SHIPPEE ENGINEERING, INC.
4408 SUNFLOWER COURT
DOYLESTOWN, PA 18901
215.589.1952(T) 267.224.4414(F)
Bold Ideas Shaping the Earth

March 1, 2005

EP Henry Corporation
Attn. Kevin Earley
16 Anderson Road
Parkerford, PA 19457

Reference: Coventry Plus Wall System
Shear Contribution from Connectors
File No. 050103

Dear Mr. Earley:

This letter summarizes the results for testing conducted on the tumbled segmental retaining wall system, the Coventry Plus system as manufactured by EP Henry Corporation. Testing was conducted by Bathurst, Clarabut Geotechnical Testing, Inc. of Kingston, Ontario. Specifically, the wall system was tested both with and without the shear connectors to directly evaluate the performance of the shear connectors and to measure their contribution toward the overall strength of the wall system. Testing was conducted in accordance with ASTM D6916-03, *Standard Test Method for Determining Shear Strength between Segmental Concrete Units (Modular Concrete Blocks)*.

The test results show that a minimum peak interface shear capacity of 994 lbs/foot is available when the shear connectors are used as an integral part of the retaining wall system. When the shear connectors were omitted from the wall system, a minimum peak shear capacity of 203 lbs/foot was achieved. This test data demonstrates that a significant (almost five-fold) increase in shear capacity is derived directly from the shear connectors themselves. The conclusion is that the shear connectors (Coventry Plus pins) offer a significant contribution in the overall ability of the retaining wall system to resist load via shearing resistance. Tumbled wall systems can benefit from the use of shear connectors. Therefore, I recommend that Coventry Wall Plus pins be specified and used when constructing an earth retaining wall with EP Henry's Coventry Wall Plus.

I trust this information adequately summarizes the results of this testing. If you have any additional questions, please contact me directly at 215-589-1952.

Sincerely,

Bart J. Shippee, P.E.
Shippee Engineering, Inc.

BJS/

encl: BCGT #24021 & #24023 Test Reports