

# **EarthTec Accommodates Multiple Wall Requirements in ICC Construction**

## **GeoStructures Subsidiary Builds 50-Foot High Wall for Highway Interchange**

PURCELLVILLE, Va., September 24, 2010 – Producing precast panels of various sizes and finishes, combining precast coping and barriers with cast-in-place techniques, and working around existing structures are some of the issues overcome by EarthTec in designing and supplying the retaining walls for support of bridge abutments and embankments for section B of Maryland's Intercounty Connector highway. The toll road will provide a new connection between central Montgomery and northwestern Prince George's counties without having drivers travel south to I-495.

Running from Georgia Avenue (Route 97) to Columbia Pike/Briggs Chaney Road (Route 29), Section B will have 12 structures built with EarthTec's mechanically stabilized earth (MSE) technology. The 70,000 square feet of MSE – ribbed steel strips embedded in granular fills and faced with precast concrete panels - will support two interchanges on the seven mile toll road.

In designing one of the recently completed walls that reaches 50 feet in height, lateral loads from adjacent, caisson-supported sound walls were taken into consideration and soil reinforcements were designed to accommodate the caissons. In addition, the concrete panels at this particular wall were cast with special inserts at the front face to accommodate a cast-in-place protective wall as required by the owner.

The retaining walls for this project were designed to have four architectural finishes in accordance with the specifications. This many finishes on one project is unusual but was required to satisfy the requirements of the local communities along the roadway. The standard 5 x 10 panel was modified to a non-standard 4 x 10 panel used on two of the walls.

"MSE wall construction on this design-build project utilized the state's performance-based specifications and required that suppliers be approved by Maryland State Highway Administration," says David McKittrick, EarthTec VP. "Maryland is forward-looking and knows that the design-build approach can lower costs and speed up construction. The EarthTec system is one of the few systems on the MDSHA approved list for MSE walls up to 50 feet high."

The project team for section B is led by MD200 Constructors, a joint venture comprised of Kiewit Southern Co., Corman Construction, Inc., and G.A. & F.C. Wagman, Inc.

EarthTec also is delivering 90,000 square feet of MSE for three interchanges on section C, a 3.7 mile stretch from Route 29 to I-95. For section C, the team is headed by IC3, a joint venture of Shirley Contracting Company, LLC, Clark Construction Group, LLC, Guy F. Atkinson Construction, LLC, Facchina Construction Company, Inc. and Trumbull Corporation.

**About EarthTec**

EarthTec helps builders save time and money when constructing grade-separation structures for transportation, commercial and industrial uses. The company's MSE wall systems feature innovations both inside and outside the wall, and through its affiliation with [GeoStructures](#) it provides ground improvement, support of excavation and sound wall solutions on a design-build basis.