



December 5, 2016

Samantha Bosshart
Saratoga Springs Preservation Foundation
112 Spring Street, Suite 203
Saratoga Springs, New York 12866

Re: 26 Caroline Street, Saratoga Springs

Dear Ms. Bosshart:

The following is a summary of my observations on site at 26 Caroline Street, my review of various documents as listed, and our discussion to date. My observations were limited to the portions of the structure visible from Caroline Street, from the rear alley, from the rear entrance to the building, and from the third-floor setback roof of 24 Caroline Street but, as described, I have sufficient information to make a preliminary finding. Documents examined include Sanborn maps of the area, and the November 27, 2016 report by Ernest Gailor, PE, of Harlan-McGee of North America.

BUILDING DESCRIPTION

The building was constructed in the 1870s and is 2 stories high and roughly 40 feet by 50 feet in plan, with a slightly irregular shape. The original building has brick exterior walls with a wood interior and there is a wood-frame rear extension. The building's north facade faces Caroline Street, the east and west facades mostly abut the neighboring buildings, and the rear facade faces a narrow alley that can be accessed only from Putnam Street.

The second-floor and roof joists span east-west between the side walls and an interior column line. It was not clear from the limited observation if there is a cellar.

The front facade was modified circa 1908 to install large windows at the first-floor retail space. The rear wall was modified to allow more communication between the main interior space and the rear extension.

CONDITIONS OBSERVED

The fire of November 24, 2016 destroyed the interior build-out of the structure. It damaged other portions of the structure, including partial collapses of the rear portions of the second floor and roof and the wood rear wall of the rear extension. The rear portion of the interior is impassible due to the collapsed portion of the second floor, and the interior is generally full of debris from the fire.

That said, large portions of the basic structure of the building are intact. The front facade is in good condition, with only minor damage that is clearly not recent. The interior brick rear wall (between the main volume of space and the rear extension) and the

side walls have no damage that was visible. (Note that the parapet of the east wall either collapsed or was damaged during fire-fighting operations.)

There is no evidence of movement since the fire. This would be visible at the front through cracking of the brick facade, at the roof by tearing of the roof membrane, and at the interior by fresh surfaces being exposed in the rubble pile. Obviously the building is damaged and will eventually move if left in its current state, but the question at hand is not leaving it as is or demolition, but rather demolition versus stabilization. The building is stable enough to be worked on.

ANALYSIS

Note that some of my conditions observations differ materially from those of Mr. Gailor. For example, I see no evidence of the rear wall having “caved in.” (See photo 2 in the appendix.) I see no evidence of recent “additional structural damage to the [front] facade.” (See photo 5.) The settlement visible at the front facade is not recent, as it predates both the installation of the large first floor windows and the paint.

Since the future of the building is uncertain, I have looked at the scope of work required for three possible scenarios: saving the entire building, saving only the Caroline Street facade, and full demolition.

A: RETAINING THE FULL BUILDING

Bearing-wall buildings are made stable by intersecting planes of structure. The second floor and roof help stabilize the four exterior walls; the front and rear facades stabilize the side walls; and the side walls stabilize the front and rear facades. The collapse of the rear portion of the second floor and damage to the rear portion of the roof mean that the rear wall needs stabilization. The fact that the front of the second floor and roof are intact means that there is currently no danger from the front facade.

Given the damage to the structure and the approaching winter, the following items of work would be necessary to ensure the safety of the public, the neighboring occupied buildings, and 26 Caroline Street:

1. Shore the rear of the building. The simplest way to accomplish this would be to install new joists in the rear at the collapsed portion of the second floor and below the damaged portion of the roof. In order to avoid masonry work, the joists should be attached to the side and rear walls through the use of ledgers bolted to the brick.
2. Remove of the debris at the interior. This should be performed in conjunction with item 1; with debris removed as the shoring proceeds.
3. Reinforce the connections between the front facade and the second floor and roof by providing light-gage steel straps between the interior of the wall.

4. Provide temporary waterproofing by closing off the windows with wood and tarps, and by putting temporary roofing over the damaged portions of the roof.

Note that this type of work is regularly performed when the interior floors of bearing-wall buildings are altered or moved, and in projects where facades are retained during demolition.

B: RETAINING THE CAROLINE STREET FACADE

The scope of work for retaining the front wall is similar to that for retaining the entire building:

1. Shore the rear of the building as described in A.1.
2. Remove the debris at the interior as described in item A.2
3. Reinforce the front facade connections as described in item A.3.
4. Carefully demolish the rear extension, rear interior wall, and rear portion of the building, leaving the front facade and the northmost ten feet of the second floor and roof. Removal of the walls, floor, and roof are to happen together; with the roof first, then the walls between the roof and second floor, then the second floor, then the lower portions of the walls.
5. Provide a wood-stud temporary wall to close off the rear of the retained structure.

C: DEMOLITION

Because the building is immediately adjacent to two occupied buildings of similar age, construction, and importance, demolition methods are restricted. For example, removal of the front facade of 26 Caroline Street will tend to destabilize the side walls from their current state (which is partially destabilized from their original state). Removal of the roof and second floor that is not accompanied by simultaneous removal of the walls is similarly unsafe. The safest method of demolition is therefore:

1. Shore the rear of the building as described in A.1.
2. Remove the debris at the interior as described in item A.2
3. Reinforce the front facade connections as described in item A.3.
4. Carefully demolish the building per item B.4, including all framing and walls.

CONCLUSIONS

Obviously, the most important concern is public safety, including the occupants of the adjacent buildings and anyone using Caroline Street or the shared rear alley. However, it is not clear that immediate demolition is the fastest or most effective way to achieve that goal.

The building is in a damaged state, but (a) it is feasible to save the front facade or entire building and (b) enough structure remains intact that the demolition sequence greatly resembles the repair sequence. Full demolition requires more work than stabilization, although not more work than returning the building to an occupiable state. If the building were simply a pile of rubble or if the front and side walls were severely compromised, then demolition would be much less work compared to stabilization.

If you have any questions or I can be of further assistance, please call.

Sincerely,

A handwritten signature in black ink, appearing to read "Donald Friedman". The signature is fluid and cursive, with a large initial "D" and "F".

Donald Friedman, PE