	TOTAL				**$ 10,306**
E5	**REPLACE EXISTING WIRING AND DEVICES**				
	Electrical Demolition	4599	SF	$ 0.84	$ 3,863
	New Power System	4599	SF	$ 9.60	$ 44,150
	Architectural Repair/ Modification	4599	SF	$ 12.00	$ 55,188
	SUBTOTAL				**$ 103,202**
	GENERAL CONDITIONS	**20%**			**$ 20,640**
	BONDS & INSURANCE	**2%**			**$ 2,064**
	OVERHEAD & PROFIT	**10%**			**$ 10,320**
	DESIGN CONTINGENCY	**20%**			**$ 20,640**
	TOTAL CONSTRUCTION COST				**$ 156,866**
	TOTAL				**$ 156,866**
E6	**REVIEW BONDING AND GROUNDING**				
	Electrician	40	HR	$ 114.00	$ 4,560
	SUBTOTAL				**$ 4,560**
	GENERAL CONDITIONS	**20%**			**$ 912**
	BONDS & INSURANCE	**2%**			**$ 91**
	OVERHEAD & PROFIT	**10%**			**$ 456**
	DESIGN CONTINGENCY	**20%**			**$ 912**
	TOTAL CONSTRUCTION COST				**$ 6,931**
	TOTAL				**$ 6,931**

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Cost Estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/27/2025

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ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E7	**INSTALL GFCI OUTLETS**				
	Install GFCI Outlets	7	EA	$ 270.00	$ 1,890
	SUBTOTAL				**$ 1,890**
	GENERAL CONDITIONS	**20%**			**$ 378**
	BONDS & INSURANCE	**2%**			**$ 38**
	OVERHEAD & PROFIT	**10%**			**$ 189**
	DESIGN CONTINGENCY	**20%**			**$ 378**
	TOTAL CONSTRUCTION COST				**$ 2,873**
	TOTAL				**$ 2,873**
E8	**REPLACE EXISTING LIGHTING**				
	Electrical Demolition	4599	SF	$ 0.84	$ 3,863
	New Lighting	4599	SF	$ 21.60	$ 99,338
	Architectural Repair/ Modification	4599	SF	$ 12.00	$ 55,188
	SUBTOTAL				**$ 158,390**
	GENERAL CONDITIONS	**20%**			**$ 31,678**
	BONDS & INSURANCE	**2%**			**$ 3,168**
	OVERHEAD & PROFIT	**10%**			**$ 15,839**
	DESIGN CONTINGENCY	**20%**			**$ 31,678**
	TOTAL CONSTRUCTION COST				**$ 240,752**
	TOTAL				**$ 240,752**

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STAGE OF DESIGN…….FACILITY ASSESSMENT

ITEM DETAIL

#	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
E9	**INSTALL LIGHTING CONTROLS**				
	Install Lighting Controls	4599	SF	$ 4.80	$ 22,075
	SUBTOTAL				**$ 22,075**
	GENERAL CONDITIONS	**20%**			**$ 4,415**
	BONDS & INSURANCE	**2%**			**$ 442**
	OVERHEAD & PROFIT	**10%**			**$ 2,208**
	DESIGN CONTINGENCY	**20%**			**$ 4,415**
	TOTAL CONSTRUCTION COST				**$ 33,554**
	TOTAL				**$ 33,554**
E10	**PROVIDE DEDICATED TELECOM ROOM**				
	New Telecom Room (Remodel)	100	SF	$ 384.00	$ 38,400
	SUBTOTAL				**$ 38,400**
	GENERAL CONDITIONS	**20%**			**$ 7,680**
	BONDS & INSURANCE	**2%**			**$ 768**
	OVERHEAD & PROFIT	**10%**			**$ 3,840**
	DESIGN CONTINGENCY	**20%**			**$ 7,680**
	TOTAL CONSTRUCTION COST				**$ 58,368**
	TOTAL				**$ 58,368**
E11	**AUDIO VISUAL MODIFICATIONS**				
	Replace Presentation System - Add (2) Screens, (2) Cameras	1	Allow	$ 12,000.00	$ 12,000
	SUBTOTAL				**$ 12,000**
	GENERAL CONDITIONS	**20%**			**$ 2,400**
	BONDS & INSURANCE	**2%**			**$ 240**
	OVERHEAD & PROFIT	**10%**			**$ 1,200**
	DESIGN CONTINGENCY	**20%**			**$ 2,400**
	TOTAL CONSTRUCTION COST				**$ 18,240**
	TOTAL				**$ 18,240**
E12	**SECURITY SYSTEM**				
	Install Security System Allowance	4787	SF	$ 6.00	$ 28,722
	Architectural Repair	4787	SF	$ 4.80	$ 22,978
	SUBTOTAL				**$ 51,700**
	GENERAL CONDITIONS	**20%**			**$ 10,340**
	BONDS & INSURANCE	**2%**			**$ 1,034**
	OVERHEAD & PROFIT	**10%**			**$ 5,170**
	DESIGN CONTINGENCY	**20%**			**$ 10,340**
	TOTAL CONSTRUCTION COST				**$ 78,583**
	TOTAL				**$ 78,583**