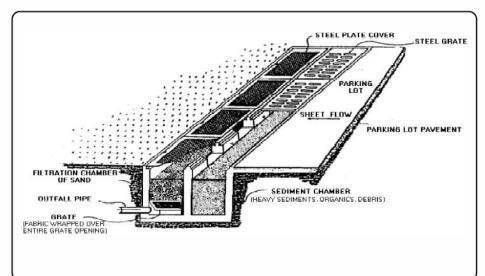
BMP: Double Trench Sand Filter



CONSIDERATIONS

- Soils
- □ Area Required
- Slope
- □ Water Availability
- □ Aesthetics
- ☐ Hydraulic Head
- □ Environmental Side Effects



ENGINEERING DEPARTMENT

2380 Washington Blvd., Suite 240 Ogden, UT 84401 (801) 399-8374

DESCRIPTION:

The double trench sand filter (aka Delaware sand filter) is a BMP consisting of parallel sedimentation and sand filter trenches connected by a series of level weir notches to assure sheet flow onto the filter. Filtered runoff is conveyed to a storm sewer by gravity flow or by pumping.

APPLICATIONS:

- Commercial and institutional parking lots, small shopping centers, and infill developments.
- Smaller redevelopment sites where the use of conventional BMPs is not practical.

INSTALLATION/APPLICATION CRITERIA:

- ► Requires very little hydraulic head.
- ▶ Need to consider structural design with traffic load.

LIMITATIONS:

- Will not prevent small floatable debris from entering through the grate openings.
- ► Disposing of petroleum-contaminated sand may require expertise in hazardous waste disposal.
- Sand filter may clog sooner than other BMPs requiring more frequent maintenance.

MAINTENANCE:

- System should be inspected yearly and after storm events to assess the filtration capacity of the filter.
- ► Filter sand should be replaced every few years to maintain pollutant removal efficiency.

TARGETED POLLUTANTS

- Sediment
- Nutrients
- Heavy Metals
- ☐ Toxic Materials
- Oxygen Demanding Substance
- ☑ Oil & Grease
- □ Floatable Materials
- □ Bacteria & Viruses
- High Impact
- Medium Impact
- □ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- Capital Costs
- ✓ O&M Costs
- Maintenance
- □ Training
- High
- Medium
- □ Low