



CHANNEL RESTORATION

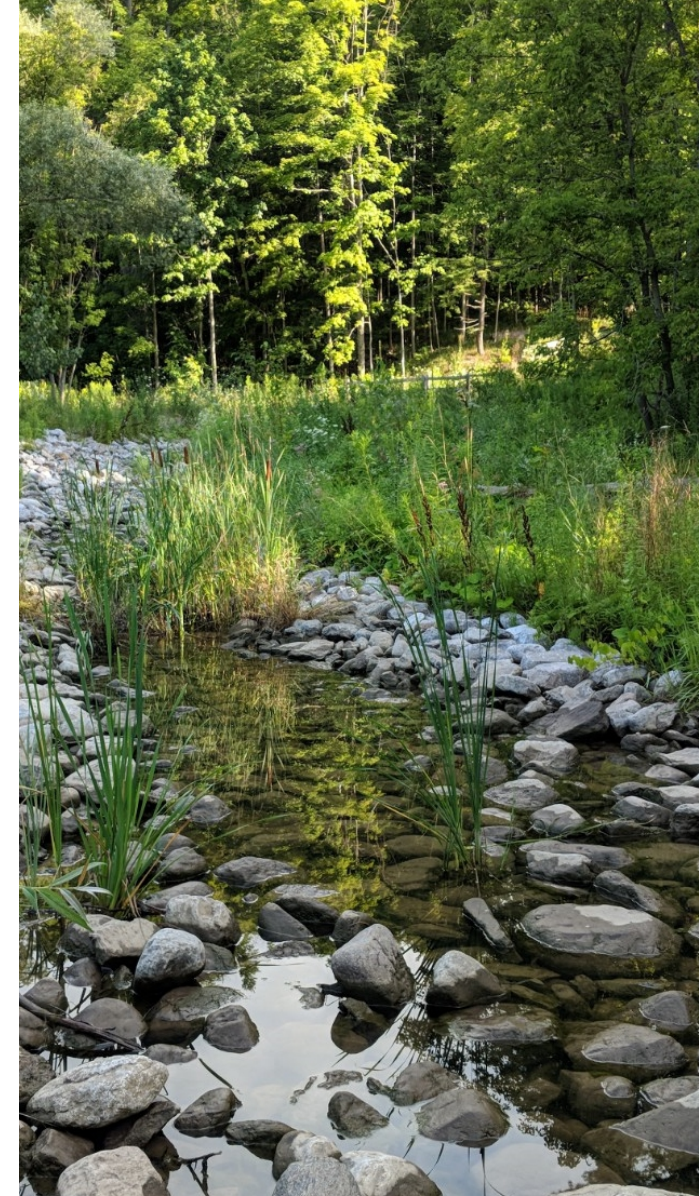
TRCA'S NATURAL CHANNEL PROGRAM

- In 2018 TRCA completed a 10-year Natural Channel Rehabilitation Plan, which identified and prioritized channels requiring attention throughout the City of Brampton

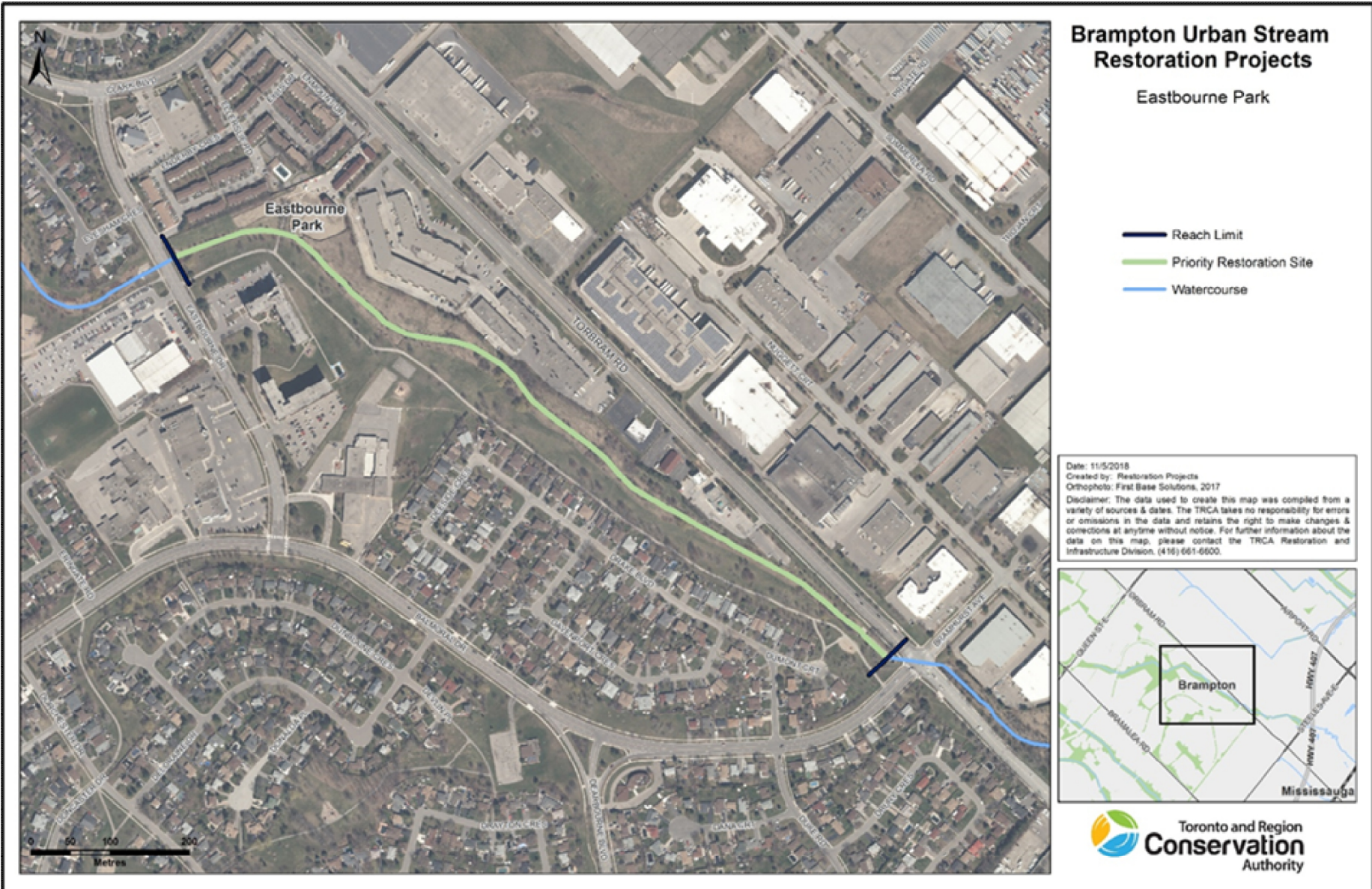


NATURAL CHANNEL ENHANCEMENTS

- Ecological Benefits
 - Improved water quality
 - Improved ground absorption
 - More flood storage
 - Less erosion
 - Natural habitat features
 - Native tree and shrub species

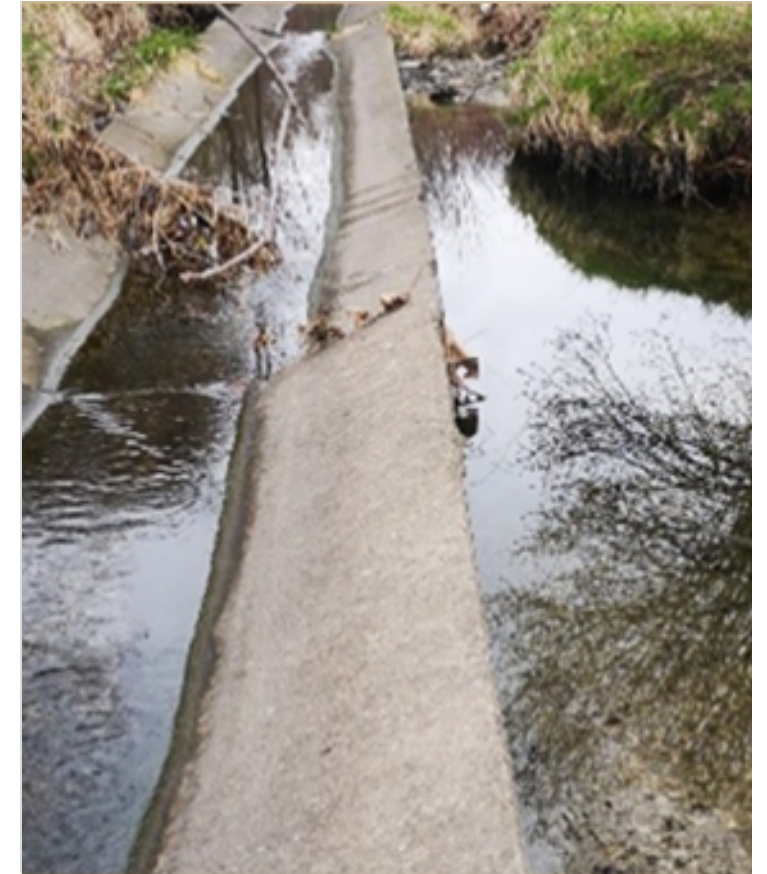


EASTBOURNE PARK



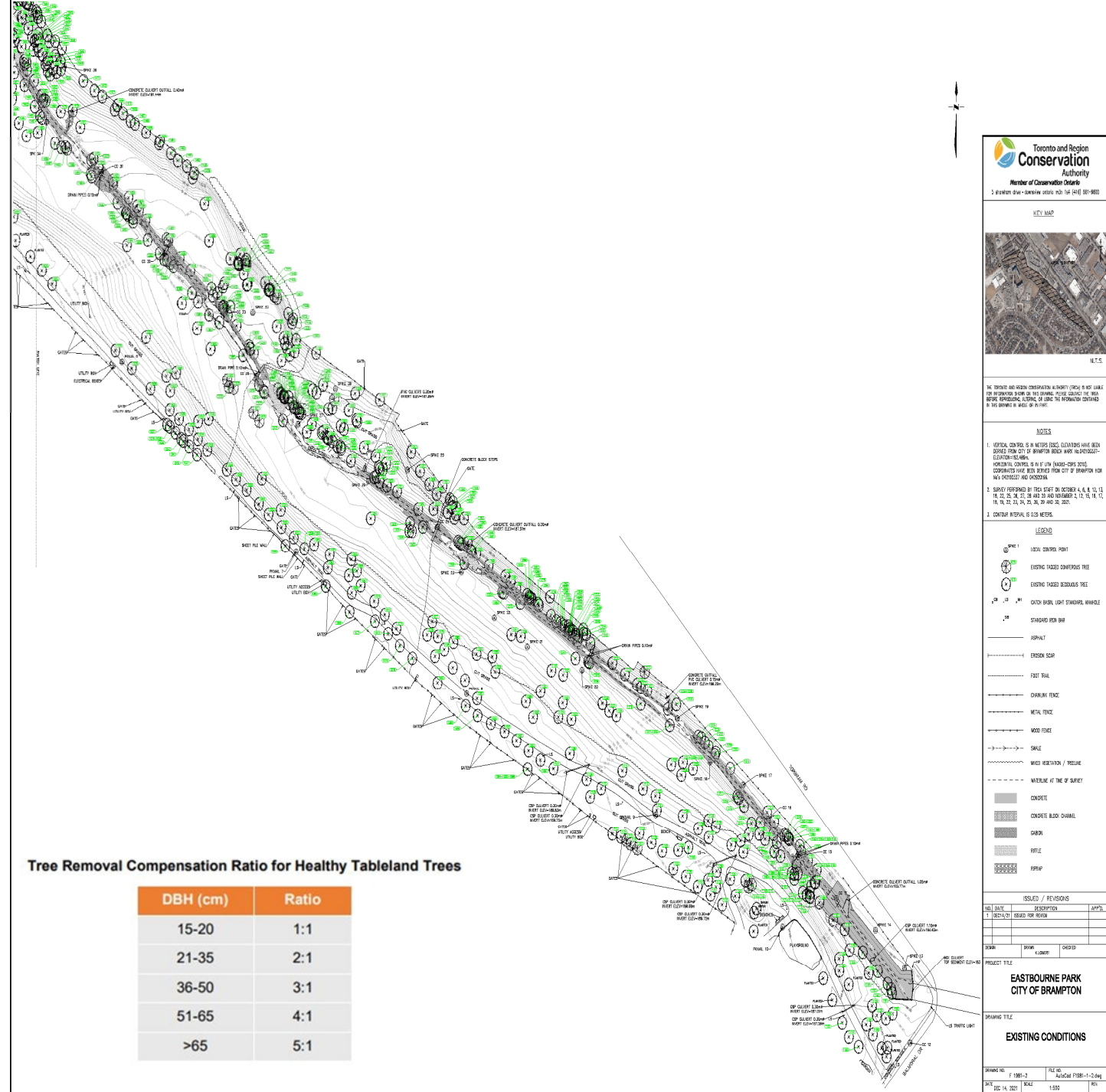
EASTBOURNE PARK EXISTING CONDITIONS

- Built in the late 1960's
- 1000m long stretch
- Concrete lined
- Severely degraded system with minimal natural habitat

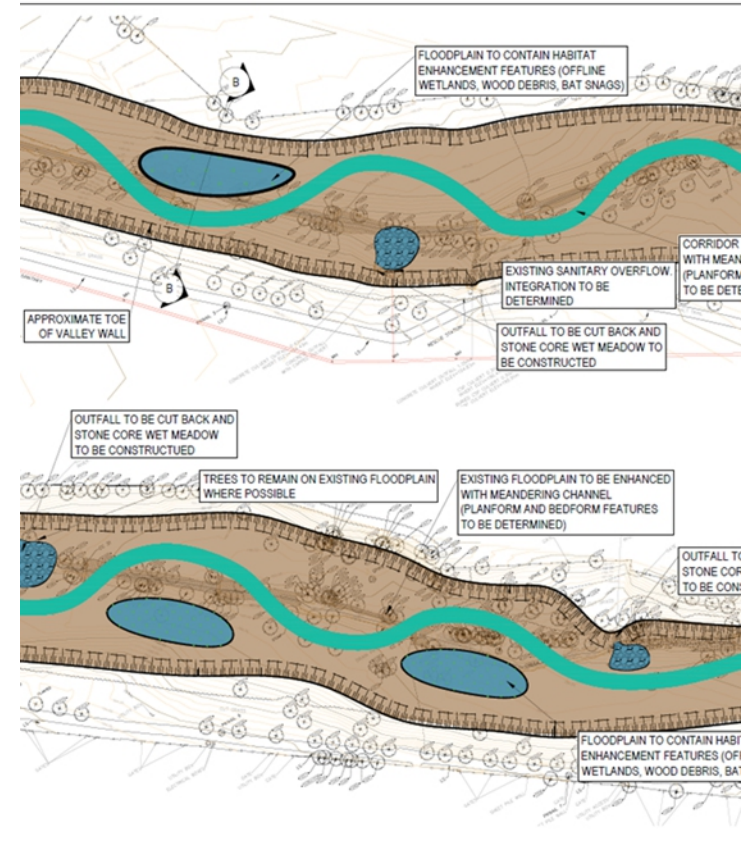
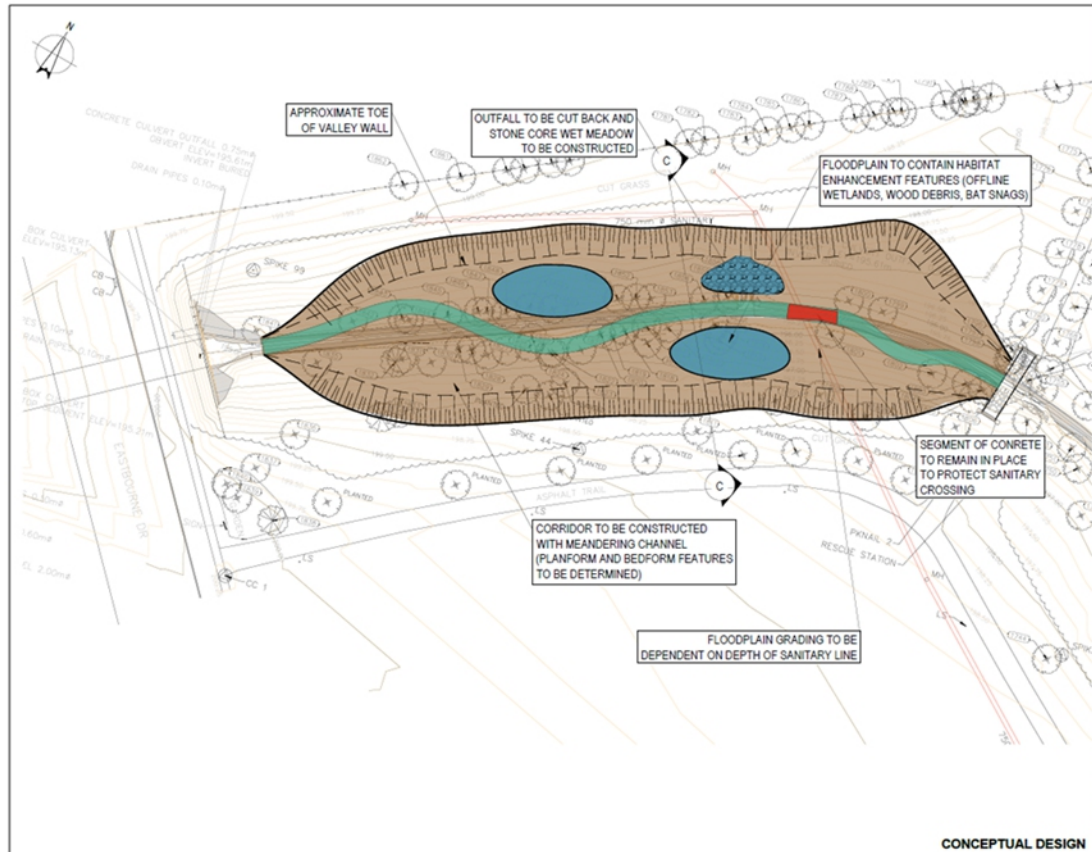


NATURAL CHANNEL RESTORATION PROCESS

- Planning and Design
- Survey
- Permits and Approvals
- Tree Removal
- Concrete Channel Removal
- Channel Restoration
- Tree and Shrub Plantings (more than what was removed)



DESIGN ALTERNATIVES – MEANDERING CHANNEL AND WIDENED FLOODPLAIN



WHAT'S INVOLVED DURING CONSTRUCTION

1. Mobilization (everything coming into the site)
2. Construction (activity during)
3. Demobilization (everything leaving the site)
4. Planting (final step)



WHAT TO EXPECT

- **IMPACT:** Loud noise (equipment)
- **MEASURE:** during working hours (7am-5pm)

- **IMPACT:** Dusty if warm and dry, Muddy if wet and cold, Entire construction area to be full of dirt, mud, and will remain until it greens up and is planted in the Spring and Fall seasons.
- **MEASURE:** Will wet areas if too dry and dusty, mud on roads will be cleaned by street sweeping machines daily.

- **IMPACT:** Traffic from large trucks and trailers delivering equipment and materials.
- **MEASURE:** Construction area will be cordoned off with perimeter fencing, Restricted entrance to construction area off Eastbourne Dr, Temporary road/sidewalk closures for deliveries.



MOBILIZATION

- Staff and contractors will arrive on site
- Staff will:
 - begin setting up perimeter construction fencing
 - begin installing ESC (Erosion and Sediment control fencing)
 - setting up a staging area
- Large trucks and equipment will begin arriving on site (floating in)
- Large trucks will begin dropping off materials (as mentioned above)
- Temporary road/sidewalk closures



CONSTRUCTION

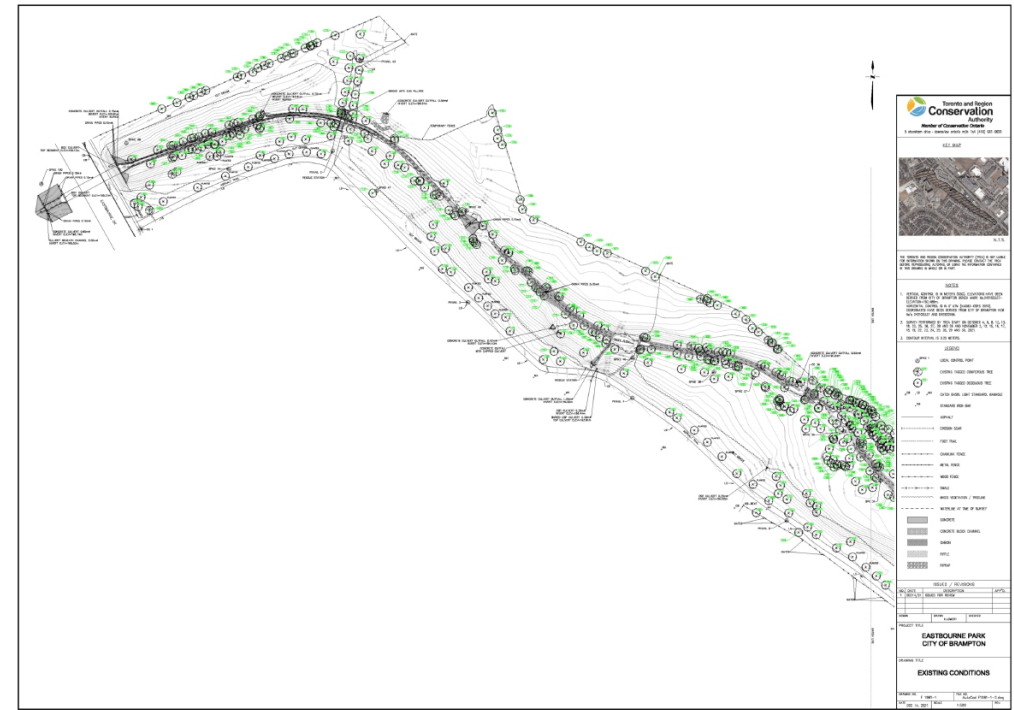
- Equipment used:
 - Excavators
 - Loader
 - Skid-steer
 - Rock truck
 - Tri-axle trucks (dump trucks)
 - Water pumps
- Excavators are main equipment used to construct new channel
- Loaders, skid-steers and rock trucks will be moving soil and material around site
- Dump trucks will enter the site to remove existing soil, and to drop off materials





Tree Removals & Protection

- The site will drastically change once the trees are removed. We will only be removing trees within the new floodplain area, and not those outside of the floodplain.



Tree Removals & Protection

- Approximately 400 trees have been identified for removal
- The majority of trees removed will be incorporated into our restoration work along the new bank of the channel
- We are currently in the process of completing a planting plan that will more than cover off the compensation required for these removals i.e. 2000 trees required, but will more likely be in the area of 15,000 -20,000 trees replanted.

PROPOSED TIMELINE

Today: Public meeting with residents

Fall 2022: Mobilization (perimeter fencing, ESC's, Tree removals, staging area, floating equipment in)

Fall 2022 – Fall 2024: Construction (plantings throughout)

Fall/Winter 2024: Demobilization



PREVIOUS PROJECTS



ALFRED KUEHNE

- Pre Construction Conditions
 - 500m concrete channel
 - Fish species absent
 - Non-native plants
 - Flash flood events
 - Minimal sediment deposition
 - No ground absorption
 - Poor water quality



Before



After



ALFRED KUEHNE

- Post Construction Conditions
 - Concrete channel decommissioned
 - 500 meters of natural channel restoration
 - Floodplain wetlands incorporated
 - Six new fish species present
 - Native trees and shrubs planted

Alfred Kuehne Stream Restoration Project



Pre construction



Construction phase



Post construction



JEFFERSON, JORDAN AND JAYFIELD PARKS

BEFORE



JEFFERSON, JORDAN AND JAYFIELD PARKS

AFTER



NATIVE TREE AND SHRUB PLANTINGS



ECO PARK AMENITIES



Jefferson Jordan and Jayfield Parks- Completed work

- Construction of 950m of Natural Channel restoration including 150m of new trail alignment
- EcoPark amenities installed (Outdoor Amphitheatre, Outdoor Classroom, Log play structure, log benches and lookout areas)
- Trees Planted: 8,425 trees and shrubs, 360 calipers, 7000 bioengineering stakes

Work Remaining:

- 50m of Natural Channel restoration, including capping of Region of Peel Sanitary line
- Installation of EcoPark Fitness Stations by Spring 2023
- Native tree, shrub and riparian plantings by Spring 2023

- Estimated Completion Date: Construction (Fall 2022), Planting/Amenities (Spring 2023)



QUESTIONS / DISCUSSION



NEXT STEPS

- Construction on channel to start November
- Pending future funding, may be future engagement
- Grow Green Newsletter/Email
- Eco Park Boards and comments!





THANK YOU



Michael.Hoy@brampton.ca – City of Brampton



Clifton.Coppolino@trca.ca – TRCA



Justyna.Braithwaite@trca.ca – SNAP/TRCA



www.brampton.ca/EcoPark

Q & A



Eastbourne Park Project

JEFFERSON, JORDAN, JAYFEILD PARK (EXAMPLE)

- Pre Construction



- During Construction



- Post Construction

