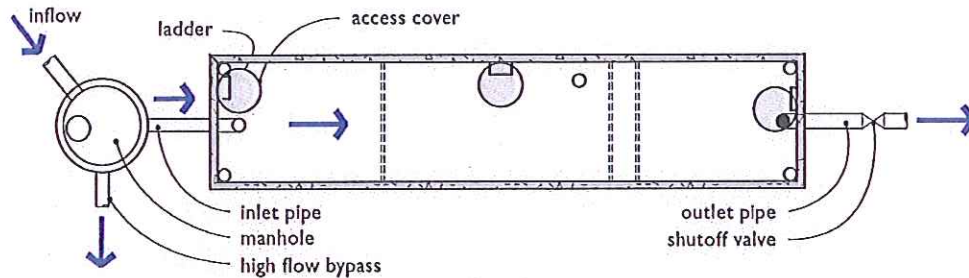
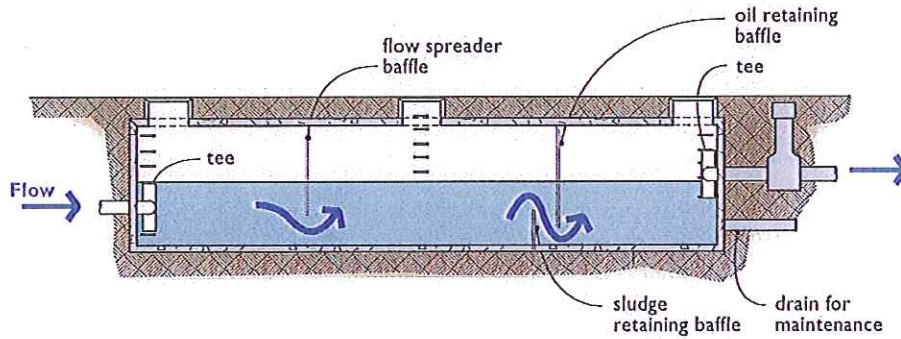


### 3.16 Oil/Water Separator (API Type)

American Petroleum Institute (API) oil water separators consist of an underground vault separated into three bays by a series of partial divider walls (baffles). The three bays consist of a forebay, separator section, and the afterbay. Oil/water separators are typically utilized in locations where high oil concentrations in the stormwater runoff are anticipated (i.e. service and fuel stations). Oil/water separators are most commonly used as the first pre-treatment facility in a series of stormwater management facilities ('treatment train').



BIRD'S-EYE VIEW



SIDE PROFILE

## Baffle Oil/Water Separators (API Type) Checklist

Frequency	Drainage System Feature	Date				Problem	Conditions to Check For	Conditions That Should Exist
		✓	✓	✓	✓			
M,S	Monitoring					Inspection of discharge water for obvious signs of poor water quality.	Sheen, obvious oil present.	Effluent discharge from vault should be clear with out thick visible sheen.
M,S	Monitoring					Sediment Accumulation	Sediment depth in bottom of vault exceeds 6-inches in depth.	No sediment deposits on vault bottom that would impede flow through the vault and reduce separation efficiency.
M,S	Monitoring					Trash and Debris Accumulation	Trash and debris accumulation in vault, or pipe inlet/outlet, floatables and non-floatables.	Trash and debris removed from vault, and inlet/outlet piping.
M,S	Monitoring					Oil Accumulation	Oil accumulations that exceed 1-inch, at the surface of the water.	Extract oil from vault by vactoring. Disposal in accordance with state and local rules and regulations.
A	Structure					Damaged Pipes	Inlet or outlet piping damaged or broken and in need of repair.	Pipe repaired or replaced.
A	Structure					Access Cover Damaged/Not Working	Cover cannot be opened, corrosion/deformation of cover.	Cover repaired to proper working specifications or replaced.
A	Structure					Vault Structure Damage Includes Cracks in Walls Bottom, Damage to Frame and/or Top Slab	Maintenance person judges that structure is unsound.	Vault replaced or repairs made so that vault meets design specifications and is structurally sound.
A	Structure					Vault Structure Damage Includes Cracks in Walls Bottom, Damage to Frame and/or Top Slab	Cracks wider than 1/2-inch at the joint of any inlet/outlet pipe or evidence of soil particles entering through the cracks.	Vault repaired so that no cracks exist wider than 1/4-inch at the joint of the inlet/outlet pipe.
A	Structure					Baffles	Baffles corroding, cracking, warping and/or showing signs of failure as determined by maintenance/inspection person.	Baffles repaired or replaced to specifications.
A	Structure					Access Ladder Damaged	Ladder is corroded or deteriorated, not functioning properly, not securely attached to structure wall, missing rungs, cracks, and misaligned.	Ladder replaced or repaired and meets specifications, and is safe to use as determined by inspection personnel.

If you are unsure whether a problem exists, please contact a Professional Engineer.

Comments:

Key:

(M) Monthly from November through April.

(A) Once in late summer (preferable September)

(S) After any major storm (use 1-inch in 24 hours as a guideline).