

# Linley Valley

**Clients:** Lamont Lands, Mount Benson Developments

**Projected Capital Cost:** \$6,500,000

**End Date:** Linley Point - 2019; Linley Park Estates - Ongoing

**Location:** Linley Valley, Nanaimo  
Linley Point  
Linley Park Estates

**Industry Segment:** Transportation (road design), Water, Sewer Systems, Stormwater Management, Private Utilities

## Key Team Members

Drew Beiderwieden

## Challenges:

- Designing ponds and natural features into neighbourhood topography while also providing adequate access through many phases of future neighbourhoods.
- Steep slopes, requiring complex grading and rock removal to create single-family lots
- Undeveloped lands required the creation and design of water mains to service all potential future phases.
- Regulatory challenges at varying levels (local, provincial) due to the complexities of developing a pond system complete with a dam.
- A beaver was continuously blocking a culvert, so a deterrent system was designed and implemented.

## Solutions:

- Multi-level stormwater flow management system designed and implemented across 3 ponds.
- Unique neighbourhood-level planning to integrate development into natural surroundings.
- Worked with geotechnical engineer to ensure setbacks from slopes were appropriate to keep housing safe.
- Reused blasted rock from the site for various purposes, including required retaining walls.

## Deliverables:

- Pre-design report.
- Design drawings for procurement and installation of a new stormwater conveyance system for the NOC and existing Fire Rescue Station No. 2.
- Concept designs for integrated pedestrian routes and furnishing.
- Detailed subdivision design drawings through to approval.
- Construction layout and inspection services.
- Constructed drawings through approval and registration.

Newcastle Engineering was hired by Lamont Lands and Mount Benson Developments to work on projects in Linley Point and Linley Park Estates in Nanaimo. The primary goals were to implement network road designs, upgrade sewer and stormwater management systems, and build the foundations for an appealing, buildable neighbourhood for single families.

To achieve this, Newcastle Engineering designed the shape and size of new stormwater ponds, featuring dams and a multi-level flow management system to help mitigate the effects of heavy rainfall.

The stormwater ponds and surrounding trails serve a functional purpose as water management systems, and a community purpose as parklands that locals can enjoy.

