

## **DRAFT Certificate of Property Use**

Issued under the authority of the Environmental Protection Act, R.S.O. 1990, c. E.19, sections 168.6 (CPU), 132 (Financial Assurance) and 197 (Order)

Certificate of Property Use number 0201-BYPLY6
Risk Assessment number 0531-A3KJZT

Owner: 2366885 Ontario Inc.

1944 Fowler Drive

Mississauga, Ontario, L5K 0A1

Site: 10194 Heart Lake Road and 0 Heart Lake Road, Brampton

with a legal description described below:

Part of Lot 11, Concession 2 EHS Ching As In CH21799, Save and Except Block 696, Parts 1, 2, 3, 4 and 5 Plan 43R-31098, Lying North East of Part 1 Plan 43R-31217 and Parts 1 and 2, Plan 43R-31192, Save and Except Part 2, Plan 43R-34515, Brampton Being part of PIN 14227-1264 (LT),

and

Part of Lot 11, Concession 2, EHS Ching, Described as Parts 4 and 5, Plan 43R-34515, Brampton Being part of PIN 14227-1266 (LT)

## NOTE TO DRAFT: TO BE CONFIRMED

This Certificate of Property Use and section 197 Order set out the requirements regarding the above-noted Property and the Risk Assessment carried out in relation to the Property which was assigned the number noted above and is described in more detail in Part 1 below.

Refer to Part 1 of the CPU, Interpretation, for the meaning of all the defined capitalized terms that apply to the CPU.

## Part 1: Interpretation

In this CPU, the following capitalized terms have the meanings described below. These terms are also defined in the Approved Model. Not all of these terms may be used in this CPU.

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

- "Adverse Effect" has the same meaning as in the Act; namely,
- (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.
- "ASTM" means the American Society for Testing and Materials.
- "Aquablok<sup>TM</sup>" means Aquablok<sup>TM</sup> 2080FW which is a patented, composite-aggregate technology for freshwater application resembling small stones that is typically comprised of a dense aggregate core with a powdered high-swell sodium bentonite coating which is approximately 20% bentonite by weight that provides low permeability seal in water environment without mechanical compaction.
- "Barriers" means the Soil Cap Barrier, the Cattail Zone Sediment Cap Barrier and the Permanent Pool Sediment Barrier.
- "Soil Cap Barrier" means cover above the Contaminants of Concern present in the soil.
- "Building" means an enclosed structure occupying an area greater than ten square metres consisting of a wall or walls, roof and floor.
- "Capping Soil" means, of
  - (a) soil found on, in or under the Property in which no Property Specific Contaminants of Concern are present, or
  - (b) soil that meets the applicable site condition standards for the Property and does not contain any contaminant for which no applicable site condition standard for soil is prescribed under Part IX (Site Condition Standards and Risk Assessment) and which is associated with any potentially contaminating activity described in the Risk Assessment.
- "Cattail Zone" means the area of PSW #31 occupying an area of approximately 6000 m<sup>2</sup> of the Property that is located at elevations between 242.5 metres above sea level (masl) and 243.0 (masl) and that is seasonally dry during the late summer and early fall periods.
- "Cattail Zone Sediment Cap Barrier" means the cover above the Contaminants of Concern present in the sediment within the Cattail Zone.
- "Certificate of Property Use" or "CPU" means this certificate of property use bearing the number 0201-BYPLY6 issued for the Property by the Director under section 168.6 of the Act, as it may be amended from time to time.
- "Competent Person" has the same meaning as in the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1.

"Contaminants of Concern" has the same meaning as in O. Reg. 153/04, which, for the Property, means one or more contaminants found on, in or under the Property at a concentration that exceeds the applicable site condition standards for the Property, as specified in section 7 of the Risk Assessment report and in Schedule A of the CPU.

"Director" means a person in the Ministry appointed as a director for the purpose of issuing a certificate of property use under section 168.6 of the Act.

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

"GPR Bathymetry" means ground penetrating radar survey to measure water depth and sediment stratigraphy.

"Intrusive Activities" means any intrusive activity undertaken at the Property, such as excavating or drilling into soil, sediment or ground water, which may disturb or expose Contaminants of Concern at the Property.

"Professional Engineer" means a person who means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28 and has obtained the appropriate education and training and has demonstrated experience and expertise in the areas related to the work required to be carried out in this CPU.

"Minister" means the minister of the Ministry.

"Ministry" means the ministry of the government of Ontario responsible for the administration of the Act, currently named the Ministry of the Environment, Conservation and Parks.

"O. Reg. 153/04" means Ontario Regulation 153/04 (Record of Site Condition – Part XV.1 of the Act), made under the Act.

"O. Reg. 406/19" means Ontario Regulation 406/19 (On-Site and Excess Soil Management), made under the Act.

"Owner" means the owner(s) of the Property, beginning with the person(s) to whom the Certificate of Property Use for the Property is first issued by the Director under section 168.6 of the Act based on the Risk Assessment, and any subsequent owner of the Property.

"Permanent Pool Zone" means the area of PSW #31 occupying an area of approximately 7500 m<sup>2</sup> of the Property that is located at elevations below the seasonal low water level of 242.5 metres above sea level (masl).

"Permanent Pool Sediment Cap Barrier" means the cover above the Contaminants of Concern present in the sediment within the Permanent Pool Zone.

"Property" means the property that is the subject of the Risk Assessment and is described in the property "Site" section on page 1 above.

"Property Specific Standards" means the standards established as the maximum allowable concentrations for the Contaminants of Concern at the Property, as specified in section 6 of the Risk Assessment report and in Schedule A of the CPU.

"Provincial Officer" has the same meaning as in the Act, namely, a person who is designated by the Minister as a provincial officer for the purposes of the Act and the regulations.

"PSW #31" means Provincially Significant Wetland #31, as designated by the City of Brampton Official Plan.

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

"Risk Assessment" means the Risk Assessment Number 0531-A3KJZT submitted with respect to the Property and accepted by a Director under section 168.5 of the Act on March 1, 2021 and set out in the following documents.

- Risk Assessment of the Northeast Quadrant of Bovaird Drive East and Heart Lake Road, Brampton, Ontario, by Intrinsik Corp., dated February 2017
- Revised Risk Assessment Report for 10194 Heart Lake Road and 0 Heart Lake Road, Brampton,
   Ontario, report prepared by Intrinsik, dated February 7, 2018
- Revised Risk Assessment Report for 10194 Heart Lake Road and 0 Heart Lake Road, Brampton,
   Ontario, report Prepared by Intrinsik Environmental Sciences Inc., dated January 30, 2020
- RE: 10194 Heart Lake Road, Brampton, e-mail from Glenn Ferguson, Intrinsik Environmental Sciences Inc., received by TASDB on May 28, 2020, with the following document, attached:
  - Heart Lake Road Phase Two CSM (2019 update)\_text.pdf
- Revised Risk Assessment Report for 10194 Heart Lake Road and 0 Heart Lake Road, Brampton,
   Ontario, report prepared by Intrinsik Environmental Sciences Inc., dated August 4, 2020
- A Revised Risk Assessment of the Northeast Quadrant of Bovaird Drive East and Heart Lake Road, Brampton, Ontario, report prepared by Intrinsik Corp., dated December 2020
- RE: 10194 Heart Lake Road and 0 Heart Lake Road, Brampton; RA1493-15; IDS#0531-A3KJZT, e-mail from Glenn Ferguson, Intrinsik Environmental Sciences Inc., received by TASDB on February 26, 2021, with the following document attached:
  - Heart Lake Road Updated Tables 1-2 and 6-2 Feb 2021.pdf

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

"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 Subsection 168.6(1) of the Act states that if a risk assessment relating to a 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:
  - Take any action 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.
  - 2. 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 of property use 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 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; and
  - (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 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.
- 2.8 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.
- 2.9 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.
- 2.10 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 was undertaken for the Property on behalf of the Owner to assess the human health risks and ecological risks associated with the presence or discharge of Contaminants of Concern on, in or under the Property and to identify appropriate Risk Management Measures to be implemented to ensure that the Property is suitable for the intended use: "Agricultural or Other Use", as defined in O. Reg. 153/04.
- 3.2 The contaminants on, in or under the Property that are present above Table 1 standards of the *Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act* published by the Ministry and dated April 15, 2011 are set out in the Risk Assessment and in Schedule A (Contaminants of Concern). The Standards for these Contaminants of Concern are also set out in Schedule A which is attached to and forms part of the CPU. Also attached to and forming part of the CPU are the following figures:
  - Plan of Survey of Part of Lot 11, Concession 2, East of Hurontario Street (Geographic Township of Chinguacousy), City of Brampton, Regional Municipality of Peel, prepared by Schaeffer Dzaldov Bennett Ltd., Ontario Land Surveyors, Received and Deposited on April 3, 2012. NOTE TO DRAFT: TO BE CONFIRMED
  - Figure 1B, Risk Management Measures Interim Risk Management Measures 2019, prepared by WSP Canada Inc., dated July 2020.

- Figure 4, Risk Management Measures Soil Cap, prepared by WSP Canada Inc., dated July 2020
- Figure 5, Risk Management Measures Sediment Cap Cattail Zone, prepared by WSP Canada Inc., dated June 2020.
- Figure 6, Risk Management Measures Sediment Cap Permanent Pool, prepared by WSP Canada Inc., dated July 2020.
- Figure 7, Risk Management Measures Capping, prepared by WSP Canada Inc., dated July 2020.
- Figure 10, Risk Management Measures PSW Monitoring Stations, prepared by WSP Canada Inc., dated July 2020.
- 3.3 I am of the opinion, for the reasons set out in the Risk Assessment that the Risk Management Measures described therein and in Part 4 of the CPU are necessary to prevent, eliminate or ameliorate an Adverse Effect on the Property that has been identified in the Risk Assessment.
- 3.4 I am of the opinion, for the reasons set out in the Risk Assessment, that Contaminants of Concern require on-going pathway elimination and it is necessary to restrict the use of the Property and/or the construction of Buildings and/or the notice provisions as outlined in Part 5 of this CPU.
- 3.5 I am of the opinion, that the requirements set out in Part 6 of this CPU are necessary to supplement the Risk Management Measures described in the Risk Assessment and in Part 4 of the CPU.
- 3.6 I believe for the reasons set out in the Risk Assessment that it is also advisable to require the disclosure of this CPU and the registration of notice of the CPU on title to the Property as set out in the order requirements in Part 7 of this CPU.

## Part 4: CPU Risk Management Measures and Requirements Relating to the Risk Assessment and the Property

I hereby require the Owner to do or cause to be done the following under the authority of paragraph 168.6(1)1 of the Act:

4.0 Implement, and thereafter maintain or cause to be maintained, the following Risk Management Measures and requirements identified in the Risk Assessment and set out in Items 4.1 to 4.11 and 5.2 as applicable.

#### 4.1 INTERIM RISK MANAGEMENT MEASURES

Under the supervision of a Professional Engineer continue to implement the interim risk management measures as required by Provincial Officer's Order 4885-BDHL2W and as described in Section 7.2.1 of the Risk Assessment until such time that the Soil and Sediment Cap Barriers described in Item 4.2 have been constructed and the Order is either amended or revoked in its entirety.

4.1.1 Notwithstanding the above, the groundwater supply well with Water Supply Well Tag #A242593 as shown in Figure 1B that has been installed as an interim risk management measure shall remain in place and be maintained by the Owner for use as a future contingency measure to maintain elevated surface water levels within PSW#31 should it be recommended through inspections that hydration of the perimeter of the Cattail Zone Sediment Cap Barrier Risk Management Measure be necessary. Removal of the groundwater supply may commence after inspections have confirmed the establishment of a sustainable root mass above the sediment capping layer and written notification is received from the Director.

#### 4.2 SOIL AND SEDIMENT CAP BARRIERS

## 4.2.1 Soil Cap Barrier Risk Management Measure

Cover all areas of the Property identified in Figure 7 as "Soil Cap" area where Contaminants of Concern are present at or within 1.0 metre(s) below the soil surface such that a Soil Cap Barrier with a minimum thickness of 1.0 metres that meets the Table 1 Site Condition Standards that is placed immediately above a geotextile material, as shown in Figure 4 and that is installed as specified in Section 7.2.2.1 of the Risk Assessment report, so as to prevent exposure to the Contaminants of Concern at the Property, in conjunction with any existing Barriers in any other areas of the Property where Contaminants of Concern are present below the soil surface. The Soil Cap Barrier Risk Management Measure shall be installed under the direction and supervision of a Professional Engineer.

#### 4.2.2 Cattail Zone Sediment Cap Barrier Risk Management Measure

Cover all areas of the Property identified in Figure 7 as the "Sediment Cap Cattail Zone" area within PSW #31 where Contaminants of Concern are present within the sediment of the Cattail Zone such that a sediment cap barrier that includes a minimum thickness of 6.4 centimetres of Aquablok<sup>TM</sup> (hydrated) overlain by a minimum thickness of 5 centimetres of organic mulch vegetation, shown in Figure 5 and that is installed as specified in Section 7.2.2.2.1 of the Risk Assessment report, so as to prevent exposure to the Contaminants of Concern at the Property. The Cattail Zone Sediment Cap Barrier Risk Management Measure shall be installed under the direction and supervision of a Professional Engineer.

#### 4.2.3 Permanent Pool Sediment Cap Barrier Risk Management Measure

Cover all areas of the Property identified in Figure 7 as the "Sediment Cap Permanent Pool" area within PSW #31 where Contaminants of Concern are present within the sediment of the Permanent Pool Zone such that a sediment cap barrier that includes a minimum thickness of 15 centimetres of Aquablok™ (hydrated) applied in two lifts, with the second lift not to be placed until turbidity levels within PSW #31 have stabilized, as shown in Figure 6 and that is installed as specified in Section 7.2.2.2.2 of the Risk Assessment report, so as to prevent exposure to the Contaminants of Concern at the Property. The Permanent Pool Sediment Barrier Risk Management Measure shall be installed under the direction and supervision of a Professional Engineer.

## 4.2.4 Fencing Requirements

Install fencing around the perimeter of the Property as shown and specified in Figure 9 so as to prevent exposure to the Contaminants of Concern at the Property. Fencing shall be maintained so long as the Contaminants of Concern are present at the Property.

#### 4.3 CONSTRUCTION REQUIREMENTS

## 4.3.1 Other permitting agencies

In addition to the requirements outlined in Item 4.2, the Owner shall ensure that the construction of the Barriers is in accordance with the requirements of other permitting agencies, including but not necessarily limited to the Toronto Region Conservation Authority and the Ministry of Natural Resources and Forestry. The Owner shall provide to the Director, upon receipt, a copy of any permit, or other authorizing document that pertains to the construction of the Barriers. If the requirements of any permit, or other authorizing document for a Barrier is different from the specifications described in Item 4.2, the Owner shall submit a request to the Director for approval to alter the requirements.

#### 4.3.2 Construction schedule

The Owner shall provide notification to the Director at least one week prior to the start of construction. The Owner shall include with the notification a schedule for the construction of the Barriers.

#### 4.3.3 Construction phase inspection and reporting for all Barriers

Prepare and implement a written construction and inspection plan for the installation of the Barriers as described in Section 7.2.2 of the Risk Assessment. The plan shall be prepared under the supervision of a Professional Engineer and is to be retained by the Owner and be available for inspection upon request by a Provincial Officer. The construction and inspection plan shall include, at a minimum:

- a. procedures and timing for implementing the program;
- procedures for training the selected general contractor and the Professional Engineer regarding the application of AquablokTM based on installation equipment and selected methodology to ensure minimum design specifications are achieved;
- description of installation methods, equipment application rates, and mitigation
  measures, as required, so as to minimize potential for adverse effects due to erosion
  and suspension of the Contaminants of Concern in surface water during the installation
  and construction of the barriers to site soils and sediment;
- d. requirements and procedures for daily inspections and monitoring activities, including documenting application methodology, application rates and coverage area.

- e. requirements and procedures for a quality assurance and quality control program to ensure that the Barriers have been installed to the design specifications including the physical verification of the thickness of the applied Barriers with the requirement that any noted deficiencies or promptly repaired to the design specifications;
- f. requirements and procedures for site security including employment of overnight personnel to deter potential human health and ecological receptors during construction period. Overnight security at the Site is required until the installation of the Cattail Zone Sediment Cap Barrier is complete, and the first lift of Permanent Pool Sediment Cap Barrier has been placed; and
- g. recording, in writing, all inspections, deficiencies, repairs and implementation of contingency measures, to be retained by the Owner and be available for inspection upon request by a Provincial Officer.

## 4.3.4 Construction Phase Surface Water Quality Monitoring and Sampling

Under the supervision of a Qualified Person implement the construction phase surface water quality monitoring program described in Section 7.2.12.1 of the Risk Assessment at the locations shown in Figure 10. The construction phase surface water quality monitoring program shall include, but not be limited to the following requirements:

- a. baseline condition monitoring to begin at least one week prior to beginning construction of the Barriers to establish baseline surface water quality conditions representative of PSW#31, as follows;
  - i. daily monitoring for surface water turbidity within PSW #31; and
  - ii. collection of surface water quality samples at locations SW1, SW2 and SW3 at midpoint of water column.
- b. ongoing monitoring upon commencing construction of the Barriers, as follows;
  - i. daily monitoring of surface water turbidity at locations within PSW #31 where the Sediment Cap Barriers have been installed; and
  - ii. weekly surface water samples collected at locations SW1, SW2 and SW3 at mid-point of water column.
- surface water quality samples shall be sent to an accredited laboratory and analysed for the parameters and compared against the Provincial Water Quality Objectives as identified in Schedule B of the CPU;
- d. in the event that the concentration of any parameter in Schedule B is identified to exceed the level measured in the baseline monitoring event by greater 20% the Qualified Person and Professional Engineer shall review construction activities and shall make recommendations to be implemented by the contractor to reduce disturbance of underlying sediment. If the concentration for any parameter in Schedule B continues exceeds the baseline monitoring event level by greater than 20% in three consecutive sampling events the Director shall be immediately notified, and a contingency plan is to be submitted within five days of receipt of the results from the third event

e. the monitoring described in section b., shall continue until the construction of the Cattail Zone Sediment Cap and Permanent Pool Sediment Cap is complete and the surface water turbidity and surface water quality levels show a stable or downward trend.

#### 4.3.5 As Constructed Plans

Prepare and submit to the Director an Interim Barrier Post – Construction Report documenting the installation of the Soil Cap Barrier, the Cattail Zone Sediment Barrier, the Permanent Pool Sediment Barrier and fencing Risk Management Measures within 30 days following completion of construction of the Barriers. The report shall be prepared by a Professional Engineer, and shall document site observations, QA/QC, inspections and monitoring including the results of surface water quality sampling as described in Item 4.3.4 The report shall provide confirmation that the Barrier Risk Management Measures were constructed in accordance with the specifications outlined in Item 4.2 and shall include a site plan of the entire Property, showing the Property, the fencing, and the location, type and design of each Barrier at the Property, including cross-sectional drawings A-A', B-B', C-C' and D-D' of the Barriers as shown in Figure 10 showing its design and vertical and lateral extent.

#### 4.4 Continuing inspection, maintenance and reporting requirements for all Barriers

Prepare and implement a written inspection and maintenance program as described in Section 7.2.12.3 of the Risk Assessment, prepared by a Qualified Person, to be conducted under the supervision of a Professional Engineer, and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, so as to ensure the continuing integrity of each Barrier at the Property so long as the Contaminants of Concern are present at the Property, including, at a minimum:

- a. procedures and timing for implementing the program;
- semi-annual inspections, in early spring and late summer/fall of the Soil Cap Barrier and Cattail Zone Sediment Barrier to be scheduled to align with seasonally dry periods when the sediment in the cattail zone would be potentially exposed for evidence of de-hydration of the AquablokTM (cracking/flaking), damage from animal foraging or areas requiring repairs;
- quarterly inspection with respect to any fencing on the Property. Any observed damage to
  the fencing barriers be immediately repaired and inspections to note any obvious signs of
  unauthorized access to PSW#31;
- d. repairing promptly any such deficiencies, to the original design specifications, with written confirmation that the Barrier has been properly repaired. The Director shall be notified promptly if the deficiencies cannot be repaired within 30 days or recur without resolution;
- e. contingency measures, to be implemented if cracks, breaches or any loss of integrity of the Barrier cannot be repaired in a timely manner to prevent exposure to the Contaminants of Concern in that area of the Property;
- f. recording, in writing, all inspections, deficiencies, repairs and implementation of contingency

measures, to be retained by the Owner and be available for inspection upon request by a Provincial Officer and which is updated and delivered to the Owner within 30 days following making any alteration to the program;

- g. maintain a site plan of the entire Property, prepared by a Licensed Professional Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, showing the Property, the fencing, and the location, type and design of each Barrier at the Property, including cross-sectional drawings of the Barrier showing its design and vertical and lateral extent and which is updated and delivered to the Owner within 30 days following making any alteration to the location, design or extent of the Barrier, or other relevant feature shown on the site plan;
- h. prepare and implement written procedures, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for written and oral communication to all persons who may be involved in Intrusive Activities at the Property that may disturb a Barrier at the Property, so as to ensure the persons are made aware of the presence and significance of the Barrier and the Contaminants of Concern at the Property and the precautions to be taken to ensure the continued integrity of the Barrier when undertaking the Intrusive Activities, and if damaged, to ensure that the Barrier is repaired promptly to the original design specifications, or, if it cannot be repaired promptly, to ensure that the contingency measures are implemented, and records kept, as specified in the inspection and maintenance program; and which are,
  - delivered to the Owner before any Intrusive Activities are undertaken at the Property;
     and
  - ii. updated and delivered to the Owner within 30 days following making any alteration to the procedures.

#### 4.5 Sediment Cap Barrier thickness and integrity verification, inspection and reporting

Under the supervision of a Professional Engineer implement the post construction Sediment Cap Barrier thickness and integrity verification inspection program described in Section 7.2.12.2 of the Risk Assessment. The integrity verification inspection program shall include, but not be limited to the following requirements:

- a. GPR Bathymetry mapping of the Sediment Cap Cattail Zone and the Sediment Cap Permanent Pool Zone to be completed within one year of the installation of the Barriers;
- b. Freeze core sampling at the ten locations within PSW#31 as shown in Figure 10 with sampling events to be completed in the winter period (December February) immediately following the installation of the Cattail Zone Sediment Barrier and Permanent Pool Sediment Barrier and in the winter (December February) five years after the installation of the Barriers. The freeze core sampling program shall include at minimum:
  - i. measurement of the thickness of the Cattail Zone Sediment Barrier and Permanent Pool Sediment Barrier.
  - ii. measurement of the thickness of any new sediment that has deposited above the Barriers,

- iii. samples of any new sediment that has been deposited above the barriers (or alternatively if no new sediment has accumulated, samples of the top few centimeters of the sediment cap itself) to be collected and sent to an accredited laboratory to assess benthic recolonization.
  - a. Sampling to be conducted in accordance with the Ontario Benthic Biomonitoring Network (OBBN) Protocol for Wetland Sampling. Samples to be identified to the lowest taxonomic level required for analysis and assessed using calculation of standard metrics (e.g. taxonomic richness, Hilsenhoff Biotic Index.). The composition of the community and index calculations will indicate the general health of the community.
- c. Prepare and submit to the Director, a Year 1 Barrier Milestone Construction Report within 30 days following completion of the GPR Bathymetry mapping and the initial freeze core sampling event. The report shall be prepared by a Professional Engineer and shall include the following, at minimum:
  - a revised site plan updated to present the findings of the bathymetry measurement and sediment freeze core sampling program including figures showing investigation locations and cross-section drawings to reflect the measured and interpreted vertical and lateral extent of the Barriers;
  - ii. documenting any deviations between the measured cap thickness and the design specifications including changes to the details presented in the Interim Post – Construction Report;
  - iii. assessment of benthic activity including composition of the community and index calculations;
  - iv. recommendations, for repairs or alterations of the Barriers if deemed necessary, including a schedule for completing the work; and
  - iv. assessment of the effectiveness of monitoring and inspection programs and will provide recommended changes as may be advised.
- d. Prepare and submit to the Director a Year 5 Barrier Milestone Construction Report within 30 days following completion of the second freeze core sampling event. The report shall be prepared by a Professional Engineer and shall include the following, at minimum:
  - a revised site plan updated to present the findings of the bathymetry measurement and sediment freeze core sampling program including figures showing investigation locations and cross-section drawings to reflect the measured and interpreted vertical and lateral extent of the Barriers;
  - ii. documenting any deviations between the measured cap thickness and the design specifications including changes to the details presented in the Year 1 Barrier Milestone Construction Report;
  - iii. assessment of benthic activity including composition of the community and index calculations;
  - iv. recommendations, for repairs or alterations of the Barriers if deemed necessary, including a schedule for completing the work; and
  - iv. assessment of the effectiveness of monitoring and inspection programs and will provide recommended changes as may be advised.

## 4.6 Surface Water Monitoring

Under the supervision of a Qualified Person implement the surface water quality monitoring program described in Section 7.2.12.2 of the Risk Assessment at the locations shown in Figure 10 until such time that the Director, upon application by the Owner has reviewed the data available and either alters the frequency of the monitoring or eliminates the requirements altogether. The surface water quality program shall include, but not be limited to the following requirements:

- a. Collection of surface water quality samples at locations SW1, SW2 and SW3 at the mid-point in the water column and the continuous measurement of surface water elevations using level loggers at locations SWL-1 and SWL-2;
- Surface water quality samples shall be sent to an accredited laboratory and analysed for the parameters and compared against the Provincial Water Quality Objectives as identified in Schedule B of the CPU;
- c. The frequency of surface water sampling shall be quarterly (every three months) until such time that the concentration of lead in the surface water in all samples collected is shown to meet the PWQO criteria in four consecutive quarters upon which the sampling frequency is reduced to semi-annual events for a one year period and then to an annual basis thereafter. If at any time the concentration of lead in the surface water is measured to exceed the PWQO the surface water sampling shall revert to a quarterly frequency;
- d. if the concentration of lead in the surface water is identified to exceed the PWQO in any sample collected then the Director shall be promptly notified in writing;
- e. If the concentration of lead in surface water is identified to show an increasing trend as per Mann-Kendall statistical trend analysis with 90% confidence, or if lead in surface water is observed to be in excess of the PWQO in consecutive sampling events then a contingency plan shall be submitted to the Director for approval. The proposed contingency plan shall be prepared by a Qualified Person and include, but not be limited to, a detailed interpretation of the available data collected to date along with recommendations for any additional investigation and/or monitoring as may be required and or recommendations for the implementation of additional risk management and/or remediation measures as may be necessary;
- f. upon the Owner receiving written approval from the Director, the Owner shall implement the approved contingency plan;
- g. Within 30 calendar days of approval of the contingency plan by the Director, the Owner shall submit written confirmation, along with supporting documentation, prepared by a Qualified Person that the contingency plan has been implemented; and
- h. Maintenance of monitoring stations shall occur on a bi-monthly basis.

## 4.7 PROHIBITION OF PLANTING FRUITS AND VEGETABLES FOR CONSUMPTION

The Owner shall refrain from planting fruit and vegetables for consumption on the Property. The planting

of fruit and vegetables for consumption on the Property is prohibited for as long as the Contaminants of Concern in soil and sediment remain present.

#### 4.8 NO GROUND WATER USE RISK MANAGEMENT MEASURE

Implement the following requirements to restrict the use of ground water at the Property:

- a. refrain from using ground water in or under the Property as a source of water; and
- b. except as may be required for continued use as a monitoring well, as defined in the OWRA:
  - properly abandon any wells on the Property, as described or defined in the OWRA, according to the requirements set out in Regulation 903 of the Revised Regulations of Ontario 1990 (Wells) made under the OWRA; and,
  - ii. refrain from constructing on the Property any wells as described or defined in the OWRA.

#### 4.9 HEALTH AND SAFETY PLAN REQUIREMENT

In addition to any requirements under the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1, prepare and implement a written health and safety plan for the Property, prepared by a Competent Person in consultation with a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, that includes information concerning the potential hazards and safe work measures and procedures with respect to the Contaminants of Concern at the Property and the communication of this information to all persons who may be involved in Intrusive Activities at the Property, including, at a minimum:

- a. the procedures and timing for implementing the plan, including the supervision of persons implementing the plan;
- all relevant information concerning the presence of, human exposure to, and risk posed by, the Contaminants of Concern through dermal contact, soil, sediment or ground water ingestion and inhalation of soil particles or vapour, and concerning any biogenic gases such as methane that may be present at the Property including information in the Risk Assessment;
- c. all relevant information, measures and procedures concerning protection of the persons from exposure to the Contaminants of Concern and the precautions to be taken when undertaking Intrusive Activities, including the supervision of workers, occupational hygiene requirements, use of personal protective equipment, provision of air flow augmentation in excavations or other areas or situations of minimal air ventilation, and other protective measures and procedures as appropriate;
- d. all relevant information concerning the presence and significance of the Risk Management Measures and requirements which are being, or have been, implemented at the Property;
- e. the procedures and timing for implementing emergency response and contingency measures and procedures, including contact information, in the event of a health and safety incident;
- f. the recording, in writing, of the implementation of the plan and any health and safety incidents that occur, to be retained by the Owner and be available for inspection upon request by a Provincial Officer;

and which is,

- g. delivered to the Owner before any Intrusive Activities are undertaken at the Property; and
- h. updated and delivered to the Owner within 30 days following making any alteration to the plan.

#### 4.10 SOIL, SEDIMENT AND GROUND WATER MANAGEMENT PLAN REQUIREMENT

Prepare and implement a written soil, sediment and ground water management plan for the Property, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for managing excavated soil and sediment, or soil brought to the Property, and, if any, ground water from dewatering during Intrusive Activities at the Property, so as to prevent exposure to or uncontrolled movement or discharge of the Contaminants of Concern in soil or ground water at the Property, including, at a minimum:

- a. procedures and timing for implementing the plan, including the supervision of persons implementing the plan;
- b. measures to control dust and prevent tracking of soil by vehicles and persons from the Property, including the cleaning of equipment and vehicles;
- c. measures, in addition to any applicable measures specified in O. Reg. 153/04 or O. Reg. 406/19, to manage soil excavated at the Property and any soil brought to or removed from the Property, including:
  - i. characterizing for contaminant quality all excavated soil and any soil brought to the Property, including determining whether the soil:
    - 1. is Capping Soil;
    - 2. meets the Standards; or
    - exceeds the Standards;
  - ii. managing excavated soil separately from any soil brought to the Property, including any excavated soil that is to be:
    - 1. used as Capping Soil at the Property;
    - 2. otherwise used as fill at the Property;
    - 3. removed from the Property for off-site storage or processing but is to be returned for use as fill at the Property; or
    - 4. removed from the Property for off-site use as fill or disposal; and
  - iii. stockpiling of excavated soil and any soil brought to the Property in separate designated areas that:
    - 1. reflect the distinctions described in subparagraphs (c) i and ii;
    - 2. have been lined and covered, as appropriate, to prevent uncontrolled movement or discharge of the Contaminants of Concern;
    - 3. have been bermed or fenced, as appropriate, to restrict access by persons; and
    - have storm water runoff controls in place to minimize storm water runoff contacting stockpiled soil, with provision for discharge of storm water runoff to a sanitary sewer or to other approved treatment if needed;

- d. measures to manage storm water and any ground water from dewatering at the Property to prevent the movement of entrained soil and Contaminants of Concern within and away from the Property, including, in addition to any applicable measures specified pursuant to other applicable law or other instruments, measures such as silt fences, filter socks for catchbasins and utility covers, and provision for discharge to a sanitary sewer or to other approved treatment if needed;
- e. recording, in writing, the soil, sediment, storm water and any ground water management measures undertaken, in addition to any applicable record keeping requirements specified in O. Reg. 153/04, O. Reg. 406/19 or pursuant to other applicable law or other instruments, to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, including:
  - i. dates and duration of the Intrusive Activities being undertaken;
  - ii. weather and site conditions during the Intrusive Activities;
  - iii. the location and depth of excavation activities, and dewatering activities, if any;
  - iv. dust control and soil tracking control measures such as hauling records;
  - v. characterization results for excavated soil and any soil brought to or removed from the Property, and for any ground water from dewatering;
  - vi. soil management activities including soil quantities excavated and brought to and removed from the Property, and stockpile management and storm water runoff control;
  - vii. management activities for any ground water from dewatering;
  - viii. names and contact information for the Qualified Persons and on-site contractors involved in the Intrusive Activities;
  - ix. names and contact information for any haulers and owners or operators of receiving sites for soil and any ground water removed from the Property, and for haulers and owners or operators of project areas (as defined in O. Reg. 406/19 also known as source sites) of any soil brought to the Property;
  - x. any complaints received relating to the Intrusive Activities, including the soil, storm water and any ground water management activities;

and which is,

- xi. delivered to the Owner before any Intrusive Activities are undertaken at the Property;
- xii. updated and delivered to the Owner within 30 days following making any alteration to the plan.

#### 4.11 ANNUAL REPORTS REQUIREMENT

Prepare each year on or before March 31, an annual report documenting activities relating to the Risk Management Measures undertaken during the previous calendar year. A copy of this report shall be maintained on file by the Owner and shall be made available upon request by a Provincial Officer. The report shall include, but not be limited to, the following minimum information requirements:

- a. a copy of all records relating to the interim risk management measured, as outlined in Item 4.1, if applicable;
- a copy of all records relating to the construction phase inspection program for the Barriers to site soils and sediment, as outlined in Item 4.3.1; if applicable
- c. a copy of all records relating to the construction phase surface water monitoring and sampling program, as outlined in Item 4.3.2; if applicable;
- a copy of all records relating to the inspection, maintenance and reporting requirements for the Barriers to site soils and sediment, as outlined in Item 4.4; if applicable;
- e. a copy of all records relating to the sediment cap thickness and integrity verification and reporting requirements for the Barriers to site soils and sediment, as outlined in Item 4.5; if applicable;
- f. a copy of all records relating to the surface water sampling program, as outlined in Item 4.6; if applicable;
- g. a copy of all records relating to the health and safety plan as outlined in Item 4.9; if applicable;
- h. a copy of all records relating to the soil and ground water management plan as outlined in Item 4.10; if applicable; and
- i. a copy of documentation to justify the financial assurance calculation and to meet the record keeping requirements as outlined in Items 6.4, 6.5 and 6.6.

## Part 5: CPU Restrictions on Property Use, Building Construction and Notice Requirements

I hereby require the Owner to do or cause to be done the following under the authority of paragraph 168.6(1)2 of the Act:

## 5.1 Property Use Restriction

Refrain from using the Property for any of the following use(s): any type of property use specified in O. Reg. 153/04 other than "Agricultural or Other Property Use", as specified in O. Reg. 153/04.

#### 5.2 Building Construction Restrictions

Refrain from constructing the following Building(s): Any Buildings.

#### 5.3 Notice of Restrictions

Pursuant to the requirements of subsection 168.6(4) of the Act, 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 Items 5.1 and 5.2, except where noted N/A, and that every occupant complies with such provisions. 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.

#### Part 6: Additional Requirements

I hereby require the Owner to do or cause to be done the following things under the authority of paragraph 168.6(1)1 of the Act:

## 6.1 Site Changes Affecting Risk Management Measures

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, the Owner shall 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 of Concern into the natural environment from the Property. In support of this work, a new risk assessment may need to be completed in accordance with O. Reg. 153/04 and submitted to the Ministry for acceptance. An amendment to the CPU will be issued to address the changes set out in any notice received and any future changes that the Director considers necessary in the circumstances.

## 6.2 Report Retention Requirements

The Owner shall retain a copy of any reports required under the CPU for a period of seven (7) years from the date the report is created and within ten (10) days of the Director or a Provincial Officer making a request for a report, provide a copy to the requesting Director or Provincial Officer.

#### 6.3 Owner Change Notification

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

#### **Financial Assurance**

6.4 Within fifteen (15) days of the date of the CPU, the Owner shall provide financial assurance to the Crown in right of Ontario in the amount of two hundred and forty-four thousand one forty six

dollars (\$244,046.00) in a form satisfactory to the Director and in accordance with Part XII of the Act to cover costs for the performance of the Risk Management Measures required to be carried out under the CPU.

- 6.5 Commencing on March 31, 2023 and at intervals of every three (3) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of financial assurance to implement the actions required under Item 6.4. The re-evaluation of the amount of financial assurance required shall include an assessment based on any new information relating to the environmental conditions of the Property and shall include any costs of additional monitoring and/or implementation of contingency plans.
- 6.6 Commencing on March 31, 2021, the Owner shall prepare and maintain at the Site an updated re-evaluation of the amount of financial assurance required to implement the actions required under Item 6.4 for each of the intervening years in which a re-evaluation is not required to be submitted to the Director under Item 6.5. The re-evaluation shall be made available to the Ministry, upon request. If the re-evaluation is for an amount greater than the amount as set out in Item 6.4 the Owner shall submit to the Director a copy of the re-evaluation.

# Part 7: Section 197 Order (Property Notice and Certificate of Requirement Registration) Requirements

I hereby order the Owner to do or cause to be done the following under the authority of subsections 197(1) and 197 (2) of the Act:

## 7.1 Property Notice Requirement

For the reasons set out in the CPU and pursuant to the authority vested in me by 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,

#### 7.2 Certificate of Requirement Registration

Within fifteen (15) days from the date of receipt of a certificate of requirement issued under subsection 197(2) of the Act completed as outlined in Schedule C register the certificate of requirement on title to the Property, in the appropriate land registry office.

## 7.3 Verification

Within five (5) days after registering the certificate of requirement provide to the Director a copy of the registered certificate and of the parcel register(s) for the Property confirming that registration has been completed.

## Part 8: General Requirements

- 8.1 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, such finding does not invalidate or render unenforceable the requirement in other circumstances nor does it invalidate or render unenforceable the other requirements of the CPU.
- 8.2 An application under subsection 168.6(3) of the Act to alter any terms and conditions in the CPU, or impose new terms and conditions, or revoke the CPU, shall be made in writing to the Director, with reasons for the request.
- 8.3 Failure to comply with the requirements of the CPU constitutes an offence.
- 8.4 The requirements of the CPU are minimum requirements only and do not relieve the Owner from, complying with any other applicable order, statute, regulation, municipal, provincial or federal law, or obtaining any approvals or consents not specified in the CPU.
- 8.5 Notwithstanding the issuance of the CPU, further requirements may be imposed in accordance with legislation as circumstances require.
- 8.6 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.
- 8.7 Failure to comply with a requirement of the CPU by a date specified does not relieve the Owner(s) from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 8.8 The Risk Management Measures identified in the Risk Assessment and also in Part 4 of the CPU and all the other requirements in the CPU shall commence upon the issuance of the CPU and continue in full force and effect in accordance with the terms and conditions of the CPU until such time as the Director alters or revokes the CPU.
- 8.9 The provisions of the CPU shall take precedence in the event of a conflict between the provisions of the CPU and the Risk Assessment.
- 8.10 In the event that the Owner complies with the provisions of Items 7.2 and 7.3 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 and then

transfers ownership of the Property to various condominium unit owners, the ongoing obligations of the Owner under this CPU can be carried out by the condominium corporation on behalf of the new Owners of the Property.

#### Part 9: Hearing before the Environmental Review Tribunal

With respect to those provisions relating to my authority in issuing a certificate of property use under section 168.6 and an order under section 197 of the Act:

- 9.1 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.
- 9.1 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.
- 9.2 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

Email: <u>ERTTribunalSecretary@ontario.ca</u>

and

Loralyn Wild Halton-Peel District Manager, Central Region Ministry of the Environment, Conservation and Parks 4145 North Service Road, Suite 300 Burlington, Ontario L7L 6A3

Fax: 905-319-9902

Email: loralyn.wild@ontario.ca

- 9.4 Unless stayed by the Tribunal under section 143 of the Act, the CPU is effective from the date of issue.
- 9.5 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 Environmental Registry of

Ontario. 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 Minister of the Environment, Conservation and Parks who will place it on the Environmental Registry of Ontario. The notice must be delivered to the Minister of the Ministry of the Environment, Conservation and Parks, College Park 5th Flr, 777 Bay St, Toronto, ON M7A 2J3 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.
- 9.6 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.
- 9.7 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 Environmental Registry of Ontario; and
  - (b) if you appeal, fifteen (15) days after the day on which your notice of appeal is given in the Environmental Registry of Ontario.

Further information on the requirements of the Tribunal regarding an appeal can be obtained directly from the Tribunal by:

Tel: (416) 212-6349 Fax: (416) 326-5370 https://olt.gov.on.ca

Issued at [LOCATION] this [DAY] day of [MONTH], [YEAR] [APPROPRIATE DIRECTOR FOR SIGN OFF]

Director, section 168.6 of the Act Loralyn Wild

Schedule A

Contaminants of Concern and Property Specific Standards

Contaminants of Concern (COC)	Units	Property Specific Standards
MEDIA - SOIL	1	
Acenaphthene	μg/g	0.077
Anthracene	μg/g	0.21
Antimony	μg/g	280
Arsenic	μg/g	74
Barium	μg/g	380
Benz(a)anthracene	μg/g	0.51
Benzo(a)pyrene	μg/g	0.42
Benzo(b)fluoranthene	μg/g	0.49
Benzo(k)fluoranthene	µg/g	0.18
Boron (hot water soluble)	µg/g	3
Cadmium	μg/g	1.7
Chromium (VI)	μg/g	1.2
Chrysene	μg/g	0.45
Copper	μg/g	87
Cyanide (CN-)	μg/g	0.33
Electrical conductivity	mS/cm	1
Fluoranthene	μg/g	1.2
Indeno(1,2,3-cd)pyrene	μg/g	0.2
Lead	μg/g	14,000
Molybdenum	μg/g	4.1
Phenanthrene	µg/g	0.59
Pyrene	µg/g	0.89
Sodium adsorption ratio	unitless	8.8
Thallium	µg/g	14
Uranium	μg/g	3.6

MEDIA – GROUND WATER           Anthracene         µg/L         0.12           Antimony         µg/L         11           Arsenic         µg/L         90           Barium         µg/L         750           Benz(a)anthracene         µg/L         0.27           Benzo(a)pyrene         µg/L         0.21           Benzo(b)fluoranthene         µg/L         0.32           Beryllium         µg/L         1.2           Boron (total)         µg/L         2.800           Chloride         µg/L         1,000,000           Chromium (total)         µg/L         14           Chrysene         µg/L         0.34           Cobalt         µg/L         8.4           Copper         µg/L         8.4           Copper         µg/L         0.65           Lead         µg/L         0.65           Lead         µg/L         0.19           Mercury         µg/L         0.19           Molybdenum         µg/L         0.35           Pyrene         µg/L         0.58           Silver         µg/L         0.6           Uranium         µg/L         54	Contaminants of Concern (COC)	Units	Property Specific Standards
Antimony       μg/L       11         Arsenic       μg/L       90         Barium       μg/L       750         Benz(a)anthracene       μg/L       0.27         Benzo(b)fluoranthene       μg/L       0.21         Benzo(b)fluoranthene       μg/L       0.32         Beryllium       μg/L       1.2         Boron (total)       μg/L       2,800         Chloride       μg/L       1,000,000         Chromium (total)       μg/L       14         Chrysene       μg/L       0.34         Cobalt       μg/L       0.34         Copper       μg/L       0.65         Lead       μg/L       0.65         Lead       μg/L       0.19         Molybdenum       μg/L       0.19         Molybdenum       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony	MEDIA – GROUND WATER	•	
Arsenic         μg/L         90           Barium         μg/L         750           Benz(a)anthracene         μg/L         0.27           Benzo(a)pyrene         μg/L         0.21           Benzo(b)fluoranthene         μg/L         0.32           Beryllium         μg/L         1.2           Boron (total)         μg/L         1.2           Boron (total)         μg/L         1,000,000           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         8.4           Copper         μg/L         0.65           Lead         μg/L         0.65           Lead         μg/L         0.19           Molybdenum         μg/L         0.19           Molybdenum         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         54           Vacenaphthene         μg/g	Anthracene	μg/L	0.12
Barium         μg/L         750           Benz(a)anthracene         μg/L         0.27           Benzo(a)pyrene         μg/L         0.21           Benzo(b)fluoranthene         μg/L         0.32           Beryllium         μg/L         1.2           Boron (total)         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         0.65           Lead         μg/L         0.19           Molybdenum         μg/L         0.19           Molybdenum         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12 <t< td=""><td>Antimony</td><td>μg/L</td><td>11</td></t<>	Antimony	μg/L	11
Benz(a)anthracene         μg/L         0.27           Benzo(a)pyrene         μg/L         0.21           Benzo(b)fluoranthene         μg/L         0.32           Beryllium         μg/L         1.2           Boron (total)         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         0.19           Molybdenum         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         64 </td <td>Arsenic</td> <td>μg/L</td> <td>90</td>	Arsenic	μg/L	90
Benzo(a)pyrene         μg/L         0.21           Benzo(b)fluoranthene         μg/L         0.32           Beryllium         μg/L         1.2           Boron (total)         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         100           Phenanthrene         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         54           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         64	Barium	μg/L	750
Benzo(b)fluoranthene         μg/L         0.32           Beryllium         μg/L         1.2           Boron (total)         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         100           Phenanthrene         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         64	Benz(a)anthracene	μg/L	0.27
Beryllium         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         64	Benzo(a)pyrene	μg/L	0.21
Boron (total)         μg/L         2,800           Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         0.35           Pyrene         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         64	Benzo(b)fluoranthene	μg/L	0.32
Chloride         μg/L         1,000,000           Chromium (total)         μg/L         14           Chrysene         μg/L         0.34           Cobalt         μg/L         8.4           Copper         μg/L         22           Fluoranthene         μg/L         0.65           Lead         μg/L         10           Mercury         μg/L         0.19           Molybdenum         μg/L         100           Phenanthrene         μg/L         0.35           Pyrene         μg/L         0.58           Silver         μg/L         0.6           Uranium         μg/L         54           Vanadium         μg/L         20           MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         230           Arsenic         μg/g         64	Beryllium	μg/L	1.2
Chromium (total)       μg/L       14         Chrysene       μg/L       0.34         Cobalt       μg/L       8.4         Copper       μg/L       22         Fluoranthene       μg/L       0.65         Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       0.09         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Boron (total)	μg/L	2,800
Chrysene       μg/L       0.34         Cobalt       μg/L       8.4         Copper       μg/L       22         Fluoranthene       μg/L       0.65         Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Chloride	μg/L	1,000,000
Cobalt       μg/L       8.4         Copper       μg/L       22         Fluoranthene       μg/L       0.65         Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Chromium (total)	μg/L	14
Copper       μg/L       22         Fluoranthene       μg/L       0.65         Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Chrysene	μg/L	0.34
Fluoranthene       μg/L       0.65         Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthylene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Cobalt	μg/L	8.4
Lead       μg/L       10         Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Copper	μg/L	22
Mercury       μg/L       0.19         Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       64	Fluoranthene	μg/L	0.65
Molybdenum       μg/L       100         Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Lead	μg/L	10
Phenanthrene       μg/L       0.35         Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Mercury	μg/L	0.19
Pyrene       μg/L       0.58         Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Molybdenum	μg/L	100
Silver       μg/L       0.6         Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Phenanthrene	μg/L	0.35
Uranium       μg/L       54         Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Pyrene	μg/L	0.58
Vanadium       μg/L       20         MEDIA - SEDIMENT         Acenaphthene       μg/g       0.12         Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	Silver	μg/L	0.6
MEDIA - SEDIMENT           Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         230           Arsenic         μg/g         64	Uranium	μg/L	54
Acenaphthene         μg/g         0.12           Acenaphthylene         μg/g         0.12           Antimony         μg/g         230           Arsenic         μg/g         64	Vanadium	μg/L	20
Acenaphthylene       μg/g       0.12         Antimony       μg/g       230         Arsenic       μg/g       64	MEDIA - SEDIMENT	•	
Antimony         μg/g         230           Arsenic         μg/g         64	Acenaphthene	μg/g	0.12
Arsenic µg/g 64	Acenaphthylene	μg/g	0.12
1,7,7	Antimony	μg/g	230
Barium µg/g 360	Arsenic	μg/g	64
	Barium	μg/g	360

Contaminants of Concern (COC)	Units	Property Specific Standards
Benzo(b)fluoranthene	μg/g	0.48
Benzo(g,h,i)perylene	μg/g	0.29
Beryllium	μg/g	1.2
Boron (total)	μg/g	15
Cadmium	μg/g	1.5
Chromium (total)	μg/g	41
Chromium (VI)	μg/g	0.24
Copper	μg/g	81
Cyanide (free)	μg/g	0.26
Indeno(1,2,3-cd)pyrene	μg/g	0.25
Lead	μg/g	12,000
Mercury	μg/g	0.25
Methylnaphthalene, 2- (1-)	μg/g	0.12
Molybdenum	μg/g	2.8
Naphthalene	μg/g	0.12
Nickel	μg/g	37
Selenium	μg/g	4
Thallium	μg/g	5.2
Uranium	μg/g	7
Vanadium	μg/g	61
Zinc	µg/g	180

Schedule B
Surface Water Quality Monitoring Program

Parameter	Provincial Water Quality Objective
Aluminum (total)	75 (μg/L)
Antimony (Total)	20 (μg/L)
Lead (Total)	5 (μg/L)
рН	6.5 – 8.5

## **SCHEDULE C**

## **CERTIFICATE OF REQUIREMENT**

# s.197(2) Environmental Protection Act

This is to certify that pursuant to Item 7.1 of Certificate of Property Use number 0201-BYPLY6 issued by Loralyn Wild, Director of the Ministry of the Environment, Conservation and Parks, under sections 168.6 and 197 of the Environmental Protection Act, on [INSERT DATE], being a Certificate of Property Use and order under subsection 197(1) of the Environmental Protection Act relating to the property municipally known as 10194 Heart Lake Road and 0 Heart Lake Road, Brampton, and legally described as Part Lot 11, Concession 2 EHS Ching As In CH21799, Save and Except Block 696, Parts 1, 2, 3, 4 and 5 Plan 43R-31098, Lying North East of Part 1 Plan 43R-31217 and Parts 1 and 2, Plan 43R-31192, Save and Except Part 2, Plan 43R-34515, Brampton, being part of PIN 14227-1264 (LT) and legally described as Part of Lot 11, Concession 2, EHS Ching, Described as Parts 4 and 5, Plan 43R-34515, Brampton, being part of PIN 14227-1266 (LT) NOTE TO DRAFT: TO BE CONFIRMED (the "Property") with respect to a Risk Assessment and certain Risk Management Measures and other preventive measure requirements on the Property.

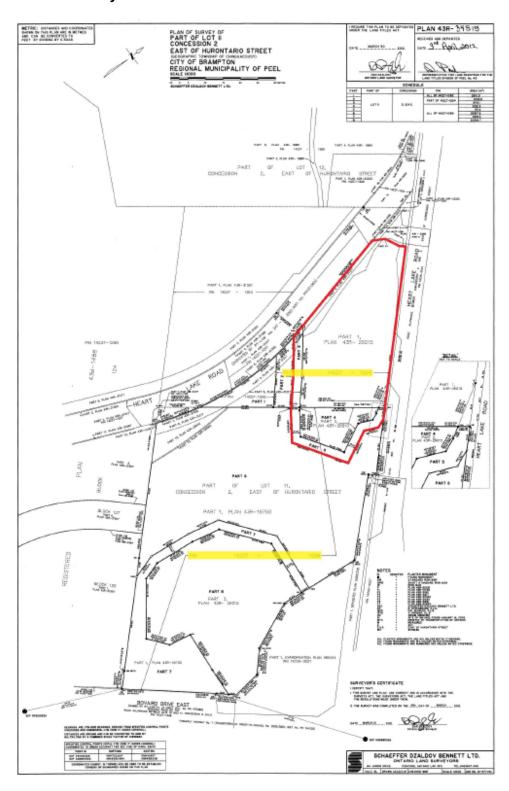
## **2366885 ONTARIO INC.**

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, acquires an interest in the Property.

## **FIGURES**

## Plan of Survey



SURFACE WATER LEVEL GAUGING STATION POWER SUPPLY TO ALL THREE FLOATING WATER FOUNTAINS VANDYK GROUP OF COMPANIES INTERIM RISK MANAGEMENT MEASURES 2019 LOCATION OF WATER SUPPLY WELL EARTHEN BERM TOP AT 243,50 MASL 18 242,95 mas 243,50 mas HEART LAKE ROAD

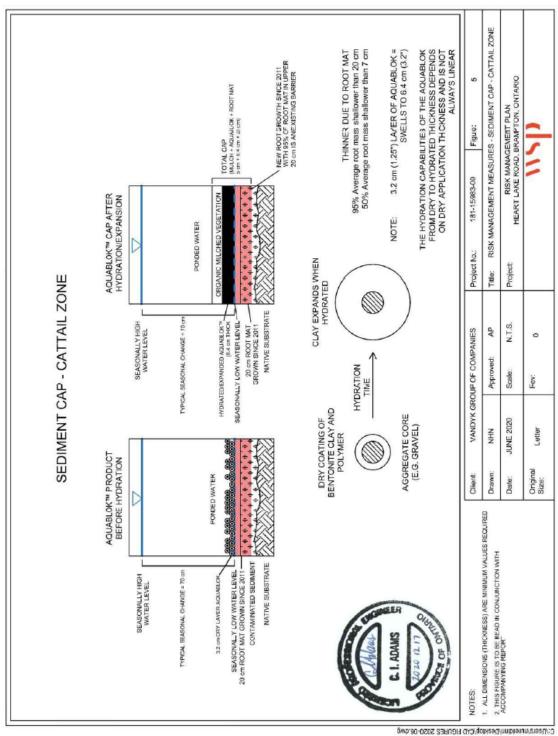
FIGURE 1B: Risk Management Measures – Interim Risk Management Measures 2019

FIGURE 4: Risk Management Measures - Soil Cap



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FIGURE 5: Risk Management Measures – Sediment Cap – Cattail Zone



TIME: RISK MANAGEMENT MEASURES - SEDIMENT CAP - PERMANENT POOL THE HYDRATION CAPABILITIES OF THE ADDACATED TO HYDRATED THICKACKESS DEPENDS ON DRY APPLICATION THICKNESS AND IS NOT ALWAYS LINEAR NOTE: 5 cm (2") LAYER OF DRY AQUABLOK = SWELLS TO 7.5 cm (3") RISK MANAGEMENT PLAN HEART LAKE ROAD, BRAMPTON, ONTARIO TOTAL CAF AQUABLOK -15 cm Figue: SEASONALLY LOW WATER LEVEL 181-15983-00 AQUABLCK™ CAP AFTER HYDRATION/EXPANSION PONDED WATER Project No.: Project: CLAY EXPANDS WHEN HYDRATED SEDIMENT CAP - PERMANENT POOL CONTAMINATED SEDIMENT NATIVE SUBSTRATE N.T.S. TYPICAL SEASONAL CHANGE = 70 cm VARIAELE THICKNESS OF HYDRATED AQUABLOK (TWO LIFTS HYDRATED = 15 cm THICK) SEASONALLY HIGH WATER LEVEL PMR VANDYK GROUP OF COMPANIES 0 Approved: HYDRATION Scale: Fev: DRY COATING OF BENTONITE CLAY AND POLYMER AGGREGATE CORE (E.G. GRAVEL) JULY 2020 ZHZ Letter AQUABLCK\*\* PRODUCT BEFORE HYDRATION Original Size: Drawn: Client: Date: SEASONALLY PONDED WATER 1. ALL DIMENSIONS (THICKNESS) ARE MINIMUM VALUES REQUIRED 2. THIS FIGURE IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING REPORT CONTAMINATED SEDIMENT NATIVE SUBSTRATE SEASONALLY HIGH WATER LEVEL TYPICAL SEASONAL CHANGE = 70 cm SEASONALLY LOW WATER LEVEL ARIABLE THICKNESS OF DRY AQUABLOK (2 LIFTS 5 cm DRY)

FIGURE 6: Risk Management Measures - Sediment Cap - Permanent Pool

NOTES:

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Sediment Cap Cattail Zone (243.0 - 242.5 Sediment Cap Permanent Pool (<242,5 mast) VANDYK GROUP OF COMPANIES RISK MANAGEMENT MEASURES -CAPPING FIGURE

FIGURE 7: Risk Management Measures - Capping

VANDYK GROUP OF COMPANIES RISK MANAGEMENT MEASURES -PSW MONITORING STATIONS 10 Surface Water Quality Sampling Locati Post Construction Sediment/Cap Integ Sampling Locations Surface Water Level Gauging Station for Ontario FIGURE: Cattal Zone (243,0 - 242,5 masl) Permanent Pool (<242,5 masl) Topographic Contours CATTAIL ZONE = 6,000 m2 ERMANENT POOL = 7,500 m2

Figure 10: Risk Management Measures – PSW Monitoring Stations