

October 21, 2020

District of West Vancouver
750 17th Street
West Vancouver, BC
V7V 3T3

Attention: Mr. John Wong, Manager of Facilities and Assets

Email: jtwong@westvancouver.ca

**Re: Structural Condition Assessment Report
Klee Wyck House
200 Keith Road, West Vancouver**

WHM # 19143

WHM was retained by the District of West Vancouver to conduct a structural condition assessment of the existing house at 200 Keith Road, West Vancouver. The house has been abandoned for several years and the District of West Vancouver is interested in documenting its current condition.

Jacob DeVos, P.Eng., member of WHM, conducted a site visit on October 16, 2020, in support of this report.

PROPERTY DESCRIPTION

The reviewed building at 200 Keith Road is a two-storey wood-frame house, with the first floor being partially submerged on the west side. The building has been unoccupied for several years.



Since the interior finishes were still in place, not all structural elements could be directly reviewed.

OBSERVATIONS

The following sections summarize WHM's observations of the existing building at 200 Keith Road, based on our site visit on October 16, 2020.

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GENERAL CONDITION

As mentioned previously, the existing building has been unoccupied for several years and has not undergone any maintenance during that time. From the lack of care provided to the building, its general condition was quite poor.



Photo 3: Main entry on west side of building



Photo 4: Upper floor ceiling showing significant water ingress

As seen in the above photos, large amounts of mold are present throughout the upper floor. Due to large amounts of water ingress, many of the interior finishes are peeling away to reveal wet structural elements.

STRUCTURAL FRAMING – UPPER FLOOR/ ROOF

Since the interior finishes for the building had not been removed, WHM was not able to directly review all structural elements for the upper floor walls and roof framing. However, based on the condition of the space and the amount water ingress present, WHM could make reasonable assumptions for the condition of the structural framing.



Photo 5: Exposed ceiling strapping on the upper floor.



Photo 6: Damaged roof overhang at northwest corner of the building.

Water ingress was present throughout the upper floor. Ceiling tiles and ceiling finishes have fallen off in a number of areas, exposing the framing above. Puddles were also present on the upper level floor.

From what was observed, WHM made the following assumptions about the condition of the roof structural framing:

- The roof sheathing is expected to be in very poor condition due to the large amount of water ingress.
- Roof rafters will have experienced a lot of moisture over the past few years and rot is expected, especially where water can collect, such as at supports and along the ceiling.
- Water ingress is also apparent along the walls and rot is expected in the existing wall framing.
- The water damage to the structural elements will have reduced their load-carrying capacity.

In addition to the above assumed damages, the northwest corner of the roof has also been damaged (Photo 6).

STRUCTURAL FRAMING – GROUND FLOOR

On the ground floor, WHM was able to review a larger portion of the existing framing. At the time of WHM's review, the framing appeared generally dry, however some signs of previous moisture were present.



While the general condition of the framing viewed from the ground floor was good, the large amount of water ingress on the upper level will impact the condition of the ground floor framing over time. The presence of puddles in some areas are also a concern since those areas may have localised rot on the floor framing.

The condition of the perimeter walls could not be reviewed in detail, but it is likely that water damage is present in some areas due to the amount of water ingress present in the building.

STRUCTURAL FRAMING – EAST DECK

The east side of the building has a large deck which is accessed from the second floor. Access was not available to the area below the deck to review the framing but the condition from above suggests that it is in very poor condition.



The plywood decking was very soft and the joists supporting the deck are expected to be rotting.

CONCLUSIONS

Based on our review of the existing building at 200 Keith Road, WHM has the following conclusions:

- Due to the amount of mold present throughout, appropriate precautionary measures should be taken by any personnel accessing the building.
- The east deck of the building should not be accessed.
- The roof framing is expected to be compromised by the amount of water ingress that is present. The building should not be accessed while there is loading on the roof (i.e. snow, high winds).
- While the general condition of the floor framing may be in acceptable condition, the presence of puddles on the floor may have caused localised rot to the framing in areas which could not be observed during WHM's visit. If access to the building is desired by the client, a thorough, intrusive review of the condition of the floor framing would be required to identify unsafe areas.
- If the client would like to open the building for frequent use, a full remediation of all damaged framing is required. A new building envelope should also be provided to prevent future water ingress.

We hope this report meets your requirements at this time. If you have any questions, please contact our office at 604.484.2859.

Regards,

WICKE HERFST MAVER CONSULTING INC.

Jacob DeVos, P.Eng.
Project Engineer