



July 10, 2019

CM3 File BDC1148 – Ottawa File D07-05-19-0001

Ann O'Connor

Planner II, Development Review - Central
Planning, Infrastructure and Economic Development Department
City of Ottawa
110 Laurier Avenue West,
Ottawa, Ontario
K1P 1J1

Sent by email to: ann.oconnor@ottawa.ca

Dear Ms. O'Connor:

Rationale for Demolition
20-24 Hawthorne Avenue, Ottawa, Ontario

1 INTRODUCTION

CM3 Environmental Inc. (CM3) has prepared this letter to summarize the rationale for the demolition of the two buildings located at 20-22 and 24 Hawthorne Avenue. CM3 had been retained by Ms. Marilyn Steinberg (owner) to provide environmental consulting services with respect to a fuel oil release at 22 Hawthorne Avenue, Ottawa, Ontario. CM3 has recommended that both buildings be demolished so that a remedial excavation could be completed to clean-up the residential fuel oil spill.

1.1 Project Background

The fuel oil release occurred on the 22 Hawthorne property in November 2016 and approximately 190 litres of fuel oil was released onto the ground from an exterior 900 litre aboveground storage tank, (AST), located at the southeast corner of the 20-22 Hawthorne building. The Technical Standards and Safety Authority (TSSA), inspected the property in December 2016 and noted two holes in the tank, fuel on the ground near the tank and staining on the interior basement wall nearest the AST. The TSSA deemed the fuel tank not suitable for use and ordered an assessment of the possible contamination from the release. CM3 completed a delineation assessment for the TSSA order in May 2017 and the file was transferred to the Ontario Ministry of Environment, Conservation and Parks, (MECP), from the TSSA because contamination had been found off-site on the adjacent 24 Hawthorne property.

At the time of the fuel release, the property at 24 Hawthorne was in the process of being sold, for demolition and re-development as a residential property. The contamination of the 24 Hawthorne property has delayed the planned development of that property. Our client wishes to complete the remediation of both properties in a timely manner as per the request of the MECP.

2 24 HAWTHORNE AVENUE PROPERTY

CM3 has completed a Phase I Environmental Site Assessment (ESA) of the 24 Hawthorne Avenue property as part of the Demolition Control Application. The Phase I ESA report is included with this application letter. The Phase I ESA identified an area of environmental concern on and between the 20-22 and 24 Hawthorne properties, and that environmental concern is the November 2016 fuel oil release.

CM3 has also completed a Designated Substance Survey (DSS) of 24 Hawthorne Avenue property and had provided recommendations for the management of designated substances found within the building. The recommendations are provided in the DSS report for 24 Hawthorne that is attached to this application. No asbestos containing materials (ACMs) were found in the DSS.

3 20-22 HAWTHORNE AVENUE PROPERTY

The delineation assessment at 20-22 Hawthorne Avenue had shown that contaminated soil and groundwater is present underneath the 20-22 Hawthorne buildings and adjacent to the 24 Hawthorne property at a depth below the 24 Hawthorne building footings. The extent of contamination is provided in the CM3 report "*Oil Spill Delineation, 22 Hawthorne Avenue, Ottawa, Ontario*" dated May 12, 2017 that is included with this application.

The initial remedial planning has been summarized in the CM3 report "*Remedial Option Evaluation, 22 Hawthorne Avenue, Ottawa, Ontario*" dated May 25, 2017 that is included with this application. The report had evaluated remedial options and approximate cost estimates were provided. The remedial options that were evaluated included excavation of the contaminated soil and *insitu* treatment of the contaminated soil. The excavation approach involved the demolition and/or moving of the two buildings on the 20-22 and 24 Hawthorne properties and the excavation of the contaminated soil to the most practical extent. The *insitu* treatment approach involved the use of a dual phase extraction (DPE) system to treat the soil followed up by chemical injections. However, it was acknowledged that the *insitu* approach would take at least 5 years to complete and would not likely be able to meet the current MECP standards. It was also recommended that a risk assessment be included as a contingency in the *insitu* approach so that the property could be used as a residential property.

Further remedial planning was conducted in July of 2017 and it was determined at the meeting that a hybrid approach involving an initial remedial excavation to remove most heavily contaminated soil to the most practical extent followed by a secondary remediation technique to address the remaining contamination would be the preferred approach. The goal of the initial excavation was the removal of all contaminated soil in excess of the MECP Standards from the properties to the most practical extent while supporting the 20-22 Hawthorne building. The secondary remediation technique was to be determined based on the outcome of the initial remedial excavation and was to include:

- A risk assessment to develop site specific standards and demonstrate that the property in the post initial remedial excavation condition would be suitable for its intended use as an urban residential dwelling; and/or

- *In situ* Remediation involving oxidant injections and/or the operation of an *in situ* remediation system to treat the remaining post initial excavation contamination to the generic MECP standards; and/or
- Further Excavation involving the removal of more soil outside of the initial excavation as required to meet the MECP Standards. This would likely involve further structural and/or geotechnical consultation.

The secondary remediation technique was to be assessed and selected based on the approach that would be determined to be the most practical following the initial excavation. The selection of the secondary remediation would be based on the cost, ease of implementation (i.e. less disruptive) and the estimated timeframe to achieve the remedial goals.

Further testing was conducted at the two properties in support of the hybrid approach and this included further environmental delineation, a structural assessment of the 20-22 Hawthorne building and geotechnical testing.

The results and conclusions of the additional assessment is summarized in the CM3 report "*Initial Remedial Excavation - Hybrid Approach, 22-24 Hawthorne Avenue, Ottawa, Ontario*" dated September 15, 2017 that is included with this application. The additional assessment work provided further delineation of the soil and groundwater contamination related to the fuel release at 20-22 Hawthorne and also provided a structural plan for supporting 20-22 Hawthorne and the geotechnical information required for this work. The excavation plan involved the removal of the soil between the two buildings up to the footings of the 24 Hawthorne buildings and underneath the 20-22 Hawthorne building up to the dividing wall of 20-22 Hawthorne.

The plans generated from the CM3 September 2017 report were used to obtain pricing from environmental contractors to complete the work. Quotes were obtained from three contractors for the work in November 2017 and were evaluated. The significant cost of the three bids, especially since it was the initial remedial effort with definite follow up costs, resulted in a re-evaluation of the remedial approach.

In late November 2017, the remediation project was issued for bid again but re-evaluated to include the demolition of the 24 Hawthorne building in the remedial process. The second set of bids were based on two options as follows:

- One for demolishing 24 Hawthorne and supporting 22 Hawthorne with soil excavation on both properties; and
- A second option of demolishing the 20-22 and 24 buildings and completing a soil excavation.

The bids received for the revised scope of work were evaluated and it was decided to proceed with the demolition of 24 Hawthorne and support of 20-22 Hawthorne. DSS reports were generated for the 22 and 24 Hawthorne buildings in the spring of 2018.

Access agreements were set in place by late summer 2018 for the 24 Hawthorne property and a contractor was selected for the project and issued a contract with an expected start date of December 2018 or January 2019. However, the contractor who was awarded the work suspended and/or ceased operations in or about December 2018, so the bid process was undertaken again in the winter of 2019 from January to March.

No economically feasible bids were received for the demolition of 24 Hawthorne and support of 22 Hawthorne approach, so the decision was made to select a bid for the demolition of 20-22 and 24 Hawthorne with excavation approach.

A DSS was conducted on 20 Hawthorne on May 22, 2019 and this report is included along with the 24 Hawthorne DSS as part of this application. ACMs were reported in both units of the buildings so this material was removed by a contractor in June of 2019. A copy of the invoice is attached to this application.

A Phase I ESA has not been completed for the 20-24 Hawthorne property for practical reasons. The Phase I ESA completed at 24 Hawthorne includes the same area that would be required for the 20-22 Hawthorne property and additionally, a Phase I ESA undertaken at the 20-22 Hawthorne property would identify the same environmental concerns that are present on the 22 Hawthorne Property. It is CM3's opinion that the environmental work completed to date on the 20-22 Hawthorne property is sufficient for this application.

4 DEMOLITION CONTROL PLAN

Three copies of the demolition control plan have been submitted with this application.

5 CLOSING

We trust that the above is satisfactory for your purposes at this time. Should you have any questions or concerns, please contact the undersigned by phone at 613-979-2093 or by email (bruce@cm3environmental.com).

Respectfully submitted,

CM3 Environmental Inc.



Bruce Cochrane, P.Geo., QP, EP
Principal

