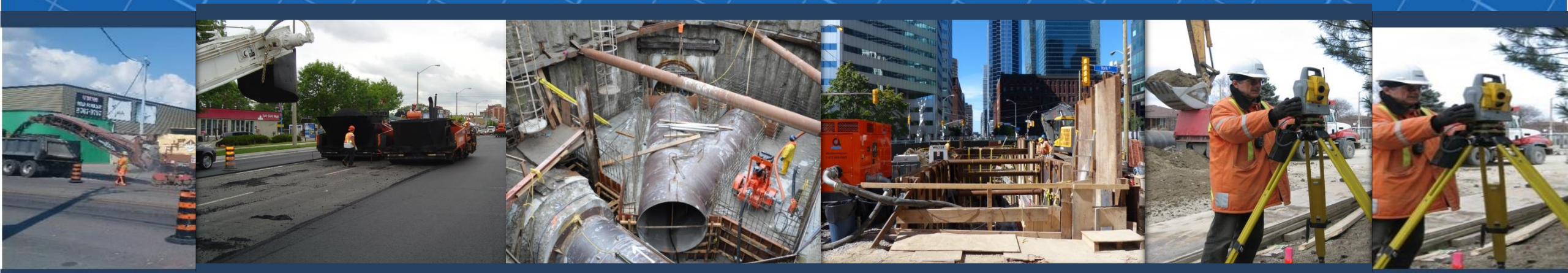
Mimico Creek Stream Restoration and Pedestrian Bridge Replacement



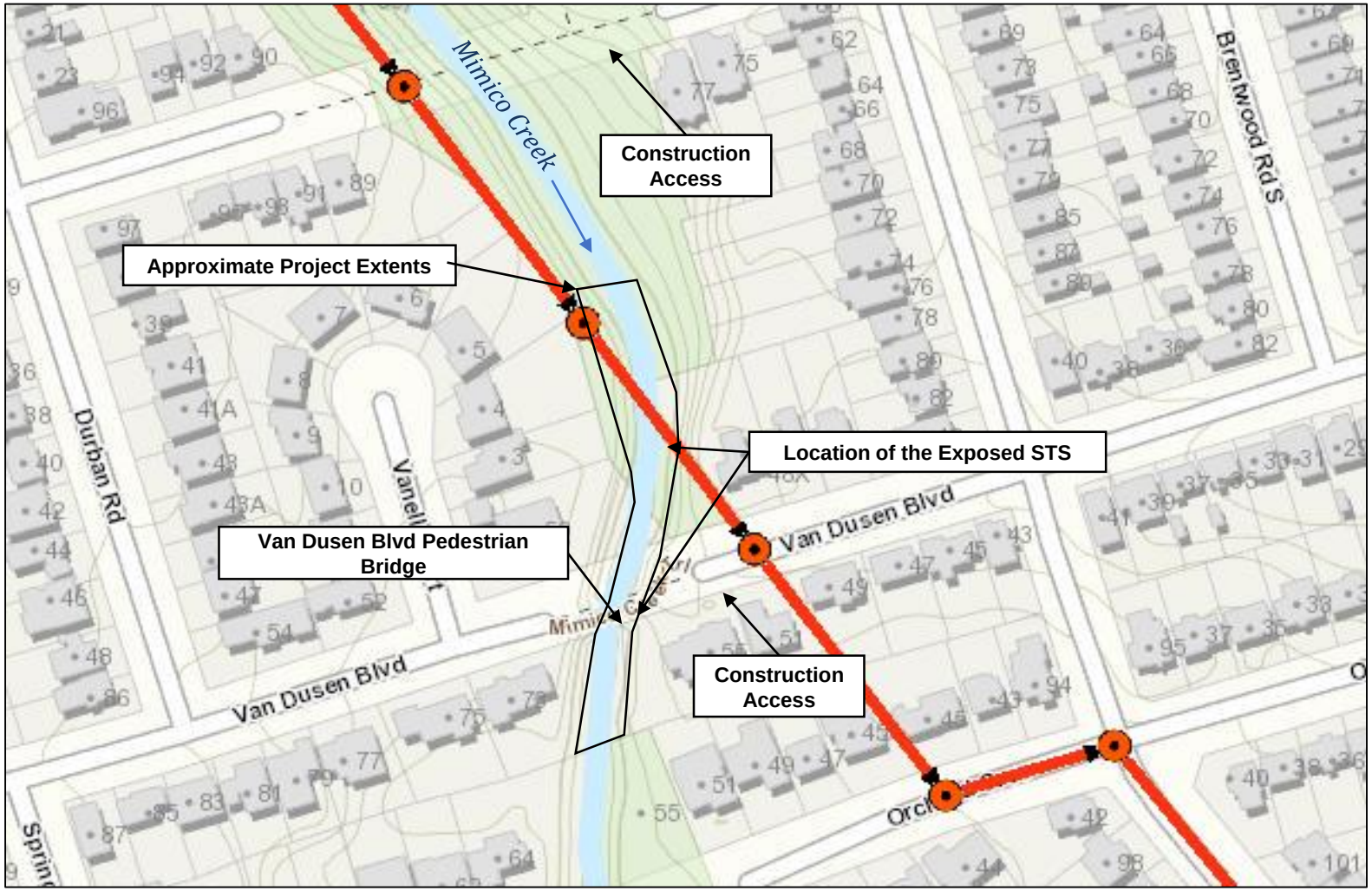
January 18, 2022

TORONTO

Presentation Outline

- Project Overview
  - Pedestrian Bridge Replacement
  - Stream Restoration
- Tree Impacts and Restoration
- Project Timelines and Status Update

Project Overview



Project Overview – Bridge Replacement

- Severe erosion from a 2020 rainstorm undermined the bridge support requiring expedited removal for public safety.
- Current project includes a new concrete foundation, bridge supports and bridge structure.
- Protection on either side of the bridge to be built into the stream restoration project to offer more protection.

Project Overview – Stream Restoration

- Mimico Creek is undergoing changes due increases in flow and extreme rainfall over the years.
- Two exposed sanitary sewers represent a significant risk to the Mimico Creek environment should they fail and rupture.
- The stream restoration project will protect the sanitary sewers, restore the eroded banks, and improve the look of the area.
- This will also result in improved water quality and fish habitat along the creek.

Project Progress

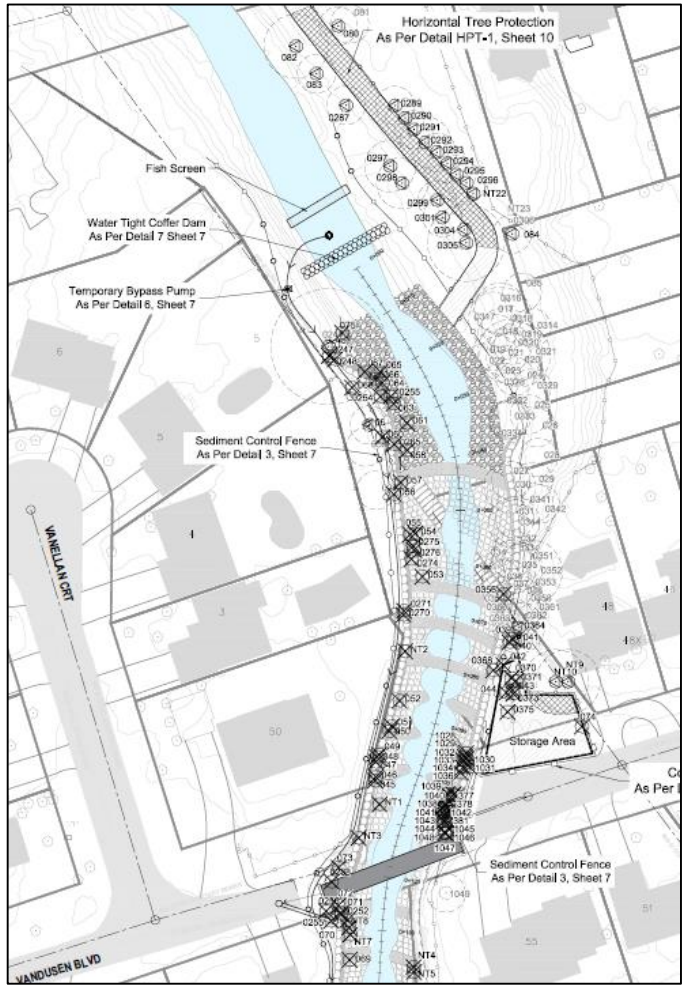
Eroded Banks Downstream of the Van Dusen Bridge

Project Progress

Eroded Banks Downstream of the Van Dusen Bridge

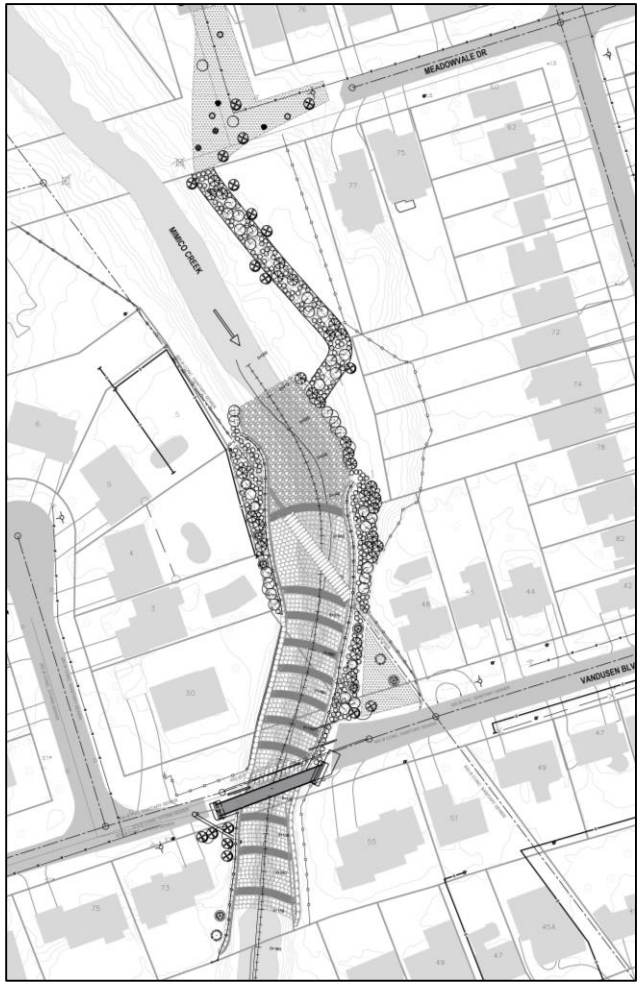
Tree Removal and Restoration

- Tree removals were deemed necessary to access the creek so that work can be done to the creek and replace the bridge.
- A qualified arborist identified the species, size and condition of trees that are protected by the City of Toronto's Tree Protection bylaw (Toronto Municipal Code Chapter 658).
- Through this process, it was determined that 105 trees needed to be removed.
- Many of the trees removed were growing along an eroding bank with roots exposed. Over time these trees would have fallen into the creek and act as debris traps, possibly exacerbating flooding.



Tree Removal and Restoration

- Trees will be replaced with a combination of sugar maples, bur oak, silver maple, white cedars, and basswoods, restoring an area of 781 m^2.
- The replacement trees will be 1 -1.5m tall bare root trees. There will also be caliper trees (50mm trunk) planted in the area.
- To further naturalize the area, a variety of native shrubs are to be planted.
- Replacement of the old and dying trees will produce a healthier valley area in the long term.



Tree Removal and Restoration

Duncan Creek Before and After Restoration

Frequently Asked Questions

Why are smaller trees planted when large trees were removed?

- Smaller sized planting stock have better success rates compared to larger trees that can suffer stress or damage during transport/delivery and the actual planting process.
- Smaller sized planting stock can mean higher density planting is achieved.
- It is easier to source appropriate native stock (seed zone & species) at smaller sizes as it is less likely to find appropriate larger stock – usually larger stock are non-natives or not locally grown.

Frequently Asked Questions

What consideration was given to the restoration plan?

- Re-naturalization areas are densely planted with a diversity of species to promote a variety of layers to mature (ground cover, understory, canopy).
- Re-naturalisation plantings are done with 100% natives in Ravine & Naturalized Feature Protection regulated areas such as this location.
- We will also be planting a mixture of fast and slower growing trees, so the faster ones will reach their full canopy potential much faster, but will have a shorter natural lifespan, hence the inclusion of slower growing species.

Frequently Asked Questions

What consideration was given to the restoration plan?

- Native stock is what has co-evolved with wildlife, including insects that can be completely dependent on certain species of native trees and shrubs for their life cycle
- Any native brambles should start producing fruit within one year of planting – thus attracting wildlife back to the area sooner.
- Continual maintenance and monitoring of planting sites allows for replacements and adjustments to be made as needed.

Project Timeline

Phase/Area	Dates
Phase 1 • Stream Restoration starting from the south project extent past the northern boundary of the pedestrian bridge. • Remove and replace existing concrete abutments. • Installation of the bridge.	Fall 2021 to Winter 2022
Expected bridge opening date	Winter 2022
Phase 2 • Stream Restoration starting just past the northern boundary of the pedestrian bridge to north project extent.	Fall 2021 to Winter 2022
Phase 3 • Final restoration of the project site. • Re-naturalization plantings with native plants.	Spring 2022

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