

Retaining Walls In the Lower Mainland

“Valley Geotechnical’s mission, as an employee-owned company, is to listen, mentor, and guide our personnel so that our clients receive the highest level of service. This allows our team to collaborate with other engineering disciplines and our clients to build trust and certainty in all of the solutions presented”.



Do you need to replace a Retaining Wall?

Many sites in the Lower Mainland have a failing retaining wall constructed out of wood or concrete.

Many home or strata owners are confused in how to actually deal with this problem. This can also be a major setback when negotiating a potential purchase or sale of a property.

We at ValleyGeo have 100 years of combined experience in dealing with this problem and have thousands of successful applications to our credit.

“The process stays the same, but the projects will always be different.”

1. Contact Local Municipal Engineering Departments for an up to date bylaw and permit fee schedule for your own information. See Municipal links page for more information.
2. Contact **Valley Geotechnical** for an initial **FREE** phone consultation.
3. View local suppliers for products you would be interested in using in your application and investigate the products online.
4. Once contracted, we at Valley Geo will take care of the design, permits, inspections during construction of the project, and letters of assurance needed by the municipality.
5. All you have to do is find the right **“Certified”** contractor for the project.

Frequently Asked Questions (FAQ)

-What types of retaining walls are out there?

There are lots of options out there, from Segmental large and small blocks, Cast in place concrete with stone facing, Rock, Wood, Green walls using welded wire cage systems, and even old tires.

-My wall is not over 4’ do I need an Engineer/ Permit?

Most municipalities don’t require an engineer to be involved, however when in doubt contact your local engineering departments.

-I have a series of walls (Terraces), do I need engineering/Permit?

In most cases you would need an engineer to evaluate your project.

-What is the difference between a gravity and reinforced wall?

A Gravity wall is a retaining wall that can stand up on its own; these are typically shorter height walls 4’ or 1m or less.

A Reinforced wall is when a gravity wall is not able to be constructed; usually a tieback mechanism is used such as **geogrid** to reinforce the soil behind the wall.

-What is Geogrid?

Geogrid is a tieback mechanism used in reinforcing a retaining wall. There are a couple of different types of Geogrid. Most notably HDPE or Polyester is used in construction of Segmental Retaining walls, they come in various strengths depending on a variety of factors.

Municipal Links

Abbotsford

[www.abbotsford.ca/Assets/2014+Abbotsford/Planning+and+Development/Planning/FAQs+\\$!26+Guides/Retaining+Walls+FAQ.pdf](http://www.abbotsford.ca/Assets/2014+Abbotsford/Planning+and+Development/Planning/FAQs+$!26+Guides/Retaining+Walls+FAQ.pdf)

Burnaby

[www.burnaby.ca/Assets/city+services/building/Brochures+\\$!26+Bulletins/Building+Technical+Information/Fences+and+Retaining+Walls.pdf](http://www.burnaby.ca/Assets/city+services/building/Brochures+$!26+Bulletins/Building+Technical+Information/Fences+and+Retaining+Walls.pdf)

Chilliwack

www.chilliwack.com/main/attachments/attachView.cfm?attachID=2405

City of North Vancouver - Contact City of North Vancouver Building Dept. for walls over 4'

City of Vancouver

vancouver.ca/home-property-development/site-and-landscape-plan-requirements.aspx

Coquitlam

www.coquitlam.ca/search-result.aspx?indexCatalogue=fullsite&searchQuery=retaining%20walls%20&wordsMode=0

Langley City

city.langley.bc.ca/sites/default/files/uploads/Building/Accessory Building Construction Guide.pdf

Maple Ridge

www.mapleridge.ca/DocumentCenter/View/286/Retaining-Wall-Checksheets

Mission

www.mission.ca/?s=Google&cx=015829763641887868192%3A7w6r5nke7os&cof=FORID%3A10&ie=UTF-8&q=rEATAINING+WALLS

New Westminster

[www.newwestcity.ca/database/files/library/Guide_Retaining_Walls\(1\).pdf](http://www.newwestcity.ca/database/files/library/Guide_Retaining_Walls(1).pdf)

North Vancouver (District)

www.dnv.org/property-and-development/build-deck-fence-or-retaining-wall

Pitt Meadows

www.pittmeadows.bc.ca/search/site/?zoom_cat%5B%5D=-1&zoom_query=Retaining+walls+&go-search=Search

Port Moody

www.portmoody.ca/modules/showdocument.aspx?documentid=8947
<http://www.portmoody.ca/search.aspx?q=Retaining%20walls%20&cx=014272426406783312333%3Apm686dd1swg>

Port Coquitlam – Sec 20

www.portcoquitlam.ca/wp-content/uploads/2017/01/Building-and-Plumbing-Bylaw-No.-3710.pdf

Richmond

www.richmond.ca/_shared/assets/pc_326229.pdf

Surrey

www.surrey.ca/city-services/18569.aspx

Township of Langley

webfiles.tol.ca/Bylaws/PLI/Guidelines/PLI%20-%20Guide_Residential_Construction_for_Subdivisions.pdf

West Vancouver (District)

westvancouver.ca/sites/default/files/dwv/assets/home-building-property/permits-and-licences/Retaining_wall_guidelines_%282017%29.PDF

White Rock - Walls over 1m needs engineering

www.whiterockcity.ca/assets/City~Services/Documents/Planning~Development/Building/1%20-%20Guide%20for%20Residential%20Construction.pdf

Established in 1995 by Mr. Narayan Abhyanker, FEC, P.Eng., P.Geo., **Valley Geotechnical Engineering Services Ltd.**, is an employee owned company that provides the following residential, commercial and industrial design services:

- Geotechnical Engineering Services
 - o Foundations
 - o Excavation and Shoring
 - o Segmental Retaining Walls
 - o Slope Stability Analysis
 - o Single Family Homes
 - o Subdivision & Land Development
 - o Hazard Assessments & Reports
 - o Pavement & Road Analysis
- Storm water Management Design
- Stream or Creek Crossing Protection
- Onsite Sewage Systems & Septic Design
- Phase 1 Environmental Review
- Erosion & Sediment Control

From Concept through to Completion, **ValleyGeo** works closely with you and other engineering disciplines to overcome the challenges of each individual project and build trust and certainty in all options presented.

ValleyGeo focuses on value added service by providing cost effective, low-risk options and solutions that comply with all statutory and regulatory requirements. We mentor and guide our personnel through our quality management and operational system so that you receive the highest-level work and service. We are also OQM certified through EGBC.

We would be proud to work with you on your next project.



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