

28 Vannah Avenue Portland, Maine 04103

Tel: 207.781.5242 Fax: 207.781.4245

Mr. David L. McDonald DLM Corp. P.O. Box 1798 Portland, Maine 04104

April 24, 2013 File: 12375

RE: H.H. Sawyer, 243-247 Congress Street

Dear David:

The purpose of this letter is to provide for the project file a record of our site visits and what we observed during those site visits.

Our first and second site visits were to observe the existing conditions and take measurements and photographs for the repair design, both from the top surface of the roof as well as by crawling into the attic space between the roof framing and ceiling joist framing. What we generally observed was that the existing roof structure was not tied down to the brick masonry walls. This was the primary reason for the roof failure at the southeast corner, allowing the roof to lift off the walls due to the suction forces caused by the high winds on the day of the failure.

On April 4, 2013 we visited the site to observe the repair work in process. Because a large section of the roof was open, we were able to gain access into the attic space and get a close-up view of the repairs, as well as other areas to be addressed. The roof joists used for the emergency repairs are being re-used as part of the permanent repairs (2x12 @ 16" o.c.). On the west wall, the Simpson hold-down anchors have been installed on each roof joist as specified, fastened to the rafter and the brick wall. In addition, because some of the ceiling joists are loose in their wall "pockets" the Contractor has installed Simpson hold-down anchors on all the ceiling joists, creating a positive connection to the brick wall.

On the east wall, the hold-down installation is underway for both the roof joists and the ceiling joists in the same manner as the west wall. In addition, because of the required notch in the end of the joists, joists hangers are being installed on each joist and nailed to solid blocking installed between the joists. On the interior wood framed and brick bearing walls, the Contractor is installing solid blocking between the joists. On the wood framed walls, a 2x4 ledger strip is being installed under the joists to support them at the notched end. At the brick walls, a joist hanger is being installed in the same manner as at the exterior walls, connected to the joists and the solid blocking.



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We discussed the broken roof joists discovered in the attic during our previous site visits with the Owners Representative and the Contractor. These were most likely damaged due to the impact from the overturned roof section on the roof, since they are in the area of the roof where the overturned section came to rest. After some discussion about the most practical way to perform these repairs, it was decided that the simplest and best way to perform these repairs would be to remove a section of the existing roof sheathing in the damaged joist area, and the existing roof joists would either be removed and replaced with new joist material, or they will be left in place and "sistered" with new joist material. This repair work is located under the existing EPDM roofing, so it was discussed that this work will be performed at the time of the new roofing installation.

In conclusion, in our opinion the Contractor is performing the Work in accordance with the plan prepared for the Work, as well as our verbal instructions for field changes or additions based on the existing conditions found while executing the Work.

Please let us know if you have any questions or wish to discuss our report.

Sincerely,

Pinkham and Greer, Consulting Engineers

James A. Moran III, P.E.