October 15,2023

**Attention:** house owner

Re: foundation issue in the house at 134 Victoria Street, Niagara-on-the-Lake, ON

We have been retained by the owner to review on site the existing house foundation condition, we conduct a filed review on October 15,2023 with the owner.



## Description:

The house is 1.5 story house with a partial basement. the rear part seems as an extension were added to the original house frame The house is old we don't know the age of the house, but it seems very old from the way that built the basement walls the house is brick house with basement walls of stone connected by mortar.

#### Observation:

Our field review was limited to the house only. No other structure located on this property was part of the review.

#### a-Exterior

Our visual inspection revealed that the entrance to the basement is a basement wooden bulkhead, also called a basement cellar door, it is almost horizontal opening with the same grade level. bulkhead doors are susceptible to mold, rot and warpage.

Over time the bulkhead door can fail to function and develop gaps that allow rain and debris to enter your basement. This can cause water leakage, flooding, and the growth of mold in the basement.



# . see the photos below





## b-Interior

Our visual inspection revealed that.

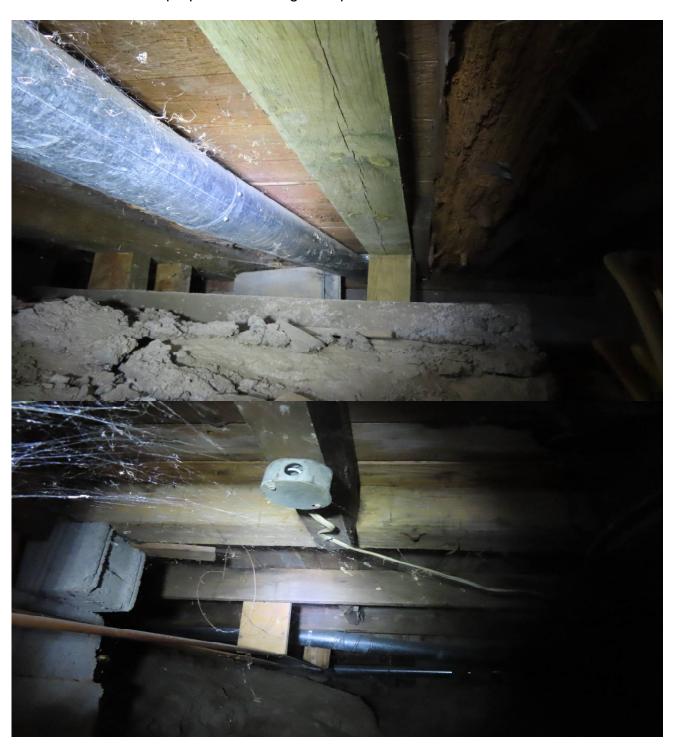
-the basement entrance is in very poor conditions, there is no retaining wall and any neither proper support for the wall above support for, it is structurally it seem there was no maintenance for long time to the basement entrance there are signs of water leaking, see photos below.



-There are many posts that have been added to support the floor above without having proper footing. See photos below.



-There are many posts that have been added on top of concrete slab that bearing on a soil which doesn't have a proper soil bearing. See photos below.







### **Conclusion:**

It is our opinion that due to the age of the house, un-proper foundation construction and bad maintenance to the foundation, the material originally used for the foundation construction, and its current condition, the foundation system is not acting as it should, making the building unsafe to be occupied. The structural integrity of the building will continue to decline due to the presence of the deficiencies mentioned in this report. Anomalies have reached a stage where remedial work is not recommended. In our professional opinion, the subject house building should be demolished to prevent injury to anyone occupying this building or anyone in the surrounding areas of this house building.

We trust that this letter meets your requirements at this time. If you have any questions or comments regarding this project, please don't hesitate to email or call

Sincerely,

**Nassar Engineering** 

Nabeel Nassar P,Eng

