

# Structure Review Report

401 Madison Street Denver, CO 80206

# Mike Moylen & Candy Assistant

Inspected By

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# CERTIFIED MASTER INSPECTOR Marctor CHERT





Thursday October 27, 2022

# **Executive Summary**

This is a summary review of the inspectors' findings during this inspection. However, it does not contain every detailed observation. This is provided as an additional service to our client, and is presented in the form of a listing of the items which, in the opinion of your inspector, merit further attention, investigation, or improvement. Some of these conditions are of such a nature as to require repair or modification by a skilled craftsman, technician, or specialist. Others can be easily handled by a homeowner such as yourself.

Often, following the inspector's advice will result in improved performance and/or extended life of the component(s) in question. In listing these items, your inspector is not offering any opinion as to who, among the parties to this transaction, should take responsibility for addressing any of these concerns. As with most of the facets of your transaction, we recommend consultation with your Real Estate Professional for further advice with regards to the following items:

Throughout the report, you'll find special symbols at the front of certain comments. Below are the symbols and their meanings:

**DEF** = The item/system failed to operate/perform its intended function, was structurally deficient, was unsafe or was hazardous at the time of the inspection.

**MAB** = Item is not correct and should be repaired however no health or safety issues apparent. The item/system was marginally acceptable. It performed its designed function at the time of the inspection. However, due to age and/or deterioration, it will likely require early repair or replacement.

# Exterior - Siding COMMENTS

**s-6:** Siding condition was overall in poor condition. Top coat of EIFS stucco was visible deteriorated at multiple locations with damaged, cracks and signs of staining from moisture intrusion. This can allow for moisture intrusion.

**MAR s-7:** Garage consisted of concrete slab with concrete ceiling. Ceiling structure had cracks visible with signs of moisture intrusion.

**MAR s-8:** Windows were either metal framed double paned glass or plexiglass with two panes. Various windows appeared fogged, leaking, or damaged.

**bef** s-9: Signs of WDO intrusion (detritus) at skylight in living room. Extent of intrusion could not be determined at the time of inspection.

# **Roofing - Roofing**

COMMENTS

**s-11:** Roofing was a membrane covered with paver tiles on south side and rolled composition on north side. Roof materials were in overall poor condition with signs of deterioration at visible areas of membrane. Skylights were deteriorated throughout roof with signs of moisture intrusion.

**s-12:** Solar heating panels visible on roof. These panels are typically used for heating of water and then stored in water tanks in basement. The panels were in generally poor condition, with panels showing signs of corrosion at pipes and various panels damaged.

Structure - Int. Foundation COMMENTS

**s-16:** Structure was comprised of Concrete floor slabs, supporting walls and ceilings. Non-load bearing walls were comprised of wood 2x4 studs. Ceiling had damage at multiple concrete seams with microbial growth throughout home.



# **Table of Contents**

Executive Summary	2
General Information	5
Scope	5
Exterior	5
Roofing	
Attic	
Structure	-



# **General Information**

The following report is based on visual inspection of the readily accessible areas of this property.

#### **GENERAL CONDITIONS**

1: Property Occupied: No Temperature: 35 F Weather: Snowing Soil Conditions: Damp/Wet Property Faces: East Property Type: Single-Family Primary Construction: Concrete Age: 43 Years Persons Present: No Person Present

#### COMMENTS

**2:** Due to the overall state of disrepair (neglect), the above listed items are not intended to reflect each and every possible maintenance issue/defect, but are merely intended to reflect the overall condition of the property.

3: This inspection is structural only. No electrical, plumbing, or mechanical inspection was performed.

Scope

#### COMMENTS

**4:** The following report is based on visual inspection only of the accessible areas of this property. This is a limited inspection for the purpose of highlighting the condition of the structure (visible exterior foundation and deferred maintenance) only. Please read and study the entire report carefully.

# Exterior

Our evaluation of the exterior of a property conforms to state or industry standards. Certain detached structures, such as storage sheds, barbecues, above ground spas, gazebos or stables are not within the scope of this inspection. Landscape components, such as trees, shrubs, fountains, ponds, statuary, pottery, fire pits, patio fans, heat lamps, and ornamental or decorative lighting are not evaluated. Surface coatings or cosmetic deficiencies and the wear and tear associated with usage or the passage of time that would be readily apparent to the average person are not commented on. The inspection of the exterior and grounds as described may be limited if not fully visible due to foliage or storage of personal belongings. Trees/foliage may have an impact on site, structure, drainage and waste.

# Siding

#### **GENERAL INFORMATION**

5: Siding Type: EIFS Stucco

# COMMENTS

**6:** Siding condition was overall in poor condition. Top coat of EIFS stucco was visible deteriorated at multiple locations with damaged, cracks and signs of staining from moisture intrusion. This can allow for moisture intrusion.





Deteriorated top coat



Damage at corner





Cracks visible in stucco











**MAR** 7: Garage consisted of concrete slab with concrete ceiling. Ceiling structure had cracks visible with signs of moisture intrusion.







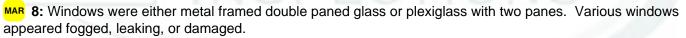
Visible leak



Visible leaking on wall



Visible leaking on ceiling







Fogged glass



Plexiglass



Fogged glass



Visible leak









**9:** Signs of WDO intrusion (detritus) at skylight in living room. Extent of intrusion could not be determined at the time of inspection.





# Roofing

Many different roof types exist, which we evaluate by walking on their surfaces. If we are unable or unwilling to do this for any reason (such as rain, snow presence or the Inspector's safety), we will indicate the method that was used to evaluate the roof.

Every roof will wear differently relative to its age, the number of its layers, the quality of its material, the method

of its application, its exposure to direct sunlight or other prevalent weather conditions, and the regularity of its maintenance. Regardless of its design-life, every roof is only as good as the waterproof membrane beneath it, which is concealed and cannot be examined without removing the roof material, and this is equally true of almost all roofs. The most common cause of leakage results when roofs are not serviced, and foliage and other debris blocks the drainage channels. In fact, the material on the majority of pitched roofs are not designed to be waterproof only water-resistant. However, what remains true of all roofs is that, whereas their condition can be evaluated, it is virtually impossible for anyone to detect a leak except as it is occurring or by specific water tests, which are beyond the scope of our service.

Unfortunately, we are unable to make a determination if the roofing materials used are impact resistant. This is a question we recommend asking the sellers.

# Roofing

# **GENERAL DETAILS**

10: Estimated Roof Age: Greater Than 15 Years
Design Life: 12-15 years and 20-25 years
Roofing Material(s): Asphalt / Composition and Membrane
Number of Layers: 1
Percent Visible: 100%
Method Of Inspection: Walked On

# COMMENTS

**11:** Roofing was a membrane covered with paver tiles on south side and rolled composition on north side. Roof materials were in overall poor condition with signs of deterioration at visible areas of membrane. Skylights were deteriorated throughout roof with signs of moisture intrusion.











**12:** Solar heating panels visible on roof. These panels are typically used for heating of water and then stored in water tanks in basement. The panels were in generally poor condition, with panels showing signs of corrosion at pipes and various panels damaged.









# Attic

In accordance with industry standards, we will not attempt to enter an attic that has less than thirty-six inches of headroom, is restricted by ducts, or in which the insulation obscures the joists and thereby makes mobility hazardous, in which case we will inspect the attic as best we can from the access point. In evaluating the type and amount of insulation on the attic floor, we use only generic terms and approximate measurements, and do not sample or test its composition for a specific identification. Also, we do not move or disturb any portion of the insulation, which may well obscure water pipes, electrical conduits, junction boxes, exhaust fans, and other components.

# Framing / Sheathing

# COMMENTS

**13:** The attic interior was visually examined for leaks and/or water stains; no cracked trusses or rafters, stains, or leaks were observed at time of inspection unless noted.





# Structure

The structural elements of a building include foundation, footings, all lower support framing and components, wall framing and roof framing. These items are examined, where visible, for proper function, excessive or unusual wear and general state of repair. Many structural components are inaccessible because they are buried below grade or behind finishes. Therefore, much of the structural inspection is performed by identifying resultant symptoms of movement, damage and deterioration. Where there are no visible symptoms, conditions requiring

further review or repair may go undetected and identification will not be possible. We make no representations as to the internal conditions or stabilities of soils, concrete footings and foundations, except as exhibited by their performance.

# Foundation

#### COMMENTS

**14:** All visible areas of the foundation were inspected; no visible signs of settlement was observed. The exterior walls appeared plumb and in good condition.

# **Int. Foundation**

If present, the basement or crawl space will be where much of the building's structural elements and many of its mechanical systems are located. These include foundation, structural framing, electrical, plumbing and heating. Each accessible component and system is examined for proper function, excessive, or unusual wear and general state of repair. It is not unusual to find occasional moisture in basements or crawl spaces. Substantial and/or frequent moisture accumulation can adversely affect the building foundation and support system and would indicate the need for further evaluation by a specialist. Although observed in the basement or crawl space, some items will be reported under the individual systems to which they belong.

For a condo or townhome where the home is not a ground level unit, inspection of the crawl space or basement (if present in the structure) will not be conducted.

#### COMMENTS

**15:** Limited visibility of foundation as basement was mostly finished. No settlement was observed; interior walls appeared plumb and in good condition.

**16:** Structure was comprised of Concrete floor slabs, supporting walls and ceilings. Non-load bearing walls were comprised of wood 2x4 studs. Ceiling had damage at multiple concrete seams with microbial growth throughout home.







Framed in drop down ceiling with signs of leaks



Concrete ceiling edge



Damage with microbial growth



Drop down ceiling with damage and microbial growth



Leak at concrete seam



Microbial growth and leak at wall



Microbial growth and leak at wall



Microbial growth and leak at wall



Leak at concrete seam



Drop down ceiling with damage and microbial growth



Drop down ceiling with damage and microbial growth



Drop down ceiling with damage and microbial growth

The Moylen Report 401 Madison Street Denver, CO 80206 Thursday, October 27, 2022



Framed in support beam with signs of leaks

# **Under Floor Framing & Support**

# **GENERAL INFORMATION**

**17:** Support Beam(s): Not Visible Support Posts: Not Visible Floor Joists: Not Visible Piers: Not Present

#### COMMENTS

18: Basement was mostly finished and limited observation of under floor framing and support.





# **Barton Consulting Services, LLC**

9249 S Broadway #200, STE 102 Highlands Ranch, CO 80129 office@bartonconsulting.co Phone: 303.997.9577

Schedule Site Observations & Inspections by Text @ 720.458.6658

November 10, 2022

MAG Builders Attn: Michael Moylen & Michael Griger 8120 South San Juan Road Littleton, CO 80127 P: 303.513.8833 E: <u>mmolyen@magbuilders.net</u> E: <u>mike@magbuilders.net</u>

Subject:	Barton Consulting Services, LLC Project #22-124
-	Structural Report
	401 Madison Street
	City & County of Denver, Colorado
Reference:	National Property Inspections report for 401 Madison Street – Dated 10.27.22
	Barton Consulting Services, LLC field notes Dated November 11, 2022. (Attached)

MAG Builders:

As requested, a preliminary site visit and observation of the aforementioned residence was conducted on November 10, 2022 to review reported structure and water damage at the subject site. The residence was reportedly constructed in 1979. For the purpose of this report the residence faces east towards Monroe Street. The shell of the structure is constructed mostly with precast concrete panels, supported by steel and concrete elements. Other elements are constructed out of wood.

#### **Findings**

The findings in this report are based upon limited observations made at the time of our site visit. No destructive or intrusive methods were used. Below is a list of our findings, **conclusions, and recommendations (BOLD).** 

# **Overall Conditions Identified**

- Deterioration of the structure, interior finishes, and building envelopes systems was observed.
- Evidence of repetitive water intrusion and long-term standing water was observed.
- Rusted and corroded items were observed throughout which include structural steel beams, structural posts, foundation and precast weld clips, structural precast slab and wall embed plates, and MEP (Mechanical, Electrical, and Plumbing) piping and conduit. The items need to be demolished and discarded.
- Virtually all wood observed contained some level of rot. All wood members shall be demolished and discarded.
- Visitors, inspectors, and laborers should wear PPE (Personal Protective Equipment) while on site.

# Roof/Ceiling

• The norther section of the flat roof was observed to be in overall fair to adequate condition. We recommend inspection by an experienced roofing contractor. (Flat roof between grid line 1 and 2)

- The clear story is not properly flashed or the flashing has been severely deteriorated. This has caused rot at the bearing location on the south side, between the upper transition, and corrosion of the solar panel piping. This appears to have been going on for quite some time and requires a complete removal of the clearstory. (Clearstory is located between gridline 2 and 3).
- The southern section of the flat roof was observed to be in overall poor conditions. The rigid insulation below the membrane was spongey which means that the insulation is damaged and holding water. This requires that the roof membrane and insulation be removed, and the roof sub-structure should be observe for structural performance. We recommend inspection by an experienced roofing contractor. (Flat roof between grid line 3 and 4)
- The ceiling of the garage was observed to be in fair to adequate condition. (Flat roof between grid line  $\frac{1}{2}$  and )
- The ceiling of the residence was observed to have water stains and mold. We recommend inspection and testing by an environmental engineer and/or certified professional so harmful items can be properly removed and disposed.
- Virtually all wood observed in the roof and ceiling contained some level of rot. All wood members shall be demolished.

# <u>Main Level</u>

- It was noted that the bedrooms on the main level do not have adequate egress. This is a life-safety concern in the event of a structure fire.
- Interior surfaces on the main level of the residence were observed to have water stains and mold. We recommend inspection and testing by an environmental engineer and/or certified professional so harmful items can be properly removed and disposed.

# Lower Level

- It was noted that the bedrooms on the lower level do not have adequate egress. This is a life-safety concern in the event of a structure fire.
- Interior surfaces on the lower level of the residence were observed to have water stains and mold. We recommend inspection and testing by an environmental engineer and/or certified professional so harmful items can be properly removed and disposed.
- The pool deck does not meet code. This is a life safety concern.
- The stairs into the basement do not meet current code standards. This is a life safety concern.

# **Exterior**

- The grading around the property is fair in some areas and inadequate in other areas draining towards and even into the structure. The lower courtyard on the southern side of the property adjacent to the pool room does not drain. We recommend BMPs (Best Management Practices) be installed and a civil engineer be retained to design a proper grading plan.
- Significant vegetation was required to be removed recently. Since, the site has inadequate BMPs, poor drainage, and inadequate BMPs there is a concern for erosion and sedimentary flow. This can adversely affect adjacent properties and the collection of debris to the City and County of Denver storm water drain system.
- The wood retaining wall that creates the lower aforementioned court yard is inadequately design and built. Furthermore, it is starting to deteriorate. This structure shall be demolished.
- The wood wellcover on the west side adjacent to the alley is dilapidated, rotted, and unsafe. This is a life safety concern and shall be tapped off and removed as soon as possible.

Based upon our observations it is our opinion that the property is structurally unsound. A good majority of the structure should be demolished.

- All wood
- All Corroded Steel

- Life-safety
- Mold

We trust this letter meets the requirements for the City & County of Denver Building Department. Please do not hesitate to contact us if you need additional information on this matter.

Respectfully Submitted,



Reviewed and Drafted By: Scott D. Barton, P.E

