Delmar Construction Limited

77 Parade St., Suite 1, Yarmouth, N.S. B5A 3B3 tel – (902-742-4672) fax – (902-742-7271) E-mail <u>delmar.con@ns.sympatico.ca</u>

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Natalie Smith Director of Planning Town of Yarmouth.

Regarding: 305 Main St. Roof-Structure Inspection

Nick Cottreau, EIT and I completed a visual inspection of the structure at 305 Main Street Yarmouth on Wednesday April 14th, 2021.

We navigated our way through the darkness and extreme debris to the roof by climbing through a window onto a portion of the roof. We were then able to walk around and see the entire roof. The south west portion of the roof had been covered with a tarp at some point in the past but had since completely deteriorated leaving only wood straps to hold it down. This would indicate that the roof had leaked possibly years ago and ever since the tarp had disintegrated. It was very evident that this area was leaking. The structure also had a very noticeable sag across its with of 37 feet. The sag was not measured but would be estimated to be 4 to 6 inches.

The roofing material in this area is in very poor shape. The eastern portion of the building had been reroofed in recent years and appeared in good condition.

We then proceeded down one level to the 3rd floor level. Water damage was very obvious bellow the above described south west portion of the roof. The Floorboards were rotted to a point where we could see into the floor structure. The floor joist were at least partially rotted from what little could be seen. The structure in this area would be very questionable as to whether it could support any occupancy loadings. The structure was sagging in a similar manner and orientation to the roof just above.

We then proceeded down to the second level. The same sag was observed in the south west portion, in the same area that the sag was observed above. Water from the roof leak was also penetrating down to the second level, but there was too much debris and bird feces to observe the surface of the second floor.

We then went down to main St. level of the south west portion of the building. A large portion of the main floor structure had been removed, exposing the basement level. Some of the remaining floor joists have broken and sagged down into the basement. It was difficult to tell if this was due to rot or excessive loading or both. The Structure was shored with 6x6 timbers and laterally braced. The main wood beam in the basement was shored with 6x6 lumber and a hydraulic jack. There was a steel column located around the center of the missing floor structure. It had compressed its supporting member by about 4" causing the column and all of the 3 levels of structure to sag that same 4" or so. The compression that occurred appears to be due to rot in the wood frame that would have been caused by years of water infiltration. This was quite alarming to witness. The first reaction was to realize that the entire structure supported by this single steel column could have come crashing down on to the demolition crew prior to shoring being put in place.

Even with the shoring in place it seems that the main steel column and its wooden support beam is propped up by a hydraulic jack. Collapse is avoided only by the performance of this hydraulic jack. A

hydraulic jack should not be used as a permanent structural component. A permanent structural solution should replace the jack immediately.

The building was a construction safety disaster. Multiple safety hazards include open stair wells, mould, nails projecting out of wood debris, extreme amounts of bird feces. That is just to name a few.

The building is in the process of being stripped of its interior finishes, but most has just been left on the floor. In many areas the debris has been scattered for years including matrasses, plaster etc.

The south east portion of this structure is in very poor shape. As it stands today It is a safety hazard to any occupants including construction workers. In order to rebuild and repair this structure, a plan must be developed by a competent person to further shore the structure to provide adequate support so that the steel and wood frame can be raised safely back in place. This plan should include an analysis of the structure to determine what must be added or reinforced in order to support the loads applied by the new occupancy. This applies to the entire structure. This plan must be executed before any further interior demolition occurs and prior to next possible heavy snow loads.

A plan to replace the hydraulic jack must be done immediately. If the hydraulic jack failed, it is possible that the building could partially collapse onto the sidewalk, street or adjacent property. Once the hydraulic jack is replaced with suitable structure, I do not believe the building is in imminent danger of collapse at least until the next substantial snow load. The sidewalk should be closed to pedestrians and parking restricted on Main Street until the Hydraulic Jack is eliminated.

Our inspection was concentrated in the south west portion of the structure, but the plan mentioned above must include the entire structure since this property is made up of several different structures that are linked together.

The person that opened the door for our entry the day of the inspection was an employee of the building owner and he stated that it was the intent to create 8 residential units in this building. It is my experience that a remedial plan as described above will be costly and it is possible that it may not be economically feasible to repair/reinstate this structure for the purpose of housing 8 residential units.

Glen Muise (Yarmouth Town building inspector) had originally asked Delmar Construction limited to see how much it would cost to repair the roof structure and roof. It is my opinion that the roof structure or roofing cannot be safely repaired without first reinstating all support structure on the lower levels. Doing any work on the roof structure will further compromise the lower support structure.

It is my opinion that it will not be economically feasible to salvage the South west portion of the building. The remainder of the building would require some cost analysis of a remedial plan versus demolition.

Mark Bourque

