

27 July 2015

To Whom It May Concern

## Phi Group and Permacrib Testimonial

As a Director of Eliot Sinclair, a Christchurch firm of consulting engineers, surveyors and planners, I have worked with Peter Syred from Phi Group NZ Ltd for many years in the design and specification of Permacrib retaining walls.

Permacrib timber crib retaining walls have been constructed on a number of Eliot Sinclair designed projects both prior to and since the 2010/2011 Christchurch earthquakes. In fact in 2004 a Permacrib wall was designed and constructed at my own residence. In view of Permacrib's proven seismic performance, technical suitability to the Christchurch hill suburbs and cost effectiveness compared to other some retaining wall options, we continue to recommend Permacrib as an effective solution across a range of retaining situations.

Phi Group has consistently provided us with comprehensive technical support for Permacrib design, specification and materials cost estimates. They have recently adapted Permacrib design to fully incorporate the July 2014 MBIE Guidance on the Seismic Design of retaining structures for residential sites in greater Christchurch.

Post-quake Christchurch has seen many changes and developments in seismic requirements and compliance. Phi Group assists our engineers to provide technically appropriate and cost effective retaining wall options in this challenging and dynamic environment.

Yours faithfully  
ELIOT SINCLAIR & PARTNERS LTD



Marton Sinclair BE BSc FNZIS MIPENZ (35473) CPEng IntPE (NZ) RPSurv  
Civil/Geotechnical Engineer  
Director