ROAD, CURB AND SIDEWALK RESTORATION

Environmental Requirements

Project No. (AR): [23137]

August 6, 2020

Prepared by:
Paul Dalmazzi, Environmental Planner
Hydro One Networks Inc.
Environmental Services
483 Bay Street, North Tower, 12th Floor
Toronto, ON M5G 2P5

Table of Contents

1 Introduction 1

2 Roles and Responsibilities 1

2.1 Hydro One Environmental Planners 1
2.2 Hydro One Site Inspector 2
2.3 Contractor 2
2.4 Contractor Deliverables 2
2.4.1 Environmental Management Plan (EMP) for Proposal Stage 2
2.4.2 Environmental Management Plan Post Award 3
2.4.3 Monitoring and Reporting 4

3 Permits, Approvals, and Assessments 4

3.1 Permits, Approvals, and Assessments Obtained by the Contractor 4
3.2 Permits, Approvals, and Assessments Obtained by Hydro One 5

4 Site Specific Issues 6

4.1 Soil Conditions ..... Error! Bookmark not defined.
4.2 Groundwater Conditions ..... Error! Bookmark not defined.
4.3 Designated substances 6
4.4 Archaeology 7

5 Construction Requirements 8

5.1 Transportation of Dangerous Goods 8
5.2 Construction Noise 8
5.3 Dust and Air Quality Control 8
5.4 Vehicle and Equipment Operation, Maintenance and Refuelling 9
5.5 Erosion and Sediment Control 9
5.6 Waste Management 10
5.6.1 General Waste and Recycling 11
5.6.2 Hazardous Waste 11
5.7 Soil, Slurry, and Water Management 12
5.7.1 Soil 12
5.7.2 Water 13
5.7.3 Slurry 14
5.8 Imported Soil and Backfill Management 15
5.9 Subcontractor Management 15
5.10 Site Restoration 15

5.11 Spills and Emergency Preparedness and Response.....16

List of Tables

Table 3-1: List of Potentially Applicable Permits, Approvals, and Assessments Obtained by the Contractor 5
Table 3-2: List of Permits, Approvals, and Assessments obtained by Hydro One 6

List of Appendices

Appendix A Qualified Person Sign-Off Form
Appendix B Reuse of Excess Soil and Backfill on Hydro One Property

1 Introduction

This Environmental Requirements document details how environmental compliance and protection will be achieved on Road, Curb and Sidewalk Restoration for the Leaside x Main Infrastructure Refurbishment Project H7L/H11L (the "Project"). This Project-specific Environmental Requirements document is provided to the Contractor as part of the Request for Proposal tender package to ensure that the expectations to achieve compliance and protection are communicated to the Contractor for inclusion into the Contractor's fixed price and proposal submission.

The Contractor is required to execute the scope of work in accordance with industry management practices, all applicable legislation, and other Hydro One contract documents.

This Environmental Requirements document will be the default reference in the event that there are any discrepancies that arise at any phase of the project. It is important that the Contractor identify environmental assumptions, constraints, and exclusions as well as perceived environmental risks and mitigation plans as discussed below in Section 2.4.

2 Roles and Responsibilities

2.1 Hydro One Environmental Planners

Hydro One Networks Inc. (HONI) is responsible to:

- Provide known and relevant site-specific information to the Contractor for their fixed price and proposal submission
- Review Contractor's environmental deliverables (presented in Section 2.4) for approval or agreement, as required
- Manage all communication including notification of the project with Indigenous communities and the public
- Coordinate any communication or requirements between the Contractor and other HONI environmental personnel if required
- Direct the Contractor to improve environmental management practices, as needed, based on Contractor or HONI Inspector monitoring findings

2.2 Hydro One Site Inspector

A HONI Site Inspector or delegate is responsible to:

- Provide oversight of Contractor's environmental consultant, monitor overall environmental performance, communicate with the Contractor's Site Supervisor and QP, and reports to the HONI Project Manager any violations and/or deviations from the Contractor's EMP or environmental regulations and other contract documents
- Consult with the HONI Environmental Planner as required regarding environmental activities being performed by the Contractor and their environmental consultant

2.3 Contractor

The Contractor is responsible to:

- Provide Contractor's deliverables (presented in Section 2.4) for the project
- If soil, slurry or dewatering required retain the services of a Qualified Person (QP; as defined by O.Reg. 153/04 as amended) to provide expertise in producing the Contractor's deliverables and providing environmental support as required throughout the project
- Manage all environmental aspects of the project
- Arrange and pay for all required sampling by individuals qualified to do such testing as well as analysis at an accredited laboratory
- Provide copies of environmental documents to the HONI Environmental Planner
- Execute monitoring and reporting and ensure improvements to address deficiencies are implemented

2.4 Contractor Deliverables

2.4.1 Environmental Management Plan (EMP) for Proposal Stage

As a part of the Contractor proposal, an EMP which demonstrates a general understanding of the environmental components of the project must be provided. This preliminary EMP shall contain the following as a minimum:

- Executive summary of the Contractor's environmental policy and/or environmental management systems
- Integration of environmental requirements into the project schedule

- For the Site Specific Conditions presented in Section 4 of this Environmental Requirements document, identify environmental effects, project impacts (i.e., schedule impacts), and associated costs for all required mitigation, permitting, testing, etc.
- Ensure that all costs associated with the Construction Requirements presented in Section 5 of this Environmental Requirements document are included in the fixed price and proposal submission
- Clearly identify environmental assumptions, constraints, and exclusions as well as perceived environmental risks and mitigation plans

While the preliminary EMP need not be authored by a QP, HONI encourages engagement with a QP given that all costs related to environmental items are captured in the fixed price and proposal submission. A QP should evaluate and review all points listed above to ensure environmental requirements are adequately understood and integrated into the Contractor's proposal.

2.4.2 Environmental Management Plan Post Award

A detailed EMP must be authored post award by the Contractor to oversee all environmental matters related to the execution of the project. The EMP must be submitted two (2) weeks in advance of the scheduled start of construction for review and comment by HONI. Construction cannot commence until the EMP is finalized and accepted by HONI. This includes any permit/approvals/assessments that are required prior to construction. The contractor must allocate appropriate time in their schedule for development of the EMP, execution of any permits and HONI review time.

The EMP will incorporate all information provided by HONI on environmental matters related to the project. In addition, the QP should address other site-specific and construction related items not communicated by HONI. The EMP shall contain the following, as applicable:

- If required completed Appendix A – Qualified Person Sign-Off Form
- Permits, approvals, assessments – include a summary of requirements, commitments, outstanding requirements for those obtained and completed by HONI and well as those to be obtained by the contractor through the execution of the project
- Communication protocols
- Erosion and Sediment Control Plan
- *Noise Control Plan*
- *Dust and Air Quality Control Plan*
- *Soil Management Plan* (including Excess Soil Management Plan)

- Waste Management and Disposal Plan
- *Spill and Emergency Preparedness and Response Plan*

The EMP will be a living document and it is expected that new information or changes will be incorporated as they come available during construction and resubmitted to HONI for review and acceptance.

2.4.3 Monitoring and Reporting

The HONI Site Inspector will not be responsible for any environmental monitoring or reporting requirements outlined above. That said, the HONI Site Inspector does have responsibilities related to the environmental requirements of the project (refer to Section 2.2 above) and is required to bring any concerns to the attention of the HONI Project Manager and/or Environmental Planner.

3 Permits, Approvals, and Assessments

The Contractor will comply with all permits and approvals. Should additional requirements, amendments or deviations be identified at any stage of the project, the Contractor is to contact HONI Project Manager and Environmental Planner immediately.

It is the responsibility of the Contractor to obtain all applicable and necessary environmental permits, approvals, and assessments; a list of potentially applicable requirements is presented in Section 3.1 below. All permits, approvals, and assessments obtained by HONI are presented in Section 3.2 below.

3.1 Permits, Approvals, and Assessments Obtained by the Contractor

The Contractor will be responsible for determining and obtaining permits, approvals, and assessments required for the Project once the project has been awarded. The Contractor will notify HONI of the requirements in the EMP, ideally at the proposal stage to ensure inclusion into the fixed price and proposal submission as well as the project schedule. Once the project has been awarded, the Contractor will commence the permitting, approval and assessment process including communication with permitting agencies and other stakeholders. Any communication with Indigenous communities or the public will be the responsibility of the HONI Environmental Planner, but under the direction of the Contractor. The HONI Environmental Planner will be the

point of contact for any assistance during the permitting, approval and assessment process. The Contractor will inform HONI when permits and approvals are received.

Table 3-1 lists potentially applicable permits, approvals, and assessments for consideration for this project. HONI in no way warrants the completeness of this list, and the Contractor remains responsible for determining which permits, approvals and assessments, whether or not listed herein, are applicable, and for ensuring compliance.

Table 3-1: List of Potentially Applicable Permits, Approvals, and Assessments Obtained by the Contractor

Permit / Approval/ Assessment	Agency	Description
Soil Testing	Reviewed by HONI	If excess soil needs to be removed from site, testing will be required to ensure proper disposal.
Imported Soil and Backfill Testing	Reviewed by HONI	Soil and backfill to be verified and/or tested when subcontractor(s) and source(s) are identified. All soil and backfill must meet applicable MECP site standards
Noise By-Law Permit	Municipality	Permit required if any works will not be in compliance with Noise By-Law
Pre-Construction Road Condition Assessment	Municipality	Undertaken prior to construction to determine baseline road condition (may be required on adjacent existing roads not directly targeted for restoration)
Traffic Management Plan	Municipality	Developed to minimize local traffic disruptions during construction

3.2 Permits, Approvals, and Assessments Obtained by Hydro One

HONI will be responsible for the permits, approvals and assessments presented in Table 3-2 below. The Contractor is required to comply with all permits, approvals and assessments including: posting and maintaining permits onsite, supporting ongoing construction related

requirements (e.g. building permit inspections), and supporting HONI where input from the Contractor is required.

Table 3-2: List of Permits, Approvals, and Assessments obtained by Hydro One

Permit / Approval/ Assessment	Agency	Description
None required		

4 Site Specific Issues

4.1 Designated substances and Asbestos

Designated substances and hazardous materials may be found in existing buildings, electrical equipment, and in buried infrastructure.

The previously existing H7L/H11L cable duct bank contained asbestos/cement mixture. While this material should have been fully removed during construction of the new underground duct banks, it is possible that additional asbestos-containing cement or other materials may be encountered subsurface.

In the event that asbestos-containing materials are identified during road restoration, the following precautions should be taken at a minimum:

- Make sure that there is no public exposure to asbestos fibres or the possibility of exposure throw windblown dust/fibres. Any exposed potential asbestos wrapping or concrete should be covered. Water spray may also help keep dust/fibres from being blown afield. Loose material should be bagged in the yellow Asbestos bags.
- Any workers in the area or handling potential asbestos must have appropriate PPE. Remind B&M to make sure they are following the requirements of O. Reg 278/05 https://www.ontario.ca/laws/regulation/050278
- Samples should be taken (following safe handling practoces/precautions for asbestos) to confirm asbestos content for disposal.
- Any asbestos waste being removed needs to be properly controlled/handled, manifested and disposed of appropriately. Tickets need to be kept for documentation.

4.2 Soil Conditions

Soil samples were taken for laboratory analyses in support of the Leaside x Main project in 2017. Of the parameters tested, there were no exceedances in the soil samples that were compared to Table 2 Site Condition Standards (SCS) of Ontario Regulation 511/09. If excess soil management or disposal is required for this project, requirements are listed in Section 5.7.1 of this document.

4.3 Groundwater Conditions

Groundwater is not anticipated to be encountered during this project. A geotechnical report conducted in support of the H7L/H11L Cable replacement work in 2017 included a test pit on Main St., north of Doncaster Ave. The test pit was excavated to a depth of 4.5 m bgs and groundwater was not encountered.

4.4 Overhead Utilities and Tree Limbs

The work area along Main St. and Lumsden Ave. contains several overhead utility lines as well as tree branches overhanging into the roadway/work area. Care should be taken when operating any equipment which may come into contact with these utility lines or tree limbs.

4.5 Archaeology

The area is considered clear of archaeological resources.

However, if artifacts, cultural remains, such as human burials or other potential archaeological or heritage resources, are encountered at any stage of construction, the Contractor shall immediately:

- If human remains are encountered, immediately call appropriate authorities (e.g. local police services) to ensure requirements under the *Funeral, Burial, Cremation Services Act* are met; initial investigation by these authorities will inform the need for additional requirements under the *Ontario Heritage Act* (which shall be coordinated by the HONI Environmental Planner)
- Ensure that all construction operations in the immediate vicinity of the discovery are halted and that the area is temporarily excluded (e.g., flagging tape, caution tape, snow fencing, etc.) from the remainder of the work area

- Proceed with work only once the area has been cleared by the police and/or a licensed archaeologist who has carried out required archeological measures (e.g. assessment, reporting, approval from MHSTCI)

5 Construction Requirements

5.1 Transportation of Dangerous Goods

The Contractor is to ensure that all dangerous goods (as defined in the Federal *Transportation of Dangerous Goods Act* and the attendant *Regulations*) be managed (handled, stored, transported and shipped) in compliance with legislation.

5.2 Construction Noise

All construction equipment shall meet the emissions requirements of the MECP and/or Ontario Ministry of Transportation ("MTO").

The Contractor is expected to be in compliance with the municipal noise by-laws. If any works may be out of compliance from noise by-laws, the Contractor must obtain any permission and approvals required.

Contractor Responsibility:

- Provide a *Noise Control Plan* in the EMP that speaks to either compliance with noise by-laws or requirements for permission and approvals required
- Provide a noise compliant response protocol in the *Noise Control Plan*

5.3 Dust and Air Quality Control

The Contractor is responsible to ensure that dust control measures are available for the project if required. It is also expected that the Contractor will maintain clean roads both inside and outside (i.e. on adjacent roads) of the work area.

Contractor Responsibility:

- Provide a *Dust and Air Quality Control Plan* in the EMP which may include: dust suppression methods; road and equipment cleaning protocols; dust control requirements from the Contractor's subcontractors

- Document all dust control measures (including road cleaning) through the duration of construction, which will be provided in monthly reporting
- If construction dust directly affects adjacent residences, the Contractor will be responsible for mitigation and/or cleanup (e.g., residential window cleaning)
- Include in the fixed price and proposal submission any costs for dust and air quality control measures

5.4 Vehicle and Equipment Operation, Maintenance and Refuelling

All vehicle and equipment handling, fuelling and fuel storage are to be conducted in accordance with the Technical Standards and Safety Act (O. Reg. 217/01). The following conditions must be adhered to with respect to vehicle and equipment maintenance and refuelling:

Contractor Responsibility:

- Vehicle and equipment refuelling are to be controlled to prevent any inadvertent discharge of petroleum products
- Vehicle and equipment refuelling is to be performed at a designated refuelling station
- No equipment and/or vehicle refuelling or maintenance, including small equipment such as chainsaws, will be conducted within 100 m of any watercourse (including the adjacent Municipal drains) or wetland
- Fuels, lubricants etc. are to be properly labelled and stored in a designated section of the construction lay-down area. This fuel and lubricant storage area should be placed in the most easily accessible part of the lay-down area
- Refuelling of small equipment i.e. chain saws, portable generators should be conducted over a portable containment unit
- Spill kits and other emergency response equipment are to be kept near the fuel/lubricant storage area. All vehicles will be equipped with spill kits
- Adherence to the Clean Equipment Protocol for Industry (Ontario Invasive Species Council, 2016) which pertains to the inspection and cleaning of equipment for the purposes of invasive species prevention

5.5 Erosion and Sediment Control

The Contractor will ensure that there is no off-site movement or contamination occurring from construction activities. Additionally, the Contractor is required to review and consider applicable

recommendations and requirements such as municipal sediment control bylaws and Canadian Environmental Quality Guidelines produced by the Canadian Council of Ministers of the Environment.

The Contractor should place emphasis on erosion control to prevent or minimize soil erosion; sediment control will be required to manage the residual sediment occurring after appropriate erosion controls are applied.

In particular, the Contractor will need to ensure that proper erosion and sediment control measures are taken near the corner of Lumsden Ave. and Eastdale Ave., where the Taylor Creek Park and Environmentally Significant Area is located just beyond the northern curb.

Contractor Responsibility:

- Provide an *Erosion and Sediment Control Plan* in the EMP which speaks to commitments on site such as the locations and use of specific control measures, including specific standard specifications to be used
- The Contractor is required to maintain, monitor and if required repair existing sediment fencing along the perimeter of the creek alongside the access shown in Figure X. Ensure that monitoring for erosion and sediment control happens on a daily basis and that modifications to the *Erosion and Sediment Control Plan* are made as required
- Include in the fixed price and proposal submission any costs for the design, materials, installation and maintenance of control measures

5.6 Waste Management

The management of wastes are the responsibility of the Contractor, with the exception of hazardous materials. The Contractor must ensure that all subcontractors are accepted by HONI prior to use.

Additional wastes, not included in this section, including soil, slurry and water, are addressed in Section 5.7 below.

Contractor Responsibility:

- Provide a *Waste Management and Disposal Plan* in the EMP which includes details on the testing, handling, storage, transportation and disposal of all classes of waste in accordance with all applicable legislation

- Ensure testing and analysis occurs for all materials where required
- Maintain records of all wastes generated, transported and disposal which will be provided in monthly reporting
- Include in the fixed price and proposal submission all costs for the management of wastes, excluding hazardous wastes

5.6.1 General Waste and Recycling

The Contractor will ensure that all wastes are managed in accordance with Regulation 347 – General – Waste Management under the Ontario *Environmental Protection Act*. The EMP shall provide a summary of the Contractor's waste management strategies and protocols. The EMP shall speak to the management of all anticipated waste classes and categories, including, but not limited to: concrete, asphalt, rocks/boulders, wood, and all other wastes described herein. Waste and recycling is to be transported by a licensed carrier and disposed of at a licensed facility. All costs associated with general waste and recycling are to be included in the fixed price and proposal submission.

5.6.2 Hazardous Waste

All transportation and disposal of known hazardous wastes will be managed by HONI. If any known hazardous wastes are encountered during the project by the Contractor, the Contractor must immediately inform the HONI Site Inspector and Environmental Planner. Coordination between the Contractor, Environmental Planner and HONI Waste Management is required to ensure that all parties are aware of timelines, processes and expectations; this process should be included in the EMP and agreed upon by all parties.

Hazardous wastes are specifically those defined in Regulation 347: General – Waste Management of the Environmental Protection Act (Section 1 and Schedule 1). Exemptions are listed in Regulation 347, Schedule 1.1.

The Contractor is required to sample and confirm through analysis any unanticipated potential hazardous wastes. Once verified, HONI will manage all hazardous waste by providing transportation and disposal, and completing the waste manifests.

Depending on the requirements for the waste identified, the Contractor may be required to handle, temporarily store, and/or load the identified hazardous wastes onto transport vehicles or

into storage bins provided by HONI Waste Management. Depending on the requirements, a Change Notice/Order may be required.

Contractor Responsibility:

- Sample and confirm through analysis any unanticipated potential hazardous wastes
- Include in the fixed price and proposal submission all costs for the handling, storage, and sampling of potential/known hazardous wastes in accordance with all Federal, Provincial and Municipal legislation, as applicable
- Immediately inform the HONI Site Inspector and Environmental Planner if any hazardous wastes are discovered
- Handle, temporarily store, and/or load the identified hazardous wastes onto transport vehicles or into storage bins provided by HONI Waste Management
- Maintain records of hazardous waste sampling and discovery, to be provided in monthly reporting

5.7 Soil, Slurry, and Water Management

The Contractor is expected to comply with all relevant legislation in dealing with soil, slurry, and water management to protect both the environment and the health and safety of workers.

Contractor Responsibility:

- Provide a *Soil Management Plan* (including Excess Soil Management Plan) and a *Groundwater Dewatering and Discharge Plan* in the EMP and include all costs associated with the management of these material in the fixed price and proposal submission
- All soil, slurry, and water is assumed contaminated until confirmed otherwise
- Ensure that all subcontractors are accepted by HONI prior to use and that all subcontractors hold required approvals, permits, etc. required for their management of materials

5.7.1 Soil

No soil disposal is expected as a result of this road, curb and sidewalk restoration project.

If excess soil/spoil is generated, the Contractor is responsible for the handling, storage, transportation and disposal of all soil which may include backfill or other coarse materials (> 2mm). The Contractor's QP will be required to determine the need for additional investigations or

analyses; onsite soil management; excess soil (including backfill) management and re-use; and disposal options for surplus soil (and backfill). The Contractor must adhere to the requirements of Ontario Regulation 406/19 for On-Site and Excess Soil Management.

The re-use of excess soil or backfill within HONI property requires the following: confirmation that all conditions of re-use as presented in Appendix B are met; re-use within the Contractor's construction limits in compliance with construction/engineering specifications or approval from HONI for re-use/stockpiling including the exact location and volume outside of the Contractor's Construction limits; and integration of soil or backfill onsite and re-use management into the EMP.

The Contractor is required to provide a list of subcontractors for soil disposal as part of the preliminary EMP for review and approval. Additionally, the Contractor is required to include all costs associated with soil management as part of the fixed price and proposal submission.

Contractor Responsibility:

- Provide a *Soil Management Plan* (including Excess Soil Management Plan) in the EMP
- Ensure that adequate testing and analysis is completed for responsible and compliant soil management including re-use and/or disposal
- Adhere to the requirements of Ontario Regulation 406/19 for On-Site and Excess Soil Management.
- Ensure responsible soil management onsite (i.e. use of an impermeable liner and cover; sediment and erosion control measures; topsoil separation)
- Include in the fixed price and proposal submission all costs for the handling, storage, transportation, and disposal of all soil in accordance with all Federal, Provincial and Municipal legislation as applicable
- Maintain records of soil management to be provided in monthly reporting, including bills of lading/manifests, etc.

5.7.2 Water

No dewatering expected is expected as a result of this road, curb and sidewalk restoration project.

If dewatering is required during construction, the Contractor is responsible for the handling, storage, transportation and disposal of all waters related to construction dewatering, including waters of all source, quality and quantity. The Contractor is required to review the available

investigations, including Reference Reports and Documents provided by HONI to determine: the need for additional investigations; permitting and approvals; onsite water management; and disposal. The Contractor is required to include all costs associated with water management as part of the fixed price and proposal submission.

Based on the quality and quantity of construction dewaters, options for management/discharge may include: dewatering onto the adjacent ground surface within the HONI ROW; discharging outside of the HONI ROW; disposing of waters as liquid industrial waste.

Contractor Responsibility:

- Provide a *Groundwater Dewatering and Discharge Plan* in the EMP
- Ensure that adequate testing and analysis is completed for responsible and compliant water management
- Include in the fixed price and proposal submission all costs for the handling, storage, treatment, transportation, and disposal of all water in accordance with all municipal, provincial or federal legislation including completion of outstanding and required permits, approval and assessments
- If waters can be discharged onto the adjacent ground surface within the HONI ROW ensure no sedimentation or erosion occurs (e.g., using dewatering filter bags, fibre mats, sediment settling ponds, rock pads, etc.) and no impediments to health and safety, access or constructability to other areas of the HONI ROW
- If waters are to be discharged outside the HONI ROW into or near any form of natural or man-made water body or drainage (e.g., storm sewers, creeks, ponds, etc.), requirements may include: confirmation and/or treatment of water quality to ensure regulatory compliance on discharge quality and quantity; permitting and approval with municipal, provincial or federal authorities
- Review and integrate, where possible, Section 518.07 and other relevant sections of OPSS 518 - Control of Water from Dewatering Operations to Protect the Environment

Maintain records of water management to be provided in monthly reporting, including bills of landing/manifests, etc.

5.7.3 Slurry

No slurry is expected to be generated as a result of this road, curb and sidewalk restoration project.

If slurry is generated, the contractor will be responsible for the excavation, handling, storage, transportation and disposal of all slurry. The Contractor is required to include all costs associated with slurry management as part of the fixed price and proposal submission.

Contractor Responsibility:

- Review the appropriate methods for slurry management (storage/drying onsite or shipment offsite) and ensure all costs for the excavation, handling, storage, transportation and disposal of all slurry are included in the fixed price and proposal submission
- Complete the required manifesting of slurry
- Maintain records of slurry management to be provided in monthly reporting

5.8 Imported Soil and Backfill Management

All soil or backfill imported to site must meet site condition standard. Backfill must be pure pit run sourced from the site with no mixing of other materials. The Contractor and their QP are responsible to source, verify quality (including testing, if required), transport and import all required soil and backfill to site.

- Provide an *Imported Soil and Backfill Management Plan* in the EMP and include all costs associated with the management of these materials including offsite sampling and analysis to confirm quality
- Prior to importing to site, the Contractor must provide confirmation to the HONI Environmental Planner of the quality of the material being imported. The subcontractors (i.e. soil or backfill supplier) must be accepted prior to use.
- Maintain records of testing and imports and provide these to HONI for review

5.9 Subcontractor Management

The awarded Contractor is required to follow the requirements laid out in the contact Terms and Conditions. Specifically, if there are any changes to the subcontractors in the accepted EMP, approval is required by HONI Environmental Planner before use.

5.10 Site Restoration

The Contractor will ensure that work areas are cleaned and restored following completion of the project. This may include the following:

- Contractor laydown areas are expected to be returned to their original condition
- Removal of any sediment and erosion control measures
- Removal of all excess materials, waste, built up sediment/dust/dirt etc.

5.11 Spills and Emergency Preparedness and Response

The Contractor shall prepare a *Spill and Emergency Preparedness and Response Plan* which will contain: spill and emergency protection measure to be used; emergency contact information; spill and emergency response procedures.

The Contractor is responsible to ensure that all measures are taken onsite to prevent spills or other emergencies. In addition, the Contractor is required to implement immediate mitigation and remedies should adverse environmental events occur.

Contractor Responsibility:

- Ensure that all equipment is inspected prior to and during all work to ensure that it is clean and free of leaks
- Ensure that areas or equipment that present risk of leaks or spill be protected using appropriate methods (e.g. spill containment systems for oils, fuels and chemical storage and transfer areas; spill containment systems under stationary equipment such as generators, pumps and compressors)
- Ensure that spill kits of appropriate size and content based on factors such as contaminants present, surrounding environment, etc. are available at all times and located within 300 m of the areas where a spill could occur; small kits shall be available in all mobile equipment
- Immediately report any potential adverse environmental events to HONI Site Inspector, PM and Environmental Planner
- Responding to adverse environmental events by taking appropriate actions to contain, remedy, clean-up and restore the site as required by HONI or other stakeholders
- Reporting to the MECP or other stakeholders, as required under *Spills Reporting – A Guide to Reporting Spills and Discharges, 2007* to ensure they are in accordance with s.92 and s.15 of the EPA and Ontario Regulation 675/98 - Classification and Exemption of Spills and Reporting of Discharges

- Providing HONI of a record of all spills (including date/time of spill, material spilled, quantity of material and cause of the spill), reporting to external agencies, remedial actions and related work completed

In the event of an emergency, HONI has the authority, and the Contractor has the obligation, to stop the work whenever in the opinion of either party such stoppage may be necessary to ensure the protection of the Environment. This includes the authority to make changes and to order the Contractor to stop working.

APPENDICES

ROAD, CURB AND SIDEWALK RESTORATION

Environmental Requirements

Project No. (AR): [23137]

Appendix A Qualified Person Sign-Off Form

QUALIFIED PERSON FORM

This Form must be completed and submitted with the proposal/work plan

The Consultant, by signing below, agrees to use a Qualified Person(s) (QP) to conduct all testing of soil and groundwater and the evaluation of the results for waste classification and disposal. The definition of a QP is as per Ontario Regulation 153/11 – Record of Site Condition.

Signature **Print Name**

Position

Name of the QP(s):

Qualification(s): (Check below)

Professional Engineer	Professional Geoscientist
Professional Agrologist	Chartered Chemist

Company Name **Date**

Appendix B Re-Use of Excess Soil and Backfill on Hydro One Property

Re-Use of Excess Soil and Backfill on Hydro One Property

Excavated soil and backfill may not necessarily be classified as a "waste" if it has a re-use purpose within the limits of the Hydro One property. All criteria below must be met to re-use excess materials.

Criteria	Yes	No
The material consists solely of soil and/or backfill and does not include bituminous material, coal or coal residue, concrete, masonry, wood, debris, metal, plastic, or any other waste material or construction debris		
The material meetings Site Condition Standard		
Potential for off-site migration of contaminants (soil or groundwater)		
Adverse effect (specifically this would pertain to off-site given that on-site, workers would be equipped with appropriate PPE)		
The material removed will be re-used for the purpose of backfilling and the location has been review and agreed upon by engineering (will not alter and or marginalize geotechnical conditions required for current or future works)		
The material will be backfilled within the Contractor's construction limits and not transported to another part of the site unless approved by all relevant HONI parties		
The material will be backfilled within 100 m of water wells		
The material will be backfilled within 100 m of residences		
The material removed is located in close proximity of a fence line and/or property line where the potential for adverse effect would be greater		
Groundwater encountered during excavation		
The material is backfilled around perforated drainage pipes		
The material will be used as backfill providing the surrounding soil is of the site quality (meeting site condition standard) based on knowledge of the site and results of previous subsurface investigations		
There are waterbodies, catch basins, manholes, drainage swales etc. within 30 m of the location where the contaminated material will be used as backfill		