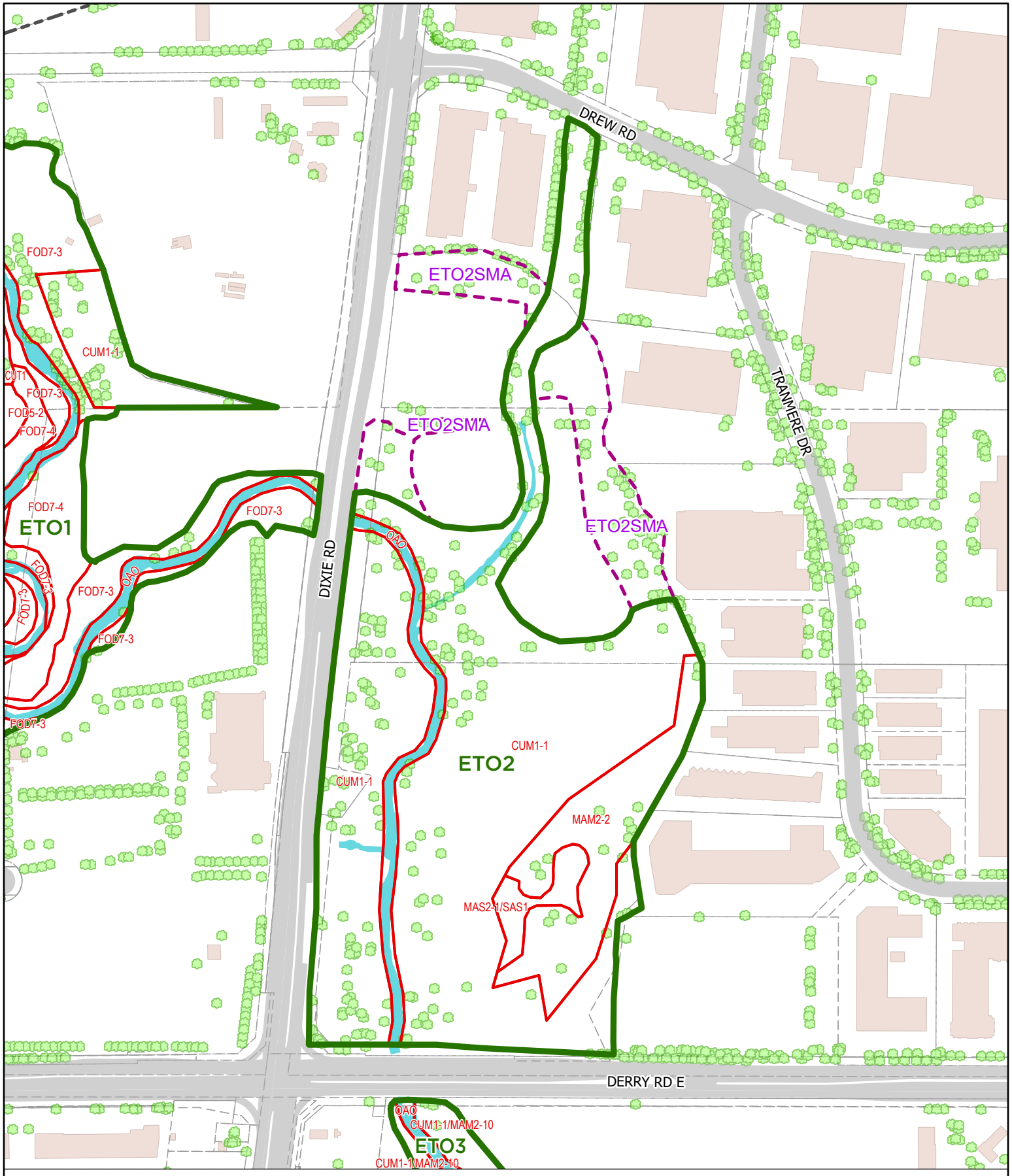

Natural AREAS SYSTEM

2024 NATURAL AREAS UPDATE

SITE ETO2

- NATURAL AREAS
- VEGETATION COMMUNITIES
- SPECIAL MANAGEMENT AREAS
- LINKAGES

N

0 25 50 100 150 200

Meters

MISSISSAUGA

Produced by IT-GIS, Client Services

ETO2

CLASSIFICATION	Park Name	PLANNING DISTRICT	AREA (Ha)
Significant Natural Area	-	Northeast (1)	14.20

CONSERVATION AUTHORITY	SUBWATERSHED	OWNERSHIP	SURROUNDING LAND USE
Toronto Region Conservation Authority	Etobicoke Creek	Public	Industrial- Recreational Parkland

GENERAL SUMMARY

ETO2 is located along Etobicoke Creek North from Derry Road East and Dixie Road intersection. Throughout its length Etobicoke Creek links a number of natural areas including, ETO2, ETO4, and ETO8.

ETO2 is a single parcel. The area is public land adjacent to a public recreational park ETO2 supports habitat-generalist wildlife and provides connectivity to other natural areas.

Three Special Management Areas containing Cultural Meadow occur adjacent to this natural area.

PHYSICAL DESCRIPTION

ETO2 is a small-medium sized natural area for the City. This site essentially comprises the full width of the Etobicoke Creek valley. The valley walls are approximately 3 m in height. Bedrock geology consists of the grey shales of the Georgian Bay Formation. These are overlain by up to 7.5 m of soils and glacial deposits consisting of well-drained Cashel clays developed in a complex of lacustrine - Wildfield till sediments deposited by glacial Lake Peel.

There are no known Earth Science features within this area. Hydrological Features within this area include a watercourse.

CONDITION

This site is currently in poor condition. Disturbances present at this site include unplanned trails, noise, soil compaction, lack of vegetation cover, and engineering of Etobicoke Creek. The creek banks exhibit under cutting from fast flowing water. The north portion of this site contains baseball diamonds and a parking lot. Four drainage culverts join Etobicoke Creek within this site.

Highly invasive plant species (as regarded by Ontario Invasive Plant Council) include European Buckthorn (*Rhamnus cathartica*), European Reed (*Phragmites australis* ssp. *australis*), Purple Loosestrife (*Lythrum salicaria*), and Tartarian Honeysuckle (*Lonicera tatarica*).

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

There are four plant communities within ETO2, including Meadow Marsh (MAM2-2), Open Aquatic (OAO), Shallow Marsh (MAS2-1)/ Submerged Shallow Aquatic (SAS1) and Cultural Meadow (CUM1-1). Community descriptions are appended.

Significant Plant Communities

There are no Significant Plant Communities in ETO2.

SPECIES RICHNESS

Flora

176 species have been recorded from the site, a medium diversity for the City. The native FQI is 28.53, and the native mean coefficient is 2.90, both low values. The native FQI has increased, and the native mean coefficient has decreased from previous values of 28.43 and 2.93, respectively. In total, 79 introduced plant species are present (representing 44.90% of the total number of species present).

No flora species considered provincially significant or at risk within the province and/or nationally have been recorded at this site.

12 locally significant flora species have been noted at this site.

31 Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been recorded on site.

Fauna

There are a total of 40 faunal species documented for this site: 31 bird, 4 mammal, 2 amphibian and 3 insect species.

Five fauna species considered at risk within the province and/or nationally have been recorded at this site.

17 Credit Valley Conservation fauna species of Conservation Concern (Tier 1-3) have been documented at this site.

MANAGEMENT RECOMMENDATIONS

1. Riparian vegetation along the creek should be restored such that the buffer consists of natural, self-sustaining vegetation.

2. Restoring the site and adjacent Special Management Areas may improve quality and increase the size and quality of natural area.

3. European Reed (*Phragmites australis* ssp. *australis*) is an introduced invasive species to this natural area and exists in a small patch at the north end of the site. This species should be removed before it spreads further into this natural area.

REFERENCES

City of Mississauga (1978)

Transportation and Works (1998)

ECOLOGICAL LAND CLASSIFICATION

Dry-moist Old Field Meadow Type (CUM1-1)

The old field meadow community comprises the majority of the site. This community has a sparse canopy (less than 10% cover) of Crack Willow (*Salix fragilis*) which is 10-20 m in height. The sub-canopy is dominated by Manitoba Maple (*Acer negundo*) which also grows in a sparsely vegetated canopy (2-10m and less than 10% cover). Many of the Willows and Manitoba Maples are associated with the creek and drainage channels. The understory is a dominant vegetation layer in this community. The understory vegetation covers greater than 60% of the community and is 0.5-2 m in height. Such vegetation includes: Canada Goldenrod (*Solidago canadensis*), Jerusalem Artichoke (*Helianthus tuberosus*), Reed Canary Grass (*Phalaris arundinacea*). The ground layer is dominated by old field species including Smooth Brome (*Bromus inermis*) and Meadow Fescue (*Festuca arundinacea*). The ground layer is 0.2-0.5m and covers greater than 60% of the community.

Reed-canary Grass Mineral Meadow Marsh (MAM2-2)

The meadow marsh has a sparse canopy of the occasional Crack Willow (less than 10% cover; 10-25 m tall). There are a few scattered shrubs including Guelder Rose (*Viburnum opulus*), Meadowsweet (*Spirea alba*) and Fragrant Sumac (*Rhus aromatica*). Shrub cover is between 1-3m in height and covers 10-25% of the community. The community is dominated by Reed Canary Grass with Grass-leaved Goldenrod (*Euthamia graminifolia*), sedges (*Carex* spp.), spikerushes (*Eleocharis* sp.) and rushes (*Juncus* spp.) as associates.

Cattail Mineral Meadow Marsh (MAS2-1)/ Submerged Shallow Aquatic (SAS1)

The shallow marsh community is located around a shallow pond. The marsh is dominated by Broad-leaved Cattail (*Typha latifolia*) and Narrow-leaved Cattail (*Typha angustifolia*) in the canopy. Other species in the canopy include Common Reed (*Phragmites australis* ssp. *australis*) and Soft Rush (*Juncus effusus*). The canopy is densely vegetated (greater than 60% cover) with species growing 1-2 m in height. The ground layer (0.2-0.5 m) is densely vegetated (greater than 60% cover) with Purple Loosestrife (*Lythrum salicaria*) and Water Smartweed (*Polygonum amphibium*). This community has some patches of open water within it but may dry out completely in drier years.

Open Aquatic (OAO)

The open aquatic community represents the watercourse flowing through the site. It is shallow and varies from rocky to sandy with little emergent or floating vegetation. Sedges (*Carex* spp.), spikerushes (*Eleocharis* sp.) and rushes (*Juncus* spp.) occur on the edges of this community or as emergent in some locations. The watercourse is 9 to 14 m wide on average.