

ARVA PUMPING STATION TO HURON STREET WATER TRANSMISSION MAIN ENVIRONMENTAL IMPACT STUDY, MAY 20, 2021 BY AECOM

Received at EEPAC's May 2021 meeting

Reviewed S. Heuchan, S. Levin, and K. Moser

RECOMMENDATION A: The recommendations in Section 5 of the EIS must be revised as indicated below.

RECOMMENDATION B: The recommendations as adopted must be included in the detail design, tender documents or in the work plan as appropriate to the parties carrying out the works.

The #s below refer to the recommendations in section 5 of the EIS. EEPAC's suggested enhancements are bolded.

#1 - Where proposed activities fall within the UTRCA's Regulation Limits (e.g., the Arva Moraine Complex PSW, Medway Creek and riparian areas, and the Gibbons Wetland ESA), a Section 28 permit (under O.Reg. 157/06 the Development Interference with Wetlands and Alteration to Watercourses and Shoreline Regulation) may be required. Consultation with the UTRCA **MUST** be completed to determine permitting requirements.

#2 - **Should proposed activities be required within or adjacent to natural heritage features, a qualified Ecologist ~~should~~ MUST be retained to compete a pre-clearance survey:**

- a. **24 hours before construction activities, to identify potential impacts to significant/sensitive species ~~or habitat~~.**
- b. **As part of detailed design to identify potential impacts to significant/sensitive habitat.**

Rationale

"24 hours is far too short a time for an adequate habitat survey. Splitting this recommendation into two recommendations makes more sense. "

- c. **A cavity survey be done to determine if bats are using any of the trees slated for removal.**

#3 - To limit the amount of removals and disturbance to natural heritage features and their functions, the area of disturbance **~~should~~ MUST** be limited to as small an area as possible.

ARVA PUMPING STATION TO HURON STREET WATER TRANSMISSION MAIN ENVIRONMENTAL IMPACT STUDY, MAY 20, 2021 BY AECOM

#4 - An Erosion and Sediment Control Plan (ESC) **MUST** be developed that includes the installation of appropriate sediment and erosion control measures such as silt fencing and haybale check dams prior to construction activities.

All vegetation removal required for maintenance/repair activities **MUST occur** outside of applicable sensitive timing windows including the breeding bird nesting period (**April 1 to August 31**), bat roosting season (**March 31 to September 1**) and turtle overwintering (where works are proposed within shallow water wetlands; **October to April**).

#5 A detailed **Construction Mitigation and Monitoring Plan (CMMP)** ~~should~~ **MUST** be developed in advance of the proposed activities and should incorporate mitigation measures identified herein. **The plan must be reviewed and approved by a city ecologist. EEPAC would appreciate an opportunity to also review the plan. The CMMP should MUST include, but not be limited to, the following:**

- a. A Species at Risk and Wildlife Handling Protocol;
- b. An Invasive Plant Management Plan which incorporates recommendations within the London Invasive Plant Management Strategy (City of London 2017). The Invasive Plant Management Plan ~~should~~ **MUST** target management of invasive species commonly known throughout the Study Area, including, but not limited to common buckthorn (*Rhamnus cathartica*) and glossy buckthorn (*Frangula alnus*). Any phragmites (*Phragmites australis*) observed within the area of impact ~~should~~ **MUST** be treated in advance of construction following the *Invasive Phragmites (Phragmites australis) Best Management Practices in Ontario* (2020);
- c. Erosion and Sediment Control Plan; and
- d. The Clean Equipment Protocol for Industry (Halloran *et al.* 2013)

#7 -Where work is required within or immediately adjacent to significant natural heritage features (i.e., Significant Woodlands, Provincially Significant Wetlands, SAR habitat and/or SWH), environmental monitoring of repair and maintenance activities ~~should~~ **MUST** be conducted to identify potential negative impacts and provide additional mitigation recommendations. **This work must be carried out during detail design or in preparing the tender documents and be reviewed and approved by the city ecologist and the species at risk biologist at the UTRCA as a condition of any section 28 approvals.**

RECOMMENDATION C: EEPAC also recommends there be a post construction monitoring plan that would include a requirement for compensation for any lost parts of the City's Natural Heritage System (which is consistent with the London plan policies for infrastructure in the NHS)

#10 Consideration **MUST** ~~should~~ be given to the restoration of disturbed areas where feasible (it is anticipated that some areas will remain cleared for accessibility purposes). A Planting Plan for post-construction activities ~~should be considered~~ **must be prepared and approved by a City Ecologist. This plan must include but not be limited to, and include** plantings of native

ARVA PUMPING STATION TO HURON STREET WATER TRANSMISSION MAIN ENVIRONMENTAL IMPACT STUDY, MAY 20, 2021 BY AECOM

trees, shrubs, forbs, grasses and sedges with the intent to enhance adjacent natural heritage features. In areas where removals were required with SAR habitat or SWH, restoration ~~should~~ **MUST** include suitable plantings to support these habitats (e.g., common milkweed (*Asclepias syriaca*) plantings to support Monarch).

OTHER RECOMMENDATIONS TO BE INCLUDED IN THE EIS

RECOMMENDATION D: Huron Street Woods be included in the list in Section 5, recommendation #1 of the EIS because Chambers 12, 12a and 13 are within the UTRCA regulated area according to the City's mapping web site.

RECOMMENDATION E: Soil Sampling and Testing of ground near transmission mains, including coring into ground, sample collection, and laboratory testing should be carried out more frequently than just once every 15 years.

RATIONALE: It is unclear why the time period is so long. It is unclear where the sampling will take place along the 8 km length. EEPAC would appreciate more explanation (the City should too)

RECOMMENDATION F: All work should be done when least disruptive to the Natural Heritage System (NHS).

RECOMMENDATION G: Any gravel roads constructed for any works must avoid the most sensitive habitats. If not possible, compensation must be required.

The EIS states that Chamber 5 and 5a work will be within a portion of the Arva Moraine Wetland Complex (PSW). Impacts associated with works proposed for Chambers 5 and 5A include:

- "Partial removal of shallow marsh and thicket swamp communities within the PSW;"

RECOMMENDATION H: When this work is undertaken, compensatory mitigation must be defined and required by the City as stated in city policy regarding infrastructure in the Natural Heritage System.

RECOMMENDATION I: There is existing access via a paved that changes to a gravel/dirt path to Chambers 12 and 12a. If trees are cut down and habitat is removed, there are many opportunities in the immediate area for compensatory mitigation to improve the area including, but not limited to, scarifying the unmanaged trails in the area.

ARVA PUMPING STATION TO HURON STREET WATER TRANSMISSION MAIN ENVIRONMENTAL IMPACT STUDY, MAY 20, 2021 BY AECOM

MAPPING CONCERNS and INVASIVE SPECIES

Attached are Google Earth images of where we think these chambers are located. The first is no more than 20-30m from the Thames. The first photograph after the maps shows the site. We believe this is Chamber 12 MAIN and is not correctly shown on the AECOM map contained in the EIS. The second site (chamber 12A) is at the base of the hill that heads up to the seminary. It is off the trail and in mature trees. The second map and second photo show the site. It appears that Chamber 12A is located approximately correctly and chamber 13 is correct on the AECOM map. The last photo shows an invasive Iris located just adjacent to the chamber 12A site. <https://www.ontario.ca/page/yellow-iris>.

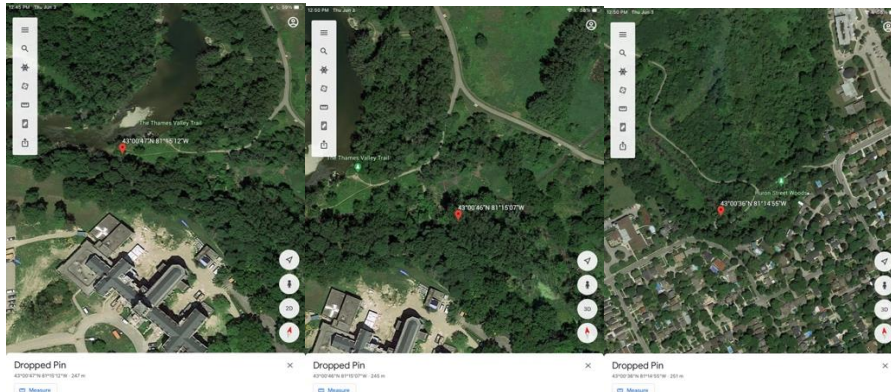


Figure 1: Locations of (from left to right) Chamber 12 MAIN, Chamber 12A and Chamber 13. The red pins show locations of chambers.



Figure 2: From left to right believed to be Chamber 12 Main and Chamber 12A.

RECOMMENDATION J: The EIS show the correct locations of each chamber.

RECOMMENDATION K: Replanting native trees or other native plants in “beat up” area to the east of chamber 12 Main.

**ARVA PUMPING STATION TO HURON STREET WATER TRANSMISSION MAIN
ENVIRONMENTAL IMPACT STUDY, MAY 20, 2021 BY AECOM**

RECOMMENDATION L: If the **invasive yellow iris** cannot be removed now, its removal must be included in the work that takes place.



Photo of yellow irises proximal to Chamber 12A.

Table 4, indicates tree removal could be required at chambers 12 and 13, but there is a paved path to chamber 13, so it is unclear why tree removal is necessary at chamber 13? The use of large heavy equipment will require considerable tree removal to access site 12A. **Table 4 of the EIS says removal of FOD7 at Chamber 12, but it should say FOD7 and SWD-4.** As indicated in table 4 this is in the Huron Woods Significant Woodland and tree removal needs to be compensated.

RECOMMENDATION M: Use the existing pathway to access these sites.

RECOMMENDATION N: Compensatory mitigation be required for all impacts on the Natural Heritage System.

Chamber 12 Main is very close to the small drain/creek (see photo) which drains into the Thames. Erosion mitigation is critical here to avoid excess sediments getting into the Thames.

RECOMMENDATION O: The Erosion Control Plan specifically review this location and make sure sediment control measures are monitored daily.

Additional recommendations which could be undertaken now

RECOMMENDATION P: immediate removal or repair of broken concrete pipes in the watercourse near Chamber 12A. Some strange orange sludge has been observed during winter months in water coming through these pipes.

RECOMMENDATION Q: Removal of campfire pit and general improvements northwest of chamber 12 Main.

RECOMMENDATION R: Removal of old broken wooden structure probably once part of the chamber infrastructure for chamber 12 Main now adjacent to this chamber.