

Catch Basin Inspection and Cleaning Standard Operating Procedures



Town of Tewksbury, MA
Department of Public Works
999 Whipple Road
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Introduction

Catch basins help minimize flooding and protect water quality by removing trash, sediment, decaying debris, and other solids from stormwater runoff. These materials are retained in a sump below the invert of the outlet pipe. Catch basin cleaning reduces foul odors, prevents clogs in the storm drain system, and reduces the loading of suspended solids, nutrients, and bacteria to receiving waters.

Procedure

The Town of Tewksbury issues an annual contract to clean and inspect all of its **2751** catch basins. Under the contract, the contractor is responsible to clean and inspecting all the towns' catchbasins. The work usually commences in the spring and is completed within the Permit Year (Before June 30th). The contractor is responsible to clean each basin to the bottom. All walls will be scraped, with the residual fill being removed to a minimum of 4" from the bottom when leveled. At the completion of each cleaning, the basin lid, frame and surrounding area shall be swept. Jetting or rodding may be required to loosen debris materials to assure complete removal. Along with cleaning the contractor is responsible for recording the depth cleaned and reporting any illicit discharges and needed structural repairs (See Appendix A).

- **Reporting** - The contractor will use a computer tablet accessing a town provided online form to record the cleaning and inspection. The data collected will include the following information:
 - Location of Catch Basin (GIS)
 - The depth of the catch basin before and after cleaning
 - Presence and type of Illicit Discharges
 - Need of Repair
- **Equipment Specifications** - The Contractor shall supply sufficient equipment to remove the accumulated dirt, refuse and other debris from catch basins. Basin cleaners shall be a minimum of 18" orange peel bucket type capable of cleaning basins to within four (4) inches of the bottom. Additional bucket of smaller size must be available for cleaning off-set structures. The vehicle must have a minimum of a five (5) yard cubic yard dump body. Consideration will be given to proposals using other type of equipment. Basin cleaners shall be capable of hauling and disposing of basin debris. Basin cleaners shall be kept clean and in good operating condition throughout the Contract Period.
- **Other Methods** that may be used in cleaning (during emergencies) are as follows:
 - Manually use a shovel to remove accumulated sediments
 - Uses of vacuum truck to suction remove sediment and use the rodder of the clean downstream pipe and pull back sediment that might have entered downstream pipe
 - Use a high pressure washer to clean any remaining material out of catch basin while capturing the slurry with a vacuum.

Illicit Discharge Detection

As part of the cleaning process the contractor will be evaluating the catch basin for any evidence that may indicate an illicit discharge (See Appendix A.)When the location of a catch basin and type of illicit discharge is reported to the Town via the online form, it will then be investigated as detailed in the Town's IDDE Plan.

Disposal of Screenings

The Contractor is responsible for the hauling of catch basin debris. The material removed from the catch basins shall be transported immediately to the approved stockpile area in trucks that will not spill or leak the material along the roadway. Any material falling on the roadway shall be reported to the Town and cleaned immediately.

All material removed from catch basins (1) shall be properly handled and disposed by the contractor or Town of Tewksbury in accordance with all regulatory rules and regulations regarding material, including but not limited to the Massachusetts Department of Environmental Protection (MassDEP) and the United States Environmental Protection Agency; and (2) shall be tested by a certified laboratory, and the results of such testing will be made available to the Town of Tewksbury upon request.

Screenings may need to be placed in a drying bed to allow water to evaporate before proper disposal. In this case, ensure that the screenings are managed to prevent pollution.

Appendix A: Catch Basin Cleaning Data Collection

INLET CLEANING

Cleaning Date:

September 8, 2020

clear

Cleaning By:

AM

DL

Truax

Cleaning Method Used:

Clam-Shell

Vacuum Truck

No Cleaning

Other

All measurements to be recorded from rim in feet.

Initial Depth to Sediment:

0 1 2 3 4 5 6 7 8 9 0 to 500

Final Depth of Structure:

0 1 2 3 4 5 6 7 8 9 0 to 500

Lowest Invert Depth:

0 1 2 3 4 5 6 7 8 9 0 to 500

Sediment Depth (calculated):

Sump Depth (calculated):

Percent of Sump Filled (calculated):

Upload Photo:

No file chosen

Comments:

Submit

Cancel



(new) of 2752



INLET INSPECTION

Inspection Date: September 17, 2020  clear

Inspection Type:

Surface

Pole Cam

CS Entry

Inspected By:

AM

DL

Truax

Weather:

Dry

Dry Weather/Wet Ground

Raining

Location Arrow:

Yes

Needed

Unknown

N/A

Medallion:

Yes

Needed

Unknown

N/A

Asset Scoring

Observations

Description of Flow:

Heavy

Moderate

Trickling

None

UNK

N/A

Reduction of Flow (GPM):

0

1

2

3

4

5

6

7

8

9

«

0 to 1000

Is Outlet Submerged?

Yes

No

Submit

Cancel



(new) of 2



Observations

Description of Flow:

- Heavy
- Moderate
- Trickling
- None
- UNK
- N/A

Reduction of Flow (GPM):

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- <<
-
- 0 to 1000

Is Outlet Submerged?

- Yes
- No

Inlet Observations (Select All That Apply):

- Algae
- Color (Water)
- Discoloration of Pipe
- Excessive Sediment
- Excessive Vegetation
- Floatables
- Odor
- Optical Enhancers
- Pet Waste
- Sanitary Waste
- Scouring Below Inlet
- Turbidity

Other Observations:

Water Quality Field Screening

Lab Results

General Comments: