

BOULDER FIRE STATION NO. 2



MAY 2023

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IMAGE CREDITS

Current-day (2020) photographs provided by Mundus Bishop, RATIO, and JVA. Historic photographs (pre-2020) provided by the City of Boulder and from online archives at the Carnegie Branch Library for Local History and Boulder Historical Society Collection, unless otherwise noted.

STATEMENT

The report documents the history, significance, integrity and existing condition and provides treatment guidance for the resource. It does not evaluate for listing in the National Register of Historic Places. If the resource has been previously listed or evaluated it is referenced and footnoted.



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The content and opinions contained herein do not necessarily reflect the views or policies of History Colorado.

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Figure 1-1. Boulder Fire Station No. 2 in Boulder, Colorado, 1938 (source: University of Colorado Boulder: Aerial Photographs of Colorado)

COMMON TERMINOLOGY

State/National Register Terminology ^{1 2}

Area of Significance - an aspect of historic development in which a property made contributions for which it meets the National Register criteria, such as architecture, entertainment or recreation.

Character-Defining Features - the elements that account for the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

Compatible Feature - a prominent or distinctive aspect, quality, or characteristic of a cultural landscape that contributes significantly to its physical character. Land use patterns, vegetation, furnishings, decorative details and materials may be such features.

Contributing Resource - a building, site, structure, object, or feature adding to the significance of a property.

Designation Boundary - the boundary defined by the Landmarks Board and City Council that encompasses a historic property. This boundary represents a physical area in which any future alterations have historic preservation review associated with them.

Eligibility - ability of a property to meet the State/National Register criteria.

Evaluation Criteria - the established criteria for evaluating the eligibility of properties for inclusion in the State Register and the National Register of Historic Places and its level of significance—local, state, or national.

Historic Context - information about historic properties based on a shared theme, specific time period and geographical area.

Landscape Characteristics - the tangible and intangible aspects of a landscape from a historic period; these aspects individually and collectively give a space its historic character and aid in understanding its historical importance.

Local Landmark - a local area or building that has been determined to have a special character and historic, architectural, or aesthetic or value to the city.

Period of Significance - the span of time in which a property attained the significance for which it meets the State and/or National Register criteria, and/or Local Landmarks criteria.

Property Type - a grouping of properties defined by common physical and associative attributes.

Integrity³

Integrity is the ability of a property to convey its significance. It is assessed to determine if the characteristics that shaped the property during the period of significance are present as they were historically.

Location is the place where the historic property was constructed or the place where the historic event occurred.

Setting is the physical environment of a historic property.

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property.

- 1 United States Department of the Interior, National Park Service, "National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation" (Washington DC: Department of the Interior, National Park Service, 1997); Office of Archaeology and Historic Preservation, History Colorado. "How to Nominate a Property to the State Register." (Denver, CO: History Colorado, 2018).
- 2 Charles A. Birnbaum and Christine Capella Peters, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington DC: Department of the Interior, National Park Service, 1996).

PROPERTY OVERVIEW

Property Name: Boulder Fire Station No. 2
Location: University Hill neighborhood
Property Address: 1010 Aurora Avenue, Boulder, CO 80302
Latitude/Longitude: 40.0035 / -105.2788
Legal Property Description: Lot 1-4 Less W 75 ft blk 26 University Place Old Fire Station on the Hill
1 Blk East of Academy Bldg
Parcel Tag: 146331324002
Acreage / Square Footage: .12 Acres / 5,378 SF
Date of Construction: 1908
Designer(s): Isaac T. Shockley, Architect

DESIGNATION, ELIGIBILITY, & CLASSIFICATION SUMMARY

Current Designation Level		Ordinance & Listing Information	
<input checked="" type="checkbox"/> Local Landmark		City of Boulder	
<input type="checkbox"/> State Register of Historic Places (SRHP)		Local Landmark No:	<u>79-8</u>
<input type="checkbox"/> National Register of Historic Places (NRHP)		Ordinance No:	<u>4455</u>
		Ordinance Date:	<u>January 01, 1980</u>
		State ID:	<u>5BL1472</u>
		National Historic Landmark No:	<u> </u>
State & National Register Eligibility⁴		Areas of Significance	
State Register of Historic Places	National Register of Historic Places	<u>Architecture</u>	
<input type="checkbox"/> Determined Eligible	<input type="checkbox"/> Determined Eligible	<u>Social History</u>	
<input type="checkbox"/> Delisted	<input type="checkbox"/> Delisted		
Recommended Period of Significance		Property Integrity: Aspects	
Date Range: <u>1908</u> to <u>1958</u>		<input checked="" type="checkbox"/> Location	
		<input checked="" type="checkbox"/> Workmanship	
		<input checked="" type="checkbox"/> Setting	
		<input checked="" type="checkbox"/> Feeling	
		<input checked="" type="checkbox"/> Design	
		<input checked="" type="checkbox"/> Association	
		<input checked="" type="checkbox"/> Materials	
Property Types		NRHP Evaluation Criterion⁴	
<input type="checkbox"/> District(s)	<input type="checkbox"/> Structure(s)	<input type="checkbox"/> Criterion A: The property is associated with event that have made a significant contribution to the broad patterns of our history	
<input type="checkbox"/> Sites(s)	<input type="checkbox"/> Object(s)	<input type="checkbox"/> Criterion B: The property is associated with the lives of persons significant in our past	
<input checked="" type="checkbox"/> Buildings(s)	<input type="checkbox"/> Feature(s)	<input type="checkbox"/> Criterion C: The property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction	
Individual Character-Defining Features of Property Types		<input type="checkbox"/> Criterion D: The property has yielded, or may be likely to yield, information important in prehistory or history	
District(s)	Structure(s)		
<u>University Hill</u>	<u> </u>		
<u>Neighborhood</u>	<u> </u>		
Site(s)	Object(s)		
<u> </u>	<u> </u>		
<u> </u>	<u> </u>		
Building(s)	Feature(s)		
<u>Fire Station No. 2</u>	<u> </u>		
<u> </u>	<u> </u>		

4 If none are checked, no determination of eligibility has been made.

DESIGNATION BOUNDARY

Designation Boundary Description: Fire Station No. 2 is located between 10th Street and 11th Street on Aurora Avenue in southwest Boulder, Colorado.

The designation boundary is the property associated with Boulder Fire Station No. 2.



Figure 1-2. Designation boundary of Fire Station No. 2, 2020 (source: Google Earth)

HISTORY & SIGNIFICANCE

Historic Context

Statement of Context

Boulder Fire Station No. 2 is associated with the themes of Fire Protection Development and Architecture within the City of Boulder, as well as in the wider context of the United States. The building was erected in 1908 in the American Foursquare style that was a common design for residential buildings. Isaac T. Shockley designed the Fire Station No. 2, as well as No. 3, in the same style around the same time; however, Fire Station No. 3 is no longer standing.⁵ This unfortunate event has made Fire Station No. 2 unique and individual to the City of Boulder.

Background History

Boulder Fire Station No. 2 was erected in 1908 at the request of Fire Chief George Fonda, in the University Hill Neighborhood of Boulder, Colorado. The fire department originally housed stables for the horses that carried their wagons that were later replaced with fire trucks. The fire station was in continuous use for 50 years, until it was replaced in 1958 with the larger, more modern station located at the corner of Broadway and Baseline. Fire Station No. 2 was Boulder's second municipal fire station and is the sole survivor from that era.⁶

Boulder Fire Station No. 2 is currently used as a pottery studio for community use, education, and recreation. The transition into a pottery studio began in 1958 when the City of Boulder Pottery Lab moved into the building after the fire station had been decommissioned that the same year. The Pottery Lab was originally operated and maintained by Boulder Parks and Recreation Department until 2015 when a local program, Studio Arts Boulder, took over the Pottery Lab program, which has maintained it ever since.⁷

Definition of the Context

Boulder Fire Station No. 2 is associated with the themes of Architecture and Fire Protection Development. The building maintains high historic integrity and reflects both the American Foursquare style, popular during the early 20th century in the United States, and the technical aspects of firefighting during the same time.

Development of the Theme or Area of Significance

The introduction of the fire station to the University Hill neighborhood was critical during a time when fire protection was limited but often needed. The University Hill Neighborhood is a highly residential area. Before sophisticated motorized equipment was invented, men and horses were the only power available for fire protection. Frame buildings, gas lamps, and wood-burning stoves contributed to the constant fires that threatened Boulder in the early days. The first organized fire protection department was created in 1871. Shortly after Boulder Fire Station No. 2 was erected.⁸

Based on the period at which it was built, Fire Station No. 2's overall design was influenced by the American Foursquare style. Most commonly, this form of architecture was utilized for residential dwellings in the early 20th century; however, it was common in that era for stations to be designed to blend in with surrounding houses of the neighborhood.⁹ This makes the Fire Station No. 2 unique to the University Hill Neighborhood, the City of Boulder, and the nationwide story of fire department architectural development altogether. The character-defining features of the Fire Station are reminiscent of other typical Foursquare style buildings with its simple, cubic shape and floor plan, low pitched, hipped roof with a deep overhang, and a large, hipped central dormer.

5 Boulder (Colo.). Landmarks Preservation Advisory Board, 1979-87. Fire Station No. 2 (Boulder, Colo.) Landmark Designation Papers, 2.

6 Ibid.

7 "History." Studio Arts Boulder.

8 Boulder (Colo.). Landmarks Preservation Advisory Board, 1979-87. Fire Station No. 2 (Boulder, Colo.) Landmark Designation Papers, 2.

9 Hafner, Katherine. "VA Fire Station Designated State Landmark." Firehouse, The Virginian-Pilot, 18 Dec. 2019

Associated Property Types

Fire Station No. 2's design is consistent with the American Foursquare style used in residential building design in the early 20th century. It was typical for neighborhood fire stations to blend in with their surrounding communities, which influenced Isaac T. Shockley to design Fire Station No. 2 in this way. He also designed Boulder Fire Station No. 3 in the same style around the same time. This would have been the closest associated property type to Fire Station No. 2; however, Fire Station No. 3 is no longer standing.¹⁰

Other landmarked examples of similar fire stations throughout the US includes the Norfolk Fire Station No. 12 in Virginia.¹¹ It was built in 1923 in a neighborhood that encapsulated the American Foursquare style in residential buildings. This building is a simple two-story, masonry construction with a cubic shape and floor plan, low pitched, hipped roof with a deep overhang and central front facing windows – similar to Boulder Fire Station No. 2. Another notable example is the Historic Hamilton Firehouse located just outside Cincinnati, Ohio.¹² It was built in 1910, two years after Boulder Fire Station No. 2, and has the same character-defining features.

Physical Characteristics and Integrity

Boulder Fire Station No. 2 possesses a high degree of integrity and retains integrity of location, setting, design, materials, workmanship, feeling, and association. It remains in its original University Hill location. It's placement on the site, specifically its scale, height, driveway setbacks and construction material, all work in harmony to make it compatible with the surrounding residences. The building has retained much of its original character. Some exterior additions (metal staircase & storage shed) completed since its original construction that do not seem to obstruct the overall design of the building and are reversible. The building's interior has been slightly modified on the interior to accommodate a pottery studio's needs and equipment. Most materials are original to the structure. The workmanship of Fire Station No. 2 is consistent with the American Foursquare architectural style. The structure is currently operated as a pottery studio as a space for community interaction and engagement. Since the building remains intact, the feeling of walking through a historic space has been maintained. Fire Station No. 2's original signage and appropriate preservation has allowed the building to maintain its associations with the growth and development of fire protection within the City of Boulder and the University Hill neighborhood.

Statement of Significance

Boulder Fire Station No. 2 is significant for its associations with the growth and development of the fire department in Boulder as well as contributing to the advancement of fire prevention in the early 1900s. The structure is significant as an example of an American Foursquare style building designed by Isaac T. Shockley - a locally well known architect. Traditionally, the American Foursquare style has been utilized in residential design, however it was not uncommon for fire department buildings to mimic their neighboring architecture, which was the case for the Boulder Fire Station No. 2.

Recommended Period of Significance

The recommended period of significance for Boulder Fire Station No. 2 is from 1908 to 1958. This period begins with its initial construction in 1908 and ends in 1958 when the fire department relocated to a larger station.

¹⁰ Boulder (Colo.). Landmarks Preservation Advisory Board, 1979-87. Fire Station No. 2 (Boulder, Colo.) Landmark Designation Papers, 2.

¹¹ Hafner, Katherine. "VA Fire Station Designated State Landmark." Firehouse, The Virginian-Pilot, 18 Dec. 2019.

¹² Rutledge, Mike. "Historic Hamilton Firehouse Could Become New Home or Business." Journal-News, Journal-News, 16 Jan. 2021.

Summary of Use

Historic Use

Boulder Fire Station No. 2 was erected in 1908 at the urging of Fire Chief George Fonda, in the University Hill Neighborhood of Boulder, Colorado along the north slope. The fire station was in continuous use for fifty years, until it was replaced with the larger, more modern station located at the corner of Broadway and Baseline in 1958.¹³

Date	Event
1908 to 1958	Boulder Fire Station No. 2

Current Use

Boulder Fire Station No. 2 currently serves as a pottery studio for community use, education, and recreation. The transition began in 1958 when the fire station was replaced with a more modern building.

Date	Event
1958 to 2015	Pottery Lab
2015 to present	Studio Arts Boulder

¹³ Boulder (Colo.). Landmarks Preservation Advisory Board, 1979-87. Fire Station No. 2 (Boulder, Colo.) Landmark Designation Papers, 2.

INTEGRITY

The integrity of Boulder Fire Station No. 2 has been assessed to determine if the characteristics that shaped the original construction within its period of significance (1908 to 1958) are present as they were historically. Integrity is evaluated according to seven aspects or qualities: location, setting, design, materials, workmanship, feeling, and association. While Boulder Fire Station No. 2 retains integrity in most aspects, it has diminished integrity in feeling as it no longer includes fire protection activities.

Location

Boulder Fire Station No. 2 remains in its original University Hill location since construction in 1908.

Setting

The site has remained similar to its period of significance, and remains within a residential neighborhood. Its placement on the site, specifically its scale, height, driveway setbacks and construction material, all work in harmony to make it compatible with the surrounding residences.

Design

The building has retained much of its original design. There have been some exterior additions (metal staircase and storage shed) since its original construction that do not seem to obstruct the overall design of the building and are reversible. The building has been slightly modified on the interior to accommodate a pottery studio's needs and equipment.

Materials

The majority of the materials are original to the structure. The pressed metal ceiling tiles were added to the first floor ceiling at an unknown date but likely not during its recommended period of significance. The roof has recently been replaced with in-kind materials.

Workmanship

The workmanship of Fire Station No. 2 is consistent with the American Foursquare architectural style. The typical characteristics of this style were represented its simple, cubic shape and floor plan, low pitched hipped roof with a deep overhang, and a large hipped central dormer.

Feeling

The structure is currently operated as a pottery studio and creates a space for community interaction and engagement. While much of the building's integrity has remained intact, the feeling of walking through a fire station has not been maintained.

Association

The Fire Station's original signage and appropriate preservation has allowed the building to maintain its associations with the growth and development of fire protection within the City of Boulder and the University Hill neighborhood.

Construction & Alteration History

Date	Event	Source*
1871	First fire protection organization established in the City of Boulder.	Fire Station No. 2 Designation Papers, 2
1908	Construction of Boulder Fire Station No. 2 completed.	Fire Station No. 2 Designation Papers, 2
1958	Boulder Fire Station No. 2 decommissioned. Replacement was larger modern fire station built at the corner of Broadway and Baseline. Boulder Parks and Recreation Department repurposed Fire Station No. 2 into a pottery studio.	Fire Station No. 2 Designation Papers, multiple
1980	Boulder Fire Station No. 2 designated a Local Landmark by the City of Boulder.	City of Boulder Landmark L-79-8
1982	Small shed roof addition built on the east side of the building.	Historic Structure Report, 26
1987	The Historic Structure Report and Survey conducted recording existing condition of fair and poor conditions. It is unknown if repairs were completed.	Historic Structure Report, 26
1993	Fire escape addition on the north east facade of the building built.	Central Records
1995	A fence approved as an alteration and added to the site.	Central Records
1999	Fencing, a walkway and exterior lighting added to the site.	Central Records
2006	Fire escape repaired and/or modified.	Central Records
2014	Original cobblestone driveway replaced by concrete paving.	Site Visit Notes

*Refer to Resources at the end of this section for sources.



Figure 1-3. Boulder Fire Station No. 2 at 1010 Aurora Avenue, with two fire trucks and a Ford automobile in front. On the truck to the left (1915 White) are (left to right): Carl Burke, Frank Johnson, Asa Dunning, and Tommy Love. In the 1914 Ford in the center are Chief Emil Johnson with Frank Urie at the wheel. On the 1913 Seagrave to the right are (left to right): Frank Burke, Art Pettingill, and DeKalb Wellma (source: Carnegie Branch Library for Local History)

EXISTING CONDITION

Landscape Condition

Circulation

A paved concrete driveway connects Aurora Avenue with the building's front entrance. Flanking the driveway at the entrance are two concrete paved sidewalks that extend along the east and west elevations, accessing the rear entrance. There are no ADA-compliant parking spaces or routes around the exterior or interior of the building.

Architectural Description

Boulder Fire Station No. 2 is a simple two-story brick building combined with a steep roof pitch and elaborate dormer window. The first floor contains large wooden double doors that were formerly used to receive horses and wagons as well as fire trucks in later years. The majority of the exterior windows are double hung. There is one exterior door on the second floor that could have opened onto an exterior staircase at one point in time but has since been removed. There is a wooden railing at the top of the second floor stairs as well as large built-in, wooden storage spaces that were formerly used as the fireman's lockers. All are character-defining features that should be retained in future rehabilitation and reuse efforts.

Primary Materials

Character-defining features of Boulder Fire Station No. 2 include the brick masonry on the exterior and interior walls, sandstone foundations, stone sills, lintels, and copings, asphalt shingle roof and dormers, wood framed windows and doors, the original hardwood flooring on the second floor, interior painted plaster walls, and the decorative pressed tin ceiling tiles.

Boulder Fire Station No. 2 has had minor rehabilitation and modifications since its original construction. These include the roofing material replacement, replacement of the cobblestone driveway with concrete pavement, the addition of a metal staircase, widening of the westernmost door on the north elevation for accessibility, and a brick masonry addition on the east elevation. A decorative tin ceiling was added to the lower level that is not original to the building. The upper level restroom is not original and has tile floors with FRP wall panels. The lower level restroom has been refinished with floor and wall tile, and has grab bars added for the toilet. Much of the interior finishes have remained the same. Bite marks from the fire department horses are visible on some wood detailing located in areas where the former stable had been kept. The original fire pole was removed after the fire department relocated. The fire pole's opening was covered with plywood, but it's indication is still visible from the first and second floor. The workroom on the second floor retains the original floor finish, but the remainder of the area has been covered by various types of non-original finishes.

Architectural Condition

Concrete

Floor Slab: The lower level floor slab appears to be in good condition. Furniture covers the flooring, however, from what was observed, there was no evidence of major damage. A metal panel inset is in the slab near the lower level restroom. A large trench drain extends north to south through most of the open floor area. These are both in good condition.

Driveway: The cobblestones were removed and the driveway was paved in 2014. The driveway is in good condition.

Roofing

Without roof access, the full conditions of the existing roof were not verified. Of what could be seen from ground level, the existing shingles appear to be in good condition. The roof soffits appear to be in good condition. The gutters and downspouts do not appear to be original to the building but are in good condition.



Figure 1-4. Linear floor drain, 2020 (source: Ratio)



Figure 1-5. Steel panel in building slab, 2020 (source: Ratio)



Figure 1-6. Roof, 2020 (source: Ratio)

Walls/ Finishes - Masonry

Brick: Overall the existing brick walls are in good condition. Joints appear to have been repointed at some time in the past. Damage near the main entry door on the north end includes brick that appears to have been treated for graffiti removal and is a darker color than the rest of the wall. The interior brick walls are painted and appear in good condition. The center window on the upper level of the south wall is in poor condition and in need of resetting and repointing.

Stone: Stone was used for window lintels, the water table and detailing throughout. The stone shows evidence of weathering, but structurally and functionally are in good condition. One lintel appears to have been replaced with concrete below the exterior staircase



Figure 1-7. Brick at upper window, 2020 (source: Ratio)



Figure 1-8. Sealant on brick, 2020 (source: Ratio)



Figure 1-9. Stone detailing, 2020 (source: Ratio)



Figure 1-10. Lintel below exterior stair, 2020 (source: Ratio)

Walls/ Finishes - Wood

Flooring: The main workroom on the upper level has original hardwood flooring. The flooring overall is in good condition, however, a large portion of the floor has been painted over and some non-compatible material replacements, such as plywood panels and mismatching wood, have occurred overtime.

Windows: The window frames are in fair condition. There is considerable damage on the windowsills throughout. Many of the windows have interior storm windows installed. The wood window frames have mostly cosmetic dirt and damage from the ceramic studio use. The lower level windows have been painted. One of the lower level windows has sustained bite marks from where the horses had gnawed on the frame during the time when the stable was still in use.

Doors: The main double garage doors at the north end of the building are the original doors. The wood is painted, and the doors are in good condition. The side door on the east wall was cut to create access to the added storage area/loading area. Some upper level doors at the south end appear to be original, and in fair condition. The swing on several of the doors has been reversed. One door appears to have been repurposed to its current location, but the top of the door was cut off to fit the existing frame.



Figure 1-11. Lower level window with horse damage, 2020 (source: Ratio)



Figure 1-12. Upper level window with interior storm, 2020 (source: Ratio)



Figure 1-13. Garage doors, 2020 (source: Ratio)



Figure 1-14. Opening cut into original east doors, 2020 (source: Ratio)



Figure 1-15. Upper level restroom door, 2020 (source: Ratio)

Lockers: The general forms of the original lockers on the upper level are intact, however many of the locker doors have been removed for pottery storage. The smaller doors on top are all in place. The lockers are currently used for storage and are in fair condition.

Finishes - Metal

Exterior Stair: The exterior stair is not original to the building. There is evidence that there was a previous exterior staircase to the upper level that was installed in a slightly different location. The exterior stair is in poor condition. It is not well secured to the building and is corroding in multiple areas.

Ceiling Tiles: The painted metal ceiling tiles are not original to the structure and were likely added after the period of significance in order to look historic. They are in good condition. Indication of the fire pole opening is visible from the first and second floors.



Figure 1-16. Lockers, 2020 (source: Ratio)



Figure 1-17. Roof framing in attic, 2020 (source: Ratio)



Figure 1-18. Exterior staircase, 2020 (source: Ratio)



Figure 1-19. Evidence of previous exterior stair landing, 2020 (source: Ratio)



Figure 1-20. Lower level ceiling, 2020 (source: Ratio)



Figure 1-21. Original fire pole location, 2020 (source: Ratio)

Mechanical / Electrical / Plumbing

The building has a mechanical system for heating and cooling that is not original to the building. Restroom facilities are on both levels with an accessible restroom on the lower level. A variety of mop sinks/ paint sinks are within the space for the ceramic studio. A building systems engineer will need to be procured by the city to conduct a thorough analysis to confirm compliance and performance of exiting systems.

Most original lighting has been replaced with new fixtures or modified.



*Figure 1-22. Mechanical unit, 2020
(source: Ratio)*



*Figure 1-23. First-floor mop sink, 2020
(source: Ratio)*



*Figure 1-24. Lower level accessible
restroom, 2020 (source: Ratio)*

Additional items

Tile: The lower level restroom has decorative tile finishes on the floor and walls that are in good condition. It is unclear if this tile was placed during the period of significance. Further analysis will need to be conducted in order to confirm before any replacement of tile in the future.

Loading/Storage Area: The lower level addition has two exterior doors, one at grade level, and one that is raised for pallet loading. The pallet storage area is raised above floor level and is enclosed in a locked gate.

Interior Stair: The bottom steps are concrete with safety painting. Portions of the paint could use retouching, and there is some damage to the corner of the steps. The main portion of the stair is wood, with applied metal treads and nosings added to each step. The metal is worn, but functional. The condition of the wood below the treads is unknown, but the portions of wood that remain exposed are in fair to poor condition.



Figure 1-25. Storage addition, 2020 (source: Ratio)

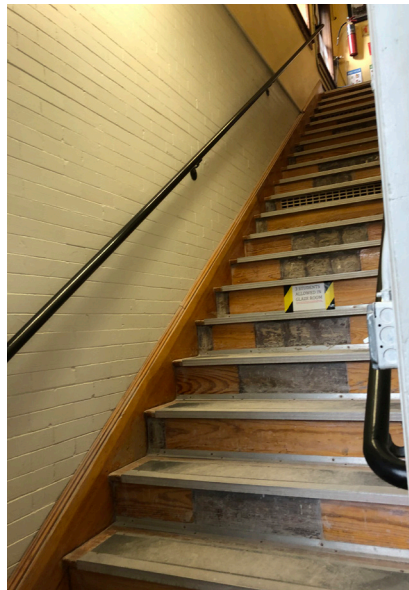


Figure 1-26. Interior stair, 2020 (source: Ratio)



Figure 1-27. Bottom of interior stair, 2020 (source: Ratio)

Structural Condition

Boulder Fire Station No. 2 is a two-story building with a wood-framed hip-roofed and clay brick masonry walls. Elevations and a Historic Structures Report prepared by CSC in 1987 were available during this assessment; however, no structural drawings, original or otherwise, were available. The structural systems are described below based on site observations and documentation of the structure.

Foundation

The foundation was not exposed or observed below grade, so the depth and presence of footings are unknown. However they are likely continuous concrete or masonry strip footings.

Overall, the foundation appears to be in good condition based on the overall system performance; no step cracking in the above-ground masonry walls related to foundation settlement was observed.

Roof Framing

The structure has a hip roof with a 7:12 pitch and a gable dormer on the north elevation. The roof framing consists of wood trusses built of 2x4 members spaced at 24" on center. The roof is sheathed with original $\frac{3}{4}$ " board skip sheathing overlaid with a newer layer of OSB.

The roof is in good condition; there is no sagging or deflection to indicate structural deficiencies. The wood framing appears to be in good physical condition showing no signs of deterioration.

Wall Construction

The building's perimeter walls consist of load bearing multi-wythe red clay brick with red sandstone headers, sills, and water tables. The mortar joints appear to consist of soft lime-based mortar. The brick is in a running bond pattern with no visible header courses. It is likely that there are blind diagonal headers, which was typical construction for brick walls in this era.

The brick and stone are in overall good condition and exhibit weathering consistent with their age. There are cracks located at brick supported over the large transom window and at the first-floor entry door. The chimney's mortar joints exhibit more weathering than the rest of the building.



Figure 1-28. Front of Fire Station No. 2, 2020 (source: JVA)



Figure 1-29. Fire escape on east side of building, 2020 (source: JVA)

Floor Framing

The ground floor of the building consists of a concrete slab on grade. The floor framing of the second floor was not exposed or visible during the observation and no structural plans are available. The framing likely spans 22'-8" between the exterior masonry bearing walls and is supplemented by painted steel wide flange and channel frames at the front, back, and middle of the structure. This floor supports a significant load from the pottery kilns and storage on the second floor. At the stairway, there is a 2'-0" difference in elevation between the first-floor ceiling and the second-story floor; this could indicate that the framing consists of wood trusses; though this couldn't be verified.

The first-floor concrete slab on grade is in good condition. The second-floor framing system has a large span, supports a large load, and was concealed during the observation, so its capacity has not been verified. However it appears to be in good condition based on the overall system performance; there are no signs of deflection that would indicate structural deficiencies.

Lateral Force Resisting System (LFRS)

The LFRS of the house consists of the building's perimeter brick walls acting as shear walls and is augmented by the steel knee-braced frames that offer some redundancy.

The LFRS is in good condition. It has performed well over the lifetime of the structure.

Other Structural Features

The site includes a non-original outdoor steel-framed stair fire escape with concrete landings leading to a second-floor entrance on the east side of the building (Re: Figure 29). There are two brick masonry chimneys on the west elevation, integral with the exterior bearing wall.

The fire escape is in poor condition and has significant corrosion at the angles and decks. The chimneys are in good condition showing no signs of structural distress such as displacement.

Structural Condition Definitions

This structural condition assessment makes use of terms concerning the condition of building components which are defined as follows:

Good - A structural element, component or system is considered in good condition when it is undamaged, structurally sound or functionally operational, and performing as intended. No specific repairs are required, and only minor or routine maintenance is needed.

Fair - An element, component or system is considered in fair condition when there are signs of wear or deterioration, such as freeze-thaw deterioration, corrosion, or wood decay exceeding expectations based on the age and use of the element, that may be reducing the structural capacity of the member. Replacement or repair of the element may be required.

Poor - An element, component, or system is considered in poor condition when it no longer performs its intended structural purpose. Deterioration or damage reduced the load carrying capacity of the element and simple repairs cannot be justified or are not expected to be effective. The element may show signs of imminent failure. Major repair or replacement will be required.

Note: Condition ratings reported are based upon visual observations only. No material testing or exploratory observations have been made. Further investigation could result in modification to condition ratings.

Table 1-1: Condition Assessment of Architectural Features

Primary Features	Description of Primary Materials	Condition
Roofing	Asphalt shingles	Good
Masonry	Brick, stone	Good
Openings	Windows/doors	Good to Fair
Finishes	Hardwood floor, original lockers	Fair, Poor
Additional Building Systems		
Mechanical	HVAC	Not Assessed
Fire Protection & Suppression		Not Assessed
Irrigation	(Backflow preventer spray heads, etc.)	Not Assessed
Electrical	Lighting	Good
Plumbing	Restrooms, mop sink	Good

Table 1-2: Condition Assessment of Structural Features

Primary Features	Description of Primary Materials	Condition
Foundation	Continuous concrete or masonry strip footings	Good
Roof Framing	Wood-framed trusses	Good
Wall Construction	Load bearing multi-wythe red clay brick	Good
First Floor Framing	First floor: concrete slab-on-grade Second floor: unconfirmed, possible wood trusses	Good
Lateral Force Resisting System	Perimeter brick shear wall with supplemental steel frames	Good
Fire Escape	Outdoor steel-framed fire escape stair	Poor

ADDITIONAL IMAGES



Figure 1-30. Boulder Fire Station No. 2 Landmark Designation plaque, 2020 (source: Ratio)



Figure 1-31. Front (north) elevation, 2020 (source: Ratio)



Figure 1-32. South and east elevations, 2020 (source: Ratio)



Figure 1-33. South storage and kiln yard, 2020 (source: Ratio)



Figure 1-34. Lower level interior looking south, 2020 (source: Ratio)



Figure 1-35. Lower level interior looking south, 2020 (source: Ratio)



Figure 1-36. Lower level pottery studio facing north elevation, 2020 (source: Ratio)



Figure 1-37. Upper level south pottery room looking east, 2020 (source: Ratio)



Figure 1-38. Upper level south pottery room looking northwest, 2020 (source: Ratio)

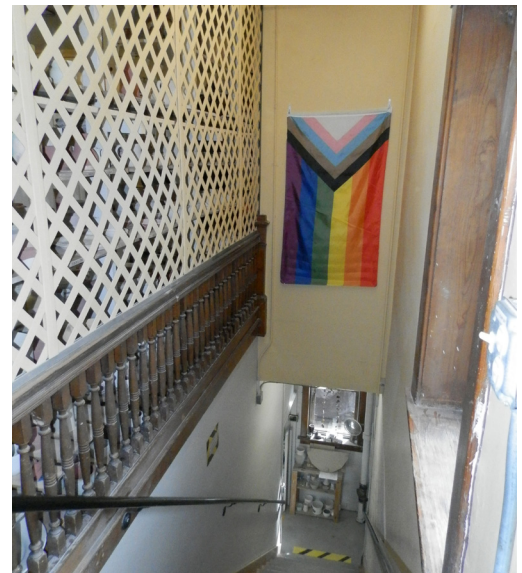


Figure 1-39. Top of interior stair, 2020 (source: Ratio)

SKETCHES

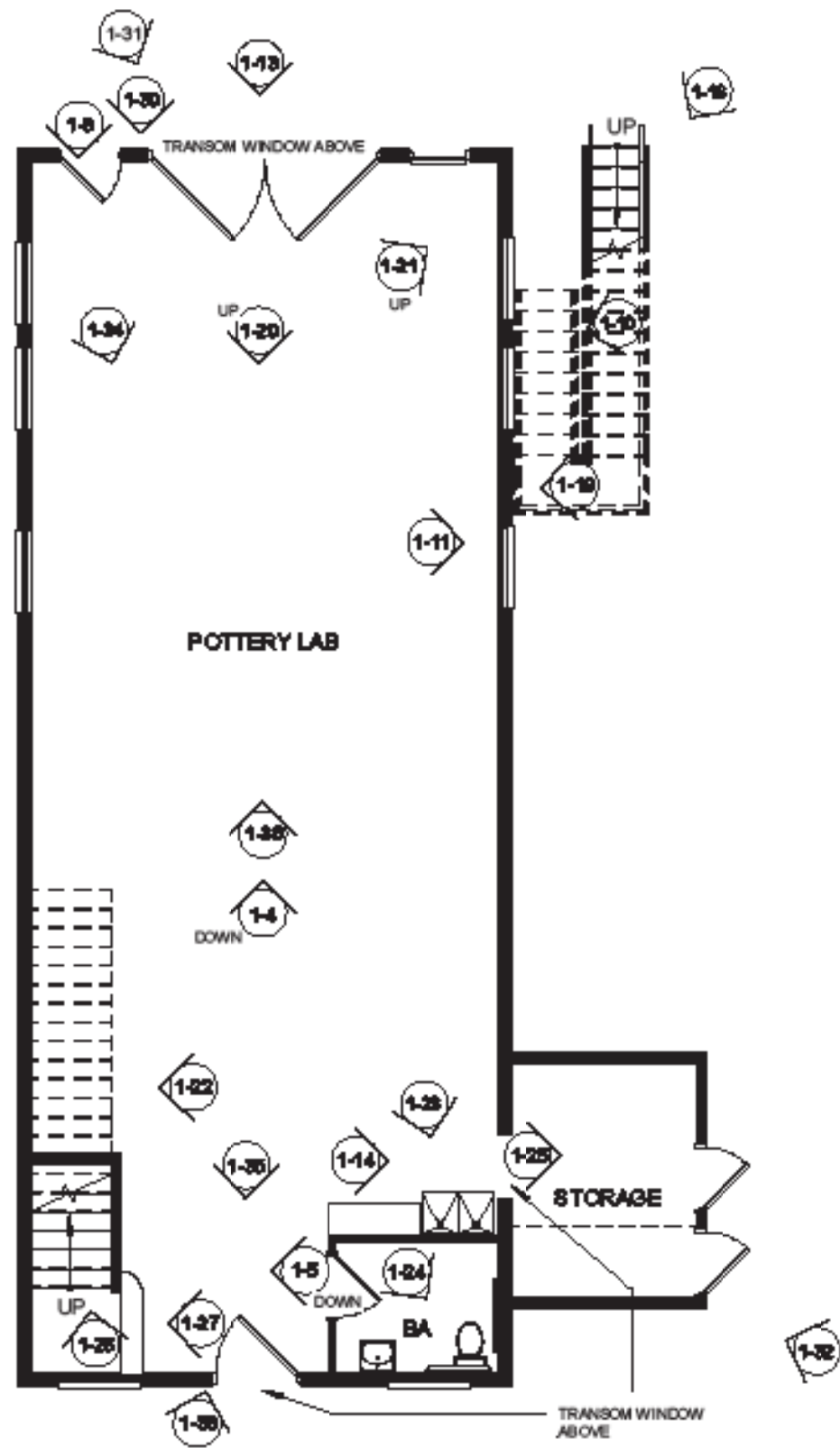


Figure 1-40. First Floor Plan, 2020 (source: Ratio)



Figure 1-41. Second Floor Plan, 2020 (source: Ratio)

TREATMENT

Introduction and Overview

Rehabilitation is the selected treatment approach for Boulder Fire Station No. 2. This approach emphasizes the preservation and repair of the structure, and allows for adaptive reuse and the addition of compatible modifications to meet future contemporary needs. This section provides actions and recommendations to guide the holistic preservation and rehabilitation of Fire Station No. 2 to ensure its future as a valued landmark.

Treatment guidance is based upon review of historic documentation, assessment of condition and integrity, and in support of current and planned futures uses. This section provides treatment actions to protect character-defining features, and repair features. Treatment recommendations identify where repair is needed to reveal historic features, retain character, and maintain integrity. Work planned for the Boulder Fire Station No. 2 shall be guided by *The Secretary of the Interior's Standards for the Treatment of Historic Properties and accomplished by using accepted preservation methods detailed by the Nation Park Service, and Chapter 9-11 (Historic Preservation) of the Boulder Revised Municipal Code.*

Treatment guidance describes necessary improvements and repairs to provide improved functionality of the Boulder Fire Station No. 2 for continued public use and for improved operations.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, or additions if those portions or features that convey its historic, cultural, or architectural values are preserved. Rehabilitation allows for new additions to be integrated within the study area in a manner that preserves established patterns and features. Additional actions include those that preserve, repair, and retain contributing features and qualities that contribute to the historic character.

Guiding Principles

Boulder Fire Station No. 2 is historically and architecturally significant for its role in early fire prevention and for its continued use as a community space. The building is characterized by its American Foursquare style. The building was built during the development of University Hill neighborhood during a time when fire protection was critical to establish for the growing City of Boulder. The building is a contributing resource to the University Hill Community and the municipal history of Boulder altogether.

Guiding Principles

- Preserve, protect, and repair Boulder Fire Station No. 2's contributing architectural and structural features including characteristics that contribute to its historic character on the interior and exterior of the structure.
- Maintain and enhance the current use or similar community use as a pottery studio.

Treatment Guidance

Treatment guidance provides recommendations for the preservation and repair of individual characteristics of Boulder Fire Station No. 2.

Buildings and Structures

Rehabilitate, stabilize, and preserve Boulder Fire Station No. 2.

- Preserve and repair extant character-defining architectural features in-place including brick masonry on the exterior and interior walls, stone sills, lintels, and copings, asphalt shingle roof and dormers, wood framed windows and doors, and the original hardwood flooring on the second floor.
 - Clean and repoint exterior masonry walls and chimneys as needed using accepted preservation methods detailed by the National Park Service . Replace masonry that is damaged beyond repair;
 - Further investigate the roof and foundation conditions and make repairs based on findings;
 - Remove non-historic coatings on contributing materials.
- Preserve, repair, and replace extant architectural finishes to match in-kind.
 - Replace hardwood stairs.
 - Consider restoring original interior finishes to the best extent possible. Conduct further research for original material and finishes that may have been removed during later modifications.
 - Consider restoring original wood lockers in their entirety.
 - Future repair of the staircase should be done with in-kind materials.
- Preserve extant structural features in-place.
 - Floor Framing - Investigate the second floor framing by carefully removing some first floor ceiling or second floor flooring finishes in whole pieces so as to protect the historic materials. Once the configuration of the framing is known, a structural analysis can be performed to determine the load capacity of the floor and the extent of strengthening necessary to support the kilns and storage currently located on the second floor.
 - Walls - Rake out deteriorated mortar joints in the walls and chimneys and repoint with a compatible mortar as determined by a mortar analysis of a sample of the original mortar. Note the mortar will require periodic maintenance; Shore the transom window with a steel lintel, slide in a larger bearing plate at either end, pin the masonry near the side of the window, and replace any cracked brick units.
 - Other Structural Elements - Remove any rust from the exterior steel fire escape with a wire brush. Recoat the steel with a zero VOC cold-galvanizing paint. If any members or portions of the deck are corroded beyond structural repair, replace in-kind.

Top Priorities

The following actions to improve or repair physical features or landscape characteristics are the top recommended priorities. These actions meet the following criteria: impact for safety / stabilization; threat of loss of integrity; poor condition; potential impact due to enhancement; critical path / adjacency to other planned work; or relevancy to other current plans.

These priorities do not diminish the necessity to complete all recommendations to protect the structure over the long term, but rather highlight the current highest priorities.

1 - Conduct repairs for the safety and stabilization of Boulder Fire Station No. 2.

- Further investigate second floor framing and strengthen as necessary.
- Repair exterior steel fire escape.

2 - Conduct repairs to improve the condition of Boulder Fire Station No. 2.

- Repair corroding lintels and deteriorating mortar joints in brick masonry.
- Conduct feasibility study for adding an elevator or a lift for accessibility.

RESOURCES

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