Israel Beetison House

Conditions and Structural Assessment

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History and Background Information

- Built by Israel Beetison in 1874-75
- Listed in the National Register in 1976
- Sold in 1999 and vacant since

Conditions Assessment

- On-site evaluation conducted in February 2022 with representatives from consultant team, city, and developer
- Thorough investigation of visible portions of the building to evaluate issues with structural integrity and condition of historic fabric
- No finishes were removed and observations did not extend to hazardous materials such as asbestos, mold, or lead paint.

General Building Information

- Two-story, wood and stone framed building with basement
- North portion is 1 ½ story with basement
- All walls are limestone with finished exterior faces and 18 inches thick.

Basement

- Two lines of wood posts and beams that run along a north/south axis down the center of the main house
- Unmilled timber consisting of round logs of varied diameter that support full 6X6 beams.

Basement Issues

First Floor

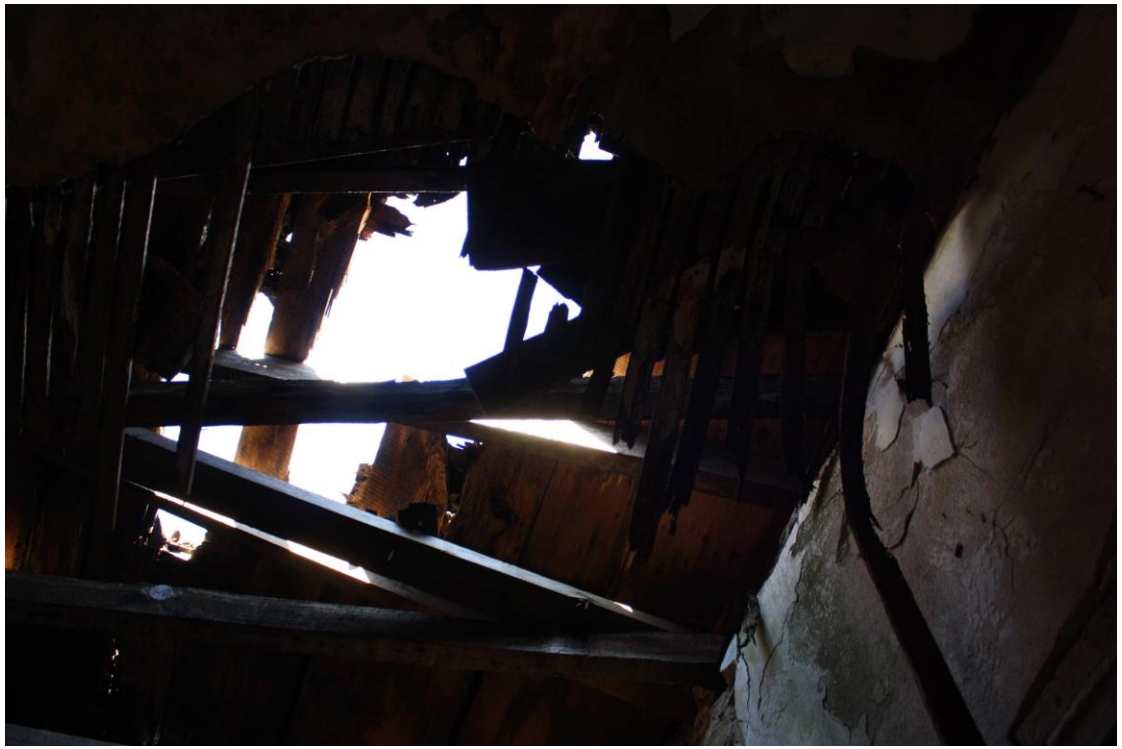
- Framed with full 2x8s spaced 12 inches on center.
- Joist bearing along the east basement wall has shifted and the wood sill plate is separating from the wall
- Ceiling originally plaster with wood lathe fastened directly to bottom of second floor framing

Second Floor

- Framed with full 2x8s.
- Ceiling joists are full 2x4s spaced a max of 24 inches on center.
- These are supported by exterior walls and wood-framed walls support the cupola floor and roof framing.
- Portion of floor rotted, located directly beneath hole in roof.

Roof

- Hipped main roof framed with full 2x6 rafters.
- Areas have failed and holes through the main roof at the east and south hips and the west face of the north gable.
- Some joists exhibit rot.
- Roof over northwest porch severely deteriorated



Exterior Stone

- Three chimneys, none are capped
- Cracks in masonry around chimneys
- Large crack in the NW corner of main house
- Arches over windows require repair (14)
- Weathered joints require repointing
- Cracked stone lintel over basement stair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Conditions

- Wood trim removed and historic finishes no longer present
- Interior physical integrity no longer exists
- Years of exposure and water infiltration has deteriorated interior features such as wood flooring and plaster
- Extensive vandalism


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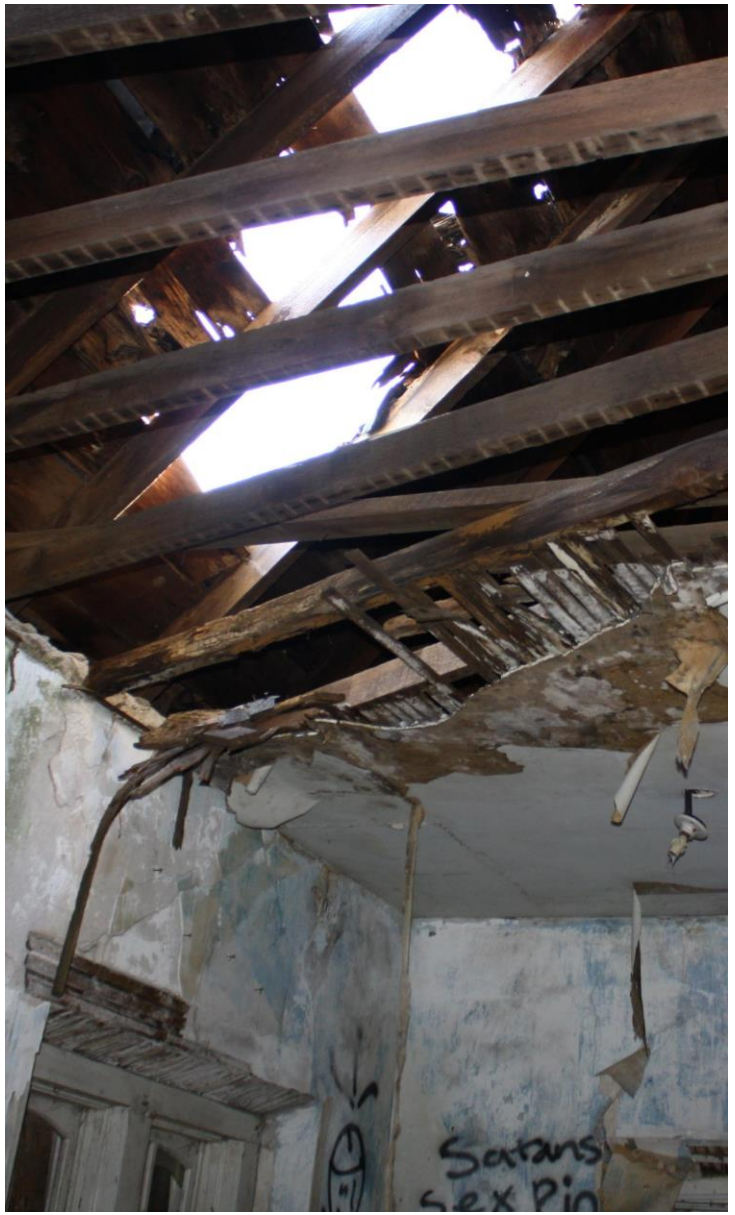
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Conclusions and Recommendations

- No historic character defining features remain within building.
- Structural stabilization and total renovation required.

- Replace roofing and deteriorated skip sheathing
- Strengthen/replace damaged wood framing
- Rebuild masonry arches and repair or replace stone lintel over basement stair
- Repoint
- Shore and rebuild joist bearing
- Enclose building envelope
- Install steel caps over chimneys

General Cost Concept

- $200-$250 per square foot (based on neighboring construction costs=$500,000)
- Additional Structural Repairs $70,000-$100,000
- Roughly $1M
- Costs may vary up or down depending on finishes and unforeseen issues.

- Masonry $20-$25/sf on affected areas
- Joist sistering could be $150 per joist
- Joist bearing at east basement wall $2500-$4000
- Structural repairs estimate (including masonry) may be $35-$50/sf