SETBACK

One of the benefits of LondonBoulder is its ability to be built both vertically and with multiple setbacks. This level of versatility allows the LondonBoulder line to be useful in a variety of environments while meeting a number of landscaping needs. However, careful consideration must be taken when determining whether to build the wall with or without a setback.

Although setback walls have the ability to retain larger amounts of earth than vertical walls, they add a level of difficulty when it comes to project planning and design. Each course in a setback wall has a setback of 2 or 6 inches. If this setback is not considered, the desired layout may be impossible to realize once the minimum radius of curvature of the LondonBoulder units has been reached.

All segmental retaining walls designed with active earth pressure theory need to rotate slightly during or after construction. This rotation is caused by construction equipment, tensioning of the geosynthetic reinforcement, and because the soils have to move slightly to achieve stability. The rotation can be as little as 1/2 of a degree or up to several degrees, depending on soil types and the care taken by the contractor. Because of this, vertical walls may not be vertical after construction, but may be leaning out slightly.



UNREINFORCED WALLS

A retaining wall is a structure that resists the forces from a soil mass by virtue of its own weight. In many cases, a simple gravity wall (with no geogrid reinforcement required) will be all that is needed to retain a soil mass. The soil is kept in place by the sole weight of the stacked concrete blocks. When this weight alone is not enough, the use of reinforcement grid brings together a larger mass of soil to counteract the pressures of the retained soil.

Unreinforced walls can be built to heights of 10'-15' depending on the set back of the wall, soil, surcharges and terrain conditions. If soil and terrain conditions are not ideal, it is strongly recommended that the project be reviewed by a qualified licensed professional (P.E.). **See "Unreinforced Height Limits for LondonBoulder" for more detailed information.**



REINFORCED WALLS

When your wall design calls for taller walls, or incorporates special conditions such as tiers, slopes, or surcharges behind the wall, reinforcing grid may be required to stabilize the wall. Grid layers work by bringing together a larger mass to aid the wall in resisting the forces exerted by the retained soil. See grid reinforcement details on page 13.

12164_LB Engineering Guide 2016_V3.2.indd 9 2/16/16 4:23 PM

Tri-Kon Precast Products Ltd.
601 Patterson Street West
Cranbrook BC V1C 6T3
250-426-8162
info@trikonprecast.com
trikonprecast.com

PRODUCT
London Boulder

DRAWING
Setback and Reinforced Walls

WEIGHT

DRAWING NO.

DATE
As per drawing

SHEET
07 of 14

UNITS / SCALE
As per drawing

Request A Quote