

Your comments are encouraged and appreciated, as this will provide us an opportunity to address project issues and concerns.





### FIRST NATIONS LAND ACKNOWLEDGEMENT



Tuck Creek Detailed Design for Erosion Site 5, 6, 7

Dundas Street to Headon Road

Burlington as we know it today is rich in history and modern traditions of many First Nations and the Métis. From the Anishinaabeg to the Haudenosaunee, and the Métis – our lands spanning from Lake Ontario to the Niagara Escarpment are steeped in Indigenous history. The territory is mutually covered by the "Dish with One Spoon Wampum Belt Covenant", an agreement between the Iroquois Confederacy, the Ojibway and other allied Nations to peaceably share and care for the resources around the Great Lakes.

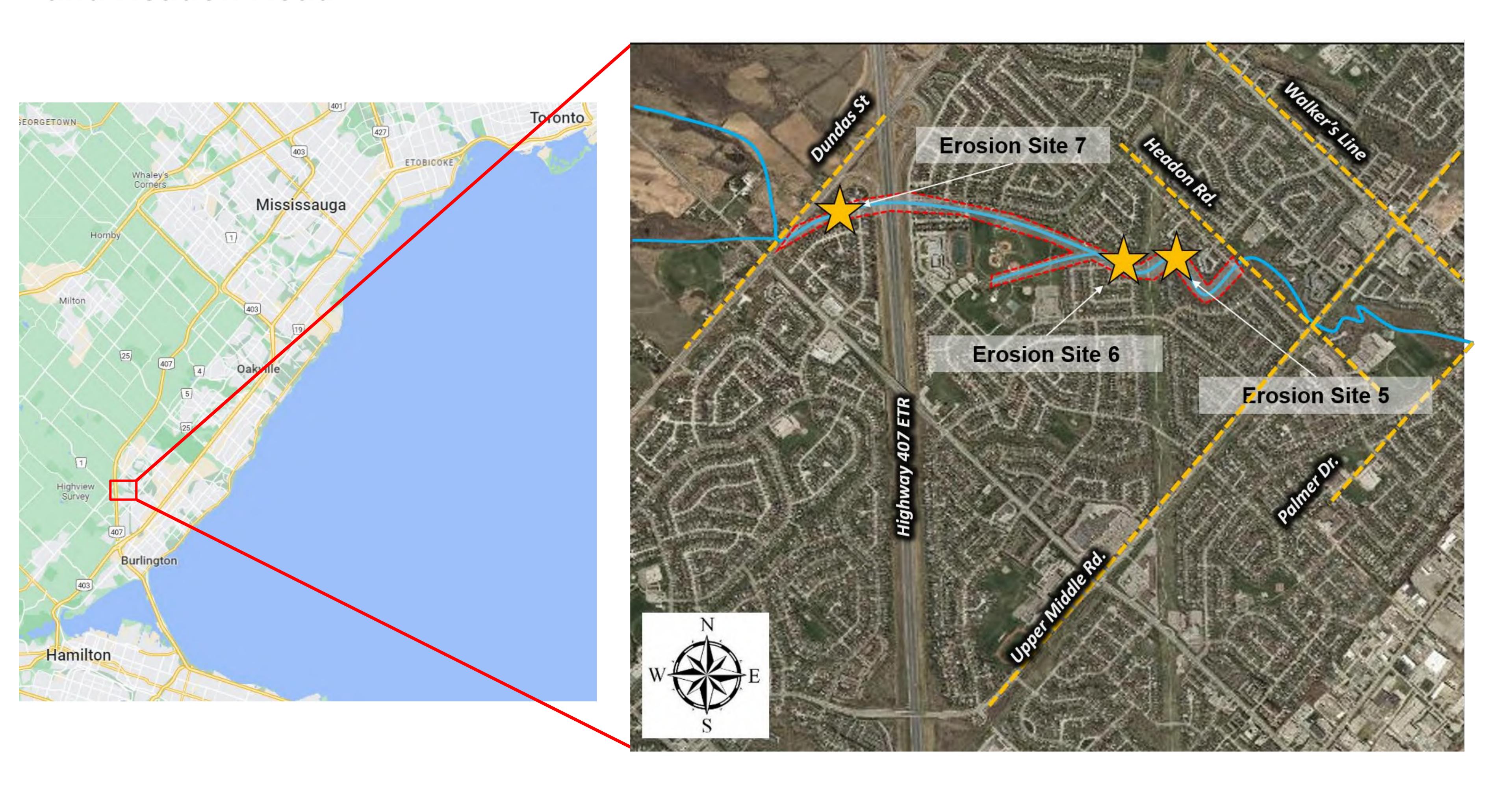
We would like to acknowledge that the land on which we gather is part of the Treaty Lands and Territory of the "Mississaugas of the Credit".

### STUDY AREA



Tuck Creek Detailed Design for Erosion Site 5, 6, 7
Dundas Street to Headon Road

The study area encompasses ~120 meters of channel works between Dundas Street and Headon Road.



#### STUDY BACKGROUND



Tuck Creek Detailed Design for Erosion Site 5, 6, 7

Dundas Street to Headon Road

The Erosion Control Environmental Assessment (EA) Study completed in 2022 identified channel erosion and slope destabilization within the Tuck Creek corridor for three distinct study areas: Harvester Road to Hydro Right of Way, Palmer Drive to CN Rail, and Dundas Street to Headon Road, posing risks to private property, aquatic habitat, and public safety.

To address these concerns, restoration efforts are needed to mitigate the impacts of bank erosion, over steepened slopes, and failed erosion and flooding protection measures, all of which continue to jeopardize both private and public properties.

The focus of this project is to address the erosion concerns and implement erosion control measures, including bank protection, minor channel realignment, regrading and restoration of the channel bed, and the implementation of a vegetation restoration plan.

#### PUBLIC INFORMATION CENTRE PURPOSE

#### This Public Information Centre (PIC) is Designed to:

- Present detailed design plans, including tree removals, construction details, and access requirements.
- Prepare residents for pending construction and provide opportunity to ask questions to City representatives
- Provide input from members of the public on the detailed design and discuss concerns regarding construction activities



#### PROJECT HIGHLIGHTS

Tuck Creek Detailed Design for Erosion Site 5, 6, 7
Dundas Street to Headon Road

- Minor channel realignment and regrading of the bank including restoration with native plantings
- Regrading and restoration of the channel bed with natural riffle pool morphology
- Installation of toe protection for the armourstone retaining wall
- Installation of vegetated buttress with boulder toe protection to prevent channel erosion with potted shrubs
- Restoration of the work area through implementation of a comprehensive vegetation restoration plan

#### CONSTRUCTION ACCESS

- Access to Erosion Site #5 via Deer Run Avenue through Hydro Corridor
- Access to Erosion Site #6 via Deer Run Avenue through Hydro Corridor
- Access to Erosion Site #7 via Driftwood Drive





### EXISTING CONDITIONS: EROSION SITE 5



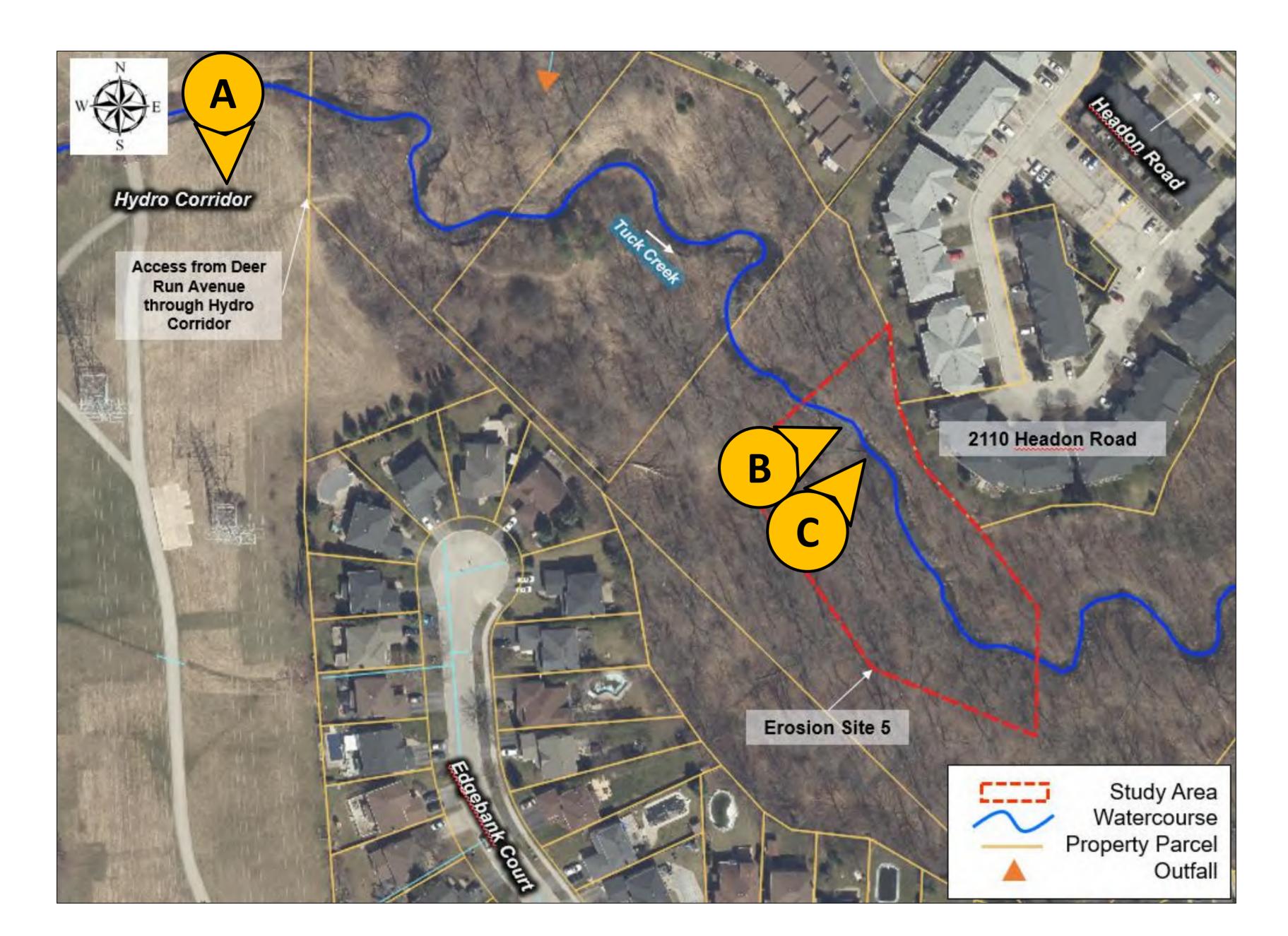




Photo A – Access Route Through Hydro Corridor





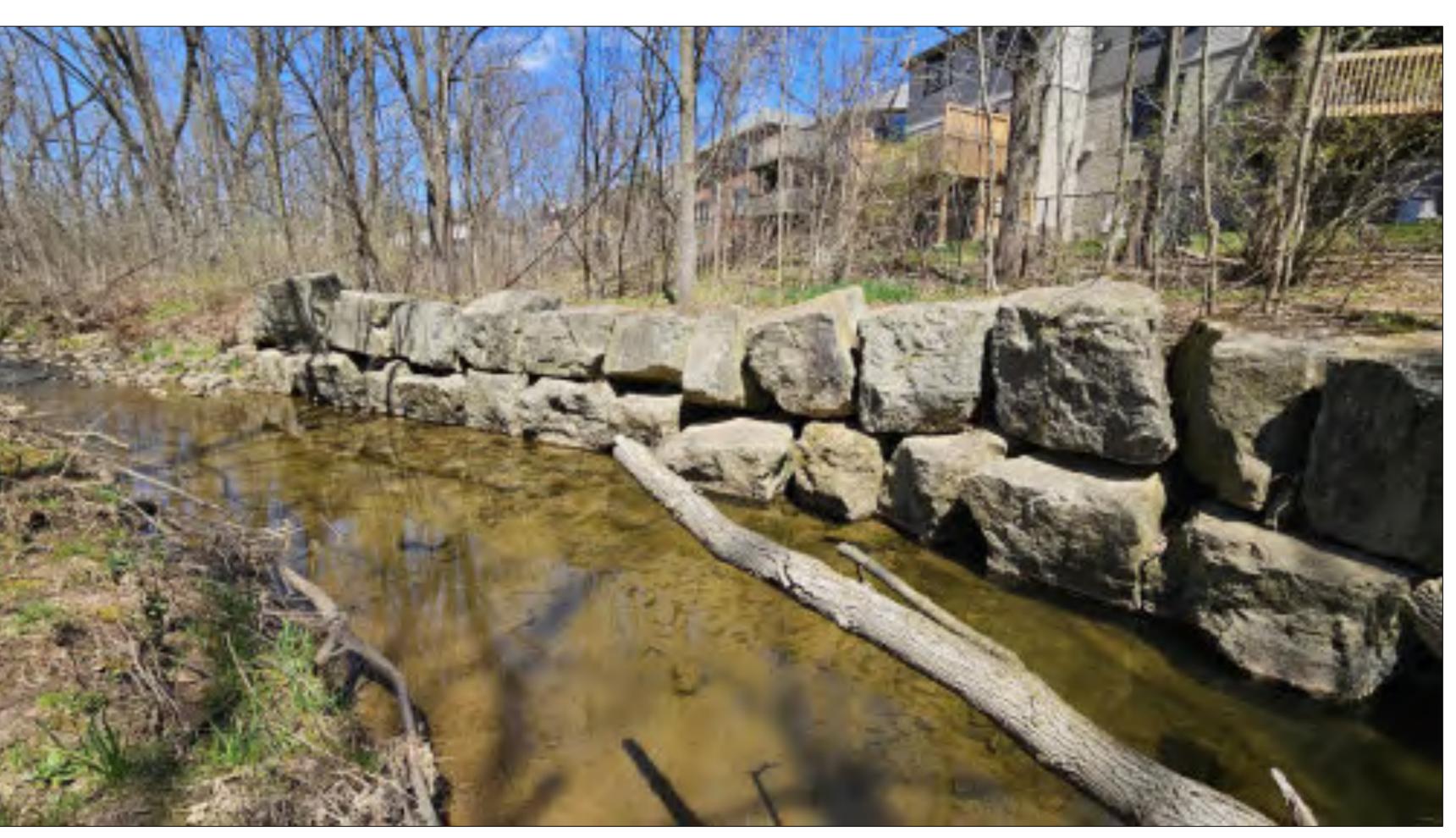
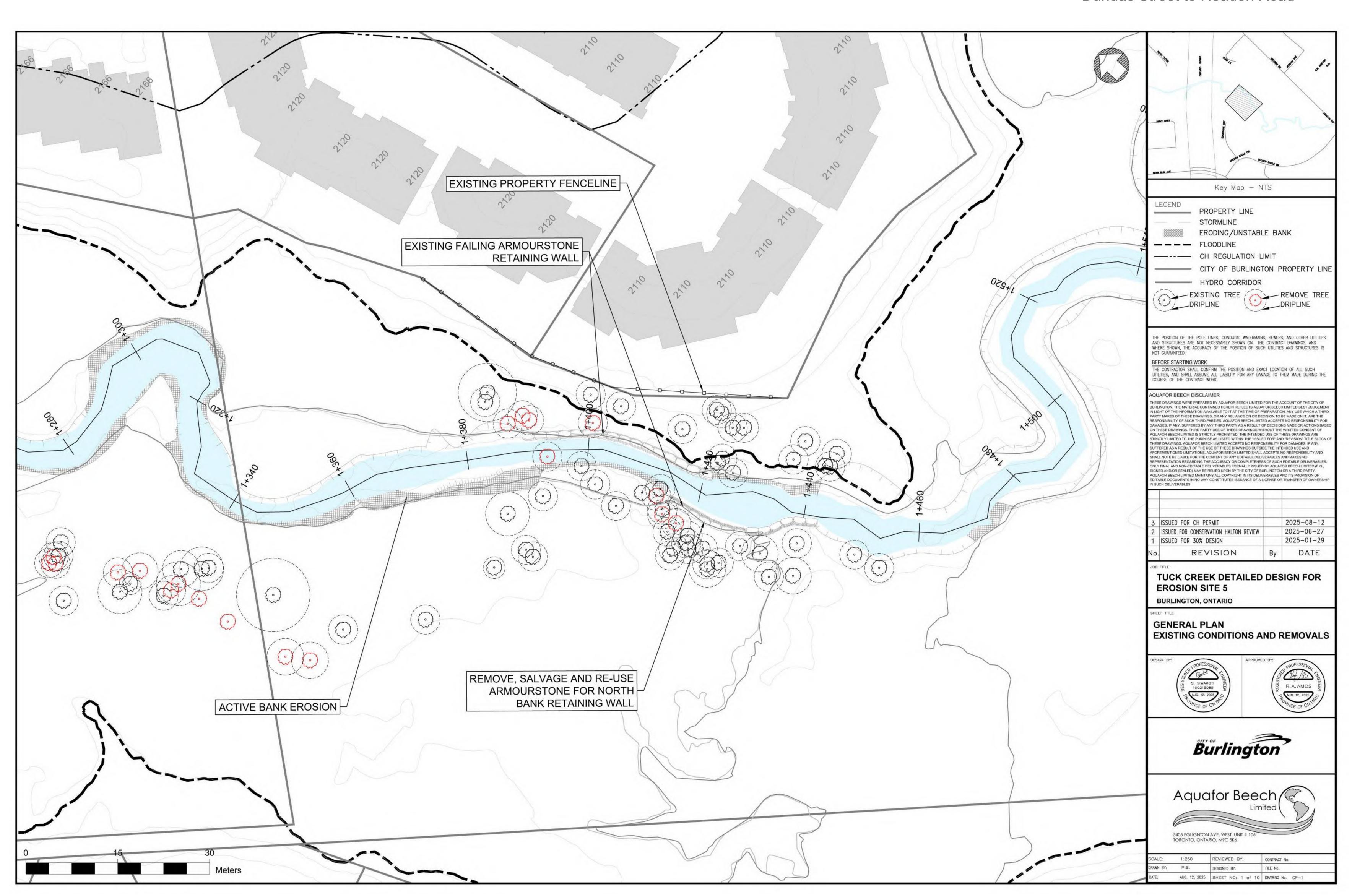


Photo C – Arrmourstone Wall in a Deteriorated Condition

# SITE 5: GENERAL PLAN – EXISTING CONDITIONS AND REMOVALS



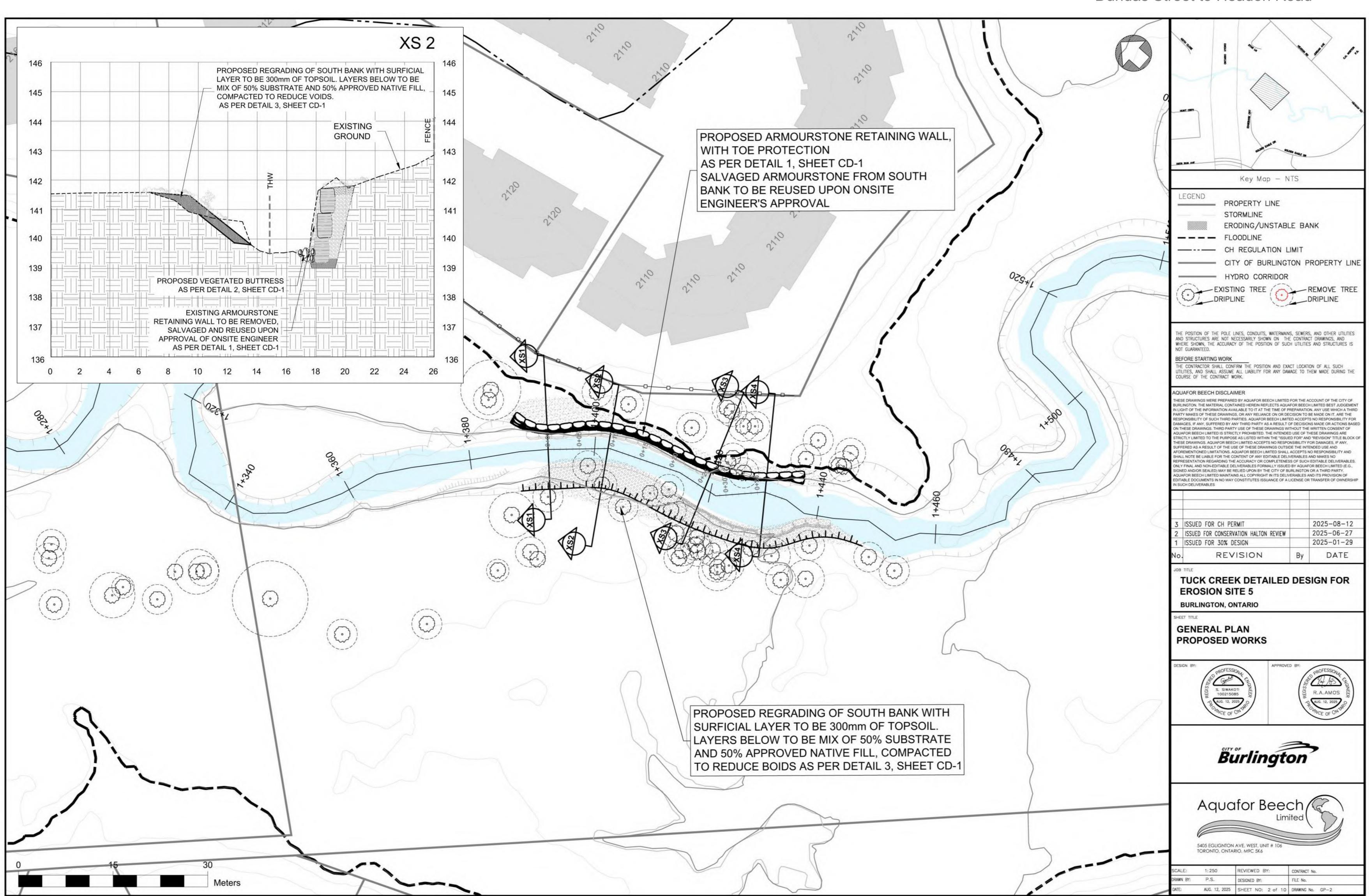




## SITE 5: GENERAL PLAN – PROPOSED WORKS



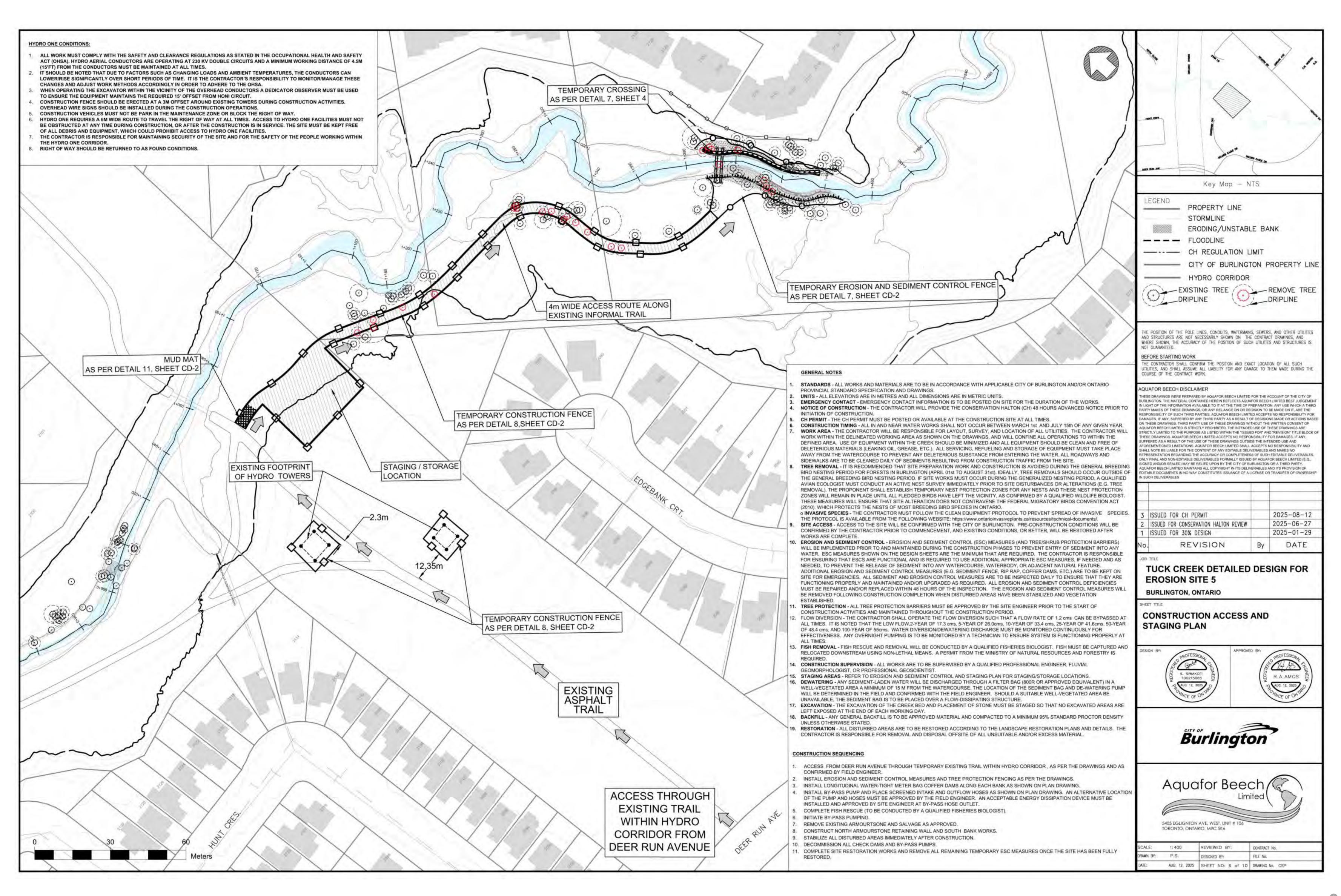




### SITE 5: CONSTRUCTION ACCESS AND STAGING PLAN



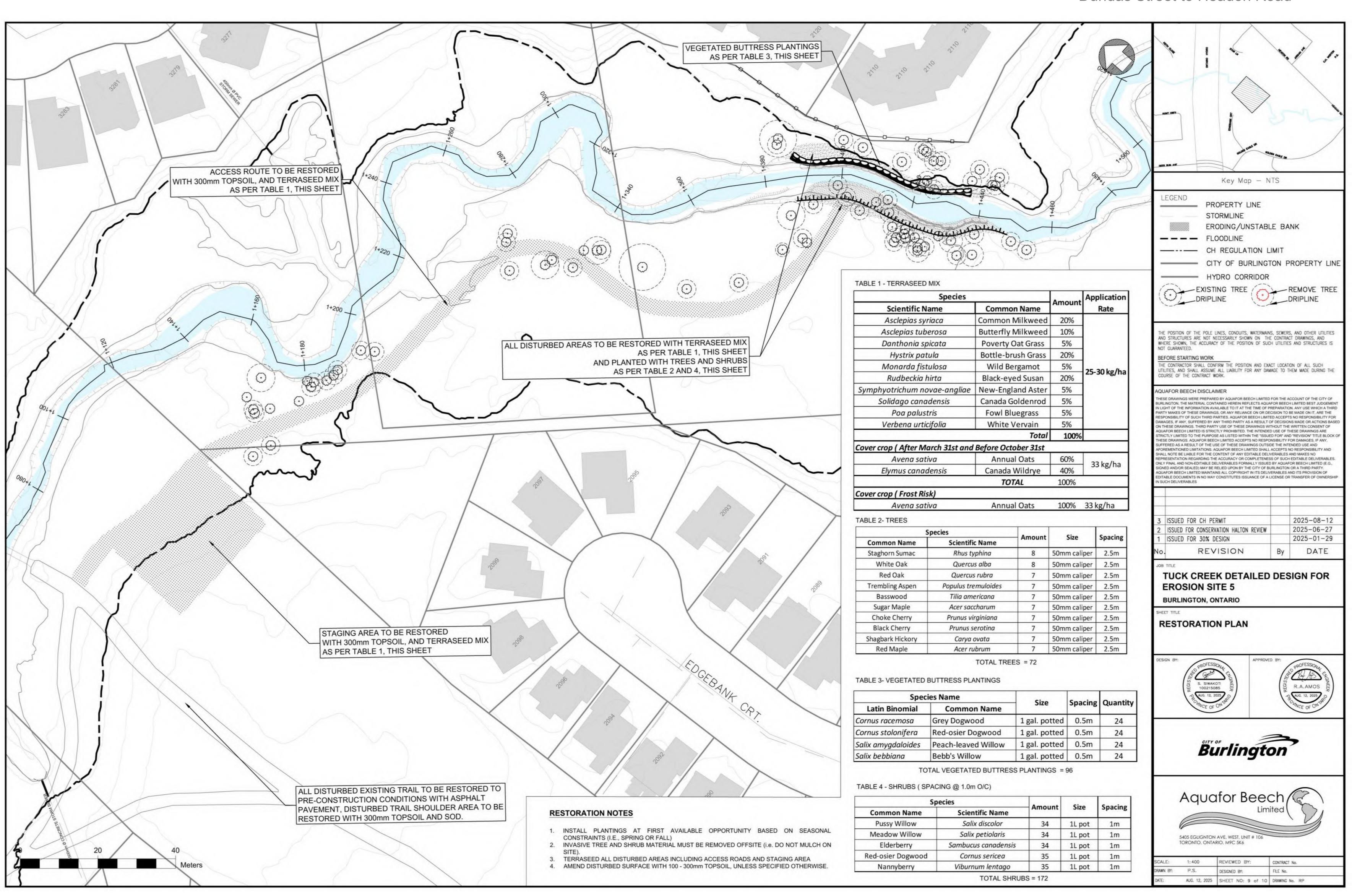
















### EXISTING CONDITIONS: EROSION SITE 6

Tuck Creek Detailed Design for Erosion Site 5, 6, 7

Dundas Street to Headon Road

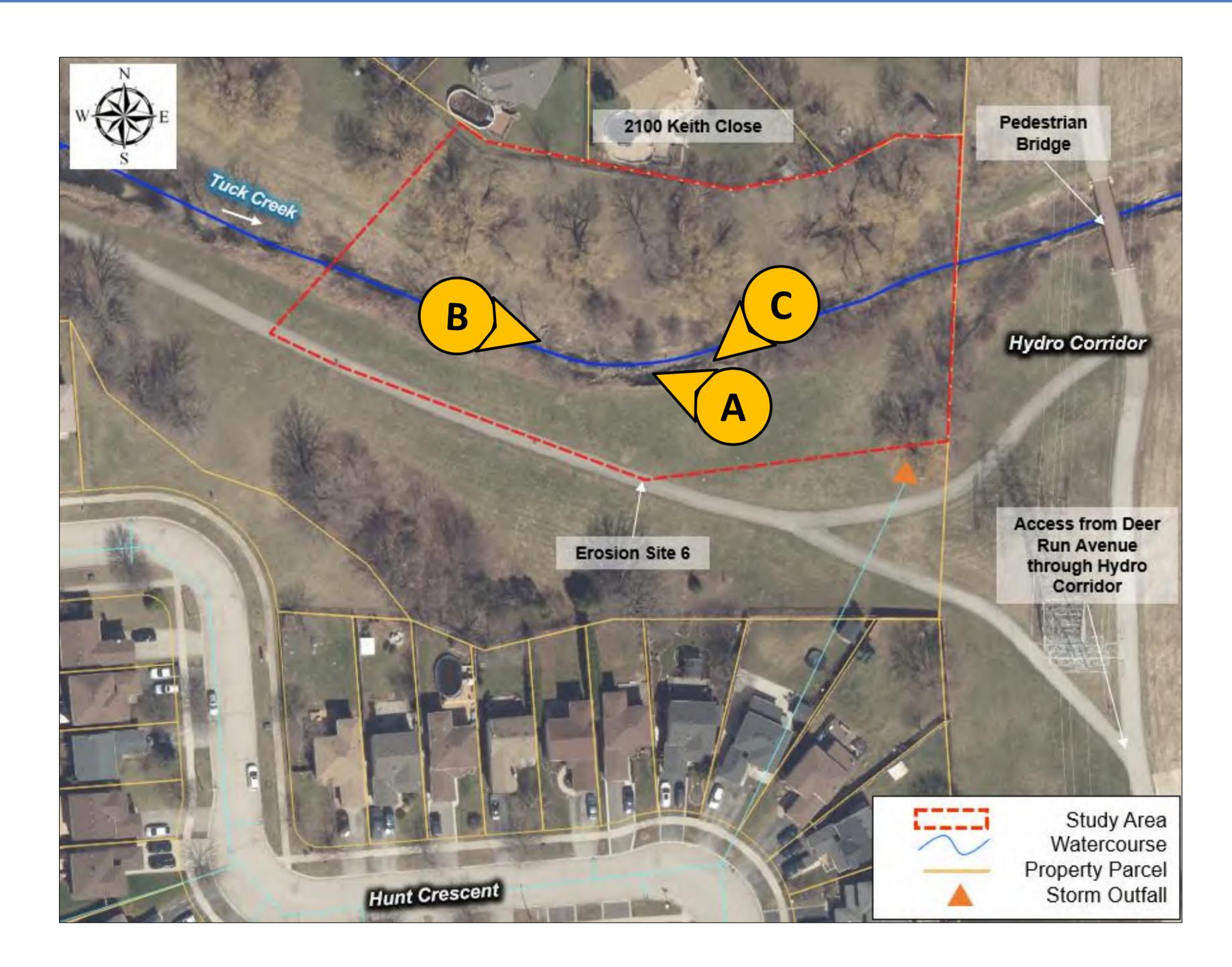




Photo B – Outflanked Concrete Weir with Downstream Terrafix Blocks Lining Channel

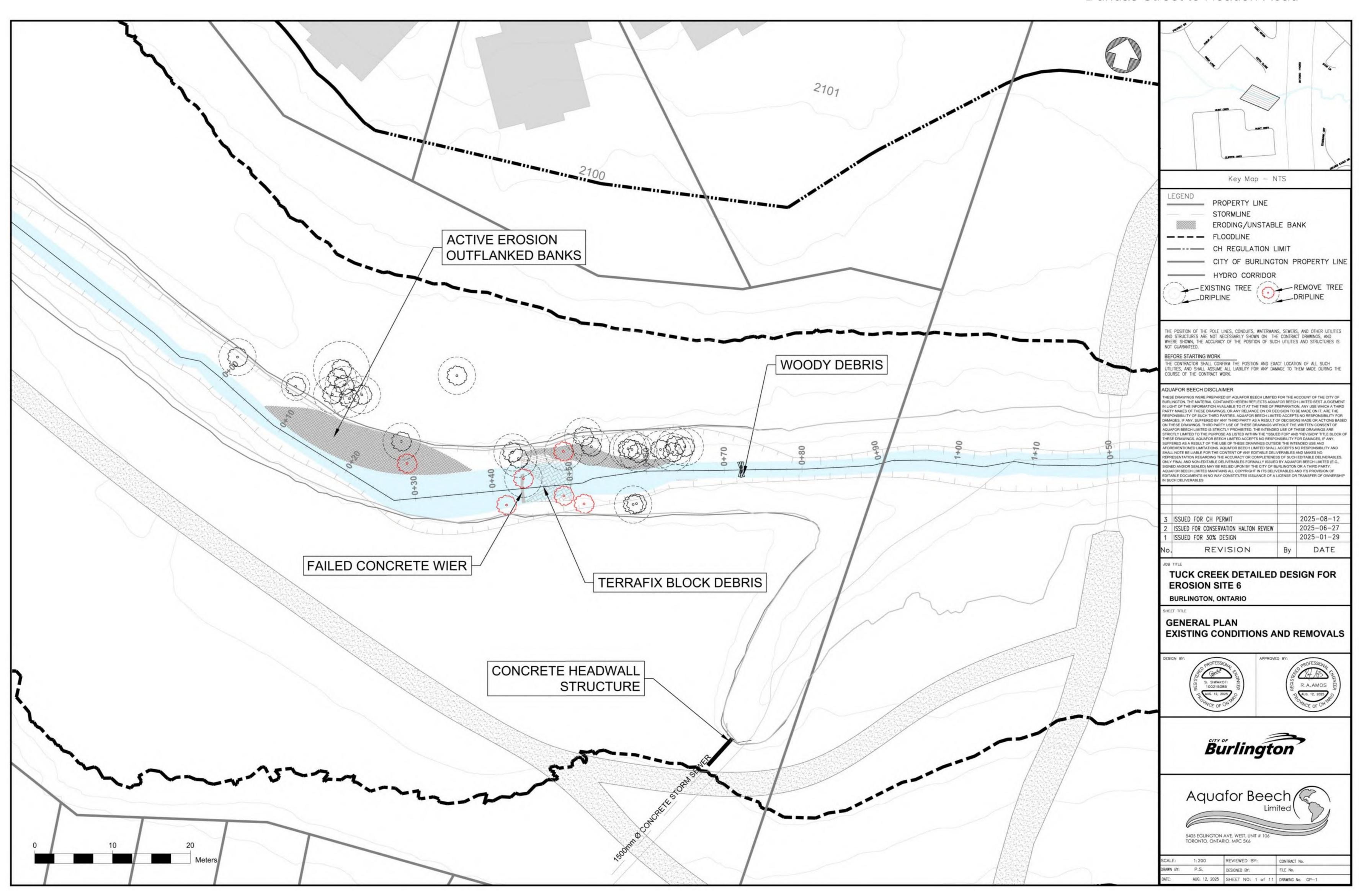


Photo C – Failed Terrafix Blocks Downstream of Concrete Weir

# SITE 6: GENERAL PLAN – EXISTING CONDITIONS AND REMOVALS



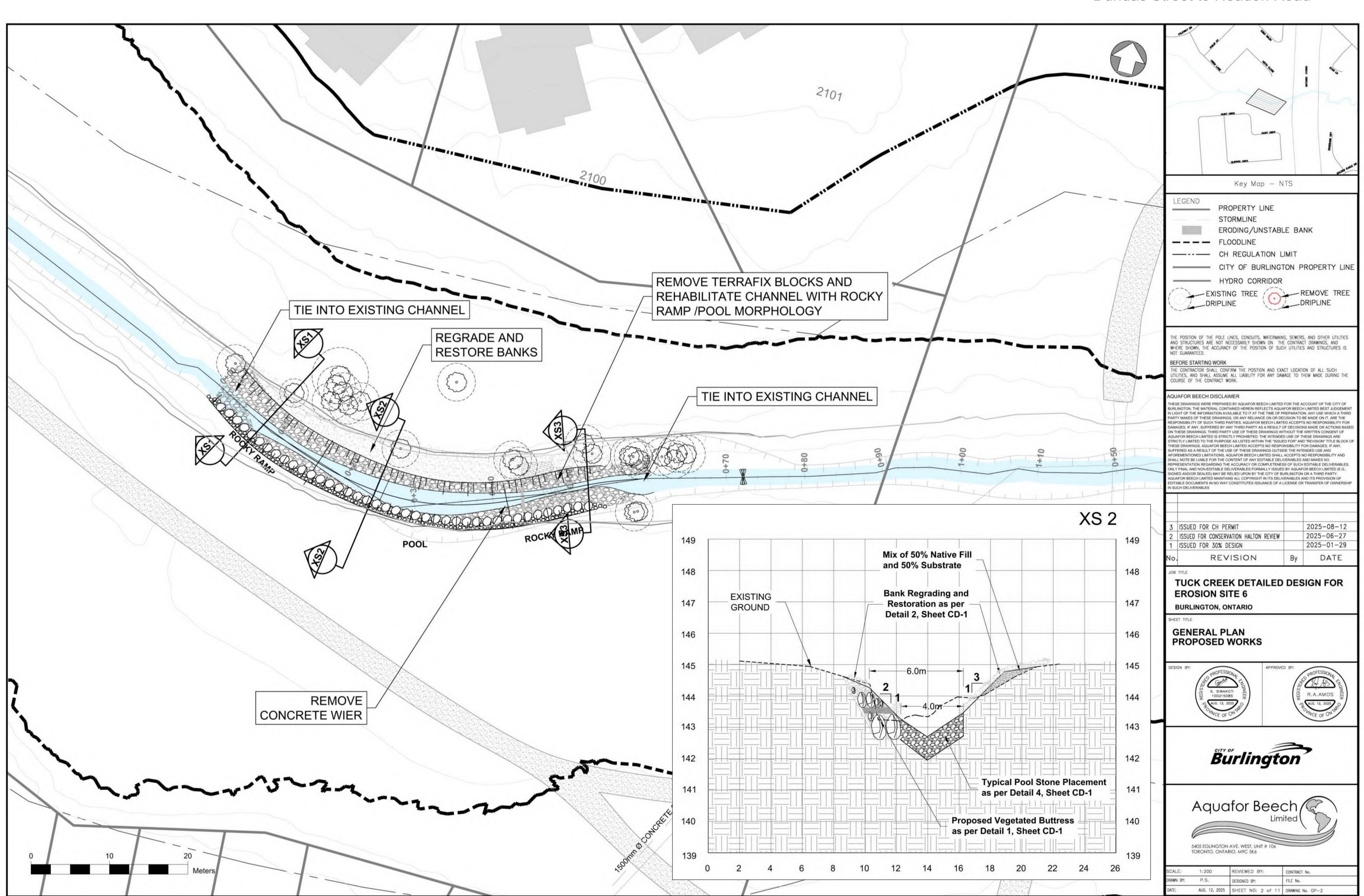




# SITE 6: GENERAL PLAN – PROPOSED WORKS



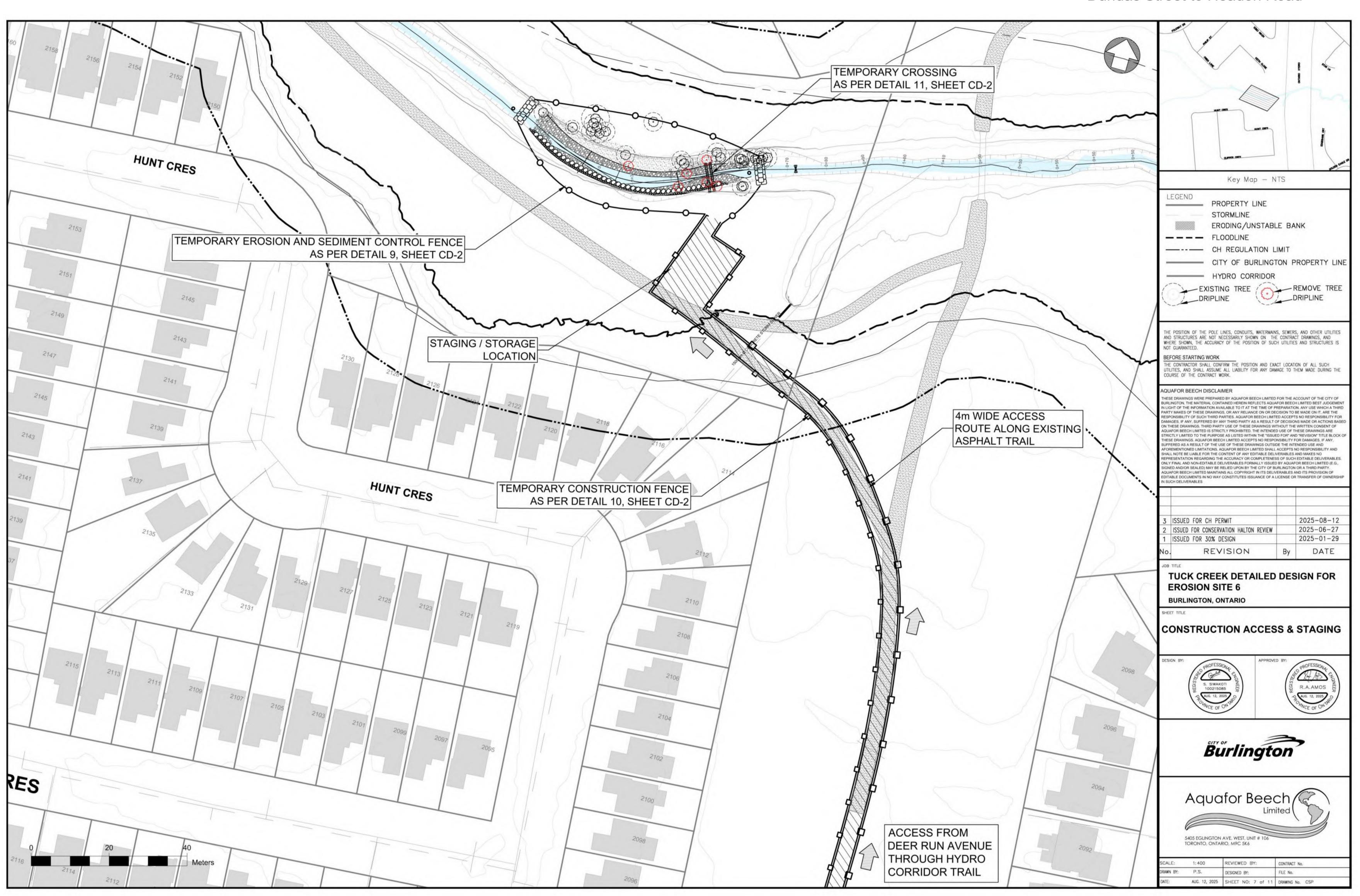




# SITE 6: CONSTRUCTION ACCESS AND STAGING PLAN



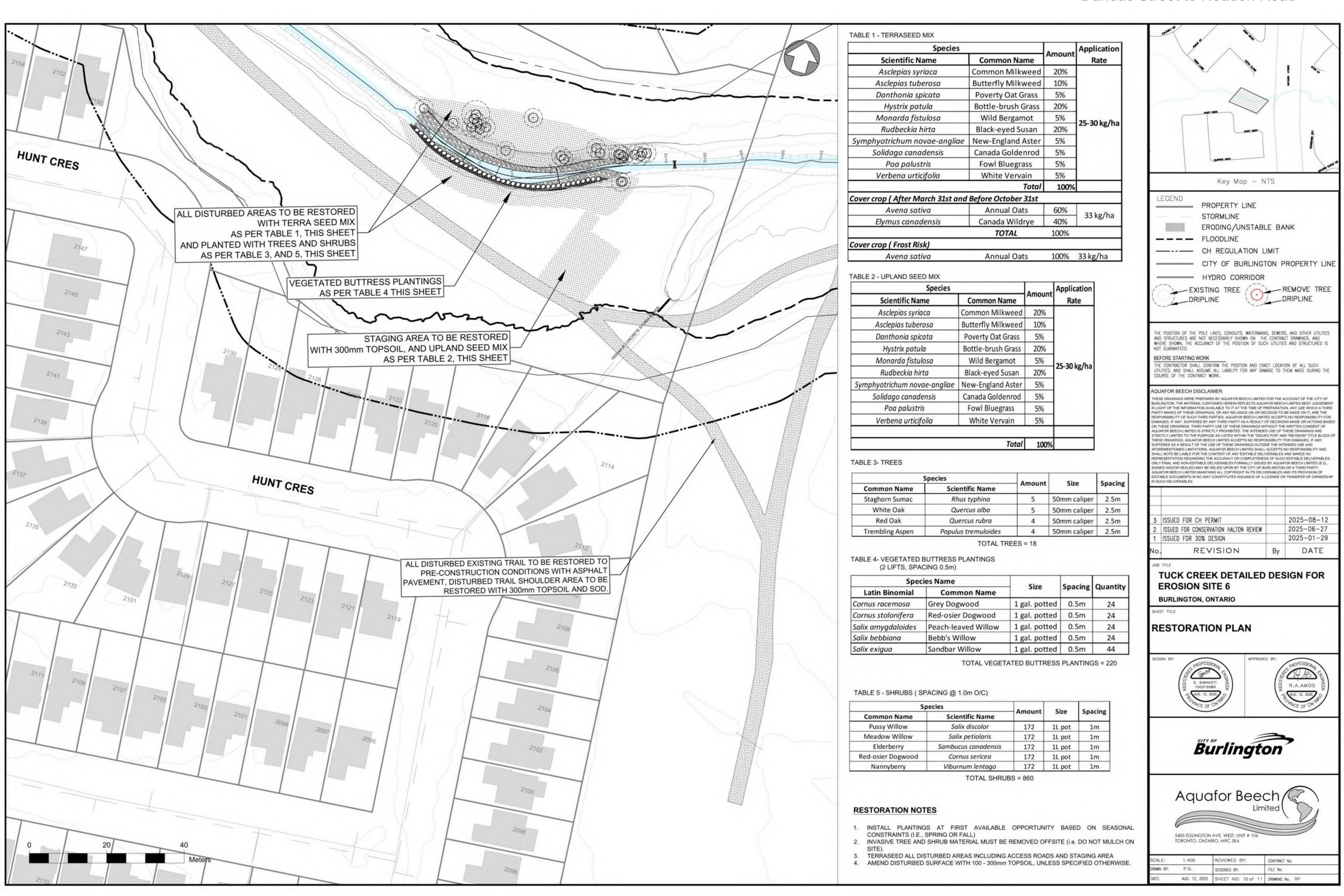




### SITE 6: RESTORATION PLAN













Tuck Creek Detailed Design for Erosion Site 5, 6, 7
Dundas Street to Headon Road



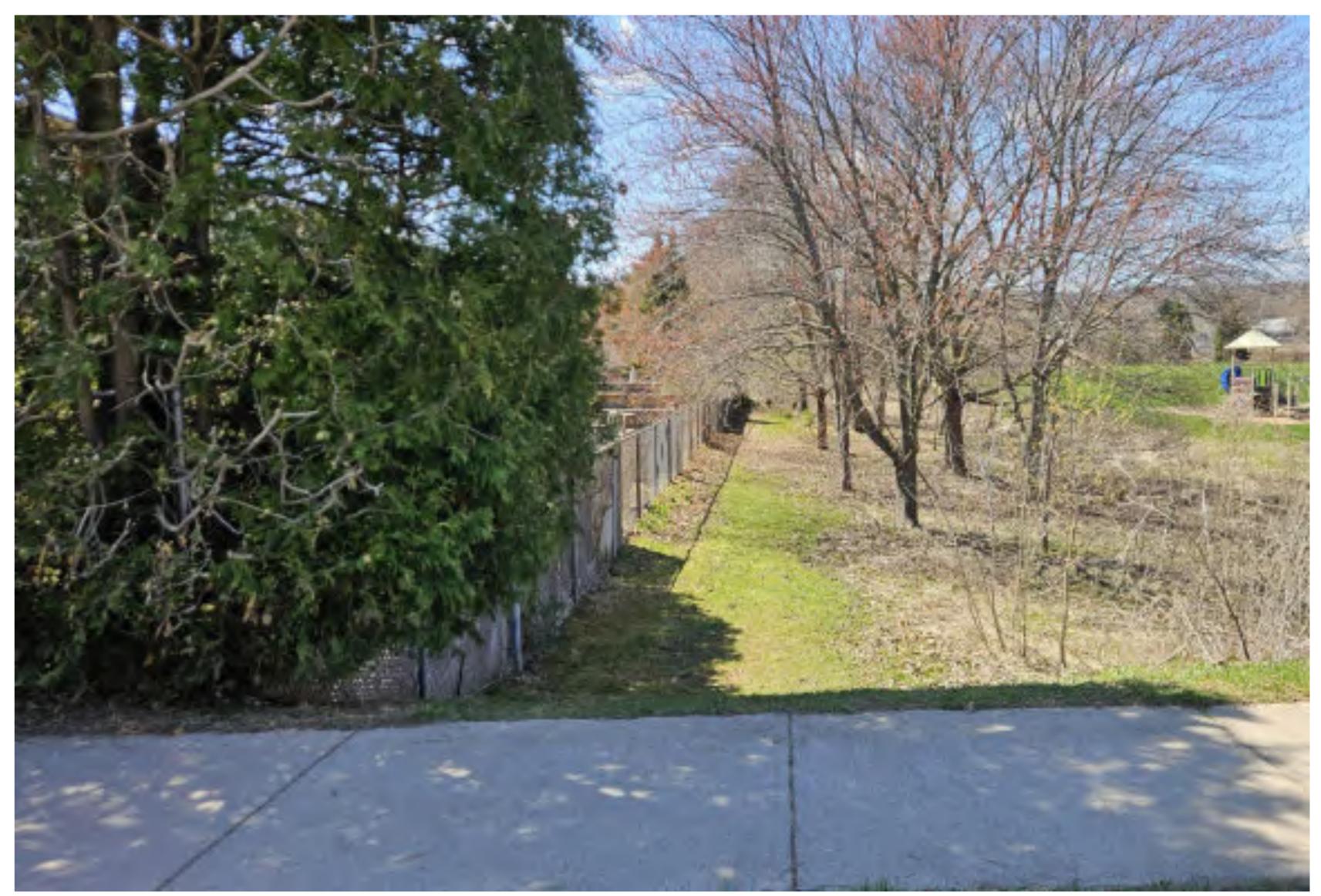


Photo D – Access Route from Driftwood Drive





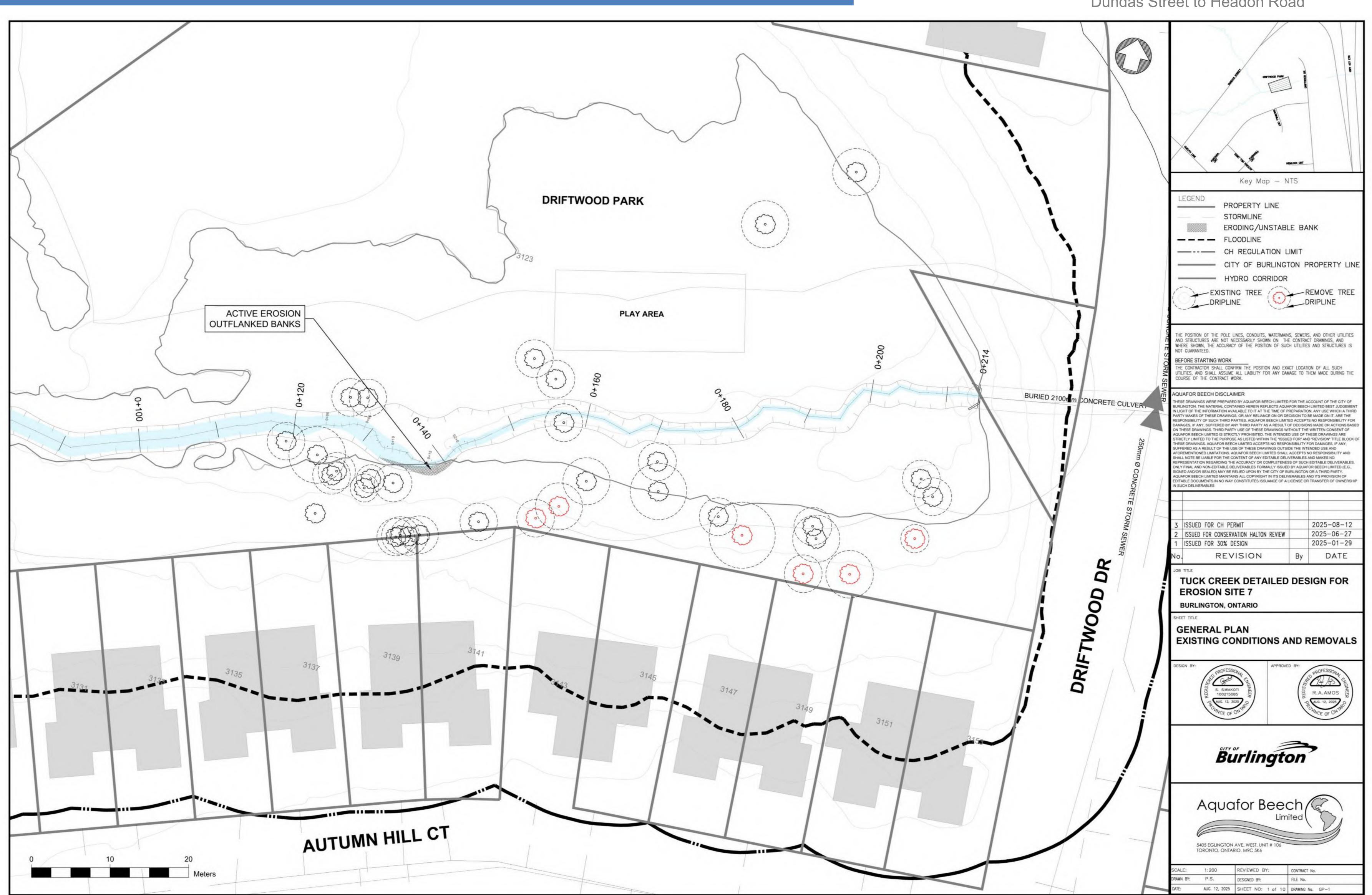
Photo E – Actively Eroding North Bank towards Private Properties

Photo F – Eroding North Bank – Looking East

## SITE 7: GENERAL PLAN – EXISTING CONDITIONS AND REMOVALS



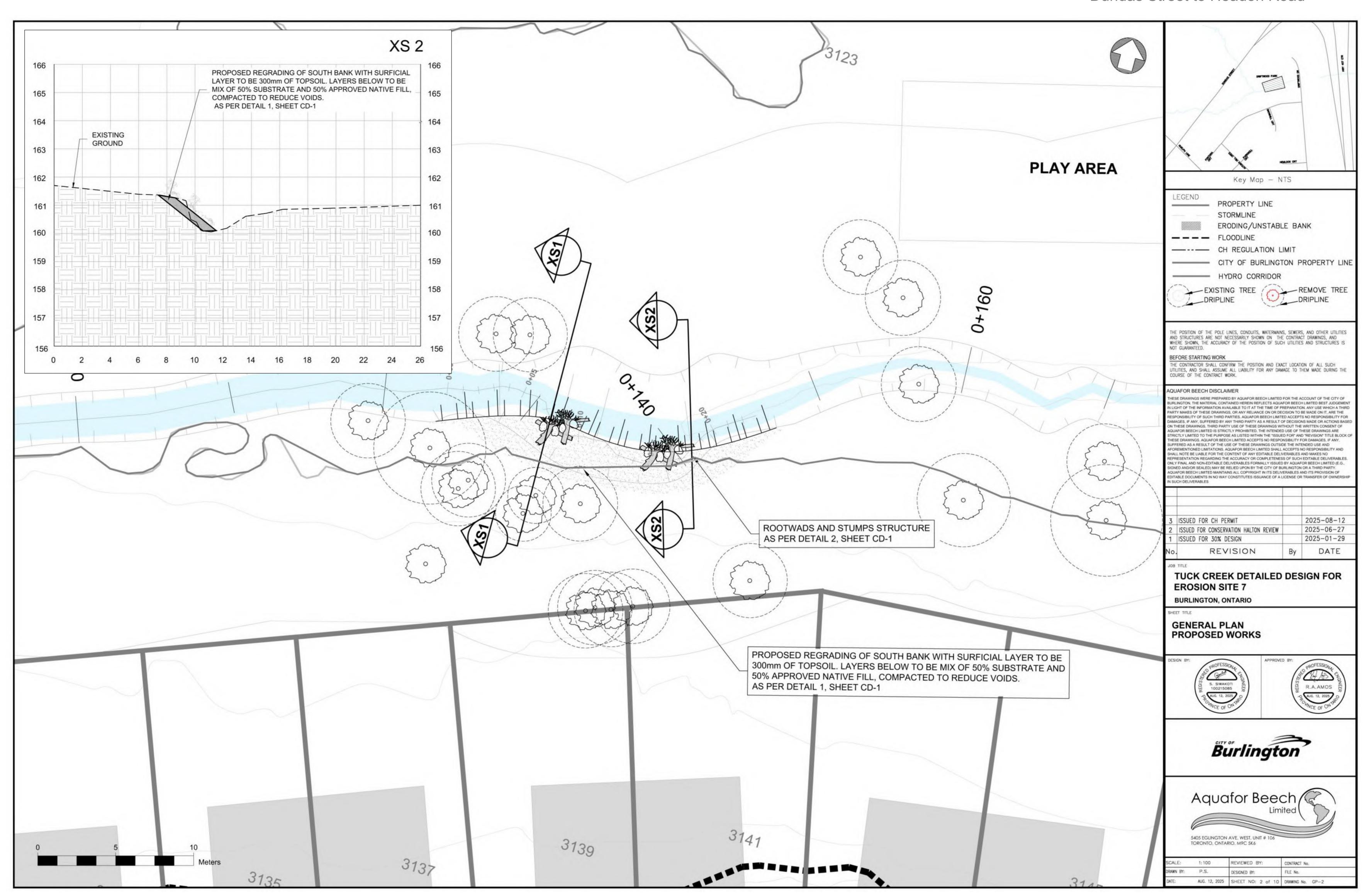




## SITE 7: GENERAL PLAN – PROPOSED WORKS



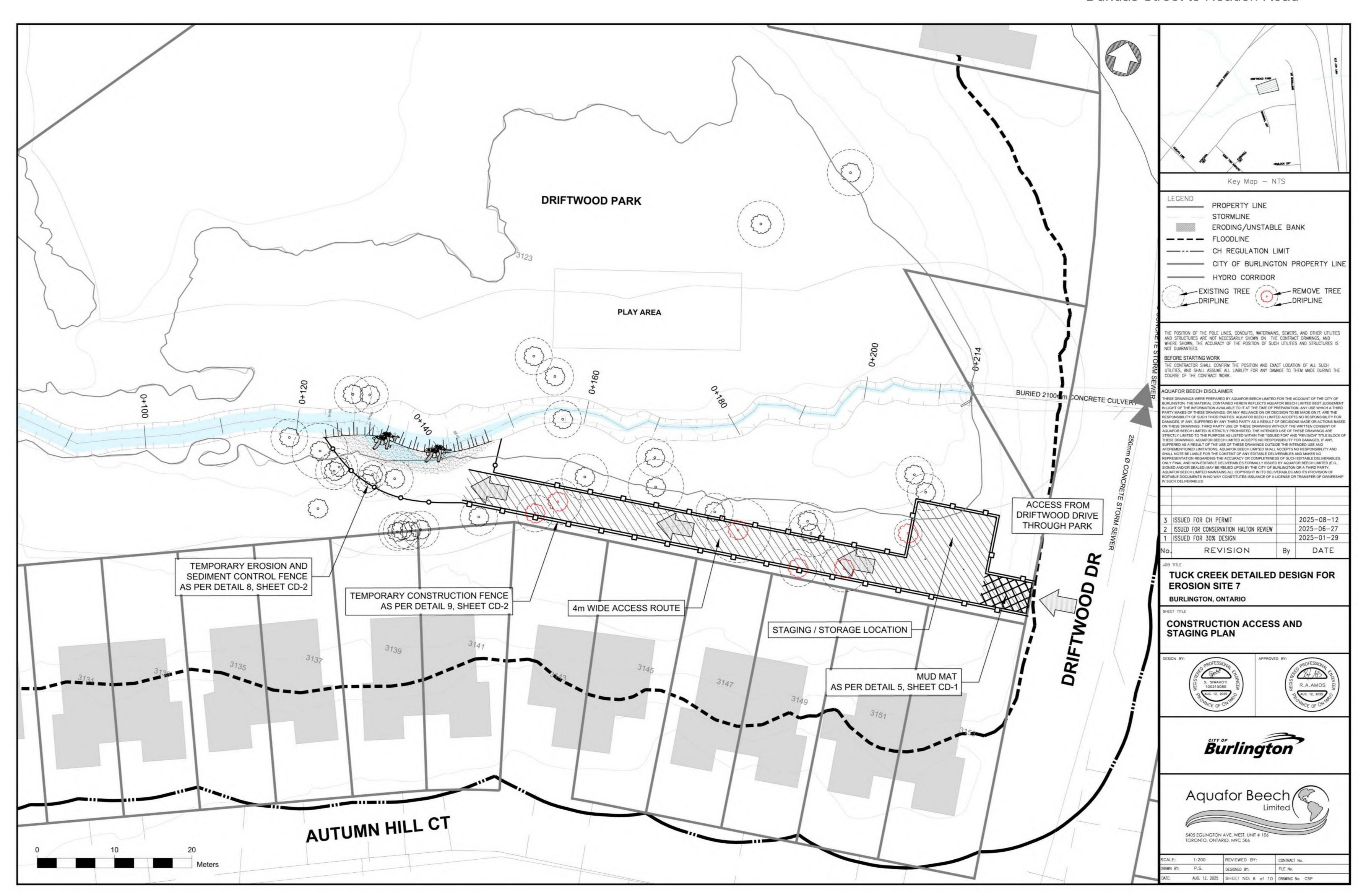




# SITE 7: CONSTRUCTION ACCESS AND STAGING PLAN







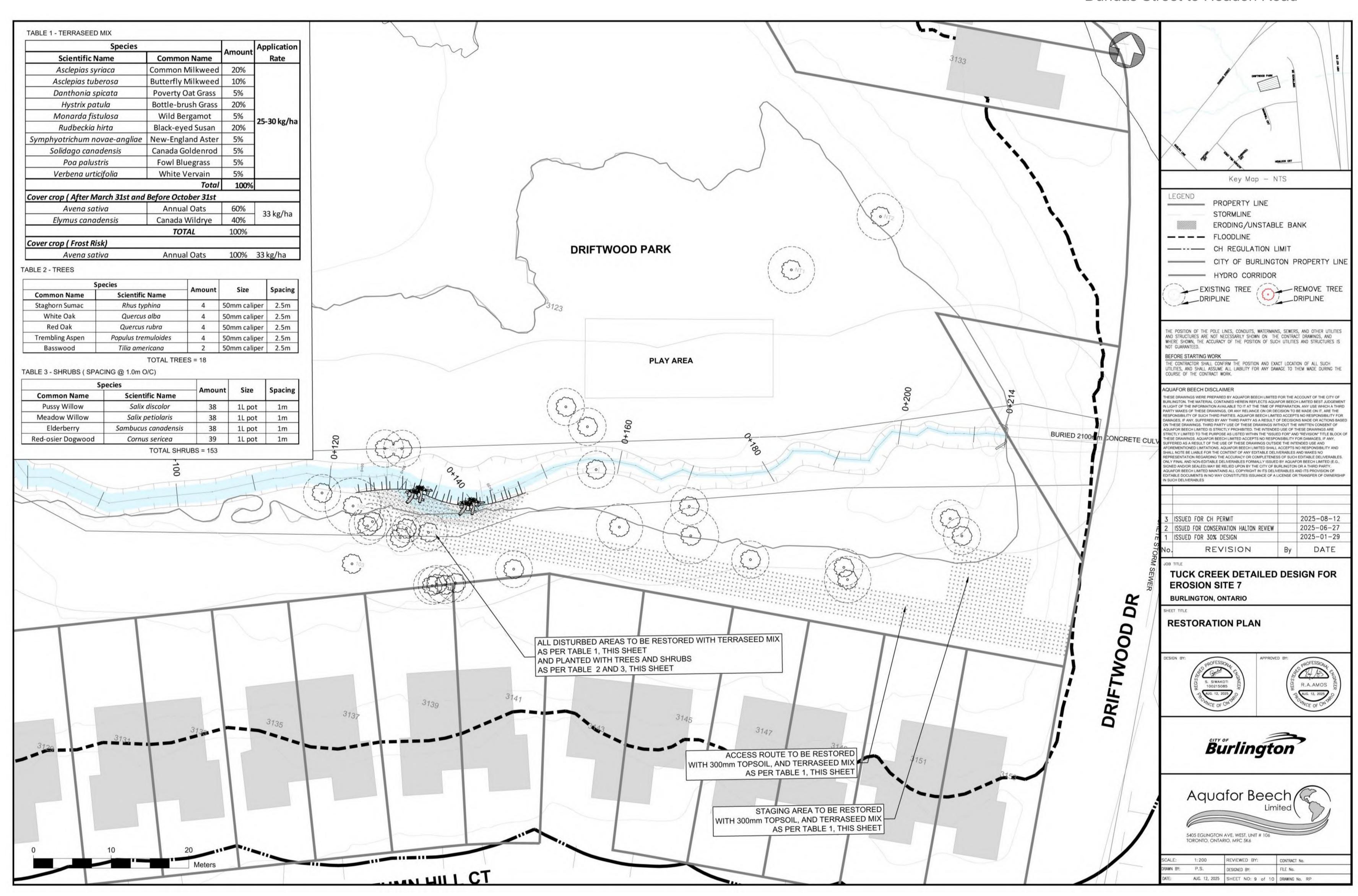




### SITE 7: RESTORATION PLAN

Tuck Creek Detailed Design for Erosion Site 5, 6, 7

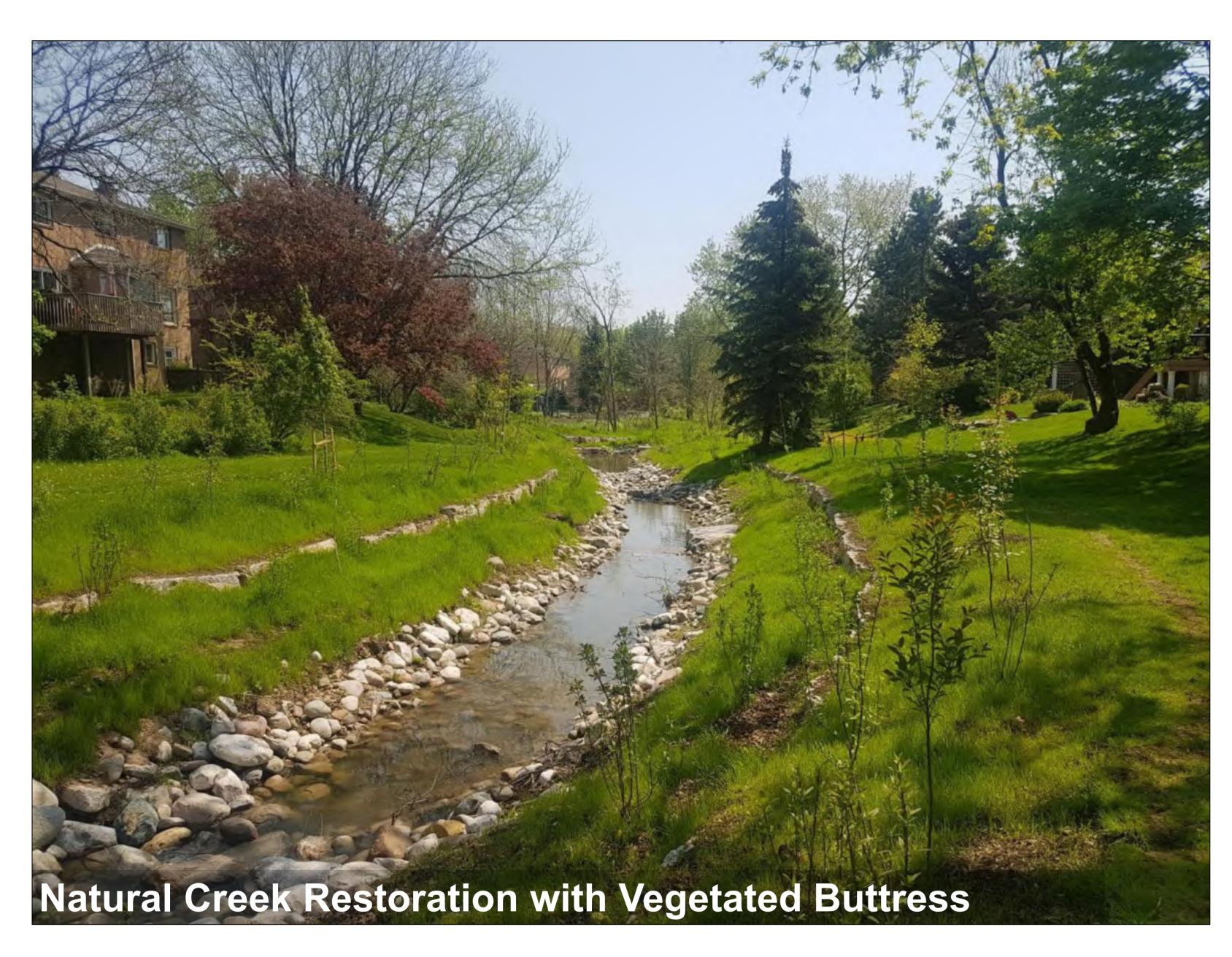
Dundas Street to Headon Road







### DETAILED DESIGN EXAMPLES







### CONSTURCTION ACTIVITIES AND BEST MANAGEMENT



- Experienced Contractors
- Construction Supervision by a Qualified Professional
- Safety First Mentality Personal Protective Equipment
- Erosion and Sediment Control
- Flow Management Throughout Construction
- Fish Removals From Work Areas
- Tree Preservation Plan
- Post Construction Monitoring
- Daily Noise (M-F, 7am 7pm)
- Conveniences for Workers (Trailer & Washroom)



