

# Beaverton Low Impact Development

Township of Brock

April 29<sup>th</sup>, 2024

Christa Sharp, Manager Restoration Services

Lake Simcoe Conservation Authority



**Lake Simcoe Region**  
conservation authority



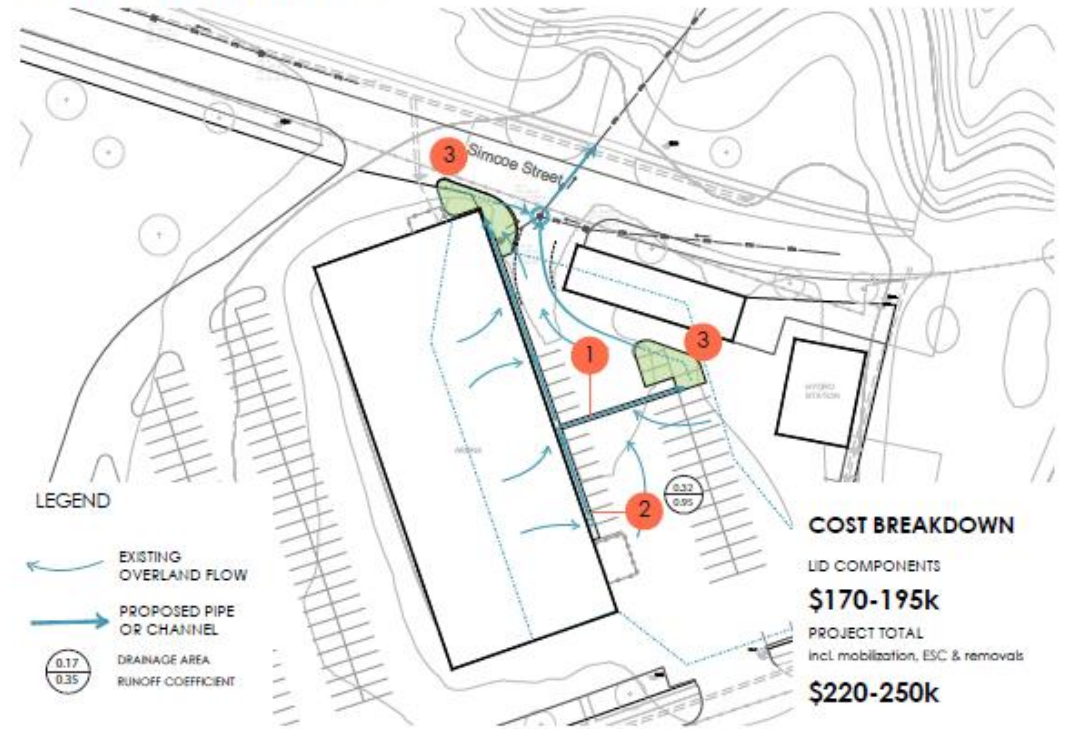
Member of Conservation Ontario

# Beaverton Stormwater Studies and Concepts

- Conservation Authority was doing outreach with our member municipalities to promote funding opportunities from our Water Balance recharge and Phosphorus offsetting funding
- The project started in 2022 when LSRCA issued a request for quote to review the firehall, arena and harbour front from opportunities to address stormwater.
- Designs were reviewed by staff and MOU was created and signed by all parties.

## CONCEPTUAL LID DESIGN - ARENA

### OPTION 1 - Bioretention Planters







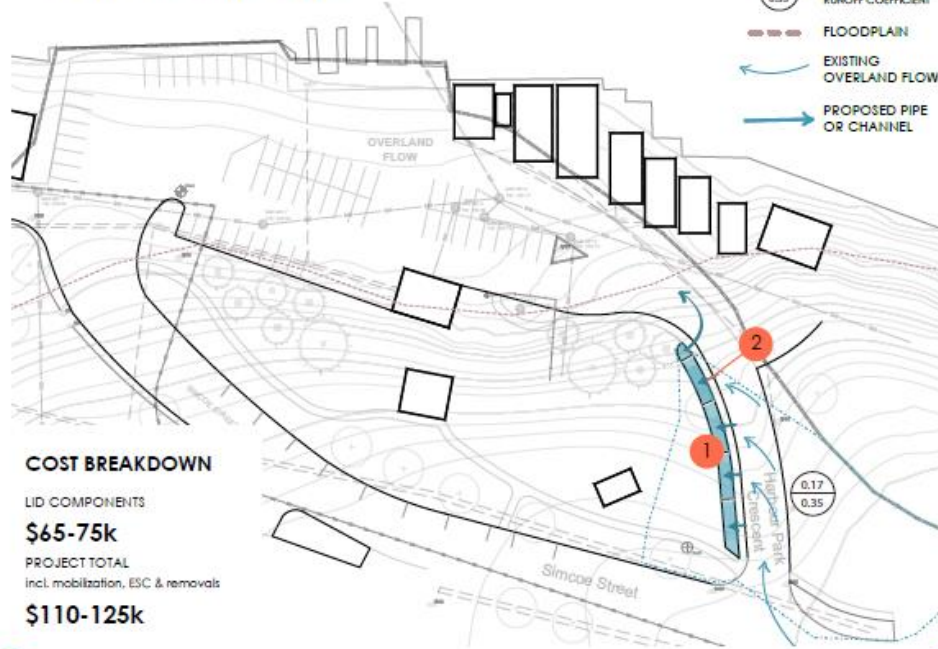


## CONCEPTUAL LID DESIGN - HARBOUR FRONT

### OPTION 2 - Terraced Dry Swale

#### LEGEND

-  DRAINAGE AREA RUNOFF COEFFICIENT
-  FLOODPLAIN
-  EXISTING OVERLAND FLOW
-  PROPOSED PIPE OR CHANNEL



- There were 5 conceptual designs for the arena and harbourfront suggested and reviewed.

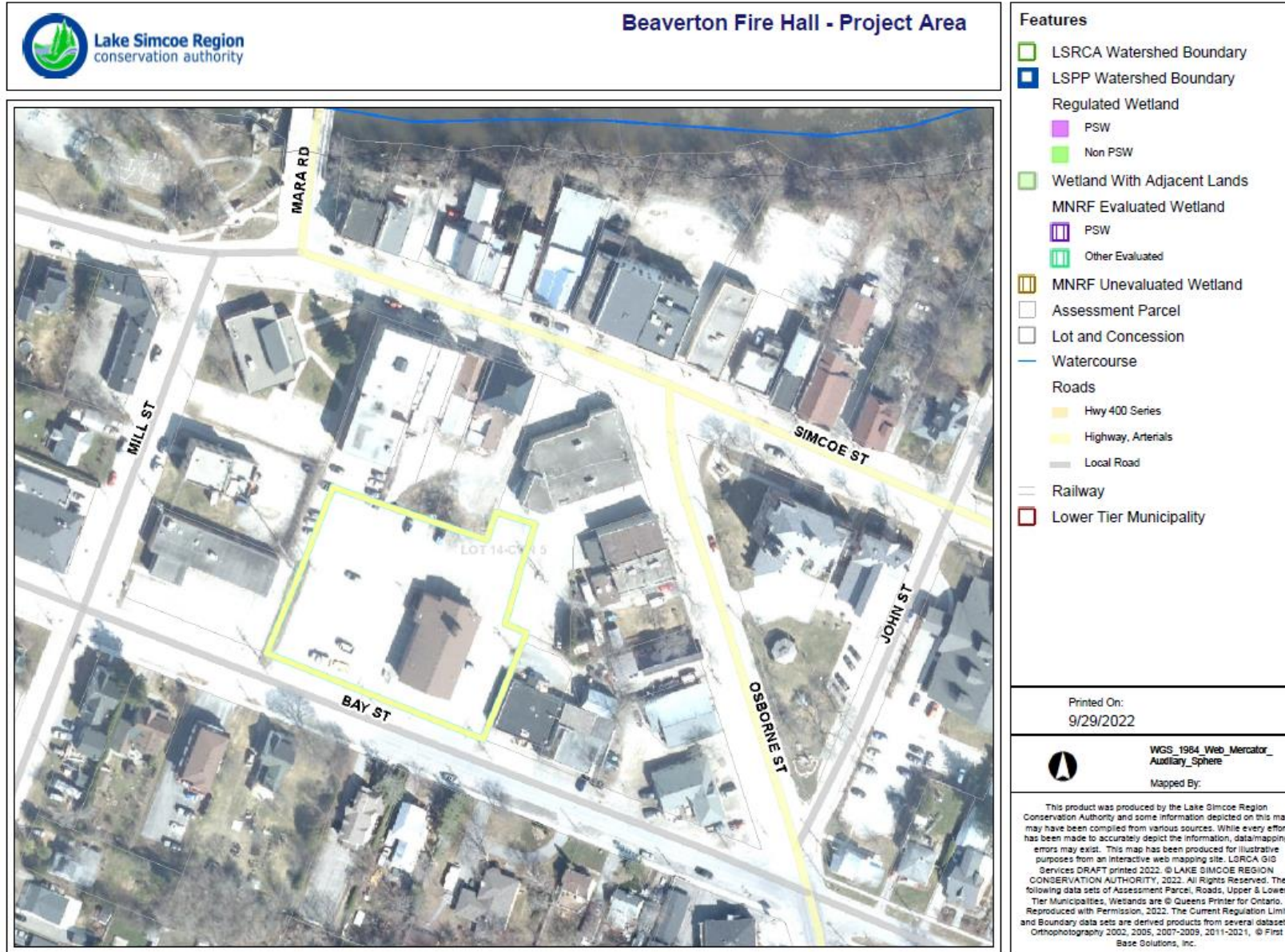
- The firehall was deemed the most economical and environmentally beneficial project.

- Construction designs were created in 2023



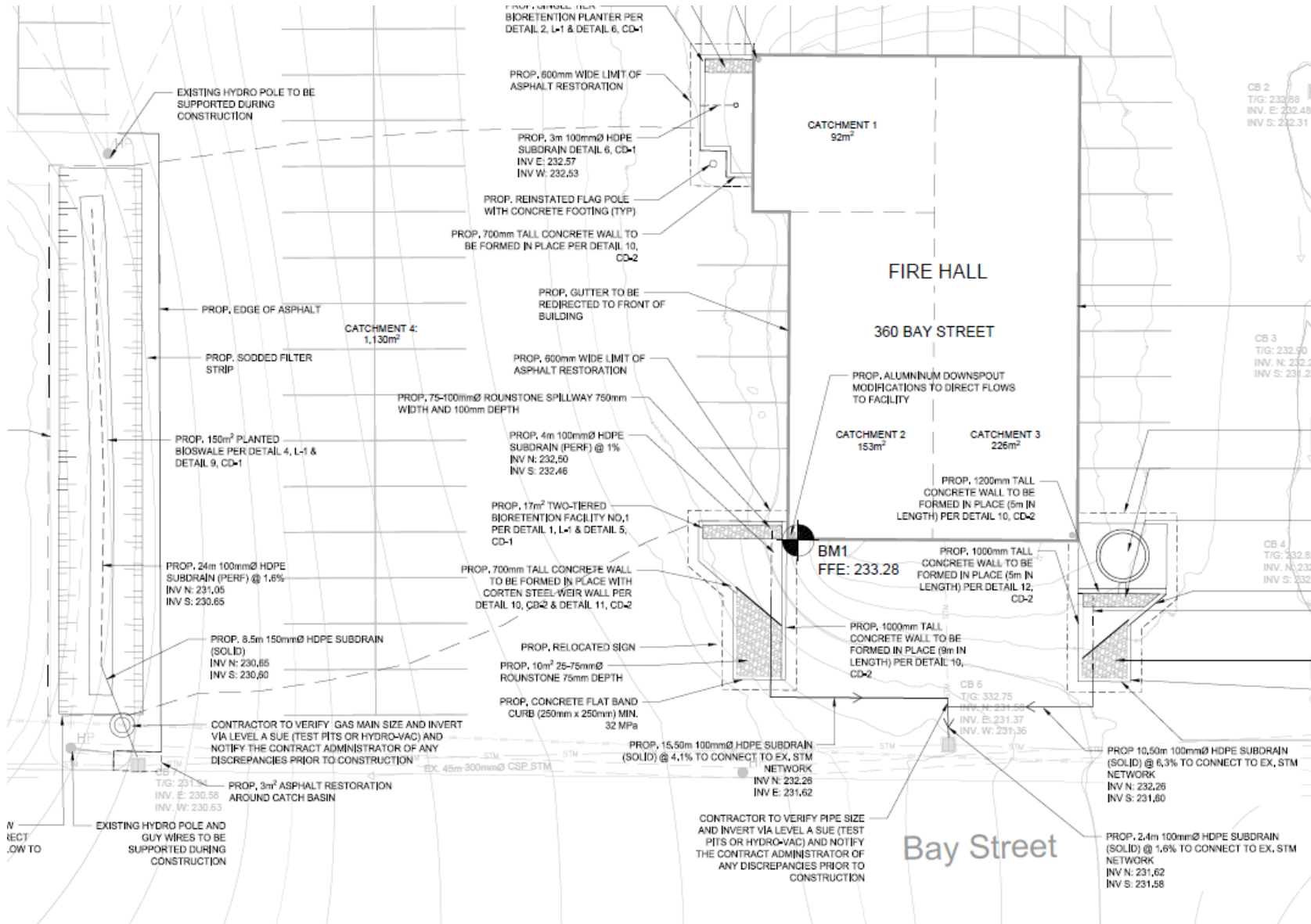


# Beaverton Firehall Low Impact Development



- The final chosen project is the Beaverton Firehall
- The current property is fully impermeable and drains directly into catch basins.
- Construction tender was issued and closed January 2024

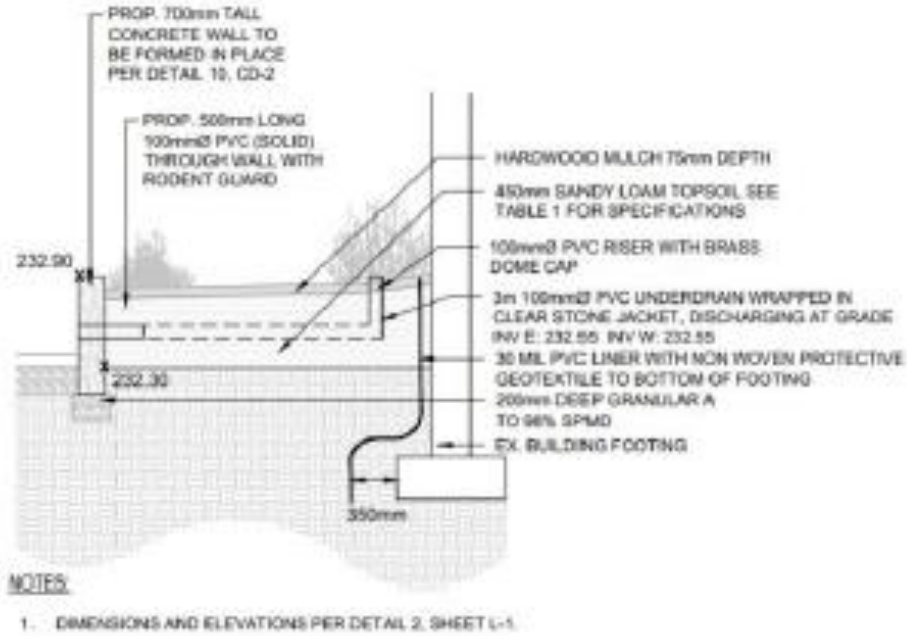




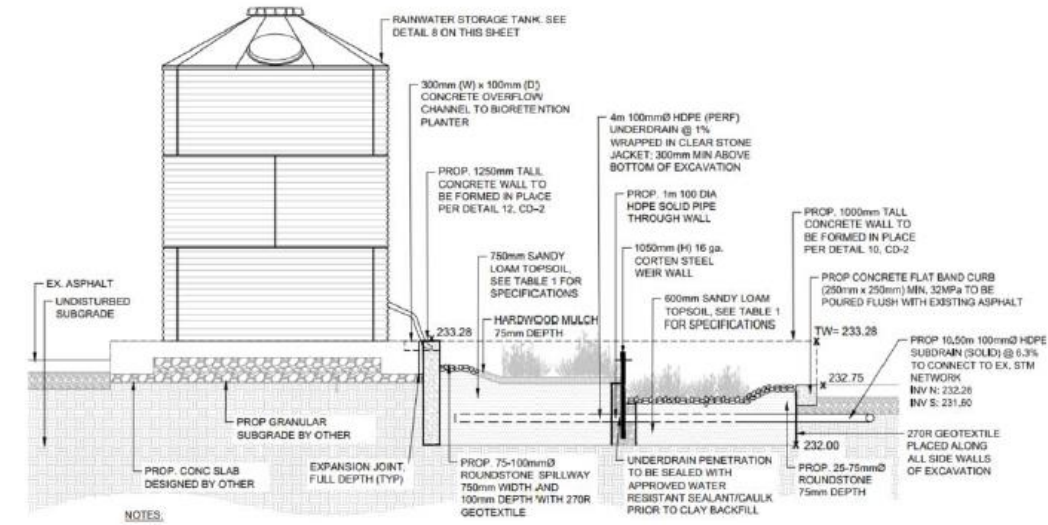
- 0.16ha catchment which is currently entirely impermeable
- The drainage is broken down into 4 different catchments
  - Western Parking
  - SW Rooftop
  - NW Rooftop
  - Eastern Rooftop



## Bioretention garden capturing westside (north) rooftop



## Storage Tank capturing eastside rooftop



## Bioretention planter capturing westside (south) rooftop

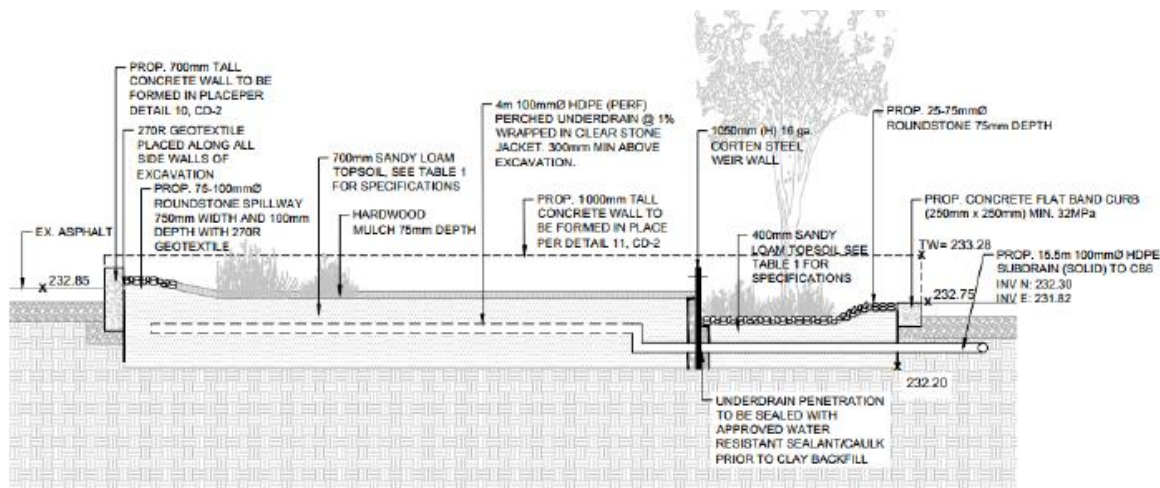
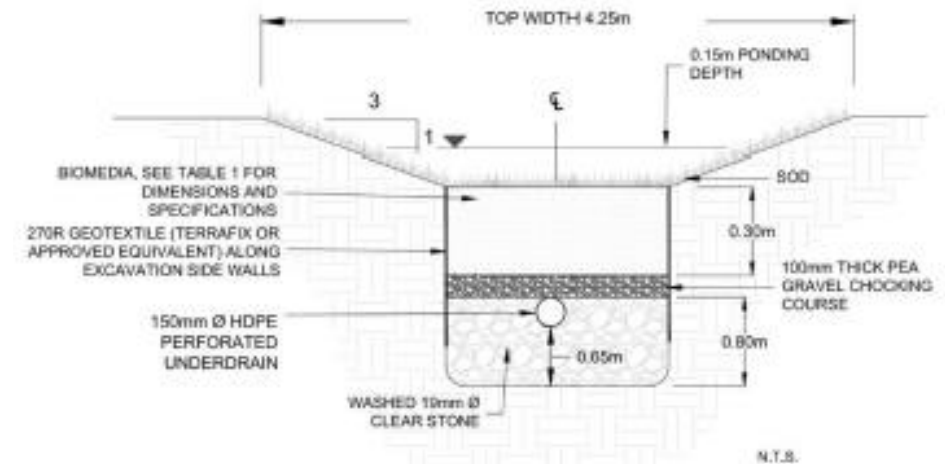


Figure 7-8 Two Tiered Bioretention Planter Detail (BR1)

## Bioswale capturing parking lot runoff







MAPLEWOOD MALL

WATER WHERE IT DROPS



# Funding and Partners

- Concepts, Final design and Construction Inspection – \$87,000
  - Funded through Ministry of Environment, Conservation and Parks and
  - Conservation Authority
- Construction and Construction Administration - \$465,000
  - Conservation Authority – Confirmed Cash and In-kind
  - Lake Simcoe Conservation Foundation – Confirmed
  - Environment Canada – Freshwater Action – Applied
  - Township of Brock – In-kind staff time and disposal of excavated native soil





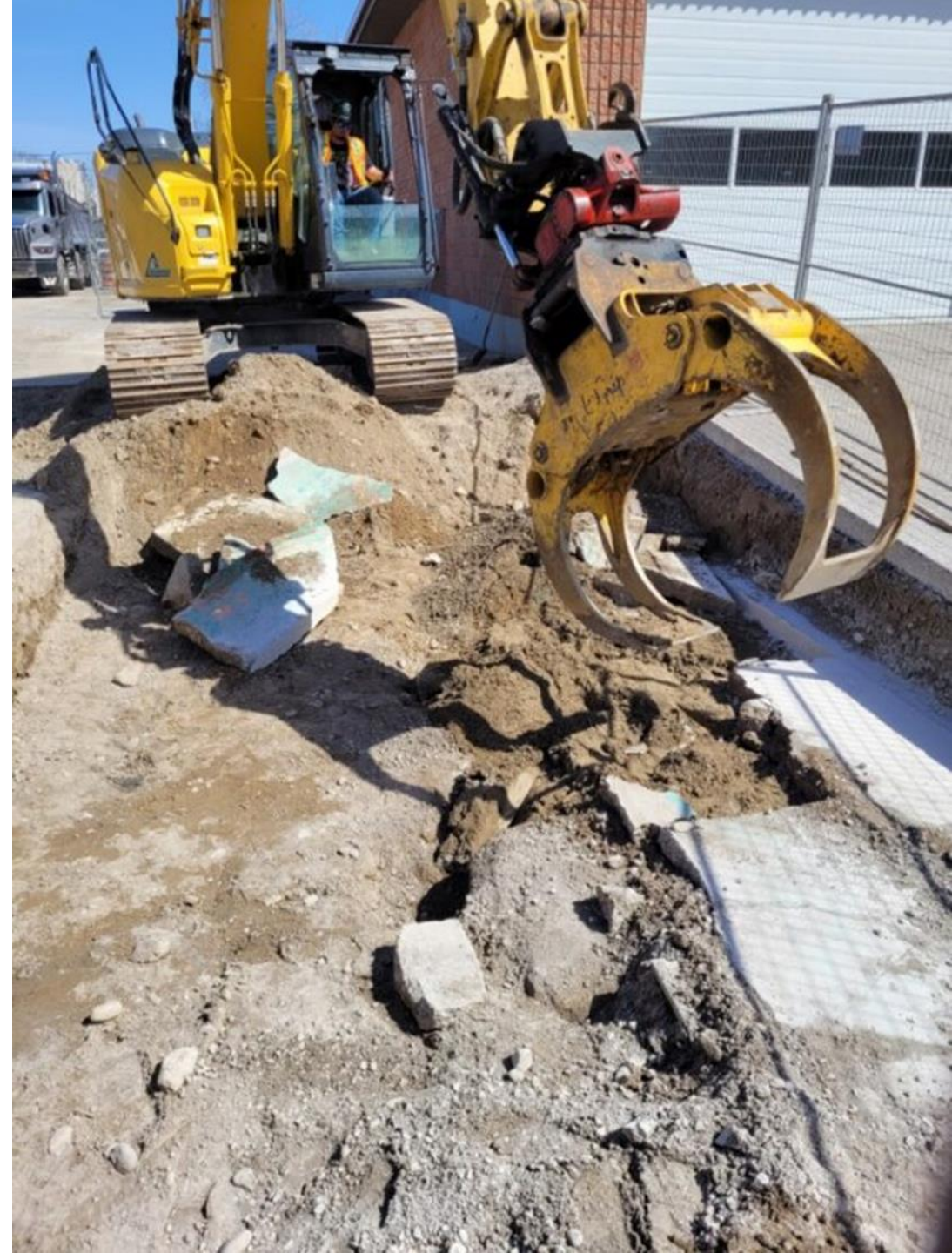
# Status update and next steps

## Current Status

- Construction started the first week of April.
- Construction will be wrapped up by late May.
- Training for staff in late May by manufacturer

## Upcoming discussions and ideas

- Community Events
- Signage
- Art Project





# Questions?

