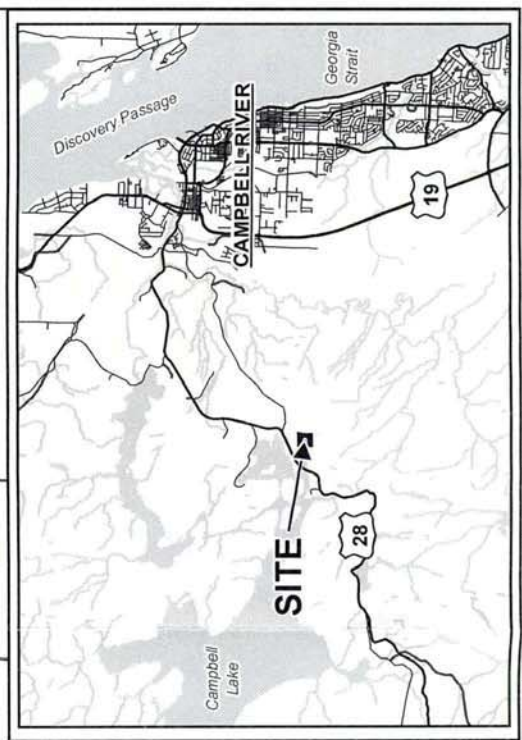
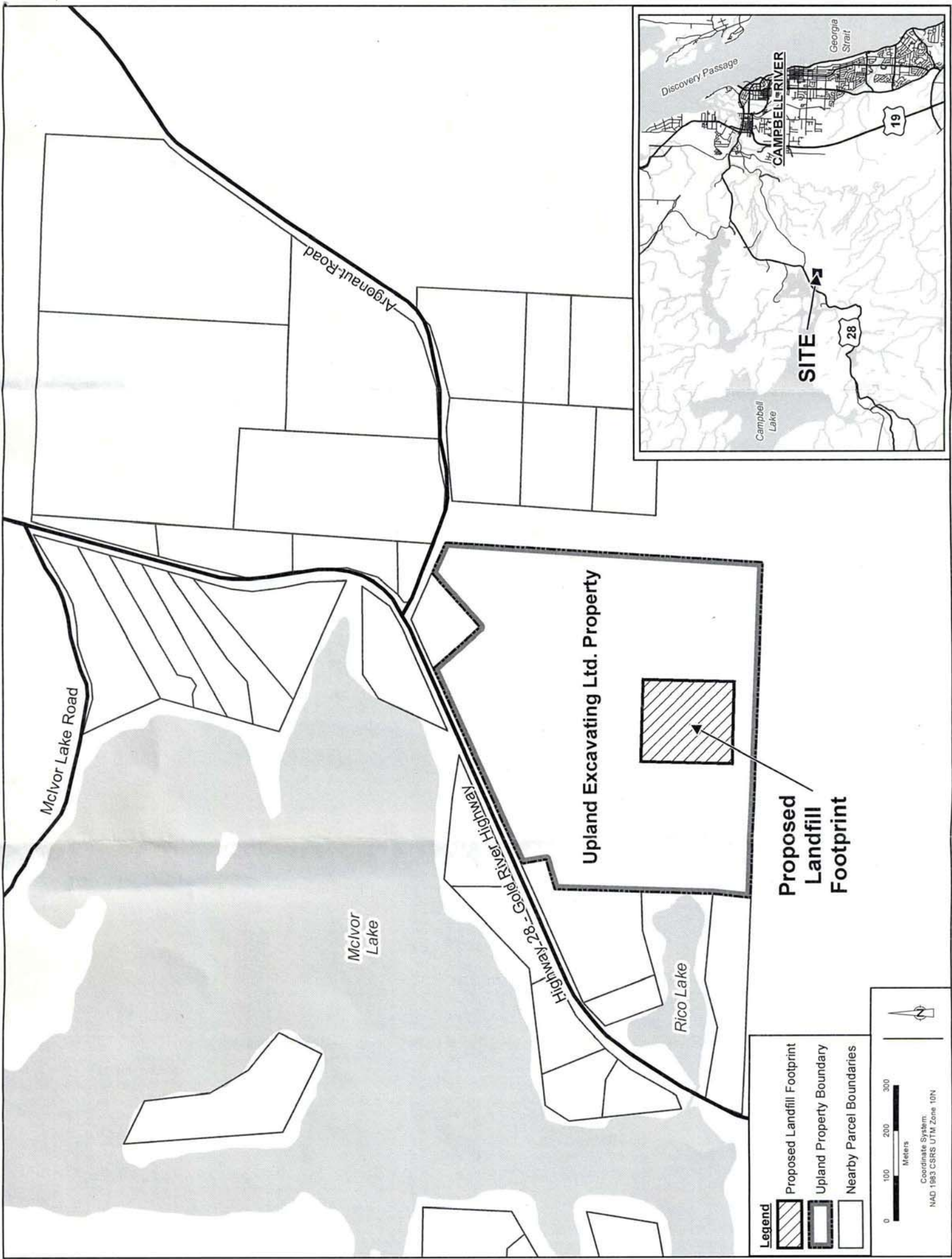
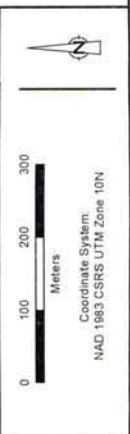




- Legend**
-  Proposed Landfill Footprint
 -  Upland Property Boundary
 -  Nearby Parcel Boundaries



Welcome To The Public Open House

Welcome to the Public Open House Information Session for the Upland Landfill Waste Discharge Application.

The purpose of this Open House is to:

- provide information to members of the public and other interested parties about the Upland Landfill Waste Discharge Application.
- invite comments and questions about the Application

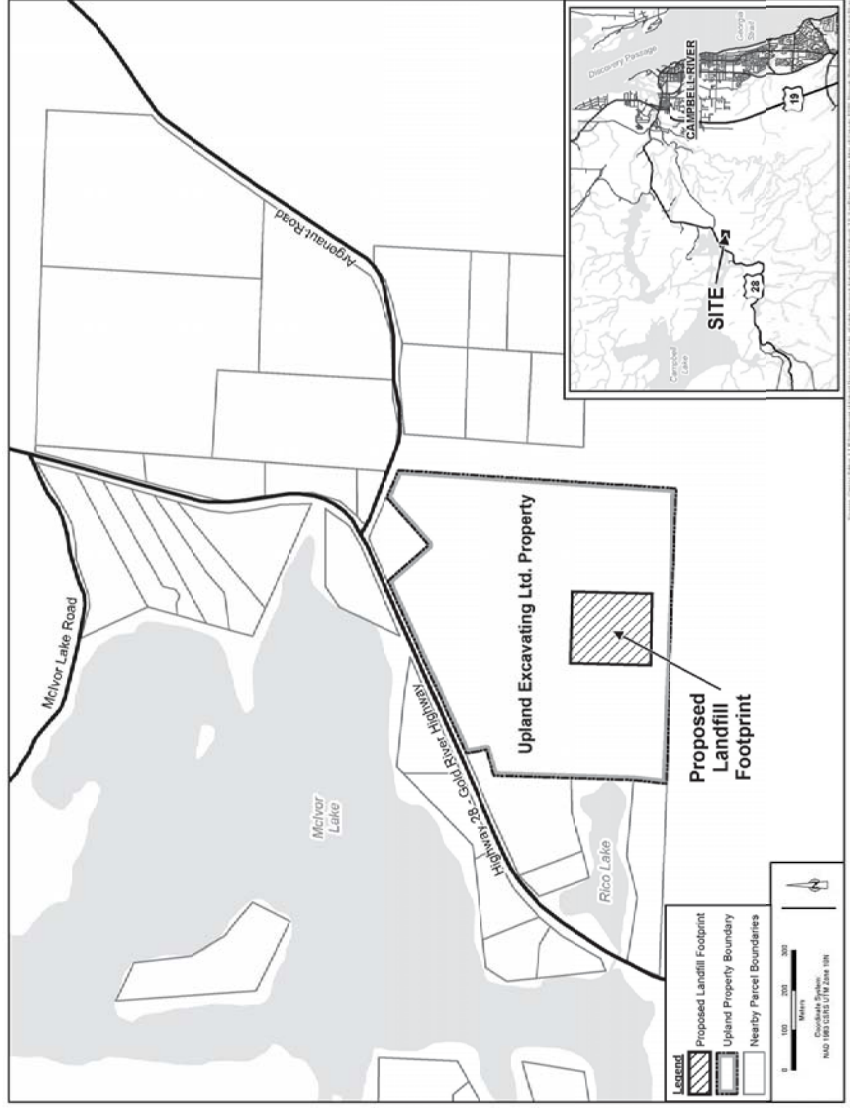
Representatives of Upland Excavating and its engineering consultants, GHD Limited, are available to answer any questions.

Please feel free to walk around and ask questions.



Project Description

- Submit a Waste Discharge Application to the Ministry of Environment (MOE) to design, construct and operate the Uplands Landfill
- Obtain an Operational Certificate to replace existing Permit PR-10807 (June 2, 1992)
- Landfill to receive solid, non-hazardous waste including
 - Construction and demolition waste
 - Land clearing debris
 - Non-hazardous contaminated waste soil
- Continued inclusion as a landfill in the Comox-Strathcona Solid Waste Management Plan
- Designed, constructed, and operated in accordance with Provincial Regulations (MOE Draft Second Edition Landfill Criteria for Municipal Solid Waste, September 2015)
- Landfill Site Life of approximately 20 years with approximately 500,000 cubic metres of capacity



Copies of the existing Permit PR-10807 and Provincial Regulation (Landfill Criteria) may be found at the Resources table.

Site Plan and Environmental Controls

Environmental controls will be in place including:

- The lined landfill cells will be located toward the centre of the property
- Groundwater and surface water monitoring locations are located throughout the Site
- The leachate treatment system (aeration pond and infiltration pond) are located to the east of the lined landfill cell



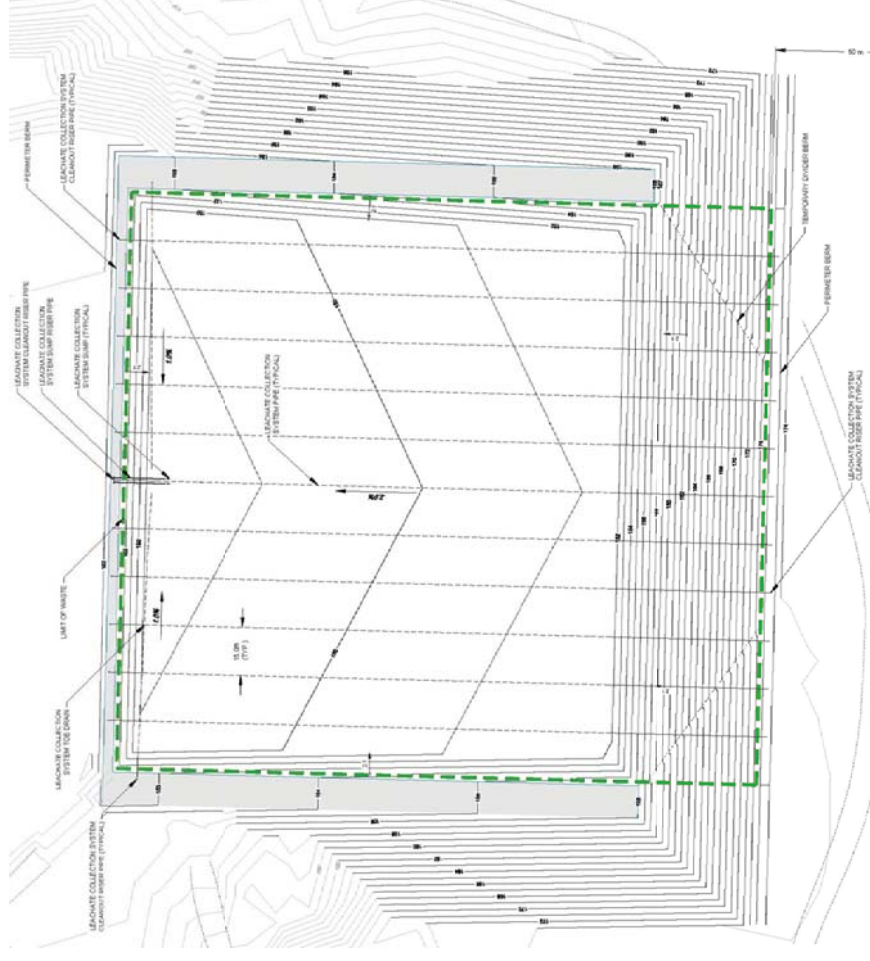
Copies of the draft design drawings and draft technical reports may be found at the Resources table.

UPLAND
EXCAVATING LTD

-
- The diagram illustrates a cross-section of a landfill liner system. The layers, from top to bottom, are:
- 300mm Ø HOPE DORT LEXIMATE COLLECTION SYSTEM PIPE (PERFORATED)** (shown in color: 25mm ABOVE)
 - GRANULAR DRAINAGE BLANKET**
 - WOVEN GEOTEXTILE**
 - NONWOVEN GEOTEXTILE**
 - 1.5mm HOPE GEOMEMBRANE (TEXTURED)**
 - GEOSYNTHETIC CLAY LINER**
 - SUBGRADE**
- Dimensions and slopes are indicated:
- 300mm** (width of the top pipe)
 - 1%** (slope of the granular drainage blanket)
 - 300mm** (width of the geosynthetic clay liner)

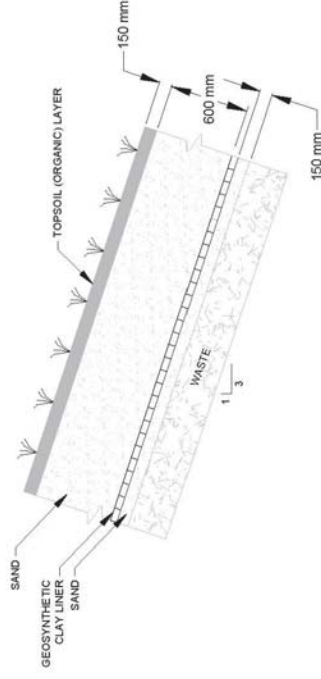
LEGEND:

---	EXISTING MAJOR CONTOURS
---	EXISTING MINOR CONTOURS
---	MAJOR CONTOURS (2 IN INTERVAL)
---	MINOR CONTOURS (1 IN INTERVAL)
---	LIMIT OF WASTE
---	PERMANENT BERM
---	PROPERTY LINE
---	LEACHATE COLLECTION SYSTEM PIPE (PERFORATED)
---	LEACHATE COLLECTION SYSTEM CLEANOUT RISER PIPE (NON-PERFORATED)
---	TEMPORARY DIVIDER BERM

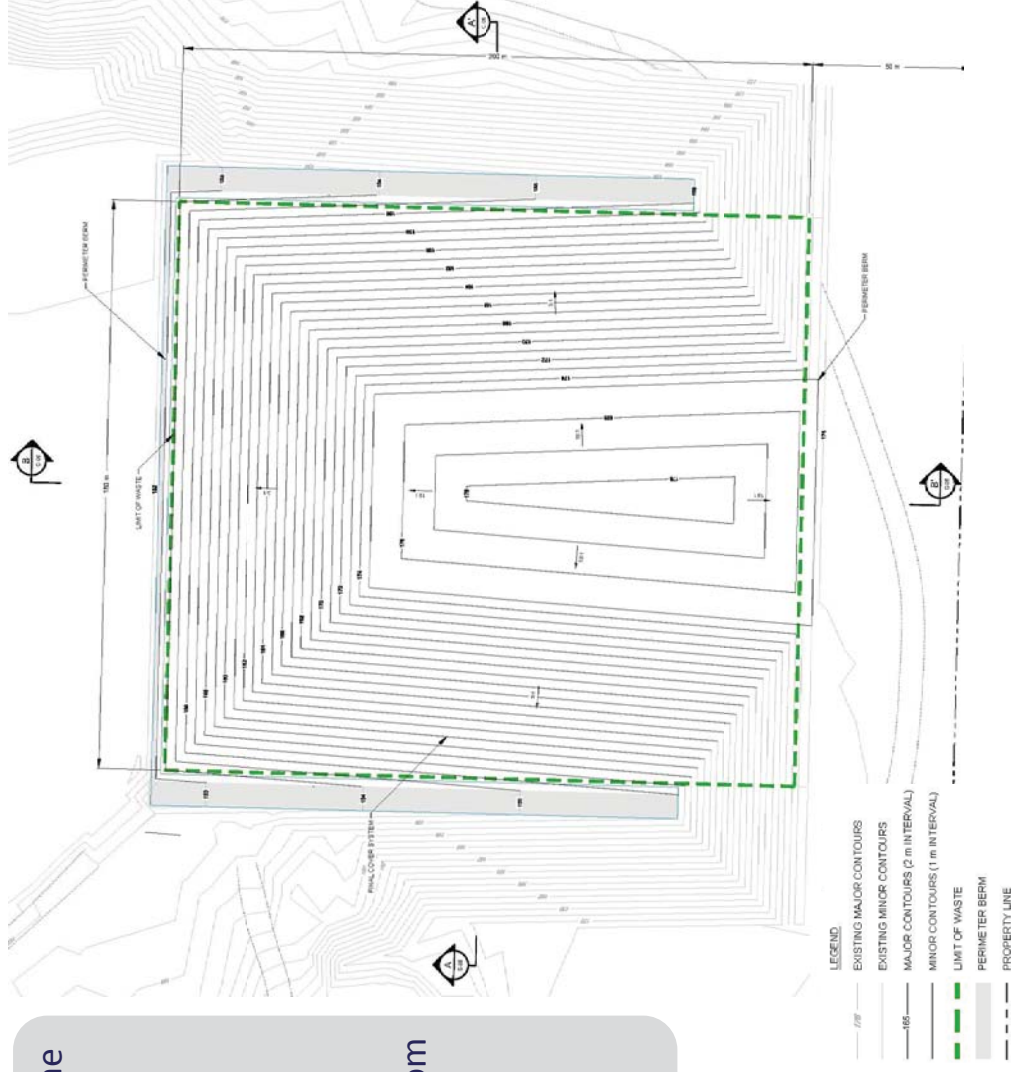


Final Cover

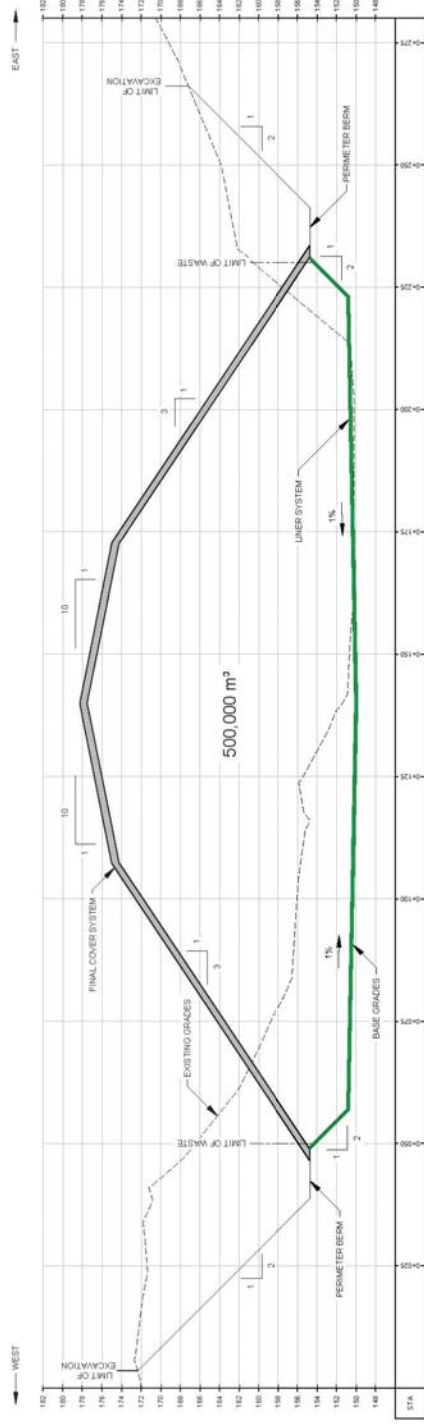
- The landfill will be filled to stable 3h:1V side slopes. The final top plateau will have slope of 10 percent to promote clean storm water runoff
- The landfill will receive progressive final closure
- A final cover will be installed to close the landfill permanently and minimize leachate generation. The final cover will include the following layers from bottom to top:
 - Cushioning sand layer
 - Geo-synthetic clay liner
 - Protective sand cover
 - Topsoil and vegetation



FINAL COVER SYSTEM

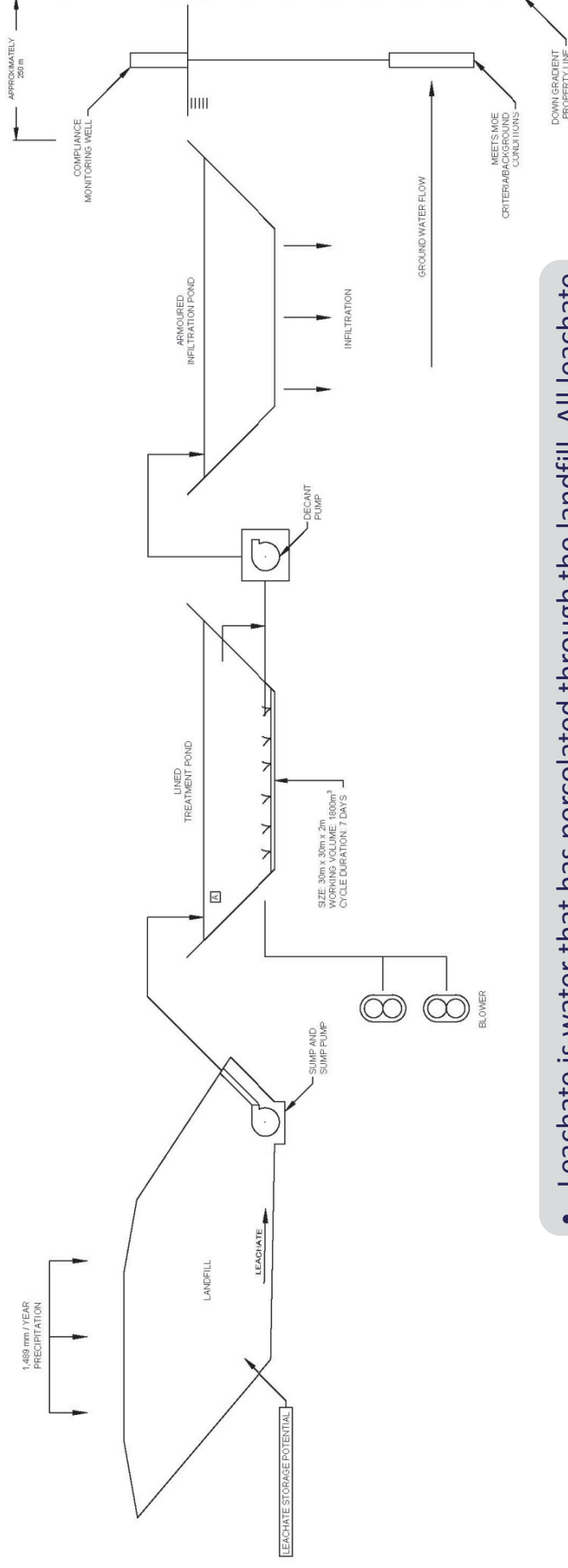


Landfill Cross-sections



The landfill will have approximately 500,000 m³ of capacity for waste and cover soil

Leachate Treatment Process



TREATMENT CYCLE
 FILLING: 1 DAY
 AERATION: 2 DAYS
 SETTLING: 1 DAY
 DECANT: 1 DAY

- Leachate is water that has percolated through the landfill. All leachate is collected within the landfill and conveyed to the treatment system
- The leachate will be treated in a lined aeration pond
- Leachate contaminant concentrations will be treated to approved MOE standards
- The objectives are to meet the MOE water quality standards at the property boundary and protect the surrounding environment

Field Investigations Completed

- Topography survey
- Advancement of 8 monitoring wells into on-site aquifer
- Installation of two surface water gauges in nearby lakes
- Advancement of 3 boreholes to characterize geotechnical conditions
- Completion of 3 seismic analysis surveys
- Collection of groundwater and surface water samples to characterize baseline water conditions
- Single well response testing to characterize the aquifer flow direction and flow rate and flux
- Topographic Survey and survey of monitoring wells and surface water gauges



Waste Discharge Application Process



Frequently Asked Questions

Will the hours of operation change at the Property?

The hours of operations will stay the same.

Will the project cause nuisances such as odours or noise?

The waste accepted (construction and demolition, land clearing debris, and non-hazardous contaminated waste soil) will be non-odorous due to the low organic content. Noise due to the operations will not be in excess of the current operations. A buffer zone of at least 300m is present between the proposed landfill and adjacent properties with vegetation and earth buffers to prevent the travel of noise towards adjacent properties.

Will the waste attract birds and wildlife?

Birds, animals, and vectors are generally not attracted to waste with low organic content (no domestic waste). In addition, daily cover will be applied to the waste to reduce the risk to wildlife.

Will the traffic volumes on Gold River Highway increase?

There is a potential for a marginal increase in traffic flow rate to and from the property. Trucks will queue within the property boundaries and queueing on Gold River Highway will be prohibited.

Will the water quality in the surrounding groundwater, lakes, streams and rivers be affected?

There will be no discharge to surrounding lakes, streams, or rivers. The groundwater flows away from McIvor Lake and Rico Lake. The groundwater will meet the applicable British Columbia Ministry of Environment Water Quality Guidelines at the property boundary. Annual Operations and Monitoring Reports will be submitted to the Ministry of Environment and Comox-Strathcona Waste Management.