Structural Integrity
Consulting Engineers, Inc.

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/14/13
Planner: Tammy Munson

April 10, 2013

Copy

Mr. Tom Moulton
551 Congress Llc
Portland, Maine 04101

Reference:
RTU Replacement and Added Roof Insulation
551 Congress Street
Portland, Maine
Structural Integrity Job: #13-0056

Dear Mr. Moulton,

As requested, I am writing this memo regarding the structural capacity of the existing roof at 551 Congress Street in regard to the forthcoming insulation upgrade and reroofing as well as the Roof Top HVAC Unit replacement as proposed for this property.

The opinions expressed are based on limited visual observations during my multiple visits to the site and my knowledge of structures, their components, and the related building codes. No physical testing was performed to determine the adequacy of the complete structural systems. Architectural/life safety conditions are not included in this report. No warranty expressed or implied, as to the condition of the structure, is intended.

The existing roof is constructed with historic sawn rafters, 2 ¾" x13 ½" min. at up to 22" on center supported on pockets in the existing brick masonry walls. Based on my calculation I have found the existing rafters are suitable to support the code imposed loads with the following conditions:

1. The roof should be kept in service, as-is, without a hung ceiling.

2. It is also important that any insulation added as part of the re-roofing project be limited to an R-24 assembly, maximum.

3. New steel angle supports, L5x3 ½" x ¼" must be installed at the joist bearing along the Oak Street side of the building per the attached sketch, 1/S-2.

I have also reviewed the location and installation of the Replacement RTU that is to be installed on the existing curb closest to Congress Street and found the framing supporting the RTU to be adequate.

Do not hesitate to call with any questions, comments, or if I can be of further assistance.

Sincerely,

STATE OF MAINE
AARON C. JONES
No. 10968
LICENSED
PROFESSIONAL ENGINEER

Aaron C. Jones, P.E., SECB, LEED AP BD+C
President