FILL ACCEPTANCE PROTOCOL Former Holt Pit 18725 McCowan Road, East Gwillimbury, Ontario

This Protocol has been developed for use in the acceptance of off-Site fill for the former Holt Pit.

I. Definitions

For purposes of this *Protocol*, the following shall have the meanings described below:

"Acceptable Excess Soil" Has the meaning set out in Part II following

"EPA" Means the Environmental Protection Act, R.S.O. 1990, c.E.19, as

may be amended

"Excess Soil Reuse Rules" Rules for Soil Management and Excess Soil Standards published

by the MECP and dated November 19, 2019. This document is

referenced in the Excess Soil Reuse Regulation.

"Excess Soil Reuse Regulation" O.Reg.406/19 (On-Site and Excess Soil Management) made

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

(EPA).

"Excess Soil Reuse Standards" Excess Soil Quality Standards presented in the Excess Soil

Reuse Rules.

"Fill" Means topsoil, soil, rock, stone, clean concrete without coating,

free of rebar and free from contamination, sod or turf, either singularly or in combination, and scientifically demonstrated inert

material. All Fill must meet the applicable Site Condition

Standards, must not contain putrescible materials, must be free of termites and invasive species including the eggs and seeds of such species, and must pass a slump test as outlined in the General Waste Management provisions contained in Ontario

Regulation

"Leachate Analysis" Leachate analysis, the leachate extraction to be completed using

the Synthetic Precipitation Leaching Procedure (US EPA SW-846 Method 1312), the Toxicity Characterization Leaching Procedure

(US EPA SW-846 Method 1311).

"Site" Means the former Holt Pit which is the site receiving the

Acceptable Excess Soil

"MNRF" Means the Ontario Ministry of Natural Resources and Forestry

"MECP" Means the Ontario Ministry of the Environment Conservation and

Parks. Prior to July 2018, the MECP was the Ministry of

Environment and Climate Change (MOECC). Prior to July 2014,

the MOECC was the Ministry of Environment (MOE). For simplicity, the MOE and MOECC means the MECP.

"Municipality" Means the Municipality of East Gwillimbury.

"Protocol" Means this Protocol, as may be amended

"Qualified Person" Means a Qualified Person as defined in O. Reg. 153/04,

Environmental Protection Act, as may be amended

"Reviewing Qualified Person" Means a Qualified Professional retained by the Project Leader as

required by this *Protocol*, and who is a professional geoscientist or professional engineer experienced in environmental site

assessment and peer review

"Site" Means the site located at 18725 McCowan Road, East

Gwillimbury, Ontario

"Operator" Operator is responsible and defined as the person or persons

who are ultimately responsible for making decisions relating to the planning and implementation of the project – for this project it

is the Rice Group.

"Soil" Means the natural materials commonly known as earth, topsoil,

loam, subsoil, clay, sand or

"Source Site" The location from which Acceptable Excess Soil Fill material

originates

"Table 2.1 Standards" Means the standards set out in Table 2.1 - Full Depth Excess Soil

Quality Standards in a Potable Ground Water Condition presented in the Excess Soil Reuse Rules under the column

entitled "Agricultural Property Use".

"Topsoil" As defined in c. 25, s. 142 (1) of the Municipal Act, 2001, as may

be amended, to mean: Those horizons in a soil profile,

commonly known as the "O" and the "A" horizons, containing organic material and includes deposits of partially decomposed

organic matter such as peat.

II. Acceptable Excess Soil Fill

The *Project Leader* shall place at the *Site* only *Acceptable Excess Soil Fill* which, for the purposes of this *Protocol*, is defined as being material that meets the following criteria:

1. Soil/earth that meets:

- a. Table 1 Standards Full Depth Background Site Condition Standards presented in the Excess Soil Reuse Rules under the column entitled "Agricultural Property Use" for soil placed to within 3 metres of base of pit; or
- b. Table 2.1 Standards Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition presented in the Excess Soil Reuse Rules, under the column entitled "Agricultural Property Use". This applies to soils placed three metres or more above the base of the pit. The soil quality standards for sodium adsorption ratio (SAR) and electrical conductivity (EC) do not have to be met for soils placed more than 1.5 metres below the final grade (as these standards are intended to ensure good plant growth) and more than 100 metres from a potable well.

- Rock (gravel, cobbles, boulders) that is less than 0.3 m in size and has leachate metal
 concentrations less the standards presented in Table 2.1 Leachate Screening Levels for
 Full Depth Excess Soil in a Potable Ground Water Condition presented in the Excess Soil
 Reuse Rules, under the column entitled "Agricultural Property Use".; and
- 3. Soil that passes a slump test as outlined in the *General Waste Management Regulation* (O. Reg. 347 pursuant to the *EPA*), as may be amended; and
- 4. Soil that does not contain:
 - Any putrescible materials
 - Drums and containers
 - Stained or discoloured earth in contrast with adjoining soil
 - Fill material containing debris
 - Trash/garbage or waste
 - Suspected odours that emanate when the earth is disturbed
 - Oily residue intermixed with earth
 - Sheens, films or discolorations on groundwater
 - Cinders/ash or other combustion by-products, like ash.

III. Application for Shipment of Fill Material

- 1. Any person wishing to ship Excess Soil to the Site will be provided with a copy of Parts I, II, and III of the Protocol.
- Anyone seeking to ship material for deposit at the Site must receive written approval from the Operator that the material proposed to be shipped has been accepted in accordance with the Protocol.
- 3. An application to ship material for deposit at the Site shall include the following:
 - (a) Name of the owner of the Source Location and the representative of the Source Location authorized to sign any bill of lading or other documentation relating to shipments of Acceptable Fill to the Site.
 - (b) One or more reports, prepared by a Qualified Person from the Source Site), to include the following information, as a minimum:
 - i) A description of the Source Location and its history, including the location, past and present uses of the land, and current activities <u>or</u> an Assessment of Past Uses as described in Section B of the Excess Soil Rules.¹.
 - ii) Soil Characterization Report as described in Section B of the Excess Soil Rules, including:

¹ This will be a mandatory requirement after January 1, 2022 as this portion of the Excess Soil Regulations come into effect at that time.

- A description of the soil (including quantity and quality, contaminants of concern, etc.) to be shipped to the *Site*, including the processes involved in its generation.
- b) Description of potential contaminating activities and areas of potential environmental concern associated with the Site and excess soil to be shipped to the Site.
- c) Where some or all of the material to be deposited is soil/earth, a record of the results of a comprehensive soil testing program for the Source Location, including a description of the sampling locations, sample collection procedures, and parameters analysed. An explanation or rationale for the selection of the sampling locations and the parameters for testing must be included.
- iii) A statement from a Qualified Person stating that in his/her opinion the material satisfies the requirements of the *Protocol* and is suitable for placement at the *Site*.
- iv) The anticipated volume of material to be shipped to the Site.
- v) An estimated time frame in which the material will be shipped.

The above information may be presented in an Excess Soil Management Plan prepared by the Source Site Qualified Person, if available.

The above information may be presented in an Excess Soil Management Plan prepared by the Source Location Qualified Person, if available. All reports and documents provided to the Reviewing Qualified Person must not be dated older than six months. If documents are older than six months, then a letter from the Source Location Qualified Person must accompany the reports indicating there has been no contaminating activities associated with the source location and there is no material change to the report content.

- 4. Copies of any application, together with the related report or reports, will be forwarded to the *Operator* and the *Reviewing Qualified Person*.
- 5. The application will be reviewed by the Reviewing Qualified Person to determine whether in his/her opinion the material proposed for shipment is suitable for acceptance. The Reviewing Qualified Person will consider the results of the sampling program, including but not limited to, whether the sampling locations and number of samples are representative of the material proposed to be shipped, whether the test results include the full range of parameters of potential concern relating to the Source Location and whether a suitable Quality Assurance/Quality Control (QA/QC) program was implemented.
- 6. The Reviewing Qualified Person will advise the Project Leader in writing whether or not the material proposed to be shipped is suitable for acceptance and provide any terms or conditions of acceptance. The Project Leader or the Reviewing Professional, if so authorized by the Project Leader, will communicate the approval or rejection, in writing, together with any terms or conditions of approval to the person making the application and confirm the approximate times of shipment of any off-Site Excess Soil.
 - 7. Once written approval has been provided by the Reviewing Qualified Person, the Operator or Source Site will implement a tracking system that could include bills of lading or electronic based

platform. Soils shall not be transported to the Site until the Operator issues a "bills of lading" to the Source Site

- 8. A master list of bills of lading will be produced for each Source Site by the Project Leader prior to the shipment of any Excess Soil. The master list will enable the bills of lading to be linked by number to the specific Source Site, haulage company(ies) and Site assessment report. The master list will be updated as required so as to remain current.
- 9. The Project Leader will keep at the Site, or at some other secure place, a copy of the documentation referred to in this Part III and shall provide a copy thereof promptly upon request to the Municipality.

IV. Controls at the Site

- The Site will be fenced and gated to prevent unauthorized access to the Site during the times that
 any off-Site Excess Soil is being received at the Site. The Site will have persons who have been
 appropriately trained by the Reviewing Qualified Persons.
- 2. On a daily basis, the Operator will identify a location on the Site where filling activities will occur. Placement of tracking of Excess Soil shall occur as follows:
 - a. Excess soil from each Source Site shall be place in a segregated location at the Site. This can be at the final location or a temporary location depending on site operations.
 - b. Each load of soil placed shall be inspected and field screened using a Photoionization Detector for field evidence of contamination.
 - c. Excess soil from each Source Site shall remain segregated until confirmatory audit soil samples have been collected and analytical results have been reviewed by the Reviewing Qualified Person. Upon written confirmation from the Reviewing Qualified Person, the soils may be graded.
 - d. The location of loads will be tracked and recorded on a daily basis through the development of a locational grid tracking system for the property.
 - e. Records will be retained for the duration of the project and be made available to the Municipality upon request.
- 3. A bill of lading will be presented before any truck(s) can enter the Site. Each load to the Site will be accompanied by a completed bill of lading indicating:
 - the owner of the Source Site;
 - name/location of Source Site;
 - the name of the hauling company;
 - license plate number and truck identifier (if one exists); and
 - the date and time of the soil leaving the source location and arrival at the Site.

Each bill of lading will be signed by an authorized representative of the Source Location.

- 4. The gatekeeper at the Site will cross-reference the information on the bill of lading against the master list which will include truck ticket numbers issued by project.
- 5. Untested/undocumented loads or loads with no bill of lading shall not be accepted under any circumstances.

- 6. The gatekeeper, who must be trained for such purposes, will complete a visual inspection of each load prior to permitting access to the Site and as the load is being placed at the Site. Loads containing unacceptable material or exhibiting evidence of possible chemical impact (e.g., unusual odours or staining) will not be permitted access to the Site. Repeated situations of material being rejected by the gatekeeper from a particular Source Site will give rise to an investigation. An investigation report will be prepared within 30 days, giving a full account of the reasons the quality control system on the part of the Source Site failed and the corrective actions taken and a copy shall be provided to the Municipality. The report will be retained by the Operator at the Site, or at some other secure place.
- 7. Once the gatekeeper approves the load for acceptance at the Site, he/she will sign the bill of lading, and direct the driver to a specific dumping location at the Site. The assigned location will be noted on the bill of lading. Loads from each Source Site shall be placed at separate designated locations and soils from different source locations shall not be mixed.
- 8. A daily summary log will be maintained for loads shipped to the Site, including rejected loads. The log entry will include:
 - Date;
 - Daily total # of trucks entering the property;
 - Daily total # of trucks accepted;
 - Daily total # of trucks rejected (and reasons for rejection); and
 - For <u>each</u> Source Site:
 - i) Identification number for each Bill of Lading received on that date, and
 - ii) Location fill was placed on the locational tracking grid.
- 9. All applications and related reports, bills of lading, logs of material accepted at the Site, records of material approved for acceptance at the Site, etc. will be retained by the Project Leader.

V. Quality Control Audit Program

- 1. For the purpose of a quality control audit, samples of materials shipped to the Site will be collected by or on behalf of the Licensee under the supervision of the Reviewing Qualified Person for every 2,000 cubic metres (which is a approximately one sample/day of imported excess soil) and a record will be maintained of the sampling procedure and the rational connected therewith.
- 2. Samples collected for audit purposes will be submitted to an accredited laboratory for analysis and will be analyzed for inorganic parameters, volatile organic compounds, polynuclear aromatic hydrocarbons, and F1 through F4 general petroleum hydrocarbon parameters, together with any other parameters that are deemed necessary by the Reviewing Qualified Person, given the information contained in the reports for the Source Site relating to the Excess Soil being shipped to the Site.

VI. Discovery of Unacceptable Materials

Should any unacceptable materials (i.e., material other than Acceptable Fill) be discovered at the Site (through the audit program or during, or after, dumping of a load), the Project Leader shall do or cause to be done the following procedure. All unacceptable material will be located by way of the Site log and locational tracking grid and recovered and stockpiled for further assessment

and/or removal from the Site. A record of the action taken, together with any applicable documentation (e.g., testing and analysis and/or shipment off Site) with respect to the unacceptable material will be kept in the Site log (at the Site, or at some other secure place). A copy of the documentation referred to in this Part VI shall be provided promptly upon request to the Municipality. Should any unacceptable materials be discovered at the Site, the Municipality will be notified promptly in writing by or on behalf of the Operator.

VII. Groundwater Monitoring

- 1. The Municipality has determined that a groundwater monitoring program will be required at the Site.
- 2. Any such monitoring program may include documentation of the number and type of samples, the manner and timing of sampling, the parameters to be analyzed, the standards to be used for comparison purposes, the reporting requirements, and any confirmatory sampling requirements should the results indicate any exceedance of a standard established for a parameter of concern, and any further response requirements.
- 3. All existing groundwater monitoring wells will be utilized for the purposes of any groundwater monitoring program and shall be protected during placement of Excess Soil and site operations.
- 4. Groundwater samples will be collected by or on behalf of the Licensee under the supervision of the Reviewing Qualified Person and delivered to an accredited laboratory to be tested. Results of the testing will be provided to Municipality in the Semi-Annual and Annual Operations Report and upon request. Any changes to groundwater quality (i.e., from background condition) will be reported to the Municipality immediately.

VIII. Amendments to the Protocol

This Protocol may only be amended with written approval by the Municipality.

| EXAMPLE BILL OF LADING OFF-SITE FILL ACCEPTANCE FORMER HOLT PIT | | | |
|---|------------|--|--|
| Please Print | No.0000001 | | |
| Name and Location of Source Location: | | | |
| Date Shipped: | | | |
| Time Shipped: | <u> </u> | | |
| Haulage Company: | | | |
| Truck Number: | | | |
| Licence Plate: | | | |
| Authorized Personnel at Source Location: | | | |
| Name: | | | |
| Signature: | | | |
| | | | |
| Date Received: | | | |
| Time Received: | | | |
| Assigned Location for Deposit at Receiving Site: | | | |
| Name of Authorized Receiving Personnel: | | | |
| Name: | | | |
| Signature: | | | |
| | | | |

ANY UNSIGNED OR INCOMPLETE FORMS WILL RESULT IN REFUSAL OF LOAD AT THE RECEIVING LOCATION.

WHITE COPY - RECEIVING SITE
YELLOW COPY - HAULAGE COMPANY
PINK COPY - SOURCE LOCATION

EXAMPLE DAILY SUMMARY LOG OFF-SITE FILL ACCEPTANCE FORMER HOLT PIT

| Date: | Total Number of Truck Loads Received at Site: 34 |
|-------|--|
| | |

| Source Location | # of Truck Loads | Bill of Lading # | Filling Grid Location Assigned |
|-----------------|------------------|------------------|-----------------------------------|
| ABC Condos | 8 | 0001-0007, 0032 | A1 |
| ABC Homes | 14 | 0008-0021 | A1 |
| 123 Homes | 10 | 0022-0031 | B2 |
| | | | |
| | | | |

TRUCK LOAD REJECTED

| Source Location | Hauling Company | Bill of Lading # | Reason for Refusal/Comments |
|-----------------|-----------------|------------------|--|
| ABC Condos | 234 Hauling | - | Rejected - no Bill of Lading |
| 123 Homes | WYZ Excavation | 27 | Oil smell/staining, mixed with asphalt - report required |
| | | | |
| | | | |
| | | | |

| Authorized Receiving Persor | nnel: |
|-----------------------------|-------|
| Name (Please Print): | |
| Signature: | |

EXAMPLE MASTER LIST: BILLS OF LADING OFF-SITE FILL ACCEPTANCE FORMER HOLT PIT

Generating Location #1 (Name and Location)

| Bill of Lading # | Date Issued | Date Received | Gatekeeper Initial |
|------------------|---------------|---------------|--------------------|
| 0001 | Sept. 2, 2007 | | |
| 0002 | Sept. 2, 2007 | | |
| 0003 | Sept. 2, 2007 | | |
| 0004 | Sept. 2, 2007 | | |
| 0005 | Sept. 2, 2007 | | |
| 0006 | Sept. 2, 2007 | | |
| 0007 | Sept. 2, 2007 | | |
| 8000 | Sept. 2, 2007 | | |
| ~ | ~ | ~ | ~ |
| 0025 | Oct. 5, 2007 | | |
| 0026 | Oct. 5, 2007 | | |
| 0027 | Oct. 5, 2007 | | |
| 0028 | Oct. 5, 2007 | | |

Generating Location #2 (Name and Location)

| Bill of Lading # | Date Issued | Date Received | Gatekeeper Initial |
|------------------|---------------|---------------|--------------------|
| 0017 | Sept. 6, 2007 | | |
| 0018 | Sept. 6, 2007 | | |
| 0019 | Sept. 6, 2007 | | |
| 0020 | Sept. 6, 2007 | | |

Generating Location #3 (Name and Location)

| Bill of Lading # | Date Issued | Date Received | Gatekeeper Initial |
|------------------|---------------|---------------|--------------------|
| 0017 | Sept. 6, 2007 | | |
| 0018 | Sept. 6, 2007 | | |
| 0019 | Sept. 6, 2007 | | |
| 0020 | Sept. 6, 2007 | | |
| 0021 | Sept. 6, 2007 | | |
| 0022 | Sept. 6, 2007 | | |
| 0023 | Sept. 6, 2007 | | |
| 0024 | Sept. 6, 2007 | | |

| Date of Last Update: | |
|---------------------------------|---|
| Authorized Receiving Personnel: | |
| Name (Please Print): | _ |
| Signature: | |