Howard/Bouffard Planning Area Master Drainage Study

Public Information Centre #3

Town of LaSalle

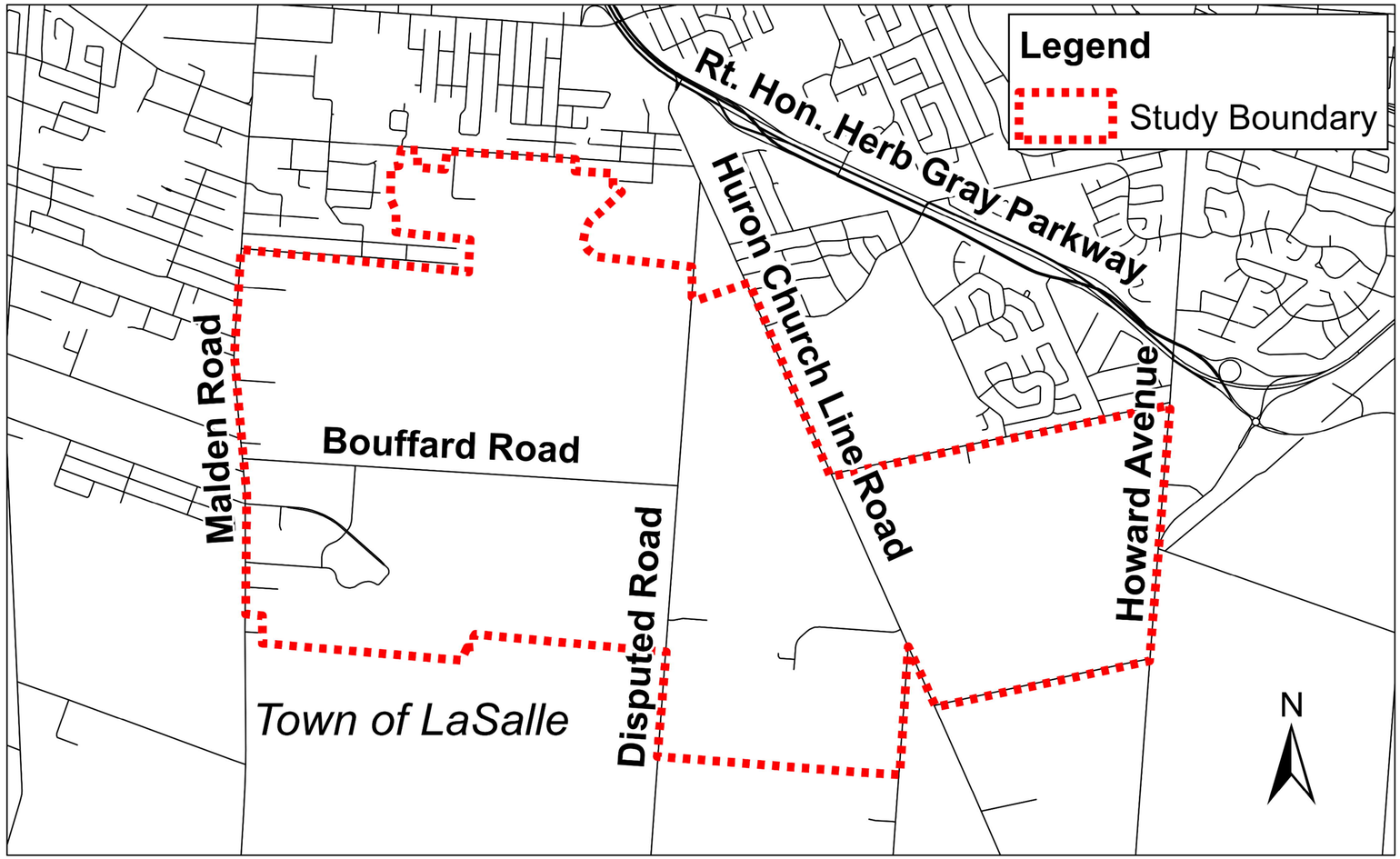
March 1, 2023

Welcome

- Thanks for your interest in this study
- The purpose of the study is to address drainage issues within the Howard/Bouffard Planning Area, which is shown on the map below.

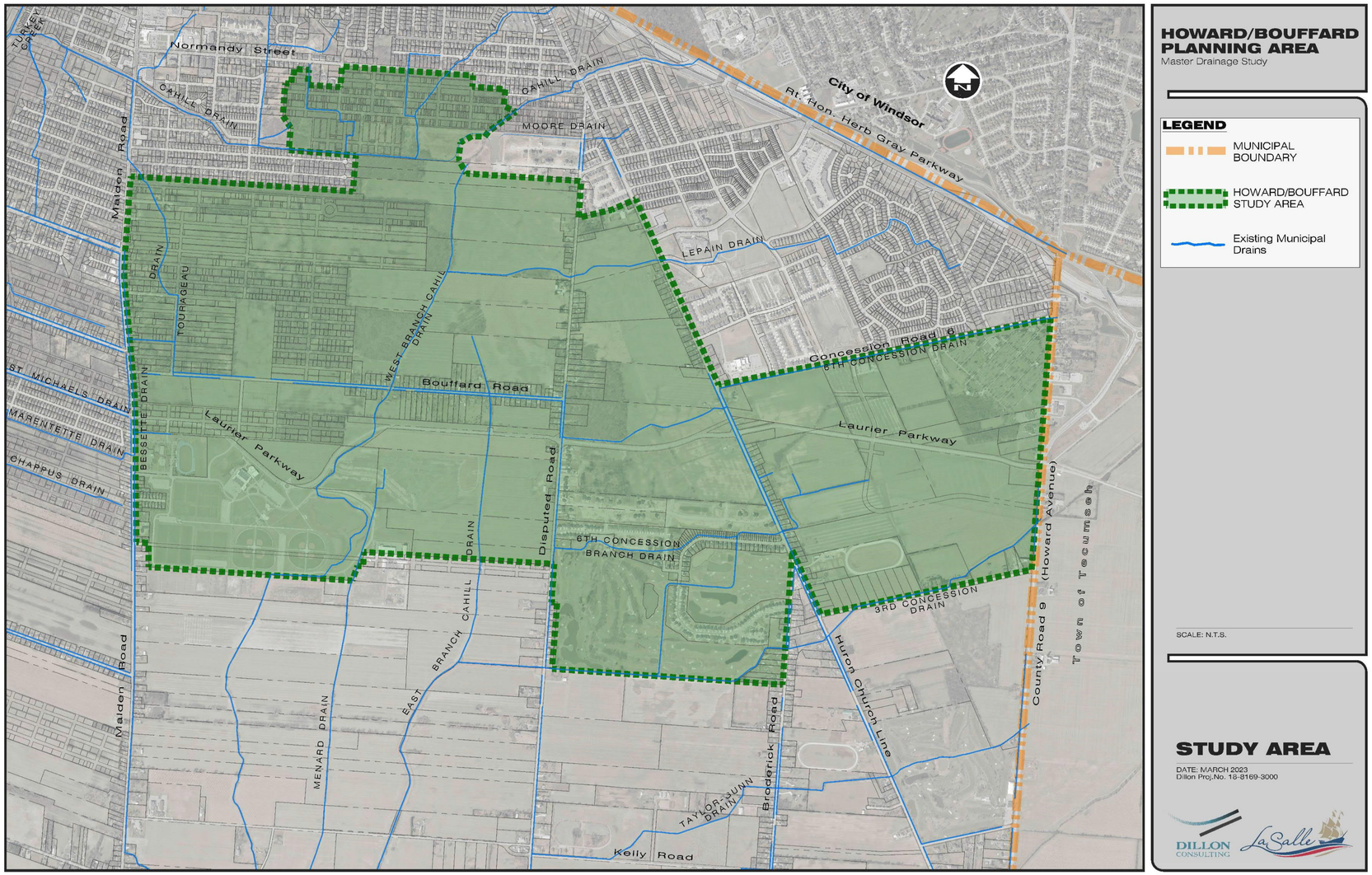
Public Information Centre (PIC) Objectives

- Provide an update on the study
- Present the evaluation of alternative solutions
- Gather feedback on the preferred solution
- Summarize next steps.



Background – Need for the Project

- The Howard/Bouffard Planning Area is primarily designated residential and is planned to be developed over the next decades.
  - The Town of LaSalle and Essex Region Conservation Authority (ERCA) are only able to issue approvals for development outside of the flood inundation area.



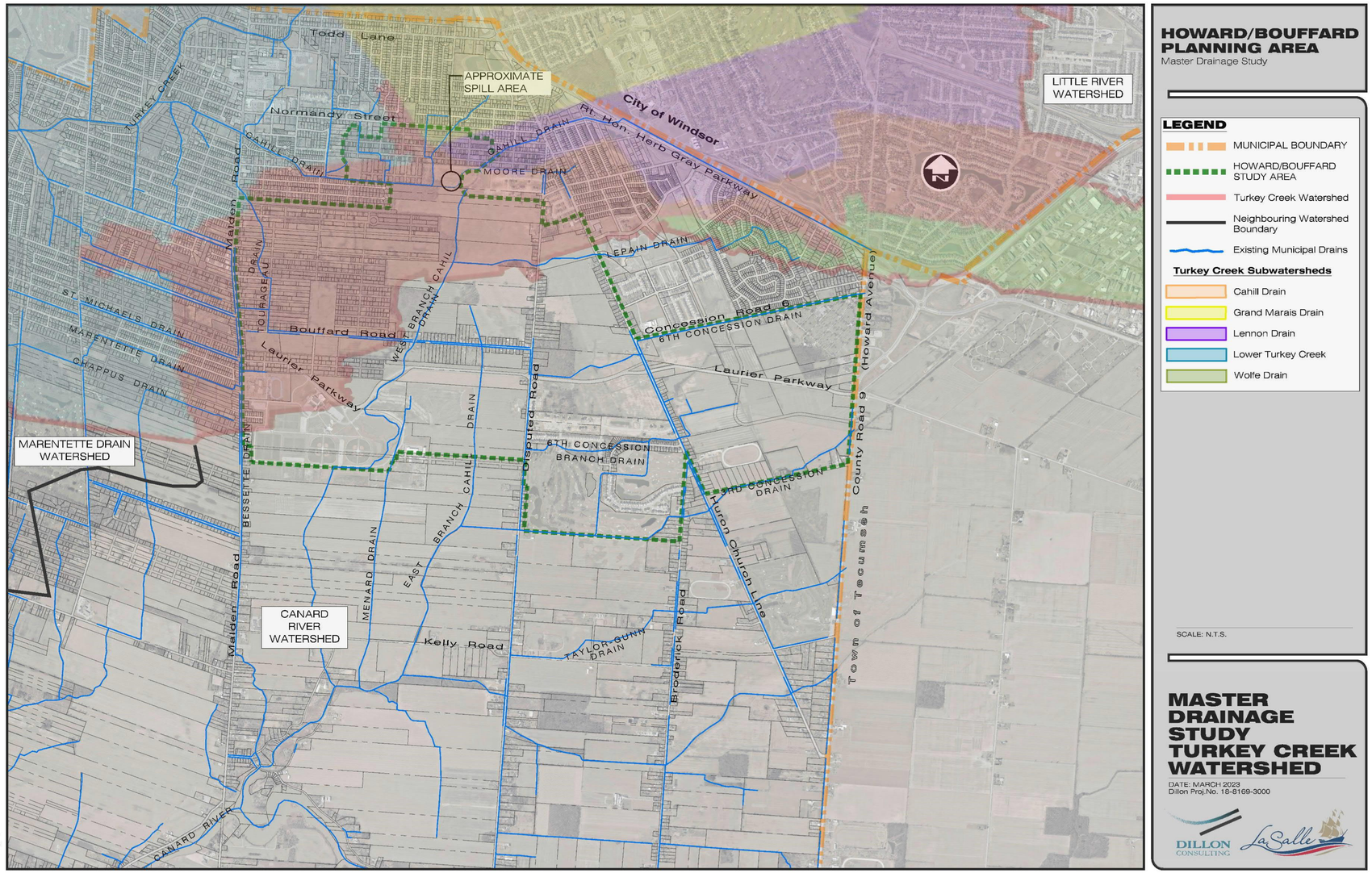
Background – Previous Studies

- Several studies have been completed to plan for new infrastructure in the area:
  - Bouffard and Howard Planning Districts Functional Design Study (2005) and Addendum (2017)
  - Environmental Study Report for Laurier Parkway between Malden Road and Howard Avenue (2009)
  - Detailed design and construction of Laurier Parkway (2010)
  - Design and construction of the expansion of the Vollmer Complex and related stormwater management facility (2010).
  - Townwide Transportation & Active Transportation Master Plan (2019)

- Previous studies addressed stormwater management for minor and major events; however, spill-over from adjacent drainage areas were not considered
- This study aims to prepare a comprehensive solution to address stormwater overflow into the Howard/Bouffard Planning Area during major storm events to ensure existing residents are protected and to provide sufficient outlet for proposed future developments.

Background – Why the Study was Paused

- In July 2020, the Howard Bouffard Master Drainage Study was paused while the Essex Region Conservation Authority undertook the Turkey Creek Watershed Study. The Turkey Creek Study established a consistent and agreed upon model which affects the Howard/Bouffard Planning Area.
- The Turkey Creek Watershed Study is now complete and can inform the Howard/Bouffard Master Drainage Study.



Project Re-Start & Objectives

- Notice of Project Re-Start was issued on August 2, 2022
  - Comments in response to the Notice included an inquiry about property impacts, confirmation that certain lands were withdrawn from the study, and guidance from the Ministry of Tourism, Culture and Sport.

Study Objectives

- Build on the solution developed through the Bouffard Howard Planning District Class Environmental Assessment Addendum (March 2017)
- Establish existing flood extents in the area
- Develop an implementation strategy, including interim conditions (if any) and full build-out
- Estimate construction costs and consider cost recovery mechanisms
- Establish property requirements to facilitate the improvements.

Class Environmental Assessment Process

PHASE 1: Problem/ Opportunity

- Identify problems/ opportunities to be addressed in the planning and design process
- Prepare a “Problem Statement.”

PHASE 2: Alternative Solutions

- Evaluate alternative solutions to address problems/opportunities
- Review existing and planned conditions
- Consult with review agencies and the public
- Assess impacts of the preferred alternative
- Prepare report documenting the study.

PIC #1

PIC #2

PIC #3 ★ We are here

PHASE 5: Implementation

- Design and construction phase
- Project must address recommendations and commitments made in the environmental assessment documentation.

This study is following Master Plan approach #2 under the Municipal Class Environmental Assessment (EA; 2000, as amended), and will proceed through Phases 1 and 2 of the process.

The Class EA process requires that:

- ✓ Relevant social, environmental, and engineering factors are considered in the planning and design process
- ✓ Public and agency input is integrated into the decisions.

Consultation Summary

Start

- October 23, 2018 – Notice of Study Commencement was distributed to introduce the study and invite initial input
  - Concerns were raised about existing flooding and property impacts
  - It was suggested that the study area be expanded.

PIC #1

- June 26, 2019 – PIC #1 outlined the alternatives considered and the initial preferred solution
  - Concerns were raised about downstream flooding, property impacts, timing for development, funding mechanisms and the evaluation.
  - Changes to the preferred solution were suggested.

PIC #2

- December 12, 2019 – PIC #2 presented a revised solution which accommodated all future development within the planning area
  - Concerns were raised about property impacts, funding mechanisms, involvement of impacted landowners and the flood extents.

PIC #3

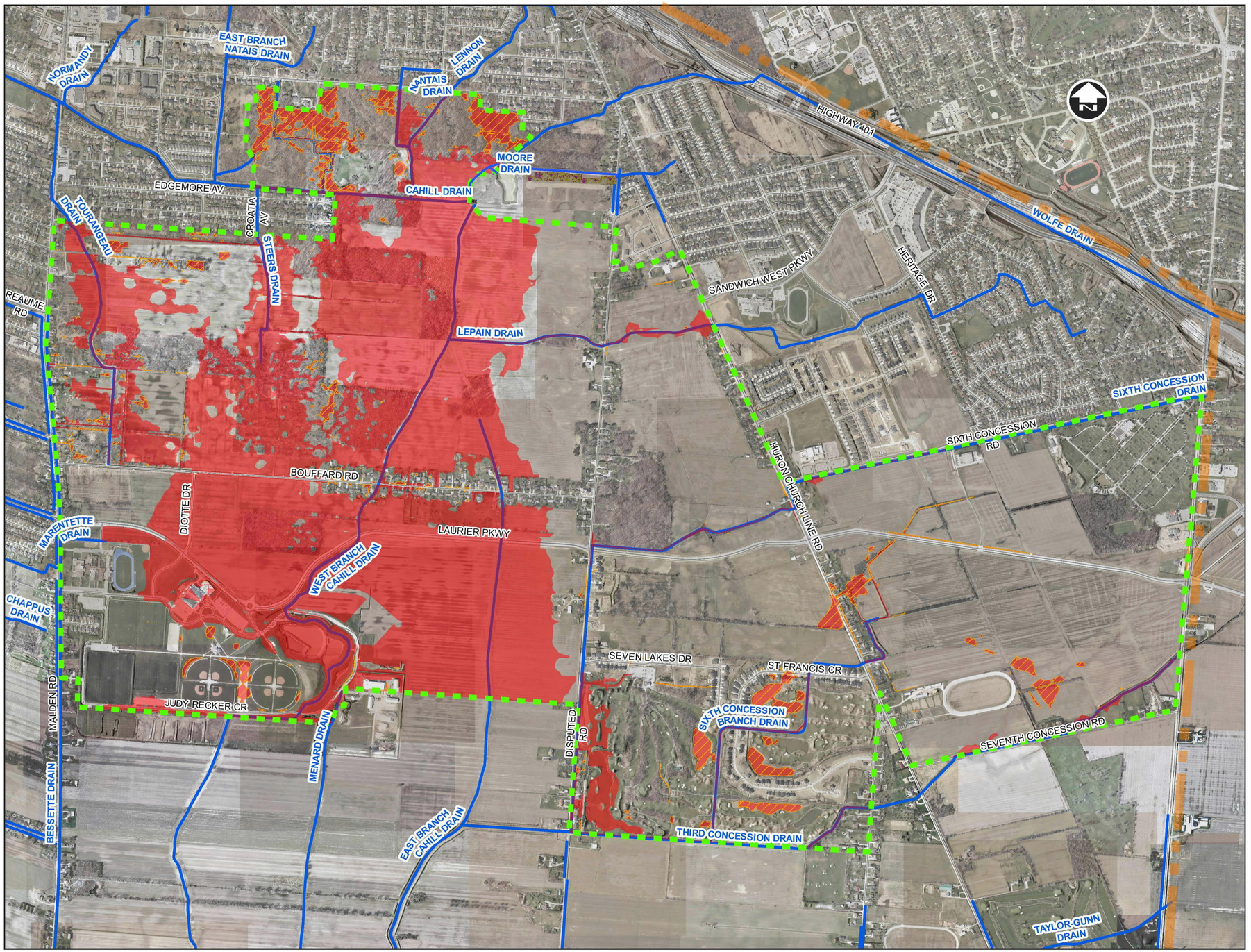
We are here

- The current PIC presents a solution that incorporates the findings of the Turkey Creek Watershed Study and addresses feedback from PIC #2.

Stakeholder Feedback and Actions

Summary of Feedback from PIC #2	Demonstrated Change for PIC #3
Concern with respect to the estimated construction cost of the preferred alternative	The solution identified in Alternative 3 will result in a substantially lower cost than the preferred solution identified in PIC #2.
Concern with the amount of time required to finance and construct the preferred alternative	The solution identified in Alternative 3 will require less financing and time to construct.
Concern with impacts to residential lands	The solution identified in Alternative 3 will reduce the impacts to private lands.
Concern with respect to implementation of one large solution	Alternative 3 is a scaled back such that it can be more easily implemented at one time.
Concern with respect to the spill rate from the Cahill Drain	The estimated spill from the Cahill Drain was 9.6 m^3/s as of PIC #2. Based on the completed Turkey Creek Study, that amount has been refined to 7.8 m^3/s for PIC #3.
Request for clarity with respect to what lands benefit and how costs will be distributed.	It is likely that the Drainage Act will be pursued as a next step in the process and would confirm the contributions from the upstream lands and affected lands within the Howard/Bouffard area.

Existing Conditions – Flood Extents



HOWARD/BOUFFARD PLANNING AREA
Master Drainage Study

LEGEND

- MUNICIPAL BOUNDARY
- HOWARD/BOUFFARD STUDY AREA
- DEPRESSION STORAGE AREA
- FLOOD EXTENT*
- EXISTING DRAIN OR WATERWAY
- STREET CENTRELINE

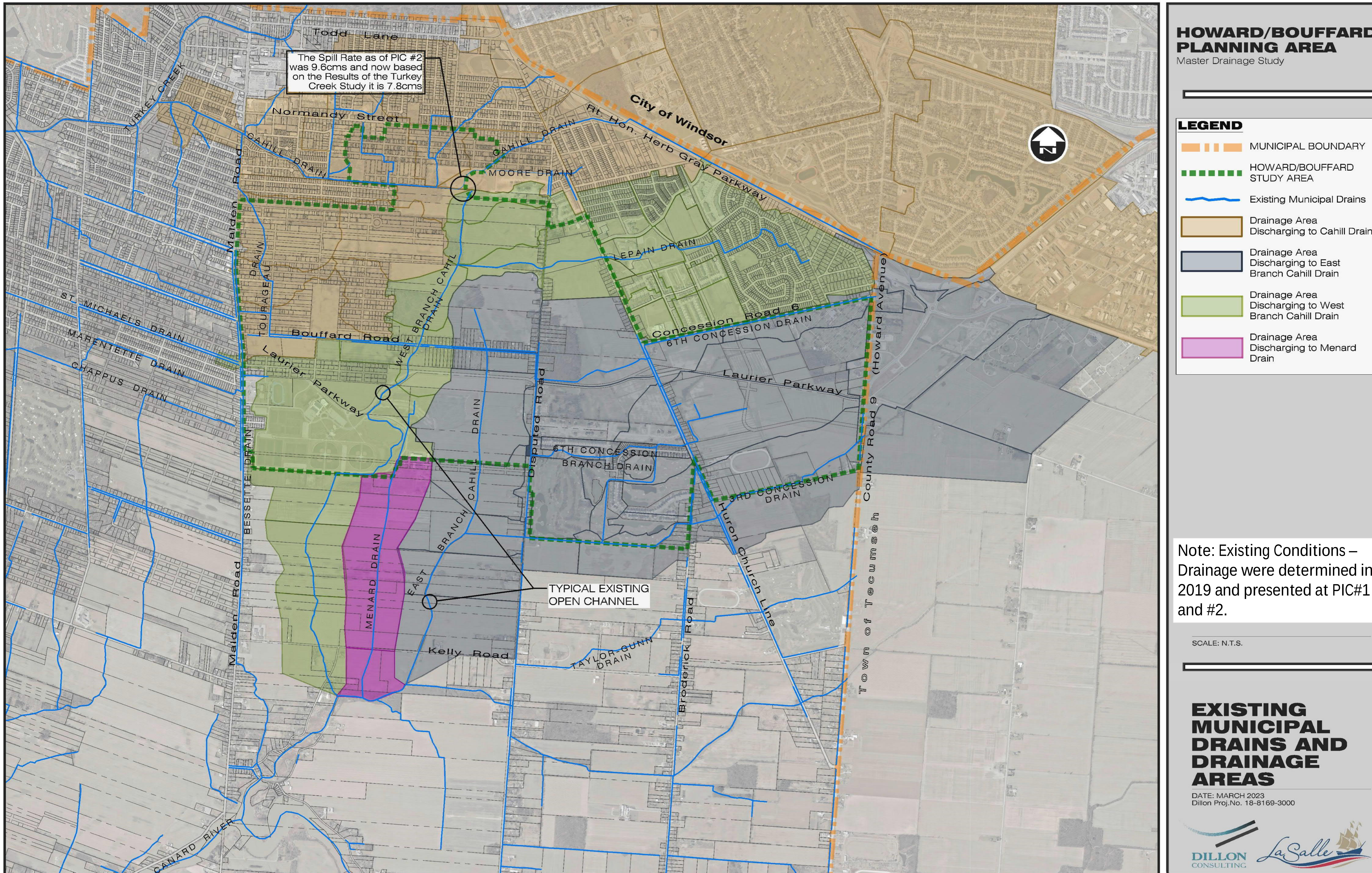
* NOTE: FLOOD EXTENTS HAVE ONLY BEEN ILLUSTRATED WITHIN THE STUDY AREA. FLOODING DOES EXTEND BEYOND THE STUDY LIMITS.

SCALE: N.T.S.

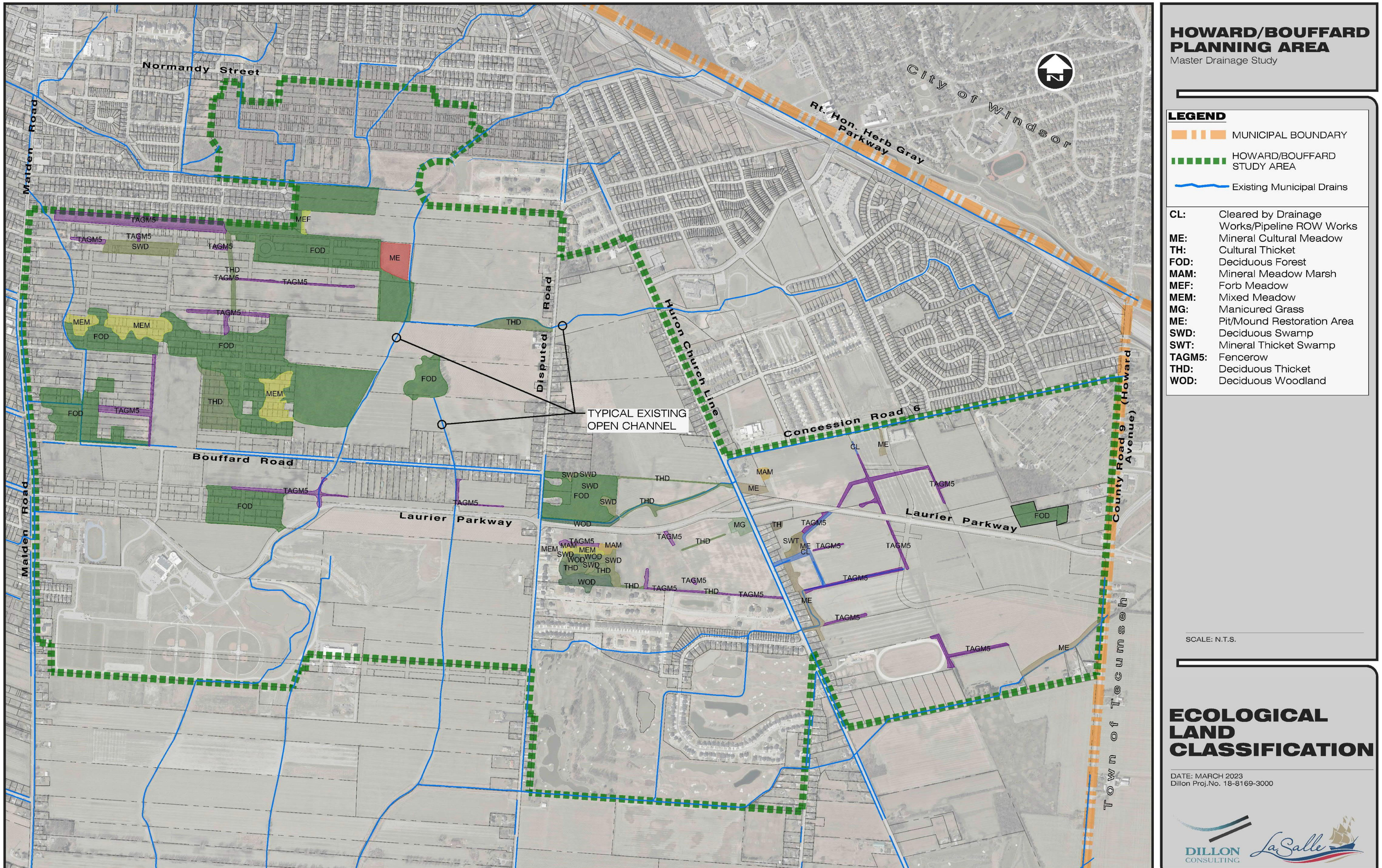
EXISTING 1:100 YEAR FLOOD EXTENTS

DATE: MARCH 2023
Dillon Proj.No. 18-8169-3000

Existing Conditions – Drainage

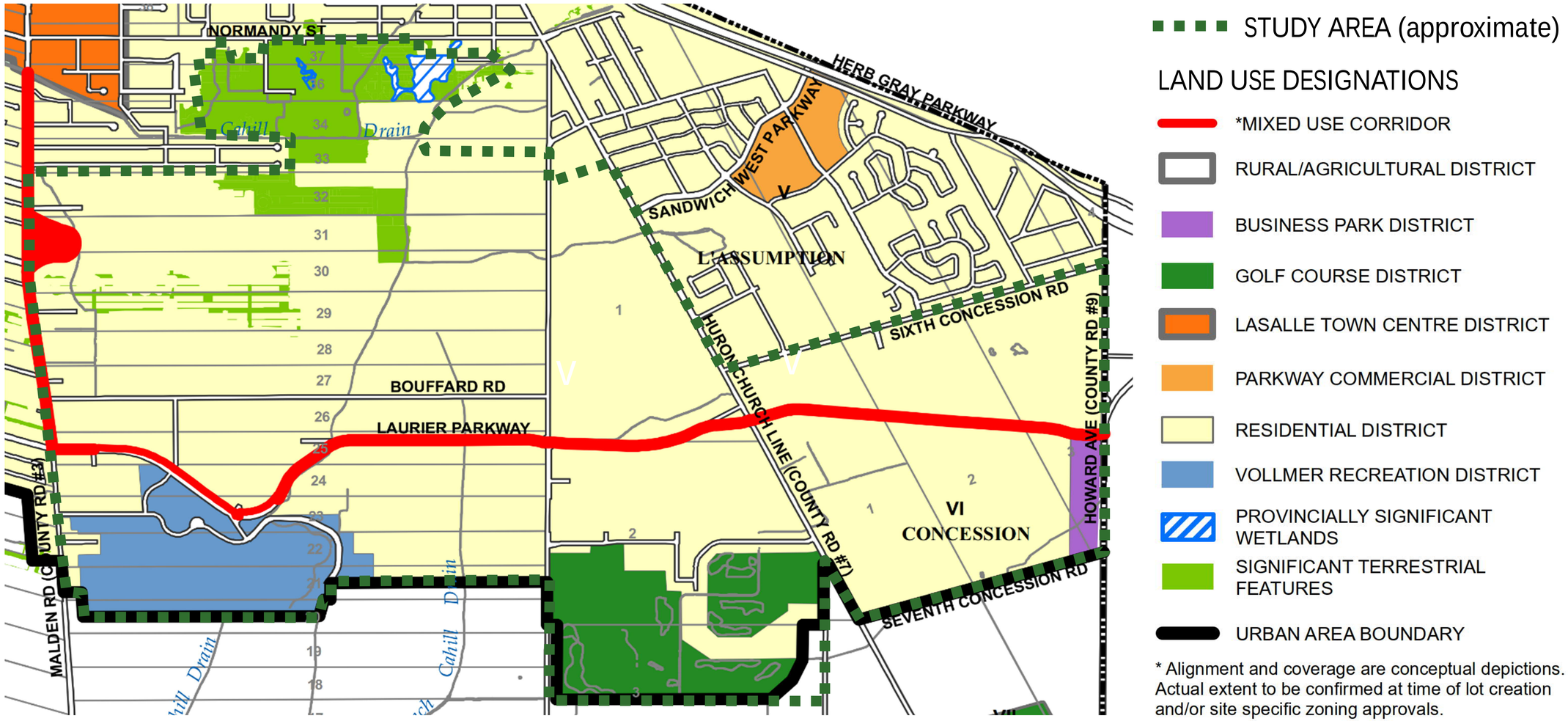


Existing Conditions – Natural Environment



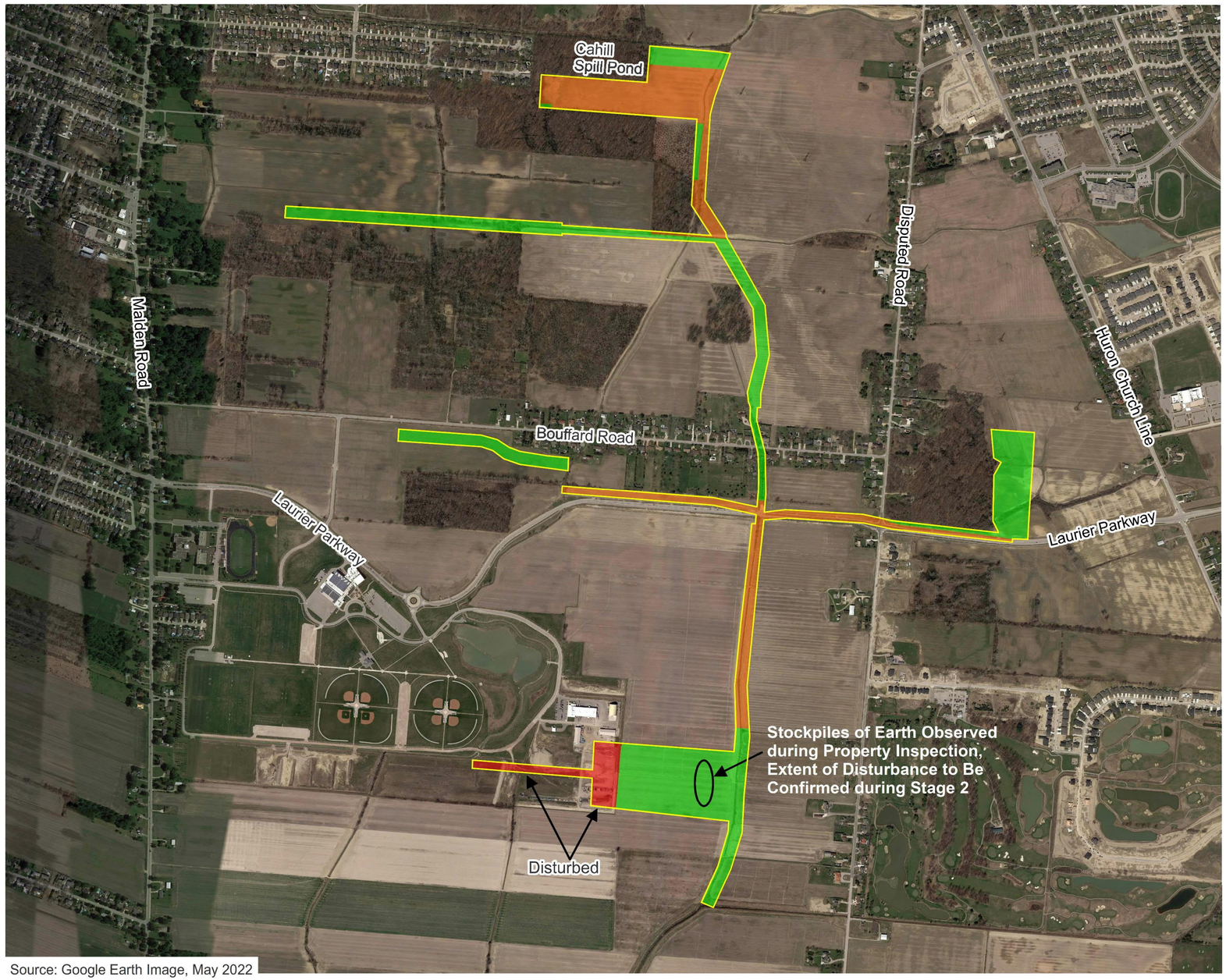
Existing Conditions – Socio-Economic

- Study area is primarily agricultural, with some existing residential dwellings, commercial and institutional uses, recreational facilities, and natural areas
  - Town of LaSalle Official Plan (Schedule B, excerpt below) calls for residential, mixed-use, and business park development in the area



Existing Conditions – Cultural Heritage

Alternative 2



Source: Google Earth Image, May 2022

KEY

- Footprint of Alternative 2
- Disturbed by Modern Activities, No Further Archaeological Work Recommended
- Previously Subjected to Stage 2: Assessment, Nothing Found, No Further Archaeological Work Recommended
- Stage 2: Assessment Recommended by Pedestrian Survey where Ploughing Is Feasible, by Shovel Testing at 5 m Intervals where Ploughing Is Not Feasible

FAC

Date: 24/02/23
Designer: JM

N

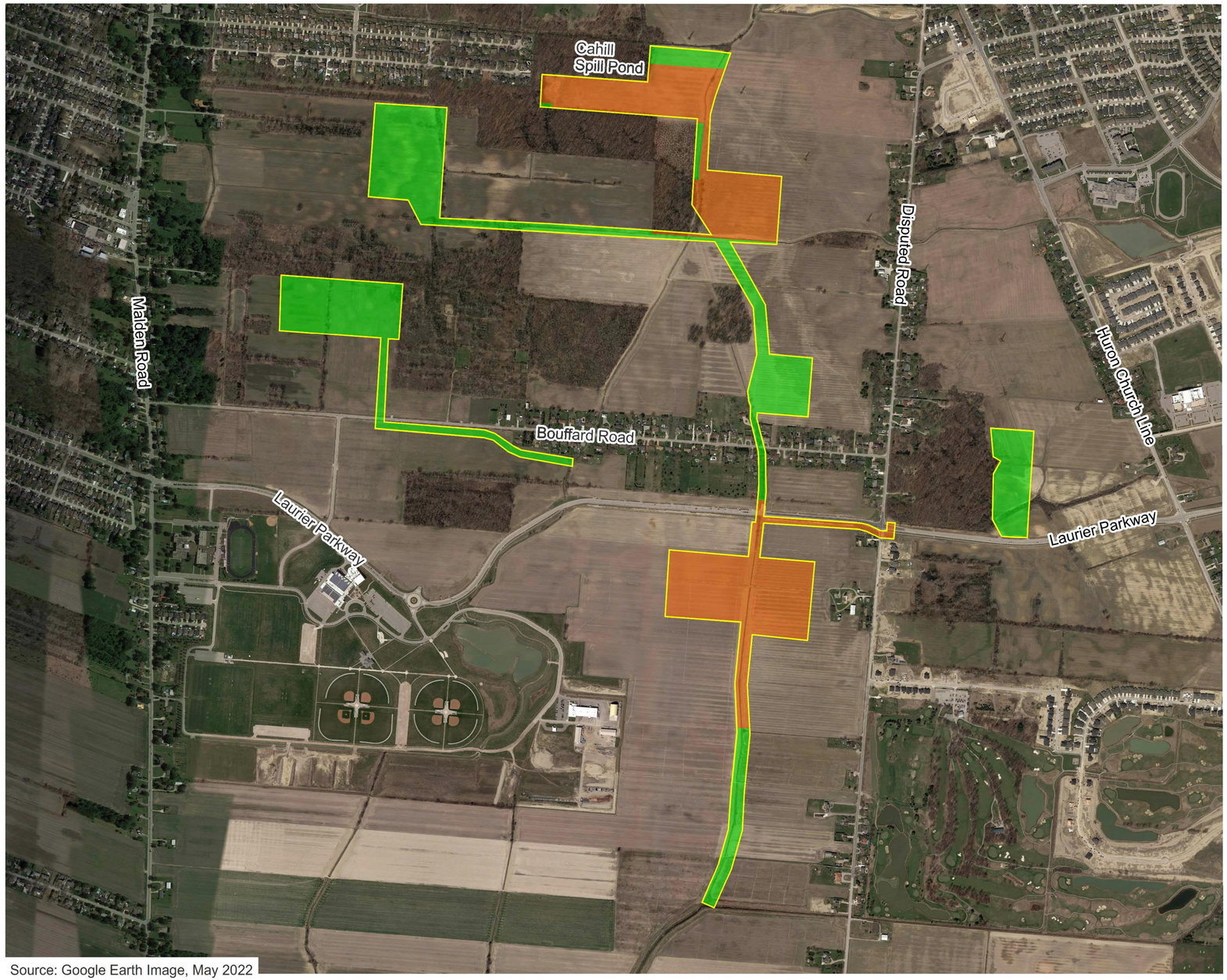
Scale
0 500 m

HOWARD-BOUFFARD DRAIN PROJECT,
LaSalle, Essex County
Archaeological Stage 1: Background Study

Figure 10: Recommendations from Stage 1, Alternative 2

Existing Conditions – Cultural Heritage

Alternative 3



Source: Google Earth Image, May 2022

KEY

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HOWARD-BOUFFARD DRAIN PROJECT,
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Figure 12: Recommendations from Stage 1, Alternative 3