### ATTACHMENT F



Eric Law Pearl St. Victoria, B. C. V8R 4A2

Received City of a state 2018 DFC II 1 Planning & Development Department **Development Services Division** 

# TO WHOM IT MAY CONCERN

BLUE

MOUNTAIN

ENGINEERING INC.

## Re: 1539 Pearl Street

# **Occupancy Condition Review**

This is to confirm review October 7, 2016 of the condition of the above building to define remediation for continued occupancy and provide professional opinion of the economic feasibility associated with such work.

### **Building Description**

The building is a 1200 sq.ft. 3 bedroom, conventional wood framed bungalow with a 2 X 4 "Stick Frame roof" on a concrete foundation with a non-insulated Concrete floor in the full height basement, circa 1950's construction.

Detailed inspection of the building interior shows evidence of water events from periodic roof failure, bathroom drainage and eaves leakage. Evidence of mould infestation in the attic insulation, the underside of roof sheathing, and around windows assure chronic indoor air quality problems which must be remediated to ensure healthful, long term occupancy.

The stick Frame 2 X 4 roof and conventional walls will require extensive upgrading to conform to current Structural and Seismic requirements.

While the basement is relatively dry, indoor humidity problems are evident and exacerbated by poor ventilation from source moisture vapor, bathroom ventilation and poor surface drainage.

Blue Mountain Engineering Inc.

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Heating system is oil fired forced air with electric hot water. The electrical panel is of antique vintage which will require upgrading to current standards.

Bio-aerosol from block mold is toxic and contributes to chronic occupant respiratory problems. experience with mold remediation of hundreds of similar houses in BC, defines the necessary remediation to ensure occupancy:

-full removal of attic insulation and infected wood frame sections is essential, (cost: \$12 - \$15 per sq. ft.);

-improved ventilation of attic space and basement space with HRV and forced air ventilation (cost: approx. \$10 per sq. ft);

-new roof and sheathing ( cost: \$6. per sq. ft.); -indow replacement – (cost: \$6 per sq. ft.);

Other necessary companion remediation include;

- bathroom replacement:
- Basement insulation:
- Asbestos remediation:

Experience with remediation of this type and vintage of building show that the cost of remediation approaches the difference in value between a new building and the value of the remediated structure.

As well, experience has shown there is no assurance that remediation will be effective.

This analysis is not based on laboratory fungus tests or indoor air quality tests, the cost of which is estimated in excess of \$2,000 - \$3,000.

#### Conclusion

Considering the marginal nature of the house, both in terms of appointments, size, sub-standard foundations, poor indoor air quality and marginal utilities, remediation of this structure to current minimum standards of occupancy is not economically feasible.

If there are any further concerns you wish addressed, please contact the undersigned.

Yours very truly,

27- 42 14

V. Proctor, P. Eng.

