CN Milton Logistics Hub: Progressive Reclamation Follow-up Program

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Abbreviations

CH	Conservation Halton
DFO	Department of Fisheries and Oceans
ECCC	Environment and Climate Change Canada
ha	hectare
IAAC	Impact Assessment Agency of Canada
PDA	Project Development Area

1.0 GENERAL

This document outlines the follow-up program for progress reclamation of areas disturbed in relation to construction of the Milton Logistics Hub.

The progressive reclamation program presented below, and the associated monitoring details, have been developed to comply with the conditions of approval in the Minister of the Environment's Decision Statement issued January 21,2021. This program has been developed to comply with Condition 6.10 of the Decision Statement and has been developed in consultation with Conservation Halton (CH), Environment and Climate Change Canada (ECCC), and the Ontario Ministry of the Environment, Conservation and Parks (MECP). Draft versions of this FUP were provided to CH on June 28, 2021 and the MECP on June 7, 2021. No comments were received from these agencies. No updates to this follow-up program are proposed over the timeline of implementation of this follow-up program.

2.0 PROGRAM DESIGN CONSIDERATIONS

A follow up program for progressive reclamation of disturbed areas will be implemented during construction to verify the accuracy of the environmental assessment and determine the effectiveness of proposed mitigation measures. The program has been developed in accordance with the information outlined in Condition 2.6 of the Decision Statement.

The program will consist of 2 components:

1. Establish a clear process for progressive reclamation of disturbed areas during construction within the Project Development Area (PDA).

2. Monitoring of vegetation to evaluate restoration success and to prevent the encroachment of invasive species.

3.0 PROGRESSIVE RECLAMATION DURING CONSTRUCTION

The purpose of the progressive reclamation follow-up program is to outline a process for continuous reclamation of disturbed areas within the PDA and to confirm the newly restored areas are functioning as intended.

3.1 CRITERIA

The follow-up program will be implemented to evaluate the success of the newly restored areas by evaluating the following:

- Areal extent of reclaimed disturbed areas (70% establishment after 1 year post seeding/planting)
- Encroachment of invasive species
- Restoration success of native vegetation and plantings

3.2 LOCATIONS

Locations of progressive reclamation will vary throughout the PDA as construction phases and areas of temporary and permanent disturbance are completed. Areas within the PDA that are temporarily disturbed will be scheduled for progressive reclamation once those areas are no longer required for construction. Areas will be identified by the contractor to CN and the contractor will complete the reclamation effort. Upon completion of reclamation, CN will start the reclamation monitoring phase for that area and trigger the beginning of the monitoring program. Areas included in the Channel Realignment and Tributary construction, as well as the stormwater management ponds are not considered in this monitoring program, as they are considered in the specific follow-up programs to monitor for the success of vegetation establishment specific to those design plans (please refer to the Wetlands Follow-up Program, the Fish and Fish Habitat Follow-up Program and the Wildlife Management Plan).

3.3 METHOD

The vegetation assessment associated with the Progressive Reclamation Follow-up Plan is being undertaken to assess the success of native vegetation seeding and the overall vegetative cover including planted and naturally regenerating vegetation completed progressively over the project site (excluding those assessment areas captured under other follow-up programs). Vegetation establishment will be assessed by a terrestrial biologist, ecologist or landscape architect with experience in vegetation monitoring.

3.3.1 Progressive Reclamation

Once an area has been disturbed and is no longer being actively worked for construction, all areas conducive to revegetation will be seeded or hydroseeded by the contractor, as directed under the contractor's erosion and sedimentation control (ESC) plan. Seed cover must include Ontario groundcover species and nurse crops as appropriate for progressive reclamation.

3.3.2 Vegetation Monitoring

The monitoring program includes the following parameters:

- Patches where seeds did not take or where potential erosion issues have limited vegetation growth
- Hydro, hand, or mechanical seed disturbed areas as construction concludes in areas that will not have permanent infrastructure on the surface, as per the erosion and sedimentation control plans
- Continuous monitoring during construction period and post construction will occur through visual assessment of seeded areas until vegetation establishment at 70% cover or greater. Reseeding will be completed as necessary to reach targeted groundcover

3.3.3 Invasive Species Monitoring

An invasive species monitoring program will be implemented with emphasis on identifying areas of non-native species encroachment.

Area searches will be conducted to provide comprehensive coverage of the reclaimed areas within the PDA. Areas of invasive species will be delineated using a GPS. If establishment of invasive species such as Common Reed (*Phragmites australis*), Japanese Knapweed (*Knapweed Fallopia japonica*), or White Sweet Clover (*White Sweet Clover Melilotus alba*) are observed to exceed 30% cover of the plot (i.e., absolute cover, as opposed to relative cover), adaptive management measures will be implemented to reduce or eliminate the species from the restoration area. Control measures will be developed in consultation with the Agencies as required and further monitoring may be required.

3.4 ADAPTIVE MANAGEMENT

3.4.1 Groundcover Vegetation

Ongoing maintenance for the vegetation will potentially include supplemental plantings or over-seeding to provide adequate cover and density within the reclaimed areas. Additionally, reseeding of areas that did not survive or are potentially eroded will be conducted.

Maintenance activities could include regular mowing to control the vegetation overgrowth or remove the establishment of woody vegetation where it is not desired. Maintenance work would be conducted with consideration of the breeding bird season.

3.4.1 Invasive Species Monitoring

In the event follow-up monitoring found invasive species to be a concern, species-specific removal measures will be developed by a qualified biologist. Resources used to develop the measures may include:

- Ontario Invasive Plant Council – www.ontarioinvasiveplants.ca
- Ministry of Natural Resources and Forestry – www.ontario.ca/invasivespecies
- Ontario's Invading Species Awareness Program - http://www.invadingspecies.com/invaders/
- Invasive Reed Canary Grass Best Management Practices in Ontario (Ontario Invasive Plant Council 2012)
- Invasive Phragmites – Best Management Practices (MNRF 2011)

Other resources or best management plans may also be relied on, depending on the invasive species identified during follow-up monitoring. Remedial measures implemented on site will depend on the species, size of the area affected and the site-specific conditions.

If adaptive management measures are required, additional monitoring may be conducted to evaluate the effectiveness of the measures implemented.

3.5 REPORTING

The results of the progressive reclamation activities and subsequent monitoring proposed as part of the follow-up program will be reviewed, analyzed and presented annually in a report to document (a) the results of the monitoring program (b) recommendations for remedial action (and review of previous remedial action), and (c) to include a photographic record of conditions observed during monitoring.

A report will be prepared annually with the results provided to Conservation Halton and other relevant authorities as applicable, for consultation to confirm the objective of monitoring has been reached (see sections 3.3.2 and 3.3.3) and will be included as a component of the annual report to IAAC.