Cassio Engineering, Inc.

5013 Deer Drive Downingtown, PA 19335

Civil and Structural Engineers

Ph. (610)873-8998 FAX (610)873-3793

April 26, 2016

Newmart Builders 10009 Cycle Lane South Hill, VA 23970

Re: Anchor Bolt Attachment to Base Rail Standard Carports



April 26, 2016

Dear Sir:

The standard plans show several options for attaching the base rail to the concrete slab with ½" anchor bolts. The most important parameters for installing the anchors bolts are the 4" minimum distance to the edge of the slab and the minimum embedment of 2%" into the concrete slab. It is acceptable to weld a short piece of steel tubing to the inside face of the base rail and attach the anchor bolt with that in order to obtain the minimum 4" clearance to the edge of the slab.

If you have any questions or comments concerning this information, please call me at (610) 620-5749.

Very truly yours,

Robert L. Luebbers, P.E.