

Permeable Paver Site Visit

Engineering for the Earth recently visited an 80,000 sq.ft. paving project being constructed in North Carolina at M.C.A.S. Cherry Point. Permeable Interlocking Concrete Pavement (PCIP) and other permeable paving methods can be more cost effective than traditional concrete or asphalt paving.

Engineering for the Earth was invited to visit this site by CCS, Combined Construction Services, a design/build firm that specializes in hardscape development. Recognizing the environmental demand for pavement alternatives that meet the growing needs for Low Impact Development, CCS has created a department dedicated to permeable paving.

PCIP users can earn up to six LEED Credits as administered by the US Green Building Council.

Follow the link for more images and information on alternative pavement options.

Permeable Paving is a often overlooked construction tool for controlling runoff. By selecting permeable paving as a development alternative, not only is the runoff mitigated, but the heat island effect of large parking lots is also greatly reduced. This reduction is enhanced when grass is grown in the pores of the pavers.

This project was designed with a system to collect and filter the runoff before diverting the flow into a natural stream. The extra precaution of filtering the runoff is only needed when there is a risk of contaminants in the runoff. This project was constructed adjacent to an ammunition storage unit. The runoff in this area is collected and filtered before being released.

The image below shows the retaining wall for the holding pond. The sand filter can be seen immediately inside the wall. The outlets at the bottom of the wall allow the filtered runoff to escape and enter the natural stream.

For most projects there is no need to be concerned with exfiltration. The rainwater will infiltrate the porous regions of the paver and then be absorbed into the ground.

