Definition and Purpose
A water quality inlet oil/grit separator is similar to a standard curb inlet, with modifications made to the underground portion of the structure to separate oil and grit into discrete chambers. This BMP generally consists of a three-chamber system designed to remove heavy particulates and absorb hydrocarbons from stormwater runoff.

Appropriate Applications
- This BMP is generally used at sites expected to receive heavy vehicular traffic. It is also used at sites where oils, grease, and petroleum products could be carried by stormwater.
- Inlets are often placed in parking lots, service stations, or in truck loading areas.
- Inlets can be used to reduce the maintenance required at downstream BMPs.
- The BMP consists of a multi-stage underground retention system: upstream chamber traps sediments, center chamber traps oils and other heavy substances, downstream chamber discharges flows.
- Although flows are only detained for a short time, the inlet can be used as an effective first stage of treatment by removing oil, grease, and sediments from stormwater before the flows enter a larger BMP, such as a basin.
- Inlets can be installed in most areas, and the drainage area to inlet is generally less than 1 acre.

Limitations
Because flows are only detained for a short time, pollutants are not removed as effectively as with facilities that retain runoff for longer periods.

Design Parameters
- Inlets can be installed in any soil or terrain and are best used when they are installed at or near the impervious area that generates stormwater runoff.
• The area above the inlet needs to be large enough for maintenance access.
• The inlet should be designed with a permanent pool approximately 4 feet deep with a total chamber volume of 400 cubic feet of water per acre of contributing drainage area.
• Higher levels of pollutants can be removed by incorporating surface skimmers in the structure.

**Maintenance and Inspection**

• Conduct inspections as required by the NPDES permit or contract specifications during construction.
• Periodic inspection and maintenance will be required based on post-construction site conditions.
• Make any repairs necessary to ensure the measure is operating properly.
• The structure should be cleaned at least twice per year to remove sediment, oil, grease, and other pollutants.