

Fulton Creek Alteration Channel Design and Stream Restoration

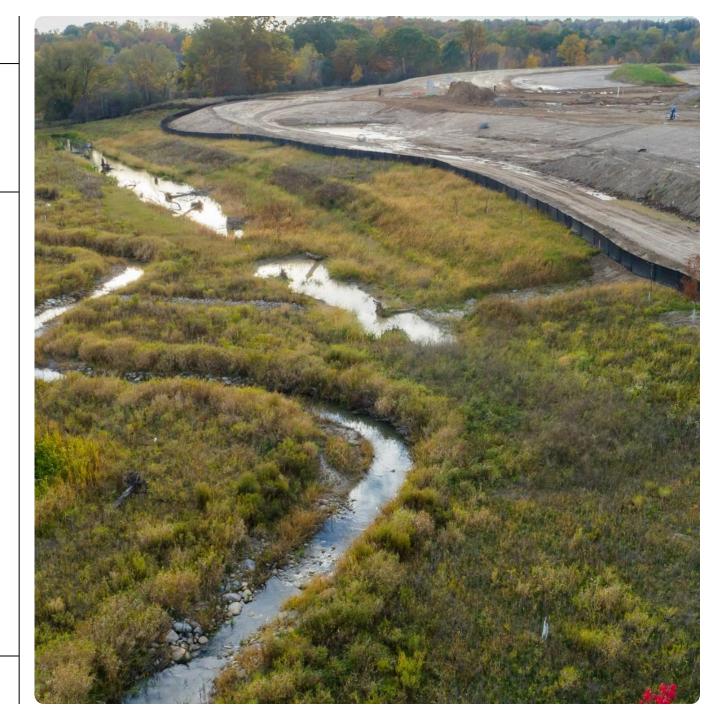
Heather Amirault, P.Eng. Water Resources Engineer



Natural Channel Design

Natural Channel design can be used to achieve multiple goals:

- Create a stable channel form (vertical and lateral stability)
- Convey base and flood flows
- Create aquatic and riparian habitat
 Incorporate physical and biological function and flood protection:
- Meander belt study
- Hydraulic modeling and analysis
- Native species planting plan



Construction Methods

- Select contractor familiar with channel construction, retain experienced channel inspector
- Build new channel 'off-line' keep existing creek active until new channel is complete
- Robust erosion and sediment controls to protect active channel on site
- Establish vegetation and stabilize channel bed and banks prior to introducing flows into new channel
- Preserve portion of existing channel and associated riparian vegetation



Creek Design and Restoration Examples

Mill Creek Deepening (17 Street) Edmonton, AB













Creek Design and Restoration Examples

Schneider Creek Restoration and Idlewood Creek Dam Removal, Kitchener, ON











Creek Design and Restoration Examples

Silverleaf Development, London, ON







Thank you

