



Monday, July 25, 2011

Ms. Shuiping Zhang
1717 Fairview Ave N
Falcon Heights, MN 55113
763.222.9885

RE: Foundation Inspection
852 4th St
St. Paul, MN 55106

This letter is in reference to the request to determine structural integrity of the foundation for the above mentioned address.

Thomas A. Weber, P.E. on behalf of Fieldstone Engineering LLC performed an onsite inspection of the above mentioned lot. The foundation is of stone and grout construction typical of homes built in the early to mid 1900's. During the inspection, no structural cracks or movement of the walls were observed. In addition, all beams and floor joist appeared to be bearing on the masonry foundation appropriately for this style of construction.

To the right of the stairway a hole has been placed in the foundation wall. This hole serves as a doorway for possible storage. The attached Exhibit A contains pictures this doorway. It is my recommendation that the lower parts of the doorway (Pictures A & C) and the upper part of the doorway (Picture B) be grouted and/or tuck pointed to prevent any further degradation of the stone in this area.

The concrete grout used to repair this area shall have a compressive strength no less than 2000 psi and use aggregate no larger than 0.75 inches in diameter. The existing loose rock may be used as filler in this area provided that they are fully grouted into place.

It is my professional opinion that this foundation is of sound nature, provided that the repairs are done according to industry standards, no loose rock remains in this area, the voids at the bottom of the opening are fully grouted, and all concrete grout is sound upon fully curing. Please note that this letter is not to be interpreted as a warranty either expressed or implied.

Sincerely,

A handwritten signature in blue ink that reads "Thomas A. Weber P.E." with a stylized flourish.

Thomas A. Weber, M.S., P.E.
PE #47360

Exhibit A:



Grout shall be placed on the left side of the opening to secure all loose material. Grout shall start on sound material at the base of the opening and extend to top of the noted line at a minimum, filling the entire void with concrete.

Picture A: Left side of doorway



Picture B: Top of Doorway

Grout shall be placed on the top of the opening to secure all stone.



Grout shall be placed on the right side of the opening to secure all loose material. Grout shall start on sound material at the base of the opening and extend to the existing stone at a minimum, filling the entire void with concrete.

Picture C: Right side of doorway

