

## Parking on your Retention Pond

Announcing another milestone from Advanced Pavement Technology regarding cutting edge technology for stormwater management. BASS has provided a simple solution for stormwater detention requirements and now has successfully demonstrated its ability to provide a simple solution for stormwater retention. Utilizing BASS as an underground storage facility has enhanced land utilization by the college where there was no surface area available for a traditional retention pond.

Elmhurst College located in Elmhurst, IL has commenced with Phase II of its planned LEED certified dormitory expansion program that included a sustainable site design with over two acres of permeable pavement system constructed in phases. Phase I has been successfully completed and is being used as an access for construction of Phase II and the associated dormitory building construction traffic and lay-down area for staging of materials.

Phase I was designed and engineered by Wight and Associates of Darien, IL to accommodate student parking and provide detention and retention for part of the planned addition of a dormitory with the use of Eco-Swales and a standard BASS cross-section built over an excavated area approximately seven feet deep and filled with CA-1 aggregates that has a void space between the aggregates that serve as a retention pond, approx. 3.3acreft, that will meet a 100 year storm event as required by the city of Elmhurst.

Discussion with Construction manager, Project Control, regarding Phase II required using Phase I area as an access point to allow excavation of soils to be removed from site and also for replacing excavated area with additional CA-1 stone for Phase II retention area, approx. 3.2acreft, under Aqua-Bric pavers as used in Phase I. It is estimated that over 1,000 fully loaded semi-trucks have trafficked over Aqua-Bric and BASS retention area in less than 30 days.

BASS has performed beyond original design intent and has shown no deformation due to the construction stress. In addition, after a year of service BASS has performed as a stormwater post-structural BMP both as a detention and retention facility that the school will be monitoring as a result of a DuPage County Stormwater Management division grant for water quality measurements that will further continue to support BASS as the best solution for stormwater management and sustainable site design.