

2024-01-24

Municipality of Middlesex Centre
Meeting

Restoration Proposal for Delaware
Site

Proposed Restoration Project

Project Lead: LTVCA

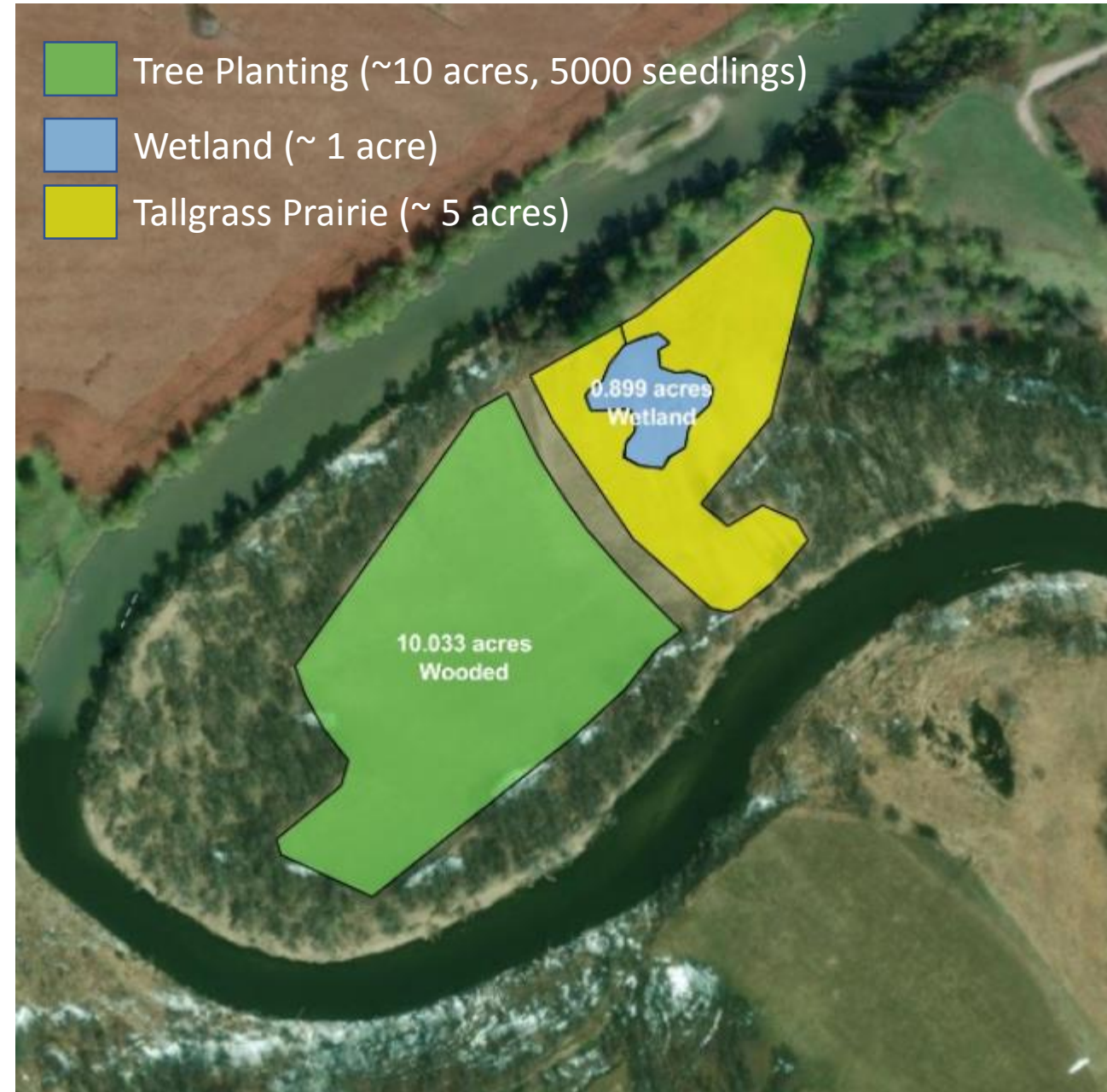
Project Location: 11602 Miller Road, Delaware, Ontario

Project Type: Habitat Creation, Soil Erosion, and Nutrient Retention.

Total Project Area: Estimated 16 acres

Project Description: The LTVCA proposes the subject site to be restored in three individual phases.

- Phase I – Spring 2024
- Phase II – Summer/Fall 2024
- Phase III – Summer/Fall 2024 or Spring 2025



Phase I: Block Tree Planting

- LTVCA will machine plant 5000 trees
- Mixture of native coniferous & deciduous trees
- Plant during May 2024
- Site preparation: Prior to machine planting, area needs to be worked up via tilling or corn stalks will need to be cut, option of spreading clover cover to mitigate weed growth

Cost Breakdown:

Establishment Cost	
Trees (5000 seedlings)	\$9,982.50
Labour Machine Planting	\$5,000.00
Establishment Cost Subtotal	\$14,982.50
Tax (13) %	\$1,947.73
Total Before Incentives	\$16,930.23
Incentive Payments	
Carolinian Canada (NGO) - LTCCC	\$3,500.00
Forests Ontario (Federal) - 50 MTP @ \$2.4/tree	\$12,000.00
Total Incentives	\$15,500.00
Total	\$1,430.23

Total Cost Required by Municipality of Middlesex: \$1,430.23

Deadline for tree orders is January 31st, 2024



Phase II: Wetland

Phase II Description: The Phase II Scope of Work would consist of excavating a 1 acre pond at the eastern portion of the agricultural field.

The wetland will be excavated in an open low laying area, with varying depths ranging from 1'-5'. The wetland would be implemented in an area that experiences seasonal flooding, and would naturally capture surface water runoff surrounding the wetland. The proposed wetland will maintain current flow, creating an open area for water to pool. After excavation, native tall grasses will be planted on the disturbed areas to stabilize the soil.

Spoils from the wetland areas will be spread around the remaining area, primarily on the north & east side with some on the west and low berms will be created to contour the wetland and encourage surface runoff into the wetland. Slopes will be low gradient, creating smooth gradual slopes from the berm into the wetland.

Estimated Establishment Cost Total: TBD

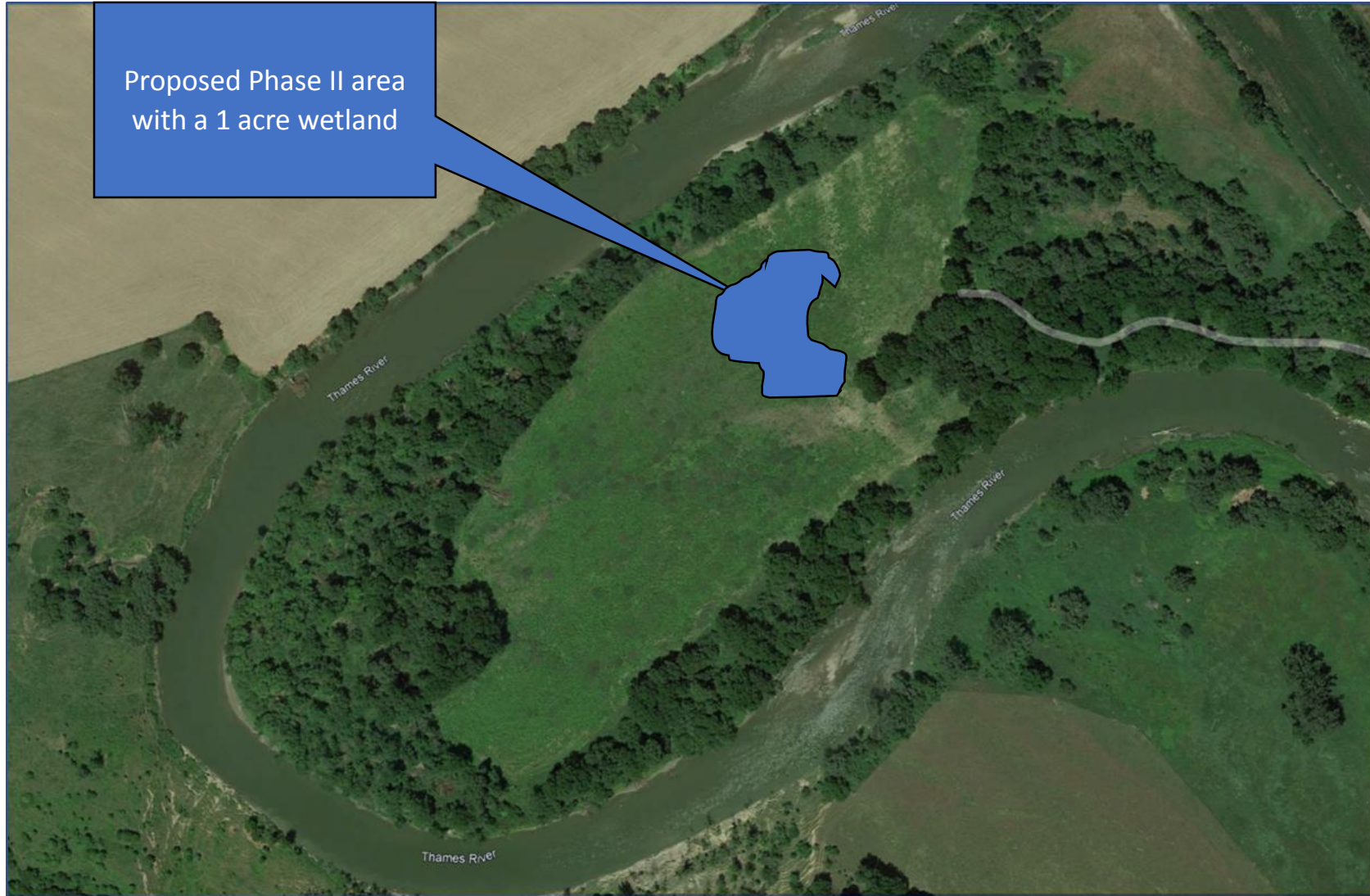
DUC Funding: TBD

WECP Funding: TBD

Total Establishment Cost Subtracting Funding Sources: TBD

Total Cost After Applicable Funding: TBD

Wetland Location Map



Phase III: Native Tall Grass Prairie

Phase III Description: The Phase III Scope of Work would consist of drill seeding 5 acres of native tall grasses surrounding the wetland area with majority of the seed being planted to the east and south.

Site preparation: area where seeds are to be planted will need to be tilled prior to establishment

Estimated Cost of Drill Seeding: \$10,000 (2,000/acre, 2,000 x 5 = \$10,000), this includes cost of machine planting

LTCCC Funding: TBD

ALUS Middlesex Funding: TBD

Native Tall Grass Prairie Location Map



Post Implementation Preparation

Tree Planting Post Preparation: Once the trees have been planted in the spring, maintenance of mitigating weed growth surrounding the plants, especially in their first three years is vital to their success. This would need to be conducted on a routine basis throughout spring to fall for those first three years until the trees reach a sufficient height where the weeds won't out compete them for sunlight. This is best done by means of a riding lawn mower or similar machinery. The LTVCA would be able to assist in maintenance, but it would not be free of charge.

Tall Grass Prairie Post Preparation: Once the tall grasses have established they should be cut annually after July 31st of the corresponding year in a high mow fashion to promote growth and mitigate weed growth respectively.