

King EPCM www.KingEPCM.com 570 Hood Road, Unit 26 Markham, ON, L3R 4G7 T: 647-459-5647 General@KingEPCM.com

FILL MANAGEMENT PLAN

AT

410B HIGHWAY 48, BROCK, ON

PREPARED FOR:

1000404455 ONTARIO INC. O/A. WANDEROSA TREE FARMS

March 22, 2023



Table of Contents

1.	INTRODUCTION	.3
1.	1. SITE AREA DESCRIPTION AND CONTACT INFORMATION	.3
2.	PURPOSE AND OBJECTIVES	.4
3.	EXCESS SOIL MANAGEMENT	.4
3.	1. APPLICABLE SITE CONDITION STANDARDS	.4
3.	1. WORK SCHEDULE	.5
4.	EXCESS SOIL SOURCE SUMMARY	.5
4.	1. PROPOSED SOIL SAMPLING AND ANALYSIS	.5
5.	TRACKING SYSTEM AND RECORD-KEEPING SUMMARY	.5
5.1.	TRACKING SYSTEM	.6
5.2.	HAULING RECORDS	.6
5.3.	CUMULATIVE RECORDS	.7
6.	SITE CONTROLS	.7
6.1.	SITE SECURITY	.7
6.2.	BACKGROUND ELEVATED PARAMETERS	.7
6.3.	SOIL SCREENING AND OBSERVATIONS	.7
6.4.	SOIL MOVEMENT SCHEDULE	.8
6.5.	HAUL ROUTES	.8
6.6.	DUST, NOISE, SEDIMENT, AND EROSION CONTROL PLAN	.8
6.7.	COMPLAINT RESOLUTION PROCESS	.8
7	CONCLUSIONS	0



1. INTRODUCTION

King EPCM (the Engineer) was retained by 1000404455 ONTARIO INC. O/A. Wanderosa Tree Farms (the Client) to prepare a fill management plan (FMP) for the property located at 410B, Highway 48, Beaverton, Brock, Ontario (the Site). The FMP has been prepared under the guidance of Qualified Person (QP) and is consistent with the requirements/regulations outlined in the *O. Reg* 406/19 and in the Township of Brock *bylaw* 2633-2015-PP, as amended by bylaw 2703-2016-PP.

The primary purpose of this FMP is to establish best management practices (BMPs) for managing excess soil in a manner that promotes sustainability and protects the natural environment (soil, groundwater, and surface water). Soil sampling and characterization requirements for approved source sites will be consistent with the O. Reg. 406/19 and the Rules for Soil Management and Excess Soil Quality Standards (ESQS) (MECP,2020).

It is the intent of this FMP to comply with these requirements as well as with applicable engineering and environmental guidelines and pertinent legislative regulations. All components of this FMP will/must be overseen by a QP, as defined in O. Reg. 153/04.

The Site has an area of approximately 20.5 ha (50.769 acres) according to the legal survey from 1973. The Site is situated south of Thorah Concession 1 Rd and west-southwest of the intersection of Thorah Concession 1 Rd and Highway 48. The Site is a piece of undeveloped land with scattered patches of trees and a wetland in the northwest corner that is subject to LSRCA regulation. A small tributary that flows through the site carries runoff into the wetland area. It is hydrologically situated in the Pefferlaw River Watershed.

The subject site is intending to serve as a receiving site for up to 46,578 m³ or 4700 truckloads of excess soil in the form of topsoil, sand, and a mixture of sand and silt, in support of proposed site alterations. This FMP is applicable to the receipt of excess soil at the Receiving Site only. The FMP will be updated as source sites are identified. This FMP is prepared for 1000404455 ONTARIO INC. O/A. Wanderosa Tree Farms (the client) and the Township of Brock and is considered the intellectual property of King EPCM, and third-party use of this report, including reliance, in part or full, is prohibited without written consent from King EPCM.

1.1. SITE AREA DESCRIPTION AND CONTACT INFORMATION

RECEIVING SITE:

The Site has an area of approximately 20.5 ha (50.769 acres) according to the legal survey from 1973. The Site is situated south of Thorah Concession 1 Rd and West-southwest of the intersection of Thorah Concession 1 Rd and Highway 48. The Site is a piece of undeveloped land with scattered patches of trees and a wetland in the northwest corner that is subject to LSRCA regulation. A small



tributary that flows through the site carries runoff into the wetland area. It is hydrologically situated in the Pefferlaw River Watershed.

Site Address: B410, Highway 48, Beaverton, Brock, ON, L0K 1A0
Owner: Robert Prosser and Danett Yoo (1000404455 Ontario Inc.)

Legal Description: CON 14 PT LOT 3

Phone:

E-mail:

This FMP was prepared by Aizaz Ali Qureshi, an Engineering Graduate of King EPCM, under the guidance and supervision of Yu Tao (Tony) Wang, QP, Professional Engineering (P. Eng.) license number 100228476. The contact details are as follows:

King EPCM

Contact: Yu Tao (Tony) Wang

Address: 570 Hood Rd – Unit 26, Markham, ON, L3R 4G7

Phone: 647-459-5647

E-mail: general@KingEPCM.com

2. PURPOSE AND OBJECTIVES

Wanderosa Tree Farms (the client) wants to develop the subject Site into a nursery for planting trees, therefore, they require to import the soil into the Subject Site. This FMP is documented since the soil will be imported, ensuring that all site importation methods are established in a sustainable manner.

Soil is an important resource. The protection and conservation of soil in Ontario is a valuable component of maintaining sustainable development. The MECP and Township of Brock encourage the beneficial reuse of excess soil in a manner promoting sustainability and the protection of the natural environment. The actions described within this Plan are intended to reduce and/or eliminate potential risks to the natural environment when handling excavated soil, and soil imported to the site.

3. EXCESS SOIL MANAGEMENT

Soil management is required at the Site due to the proposed receipt of excess soil for use during site alterations.

3.1. APPLICABLE SITE CONDITION STANDARDS



Appendix I of the Rules of Soil Management and *Excess Soil Quality Standards under O. Reg.* 406/19, and Town of Brock *bylaw* 2633-2015-PP, as amended by bylaw 2703-2016-PP, were used to determine the applicable ESQS for the Receiving Site.

The applicable excess soil conditions standards are Table 1: Full Depth Background Site Conditions Standards, Agricultural Property Use for Soil quality, *Soil, Ground Water and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act (March 2021), (Criteria).*

3.1. WORK SCHEDULE

The work schedules for this Plan are designed according to the bylaws of the Township of Brock, and the schedule is as follows.

Work Start Date: xx-xx-xxxx (TBD)
Work End Date: xx-xx-xxxx (TBD)
Times of Operation: 7 AM to 7 PM

Days of Operation Monday to Friday (no work will be allowed during environmental

warnings for the area)

4. EXCESS SOIL SOURCE SUMMARY

All excess soil expected to be generated from the source sites and deposited at the Receiving Site is subject to meeting the Receiving Site's applicable Excess Soil Quality Standards (ESQS). Site review and soil characterization are required to be completed for each of the source sites.

4.1. PROPOSED SOIL SAMPLING AND ANALYSIS

Soil sampling and characterization requirements for approved source sites will be consistent with O. Reg. 406/19. This will include minimum sample frequencies and chemical analysis requirements.

The analytical results for proposed source sites will be reviewed by the Receiving Site QP. A copy of the results from the characterization will be updated in the Appendix this document.

5. TRACKING SYSTEM AND RECORD-KEEPING SUMMARY

The following sections summarize the tracking system and the records to be retained or complied in relation to the tracking system.



The location of the records and the name and contact of the person that can provide these records upon request shall be provided for reach soil management project undertaken at the Site.

5.1. TRACKING SYSTEM

The tracking system shall include auditing procedures to ensure the system is implemented, and able to generable the following records:

- I. Every location where the soil is imported, and in each location, the total volumes
- II. Where imported soil is stored within a project area in stockpiles, the location of every stockpile, and the origin, amounts, and quality of each stockpile
- III. Procedures used to keep soils segregated based on quality, including soils for which quality is unknown
- IV. Inspection procedures (visual, olfactory, or field testing) and testing were undertaken from pre-excavation to do deposition at the Receiving Site.
- V. For every truckload imported to the Receiving Site:
 - a. Date and time of importation
 - b. Quality
 - c. Quantity
 - d. Name of a hauling company, including registration number, license plate, contact name and address of source site, and the route taken for transport
 - e. Acceptance procedure is undertaken at the Receiving Site on behalf of the proponents or Receiving Site (e.g., visual, olfactory, field testing, laboratory confirmation, weighing, a record of placement, a method to confirm receipt of excess soil)

5.2. HAULING RECORDS

The contractor who represents the Receiving Site is in charge of keeping track of hauling records. The truck driver who is transporting an excess soil load must make sure that at any point between the time the vehicle leaves a project area and the time the excess soil is deposited at the Receiving Site, he or she can compile an excess soil hauling record.



5.3. CUMULATIVE RECORDS

A proponent who is required to create an FMP must keep track of all excess soil movements within the project area throughout time. For the period of excess soil management activities at the project area, the proponent shall make the cumulative record available at the project area upon request from the MECP.

A cumulative record of excess soil movement shall include the following in respect of excess soil transported from a source site project area to the Receiving Site:

- I. An identification of every source site from which excess soil was transported.
- II. For each source site:
 - a. The quantity of excess soil delivered
 - b. An identification of the hauling company or companies used
 - c. The date(s) that excess soil was moved to the Receiving Site
 - d. The quality of excess soil delivered

6. SITE CONTROLS

6.1. SITE SECURITY

The Receiving Site will be protected against inadvertent access or unpermitted dumping through access restrictions, gates, and on-site personnel when access is open.

6.2. BACKGROUND ELEVATED PARAMETERS

No background soil samples will be retrieved from the Receiving Site to provide an indication of existing elevated parameters and allow justification of importing from sites with similar exceedances, thereby increasing the compatibility of the Receiving Site to potential source sites. The only soil that meets the applicable SCS for the Receiving Site will be accepted.

6.3. SOIL SCREENING AND OBSERVATIONS

During the importation of soil from the source sites, contractors or property owners involved with the earthworks will visually inspect the soil for observations of contaminants. This may include staining, odors, sheen; or the presence of waste/debris, drums, tanks, etc.



Should any potential for contaminants be observed, soil exportation work should be halted, and the contractor shall contact the QP for further review.

6.4. SOIL MOVEMENT SCHEDULE

The start and anticipated completion are to be determined as source site(s) are identified. Excess soil will be received at the subject property in accordance with Township of Brock by-laws.

6.5. HAUL ROUTES

For each source site, a haul route will be identified in consultation with the Township of Brock.

Where a haul route includes a highway not under the jurisdiction of the Town, The Receiving Site will obtain permission from the road authority.

6.6. DUST, NOISE, SEDIMENT, AND EROSION CONTROL PLAN

If, at any time, the management of the excavated soil or excess soil causes an adverse effect, such as odor, litter, dust, noise, erosion, sedimentation, or other impacts on the natural environment or water quality, appropriate preventive and remedial actions should immediately be taken to mitigate the adverse effects or impact. Such preventive measures may include berms for noise control, excavation wetting for dust control, dust monitoring, mud tracks, and related mitigation protocols.

For further information please refer to the Erosion and Sediment Control (ESC) plan document.

6.7. COMPLAINT RESOLUTION PROCESS

The site signage will include contact information for the Site Owner and the Site QP, if either party receives a complaint the site operations will follow up onsite to investigate the complaint. The complaint will be logged, and a response will be provided to the complainant within 24 hours. All records of complaints will be maintained for the duration of the soil management works and provided upon request.



7. CONCLUSIONS

This FMP was completed by Aizaz Ali Qureshi, Engineering Graduate of King EPCM, under the supervision of Tony Wang, the principal engineer of King EPCM, and a Qualified Person (QP) in accordance with O. Reg. 153/04 and updated by O. Reg. 511/09.

The information presented in this plan is true and accurate to the best of the assessors' knowledge.

Yu Tao (Tony) Wang, P. Eng. Principal Engineer Qualified Person, per O. Reg. 153/04

March 22, 2023