



MODEL SHOWN : Non-Perforated Solflo Max

# PIPE TYPE DETENTION SYSTEM

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## MAINTENANCE AND INSPECTION GUIDE OPERATION OF A PIPE TYPE DETENTION SYSTEM

For very large volumes, watertight detention systems made from Solflo Max, Weholite or DuroMaxx pipes with flow regulators allow temporary storage of a significant amount of water in order to minimize the load on municipal storm water sewer systems during peak periods. Maintenance is simple, quick and requires no work in confined spaces. To operate at full efficiency, the system must be maintained regularly. Specialized companies such as Soleno Service<sup>1</sup> can inspect and maintain this type of equipment.

<sup>1</sup> Contact Soleno Service for more information about the services offered at [service@soleno.com](mailto:service@soleno.com) or see our web site at [solenoservice.com/en/](http://solenoservice.com/en/).

### STEPS

1. Inspection frequency
2. Inspection
3. Maintenance

### APPENDIX

1. Inspection form

## STEP 1

### INSPECTION FREQUENCY

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Since HDPE detention systems are made of pipes with smooth interior walls, debris and sediment accumulation is very unlikely, especially when a self-cleansing slope has been provided in the system's design. The environment in which the pipe type detention system is installed greatly impact the frequency of inspection and maintenance. Therefore, it is strongly recommended to proceed with the first inspection as soon as the installation is completed.

Subsequently, we recommend inspecting the system annually or following a heavy rain. Once these two first inspection have been performed, the inspection frequency can be established.

## STEP 2

### INSPECTION

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Pipe type detention system requires no work in confined spaces. Inspection and maintenance can be performed from the surface.

- a. Remove one of the access covers (cast iron).
- b. With a surveying ruler (or any other measurement equipment), measure the thickness of the sediments. Should it be necessary to enter into the system, local rules of health and safety must be respected; only employees who have been trained for working in confined space and equipped with appropriate equipment can enter in the system.
- c. Inspect the entire system, including the ends (inlets and outlets), where sediments and debris tend to accumulate.
- d. Repeat steps 2a) to 2c) for the access port to inspect the entire system.
- e. Reinstall the access covers.
- f. Fill the inspection form for pipe type detention system.
- g. Maintenance is recommended if the sediment accumulation obstructs 5% to 20% of the pipe diameter. Maintenance is mandatory if the sediment accumulation obstructs more than 20% of the pipe diameter or if noxious and toxic substances have been found.

## STEP 3

### MAINTENANCE

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In principle, maintenance of the pipe type detention system requires no work in confined spaces. Maintenance can be performed from the surface.

- a. Remove one of the access covers (cast iron).
- b. Insert pressured water jet inside the access port to remove deposits.
- c. Insert a suction pipe at the end of the system and vacuum the content.
- d. Repeat steps 3a) to 3c) for the access ports in order to clean the entire system.
- e. If debris remains present at the bottom, rinse the complete system with pressured water jet.
- f. Visually inspect the general condition of the system to detect any anomaly or damage.
- g. Reinstall the access covers.
- h. Fill the inspection form for pipe type detention system.



Important: disposal of residues must respect the federal, provincial and local legislations.

# INSPECTION FORM - PIPE TYPE DETENTION SYSTEM

SITE NAME : \_\_\_\_\_

DATE (DD-MM-YY): \_\_\_ / \_\_\_ / \_\_\_

TIME: \_\_\_ H \_\_\_

PIPES TYPE (circle) : SolFlo Max / Weholite / DuroMaxx / Other: \_\_\_\_\_

PIPES DIAMETER (in mm): \_\_\_\_\_

GPS COORDINATES OF THE UNIT (latitude, longitude in degrees, minutes, seconds): \_\_\_\_\_

CHANGE OF OWNERSHIP SINCE THE LAST VISIT (circle): Y / N

OWNER'S NAME: \_\_\_\_\_

OWNER'S ADDRESS: \_\_\_\_\_

OWNER'S PHONE NUMBER: \_\_\_\_\_

CERTIFIER'S NAME : \_\_\_\_\_

## INSPECTION

TABLE 1  
TABLE OF INSPECTIONS AND MAINTENANCES

Inspection from		Reading of the rule (in mm)			Maintenance performed	Notes
Manhole	Inspection port	Distance between the bottom of the pipe and the top of the cast iron [1]	Distance between the top of the sediments and the top of the cast iron [2]	Depth of sediments (in mm) [3]		

\* Maintenance is recommended if the sediment accumulation obstructs 5% to 20% of the pipe diameter. Maintenance is mandatory if the sediment accumulation obstructs more than 20% of the pipe diameter or if noxious and toxic substances have been found.

# INSPECTION FORM - PIPE TYPE DETENTION SYSTEM

## INSPECTION (CONT'D)

### OBSERVATIONS

Stagnant water in the system: Y / N

Presence of surface oil: Y / N

Presence of obstructions: Y / N

### SYSTEM INTEGRITY

Inspection of internal components: Y / N

Presence of damages: Y / N

If so, explain: \_\_\_\_\_

Pictures taken: Y / N

### SPECIAL NOTES

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SIGNATURE OF THE CERTIFIER: \_\_\_\_\_