

July 7, 2021

Lancaster County Land Bank Authority
28 Penn Square
Suite 200
Lancaster, PA 17603
Attn: Michaela Allwine

Re: Phase 1 Report - Structural Observations
26 E. High Street
Manheim, PA
Project #211234

Dear Michaela:

Per your request, Providence Engineering Corporation (Providence) has performed a structural review of visually accessible portions of the property at the address noted above. The purpose of our review was to confirm general findings noted in a report, supplied to us, from Greenebaum Structures, P.C. (Greenebaum) dated August 3, 2018. Part of this report recommended the installation of temporary supports in the basement along the front wall, part of our review was to confirm correct installation of these temporary supports.

Our scope included the visually accessible portions of the roof and attic framing, floor framing, interior and exterior walls including basement walls. We performed our on-site review on Wednesday June 23, 2021.

For the purposes of this report, the front of the building faced High Street. References to the left, right and rear within this report were from the viewer's perspective standing on the sidewalk along High Street looking at the front elevation.

Existing Conditions

The existing property was a wood-framed three-story structure plus attic over a basement with a one-story addition to the rear. The one-story addition was constructed on slab-on-ground. A bell-tower was located at the front right corner above the roof. The original three-story structure consisted of exterior brick masonry bearing walls on stone rubble basement walls. First floor framing consisted of steel framing with concrete floors. Upper floors, including attic and roof, consisted of wood framing clear-spanning side to side of the building, approximately 25 feet. The one-story addition at the rear was slab-on-ground and appeared to have a concrete framed roof supported by load bearing exterior walls.

Excluding the basement, the property was approximately 5,300 square feet. The building was reported to have been constructed in, or around, 1900. The building was mixed-use. The ground floor was vacant with a large garage space and rooms for offices or sleeping. The second floor was occupied office space. The third floor was vacant flexible space.

Observations

The following is a summary of our observations of structural damage, deterioration or other concerns. Observations are broken down by floor. Photos have been provided, as needed, for clarification. See attached Reference Photos.

Exterior:

Exterior walls for the building were primarily multi-wythe brick masonry. The single-story rear addition had two walls of parged concrete. Walls appeared to be in good condition.

Bell-tower framing, as observed from the ground, appeared to be traditional wood construction.

Basement:

First-floor framing, as observed from the basement, consisted of steel beams. The front portion had concrete on metal deck supported by the beams, the rear portion of the building utilized concrete on a paper-backed steel wire mesh form supported by the beams. Steel beams ran front to back bearing on the foundation walls and interior steel girders. Basement walls were a combination of concrete masonry units (CMU) and stone.

- B1: Stone foundation walls had loose and/or deteriorated mortar in some locations.
- B2: Temporary supports along the front wall, as required by Greenebaum, were observed to be incorrectly installed. Posts were not mechanically fastened to the steel beams or the wood cribbing at the floor. A few posts weren't installed centered under the steel beams. Several posts were loose and not actually supporting the beams. One post was missing. See Photos 1 and 2.
- B3: At the base of the stairs into the basement there was a steel girder pocketed into the existing foundation wall with significant corrosion resulting in section loss at the beam pocket. See Photo 3.
- B4: All steel had corrosion to varying degrees.
- B5: Metal deck was observed to have corrosion in some places.

First Floor:

The front of the first floor was a garage. The garage floor sloped up from the garage door towards the interior. The middle and rear of the first floor were vacant with space to accommodate offices or sleeping rooms depending on use of the building. Finishes on walls and ceiling were in place obstructing our view of most of the structure. The single-story section at the rear had a few missing ceiling tiles exposing what appeared to be a concrete slab spanning between concrete beams for roof framing.

Second Floor:

The second floor was being utilized as commercial office space at the time of our visit. All wall, floor and ceiling finishes were in place obstructing our view of the structure.

Third Floor:

The third floor housed mechanical equipment with ducts going through the floor servicing the second floor. Floor framing was able to be seen by shifting one of the flexible ducts that penetrated the floor. Framing appeared to be 2x12 joists at 12" on center spanning side to side, a distance of approximately 25'.

- 3.1: Daylight was visible through an opening in the ceiling at the front of the building. The opening appeared to be located below a window in the attic space, however, this wasn't able to be confirmed.

- 3.2: A masonry pier in the left rear corner of the building was found to have loose and deteriorating masonry sections. See Photo 4.
- 3.3: Floor framing had a visible deflection mid-span of the joists.

Attic and Bell-Tower:

Safe access to the attic and bell-tower was not available at the time of our visit.

Deflection of the attic floor was visible from the third-floor.

Conclusions and Recommendations

The building as a whole appeared to be in good condition. However, based on the floor deflections observed, we anticipate reinforcing will be required for all floors for any building use.

Recommendations for each portion of the structure, in addition to the anticipated need for floor reinforcing noted above, are noted below. Numbering matches the respective item in the observations section.

Basement:

- B1: Clean and repoint foundation walls, as needed.
- B2: All temporary support posts that are not installed centered under the existing beams and snug tight shall be modified to accomplish this. Install missing temporary support post in the basement. Mechanical fastening to be installed connecting the posts to the steel beams and wood cribbing at the floor.
- B3: Install a temporary post under the steel girder, approximately 9" from face of basement wall, on floor cribbing.

Depending on the final use of the building, first-floor framing may need to be reinforced or replaced to accommodate the loads and/or create a level floor. Corrosion on the steel beams and decking would be addressed at this time.

Third Floor:

- 3.1: Recommend further investigation at the front of the building to determine if the daylight noted above is due to a window or an opening in the structure.
- 3.2: Damaged masonry pier to be cleaned and repaired. Exact repair method to be determined once the pier is fully exposed and cleaned.

Attic and Bell-Tower:

Based on the age of construction, we suspect the bell-tower will need to be repaired or replaced due to normal weathering.

Once a buyer is lined up, we recommend retaining an architect to start developing as-built plans and schematic designs for the renovation based on the buyer's proposed use for the building. Providence could work with the architect to help develop a schematic design that would accommodate the desired use of the space while allowing for proper structural framing and supports.

This report contains the professional opinion of the Engineer based on conditions that were observed at the time of our site visit. Nothing in this report shall be interpreted as any kind of guarantee or warranty regarding the building/structure, but only addresses the condition of the areas that were readily accessible and that were observed at the time of our visit. While this visit was performed with care by experienced persons, Providence makes no warranty that all defects or existing conditions were discovered.

We appreciate the opportunity to be of service to you. If you need any further information or have any questions, please feel free to contact us.

Sincerely,



Michelle Benoit, PE
Project Manager