Stormwater Management
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Use
Precast stormwater management structures are typically used for storm water control ponds, detention, retention, energy dissipation, underground drainage and spring water control.

Sizes
Precast stormwater management structures are available in all pipe sizes, box sizes and manhole sizes.

Application
Precast stormwater management structures may be used for the following:
- Pond risers
- Overflow structures
- Underground detention or retention
- Anti seep collars
- Energy dissipaters
- Spring boxes
- Infiltration systems

Joints
The following joints may be available for utility structures:
- Rubber gaskets
- Pre-formed mastic or butyl
- Mortar joints

Applicable Specifications
The following specifications apply to Precast stormwater management structures:
- ASTM C 76
- ASTM C443
- ASTM C361
- ASTM C478
- ASTM C877
- ASTM C890
- ASTM C913
- ASTM C990
- ASTM C1577
- Department of Transportation specifications
- Local utility jurisdiction requirements
Isometric View

Notes
1) Manhole structures conform to ASTM C478.
Notes
1) Manhole sections conform to ASTM C478.

Precast SWM-1 Stormwater Management Structure
**Notes**

1) Precast Anti-Vortex device (Cap & Riser) conform to ASTM C478.
2) Dimensions subject to permissible variations of ASTM C478.
3) Inlet area (area between device I.D. and riser O.D) is greater than outlet area (area of riser I.D.).

<table>
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<th>Riser OD</th>
<th>Cap ID</th>
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<th>Notch Dia</th>
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</table>
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Open Top Riser vs. Anti-Vortex Flow Rate Chart
Notes
1) Weir wall could have orifice openings and/or weir slot along center top.
Isometric View

Notes
1) Level spreader will be uniform elevation along top to allow a sheet flow of water over it.
Notes
1) Refer to VDOT Road & Bridge Standards for EG-1A grate detail.
2) EG-1 PC Energy Dissipator (without grate).
3) EG-1A PC Energy dissipator (with grate).

Precast Energy Dissipator
(EG-1 & EG-1A)
Notes
1) Contractor to seal pipe into opening in field.
**Notes**

1) Manhole components to be per ASTM C478.
2) Top 6" thick for 0' to 20' fill over flattop and 10" thick for 20' to 50' fill over flattop.
3) Bottom 8" thick for 0' to 20' fill over flattop and 10" thick for 20' to 50' fill over flattop.

**Isometric View**
We are committed to making Concrete Pipe & Precast the preferred supplier for our customers by delivering outstanding value, continuous innovation, and exceptional customer experience by consistently fulfilling our promise:

“Not Just Concrete, Concrete Solutions”