Price Structural Engineers, Inc.

75 Farms Edge
North Yarmouth, ME (
Tel: 207-846
Fax: 207-846-1633
E-Mail: PriceStructural@maine.rr.com

CITY OF PORTLAND, MAINE
RESURGAM
Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 04/21/17

STRUCTURAL DESIGN OF BASEMENT HEADER

5 Brookside Road
Portland, ME 04103

STRUCTURAL NOTES and DETAILS
PSE Project No. 108-17

Structural Notes: Pages 1 - 8
Details: Pages S-1 thru S-3

Prepared for:
Michella Canning
5 Brookside Road
Portland, ME 04103

Prepared by:
David A. Price, P.E.
Price Structural Engineers, Inc.
75 Farms Edge Road
North Yarmouth, ME 04097
Tel: (207) 846-0099

March 2, 2017

STATE OF MAINE
DAVID A. PRICE
No. 6401
LICENSED
PROFESSIONAL ENGINEER

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GENERAL STRUCTURAL NOTES

GENERAL REQUIREMENTS

1. Work and materials shall conform to the 2009 International Building Code, State of Maine Building Codes, and other applicable codes and standards and shall meet the requirements of local authorities having jurisdiction.

2. See other project drawings, specifications and construction documents for additional requirements.

3. Reference to "Engineer" within these specifications refers to Price Structural Engineers, Inc.

4. Not all existing components within the building have been reviewed for adequacy by the engineer. The new materials and reinforcement improvements specified within the stamped structural design documents define the extent to which the structure has been reviewed by Price Structural Engineers, Inc. (PSE).

5. At areas where existing structural components are uncovered and found to be inadequate, the contractor shall either properly reinforce the components or contact PSE for the structural design of the modifications.

6. Coordinate work schedule, daily hours of construction, location of material storage, access to utilities, security measures and final cleanup requirements with owner prior to construction.

7. See attached page labeled "Abbreviations" for description of abbreviations used on sketches.

8. Structural drawings and specifications do not include provisions for site-work, building set-back requirements, ventilation, plumbing, water-tightness of building, NFPA fire code requirements, Americans with Disabilities Act (ADA) requirements, handrails, guardrails, lighting, egress requirements, flashing, finishes, hazardous waste, or other architectural and environmental features. Coordinate these requirements with others as necessary.

9. The following list of drawings and sketches form a part of this specification:
   S-1 through S-3 Framing Plan and Details

10. The structural design is based on the full interaction of all its connected parts. No provisions have been made for any temporary conditions that may arise during construction prior to the completion of the structure. The Contractor shall be responsible for adequate design and construction of all forms, shoring and temporary bracing during the progress of the project.

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11. All work, including demolition, shall be performed by experienced workman and coordinated with adequate supervision by the contractor's project supervisor.

12. Alternate details may be used only if such details are submitted in writing to the Structural Engineer for review and written acceptance is granted prior to construction. However, the Structural Engineer shall be the sole judge of acceptability and the Contractor's Bid shall anticipate the use of those specific details shown on the Drawings.

13. The Contractor shall be completely responsible for the safety of adjacent structures, property, and the public. The Contractor shall comply with all federal, state and local safety requirements.

14. Do not scale from Drawings. All materials shall be new except those labeled "EXG." (existing).

15. Work not indicated on a part of the Drawings but reasonably implied to be similar to that shown at corresponding places shall be included.

16. Verifying assumed dimensions of existing materials shown on these drawings is the sole responsibility of the contractor.

17. These structural documents shall be used for this project only and not for any other purpose. The Contractor shall not modify these documents or make changes in construction from the intent of these documents without written approval from the engineer. Use of part but not all of these documents is not permitted.

18. Details indicating existing conditions are based on assumptions, some of which have not yet been field verified. It is critical that the contractor verify actual existing conditions prior to purchasing or fabricating new materials and notify the engineer immediately if actual conditions differ from those indicated on the structural details.

19. Remove and legally dispose of demolished materials.

20. Stored materials shall be kept under cover and dry. Protect from weather and contact with damp or wet surfaces. Stack materials in such a manner that prevents warping or crushing.

21. Pre-manufactured materials shall be installed in accordance with manufacturer's requirements and recommendations. Substitutions for specified pre-manufactured materials may be made but only after specific written approval has been provided by the owner's engineer prior to installation.

22. Except where slope is specified, new materials shall be installed plumb, level, and square.

23. Contractor shall not fabricate materials until interferences have been identified and resolved.

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ROUGH CARPENTRY

1. Lumber shall bear the grade and trademark of the association under whose rules it is produced and a mark of mill identification. Except for heavy timbers and pressure treated wood, lumber shall be kiln-dried to a moisture content not exceeding 19%.

2. Except for wood designated to be pressure-treated (PT) to prevent decay,, lumber used for joists or blocking shall be No. 2 grade or better Spruce, Pine, Fir (SPF) and surfaced four sides.

3. All fasteners (including nails, lag screws, and bolts) for pressure treated lumber shall be hot-dip galvanized. If ACQ preservative is used, fasteners shall either be stainless-steel or be clearly specified as having a G-185 galvanized coating and joists/beam hangers shall have additional galvanizing suitable for ACQ treatment.

4. Holes for bolts shall be drilled to a diameter that is 1/16" larger than the nominal diameter of the bolt.

5. Holes for the unthreaded portion of lag screws shall be drilled to a diameter that is the same as the nominal diameter of the lag screw shank. A pilot hole for the threaded portion of the lag screw shall be drilled and shall have a diameter that is half the nominal diameter of the lag screw shank.

6. Fabricate horizontal and inclined members, units of less than 1:1 slope, with natural convex bow (crown) up to provide camber.

7. Carpentry work shall comply with AFPA's "National Design Specification for Wood Construction," 2005 Edition. Wood components shall be securely attached with sound connections and without splitting. As a minimum, wood fasteners shall conform to the 2009 International Building Code, Table 2304.9.1, "Fastening Schedule" unless otherwise noted.

8. Reference to "Simpson" on Drawings indicates metal connectors manufactured by Simpson Strong-Tie.

9. Substitution for the specified pre-manufactured materials may be made only after specific written approval has been provided by the engineer prior to the installation.

10. Pre-manufactured materials, including expansion bolts and Simpson materials, shall be installed in strict accordance with the manufacturer's requirements and recommendations.

11. Expansion bolts shall be "Lok-Bolt" (manufactured by Powers Fasteners Company) or approved equal.

12. Dimensions labeled "VIF" shall be verified in field by the contractor prior to fabricating new components. Any discrepancies shall be brought immediately to the attention of the owner's engineer.