

HISTORIC STRUCTURAL ASSESSMENT **612 JEFFERSON AVE., LOUISVILLE, COLORADO**

April 1, 2022



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State Survey Number 5BL.11288*

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1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND / PROJECT PARTICIPANTS

DAJ Design conducted an Historic Structural Assessment for the structure located at 612 Jefferson Avenue, Louisville, CO to determine its feasibility as a candidate for historic landmark designation as defined under the Historic Preservation program of the City of Louisville. The structure is a residential property. The City of Louisville Historic Preservation Commission found probable cause that the building may be eligible for landmarking under criteria in section 15.36.050 of the Louisville Municipal Code. Therefore, the Commission approved the Historic Structural Assessment to be paid for by the Louisville Preservation Fund grant.



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The primary purpose of this HSA is to evaluate the property's current condition and to identify preservation priorities for the best use of rehabilitation funds. DAJ Design inspected 612 Jefferson visually to identify areas of necessary maintenance and repair. It is possible that complications exist that were not visible and therefore it is recommended that the property owner includes contingency funding in any repair budget.

DAJ Design inspected 612 Jefferson on March 4th, 2022, and returned with Glenn Frank Engineering on March 31st, 2022, for a follow-up structural visit. The weather for the initial visit was cool and sunny with snow covering the ground from a recent storm. The weather for the follow-up visit was warm and sunny. Adequate access to the basement and crawlspace was available, though not all areas were entirely visible. Attic access was available to observe the attic condition, though not all attic spaces were accessible. Additionally, there are three detached structures on the property including a garage, a carport, and a shed. These structures were not inspected beyond taking note of the exterior condition.

LIST OF CONSULTANTS AND SOURCES:

STRUCTURAL ENGINEER

JESSE SHOLINSKY, PE
GLENN FRANK ENGINEERING, INC.
PO BOX 20708
BOULDER, CO 80308
303.554.9591

SOURCES

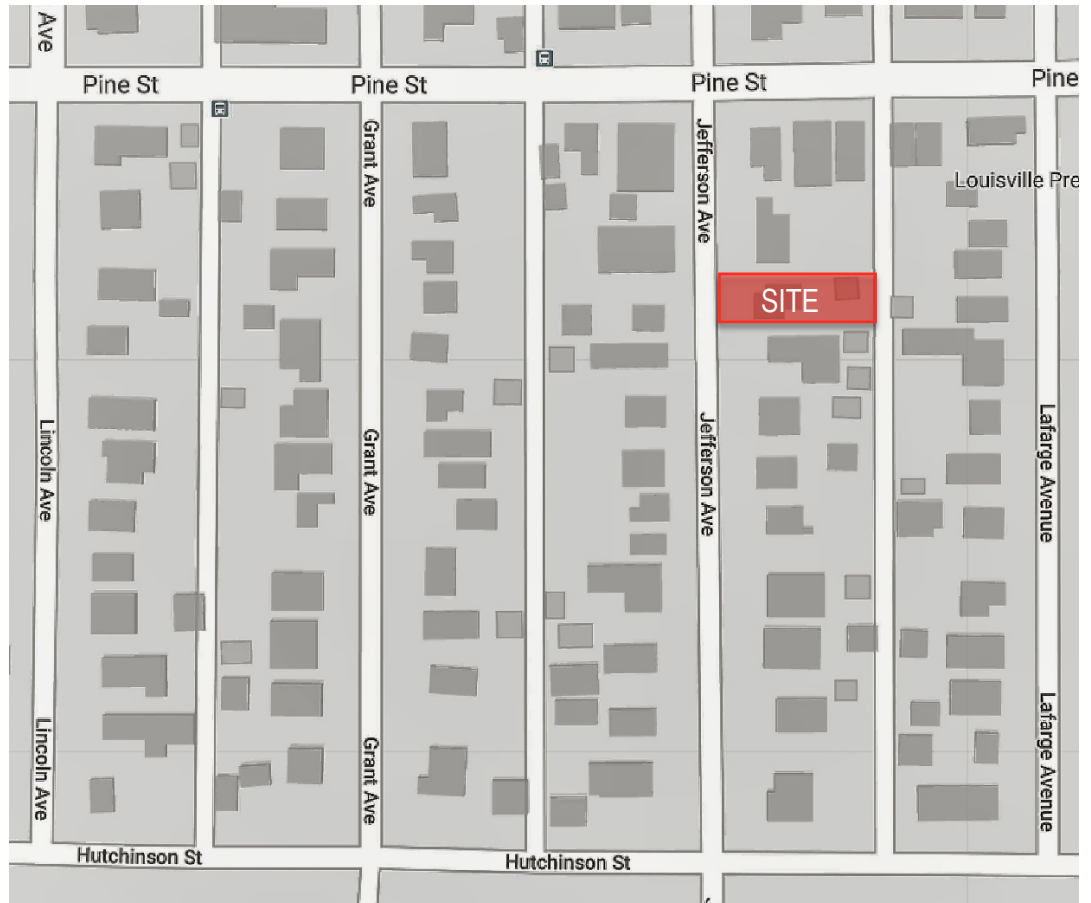
"Louisville Historic Preservation Commission Staff Report," December 20, 2021.
"612 Jefferson Ave. Architectural Inventory Form," September 1998, Louisville Historical Museum.

1.2 BUILDING LOCATION

VICINITY MAP



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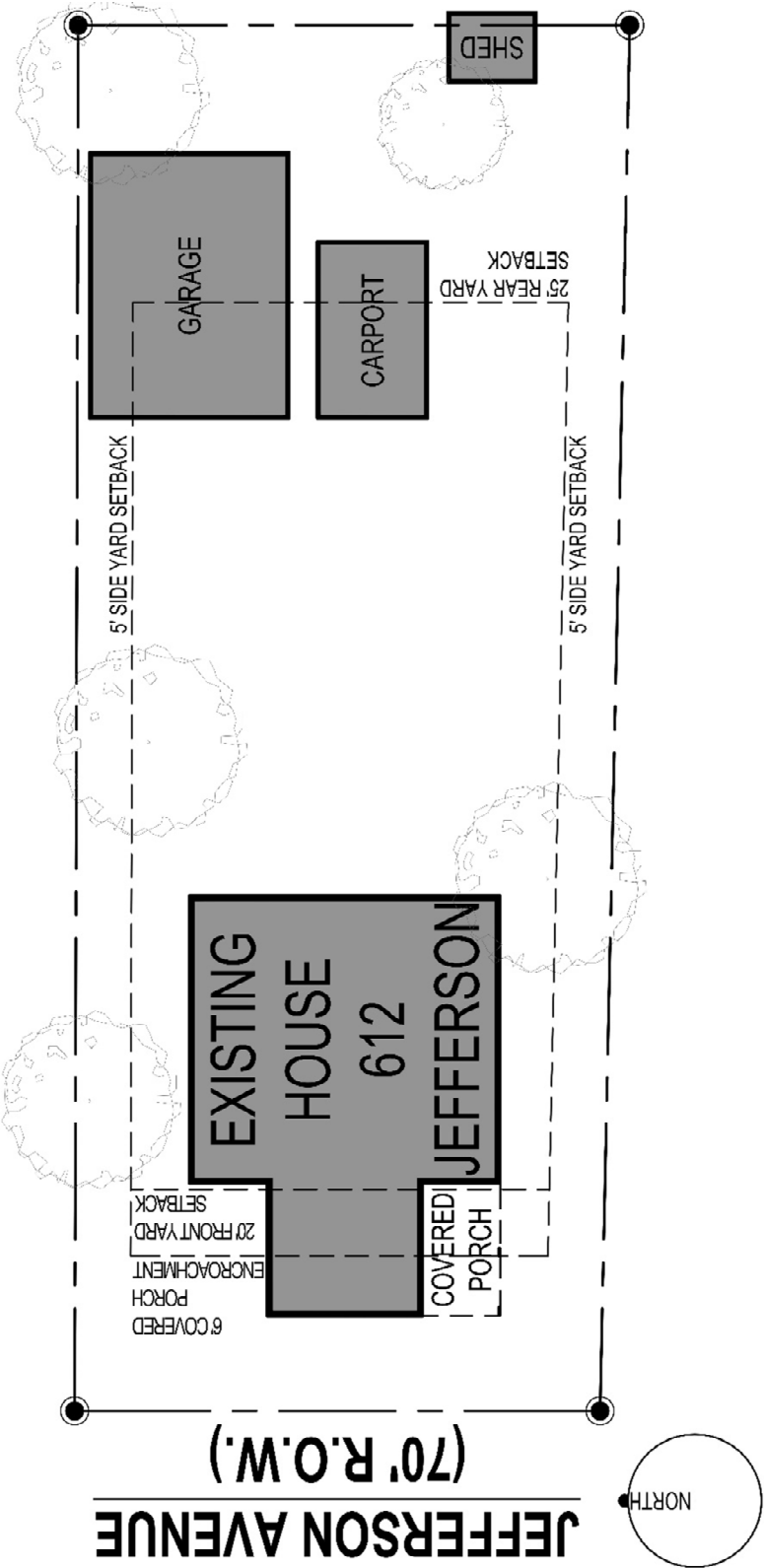
LEGAL DESCRIPTION

Lots 14-15, Block 7, Jefferson Place

SITE PLAN



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2.0 HISTORY AND USE

The following social history was written and included as part of the *Architectural Inventory Form* for 612 Jefferson Avenue:

Louisville Historical Museum
Department of Library & Museum Services
City of Louisville, Colorado
2013



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Year of Construction: 1900

Builder / Contractor: Unknown. August LeComte was a carpenter and may have built the house himself.

Historical Background

This building is part of Jefferson Place, the first residential subdivision in Louisville.

612 Jefferson was the home of members of the LeComte family from France for many years and has also been associated with the Hicks family of Louisville for over 91 years. 612 Jefferson and 620 Jefferson (5BL11292) next door had shared ownership for a period.

In 1898, Jefferson Place developer Charles Welch conveyed twenty-nine different lots in Jefferson Place to a Denver lawyer, Harper Orahood, apparently for Orahood to resell. The lots for this parcel were among these properties. Orahood conveyed 612 Jefferson to August LeComte by a deed that was recorded in 1905. Orahood also conveyed 620 Jefferson to August LeComte by a deed that was recorded on the same day.

Boulder County gives 1900 as the year of construction for this property. Although the dates given by Boulder County have sometimes been found to be in error with respect to historic buildings in Louisville, for this particular house there was no other evidence found that could help prove or disprove this date. The property in question is outside of the boundaries of the Sanborn Maps that were done for Louisville in 1893, 1900, and 1908 (they focused on the downtown business district and La Farge Avenue only). The house does appear in the correct location on the 1909 Drumm's Wall Map of Louisville.

August LeComte and his family may have purchased the house and started living here even earlier than 1905, as their address in the 1904 directory is listed as being on Jefferson between Pine and Hutchinson (which is a description of the location of 612 Jefferson). The 1910 census shows the family as living in this location next to the De Santo family next door at 600 Jefferson (5BL11287). The family was made up of August LeComte Sr. (1859-1923) and Louisa Helart LeComte (1859-1912); their children August Jr., Florence, Leah, Victor; and Louisa's mother. August, Louisa, August Jr., and Louisa's mother had all been born in France and came to the US in 1887 or 1888. August LeComte Jr. was born in 1886 and died in 1951.

According to the 1916 directory, August LeComte Sr. and August LeComte Jr. were both living at this house, which then had the address of 121 Jefferson. Father and son worked as coal miners in Louisville, and August LeComte Sr. also worked as a carpenter.

A family history of the LeComte family in the files of the Louisville Historical Museum shows that August LeComte Sr. was conscripted into the French Territorial Army, and he served from 1879 to 1886. His hometown was Bethune in the Pas de Calais province in northwestern France. Louisa Helart was his wife; this is just one of several connections between the LeComte and Helart families, which were also closely related to the Warembourg family of Louisville.

In 1920, August LeComte sold the house to Monroe Hicks. The house would be associated with the Hicks family for many decades to come. Monroe Hicks (1882-1952) married Beatrice Thirlaway (1887-1983) of the English Thirlaway family of Louisville in 1904. Beatrice was also related to John and Emma Barker who lived nearby at 801 Pine Street (5BL8023) in Jefferson Place. Their only child, John Hicks (1905-1998), married Bessie Truitt (1904-2000) in 1930.

John and Bessie's adopted son, Roger Delforge, who was identified as being Bessie's adopted son in her obituary, continues to be the current owner of 612 Jefferson. [1998]

The 1929 census records show Monroe and Beatrice Hicks and their son John living at the 612 Jefferson location.

Directories show the Hicks family as living at this address, which was then 121 Jefferson, beginning in the early 1920s. In the late 1920s, Monroe and Beatrice Hicks had a grocery store on Front Street, and their son, John Hicks, was a clerk at Celeste Romano's establishment located at what is now 809 Main (5BL8041). There was a period in the 1920s when the family was listed as living at their store location on Front Street, and it is not known who was living in the house at 612 Jefferson during that period. It was in 1930 that John and Bessie Hicks married, and the 1930 census shows them to be living at 612 Jefferson. Directories also show them to have lived at 612 Jefferson consistently after that. In the late 1930s when Louisville addresses changed, the address of their house was altered from 121 Jefferson to 612 Jefferson.

Monroe Hicks and his son, John, primarily worked as coal miners in the Louisville area, according to their obituaries. Bessie Hicks worked for Remington-Kaiser during World War II. She also worked as a waitress at the Blue Parrot Restaurant in Louisville at 640 Main (5BL8037).

Following the death of Bessie Hicks in 2000, her adopted son, Roger Delforge, took ownership of the house, and he continues to be the current owner. [1998]

Sources of Information

Boulder County "Real Estate Appraisal Card – Urban Master," on file at the Carnegie Branch Library for Local History in Boulder, Colorado.

Boulder County Clerk & Recorder's Office and Assessor's Office public records, accessed through <http://recorder.bouldercounty.org>.

Directories of Louisville residents and businesses on file at the Louisville Historical Museum.

Census records and other records accessed through www.ancestry.com (including the photos for this report).

Drumm's Wall Map of Louisville, Colorado, 1909.

Sanborn Insurance Maps for Louisville, Colorado, 1893, 1900, and 1908.

Archival materials on file at the Louisville Historical Museum, including a family history of the Warembourg and LeComte family written by Ron Buffo.



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2.1 ARCHITECTURAL SIGNIFICANCE & CONSTRUCTION HISTORY

The residential property at 612 Lincoln Avenue was constructed around 1900 and is a typical early-1900's wood frame vernacular house of the Louisville area. In 2022 the structure is sided in aluminum lap siding, though evidence remains of the original painted wood siding possibly existing beneath. At some point in time the foundation was replaced or reinforced with a concrete foundation. The northeast corner of the house was originally a deck that was enclosed by 1948. A deck in the southeast corner of the house was enclosed between 1948 and 1976 and is enclosed as a side entry in 2022. A covered front porch was constructed between 1948 and 1976 and exists in 2022 as it did in 1976.



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The primary façade faces west to Jefferson Avenue and the original form of the house is apparent when viewed from Jefferson Avenue. The overall mass of the house has increased slightly to the east with the enclosure of the northeast and southeast decks. Due to the one-story nature of the construction, the additions are not easily detected from the primary street façade. The covered front porch in the southwest corner of the house partially obscures the overall form of the original house as was seen prior to 1976.

612 Jefferson Avenue has the potential to be restored to a high degree of architectural integrity when compared to historic photos dated 1948. Overall, the home is well maintained but has a few items that require prioritization, as outlined in the analysis of this report. Based on site measurements and observations, it is believed that the original wood siding and any other original features like trim work and original window sizes still exist beneath the current aluminum siding. Further investigative deconstruction has the potential to reveal a larger extent of original materials.

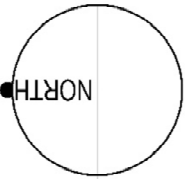
612 Jefferson Avenue is not listed on the National, State, or Local Register.

Primary Changes Occurring Over Time:

- | | | |
|---|---|-------------|
| • Original house (RED): | : | 1900 |
| • Northeast porch (BLUE): | | Pre-1948 |
| ○ Northeast porch enclosed: | | Pre-1948 |
| • Southeast porch (GREEN): | | Pre-1948 |
| ○ Southeast porch enclosed: | | 1948 – 1976 |
| • Southwest porch constructed (ORANGE): | | 1948 – 1976 |
| • Garage constructed: | | 1948 – 1976 |
| • Windows replaced / modified: | | 1965 |
| • East patio constructed: | | 1975 |
| ○ East patio demolished | | 1976 – 1998 |
| • Aluminum siding: | | 1976 |
| • Carport constructed: | | 1983 |
| • New asphalt roof | | 2019 |
| • Shed constructed: | | Unknown |



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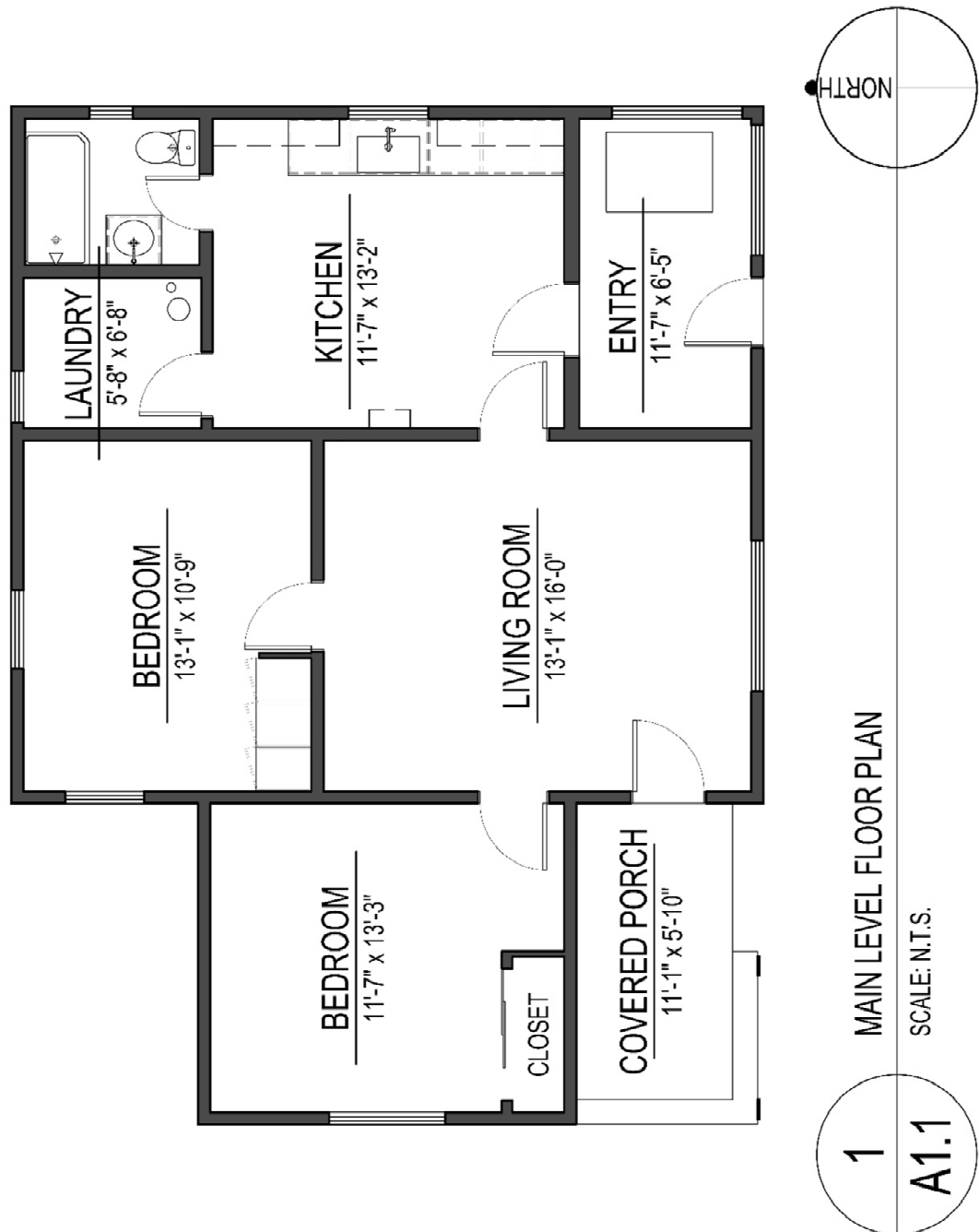


1 MAIN LEVEL FLOOR PLAN
A1.1
SCALE: N.T.S.

2.2 FLOOR PLAN



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2.3 PROPOSED USE

There is no proposed change of use at this time.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

ASSOCIATED LANDSCAPE FEATURES

Description:

612 Jefferson Avenue is set on a typical downtown Louisville lot approximately 50 feet wide by 125 feet deep, running lengthwise in the east-west direction and totaling approximately 6,065 sf. The property is bordered on the west by Jefferson Avenue, to the north and south by residential properties, and on the east by an alley. The house sits on the west side of the lot, approximately 8 ½ feet from the west property line. A chain link fence encloses the west side of the lot, set back towards the rear of the house. Fences of various materials and heights run the length of the property on the north and south sides, and partially enclose the east side of the lot from the alley.

Approximately 1/5 of the lot is covered by the building footprint, located in the western 1/3 of the site. The building is set back approximately 10 feet from both the north and south property lines. Also found on the site is a garage, carport, and shed. The total lot coverage of all buildings is approximately 1/4 of the site. Additionally, there are several concrete slabs between the outbuildings and the alley, as well as concrete walks running the length of the south side of the property and intermittently between the outbuildings.

The front yard and the yard between the house and garage are primarily sod, with a few mature trees scattered throughout, primarily along the north and south sides of the lot.



Looking northeast. The house sits on the west end of the lot, close to the ROW without any planting on the west side of the lot.



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Condition Evaluation:

Overall, the landscape features are in fair condition with the primary issues being overgrown mature trees and concrete flatwork that has heaved in several areas. None of the listed features meet historic requirements, nor were any historic features discovered, and therefore assessment was minimal.

Recommendations:

No recommendations at this time.

GRADING

Description:

Overall, the site is relatively flat. The site slopes downwards from west to east with the alley being lower than Jefferson Avenue. Grading on the west drains significantly towards the house while grade on the east part of the property drains to the alley. Drainage around the building footprint is minimal but does drain towards the building in several areas, primarily on the west facing aspects of the house. The top of grade relative to the top of foundation throughout could not be determined due to finish materials running to grade or adjacent flatwork.



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Grading around the building footprint is apparent in how the siding is tapered where it meets grade.

Condition Evaluation:

The overall site grading is in poor condition, though no signs of damage caused by poor or negative drainage was observed. However, no observations could be made because the existing aluminum siding runs to grade obscuring the top of foundation relative to the top of grade. Ideally, the grading around the house should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Due to the nature of the lot, it is unrealistic that these requirements may be achieved.

Recommendations:

1. Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
2. The top of the foundation relative to the top of grade should be determined around the perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
3. The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.
4. All areas where grade slopes towards the house, particularly on the west side of the house, should be regraded to direct water away from the house foundation.

PARKING

Description:

A detached, single car + garage faces east towards the alley. This garage appears on the 1976 Boulder County Assessor's card ground plan sketch, but it is unclear when the garage was built. The garage is constructed of painted concrete masonry unit walls with a framed roof. The roof rafters are 2x4 lumber sloping west with exposed rafter tails on the west end. The garage has stepped parapet walls on the north and south sides. The garage door is a painted wood overhead door facing east. On the south side of the garage is a painted wood man-door with a ½ lite and two wood hopper style windows.



Garage and carport facing the east alley

South of the garage is a 10' x 16' carport with three enclosed sides and open to the east. The carport is set back several feet from the east face of the garage and there is a concrete slab poured up to and inside of the carport. According to building records, the carport was added in 1983 and was built on caissons. The carport is a mix of wood and steel wall framing with mixed corrugated fiberglass and steel siding attached directly to the wall studs.

The garage and carport each accommodate one parking space for a total of two on the site.



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3.2 STRUCTURAL SYSTEM

GENERAL STRUCTURAL SYSTEM DESCRIPTION

FOUNDATION SYSTEMS

Description:

The house foundation was observed from a basement beneath the east portion of the original house structure. Access to the basement is through a floor hatch in the southeast corner of the house. The house appears to have been originally built entirely over crawlspace with a small portion later dug out to basement depth to accommodate mechanical equipment. Most of the house still sits over a crawlspace approximately two feet in depth.

The basement walls are constructed of concrete masonry blocks, approximately 4 ½ feet tall on the north, west, and south sides. These walls retain the soil in the crawlspace areas. The CMU wall on the east side is full basement height running to the bottom of the floor joists with a 2x sill plate. The basement has a concrete slab floor. It could not be determined if the CMU walls were constructed on top of the slab or if they have any footing.

The perimeter foundation walls are not visible from the exterior as finish materials run to grade. However, most of the foundation was observed from the basement looking into the crawlspace areas. The entire house perimeter appears to have a poured concrete foundation of unknown depth (minimum of two feet deep) and it is unknown if any footing exists. The concrete foundation walls are constructed with a concrete mixture that used a large aggregate. Due to the year of construction, it is possible that the concrete walls observed were added at a later date than original construction. Based on our knowledge of construction techniques used for similar structures built around the same time in the Louisville area, it is possible that the concrete is either applied on top of the existing foundation, or that the original foundation was removed in stages and replaced with a new concrete foundation.



CMU walls in basement. The east wall runs to the bottom of floor joists and is capped with a 2x sill plate.



Concrete foundation in northeast corner of crawlspace.



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Condition Evaluation:

The north, west, and south CMU foundation walls only have a couple of point loads supporting the house structure while their primary purpose is to retain the crawlspace soils. The point loads may have been added later to stiffen the floor structure, but the overall load applied at these locations is minimal. Complete analysis of these walls was not possible as the presence of a footing and its construction could not be determined. Additionally, these walls are not constructed as proper cantilevered retaining walls, though they are performing as such. No signs of failure were observed, and the walls appear level and straight with no signs of weakness. For this reason, these three walls are in fair condition.

The east CMU wall is in fair condition. This wall supports the east end of the main floor and walls in conjunction with the original east foundation wall that is still present. Similar to the other CMU walls, a footing could not be observed and there do not appear to be any anchor bolts connecting the wall to the sill plate and floor framing. Therefore, this foundation wall is determined to be in fair condition.

The poured concrete perimeter foundation walls are in fair to poor condition. The foundation walls supporting the west side of the house could not be fully analyzed as access was limited. Most of the perimeter foundation walls appear to be in fair condition as they are still fully intact with little to no cracking observed. There are several areas where the concrete has cracked showing signs of failure. The primary area of failure is in the southeast corner of the house where the concrete foundation is severely cracked and deteriorating.



CMU walls between basement and crawlspace.

Recommendations:

1. The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed. The walls are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
2. Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. Wall cracks were observed within the gypsum wall board on the main level. However, it is unclear if these cracks were caused by the foundation or because the wall board appears to have been applied directly over the original plaster walls. If further signs of cracking are detected, these areas should be evaluated by a licensed engineer and repaired as needed.
3. The foundation wall in the southeast corner of the house, as well as any other areas where cracking or deterioration has occurred, should be replaced as prescribed by a licensed engineer.



Failing foundation wall in southeast corner of house.

FLOOR & CEILING SYSTEMS

Description:

The floor framing throughout is constructed of rough-sawn 2x6 floor joists at 24 inches on-center, running east to west. The floor joists bear on a 2x sill plate on the original foundation at all perimeter areas except in the southeast corner where no sill plate is present. The framing of the southeast corner suggests that it was originally framed as a deck. This assumption is consistent with the available historical information of the house where this part is shown as a deck on the 1948 Boulder County Assessor's card. The northeast corner of the house also appears to have been originally framed as a deck but with materials and techniques matching that of the original house structure.

The floor joists are supported by wood beams running north-south at the cruciform intersections that appear to be original. There are wood beams where the original house meets the southeast deck as well as various wood posts throughout the middle floor sections that appear to have been added to brace sagging or bouncy floor areas. All of the wood beams are constructed of 2x or 4x lumber, both rough and dimensional, and in some areas are built-up beams of multiple and sometimes non-identical members.

The beams and joists are supported with various built-up columns throughout. Some of the materials used for these columns include dimensional lumber of various sizes, non-dimensional lumber of various sizes, wood logs, concrete masonry blocks, clay bricks, and wood shims. Most of these columns are built up of several different materials and bear on concrete or masonry on undisturbed soil. Some of the wood columns are notched and a few bear on the concrete masonry wall. The built-up columns are dispersed

throughout the crawlspace areas and appear to have been added at different points in time based on the materials used. The floor joists are supported at the mid-span line in a similar manner with notched wood posts bearing on various footings. These mid-span floor joist supports appear to be either original or added early on.

Sheathing and flooring is constructed of 1x3 tongue-and-groove hardwood. Linoleum flooring is applied on top of the original flooring in the kitchen, bath, and southeast entry.



Floor framing, sheathing, & supports



Various flooring structure support-beams & built-up columns



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Condition Evaluation:

The 2x6 floor joists are in good condition and the size of the joists are typical for houses built around the same time in the Louisville area. The joists spanning the long dimension of the house is a-typical for similar houses built around the same time in the Louisville area, though the methods used to brace the floor framing is very common. The joist sizing and spacing do not meet minimum IRC code requirements for today's standards but appear to be performing adequately. The floor on the main level felt sturdy and no floor deflection was observed, indicating that the floor framing is adequate for the current loading.

The beams supporting the floor joists are in fair to poor condition. The spacing and sizing of the beams appear adequate for the current loads that they are supporting. However, several of the beams are built up of various materials in several locations and none of the beams are properly attached to their supports. The beam sizing, spacing, and spans do not meet minimum IRC code requirements for today's standards but appear to be performing adequately.

The beam joist supports are in fair to poor condition as well. The supports are built of various stacked materials and in several cases the materials used are not appropriate for the supported loads. In most cases, each support bears on concrete or brick instead of soil which is appropriate, but the bricks and concrete units used are various and their capacity to withstand further loading is unknown. The materials, sizing, and construction methods of the beam supports do not meet minimum IRC code requirements for today's standards but appear to be performing adequately.

The floor sheathing that also performs as the finish flooring in most of the house is in fair condition. The flooring appears to be performing adequately, but there are several areas on the main floor that are bulging (likely from excessive supporting from below) and there are a few areas of water damage as observed on the main floor, likely from water being trapped beneath areas where carpet was formerly present. The floor sheathing does not meet minimum IRC code requirements for today's standards but appears to be performing adequately.

Recommendations:

1. The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
2. The beams and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth as specified by a licensed geotechnical engineer.
3. If floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
4. It is recommended to remove the linoleum flooring wherever it occurs throughout the house to properly assess the floor sheathing in these areas.
5. Refinish or replace the flooring where signs of water damage have occurred.



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ROOF FRAMING SYSTEMS

Description:

The roof framing over the original house forms a symmetric cross gable. Shed roofs cover the northeast and southeast corners of the house shedding to the north and to the south respectively. A shed roof sloping down to the south also covers the front porch in the southwest corner of the house.

The cross-gable roof structure appears to be entirely original and is accessed through an exterior attic hatch in the east facing gable end. The main house roof framing is built of 2x4 rafters at 24 inches on-center. There is a 1x6 joining ridge member and there are no collar ties. The ceiling joists are 2x4 that are also 24 inches on-center and are not spliced as is sometimes seen in similar houses. Original roof sheathing is present and is constructed of 1x12 decking with one inch spacing between each member. There is a layer of OSB sheathing applied on top of the original sheathing that was likely added when the original roof was removed and replaced with new asphalt composite shingles. The gable ends are framed with 2x4 studs, balloon-framed from the main level exterior wall below.

The west facing gable roof was not accessible for evaluation. This roof appears to be framed in a similar manner to the other gable roofs and is likely over-framed on the gable that runs in the north-south direction. An exposed 2x4 barge rafter on the west gable supports these assumptions.

The roof framing for the northeast and southeast shed roofs was not accessible for evaluation. These roofs are likely framed with 2x4 rafters based on the eave sizing and the ends of these rafters were observed in the main roof attic. The ceilings in these portions of the house are pitched.

The covered front porch is constructed of steel framing members supported by two steel columns and forming a shed roof. The steel is attached and supported by the house walls and the roof steps down from the house roof on the south side.



Roof framing as observed from east gable end access.



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Condition Evaluation:

The roof is in fair condition and is constructed of typical materials and methods for houses built around the same time in the Louisville area. There is no evidence of water damage where the roof was able to be observed. There is no evidence of damaged or poor performing rafter or ceiling joists. The covered front porch was observed to be sagging minimally and is in fair condition.

There are no intermediate walls to help support ceiling joists and roof members as needed. As a result, ceiling finish material damage is likely and was observed where the dropped ceiling had been removed. See recommendation below for options to reduce future finish material damage.



East facing gable roof structure with north-south gable structure beyond. Chimney remnants found in attic space are not present on the main floor nor protruding through the roof.

Recommendations:

The roof and ceiling structure are not to current code standards. However, they have performed adequately and if not revised will likely perform in a similar manner. Some of the following items should be considered to further solidify roof structure performance.

1. Add 2x4 collar ties at 48 inches on-center.
2. Consult with a licensed structural engineer to provide deeper ceiling members and rafters to meet minimum IRC prescriptive roof framing.
3. It is not recommended to add additional roofing materials such as an additional layer of shingles (code allows for up to two layers), or solar panels without the additional structural support mentioned above. Additionally, any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
4. The roof framing over the rear additions and the west facing gable should be investigated to determine if they need additional support.
5. Any repairs to the roof should be coordinated with a licensed structural engineer.



Covered front porch steel structure.



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3.3 ENVELOPE – EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION

Description:

The main level wall framing was not exposed for review. The wall framing is likely a 2x4 stud wall with studs on regular spacing (site measurements support this assumed wall thickness). The original wood siding appears to be attached directly to the wall framing, as seen in the attic. No visible sheathing is present.

Condition Evaluation:

Since the wall structure was not exposed for observation, we are unable to evaluate the condition or determine if there is any structural damage. The wall heights are approximately 8 ½ feet tall which is an acceptable height for 2x4 wood stud construction. Wall finish cracks were observed on several of the interior wall surfaces. The cause of this cracking could be from foundation movement or from improper installation of the gypsum wall board over the original plaster.

Recommendations:

Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.

EXTERIOR FINISHES

Description:

The entirety of the house is clad in painted aluminum siding. Building records indicate that the aluminum siding was added in 1976. The aluminum siding wraps the original house as well as the east additions. The aluminum siding runs from grade all the way up through the gable ends. No areas were available to observe what siding is beneath the aluminum siding, but it was common practice to apply steel siding over the existing siding around the time that this steel siding was added. The edges of what is likely the original wood siding was observed in the basement and at the attic access hatch. It is unclear if this wood siding is still present on the entire house or if other layers of siding are between the wood siding and aluminum siding.

The 1948 Boulder County Assessor card image appears to show wood siding wrapping the front of the house (and likely the entire house), but it is difficult to determine what type of siding was used from the photo. Additionally, the assessor card lists wood siding as the type of siding used.

The 1976 Boulder County Assessor card image appears to show stucco siding wrapping the front and south sides of the house (and likely the entire house). Additionally, the assessor card lists stucco as the type of siding used.



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Condition Evaluation:

The aluminum siding is in fair condition. There are a few bent or chipped panels and damage was done to the panels around several of the window openings when awnings were attached and then later removed.

Recommendations:

Investigative deconstruction is recommended in an inconspicuous area to determine what siding exists beneath the aluminum siding. It is likely that the aluminum siding was applied directly over the stucco siding which in turn was likely applied directly over the original wood siding as was common practice in the Louisville area. It is recommended that the aluminum and stucco siding be removed from the entire house. With the removal of this siding, it is likely that the original siding will be exposed. Repair, refinish, or replace the original wood siding.



Aluminum siding. One panel is bent near grade on the north side and the siding has been damaged around the west facing window where an awning was removed.

EXTERIOR MASONRY

Description:

An approximately two-foot tall by one-foot-thick brick wall surrounds the west and part of the south side of the covered front porch. The brick wall is capped in a thin layer of concrete. This wall was likely added at the same time as the covered front porch (between 1948 & 1976) and appears on the 1976 Boulder County Assessor's card image. No other masonry was observed on the house.

Condition Evaluation:

The brick knee-wall is in poor condition as it is crumbling throughout.

Recommendations:

The brick wall should be removed and not replaced. Though the wall likely meets the 50-year minimum to be historic, this wall was not original (it does not appear on the 1948 Boulder County Assessor's card image), it is not structural, and does not fall under the period of significance. Removing the brick wall would further improve the front façade's historic integrity as it is not original.



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EXTERIOR APPENDAGES

Description:

A covered front porch is attached to the southwest corner of the house. The front porch is not original and first appears on the photo in the 1976 Boulder County Assessor's card. The front porch is approximately 7 feet wide and 11 feet deep. The front porch is one step above grade and is slightly lower than the finished floor. The porch floor is a concrete slab. The entire porch is covered with a shed roof supported by two decorative steel columns and a brick knee-wall wraps the porch on the west and south sides, as described above. The steel columns, steel roof structure, brick wall, and concrete slab are likely original to the porch and can be seen in the 1976 photo.

A patio attached to the east side of the house appears on the floor plan of the 1976 Boulder County Assessor's card. This patio appears to have been constructed of concrete in 1975 and removed by 1998, according to building records. It is unclear if this patio was ever covered.

Condition Evaluation:

The covered front porch is in poor condition as the concrete slab and brick wall are deteriorating and the steel columns have a few areas where rust has started to appear, primarily where the columns are attached to the brick wall.

Recommendations:

Remove the entire covered front porch including the shed roof, steel roof structure and columns, brick wall, and concrete slab. The front porch is not original to the house nor does its construction match any period of significance. Removing the covered front porch would further improve the front façade's historic integrity.



Covered front porch



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3.4 ENVELOPE – ROOFING & WATERPROOFING

ROOFING SYSTEMS

Description:

The entire house roof is covered with an asphalt composite shingle roof that was added in 2019, according to building records. This roof was likely replaced due to hail damage, as was common in the Louisville area at this time. The new roof replaced an existing asphalt composite shingle roof that had been installed in 2005. The 1948 Boulder County Assessor's card shows that in 1948 the roof material was wood shingles.

There are two mushroom style roof vents located near the roof ridge for attic venting. Low venting at the eaves was not observed.

The covered front porch roof is a corrugated metal roof that is likely original to the front porch.



Asphalt composite shingle roof on main house, corrugated metal roof at the covered front porch.

Condition Evaluation:

The asphalt composition shingle roof, roof vents, and corrugated metal roof are in good condition.

Recommendations:

Consider adding more ridge venting to supplement the two existing vents as well as adding low roof venting in the roof eaves to provide for adequate air circulation and attic venting.

SHEET METAL FLASHING

Description:

Metal flashing is present where the shed roofs meet the original house exterior walls. This flashing is applied over the aluminum siding and was likely added when the new asphalt shingle roof was installed in 2019.

Condition Evaluation:

The metal flashing is in good condition.

Recommendations:

No recommendations at this time.



PERIMETER FOUNDATION DRAINAGE

Description:

A perimeter foundation drain was not observed during the inspection. Due to the construction time period and construction methods used, it is unlikely that a perimeter foundation drain exists.

DRAINAGE SYSTEM, GUTTERS & DOWNSPOUTS

Description:

Painted white, k-style gutters are found throughout the entire house and front porch. The gutters are located at the end of all eaves in the appropriate locations and of appropriate lengths for adequate water collection.

2x3 downspouts are located throughout and appear to be of an adequate amount for proper drainage where located. There are a few areas where downspouts are not present. The main roof gutters above the covered front porch discharge water directly onto the corrugated metal roof of the covered porch. The main roof gutter above the southeast corner shed roof does not have a downspout and therefore water is released over the edge of the gutter once collected.



Upper roof gutters discharge water directly onto covered porch roof.

Where the downspouts meet grade, downspout extensions are attached in all locations, though one location was found to be propped up and appears to have been so for an extended period of time.

Condition Evaluation:

The gutters are in good condition. The downspouts are in fair condition as they appear to be of an adequate amount and in proper locations but are missing in a few locations. Additionally, all downspout extensions should be maintained to discharge water away from the perimeter of the house and therefore limiting the amount of water near the foundation.

Recommendations:

1. Add a downspout in the southwest corner of the original house so that water from the upper roof is not discharged onto the covered porch roof.
2. Add a downspout from the upper roof to the lower roof gutter in the southeast corner of the original house so that water is not discharged over the edge of the existing gutter.
3. Ensure that all gutter extensions are maintained to discharge water away from the building foundation and are kept clear of debris.

SKYLIGHTS / CUPOLAS

Description:

There are no skylights or cupolas.



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3.5 WINDOWS & DOORS

DOORS

Description:

The front door is a stained wood door with a three quarter-lite and wood simulated divided lites. Additionally, the front door has an aluminum, three quarter-lite storm door with missing glass or screens. It could not be determined when the front door was replaced, but it is not the same door as is visible in the 1948 Boulder County Assessor's card photograph. The front door visible in that photograph is likely a wood door and appears to have a three quarter-lite with 2 over 4 divided lites. It is unclear if that door is original, but it would match the style for the period of significance.

On the south side of the house there is an aluminum full-lite storm door that is the entrance to a foyer that was originally a deck and later enclosed between 1948 and 1976. Between the southeast entry room and the kitchen there is a stained wood door with a half-lite, recessed panels, and a dog-door that appears to have been an addition to the door. This wood door was likely an exterior door prior to the southeast porch being enclosed.

Condition Evaluation:

The two wood doors are in fair condition. Both wood doors work properly and appear to create acceptable seals. The aluminum storm doors are in poor condition as both are missing glass or screen panels and neither door appears to close properly.

Recommendations:

1. Remove the aluminum storm door and wood door at the front entry. Replace the door with a new wood door that matches the 1948 Boulder County Assessor's card image.
2. Remove the aluminum storm door on the south side of the house. Replace this door with a new door. Since this enclosure was not part of the original house and was originally a deck without a door, the new door should not match the historic nature of the house.



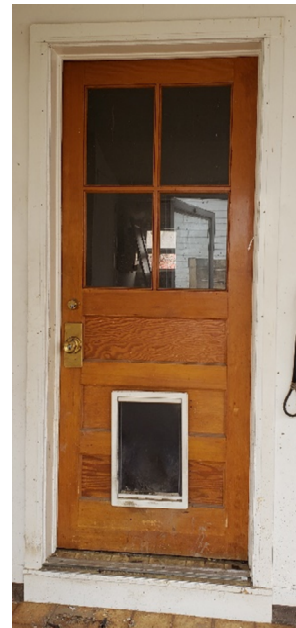
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Front door



South side door



Door from southeast entry to kitchen

WINDOWS

Description:

According to building records, all the windows were replaced in 1965 and most of the windows present on the house in 2022, appear to be those replacement windows. Some of the replacement windows can be seen on the 1976 Boulder County Assessor's card image. The replacement windows are primarily aluminum, single-pane slider windows. Three windows, including one in the kitchen, the laundry room, and the bathroom, are all vinyl single-hung windows that may have been replaced after 1965, based on their construction style.

An original window can be seen on the west side of the house in the 1948 Boulder County Assessor's card image. This window is taller than what is there in 2022 and may be two side-by-side windows. The original window openings likely exist in the original wall framing.

Additionally, there are two wood awning style, but not operable, windows located at garden height in the east wall of the basement. These windows appear to be original to when the basement was dug out.

Condition Evaluation:

All of the windows are in poor condition. Operation was tested on some, but not all, of the windows with variable results. The aluminum and vinyl windows are beyond the expected lifespan of such windows and do not perform well thermally in Louisville's climate.

Recommendations:

1. Remove existing aluminum and vinyl windows in all locations.
2. Determine the original window opening sizes when the framing or original siding is revealed with the removal of the aluminum and stucco siding.
3. Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical tall and narrow, single-hung windows can be found on several houses in the Louisville area built at a similar time.
4. The two aluminum windows in the southeast corner of the house are not in historic locations. If this area remains enclosed, these windows should be replaced with new window units that do not match the historic style.



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Typical aluminum slider window



Typical vinyl single-hung window

3.6 EXTERIOR DETAILS

SOFFIT & FASCIA

Description:

Soffits are painted corrugated aluminum panels and fascia is painted aluminum channel at all roof overhangs. According to building records, the aluminum soffits and fascia were added in 1977, around the same time that the aluminum siding was added. The fascia is square-cut, with gutters attached using standoffs.

Condition Evaluation:

The soffits and fascia are in fair condition. The aluminum fascia on the west gable end is missing, exposing the original barge rafter, and the soffit in this area is sagging.



Missing fascia & sagging soffit at west gable end. Original barge rafter exposed.

Recommendations:

Remove the aluminum soffits and fascia throughout the entire house. Replace the soffits and fascia with painted flat board soffits & fascia that are similar to what was commonly used in the Louisville area on houses built around the same time. Numerous examples can be found throughout the Louisville area.

TRIM

Description:

All of the corner trim is standard painted aluminum siding trim, 2 1/2" wide. Standard painted aluminum j-trim wraps all of the windows and doors as well as the gable end attic access on the east side of the original house. The trim was likely added at the same time as the aluminum siding in 1976.

It is unclear what the original corner and window trim was based on the Boulder County Assessor card images. However, it is likely that the original trim exists, at least in some locations, beneath the aluminum and stucco siding.

Condition Evaluation:

All of the trim is in good condition.

Recommendations:

Remove the aluminum trim with the aluminum siding exposing the original trim below. Repair, refinish, or replace the original trim.

ORNAMENTATION

Description:

Ornamentation does not exist on the house, nor does it appear to have existed in historical photographs.



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3.7 MECHANICAL SYSTEMS

HEATING & AIR-CONDITIONING

Description:

Heating is provided to the entire house through a gas-fired boiler located in the basement. The boiler is atmospherically vented through the roof. Copper supply lines run throughout the floor plenum to baseboard registers on the main floor.

A window air conditioning unit is located at the east facing window in the kitchen. This unit is precariously supported on a makeshift stand on the exterior of the house. It is unclear when any of the heating or cooling equipment was installed, but all units appear to be significantly dated as of 2022.

Condition Evaluation:

The boiler and air conditioning unit appear to be in working condition but were not tested during the site visit. The copper supply and return lines for the boiler appear to be in good condition, though a minor leak was observed at the boiler location.

The boiler and baseboard registers are in poor condition. Several of the register covers were removed or missing revealing deformed register fins which limits optimal performance. The boiler, while not tested, appears to be beyond the expected lifespan of such a unit and it was unclear if the leak at the boiler location was from the boiler unit or one of the supply or return connections.

The window air conditioning unit appears to be in poor condition, though not tested. The unit is not properly supported and is supported in a dangerous manner posing a fall hazard. The air conditioning unit appears to be beyond the expected lifespan and the unit does not appear to have received proper maintenance for being exposed to the elements.

Recommendations:

1. The boiler should be replaced with a high-efficiency unit with a sealed combustion intake/exhaust system. Once replaced, the existing supply and return lines should be evaluated for any leaks.
2. Consider replacing the baseboard registers with newer, more efficient units.
3. The window mounted air conditioning unit and support structure should be removed for safety concerns.



Gas-fired boiler located in basement.



Window mounted air conditioning unit and makeshift support structure located at east facing kitchen window.



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WATER SERVICE, PLUMBING, & SEWER UTILITIES

Description:

A standard 40-gallon, gas-fired water heater is located in the basement and is atmospherically vented through the roof. The water delivery system is copper piping, and the waste lines are cast-iron. The waste line exits the house as cast-iron piping on the east side of the house, in the northern corner. No sewer cleanouts were found in the yard, though it is likely that the sewer line runs to the alley. Additionally, there is no fire sprinkler system in the house.

Condition Evaluation:

The water heater, supply and waste lines, and sewer appear to be in good condition, but were not tested.

Recommendations:

Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.



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Copper water supply and cast-iron waste lines.



40-gallon gas-fired water heater.

3.8 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE & PANELS

Description:

Electrical service to the house is brought in overhead from the alley to the east side of the house. The electrical meter and disconnect are located on the east exterior of the house with the original main breaker panel located on the east wall in the kitchen, located within one of the kitchen cabinets. A newer, secondary breaker panel is located on the east wall in the basement which serves the water heater and boiler. Access to the electrical panels was difficult and the size could not be determined.

Condition Evaluation:

The electrical service was not tested during the site visit but appear to be in working condition. The locations of the electrical panels present difficulties in servicing and they are not properly protected. Additionally, the main breaker panel in the kitchen appeared to be scarred and dirty presenting a safety hazard.

Recommendations:

The electrical service panels should be replaced by a licensed electrical engineer with a single 200-amp panel located in a safe area where it can be serviced and meets all current adopted electrical codes.

ELECTRICAL DISTRIBUTION SYSTEM

Description:

Electrical distribution throughout the house is Romex, upgraded at an unknown date with parts of the original knob and tube wiring still visible in the basement, though abandoned.

Condition Evaluation:

The electrical distribution was not tested during the site visit but appears to be in good condition.

Recommendations:

No recommendations at this time.



New romex wiring with abandoned knob-and-tube.

LIGHTING

Description:

A wall sconce is installed next to the front door though the bulb and sconce cover were removed.

Condition Evaluation:

The light fixture was not tested but if replaced, appear to be in working condition.

Recommendations:

Consider replacing the exterior light fixture with a full cutoff, high-efficiency unit and adding a fixture next to the back entrance door.



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4.0 ANALYSIS AND COMPLIANCE

4.1 HAZARDOUS MATERIALS

Due to the age of the building, the finish coatings may contain lead-based paint and asbestos may be present in the plaster topcoat. A professional evaluation should be conducted to determine the presence of any hazardous materials.

4.2 MATERIALS ANALYSIS

Does not apply.

4.3 ZONING CODE COMPLIANCE

Notes:

- It is recommended that the owner have a survey of the property conducted to verify the *Lot Size*. All *Lot Coverage* and *Floor Area Ratio* percentages are based on the actual property size and are subject to change from what is specified in this report.
- Building area square footages are taken from:
 - Boulder County Property Records (R)
 - As-built measurements as measured from the interior face of wall, by DAJ Design (M)
- Some areas are taken from the Boulder County Property Records. These records are found to be inaccurate at times. All areas are subject to change based on actual measurements.
- Only the main floor of the house was measured by DAJ Design as this is the only historic structure located on the specified property.

Legal Description:

Lots 14-15, Block 7, Jefferson Place,
City of Louisville, County of Boulder, State of Colorado

Year Built (Main House):

Circa 1900

Lot Dimensions:

Approx. 47.5' x 125' (Improvement Survey Plat)

Lot Size:

6,065 sf (Improvement Survey Plat)

Zoning:

[RL](#) (one residential unit per 7,000sf)

Property is subject to the [Old Town Overlay Zoning District Regs](#)

Areas of levels in square feet (sf):

First (above ground) finished area:	858 sf (M)
Front porch area:	82 sf (M)
Detached garage area:	360 sf (R)
Detached carport area:	160 sf (R)
Detached shed area:	33 sf (R)

Allowable Building Height (from existing grade):

Primary Structure:	27'
Accessory Structure:	20'



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Lot Coverage:

Existing:	1,548 sf	25.5%	First floor, porch, garage, shed, & carport
Allowable:	2,250 sf	Min.	702 sf remain
Preservation:	2,425 sf	40%	877 sf remain
Landmark:	2,729 sf	45%	1,181 sf remain

Floor Area Ratio:

Existing:	1,218 sf	20%	First floor & garage
Allowable:	2,699 sf	Min.	1,481 sf remain
Preservation:	2,729 sf	45%	1,511 sf remain
Landmark:	3,032 sf	50%	1,814 sf remain

Setbacks:

Front:	20'	(could be different depending on the front of neighboring house locations)
Front Porch:	14'	(6' encroachment into front yard & street side yard setback)
Rear:	25'	
Side (interior lot line):	5'	
Accessory Rear:	3'	
Accessory Side:	3'	

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

CRITICAL DEFICIENCY



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- The top of the foundation relative to the top of grade should be determined around the perimeter of the house. If the top of the foundation is determined to be at or below the existing grade, new grading should occur to bring the grade down below the top of the foundation, as prescribed by a licensed structural engineer.
- The wood floor framing members including the sill plate, rim board, floor joists, and floor sheathing should be inspected for rot caused by poor drainage. If rot is found in any of these members, the affected flooring should be replaced as prescribed by a licensed structural engineer.
- All areas where grade slopes towards the house, particularly on the west side of the house, should be regraded to direct water away from the house foundation.
- The foundation wall in the southeast corner of the house, as well as any other areas where cracking or deterioration has occurred, should be replaced as prescribed by a licensed engineer.
- The beams and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth as specified by a licensed geotechnical engineer.
- Investigative deconstruction is recommended in an inconspicuous area to determine what siding exists beneath the aluminum siding. It is likely that the aluminum siding was applied directly over the stucco siding which in turn was likely applied directly over the original wood siding as was common practice in the Louisville area. It is recommended that the aluminum and stucco siding be removed from the entire house. With the removal of this siding, it is likely that the original siding will be exposed. Repair, refinish, or replace the original wood siding.
- Remove the aluminum trim with the aluminum siding exposing the original trim below. Repair, refinish, or replace the original trim.
- Remove the entire covered front porch including the shed roof, steel roof structure and columns, brick wall, and concrete slab. The front porch is not original to the house nor does its construction match any period of significance.
- Remove the aluminum storm door and wood door at the front entry. Replace the door with a new wood door that matches the 1948 Boulder County Assessor's card image.
- Remove the aluminum storm door on the south side of the house. Replace this door with a new door. Since this enclosure was not part of the original house and was originally a deck without a door, the new door should not match the historic nature of the house.
- Remove existing aluminum and vinyl windows in all locations.
- Determine the original window opening sizes when the framing or original siding is revealed with the removal of the aluminum and stucco siding.
- Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical tall and narrow, single-hung windows can be found on several houses in the Louisville area built at a similar time.
- The two aluminum windows in the southeast corner of the house are not in historic locations. If this area remains enclosed, these windows should be replaced with new window units that do not match the historic style.



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SERIOUS DEFICIENCY

- The basement and crawlspace walls should be observed by a licensed engineer and repaired as needed. The walls are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
- Continually monitor the main floor walls for signs of foundation distress such as cracking or improper door operation. If such signs are detected, these areas should be evaluated by a licensed engineer and repaired as needed.
- The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition and should be replaced for new loading.
- It is recommended to remove the linoleum flooring wherever it occurs throughout the house to properly assess the floor sheathing in these areas.
- Refinish or replace the flooring where signs of water damage have occurred.
- Add a downspout in the southwest corner of the original house so that water from the upper roof is not discharged onto the covered porch roof.
- Add a downspout from the upper roof to the lower roof gutter in the southeast corner of the original house so that water is not discharged over the edge of the existing gutter.
- Ensure that all gutter extensions are maintained to discharge water away from the building foundation and are kept clear of debris.
- The boiler should be replaced with a high-efficiency unit with a sealed combustion intake/exhaust system. Once replaced, the existing supply and return lines should be evaluated for any leaks.
- Consider replacing the baseboard registers with newer, more efficient units.
- The window mounted air conditioning unit and support structure should be removed for safety concerns.

MINOR DEFICIENCY

- Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
- If floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
- If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.
- Consider adding more ridge venting to supplement the two existing vents as well as adding low roof venting in the roof eaves to provide for adequate air circulation and attic venting.
- Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.
- Consider replacing the exterior light fixture with a full cutoff, high-efficiency unit and adding a fixture next to the back entrance door.

5.2 PHASING PLAN

A phasing plan is not available at this time.

5.3 ESTIMATE OF PROBABLE COST OF CONSTRUCTION

A probable cost of construction is not available at this time.

6.0 PHOTOGRAPHS AND ILLUSTRATIONS



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1948 Boulder County Assessor's Card Image



2022 West Elevation



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1976 Boulder County Assessor's Card Image



2022 Southwest Corner



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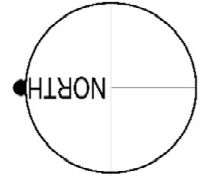
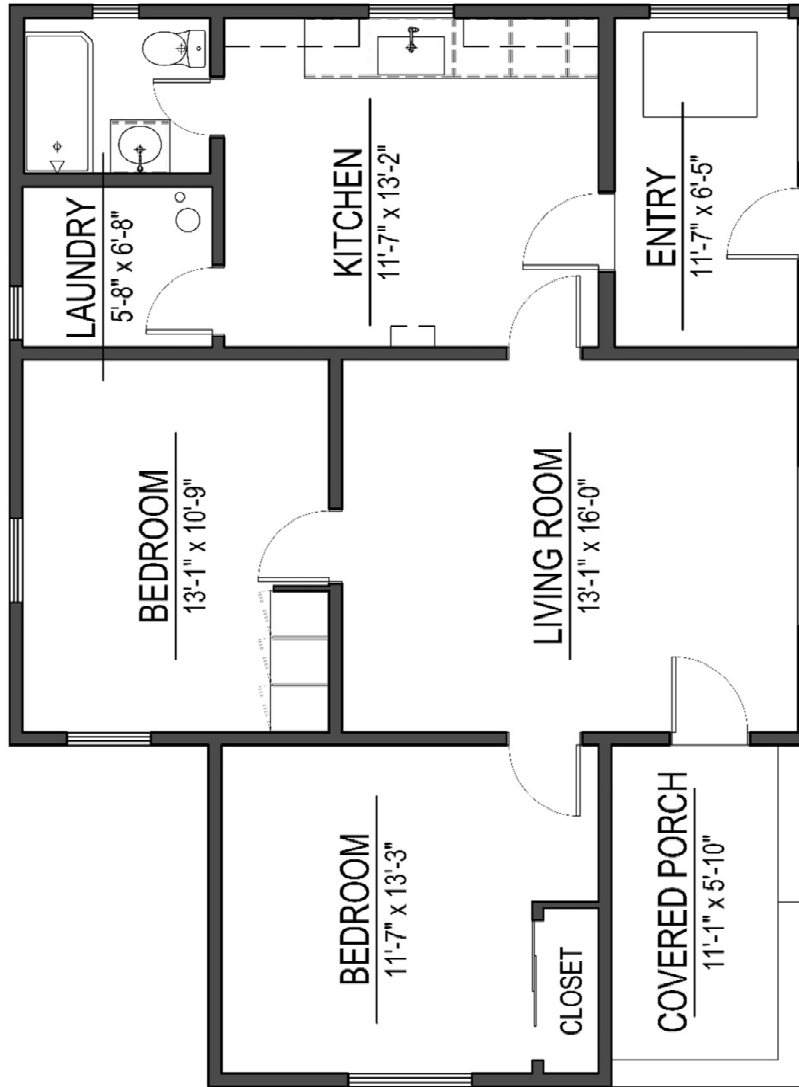
2022 Northwest Corner



2022 Southeast Corner



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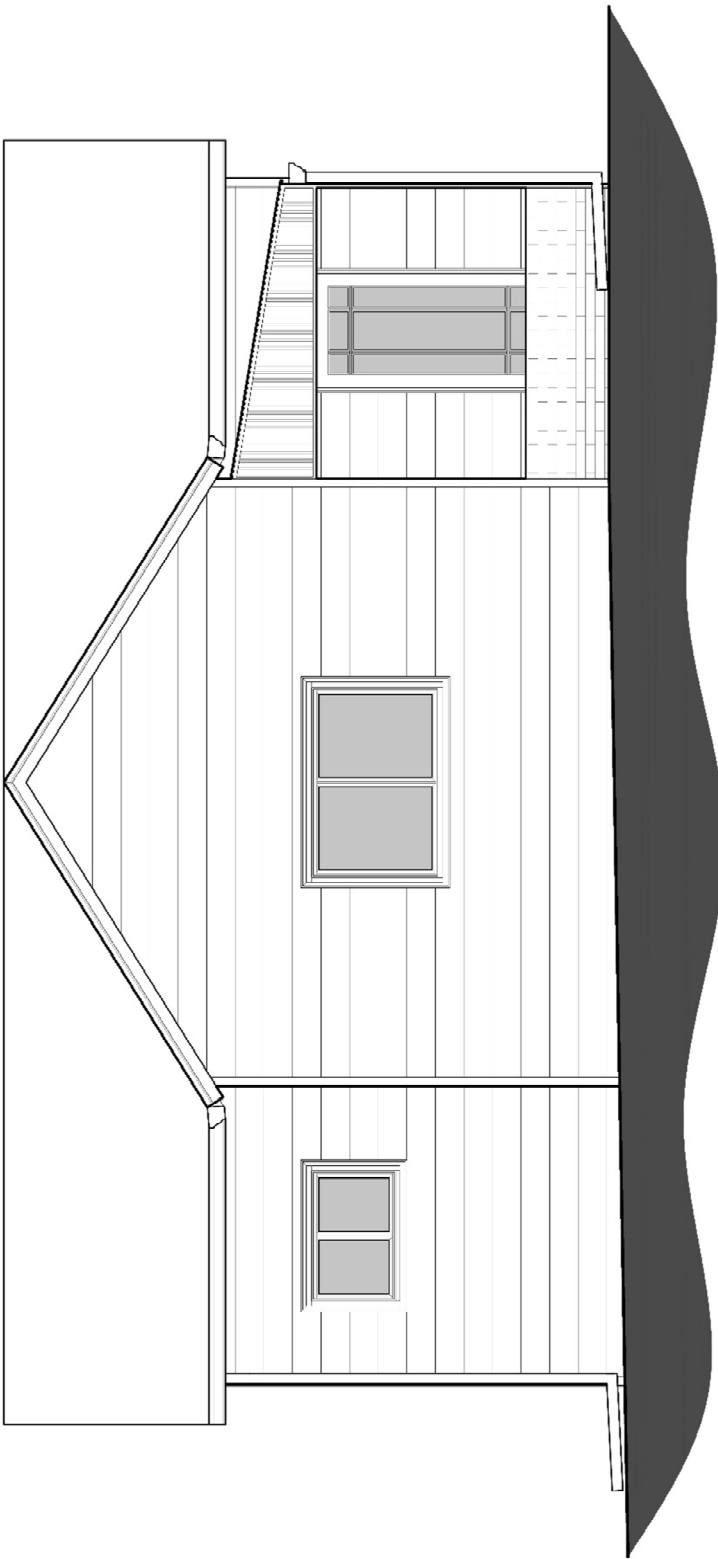
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A1.1

MAIN LEVEL FLOOR PLAN

SCALE: N.T.S.



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A2.1

WEST ELEVATION

SCALE: N.T.S.



April 1, 2022

Attn: Andy Johnson
DAJ Design
Louisville, CO

Dear Andy,

We visited the residence at 612 Jefferson Ave, Louisville, CO on March 31, 2022 to review the existing building for the purpose of documenting and evaluating the existing structure. It was at this time that we reviewed the building with DAJ Design and coordinated our findings with the report created by DAJ Design.

On April 1, 2022 we reviewed the final report and made any necessary modifications to the structural sections. All findings, evaluations and recommendations are in the report. Below, in this letter, are our structural conclusions and a summary of our scope of work. Please feel free to contact us for any further information.

Structural Conclusions:

A. In our professional opinion, the building's structure is adequate for its continued safe use. The construction does not meet all modern code standards; however, it has performed adequately up to this point. We recommend that a licensed Structural Engineer be retained to further evaluate the structure, provide the repairs recommended in each of the sections of this report and assist in any modifications to the structure proposed by the owner and an architect.

Please see the recommendations sections of the report for any required or recommended structural recommendations, to be completed by a licensed structural engineer and contractor.

It is also important to note that a significant portion of the building's structure was not exposed for our review. There may be damaged structure that we were not able to observe due to finish materials. Also, additional cosmetic imperfections could arise, which is normal for an old structure.

B. An extreme event occurring at the site, such as a tornado, a serious (rare) earthquake or other unforeseen event could significantly damage the structure. But this is also true for most old structures in Louisville (and probably for some modern structures) and is only mentioned for completeness of this report.

C. The drainage around the home should be addressed to allow for water to flow away from the building. Poor drainage could result in water infiltration or excessive movement and damage to the foundation and wood framing.



Summary and Limitations:

A. Summary:

1. The goal of our site observation and the structural portion of the report is to provide an overview of the building's structure and foundation and identify areas where remedial work in the near future is prudent.
2. The recommended remedial measures are intended to promote the building's continued safe use and are not intended to eliminate all existing and potential future cosmetic defects.

B. Limitations:

1. The information contained in the report is the author's professional opinion based on visual evidence readily available at the site, without the removal of existing finish materials. Of course, this means there could be hidden defects which are not discoverable at this time, without demolition of finish materials. That is true for most buildings, and an inherent limitation for this kind of report. Should additional information become available or additional movement is perceived, we recommend that our firm be contacted for further review.
2. The issuance of the report does not provide the building's current or future owners with a guarantee, certification, or warranty of future performance. Acceptance and use of this report do not transfer financial liability for the building or the property to the author or this engineering firm.
3. The report is also only preliminary to make note of areas that need to be addressed. A licensed Structural Engineer should be retained to provide a more thorough investigation and provide appropriate repair details for all necessary repairs.

Sincerely,

Jesse Sholinsky, P.E.

