FEATURES

- Meets all Virginia DEQ, DDOT and MDE requirements
- Meets Level 1 and Level 2 design requirements
- Has a 10% open surface with documented 135 inches of rain per hour surface infiltration rate
- Provides the 3 disciplines of “Interlock”
- Meets American with Disabilities Act
- Provides Section 32 specifications, construction details and maintenance guidelines
- Machine set or hand set mold configuration

STORMWATER FUNCTION | LEVEL 1 DESIGN | LEVEL 2 DESIGN
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Annual Runoff Volume Reduction (RR) | 45% | 75%
Total Phosphorus (TP) EMC Reduction\(^1\) by BMP Treatment Process | 25% | 25%
Total Phosphorus (TP) Mass Load Removal | 59% | 81%
Total Nitrogen (TN) EMC Reduction\(^1\) | 25% | 25%
Total Nitrogen (TN) Mass Load Removal | 59% | 81%
Channel Protection | Use VRRM Compliance spreadsheet to calculate a Curve Number (CN) adjustment; OR, Design extra storage in the stone underdrain layer and peak rate control structure (optional, as needed) to accommodate detention of larger storm volumes.
Flood Mitigation | Partial. May be able to design additional storage into the reservoir layer by adding perforated storage pipe or chambers.

ECOBAY™ PICP

DIMENSIONS | 5” x 10” x 3.125” (tall)
PIECES/PALLET | 224 Whole / 56 Half
SQ. FT./PALLET | 88
WEIGHT/PALLET | 3,130 lbs
LAYER/PALLET | 8
SQ. FT./LAYER | 11
COLORS | James River, Chesapeake

\(^1\) Change in event mean concentration (EMC) through the practice. Actual nutrient mass load removed is the product of the removal rate and the runoff reduction rate (see Table 1 in the Introduction to the New Virginia Stormwater Design Specifications). NCOS TR-55 Runoff Equations 2-1 thru 2-5 and Figure 2-1 can be used to compute a curve number adjustment for larger storm events based on the retention storage provided by the practice(s).

Sources: CWP and CSN (2008) and CWP (2007)
1. Eagle Bay’s SWM PAVE PICP Systems accommodate a wide variety of stormwater management objectives due to flexibility of Pavement Design, Storage Quantity Capacities, and Water Quality Treatment.

2. Runoff reduction of up to 100%, depending on project design parameters.

3. Provides both Channel Protection and Flood Mitigation.


5. Allows for retention and storage of stormwater for possible reuse for irrigation or other non-potable applications.

6. Reduces non-point-source pollutants in stormwater, thereby mitigating impact on surrounding surface waters, and may lessen or eliminate downstream flooding and stream bank erosion.

7. Minimizes impact and stress on existing stormwater or combined stormwater and sewer systems through reduced peak discharges.

8. The multi-purpose Permeable Pavement enhances land-use planning and leads to more efficient use of available land for greater economic value, especially in high-density urban areas. Utilizing the storage capacity of the PICP System below the pavement wearing surface, as opposed to above ground storage ponds or the deep excavation required by below grade confined space systems, accomplishes this goal.

9. May decrease project cost by reducing or eliminating drainage and retention/detention systems.

10. May reduce cost of compliance with stormwater regulatory requirements and lower Municipal or State utility/stormwater fees.

11. Solar Reflectivity Index compliance will reduce heat island effect and thermal loading of surrounding surface and/or outflow waters when Eagle Bay’s SRI-Compliant colors are specified.

12. Accommodates pavement design to provide both mechanical stability and structural integrity for a variety of traffic loads, including Secondary Roadways, Light and Heavy Duty traffic requirements.

ECOBAY™ PICP CROSS SECTION DETAIL

Typ. No. 8 Aggregate in Joints/Voids

ECOBAY™ PICP: Minimum depth 3 1/8"

Bedding Course: depth 1.5”– 2”

Compacted No. 57 Stone Open-Graded Base: depth 4”

Compacted No. 2 or 3 Stone Subbase: depth Minimum 12”

Optional Perforated Underdrain

Soil Subgrade — Zero Slope