

## Certificate of Property Use

Issued under the authority of the Environmental Protection Act, R.S.O. 1990,  
c.E.19, sections 168.6 (CPU) and 197 (Disclosure Order)

Certificate of property use number **5225-ADDSRF-A**  
Risk assessment number **8605-7G8NBY-01**

**Imperial Oil Limited** (Owner)  
**505 Quarry Park Boulevard SE**  
**Calgary, Alberta**  
**T2C 5N1**

**Site:** **1508 Richmond Road** (Property)  
**Ottawa, Ontario**

**With a legal description of:**

***Part of Lot 21, Concession 1, Ottawa Front, as in NP42228, except CR405004; Ottawa-Nepean, together with an easement over Part of Lot 21, Concession 1, Ottawa Front, Part 1, Plan 4R3261 except Parts 1 and 2, Plan 4R5836, as in OC714379.***

**Being all of PIN 03962-0388 (LT)**

The conditions of this Certificate of Property Use (CPU) address the Risk Management Measures in the Risk Assessment noted above and, which also includes the documents listed in detail in Part 1 below (Risk Assessment). In the event of a conflict between the CPU and the Risk Assessment, the conditions of the CPU take precedence.

Risk Management Measures (RMMs) that are required to be implemented are found in Part 4 of the CPU – Director Requirements. Key RMMs specified in Part 4 include, but are not limited to:

- soil barriers including fill, cement concrete, bituminous concrete (asphalt), and granular material shall be maintained indefinitely above the Property soils or until the Director alters conditions related to the said RMMs or revokes the CPU;

- no building shall be constructed in the future unless a passive soil vapour intrusion management system with the capacity to be upgraded to an active soil vapour intrusion management system is integrated under and with the said building(s);
- implementing a sub-slab vapour monitoring program for any and all buildings constructed at the Property, supplemented, if necessary by an indoor air quality monitoring program; and,
- managing exposure to the Contaminants of Concern through the implementation of an inspection and maintenance plan, a soil management plan, a Health and Safety plan, a groundwater monitoring program and a sub-slab vapour monitoring program. The said plans and programs shall continue indefinitely, or until the Director alters conditions relating to the said plans and/or programs, or revokes the CPU.

## Part 1: Interpretation

In this CPU, the following terms shall have the meanings described below:

"Act" means the *Environmental Protection Act*, R.S.O. 1990, c. E. 19;

"Adverse Effect" has the same meaning as in the Act; namely, it has the meaning of one or more of,

- a) impairment of the quality of the natural environment for any use that can be made of it,
- b) injury or damage to property or to plant or animal life,
- c) harm or material discomfort to any person,
- d) an adverse effect on the health of any person,
- e) impairment of the safety of any person,
- f) rendering any property or plant or animal life unfit for human use,
- g) loss of enjoyment of normal use of property, and
- h) interference with the normal conduct of business.

"Building" means an enclosed structure occupying an area greater than ten square metres consisting of walls, roof and floor;

"Building Code" means the Ontario Regulation 332/12: Building Code, as amended to January 1, 2015, made under the *Building Code Act*, 1992, S.O. 1992, c. 23;

"Competent Person" has the same meaning as in the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1;

"Contaminant" has the same meaning as in the Act, namely any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them, resulting directly or indirectly from human activities that causes or may cause an Adverse Effect;

"Contaminants of Concern" or "COCs" has the meaning as set out in section 3.2 of the CPU;

"CPU" means this certificate of property use as may be altered from time to time and bearing the document number **5225-ADDSRF-A**;

"Director" means the undersigned Director or any other person appointed as a Director for the purpose of issuing a certificate of property use;

"EBR" means the *Environmental Bill of Rights, 1993*, S.O. 1993, c. 28;

"Licenced Professional Engineer" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.R.O. 1990, c. P.28;

"Ministry" means the Ontario Ministry of the Environment and Climate Change;

"OHSA" means the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1;

"O. Reg. 153/04" means the Ontario Regulation 153/04: Records of Site Condition – Part XV.1 of the Act as amended, made under the Act;

"Owner" means Imperial Oil Limited, the current owner of the Property, its successors and assigns;

"Property" means the property that is the subject of the Risk Assessment, is described in the "Site" section on page 1 of the CPU and, is illustrated as Part 1 in Schedule 'A', which is attached to and, forms part of the CPU;

"Property Specific Standards" means the property specific standards established for the Contaminants of Concern set out in the Risk Assessment and in section 3.2 of the CPU;

"Provincial Officer" means a person who is designated as a provincial officer for the purposes of the Act;

"Qualified Person" means a person who meets the qualifications set out in in subsection 5(2) of O. Reg. 153/04;

"Risk Assessment (RA)" means the risk assessment number **8605-7G8NBY-01** accepted by the Director on December 1<sup>st</sup>, 2016, and set out in the following documents:

- "*Risk Assessment, 1490 and 1508 Richmond Road, Ottawa, Ontario (Volumes I, II and III)*", by Barenco Inc., dated February 6, 2009;
- "*Risk Assessment Addendum, 1490 and 1508 Richmond Road, Ottawa, Ontario*", by Barenco Inc., dated August 25, 2009;
- "*Risk Assessment Addendum 2, 1490 and 1508 Richmond Road, Ottawa, Ontario*", by Barenco Inc., dated January 14, 2010;
- "*Risk Assessment Addendum 3, 1490 and 1508 Richmond Road, Ottawa, Ontario*", by Barenco Inc., dated May 20, 2010;
- "*Risk Assessment, 1490 and 1508 Richmond Road, Ottawa, Ontario*", by exp Services Inc., dated April 2, 2012;
- "*Risk Assessment Addendum 5, 1490 and 1508 Richmond Road, Ottawa, ON*", by exp Energy Services Ltd., dated August 30, 2012;
- "*Risk Assessment Addendum 6, 1490 and 1508 Richmond Road, Ottawa, ON (Volumes 1 and 2)*", by exp Energy Services Ltd., dated October 31, 2012;

- "Risk Assessment Addendum 7, 1490 and 1508 Richmond Road, Ottawa, ON (Volumes 1 and 2)", by exp Energy Services Ltd., dated November 28, 2013;
- "RE: RA for 1508 & 1490 Richmond Road, Ottawa; RA1011-08; IDS# 8605-7G8NBY", email from Theresa Phillips, exp Services Inc., received by SDB on January 21, 2014, with electronic file named *01093 - Richmond Road - SV logs and filed notes.pdf* attached;
- "FW: additional files for Richmond Rd. Ottawa.", email from Theresa Phillips, exp Services Inc., received by SDB on January 21, 2014, with electronic file named *01093 - VP103-VP104.pdf* attached;
- "Risk Assessment - Addendum 8, 1490 and 1508 Richmond Road, Ottawa, ON (Volumes 1 and 2)", by exp Energy Services Ltd., dated December 18, 2014;
- "Addendum 9 - Risk Assessment: 1490 and 1508 Richmond Road Ottawa - RA1011-08; IDS# 8605-7G8NBY", email from Theresa Phillips, exp Services Inc., received by SDB on April 14, 2015, with electronic files named respectively *01093 RA Adden9 Appen S RMP Part 1 and Part 2.pdf* (Appendix S, Risk Management Plan) and *Legal Documents Part 1 and Part 2.pdf* (Legal description of the Property) attached;
- "FW: RA for 1490-1508 Richmond Road, Ottawa; RA1011-08; IDS# 8605-7G8NBY", email from Theresa Phillips, exp Services Inc., received by SDB on November 23, 2015, with electronic files named respectively *Notice-Co-Owners Agreement - OC1727247.pdf* (Co-owners agreement for Part 2 of RA property) and *Transfer - OC1727246.pdf* (Land transfer information) attached;
- "RE: RA for 1490-1508 Richmond Road, Ottawa; RA1011-08; IDS# 8605-7G8NBY", email from Theresa Phillips, exp Services Inc., received by SDB on February 26, 2016, with electronic file named *1093 Ottawa RA - Add10 - Richmond Road, Ottawa - 2016 02-26.pdf* ("*Risk Assessment - Addendum 10, 1490 and 1508 Richmond Road, Ottawa, ON*", by exp Energy Services Ltd., dated February 26, 2016) attached;
- "RA 1011-08, IDS # 8605-7G8NBY; 1490 Richmond Road, Ottawa", email from Paul Morassutti, Osler, Hoskins & Harcourt LLP, received by SDB on March 16, 2016, with electronic file named *Letter to G. Floyd (MOECC) re 1508 Richmond Road, Ottawa.pdf* (Property information for 1508 Richmond Road) attached; and,
- "RE: RA for 1490-1508 Richmond Road, Ottawa; RA1011-08; IDS# 8605-7G8NBY", email from Theresa Phillips, exp Services Inc., received by SDB on April 7, 2016, with electronic file named signed *PSF pg30\_QPRA change.pdf* (Documentation supporting change in QPRA) attached.

"Risk Management Measures" means the risk management measures specific to the Property and which are described in the Risk Assessment and/or Part 4 of the CPU;

"Subsurface Soils" are soils that are located at the Property at depths greater than 1.5 metres below ground surface; and,

"Tribunal" has the same meaning as in the Act, namely, the Environmental Review Tribunal.

## Part 2: Legal Authority

- 2.1 Section 19 of the Act states that a certificate of property use is binding on the executor, administrator, administrator with the will annexed, guardian of property or attorney for property of the person to whom it was directed, and on any other successor or assignee of the person to whom it was directed.
- 2.2 Subsection 132(1.1) of the Act states that the Director may include in a certificate of property use a requirement that the person to whom the certificate is issued provide financial assurance to the Crown in right of Ontario for any one or more of:
- a. the performance of any action specified in the certificate of property use;
  - b. the provision of alternate water supplies to replace those that the Director has reasonable and probable grounds to believe are or are likely to be contaminated or otherwise interfered with by a contaminant on, in or under the property to which the certificate of property use relates; and,
  - c. measures appropriate to prevent adverse effects in respect of the property to which the certificate of property use relates.
- 2.3 Section 168.6 (1) of the Act states that if a risk assessment related to the property has been accepted under clause 168.5(1)(a), the Director may issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:
- a. Take any action that is specified in the certificate and that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect that has been identified in the risk assessment, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
  - b. Refrain from using the property for any use specified in the certificate or from constructing any building specified in the certificate on the property.
- 2.4 Subsection 168.6(2) of the Act states that a certificate of property use shall not require an owner of property to take any action that would have the effect of reducing the concentration of a contaminant on, in or under the property to a level below the level that is required to meet the standards specified for the contaminant in the risk assessment.
- 2.5 Subsection 168.6(3) of the Act states that the Director may, on his or her own initiative or on application by the owner of the property in respect of which a certificate has been issued under subsection 168.6(1),
- a. alter any terms and conditions in the certificate or impose new terms and conditions; or,
  - b. revoke the certificate.

- 2.6 Subsection 168.6(4) of the Act states that if a certificate of property use contains a provision requiring the owner of the property to refrain from using the property for a specified use or from constructing a specified building on the property,
- a. the owner of the property shall ensure that a copy of the provision is given to every occupant of the property;
  - b. the provision applies, with necessary modifications, to every occupant of the property who receives a copy of the provision; and,
  - c. the owner of the property shall ensure that every occupant of the property complies with the provision.
- 2.7 Subsection 196(1) of the Act states that the authority to make an order under the Act includes the authority to require the person or body to whom the order is directed to take such intermediate action or such procedural steps or both as are related to the action required or prohibited by the order and as are specified in the order.
- 2.8 Subsection 197(1) of the Act states that a person who has authority under the Act to make an order or decision affecting real property also has authority to make an order requiring any person with an interest in the property, before dealing with the property in any way, to give a copy of the order or decision affecting the property to every person who will acquire an interest in the property as a result of the dealing.
- 2.9 Subsection 197(2) of the Act states that a certificate setting out a requirement imposed under subsection 197(1) may be registered in the proper land registry office on the title of the real property to which the requirement relates, if the certificate is in a form approved by the Minister, is signed or authorized by a person who has authority to make orders imposing requirements under subsection 197(1) and is accompanied by a registrable description of the property.
- 2.10 Subsection 197(3) of the Act states that a requirement, imposed under subsection 197(1) that is set out in a certificate registered under subsection 197(2) is, from the time of registration, deemed to be directed to each person who subsequently acquires an interest in the real property.
- 2.11 Subsection 197(4) of the Act states that a dealing with real property by a person who is subject to a requirement imposed under subsection 197(1) or 197(3) is voidable at the instance of a person who was not given the copy of the order or decision in accordance with the requirement.

### **Part 3: Background**

- 3.1 The Risk Assessment (RA) was undertaken on behalf of the Owner to assess the human health risks and ecological risks associated with the presence or discharge of Contaminants on, in or under and to identify appropriate Risk Management Measures to be implemented to ensure that the Property is suitable

for the intended use: "commercial use" as defined in O. Reg. 153/04. The Risk Assessment used a modified ecological protection approach.

- 3.2 The Contaminants on, in or under the Property that are present at concentrations above the respective Industrial/Commercial/Community Property Use Standards for coarse-textured soils listed in Table 3 of the ***Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act*** (published by the Ministry on April 15, 2011) or for which there are no such standards are defined as the Contaminants of Concern. The Property Specific Standards for these Contaminants of Concern are set out in Schedule 'B' attached to and forming part of the CPU.
- 3.3 I am of the opinion, for the reasons set out in the Risk Assessment that the Risk Management Measures described therein and outlined in Part 4 of the CPU are necessary to prevent, eliminate or ameliorate an Adverse Effect on the Property.
- 3.4 I am of the opinion, for the reasons set out in the Risk Assessment, that the Contaminants of Concern require elimination of the exposure pathways and that it is necessary to restrict the land use and/or to control the construction of building(s) and/or to include notice provisions as outlined in Items 4.3 to 4.5 inclusive.

#### **Part 4: Director Requirements**

Pursuant to the authority vested in me under section 168.6(1) of the Act, I hereby require the Owner to do or cause to be done the following:

##### **Risk Management Measures**

- 4.1 Implement, and thereafter maintain or cause to be maintained, the Risk Management Measures.
- 4.2 Without restricting the generality of the foregoing in Item 4.1, carry out or cause to be carried out the following key elements of the Risk Management Measures:

##### **Geotechnical Engineering**

- 4.2.1. Quality assurance and quality control, for such earthworks at the Property as the excavation, placement and/or compaction of geotechnical materials which may include any Contaminant of Concern, shall be carried out by the Licenced Professional Engineer responsible for geotechnical engineering work pertaining to the construction activities, in consultation with a Qualified Person.

##### **Barriers to Subsurface Soils**

- 4.2.2. Except for the capping of soils under such scenario(s) as the "Roadway and Parking Areas" and/or "Concrete Sidewalks and Pads" illustrated in Schedule 'C' or for site characterization activities, no site alteration shall be carried out without a commence work letter or equivalent permission issued by the City of Ottawa as a result of a site plan agreement under the *Planning Act*, R.S.O. 1990, c. P.13, as amended;

- 4.2.3. No Subsurface Soils – greater than 1.5 metres below ground surface - shall be brought to a depth of less than 1.5m below grade unless they are excavated and transported off the Property within the same week.
- 4.2.4. Any stockpile containing soils shall be protected from the weather elements to ensure that it will not become a source of fugitive dust nor contaminate surface runoff at the Property nor on any municipal road.
- 4.2.5. For a re-development of the Property in accordance with a site plan agreement under the *Planning Act*, R.S.O. 1990, c. P.13, as amended, every barrier established at the Property shall conform to one of the options illustrated in Schedule 'C' to best fit the specific circumstances encountered.

#### **Mitigation of Vapour Intrusion**

- 4.2.6. Refrain from constructing any New Building on, in or under the Property unless the building(s) is constructed with a reinforced concrete floor slab with a minimum thickness of 7.5 cm underlain by a minimum 150 mm thick layer of “Granular A” or equivalent base material, and, for which indoor air shall be protected by the elements of the passive soil vapour intrusion management system illustrated in Schedule 'D' and incorporated in the building design by a Licenced Professional Engineer and which shall consist, as a minimum, of:
  - a. An impermeable reinforced polyethylene geo-membrane liner installed as a sub-slab vapour barrier, and which shall meet or exceed the set of specifications for the Layfield Hazgard 100;
  - b. Two pipe networks, each located above (Level 1) and below (Level 2) the abovementioned geo-membrane liner – vapour collection shall be carried out at separate rows of 50mm (approximate minimum diameter) perforated pipes wrapped with a non-woven geotextile, and transmitting to the respective Level 1 and Level 2 solid header pipes; and,
  - c. Provision(s) for the installation of an active (extraction) ventilation system, also known as an active soil vapour intrusion management system; and,

#### **Soil Management Plan**

- 4.2.7. A soil management plan shall be prepared for the Property and implemented during any activities potentially coming in contact with or exposing soils on the Site. A copy of the plan shall be kept by the Owner and made available for review by a Provincial Officer upon request. Implementation of the plan shall be overseen by a Qualified Person and shall include, but not be limited to, provisions for soil excavation; stockpiling, characterization, disposal and record keeping as identified below;



- a. Dust control measures and prevention of soil tracking by vehicles and personnel from the Property, which may include wetting of soil with potable water, reducing speeds for all vehicles moving on the Property, washing vehicle tires on the Property and restricting work in the presence of high wind conditions or as required by other conditions;
- b. Management of excavated materials which may include cleaning equipment, placement of materials for stockpiling on designated areas lined and covered with polyethylene sheeting, bermed and fenced to prevent access, runoff control to minimize contact and provisions for discharge to sanitary sewers or other approved treatment, as required;
- c. Characterization of excavated soils to determine if soils exceed the Property Specific Standards shall follow the sampling strategy in the Risk Assessment. Excavated soils and materials requiring off-site disposal as a waste shall be disposed of in accordance with the provisions of O. Reg. 347, as amended, made under the Act. Excavated soil meeting the Property Specific Standards may be placed on-site below the barrier to site soils if deemed suitable by a Qualified Person and in accordance with the Risk Assessment.
- d. Record keeping including dates and duration of work, weather and site conditions, location and depth of excavation activities, dust control measures implemented, stockpile management and drainage observed at different times in a given day, soil characterization results, names of the Qualified Person, contractors, haulers and receiving sites for any soil or contaminated ground water removed from the Property and any complaints received relating to site activities potentially coming in contact with or exposing site soils and ground water.

### **Health and Safety Plan**

4.2.8. A health and safety plan shall be developed specifically for the Property and implemented during all intrusive activities which may have the potential for workers and/or occupants to come in contact with or be exposed to soils on the Site and/or groundwater. The Owner shall ensure that:

- a. The health and safety plan takes into account the presence of the COCs and is implemented prior to any intrusive work being undertaken at the Property or any portion thereof, in order to protect workers from exposure to the COCs.
- b. The health and safety plan shall be prepared in accordance with applicable Ontario Ministry of Labour health and safety regulations, along with all potential risks identified in the RA and include, but not be limited to, occupational hygiene requirements, personal protective equipment, contingency plans and contact information.
- c. Prior to initiating any project, as defined in the OHSA, at the Property or any portion thereof, the local Ontario Ministry of Labour office shall be notified of the proposed activities and that COCs have been identified in soil and/or groundwater at the Property.

- d. The implementation of the health and safety plan shall be overseen by a Competent Person who shall also review and adjust, when necessary, the provisions of the plan in relation to the findings of daily inspections and the site work proposed for each day. A log within the health and safety plan shall be kept of all revisions to the said plan, the dates on which the revisions were made and the rationale for any and all revisions.
- e. A copy of the health and safety plan shall be kept at the Property for the duration of intrusive activities.
- f. A copy of the plan shall be kept by the Owner and shall be made available for review by the Ministry upon request.

### **Groundwater Monitoring Program**

4.2.9. The Owner shall implement the groundwater monitoring program identified in the Risk Assessment at Section S-1.4.5:

- a. At monitors TH103, MW-7 and MW-45 (shown in Schedule 'H') to ensure the protection of the occupants of the existing slab-on-grade building located at Part 2 of Registered Plan 4R-20752 of Schedule 'A' and closest to the Property line shared by Parts 1 and 2, in relation to the Contaminants of Concern identified in Schedule 'I';
- b. At monitors MW-2, MW-32, TH303 and TH304 (shown in Schedule 'H') to identify the concentrations of the Contaminants of Concern identified in Schedule 'J' that may be migrating off the Property and, in the case of monitor TH303, to identify the presence of floating petroleum hydrocarbons;
- c. At monitors MW-2, MW-32, TH303 and TH304 (shown in Schedule 'H') to determine groundwater elevations to validate previous assessments of the groundwater flow direction. In the event of a change from the current (northbound) groundwater flow direction, a Qualified Person shall revise the groundwater monitoring program identifying a new set of downgradient monitor locations for Item 4.2.9b and shall implement the revised aspects of the groundwater monitoring program once approved by the Director.

### **Vapour Monitoring Program**

4.2.10. The Owner shall implement the vapour monitoring program identified at Section S-1.4.4 of the Risk Assessment and ensure that:

- a. No occupancy of any building on the Site shall occur unless the results from the sub-slab sampling event demonstrate that no soil vapour criterion identified in Schedule 'F' has been exceeded and that none of the concentrations equals nor exceeds 20% of their respective lower explosive limit;

- b. No occupancy of any building on the Site shall occur unless all results obtained in relation to Item 4.2.10a have been shared with the building official responsible for the issuance of an occupancy permit under the Building Code;
- c. Within two (2) weeks of the analytical results for the sub-slab samples being released by the laboratory, the Owner shall notify the Director in writing of any sub-slab vapour sample exceeding the applicable concentrations listed in Schedule 'F' and/or not lower than 20% of their respective lower explosive limit. The notification to the Director shall include a confirmatory sample collection plan which shall be executed within one (1) week of the said notification to the Director;
- d. Within one (1) month of the analytical results for the confirmatory samples – obtained in relation to Item 4.2.10c - being released by the laboratory and which show that any soil vapour criterion has been exceeded, the Owner shall provide to the Director, in writing, an action plan that may include indoor air sampling for comparison with the criteria outlined in Schedule 'G'. The action plan shall be immediately implemented by the Owner upon receiving written confirmation of the Director approving the said plan with or without conditions;
- e. In the event, that an indoor air sample contains any COC at a level greater than the corresponding indoor air target level appearing in Schedule 'G', the Owner shall provide to the Director and within two (2) months of the indoor air sample results being released by the laboratory, a written report prepared by a Licenced Professional Engineer which shall include engineered controls with the objective of improving indoor air quality and which may include the design and installation of an active soil vapour intrusion management system. The Professional Engineer's report transmitted to the Director shall be accompanied by a written confirmation that an application for a building permit has been filed, where warranted, in accordance with the Building Code.

### **Inspection and Maintenance Plan**

4.2.11. An inspection and maintenance plan shall be prepared and implemented to ensure the continuing integrity of the RMMs acting as barriers to Site soils as long as the Contaminants of Concern are present on, in or under the Property. The inspection plan shall include, at a minimum, semi-annual (spring and fall) inspections of the integrity of the barriers to the Site soils. Any deficiency in the barriers to the Site soils shall be repaired forthwith to meet original performance standards. Inspection, deficiencies and repairs shall be recorded in a log book maintained by the Owner and made available upon request by a Provincial Officer.

### **Documentation and Reporting**

4.2.12. The Owner shall:

- a. Maintain records pertaining to the inspection and maintenance of the RMMs, the implementation of contingency measures, any and all Property restoration activities, soil testing and, the leading causes of

events having affected the structural integrity of any RMM for as long as the RMMs are in place.

- b. Prepare by March 31st of each year, an annual report documenting all activities in relation to Part 4 of the CPU and undertaken during the previous calendar year. A copy of this report shall be kept on file indefinitely by the Owner and shall be promptly made available for inspection upon request by a Provincial Officer.
- c. Submit to the Director by March 31<sup>st</sup> of each year, a copy of the annual report identified in the previous paragraph. Such transmission may be discontinued when the Director will have confirmed that the off-site migration of petroleum hydrocarbons does not constitute an Adverse Effect.

### **Property Use Restrictions**

- 4.3 Refrain from using the groundwater at the Property for any use and particularly as a source of potable water and/or as a source of geothermal energy for a system that is not closed loop or that comprises parts that are not chemically resistant to the groundwater COCs.
- 4.4 Refrain from constructing the following building(s): any building unless its construction incorporates a passive soil vapour intrusion management system with provision(s) to be upgraded to an active soil vapour intrusion management system and the said building is equipped with a sub-slab vapour pin(s) and a sub-slab vapour probe(s) at key locations identified by a Licensed Professional Engineer.

### **Notification of Occupants**

- 4.5 The Owner shall ensure that every occupant of the Property is given notice that the Ministry has issued this CPU and that it contains the provisions noted above in sections 4.3 and 4.4. For the purposes of this requirement, an occupant means any person with whom the Owner has a contractual relationship regarding the occupancy of all or part of the Property.

### **Site Changes**

- 4.6 Following a re-development of the Property and in the event of a change in the physical site conditions or receptor characteristics at the Property that may affect the Risk Management Measures and/or any underlying basis for the Risk Management Measures, forthwith notify the Director of such changes and the steps taken, to implement, maintain and operate any further Risk Management Measures as are necessary to prevent, eliminate or ameliorate any Adverse Effect that will result from the presence on, in or under the Property or the discharge of any contaminant(s) into the natural environment. An amendment to the CPU will be issued to address the changes set out in the notice received and any further changes that the Director considers necessary in the circumstances.

### **Reports**

- 4.7 Retain a copy of any and all reports required under the CPU, the Risk Assessment and any reports referred to in the Risk Assessment (until otherwise notified by the Director) and within ten (10) days of the Director or a Provincial

Officer making a request for a report, provide a copy to the Director or Provincial Officer.

### **Property Requirement**

4.8 For the reasons set out in the CPU and pursuant to the authority vested in me under subsection 197(1) of the Act, I hereby order you and any other person with an interest in the Property, before dealing with the Property in any way, to give a copy of the CPU, including any amendments thereto, to every person who will acquire an interest in the Property as a result of the dealing.

### **Certificate of Requirement**

4.9 Within fifteen (15) days from the date of receipt of a certificate of requirement, issued under subsection 197(2) of the Act and as set out in Schedule 'K', register the certificate of requirement on title to the Property in the appropriate land registry office.

4.10 Immediately after registration of the certificate of requirement, provide to the Director written verification that the certificate of requirement has been registered on title to the Property.

### **Owner / Occupant Change**

4.11 While the CPU is in effect, forthwith report in writing, to the Director any changes of ownership or occupancy of the Property, except that while the Property is registered under the Condominium Act, 1998, S.O. 1998, c. 19, as amended, no notice shall be given of changes in the ownership of individual condominium units or any related common elements on the Property.

### **Financial Assurance**

4.12 The Director has not included in the CPU a requirement that the Owner provide financial assurance.

## **Part 5: General**

5.1 The requirements of the CPU are severable. If any requirement of the CPU or the application of any requirement to any circumstance is held invalid, the application of such requirement to other circumstances and the remainder of the CPU shall not be affected thereby.

5.2 An application under section 168.6(3) of the Act shall be made in writing to the Director, with reasons for the request, to:

- a. alter any terms and conditions in the CPU or impose new terms and conditions; or
- b. revoke the CPU;

5.3 The Director may alter the CPU under subsection 132(2) or (3) of the Act to change a requirement as to financial assurance, including that the financial assurance may be increased or provided, reduced or released in stages. The total financial assurance required may be reduced from time to time or released by an

order issued by the Director under section 134 of the Act upon request and submission of such supporting documentation as required by the Director.

- 5.4 Subsection 186(3) of the Act provides that non-compliance with the requirements of the CPU constitutes an offence.
- 5.5 The requirements of the CPU are minimum requirements only and do not relieve you from,
- a. complying with any other applicable order, statute, regulation, municipal, provincial or federal law; or
  - b. obtaining any approvals or consents not specified in the CPU.
- 5.6 Notwithstanding the issuance of the CPU, further requirements may be imposed in accordance with legislation as circumstances require. The Director shall also alter the CPU where the approval or acceptance of the Director is required in respect of a matter under the CPU and the Director either does not grant the approval or acceptance or does not grant it in a manner agreed to by the Owner.
- 5.7 In the event that, any person is, in the opinion of the Director, rendered unable to comply with any requirements in the CPU because of,
- a. natural phenomena of an inevitable or irresistible nature, or insurrections,
  - b. strikes, lockouts or other labour disturbances,
  - c. inability to obtain materials or equipment for reasons beyond your control, or
  - d. any other cause whether similar to or different from the foregoing beyond your control,

the requirements shall be adjusted in a manner defined by the Director. To obtain such an adjustment, the Director must be notified immediately of any of the above occurrences, providing details that demonstrate that no practical alternatives are feasible in order to meet the requirements in question.

- 5.8 Failure to comply with a requirement of the CPU by the date specified does not absolve you from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 5.9 In the event that the Owner complies with provisions of Items 4.9 and 4.10 of the CPU regarding the registration of the certificate of requirement on title to the Property, and then creates a condominium corporation by the registration of a declaration and description with respect to the Property pursuant to the Condominium Act, 1998, S.O. 1998, c. 19, as amended and then transfers ownership of the Property to various condominium unit owners, the ongoing obligations of the Owner under this CPU may be carried out and satisfied by the condominium corporation by and on behalf of the new Owners of the Property.

## **Part 6: Hearing before the Environmental Review Tribunal**

- 6.1 Pursuant to section 139 of the Act you may require a hearing before the Environmental Review Tribunal (the “Tribunal”), if within fifteen (15) days after service on you of a copy of the CPU, you serve written notice upon the Director and the Tribunal.
- 6.2 Pursuant to section 142 of the Act, the notice requiring the hearing must include a statement of the portions of the CPU and the grounds on which you intend to rely at the hearing. Except by leave of the Tribunal, you are not entitled to appeal a portion of the CPU or to rely on a ground that is not stated in the notice requiring the hearing.
- 6.3 Service of a notice requiring a hearing must be carried out in a manner set out in section 182 of the Act and Ontario Regulation 227/07: Service of Documents, made under the Act as they may be amended from time to time. The address, email address and fax numbers of the Director and the Tribunal are:

The Secretary  
Environmental Review Tribunal  
655 Bay Street, Suite 1500  
Toronto ON  
M5G 1E5

Fax: (416) 326-5370  
Fax Toll Free To 1(844) 213-3474  
Email: ERTTribunalSecretary@ontario.ca

and,

Steve Burns, Director  
Ministry of the Environment and Climate Change  
2430 Don Reid Drive, Suite 103  
Ottawa ON  
K1H 1E1

Fax: (613) 521-5437  
Email: steve.burns@ontario.ca

- 6.4 Unless stayed by application to the Tribunal under section 143 of the Act, the CPU is effective from the date of issue.
- 6.5 If you commence an appeal before the Tribunal, under section 47 of the Environmental Bill of Rights, 1993 (the “EBR”), you must give notice to the public in the EBR registry. The notice must include a brief description of the CPU (sufficient to identify it) and a brief description of the grounds of appeal.

The notice must be delivered to the Environmental Commissioner of Ontario who will place it on the EBR registry. The notice must be delivered to the Environmental Commissioner at 605-1075 Bay Street, Toronto ON M5S 2B1 by the earlier of:

a. two (2) days after the day on which the appeal before the Tribunal was commenced;

and,

b. fifteen (15) days after service on you of a copy of the CPU.

6.6 Pursuant to subsection 47(7) of the EBR, the Tribunal may permit any person to participate in the appeal, as a party or otherwise, in order to provide fair and adequate representation of the private and public interests, including governmental interests, involved in the appeal.

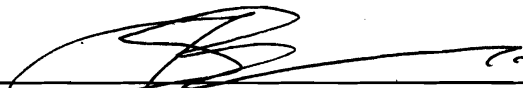
6.7 For your information, under section 38 of the EBR, any person resident in Ontario with an interest in the CPU may seek leave to appeal the CPU. Under section 40 of the EBR, the application for leave to appeal must be made to the Tribunal by the earlier of:

a. Fifteen (15) days after the day on which notice of the issuance of the CPU is given in the EBR registry;

and,

b. If you appeal, fifteen (15) days on which your notice of appeal is given in the EBR Registry.

Issued at Ottawa this day of February 28, 2018.

  
\_\_\_\_\_  
Steve Burns  
Director, section 168.6 of the Act



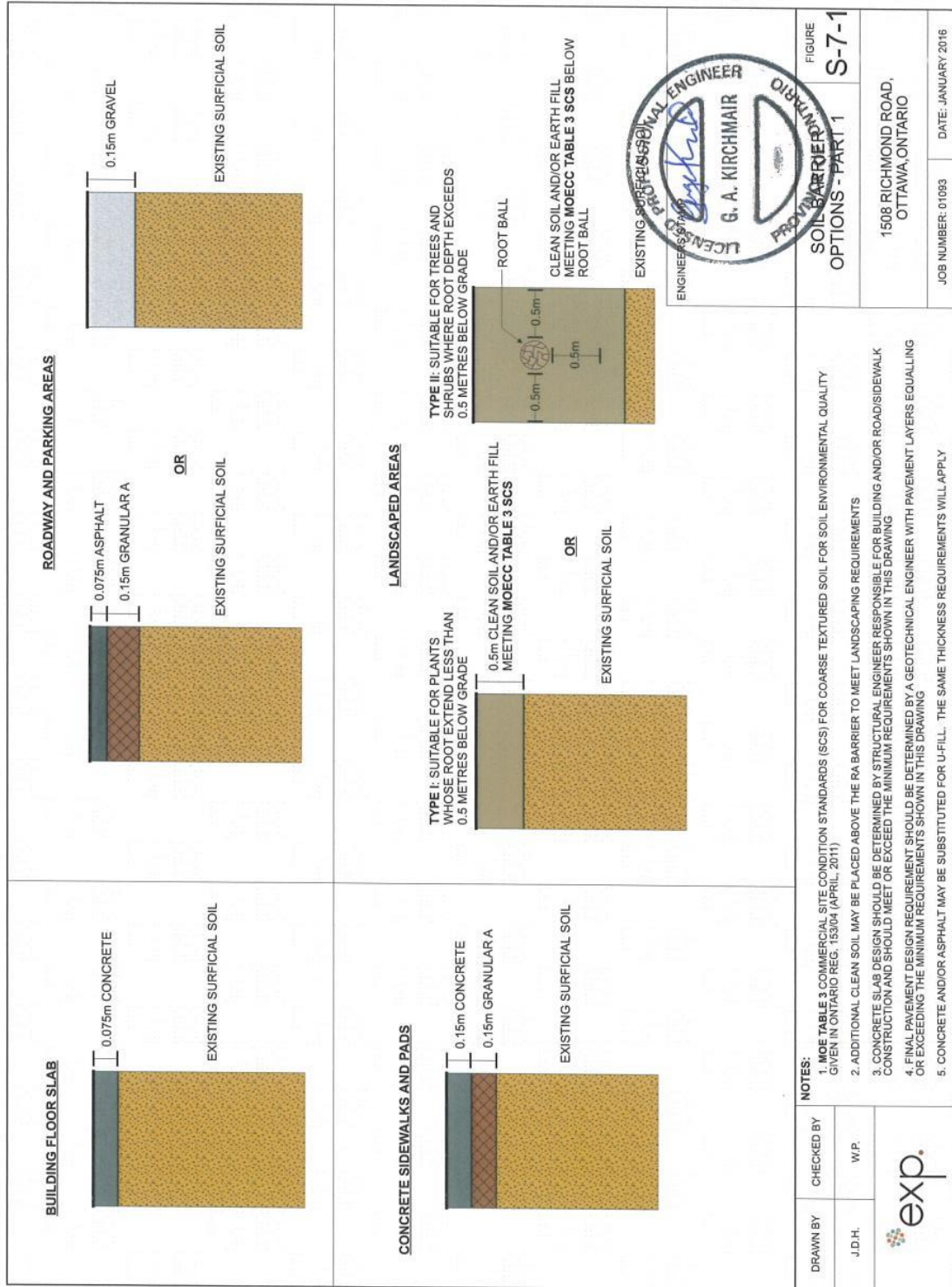


Schedule 'B'  
Property Specific Standards for Contaminants of Concern  
1508 Richmond Road, Ottawa, Ontario

Environmental Medium	Contaminant of Concern (COC)	Property Specific Standard [ug/L]
Ground Water	Benzene	9,460
Ground Water	Bromoform	550
Ground Water	Carbon Tetrachloride	55
Ground Water	Chloroform	330
Ground Water	1,4-Dichlorobenzene	550
Ground Water	1,2-Dichloroethane	500
Ground Water	<i>cis</i> -1,2-Dichloroethene	55
Ground Water	<i>trans</i> -1,2-Dichloroethene	55
Ground Water	Ethylbenzene	5,390
Ground Water	Ethylene Dibromide	1
Ground Water	<i>n</i> -Hexane	275
Ground Water	Methylene Chloride	1,100
Ground Water	Methyl tert-butyl ether	1,100
Ground Water	1,1,1,2-Tetrachloroethane	5.5
Ground Water	1,1,2,2-Tetrachloroethane	2
Ground Water	Tetrachloroethylene	5.5
Ground Water	Toluene	29,700
Ground Water	1,1,2-Trichloroethane	110
Ground Water	Trichloroethylene	55
Ground Water	Xylenes	29,700
Ground Water	PHC – Fraction F1	34,100
Ground Water	PHC – Fraction F2	2,640
Ground Water	PHC – Fraction F3	36,300
Ground Water	PHC – Fraction F4	3,080
Environmental Medium	Contaminant of Concern (COC)	Property Specific Standard [ug/g]
Soil	Benzene	11
Soil	1,4-Dichlorobenzene	0.48
Soil	1,2-Dichloroethane	0.13
Soil	Ethylbenzene	187
Soil	<i>n</i> -Hexane	96.8
Soil	1,1,2,2-Tetrachloroethane	0.077
Soil	Toluene	352
Soil	1,1,2-Trichloroethane	0.11
Soil	Xylenes	1,045
Soil	PHC – Fraction F1	3,630
Soil	PHC – Fraction F2	1,760
Soil	PHC – Fraction F3	11,000
Soil	PHC – Fraction F4	8,030
Soil	Lead	561

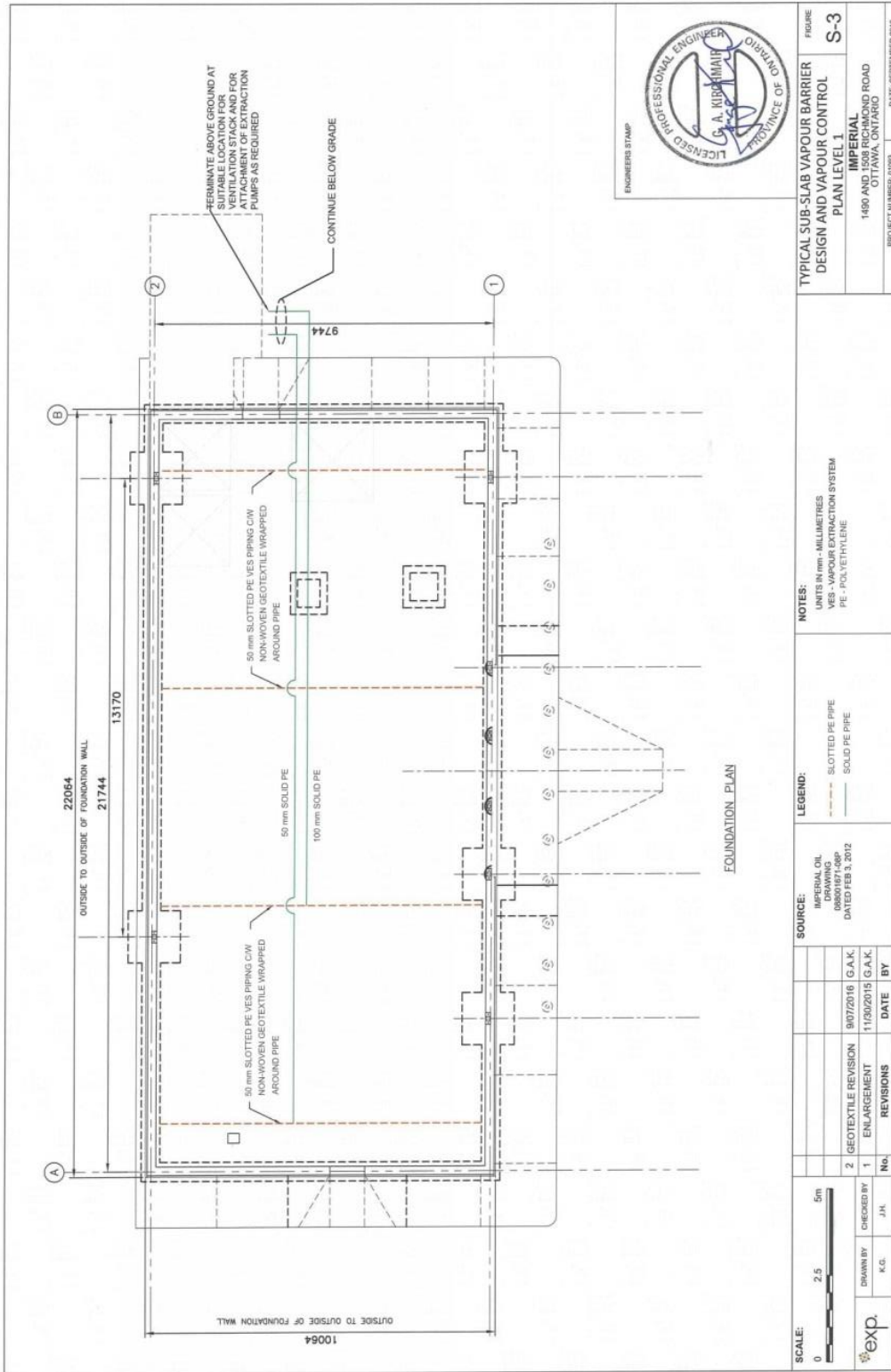
Schedule 'C'

Soil Barrier Options for 1508 Richmond Road, City of Ottawa



Schedule 'D'

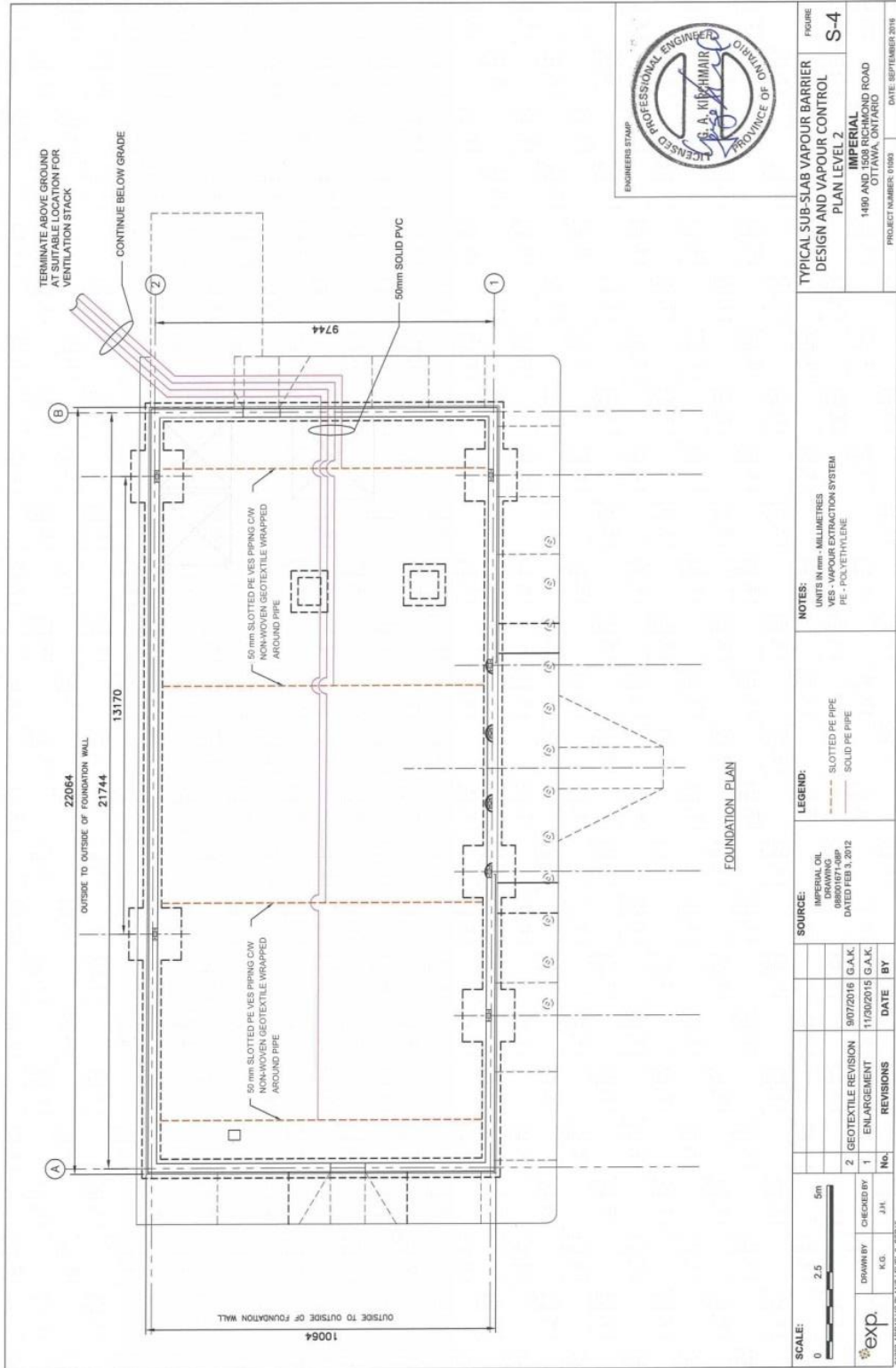
Sub-Slab Vapour Barrier for Future Building at 1508 Richmond Road, City of Ottawa



Note: building envelope delineation & dimensions are for illustration purposes only

Schedule 'D' (cont'd)

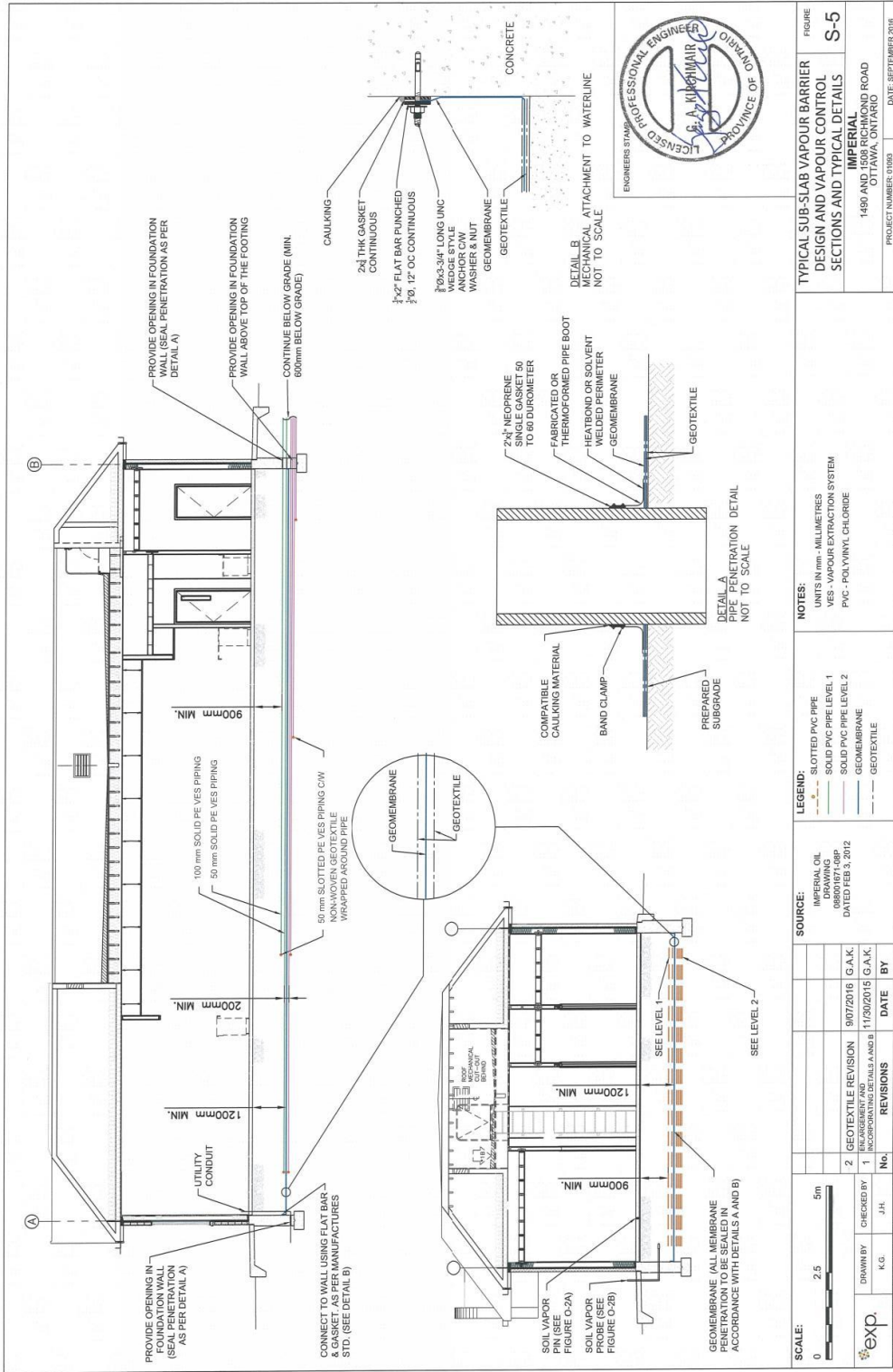
Sub-Slab Vapour Barrier for Future Building at 1508 Richmond Road, City of Ottawa



Note: building envelope delineation & dimensions are for illustration purposes only

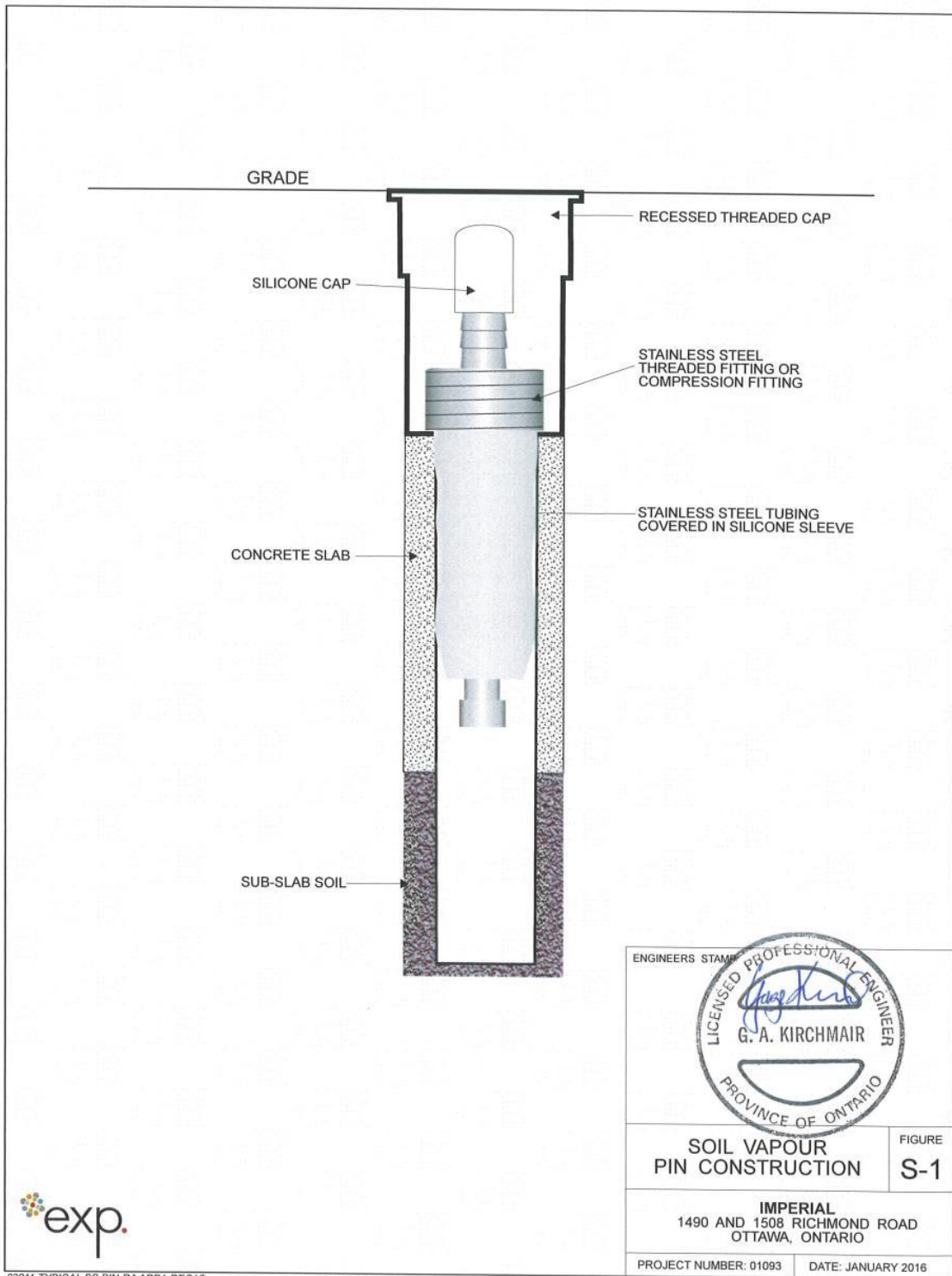
Schedule 'D' (cont'd)

Sub-Slab Vapour Barrier for Future Building at 1508 Richmond Road, City of Ottawa



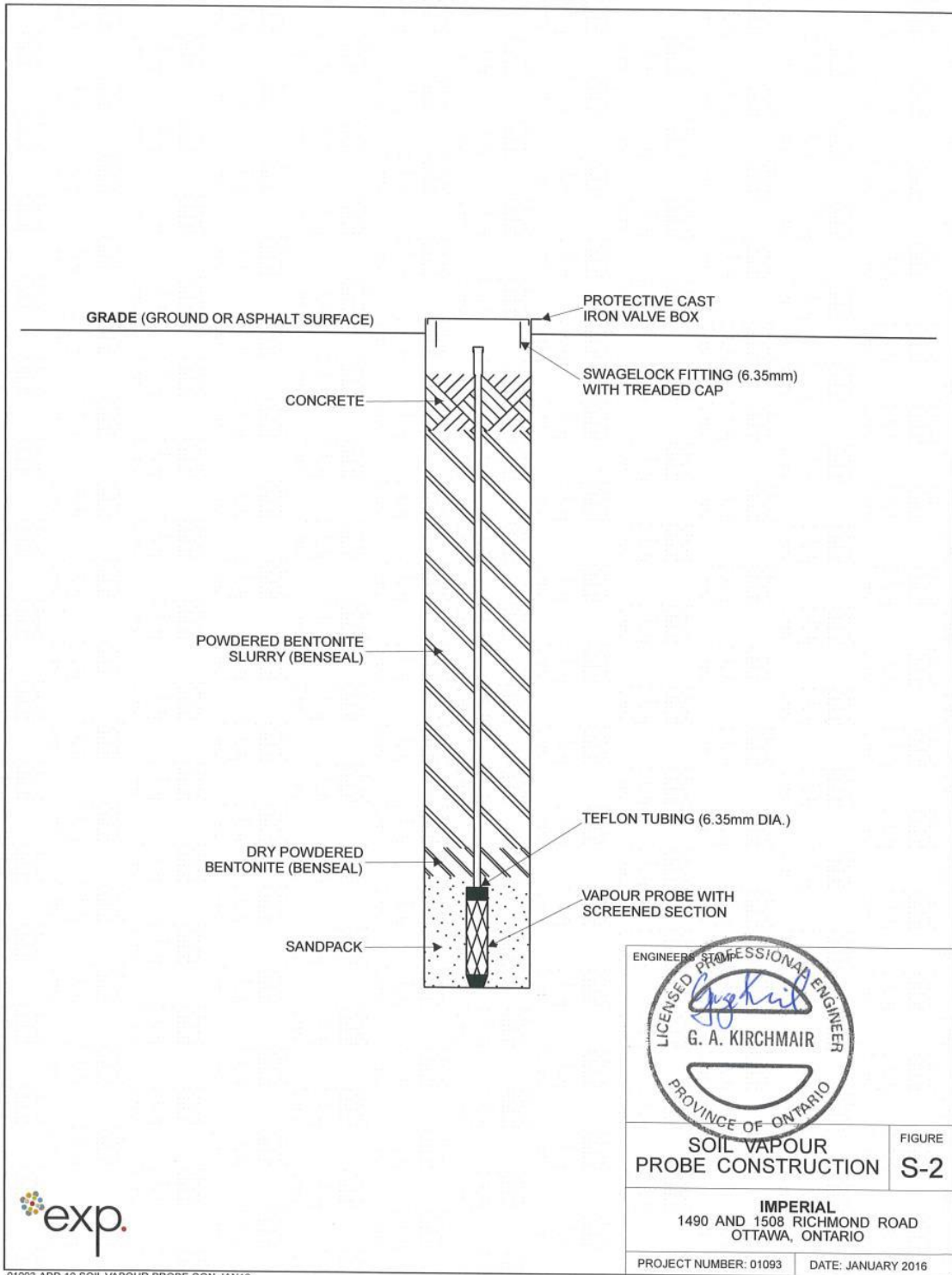
Note: building envelope delineation & dimensions are for illustration purposes only

Schedule 'E'  
 Sub-Slab Vapour Pin for Building Constructed After Issuance of CPU  
 1508 Richmond Road, City of Ottawa



Schedule 'E' (cont'd)

Sub-Slab Vapour Probe for Building Constructed After Issuance of CPU  
1508 Richmond Road, City of Ottawa





Schedule 'F'

Soil Vapour Criteria ("SVC")  
for Volatile Organic Compounds in Sub-Slab Vapours

1508 Richmond Road, Ottawa, Ontario

Contaminant of Concern	SVC Slab on Grade [ug/m <sup>3</sup> ]	SVC Basement [ug/m <sup>3</sup> ]
Benzene	408	82
Bromoform	813	163
Carbon Tetrachloride	150	30
Chloroform	169	34
1,4-Dichlorobenzene	224	45
1,2-Dichloroethane	35	7.0
<i>cis</i> -1,2-Dichloroethene	26,750	5,350
<i>trans</i> -1,2-Dichloroethene	10,725	2,145
Ethylbenzene	50,250	10,050
Ethylene Dibromide	1.5	0.3
<i>n</i> -Hexane	447,500	89,500
Methylene Chloride	38,750	7,750
Methyl tert-butyl ether	3,450	690
1,1,1,2-Tetrachloroethane	121	24
1,1,2,2-Tetrachloroethane	15	3.1
Tetrachloroethylene	3,433	687
Toluene	895,000	179,000
1,1,2-Trichloroethane	56	11
Trichloroethylene	100	20
Xylenes	125,250	25,050
PHC – Fraction F1	2,135,000	427,000
Aliphatic C <sub>6</sub> – C <sub>8</sub>	8,255,000	1,645,000
Aliphatic >C <sub>8</sub> – C <sub>10</sub>	447,500	89,500
Aromatic >C <sub>8</sub> – C <sub>10</sub>	895,000	17,900
PHC – Fraction F2	402,500	80,500
Aliphatic >C <sub>10</sub> – C <sub>12</sub>	447,500	89,500
Aliphatic >C <sub>12</sub> – C <sub>16</sub>	447,500	89,500
Aromatic >C <sub>10</sub> – C <sub>12</sub>	89,500	17,900
Aromatic >C <sub>12</sub> – C <sub>16</sub>	89,500	17,900

Schedule 'G'

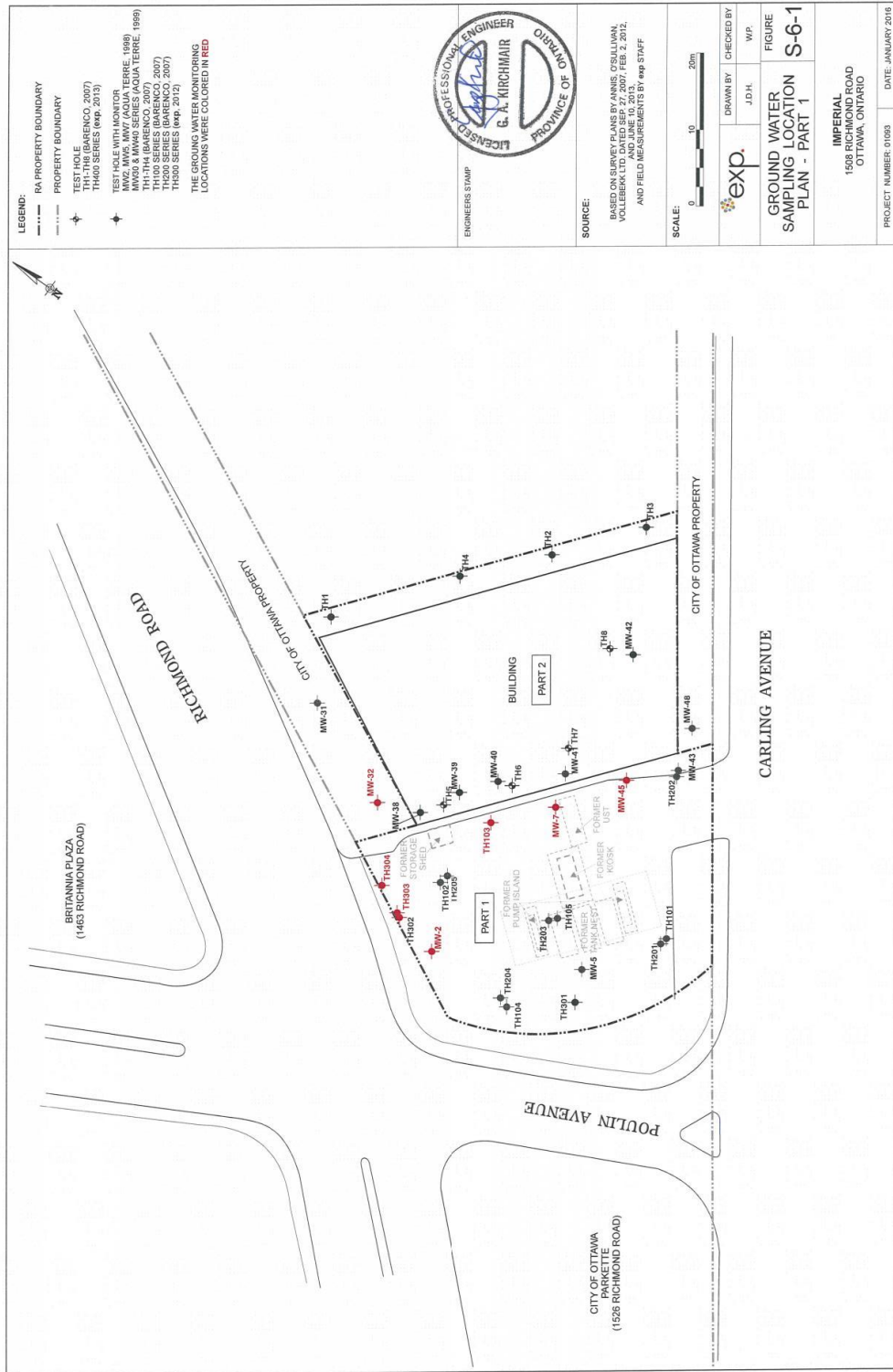
Indoor Air Target Levels  
for Volatile Organic Compounds

1508 Richmond Road, Ottawa, Ontario

Contaminant of Concern	Indoor Air Target Levels [ $\mu\text{g}/\text{m}^3$ ]
Benzene	1.63
Bromoform	3.25
Carbon Tetrachloride	0.60
Chloroform	0.675
1,4-Dichlorobenzene	0.894
1,2-Dichloroethane	0.14
<i>cis</i> -1,2-Dichloroethene	107
<i>trans</i> -1,2-Dichloroethene	42.9
Ethylbenzene	0.006
Ethylene Dibromide	201
<i>n</i> -Hexane	1,790
Methylene Chloride	155
Methyl tert-butyl ether	13.8
1,1,1,2-Tetrachloroethane	0.483
1,1,2,2-Tetrachloroethane	0.062
Tetrachloroethylene	13.73
Toluene	3,580
1,1,2-Trichloroethane	0.223
Trichloroethylene	0.401
Xylenes	501
PHC – Fraction F1	8,540
Aliphatic C <sub>6</sub> – C <sub>8</sub>	32,900
Aliphatic >C <sub>8</sub> – C <sub>10</sub>	1,790
Aromatic >C <sub>8</sub> – C <sub>10</sub>	358
PHC – Fraction F2	1,610
Aliphatic >C <sub>10</sub> – C <sub>12</sub>	1,790
Aliphatic >C <sub>12</sub> – C <sub>16</sub>	1,790
Aromatic >C <sub>10</sub> – C <sub>12</sub>	358
Aromatic >C <sub>12</sub> – C <sub>16</sub>	358

# Schedule 'H'

## Groundwater Monitoring Well Locations for 1508 Richmond Road, City of Ottawa



Schedule 'I'

Groundwater Monitoring Benchmarks in µg/L  
for Monitors TH-103, MW-7, and MW-45,  
located at 1508 Richmond Road, City of Ottawa

Contaminant of Concern	2011 SCS Table 3 Standards	Maximum Concentrations Found at Each Monitor (2011-2013 Period)		
		TH103	MW-7	MW-45
Benzene	44	1,400	160	0.60
Carbon Tetrachloride	0.79	<0.20	<0.20	<0.40
Chloroform	2.4	<0.35	<0.20	<0.40
1,4-Dichlorobenzene	8	1.9	<0.5	<1.0
1,2-Dichloroethane	1.6	<0.5	<0.5	<1.0
1,1,2-Trichloroethane	4.7	<0.20	<0.2	<1.0
Trichloroethylene	1.6	0.24	<0.2	<0.40
PHC – Fraction F1	750	1,100	3,300	3,900

Schedule 'J'

Groundwater Monitoring Benchmarks in µg/L  
for Monitors MW-2, MW-32, TH-303 and TH-304  
(all located at 1508 Richmond Road, City of Ottawa  
or within municipal right-of-way)

Contaminant of Concern	2011 SCS Table 3 Standards	Maximum Concentrations Found at Each Monitor (2011-2013 Period)			
		MW-2	MW-32	TH303	TH304
Benzene	44	5,400	44	5,100	3,400
Carbon Tetrachloride	0.79	<250	<25	0.79	<100
Chloroform	2.4	2.4	-	<5.6	<5.1
1,2-Dichloroethane	1.6	<500	<50	3.5	<200
Ethylbenzene	2,300	4,100	2,300	2,900	2,600
<i>n</i> -Hexane	51	250	51	51	51
Toluene	18,000	22,000	18,000	18,000	18,000
Xylenes	4,200	20,000	4,200	6,500	4,200
PHC – Fraction F1	750	24,000	750	12,000	12,000
PHC – Fraction F2	150	1,700	150	1,300	1,600

**CERTIFICATE OF REQUIREMENT**

**s. 197(2)**

***Environmental Protection Act***

This is to certify that pursuant to section 4.9 of Certificate of Property Use 5225-ADDSRF-A issued by Steve Burns, Director of the Ministry of the Environment and Climate Change, under sections 168.6 and 197 of the *Environmental Protection Act*, on February 28, 2018, being a Certificate of Property Use and order under subsection 197(1) of the *Environmental Protection Act* relating to the property municipally known as 1508 Richmond Road, Ottawa Ontario, being all of PIN 03962-0388 (LT) (the "property") with respect to a Risk Assessment and certain Risk Management Measures on the property

IMPERIAL OIL LIMITED

And any other persons having an interest in the property, are required before dealing with the property in any way, to give a copy of the Certificate of Property Use, including any amendments thereto, to every person who will acquire an interest in the property.

Under subsection 197(3) of the *Environmental Protection Act*, the requirement applies to each person who, subsequent to the registration of this certificate acquire an interest in the property.