Storm Water Storage

Berm

Longitudinal Street Profile

Controlled Discharge to Sewer System

Catch Basin

Flow Regulator

Note: Not to scale and great vertical exaggeration

Catch basins can be equipped with flow restrictors to temporarily detain storm water in the conveyance system

APPLICATIONS

- ☒ Manufacturing
- ☒ Material Handling
- ☐ Vehicle Maintenance
- ☒ Construction
- ☒ Commercial Activities
- ☐ Roadways
- ☒ Waste Containment
- ☒ Housekeeping Practices

DESCRIPTION:

In-line storage refers to a number of practices designed to use the storage within the storm drain system to detain flows. While these practices can reduce storm peak flows, they are unable to improve water quality or protect downstream channels. Devices can slow the rate of flow by backing up flow, as in the case of a dam or weir, or through the use of vortex valves, devices that reduce flow rates by creating a helical flow path in the structure.

APPROACH:

- ➢ In-line storage practices serve the same purpose as traditional detention basins
- ➢ These practices can act as a surrogate for aboveground storage when little space is available for aboveground storage facilities.

LIMITATIONS:

- ➢ In-line storage practices only control flow, and thus are not able to improve the water quality of storm water runoff.
- ➢ If improperly designed, these practices may cause upstream flooding.
- ➢ Flow regulators cannot be applied to all storm drain systems. In older cities, the storm drainpipes may not be oversized, and detaining storm water within them would cause upstream flooding.

MAINTENANCE:

- ➢ Flow regulators require very little maintenance, because they are designed to be "self - cleaning," much like the storm drain system.
- ➢ For some designs, such as check dams, regulations will require only moderate construction in order to modify the structure's design.

LINDON
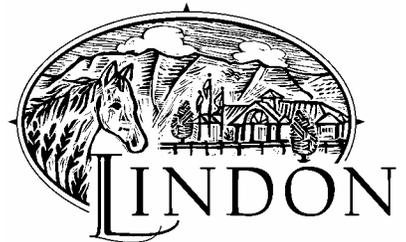
TARGETED POLLUTANTS

- ☒ Sediment
- ☐ Nutrients
- ☐ Heavy Metals
- ☐ Toxic Materials
- ☐ Oxygen Demanding Substances
- ☐ 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 |

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