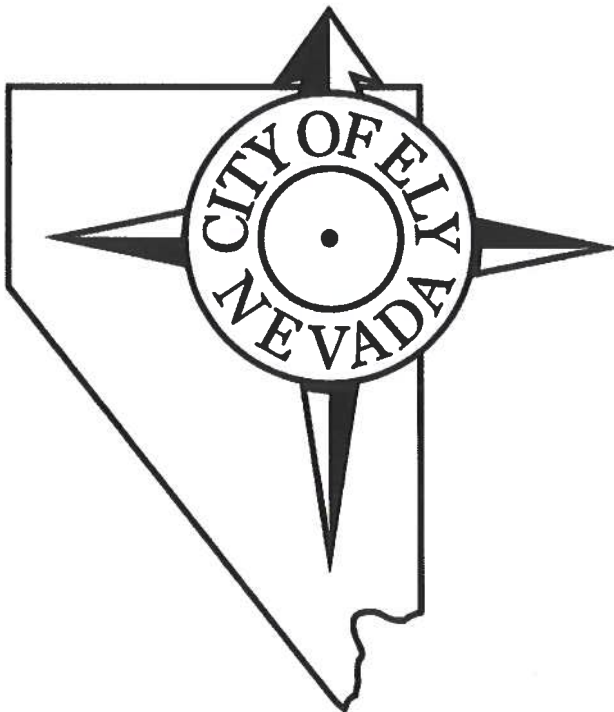


Programming Report

Ely City Hall Renovation: Project Scope Identification and Programming



May 12, 2023

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Diagram Drawings:

- Floor Plans – Original Floor Plans (to the best of our knowledge)**
- Floor Plans – Existing Building and Existing Functions**
- Floor Plans – Bubble Diagram of Program within Existing Buildings**

EXECUTIVE SUMMARY

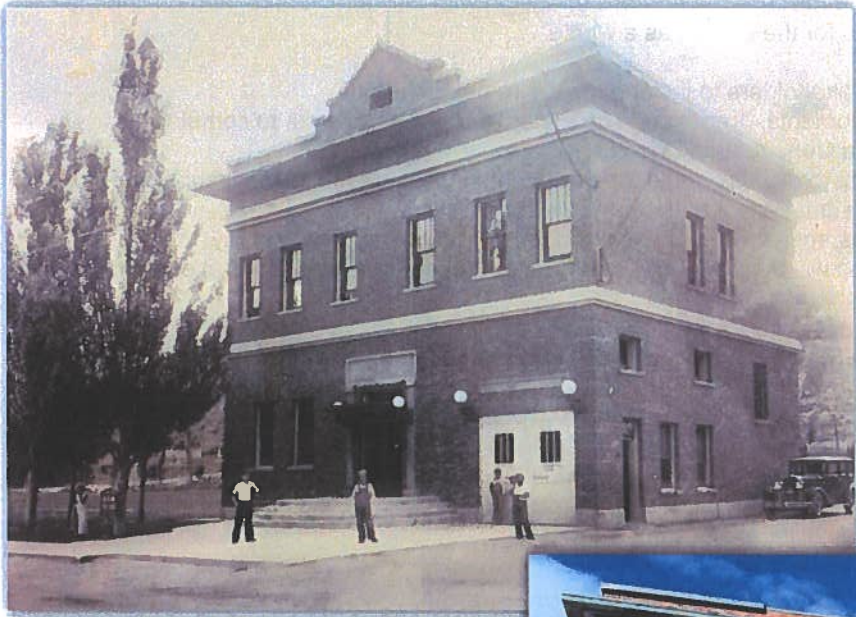
The City of Ely is considering reorganizing and expanding its current functions and operations within Ely City Hall. The intent of this Programming document is to help guide planning, design, construction documentation, and construction efforts for the Ely City Hall Renovation project located at 501 Mill Street, Ely, Nevada. It will further guide other development, planning, improvements, decisions, operations, and phasing efforts of the proposed renovation and related improvements for the City of Ely and Ely City Hall.

In November of 2022 Paul Cavin Architect was selected by the City of Ely to lead the design efforts for the renovation of Ely City Hall. The selection followed a formal Request for Qualifications process administered by the City of Ely.

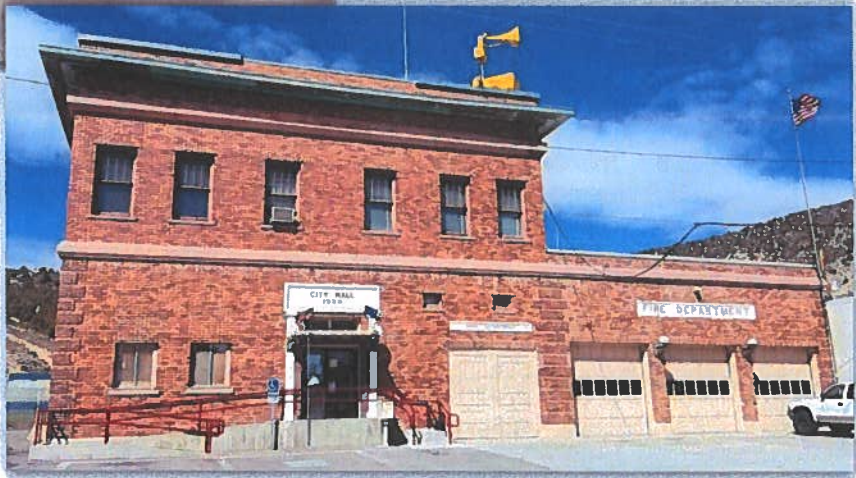
Project Scope Identification efforts began in December of 2022 with the review of drawings and documents provided by the City of Ely Mayor (Nathan Robertson). On January 17th and 18th 2023, the design team traveled to Ely to investigate, and field verify the existing building. During this initial site visit a kick-off meeting was held with the stakeholders and design team to review the project at hand and gather additional information.

The Programming efforts started shortly after the field visit in January and a second trip to Ely occurred on March 16th, 2023. This trip consisted of additional field verifications, a second meeting with the stakeholders, and a public meeting. Upon gathering and organizing the additional information, the programming report efforts continued.

Upon completion of the Programming Report the design team will prepare a proposal for the next phases of the project. Milestones for project development within the next phase include Schematic Design, Design Development, Construction Documents, Plan Review, Bidding Documents, and Construction Administration.



Ely City Hall Circa 1930



Ely City Hall Circa 2020

PROJECT SCOPE IDENTIFICATION AND PROGRAMMING SCOPE OF WORK

The scoping and programming efforts will incorporate information from the specific government departments that currently occupy or may occupy Ely City Hall. These efforts will also include input from the public as well via a public meeting, design charette, or similar forum with the intent to gather information on how the public would like to use the building. It is intended to incorporate previous work related to City Hall such as the Historic Structures Report prepared by RAFI Architecture and Design in 2017. It is intended to engage each City department and staff to determine wants and needs for space and amenities specific to each department. These efforts will also include an analysis of the building's structural system, life safety systems, ADA accessibility, envelope, mechanical, plumbing, and HVAC systems. The Historic Structures Report will be the starting point for understanding the existing building with the understanding that the building has aged, been maintained, and improved in areas over the past five years. The design team will make recommendations for future improvements to each of these systems as needed.

The design efforts for a complete project are proposed to be performed in 3 phases:

- Phase 1: Project Scope Identification and Programming
- Phase 2: Schematic Design, Design Development, Construction Documents, and Agency Review
- Phase 3: Bidding Assistance and Construction Administration

The following is an outline of the scope of work and professional services for Phase 1:

Project Scope Identification:

The intent of the Project Scope Identification effort is to familiarize the design team and stakeholders with each other, familiarize the design team with the building, discuss the process of design with all stakeholders, and outline the requirements, expectations, and processes for the project as a whole.

1. Kick-off meeting with City of Ely stakeholders to include the entire design team.
 - a. Identify requirements, documents, processes, schedules, and scope of work to complete Programming, Design, and Construction Documents.
 - b. Meet with each department to discuss and define needed spaces, adjacencies, circulation, etc.
 - c. Discuss the process of design relative to the project at hand.
 - d. Perform field investigations, measurements, photo documentation, etc. while in Ely.
 - i. Field investigations will be visual only and not through the means of special equipment or technical devices.
2. Review existing drawings, Historic Structures Report, other existing documents relative to the building and site, prior to kick-off meeting.

Programming:

1. Second meeting with City of Ely stakeholders and the general public to present findings and information from the kick-off meeting and initial site investigations.
 - a. The second meeting may be twofold:
 - i. Meeting with City of Ely stakeholders first.
 - ii. Then meet with the general public to discuss community needs and wants for the building.
 - iii. This process of meetings will be determined with the City of Ely prior to performing the meetings.
 - b. This second meeting will only include the Architect from the design team, it may include other design members via conference call, Zoom, or other telecommunications.
 - c. Topics for discussion may include:
 - i. Historic features to be restored and saved.
 - ii. Building additions/future expansion.
 - iii. Additional information for needed spaces, adjacencies, circulation, etc. for each department.
 - iv. Utility upgrades.
 - v. Findings from kick-off meeting field investigations.
 - vi. Public use, expectations, wants, needs, for the building.
 - vii. Other topics as coordinated with the stakeholders and design team.

2. Prepare a Programming Document that may include:
 - a. Architectural Narrative
 - b. Structural Narrative
 - c. Mechanical Narrative
 - d. Electrical Narrative
 - e. Define current design criteria
 - f. Interior Programming requirements for each room and space may include:
 - i. Architectural
 - ii. Mechanical/Plumbing
 - iii. Electrical
 - iv. Security
 - v. Telecommunications
 - vi. Other
 - g. Spatial relationships, adjacencies, site plan diagrams, and floor plan diagrams.
 - h. Identify a scope of work for each discipline for future improvements to the building and site.

3. Deliverables for Programming:
 - a. Programming Report Draft
 - b. Programming Report Final
 - c. Associated diagrams (site plan and floor plans)
 - d. Scope of work for a comprehensive design for Phase 2 and Phase 3



Current Aerial View, Ely City Hall

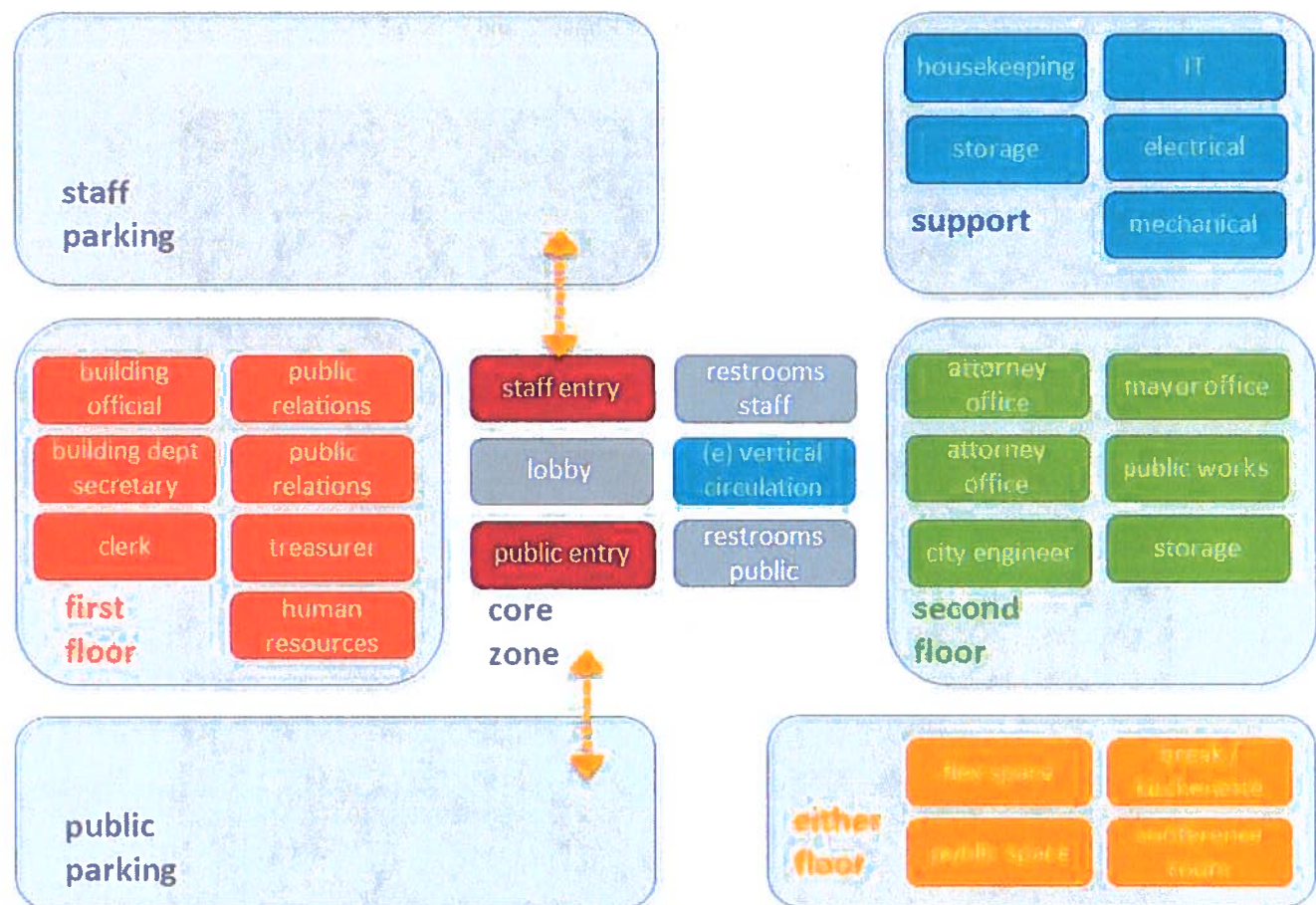
ARCHITECTURAL NARRATIVE

OVERALL BUILDING CONSIDERATIONS

The Ely City Hall is a multi-story building. The original structure was built in 1928 with a basement, a grade level apparatus bay, first floor, intermediate floor, and second floor. In 1953, a garage was added to the north with three apparatus bay doors to a double-high space including two stories of bedrooms and bathrooms. Another remodel project happened in 1973. Interior spaces were reconfigured, and emergency exits were added. More recent improvements include updated flooring, texture and painting, cubicles and similar finish improvements.

There are a number of programmatic upgrades necessary to bring the existing building up to current code and to function as a modern city hall. An elevator is required for accessibility to each level. Offices shall be sized and configured appropriately. If a large public space is considered, a lactation room will need to be included in the program. The number of plumbing fixtures needs to accommodate the updated programmed occupancy.

Below is a diagram showing the necessary spaces and preferred adjacencies of each space. This diagram is a result of multiple meetings with the users and stakeholders.



Administrative Space Relationships

BUILDING PLANNING

SPACE SQUARE FOOTAGE PROGRAMMING

The square footages shown below are for reference only and are the starting point for the fitting the spaces within the existing building. They are of ideal and typical sizes, appropriate for the function. Actual and final sizes will depend on how they fit within the existing building.

First Floor (name/use)	area	quantity	subtotal	Notes
Building Official	120	1	120	12' x 10' office
Building Dept Secretary	100	1	100	10' x 10' office or cubicle
Clerk	120	1	120	12' x 10' office
Public Relations	100	4	400	10' x 10' cubicles or desks in open office
Treasurer	120	1	120	12' x 10' office with lockable door
Human Resources (future)	120	1	120	12' x 10' office

First Floor Programmed Area: 980 Square Feet

Second Floor (name/use)	area	quantity	subtotal	Notes
Attorney	120	1	120	12' x 10' office
Mayor's Office	120	1	120	12' x 10' office
Public Works	120	3	360	12' x 10' office
Storage	150	1	150	10' x 10'
City Engineer	120	1	120	12' x 10' office
Attorney's Assistant	100	1	100	10' x 10' office or cubicle

Second Floor Programmed Area: 970 Square Feet

Either Floor (name/use)	area	quantity	subtotal	Notes
Break Room / Kitchenette	200	1	200	refrigerator, microwave, sink, dishwasher, disposal
Conference Room Small	150	1	150	
Flex Space	1500	1	1500	future uses, counsel meetings, public
Public Space	150	1	150	records storage, integrated in other public areas

Either Floor Programmed Area: 2,000 Square Feet

Support Spaces (name/use)	area	quantity	subtotal	Notes
Electrical Room	100	1	100	
IT / Communications	100	1	100	
Mechanical	100	1	100	
Elevator	100	2	200	100 SF per floor, Limited Use Limited Access
Housekeeping	50	1	50	
Restrooms Public	200	2	400	will be based on occupancy
Restrooms Staff	75	2	150	will be based on occupancy
Public Entry/Lobby	300	1	300	
Staff Entry	100	1	100	
Stairs (existing)	200	1	200	
Storage	100	1	100	

Support Programmed Area: 1,800 Square Feet

Total Programmed Area: = 5,750 Square Feet

Net-to-Gross Multiplier: = 1.5

Total Gross Programmed Area Total: = 8,625 Square Feet

Current Existing Gross Area Total: = 7,685 Square Feet

The difference between Programmed Area and Existing Area is (940 Square Feet)

BUILDING CODES

Building Authorities Having Jurisdiction (AHJ):

City of Ely / Building and Planning Department
501 Mill Street
Ely, Nevada 89301

State Fire Marshal
107 Jacobson Way
Carson City, Nevada 89701
(775) 684-7500

Current Applicable Building Codes for Improvements and Accessibility (2023):

- 2018 International Building Code (IBC)
- 2018 Uniform Mechanical Code (UMC)
- 2018 Uniform Plumbing Code (UPC)
- 2018 International Energy Conservation Code (IECC)
- 2011 National Electrical Code (NEC)
- 2018 Northern Nevada Amendments
- 2009 ICC A117.1-2009 Accessibility Standards
- 2018 International Fire Code (IFC)
- 2018 Northern Nevada International Fire Code Amendments

Project Data and Design Criteria:

Address:	501 Mill Street Ely, Nevada 89301
APN:	001-28-304
Land Use:	400 General Commercial
Acres:	6.5686
Flood Zone:	Yes, X/A
Number of Stories:	Two plus a basement and intermediate space
Existing Construction Type:	III-B
Occupancy Groups:	B, and possibly A depending on final layout and size of spaces
Occupant Load:	225, depending on final layout and size of spaces
Required Number of Exits:	2
Allowable Height:	75 ft
Allowable Area:	Non - Fire Sprinklered – 19,000 square feet Fire Sprinklered – 57,000 square feet
Existing Area:	2,040 gross square feet, second floor 754 gross square feet, interstitial space 4,156 gross square feet, first floor <u>735 gross square feet, basement</u> 7,685 gross square feet
Fire Separations:	None existing. Yes, for restoration, if required.
Fire Sprinklers:	None existing. Yes, for restoration.
Fire Alarm:	None existing. Yes, for restoration.

Plumbing Fixture Analysis – Preliminary

Projected Occupant Load:	225
Required Plumbing Fixtures:	
Assembly Occupancy (167)	
Water Closets (1/125M, 1/65F):	1M/2F
Lavatories (1/200):	1
B Occupancy (58)	
Water Closets (1/50 + 1):	3
Lavatories (1/80 + 1):	2
Total Building	
Drinking Fountains (1/500):	1
Mop Sink:	1
Total Required:	
Water Closets:	6
Lavatories:	3
Drinking Fountains:	1
Mop Sink:	1

OVERALL ARCHITECTURAL PROJECT GOALS AND INTERIOR ENVIRONMENT CONSIDERATIONS

- Holistic Planning:
 - Involve all current users and the community.
 - Plan for the current functions of the City of Ely.
 - Think of the future functions of the City of Ely.
 - Reflect on the past functions of the building and how they may inform current decision making.
 - Involve a complete design team to evaluate the existing building (Architectural, Structural, Mechanical, Plumbing, Electrical, and Communications) for recommendations for improvements to the building.
- Last another century:
 - Building material choices, systems, finishes, and products should be durable and robust.
 - Maintenance and service schedules and intervals should be performed as required.
- Respect the historical context:
 - Restore the historical integrity as much as possible.
 - Reconfigure spaces to the original configuration as much as possible.
 - Re-use historic materials and products.
 - Find original materials and products and incorporate them into the design.
 - Create spaces within the building that display the history of the building.
 - Utilize the Historic Structures Report that has been provided by the City of Ely.
- Upgrade to current building codes:
 - The existing building(s) should follow the current International Building Codes.
 - The building should be made accessible for persons with disabilities utilizing the ANSI A117.1-2009 Accessibility Standards.
 - The ADA Standards for Accessible design should be considered but understood that ANSI takes precedence per IBC as the minimum requirements for accessible design.
 - It is acceptable to exceed code requirements.
- Complete interior remodel:
 - Utilize modern materials and finishes where appropriate.
 - Restore historic materials and finishes where appropriate.

- Clean, neat, and efficient layout of walls and spaces:
 - Incorporate input from the stakeholders and users as to daily functions and operations.
- Double pane windows for all windows:
 - Work with SHPO and window manufacturers for a more thermal efficient window system while also respecting the historic integrity of the existing windows.
- Update roof coping and flashing, the existing roofing is new and under warranty.
 - Verify that coping details are adequate and installed to last the lifetime of the roof.
 - Verify that coping can be reused or if it should be replaced due to metal fatigue, cracking, rust, or other caused of metal failure.
 - Verify that flashing details are adequate and installed to last the lifetime of the roof.
- Replace entry doors with original type/look:
 - The entry doors are a character defining feature of the historic time period.
 - It is rumored that the original entry doors still exist and are somewhere within the community.
- Incorporate historical items and finishes: wood floors, tin ceilings, wood railings, wood moldings, radiators:
 - These materials and items exist within the building and should be restored and re-used to the greatest extent possible and practicable.
- For an improved work environment, office spaces should have views to the outside and/or daylight where possible. Overall organization and individual staff spaces should be designed to support a positive and cooperative experience and daily engagement.

PUBLIC INPUT

The items listed below were gathered from a public meeting that was held on March 16, 2023. Approximately 8 – 10 people from the community showed up and participated in discussions about Ely City Hall. The meeting was very positive, and all the people who showed up shared their stories and interest in the City Hall building.

- Storage for community and/or city committees.
- Highest and best use of the space.
- The interior environment should tell the story of the space and building. For example, old pictures or stories, memorabilia on display in public areas, and/or interpretive gallery.
- New improvements should have a professional appearance.
- Find old components of the building and incorporate them into the renovation. For example, the original entry doors, heating radiators, etc.
- Reconstruct the first-floor windows and other windows to the original size.
- Reconstruct the triangular parapet.
- Reconstruct the original front steps and incorporate an accessible ramp/route.
- Remove the two windows above the original apparatus bay and restore to the original façade.

STRUCTURAL ENGINEERING NARRATIVE

Summary of Building Structures

The existing building structure consists of the following major components:

- 1928 – Original two-story city hall building with partial basement. This building originally housed the police, jail, fire department and other community office functions. Existing structural systems are generally as follows:
 - Low slope roof over 1x decking over 2x framed roof trusses at 24" o.c. that span north-south between exterior walls and across a bearing wall line at the middle of the building.
 - Two-story cast-in place concrete walls, floors, and ceiling at the portion of building that was originally the jail.
 - Wood framed floor second floor system for the remainder of the building.
 - Interior wood framed walls.
 - Unreinforced masonry exterior walls.
 - Cast-in-place concrete walls, foundations, and slab where basement occurs on the west side of the building, and crawl space on the east side of the building.
- 1950 – Fire house addition. This building was constructed to house the fire department and has single story garage space at the front for 3 fire bays, and two-story space toward the rear of the building for offices, restrooms, and storage. Existing structural systems are generally as follows:
 - Low slope roofing over 2x decking over wood rafter framing over tapered steel trusses that clear span north-south from the north wall of the 1928 building to the north wall of the 1950 addition.
 - Wood framed walls and second floor structure at the two-story office portion.
 - Exterior concrete masonry walls with exterior brick veneer over shallow, continuous concrete footings.
 - Concrete slab-on-grade.
- 1973 – Various remodel improvements to the original 1928 building. Significant structural improvements included the addition of interstitial space that is used for storage. Existing structural systems are generally as follows:
 - Wood framed floor systems supported by new and/or existing walls.

Anticipated Structural Improvements – 1928 Original Building

Based on preliminary project scoping and programming efforts and the RAFI Historic Structures Report, the following structural improvements are anticipated:

- There may be minor modifications to the existing building as a part of architectural improvements and reconfiguration of the spaces within.
- A new elevator may be added. If located outside the building footprint, a new exterior elevator shaft enclosure will need to be constructed and tied to the existing building. If located inside the building footprint, major structural modifications could be required to create new openings in the building floors and possibly the building roof.
- Seismic upgrades are anticipated as part of improvements to the building. The following upgrades are generally expected:
 - Unreinforced masonry walls will likely need to be reinforced by the addition of a system like reinforced shotcrete.
 - Floor and roof diaphragms will likely need to be reinforced by adding plywood sheathing, and additional connectors as needed to transfer diaphragm shear to exterior walls.
 - Ties and anchors will likely need to be added at the floors and roofs to tie exterior walls to the floor and roof diaphragms.
 - Bracing may need to be added to parapets or chimneys above the roof.

Anticipated Structural Improvements – 1950 Fire House Addition

Based on preliminary project scoping and programming efforts and the RAFI Historic Structures Report, the following structural improvements are anticipated:

- Foundations at the northwest corner of the building have settled, causing cracks in exterior walls and uneven floors in that corner of the building. Foundation stabilization efforts are anticipated as well as repairs to cracked walls and brick veneer.

- There may be minor modifications to exterior walls that require structural infill or reinforcing, i.e. infill of existing openings and/or cutting in of new openings.
- Seismic upgrades may be warranted. Anticipated upgrades may include overlay of the existing 2x decking with new plywood sheathing to strengthen the existing roof diaphragm, and addition of new wall tie anchors to tie the exterior walls to the roof. The existing exterior CMU walls are likely reinforced so the walls themselves may not need to be seismically reinforced.

Anticipated Structural Improvements – 1973 Remodel Improvements

Based on preliminary project scoping and programming efforts and the RAFI Historic Structures Report, the following structural improvements are anticipated:

- The interstitial floors will likely be removed as recommended in the RAFI report. This will allow the original space of the historic building to be recaptured and returned to its original condition.

Structural Design Criteria

Structural improvements will be designed in conformance with the structural requirements of the 2018 International Building Code, 2018 International Existing Building Code, and design criteria historically used in Ely. The following is a summary of standards and site-specific structural design criteria that would apply to the project.

Standards

- ASCE 7-16 "Minimum Design Loads and Associated Criteria for Buildings and Other Structures"
- ACI 318-14 "Building Code Requirements for Structural Concrete"
- AISC 341-16 "Seismic Provisions for Structural Steel Buildings"
- AISC 360-16 "Specification for Structural Steel Buildings"
- AISI S100-16 "North American Specification for the Design of Cold-formed Steel Structural Members"
- AWC NDS-2018 "National Design Specification (NDS) for Wood Construction"
- AWC SDPWS-2015 "Special Design Provisions for Wind and Seismic"
- TMS 402-2016 "Building Code for Masonry Structures"
- TMS 602-2016 "Specification for Masonry Structures"

Structural Risk Category

- II: Normal. This risk category applies to normal buildings and structures. This risk category uses normal importance factors ($I = 1.0$) and requirements. It is assumed that this building is not an essential facility and will not contain functions or uses that represent a substantial hazard to human life in the event of failure.

Snow Loads

- Elevation: 6,500 ft
- Ground Snow Load, pg : 60 psf
- Flat Roof Snow Load, pf : $pf = 0.7 C_e C_t I_s pg = 0.7 \times 1.1 \times 1.0 \times 1.0 \times 60 = 46$ psf

Wind Loads

- Basic Wind Speed: 115 mph (Risk Category IV)
- Exposure: C
- Enclosure Classification: Enclosed ($GC_{pi} = \pm 0.18$)

Seismic Loads

- S_s : 0.37
- S_1 : 0.13
- Site Class: D - Default
- S_{ds} : 0.37
- S_{d1} : 0.20
- I_e : 1.00
- Seismic Design Category: C

Soils

- A geotechnical evaluation was prepared by Ninyo & Moore (Project No. 304072001 dated April 26, 2017) as part of the Historic Structures Report prepared by RAFI Architecture and Design. The report was solely an evaluation that 1) assessed cause(s) of previous settlement, 2) provided conceptual geotechnical recommendations for stabilization and re-leveling of foundations / floor slabs at an isolated portion of the

building, and 3) assessed groundwater conditions at the building site. The geotechnical evaluation did NOT provide soil design parameters for any final designs, so a geotechnical investigation will be needed that provides soil design parameters to be used in the design of new foundations and/or stabilization of existing foundations.

- Allowable Soil Bearing: To be determined.
- Coefficient of Friction: To be determined.
- Active Pressure: To be determined.
- At Rest Pressure: To be determined.
- Passive Pressure: To be determined.
- Frost Depth: 36 inches

MECHANICAL AND PLUMBING ENGINEERING NARRATIVE

PROJECT OVERVIEW

Via Paul Cavin Architect LLC, the City of Ely has requested a building assessment of the existing 7,700 square foot City Hall structure located at 501 Mill Street, Ely, Nevada. This report will provide information regarding Ainsworth Associates Mechanical Engineers (AAME) findings, design criteria, and proposed solutions for the final mechanical, plumbing, and fire protection design. The existing building houses the City Hall Clerk, Treasurer, Human Relations, Mayor, Attorney, Public Works, and the building officials' offices. Along with these office spaces are two bathrooms, storage areas, a meeting area, server room, and a basement. The building next door was once used for the fire department and is now used for storage.

Codes and Applicable Standards

- International Building Code (IBC) 2018
- Uniform Mechanical Code (UMC) 2018
- Uniform Plumbing Code (UPC) 2018
- International Fire Code (IFC) 2018
- National Fire Codes (NFPA Standards), current editions as referenced
- 2018 International Energy Conservation Code (IECC) ASHRAE/IESNA Standards 90.1-2016
- ASHRAE Chapter 30, HVAC Systems and Applications
- ASHRAE 62.1, Ventilation for Acceptable Indoor Air Quality
- Nevada State Fire Marshal Regulations
- Accessibility ANSI A117.1, 2009 edition
- 2018 Northern Nevada Amendments by NNICC
- Local Codes and Ordinances as may be applicable.

MECHANICAL

Existing Mechanical Overview

The existing mechanical system has gone through several updates and revisions since the original construction. The previous revision incorporated a radiant steam system to heat the whole building and is now abandoned in place. The radiant steam system consisted of a boiler, an underground fuel tank, and radiator style heaters serving the spaces. To replace the steam heating system, electric radiant heaters were installed at select locations. The first-floor office spaces consist of 3 different types of heaters see Figure 1 for one example. The second floor appears to have the same style heater throughout. Each space had a personal electric heater to supplement the wall heaters. The first floor utilizes wall mount package AC units to cool the space in the summer, see Figure 2. The second floor did not appear to have any means for mechanical cooling. There is no central air system for the building so to get fresh air the building relied on natural ventilation by leaving a window cracked or a door left open. Natural ventilation is no longer code compliant without the use of a mechanical fan in certain climates.

The existing server room is on the intermediate floor that now serves two purposes: a server room and a storage room. It is currently not cooled or ventilated. See Figure 3 for the existing server room.



Figure 1: Electric Radiant Heater



Figure 2: Wall Mount AC Unit



Figure 3: Existing Server Room

The fire station has electric radiant heaters in the office spaces and the garage space is heated by an electric unit heater hung from the ceiling. The fire building has no means of mechanical cooling or ventilation. Most of this building is now used for storage as the fire department has moved to another site.

Mechanical Recommendations

To improve the building's mechanical system and bring it up to current codes, the existing equipment should be replaced in their entirety. The boiler and all associated piping will be demolished, along with all the electric radiant heaters and package AC units. All piping serving the radiant steam heaters will be demolished up to the heating unit and then capped at the unit if the radiant heaters are deemed aesthetically pleasing and chosen to remain. If all radiant heaters are going to be removed then all steam piping, associated units, and accessories will be demolished. The underground fuel tank will either need to be removed or filled with a concrete slurry to prevent any future damage. Removal or slurry of the underground fuel tank is considered hazardous so it will need to be accomplished directly by the owner and out of the mechanical contract.

The proposed mechanical system will be comprised of several all-electric packaged units mounted on slab in the basement or on grade outside of the building. While the basement may seem like a natural fit for the mechanical equipment, it should be noted that its opening to the outdoors (the old coal shoot) is likely not large enough for both outside air in and exhaust air out. To take advantage of Ely's mild climate and potential for free cooling during the shoulder months, this ductwork will be sized for full building CFM. To put fans in the basement would likely mean enlarging the coal shoot opening or creating a second pathway for air to/from said fans. In addition, the mechanical unit's condenser sections will need to be located outside to reject the heat of the building during the summer months. This will place a handful of condensers, or perhaps one larger VRF condenser outdoors regardless.

Once a layout of the building is finalized, a zoning plan can be established to satisfy the requirements of each space. In the meantime, if a new conference room or large gathering spaces is implemented into the building design, these spaces will be on their own zone with a dedicated unit. This will ensure the load in the space is met when there is a large gathering or meeting without impacting adjacent spaces. Offices with similar exposures and load profiles will be zoned together on one unit. The interstitial storage areas are considered unoccupied storage by ASHRAE and per 62.1 still require minor ventilation, requiring ductwork and air distribution pieces (diffusers). This can be achieved from a unit serving a nearby space.

If a new server room is incorporated into the floor plan, the space will need dedicated cooling. To achieve this there will be a mini-split unit hung on the wall with a dedicated thermostat tied to the unit. This will require a condensing unit to be placed as close to the server room as possible.

Design Criteria

A detailed room by room heating and cooling load analysis will be done during the Construction Document phase utilizing Hourly Analysis Program. The following criteria will be used in the design:

- Location: Ely, NV
- Elevation: 6437'

Outside Air Conditions (2021 ASHRAE Fundamentals)

- Summer (0.4%): 91.6°F DB / 56.6°F WB
- Winter (99.6%): -3.8°F DB

Interior Design Conditions

- All Spaces: 74°F, Summer
72°F, Winter

Air Filtration

- All Spaces: MERV-11 Filters

Mechanical Basis of Design

Mechanical equipment basis of design will be as follows (unless directed otherwise by the owner):

- Package Units: Trane, Lennox, or Daikin
- Dampers/Louvers: Greenheck or Price
- Grilles/Registers/Diffusers: Titus, Price, or Krueger
- Fans: Greenheck or Pennbarry
- Mini Split Systems: Mitsubishi or Daikin

PLUMBING

Existing Plumbing Overview

The domestic cold and hot water systems are constructed of rigid copper and appear to be original to the building. The existing domestic water systems consist of an electric water heater that serves domestic hot water to the whole building and the old fire department building. There is no hot water return piping and no drain line installed for the pressure relief valve on the top of the water heater. It appears there are several domestic water or sewer lines abandoned in the basement area. We received testimonies from the staff that confirm the periodic sewer blockage which are costly and timely for the facility staff to react to.

Plumbing Recommendations

Due to the age of the piping, it is recommended that the system be replaced entirely. With the replacement will be a redesign to include a new domestic hot water recirculation system. Having a hot water return will bring immediate hot water to the plumbing fixtures as well as abide by the current code. This will also include new plumbing fixtures to bring all restrooms up to ADA standards.

The sanitary sewer piping out of the building should be scoped by a licensed plumbing contractor. If it is discovered that the piping needs to be replaced, the existing piping will need to be unburied and the new piping will be sized accordingly to the new drainage fixture units. If there are additional bathrooms added to the building, this will take an effect on the new sanitary sewer pipe sizing. If the sanitary sewer pipe from the building is not being replaced, then the size of the piping will be evaluated to ensure proper flow.

The existing electric water heater is approaching the end of its useful life. It is recommended to replace the water heater and properly pipe the pressure relief to a floor sink. See Fig. 4 for the existing water heater.



Figure 4: Existing Water Heater

Plumbing Fixtures Basis of Design

Plumbing fixtures will be ADA compliant (where applicable), low flow, and vitreous China.

- | | |
|------------------------------|------------------------------|
| • Water Closets and Urinals: | American Standard |
| • Lavatories: | American Standard |
| • Sinks: | American Standard |
| • Flush Valves: | Sloan (Manual or Hard Wired) |
| • Faucets: | Sloan (manual or Hard Wired) |
| • Drinking Fountains: | Elkay |

FIRE PROTECTION

The building has no existing fire protection in place but does have a fire hydrant within 300 feet of the building. The building is considered a National Historic Building so as per the NFPA the existence of a fire protection system will be dependent on multiple variables. NFPA 914 is contingent upon the extent of changes occurring to the building. Once the full project scope has been finalized, the need for a wet fire protection system can be identified by the architect, if needed, our office will prepare performance-based specifications for a deferred design and a Civil Engineer will be needed to coordinate a new fire service from the street.

CONCLUSION

The simple age of this building is resulting in the need of a major replacement of almost all mechanical and plumbing systems. With this in mind, the recommended alterations for mechanical, plumbing, and fire protection outlined above are contingent upon the final layout of the building. For budgetary reasons, an opinion of probable cost for what was recommended above for mechanical and plumbing is between \$400,000 and \$600,000. This cost does not include an opinion for fire protection as this will be included upon further review.

ELECTRICAL ENGINEERING NARRATIVE

ELECTRICAL

Adopted Codes and Regulations:

- National Electric Code (NEC) 2011
- International Fire Code (IFC) 2018
- National Fire Codes (NFPA Standards) as referenced in the 2018 International Fire Code
- International Energy Conservation Code (IECC) 2018
- ASHRAE/IESNA Standards 90.1, 2010
- International Building Code (IBC) 2018
- Commercial Building Standard for Telecommunications Pathways and Spaces, EIA/TIA569.
- Nevada State Fire Marshal's Regulations
- Americans with Disabilities Act
- Local Codes and Ordinances as may be applicable.

Normal Power Distribution:

The three existing exterior mounted, 120/240V, 1PH, 3W, electrical services fed from pole mounted transformers to the City Hall building shall be removed and consolidated within one new main service entrance switchboard.

New electrical utility power is recommended to be a 277/480V, 3PH, 4W, system. Coordination with Mt. Wheeler Power and the City of Ely is required for the final location of a new pad mounted utility transformer which would feed a new switchboard. Three phase power would be more efficient than the current 120/240V, 1PH power source for electrical and mechanical equipment selections, lighting loads are also more efficient at 277 volts.

The new switchboard will include a main breaker with integral ground fault protection and shunt trip. The switchboard will include a distribution section with distribution circuit breakers. An ATS (Automatic Transfer Switch) may be integrated into the new switchboard, but a standalone unit makes better ease of maintenance.

The short circuit rating of the switchboard and all components shall be evaluated based on the available fault current values of the MT Wheeler Power distribution system at the point of service to this project.

The Service Entrance Switchboard shall feed 480Y/277 volt distribution panels and dry type 480-208Y/120 volt transformers.

Depending on the new building layout, a supplemental electrical room may be needed to provide localized branch circuit connections. The supplemental electrical room will be fed from the Main Service Entrance Switchboard at 480Y/277 volts, and a distribution transformer will step the voltage down to 208Y/120V for branch circuit distribution.

Surge suppression devices (SPD's) will be installed at the Main Service Entrance Switchboard, Mechanical Distribution Boards, and downstream at the 208Y/120 volt distribution boards. The SPD is used to minimize damaging internally and externally generated electrical transients and surges that can affect and/or harm electronic equipment.

Electrical distribution equipment will be utilized as follows:

- | | |
|------------------------------|--|
| ▪ 480V, 3 phase, 3 wire | Motors ½ HP and larger |
| ▪ 480V/277V, 3 phase, 4 wire | LED lighting, Mechanical Equipment |
| ▪ 208Y/120V, 3 phase, 4 wire | Receptacles, motors less than ½ HP and small equipment loads |

Stand-By Power Distribution:

The current Ely City Hall property does not have a standby generator. It is understood that the city has requested a stand-by diesel generator for complete back up of the new electrical system. The new generator would be provided with a sound and weather rated enclosure unit mounted on a minimum 24-hour diesel belly tank. The generator will be sized according to all electrical load information for all systems being coordinated. Overall generator run times will vary depending on actual loads the generator is being operated at.

An Automatic Transfer Switch shall be in the Main Service Switchboard or adjacent to the switchboard.

Standby Power Distribution Voltages:

- | | |
|------------------------------|--|
| ▪ 480V, 3 phase, 3 wire | Motors ½ HP and larger |
| ▪ 480V/277V, 3 phase, 4 wire | LED lighting, Mechanical Equipment |
| ▪ 208Y/120V, 3 phase, 4 wire | Receptacles, motors less than ½ HP and small equipment loads |

Uninterruptable Power Supply (UPS):

- A new UPS system shall be considered for all workstation receptacles serving computer and security equipment to maintain electrical continuity to critical equipment during the transfer of normal utility power and emergency generator standby power.
- Duplex receptacles and trim plates connected to UPS backed circuits shall be blue in color.

Emergency (Life Safety) Power Supply:

- Life Safety egress illumination within the facility is provided by individual emergency battery back-up ballasts/drivers integral to the lighting fixtures or by standalone unit equipment (bug-eyes).
- This strategy of individual batteries is acceptable for typical uses however this strategy requires monthly and yearly maintenance of each individual battery per NFPA 101. See item below for a time saving strategy.
- Utilizing a standalone emergency lighting inverter would simplify required maintenance as there is a single place to perform the required maintenance on the life safety power supply. An inverter will be provided during design if requested.

Equipment Sizing Criteria – Branch Circuit Load Calculations:

Lighting	Connected load
Receptacles	180 VA per 120V general convenience outlet (single and duplex). Quad receptacles shall be considered as two 180 VA loads, minimum
Special outlets	Actual installed wattage of equipment served
Dedicated equipment circuits	Actual load or 1,200 VA per 120V outlet; 4,160 VA for each 208V/30A/1Ø outlet, minimum
Motors	100% of motor full load amps

Demand Factors:

Lighting	100% of total wattage
Receptacles	100% of first 10 kVA plus 50% of remainder over 10KVA
Motors	125% of wattage of largest motor plus 100% of wattage of all other motors
Fixed equipment	100% of total wattage

Branch Circuits:

Individual circuits will be used for lighting, receptacle, and mechanical loads. Generally, the loading on lighting and receptacle circuits will be limited to 80% or less of the branch breaker rating. Minimum wire size for branch circuits is No.12 AWG copper, except that No. 10 AWG copper will be used on 120-volt circuits longer than 100 feet. An equipment-grounding conductor will be run in each branch circuit.

Wiring Devices:

Switches for all lighting loads shall be rated 20 amperes, 120/277 volts, AC, UL approved, premium specification grade, quiet rectangle decorative (Decora) type.
0-10V dimmer switches shall be specification grade. Dimmers shall be sized appropriately for the load served.

Receptacles for general use shall be premium specification grade, flush, duplex, 3 wire, grounding type rated at 20 amperes, 120 volts and suitable for back or side wiring.

Floor boxes for receptacles and data will be located as required within conference and meeting rooms per NEC standards.

Weatherproof (in-use) covers shall be cast aluminum with lockable covers suitable for a flush installation. All switches, receptacles and cover plates in finished areas shall be smooth nylon. Color shall be white or as selected by user and Architect. Cover plates in unfinished areas shall be galvanized sheet steel with matching finish.

All power and communications wall outlets shall be located at 16 inches above the finished floor to bottom of device unless noted otherwise. All wall switches shall be located 48 inches above finished floor unless noted otherwise. Outlets, switches, and other devices located in one common area shall be carefully aligned both horizontally and vertically to maximize available wall space for display, whiteboards, etc. Mounting heights shall comply with all governing codes and handicap accessibility requirements.

Occupancy sensors designed to turn lights on when the room is occupied and turn the lights off when the room is unoccupied shall be either wall or ceiling mounted (as appropriate) with dual technology infrared/motion sensor type suitable for controlling electronic ballasts with wide field of view, adjustable "turn off" time delay up to 30 minutes.

Lighting:

All lighting, interior and exterior, will be designed utilizing energy efficient LED technology. Lighting in all spaces will be designed in accordance with the IES Guidelines. IESNA recommended lighting levels are a minimum recommendation, designed lighting levels will meet or exceed these recommendations.

Interior lighting will be designed to meet requirements for Controllability and Minimum Energy Performance of IECC 2018.

All lighting fixtures will be provided with 0-10V dimming allowing for controllability by occupants (where applicable). Additionally, dual technology (PIR & Ultrasonic) occupancy/vacancy sensors will be utilized throughout the project to ensure lighting is not left on in areas that are not occupied.

Additionally, all areas that are determined to be daylight zones shall incorporate automatic daylight-responsive controls. This includes spaces with a total of more than 150 watts of general lighting. Daylight response controls shall dim lights continuously from full light output to 15 percent of full light output or lower based on the daylight contribution as measured by a daylight sensor. The daylight responsive controls within each space shall be configured so that they can be calibrated from within that space by authorized personnel.

IES Standard FC Levels:

Conference/Training/Classroom: Dimmable suspended linear fixtures. Conference rooms may have a more decorative aesthetic. In those spaces with sufficient daylight, fixtures in daylight area will have integral daylight sensors to automatically dim the fixtures. Occupancy sensors will be utilized.

Design Footcandle Levels

- 40 FC to 50 FC horizontal maintained.

Offices Spaces/Administration:

Recessed volumetric type fixtures. Control in these areas will generally be via local occupancy sensors with ability to manually dim by areas. In those spaces with sufficient daylight, fixtures in daylight area will have integral daylight sensors to automatically dim the fixtures. Occupancy sensors will be utilized.

Design Footcandle Levels

- Open Offices: 40 FC horizontal maintained.
- Private Offices: 40 FC horizontal maintained.

Storage:

Recessed lay-in prismatic fixtures or strip lights will be used depending on presence of ceiling. Occupancy/vacancy sensors will be used in the storage spaces to prevent the fixtures from being left on for an extended period. Switching will be via local control.

Design Footcandle Levels

- 15 FC to 30 FC horizontal maintained, depending on particular task.

Restrooms/Lockers/Showers:

Surface mounted fixtures above the lavatory mirror and/or recessed downlights will be used in restroom spaces. Surface mounted fixtures in locker rooms. Shower stalls will be downlights listed for wet locations. Local occupancy/vacancy sensors will be used in single occupant restroom.

Design Footcandle Levels

- 20 FC to 25 FC horizontal maintained, depending private vs. public, size, architectural finishes, etc.

Reception and circulation:

Architectural and decorative fixtures in the main entries upon owner request. Recessed downlights, 2x2 or 2x4 fixtures

in corridors depending on ceiling types. Control via occupancy sensors and timeclock, with local override.

Design Footcandle Levels

- 15 FC to 20 FC horizontal maintained, supplemental task lighting at any reception desks.

Egress Lighting & Exit Signage:

Egress lighting levels will be designed in accordance with IBC 1006.4 to provide 1 footcandle average (0.1fc minimum) along the path of egress. All egress lighting will be provided with centralized battery inverter units, including exit signs, unless Owner prefers a central inverter unit. Exit signs will be LED.

Power and Receptacles:

Receptacle layouts will be coordinated with the user's requirements.

Receptacles will be provided in the corridor for cleaning.

Power will be provided for mechanical equipment as needed. Power will be provided for all A/V equipment and as necessary.

Fire Alarm System:

The new building will have a new supervised, 24-volt DC-powered, addressable fire alarm system. All fire alarm wiring shall be in conduit.

The system will consist of a flush mounted main FAAP (Fire Alarm Annunciator Panel) near the front entrance. It mirrors the functions of the FACP (Fire Alarm Control Panel) located within the building.

The building will have area smoke detection, duct smoke detectors, smoke detectors, heat detectors, magnetic door holders were required, flow and tamper switches for fire sprinklers, audio/visual (Horn/Strobe) notification appliances will be located throughout the building based on Code requirements.

The fire alarm system will be connected to the building generator system which exceeds NFPA 72. The system will be remote station monitored via a digital communicating device that will provide the dial out by point to the Owner's Vendor.

TELECOMMUNICATIONS

Codes and Standards:

The Division 27 telecommunication system will be designed in accordance with the following codes and standards:

- ANSI/TIA-568.0-D: Generic Telecommunications Cabling for Customer Premises.
- ANSI/TIA-568.1-D: Commercial Building Telecommunications Infrastructure Standard.
- ANSI/TIA-568.2-D: Balanced Twisted-Pair Telecommunications Cabling And Components Standards.
- ANSI/TIA-568.3-D: Optical Fiber Cabling and Component Standard.
- ANSI/TIA-569-D: Telecommunications Pathways and Spaces.
- ANSI/TIA-606-C: Administration Standard for Telecommunications Infrastructure.
- ANSI/TIA-607-C: Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises.
- ANSI/NFPA-70, 2017 -- National Electrical Code (NEC).
- Underwriter's Laboratories, Inc. (UL).
- Federal Communications Commission (FCC).
- Americans with Disabilities Act (ADA).

Premise Telecommunications Infrastructure:

Data, voice, and audio/visual services will be distributed throughout the building via a structured cabling system. The MDF will be the central distribution point for telecommunications cabling throughout the building. A structured Category 6 cabling system will be installed from the MDF to the work areas (offices, conference rooms, etc.).

Wire basket tray will be installed to route horizontal data and voice cabling from the MDF to the work area outlets. Telecommunication outlets for computers, printers, wireless devices, telephones, projectors, monitors, etc. will be provided at all work areas. The telecommunication room will house rack mounted active electronic equipment to support the data and audio/visual systems.

MDF (Main Distribution Frame) Room:

General:

The MDF will be the demarcation for outside plant data and voice cabling and the distribution point for the premise voice and data cabling. The MDF will house network electronics. Network electronics will be owner furnished owner installed.

Horizontal Category 6 data cabling from the work area outlets will terminate in rack mounted Category 6 patch panels.

Construction:

The MDF will be designed to accommodate telecommunication cabling terminations and electronics. The rooms will be sized to provide adequate space for outside plant conduit, backbone cable termination equipment, lightning protection equipment, network equipment racks and audio/visual equipment racks. The design and layout of the rooms will be flexible to accommodate future expansion and reconfiguration with minimal service disruption. Security will be provided to prevent unauthorized access via a card access system. The rooms will be structurally designed to accommodate loads resulting from cable tray, ladder rack, backboards, floor standing racks and mechanical electrical equipment serving the room. A minimum of one 3'-0" x 7'-0" door will be provided into the space and will swing out of the room. The ceiling height will accommodate 84" racks with ladder rack and fiber optic trays attached to the top.

Plywood Backboards:

4'-0" x 8'-0" x 3/4" AC fire treated plywood backboards will be provided along all 4 walls of the MDF to accommodate termination of backbone cabling and horizontal voice cabling. Plywood sheets will be run from 6" to 8'-6" AFF (above finished floor). Plywood will be painted with 2 coats of white paint.

Ladder Rack:

18" wide horizontal ladder rack will be installed at 9'-0" AFF around the perimeter of the room and over the top of all equipment racks and cabinets to facilitate cable routing. Ladder rack stringers will be 1.5" in depth with 1.5" wide cross members spaced at 9" OC (on center). Radius dropouts will be provided above all equipment racks to maintain the manufacturers' bend radius of all telecommunications cabling. A ladder rack will be secured to the walls with triangular support brackets spaced at 4'-0" OC. Where not routed adjacent to a wall, the ladder rack will be supported from structure with Unistrut and threaded rod.

Open Equipment Racks:

UL listed 4-post equipment racks will be installed to house termination and electronic equipment. Equipment racks will be constructed of lightweight aluminum and will have a black finish. Racks shall be 84" high with 19" rack mounting spaces. Rack bases shall be 15" deep x 20.25" wide base with four (4) 3/4" bolt down holes. Side rails shall be 3" deep with double-sided tapped holes. Rack shall be secured to the concrete floor with four (4) 5/8" concrete expansion anchors. The quantity of racks will be determined during the Design Development phase based on the number of terminations and type of electronic equipment.

Horizontal and vertical cable management shall be provided with all racks. Cable managers shall be constructed of a steel panel with PVC fingered duct attachments (black) on the front and cable management rings on the rear. Horizontal cable managers shall be 1 or 2 rack units in height. Vertical cable managers shall be 6" wide.

Mechanical:

A dedicated HVAC system shall be provided to the room with dedicated thermostat. The mechanical system shall be operational 24/7. The HVAC unit serving the room shall be located outside of the room so as not to occupy space in the room. Only HVAC ductwork serving the room will be located in the room. The maximum BTU loading for the room will be determined during the Design Development Phase of the project. In the MDF, the HVAC system shall be designed to provide supply air to the front of the racks and return air from the rear of the racks.

Electrical:

Sizing the service for the telecom rooms shall be based on the quantity of telephone and network electronics and UPS equipment.

Dedicated 20-amp outlets shall be mounted on the side of the ladder rack. 1 quadplex outlet shall be located between each two data racks. Additional duplex outlets at 18" AFF shall be spaced around the perimeter of the room at approximately 10'-0" spacing.

Equipment racks shall have a minimum of one horizontal rack mounted 20-amp power distribution unit (PDU). PDU's shall have one (1) NEMA 5-20P input and ten (10) NEMA 5-20R outputs. PDU's shall have integrated toggle switch

and circuit breaker.

Server cabinets shall have (2) vertical PDU's. Each PDU shall be fed from a separate 208V 20A circuit.

Interior Communication Pathways:

Workstation Outlets:

4 11/16" x 4 11/16" x 2 1/2" deep wall boxes with single gang mud rings will be installed at all work area outlets. Two port faceplates with plastic label holders will be installed at each work area outlet. 1" EMT (electrical metallic tubing) will be installed from the workstation outlets to an accessible ceiling space.

J-Hooks:

J-Hooks spaced at 5'-0" OC will be installed from the workstation outlets to the nearest cable tray.

Wire Basket Tray:

12" wide x 4" deep wire basket tray will be installed from the MDF to the work areas.

Conduit & Sleeves:

Conduits will be installed to route horizontal telecommunications cabling through non-accessible ceiling and wall spaces. Conduits will be sized so as not to exceed 40% fill rate. Sleeves will be installed to penetrate fire rated or concrete walls and floors.

Work Area Cabling and Termination:

Type and Number of Communications Outlets:

Typical telecommunication outlets will consist of a two-port faceplate with plastic label holders. A minimum of two (2) Category 6 data drops will be provided at each outlet. The number of telecommunication outlets will be dependent on the use of the space.

Telecom outlets located above ceilings will be spaced throughout the building to support an infrastructure of wireless access points. A 25'-0" cable loop will be provided at each access point to allow the wireless access point to be relocated anywhere in a 25'-0" radius. Cabling to the wireless access points will be terminated on separate Category 6 patch panels in the Telecom Room. Power will be provided to the wireless access points via POE switches or injectors located in the Telecom rooms.

Telecom outlets will be mounted in the ceiling of each classroom to support projectors and monitors. Voice and data outlets in addition to raceway for audio/visual cabling will be floor mounted at all classroom podiums.

Work Area Jacks:

8-pin Category 6 jacks will be provided at work area outlets for data and voice. Data jacks blue. Pin/Pair assignment shall be in accordance with ANSI/TIA/EIA-568B.

Horizontal Cabling:

Horizontal data cabling from the IDF's to the telecommunications outlets shall be Category 6. Cable shall have a plenum rated jacket (CMP). Data cabling jacket color shall be coordinated with Ely City Hall's IT department.

Data Patch Panels:

Horizontal data cabling shall be terminated on 19" rack mounted 48-port Category 6 patch panels. Data ports will be cross connected to Owner furnished switches with Category 6 patch cords with molded strain relief boots.

Cabling Manufacturer and Warranty:

All Telecommunications cabling shall be manufactured by Belden/CDT, CommScope, Leviton, Panduit or equal. The Telecommunications system shall carry a 25-Year warranty.

Grounding System:

General:

The entire telecommunication system shall be bonded and grounded. A telecommunications ground bar will be installed in the MDF and each IDF. The following equipment will be bonded to ground with a #6 AWG grounding conductor:

- Equipment racks and cabinets.
- Ladder rack.
- Backbone conduit.

- Building entrance terminals.
- Outside plant copper cable shields.

Ground Bars:

UL listed copper grounding bars with insulated standoffs and stainless-steel mounting brackets will be provided in all telecom rooms. The ground bar in the MDF and IDF shall be minimum 20" x 4" x 1/4". Ground bars shall have pre-drilled lug mounting holes to accommodate attachment of two-hole lugs. Ground bars shall be bonded to ground as follows:

Ground bars shall be grounded to the building steel in each telecom room with a minimum #2 solid green insulated grounding conductor.

Ground bars in the IDF's shall be grounded to the electrical service ground serving the room with #2 ground conductor. The ground bar in the MDF shall be bonded to the main building electrical ground with a #2 grounding conductor.

Ground bars in the IDF's shall be bonded to the ground bar in the MDF with a #2d telecommunications bonding backbone conductor.

Video Surveillance System:

CAT 6 cable will be installed as required to support video surveillance CCTV cameras located throughout the exterior of the property.

Specific interior CCTV camera locations shall be installed at the request of the owner.

Door Access System:

It is understood that a 'Door Access System' will not be required.

Fiber Optics:

It is understood that the Ely City Hall has been in contact with 'Commnet Broadband' for the purpose of bringing fiber optics into the existing building. The timeline for the fiber upgrade to the existing building is unknown and shall be coordinated to be relocated if installed prior to the City Hall renovations.

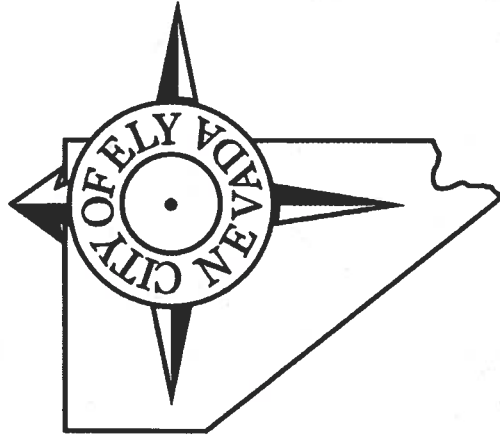
APPENDIX

Diagram Drawings:

- Floor Plans – Original Floor Plans (to the best of our knowledge)**
- Floor Plans – Existing Building and Existing Functions**
- Floor Plans – Bubble Diagram of Program within Existing Buildings**

Ely City Hall Renovation Scoping and Programming

City of Ely
501 Mill Street
Ely, Nevada 89301



Scoping and Programming
May 12, 2023

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PRELIMINARY
NOT FOR CONSTRUCTION

consultant

project
Ely City Hall Renovation
Scoping and Programming
City of Ely
501 Mill Street
Ely, Nevada 89301

revision	description	date

drawn by: PAC
checked by: PAC
date: 05/12/2023
project number: 22043
drawing name: Cover Sheet

Cover Sheet
sheet number: A000

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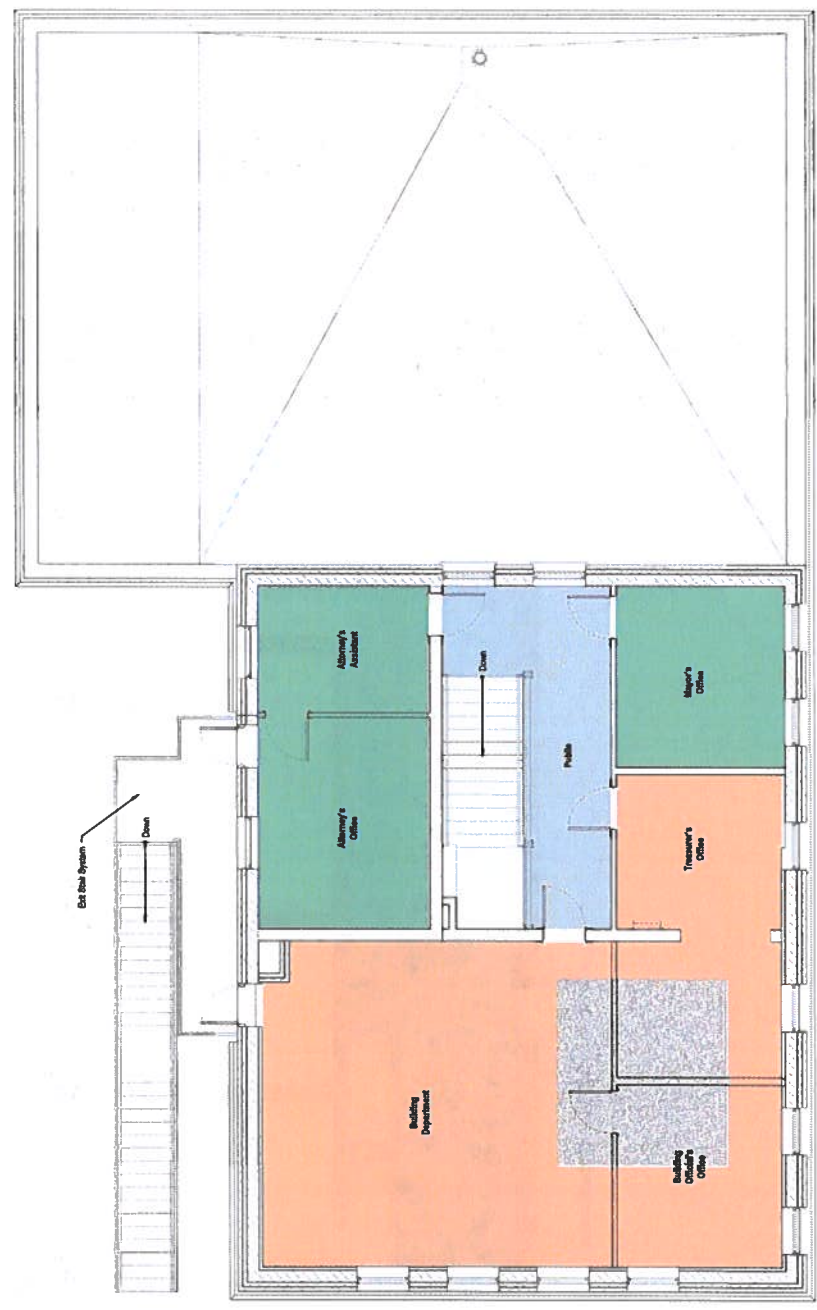
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501 Mill Street
Ely, Nevada 89301



05 Existing Second Floor Plan
1/8" = 1'-0"

A114

Existing Second Floor Plan

Project Number: 22045

City of Ely

501 Mill Street

Ely, Nevada 89301

City of Ely

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