Aqua Holland™

BP HARDSCAPE PRODUCTS

Going Green has never looked so good

Aqua Holland™ Permeable pavers are designed to allow you to maintain and manage the natural ecology of an outdoor area by controlling nonpoint source pollution and erosion caused by runoff. When installed properly, the system naturally filters contaminants, facilitates replenishment of the water table and allows rainwater to be collected.

See Back side for more informa

FEATURES:

- **MSD Approved**
- **Meets American Disabilities Act guidelines**
- **Allows for rapid removal of storm water through void openings**
- **Design flexibility by enabling a wide range of creative patterns**
- **LEED points under sustainable site and material resource credits**
- **80 mm for commercial and residential application**

Aqua Holland™

Dimensions:
Nominal 5" x 10" x 3⅛"

Produced Locally

Building Products Corp. Office: 800.427.6282 Fax: 618.274.1060
www.BuildingProductsCorp.com

Metropolitan
St. Louis Sewer
District

2350 Market Street
St. Louis, MO 63103-2555
(314) 768-6200

February 29, 2016

Mr. Aron Rauls
Building Products Corp.
494 North 33rd Street
Swansea, IL 62205

RE: Permeable Interlocking Concrete Pavement (PICP) - A Structural BMP

Dear Mr. Rauls,

The Metropolitan St. Louis Sewer District (MSD) has reviewed your application of the Eco-Brick (manufactured by Advanced Pavement Technology) and Aqua Holland Permeable Pavers and hereby grants these products Provisional Use Level (PUL) approval as a PICP system. MSD understands that these pavers enhance surface permeability by the open space created between the blocks, and are recognized as a permeable pavement in satisfying MSD stormwater management requirements.

MSD has determined that the PICP may be used under the following conditions:

1. Proposed uses and designs of the paving units must be in general conformance with the information and methodologies provided by Building Products Corporation dated March 23, 2009 and January 4, 2016. Uses and designs shall also comply with the Interlocking Concrete Pavement Institute (ICPI) and MSD's permeable pavement design and construction guidelines.
2. Channel Protection Volume (CPv) storage may be provided in the base stone and subbase stone beneath the PICP and bedding layer.
3. The minimum pavement section subject to vehicular traffic shall be (from top to bottom) 3 1/8 inch thick paving units, 2-inch thick bedding stone (typically ASTM No. 8 or 9 stone), 4-inch thick layer of base stone (ASTM No. 57 or similar size), and a layer of subbase stone (ASTM No. 2 or similar size), all underlain by MSD type 4 filter fabric. The thickness of the subbase will vary depending on storage and anticipated traffic loads. However, a minimum 12-inch thick subbase will be required for all applications.
4. The post-developed curve number (CN) for the footprint of the paving units may be reduced. Reduced CN numbers are provided below.

Soil	A	B	C	D
CN	61	61	74	80

5. The PICP system will be considered as a pervious area for the purpose of calculating Water Quality Volume (WQv) and 5 percent impervious when calculating the differential runoff with PI factors. However, the PICP will be considered as a 100 percent impervious area for the purpose of calculating pipe sizes downstream and when evaluating a site's annual post developed runoff condition.
6. PICP may be considered as a stand-alone BMP in certain design instances. Those designs are subject to MSD review and approval.

7. Project specific design calculations and maintenance plans must be included within the project's "Stormwater Management Facilities Report" prepared by the consulting Engineer.

MSD reserves the ability to withdraw or modify this approval based on subsequent information, including information indicating that the pavers do not satisfy MSD rules, requirements, or construction and material specifications.

Sincerely,

Jason T. Peterein, P.E.
Principal Engineer (BMP Committee Chairman)
Engineering / Planning - Development Review
Metropolitan St. Louis Sewer District