

Arcadia™

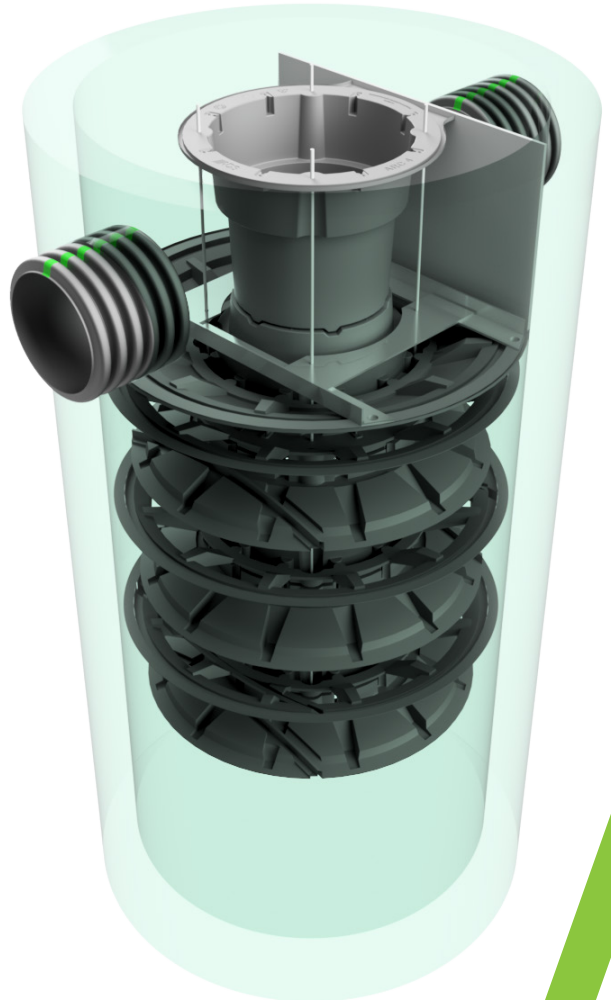
The Arcadia is market-changing stormwater quality technology. This high-performance hydrodynamic separator is designed to remove total suspended solids in order to protect the world's most precious resource, water. The Arcadia is also an outstanding value that offers multiple pipe configurations, and quick installation.

Features

- Single manhole design.
- No elevation loss between the inlet and outlet.
- Variable inlet/outlet angle configurations (not just 180 degree orientation).
- Internal bypass for inline installation (where applicable).
- Innovative, patent-pending design mitigates turbulence in the sump area to prevent resuspension of captured contaminants.

Benefits

- The AR3, AR4, AR5, AR6, AR8 and AR10 can be installed in a standard 36" (900 mm), 48" (1200 mm), 60" (1500 mm), 72" (1800 mm) 96" (2400 mm), and 120" (3000 mm) precast manhole, respectively.
- The AR3, AR4 & AR5 can be provided factory assembled within a 36" (900 mm), 48" (1200 mm), and 60" (1500 mm) ADS HP manhole and delivered to the jobsite.
- The interlocking internals are designed and manufactured for quick and easy installation.
- Designed for easy maintenance using a vacuum truck or similar equipment.
- Inspection and maintenance are performed from the surface with no confined space entry.



Arcadia Specification

Materials and Design

- Concrete Structures: Designed for H-20 traffic loading and applicable soil loads or as otherwise determined by a Licensed Professional Engineer. The materials and structural design of the devices shall be per ASTM C857 and ASTM C858.
- HP Manhole Structures: Made from an impact modified copolymer polypropylene meeting the material requirements of ASTM F2764. Gaskets shall be made of material meeting the requirements of ASTM F477.
- Separator internals shall be substantially constructed of polypropylene, polyethylene or other thermoplastic material approved by the manufacturer.

Performance

- The stormwater treatment unit shall be an inline unit capable of conveying 100% of the design peak flow. If peak flow rates exceed maximum hydraulic rate, the unit shall be installed offline.
- The Arcadia unit shall be designed to remove at least 80% of the suspended solids on an annual aggregate removal basis. Said removal shall be based on full-scale third party verified testing using OK-110 media gradation or equivalent and 300 mg/L influent concentration. Full scale testing shall have included sediment capture based on actual total mass collected by the stormwater treatment unit.
-OR -
The Arcadia unit shall be designed to remove at least 50% of TSS using a media mix with D50=75 micron and 200 mg/L influent concentration per current NJDEP/NJCAT HDS protocol.
- The stormwater treatment unit internals shall consist of (1) separator assembly.

| Arcadia Model* | | Manhole Diameter | NJDEP (50% removal) | OK-110 (80% removal) |
|----------------|---------------------------------------|------------------|---------------------|----------------------|
| AR3HP | HP manhole with concrete top slab | 36" (914 mm) | 0.95 cfs | 1.55 cfs |
| AR3HPDT | HP manhole with ductile iron flat top | | | |
| AR3PC | Concrete manhole | | | |
| AR4HP | HP manhole with concrete top slab | 48" (1219 mm) | 1.68 cfs | 2.75 cfs |
| AR4HPDT | HP manhole with ductile iron flat top | | | |
| AR4PC | Concrete manhole | | | |
| AR5HP | HP manhole with concrete top slab | 60" (1524 mm) | 2.63 cfs | 4.30 cfs |
| AR5PC | Concrete manhole | | | |
| AR6PC | Concrete manhole | 72" (1829 mm) | 3.78 cfs | 6.19 cfs |
| AR8PC | Concrete manhole | 96" (2438 mm) | 6.72 cfs | 11.00 cfs |
| AR10PC | Concrete manhole | 120" (3048 mm) | 10.50 cfs | 17.19 cfs |

* Peak bypass flows are dependent on final design

Installation

Installation of the stormwater treatment unit(s) shall be performed per manufacturer's installation instructions. Instructions can be obtained by calling Advanced Drainage Systems at 800-821-6710 or by logging on to www.adspipe.com.

