Oak Park Conservancy District
Stormwater Best Management Practices (BMPs)
Sediment Management Practices (SMPs)

SMP-07

Activity: Temporary Sediment/Detention Basin

PLANNING CONSIDERATIONS:

Design Life:
1 yr

Acreage Needed:
Minimal

Estimated Unit Cost:
Avg: $100
Range: $50-$150

Monthly Maintenance:
60% of Installation

TSB

Target Pollutants

Significant ♦	Partial ◈	Low or Unknown ◊

Sediment ♦ Heavy Metals ◊ Nutrients ◊ Oxygen Demanding Substances ◊ Toxic Materials ◊
Oil& Grease ◊ Bacteria & Viruses ◊ Floatable Materials ◊ Construction Waste ◊

Description

The purpose of this large temporary sediment/detention basin is to detain large runoff while allowing excessive amounts of sediment to settle out. The abundant area permits a severe reduction in sediment.

Suitable Applications

- For disturbed areas 5 acres or larger, basins should be placed at the outlet, or smaller more disturbed areas with potential erosion problems.
- Used with devices to divert disturbed areas into the basin.
- Used in areas where sediment-laden runoff may enter usable waterways.

Approach

- Suitable for almost all construction projects.
- Intended to trap sediment before it leaves the construction area.

Installation Procedures

- Securely anchor and install anti-seep collar on the outlet pipe/riser for events larger than 2-year storm events.
- Basin volume should capture at least a 2 year 24 hour storm.

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Maintenance

- Inspect weekly and before and after rainfalls.
- Maintain all aspects of the basin (outlet area, outlet structures, etc.).
- Remove sediment when storage is 1/3 full.
- Basin failure should not affect loss in life, property, roads, or utilities.

Inspection Checklist

- ❑ Structure has appropriate outlet design.
- ❑ Stabilized outlet prevents erosion.
- ❑ Sediment accumulation does not exceed 1/3 depth of basin.