



WAIVER APPROVAL

Issued by the NH Department of Environmental Services, Waste Management Division (NHDES)
pursuant to RSA 149-M and Part Env-Sw 202 of the New Hampshire Solid Waste Rules (Rules)

I. IDENTIFICATION OF FACILITY/ACTIVITY:

Waiver Approval No.: DES-SW-WV-16-003

Applicant Name/Address: NH Department of Transportation, Division of Operations, 7 Hazen Drive, PO Box 483, Concord, NH 03302-0483

Facility Name and Location: Not location specific / Applies statewide to NHDOT-owned property associated with the roadway network

Related Regulatory Activity: Management of Street Wastes

II. FILE REFERENCE/RECORD OF APPLICATION:

Application #2016-20185 received February 4, 2016

III. RULES BEING WAIVED:

Except as specified in Section IV of this approval, the requirements of the NH Solid Waste Rules, Env-Sw 100- Env-Sw 2000, shall not apply to management of certain street wastes generated by the NH Department of Transportation (NHDOT) when such street wastes are managed by NHDOT in accordance with the provisions of this Waiver Approval.

IV. TERMS AND CONDITIONS: See pages 2 - 4

V. EFFECTIVE DATE/DURATION OF WAIVER: Effective on the date of signature below, with no explicit expiration date, but duration is subject to the provisions for modification, suspension, revocation, and termination specified in Section IV, Condition 9 of this approval.

VI. AUTHORIZATION: This approval grants to the applicant (identified in Section I above) a waiver to the requirements set forth in the rules cited in Section III above, as the rules relate to the facility or activity specified in Section I above, subject to the conditions specified in Section IV above. The waiver is valid for the period of time specified in Section V above and is granted on the basis of information supplied by the applicant. If that information is false, misleading or incomplete, this approval may be modified, revoked or suspended. **BY EXERCISING ANY RIGHTS UNDER THIS AUTHORIZATION, THE APPLICANT HAS AGREED TO ALL TERMS AND CONDITIONS.** Failure to comply with the terms and conditions could result in administrative, civil or criminal enforcement action and penalties, and suspension or revocation of this approval or any permit to which it may apply. No liability is incurred by the State of New Hampshire by reason of any approval of this waiver or the facility or activity to which it relates. No warranty/guarantee is intended or implied by reason of any advice given by NHDES or its staff. This approval shall not eliminate the applicant's obligation to obtain all requisite federal, state or local permits, licenses or approvals, or to comply with all other applicable federal, state, district and local permits, ordinances, laws, approvals or conditions relating to the approved activity.

A handwritten signature in black ink, appearing to read "Michael J. Wimsatt".

Michael J. Wimsatt, P.G., Director
Waste Management Division

October 5, 2016

Date

Section IV: Terms and Conditions (continued from page 1)

1. Background and Purpose. Data indicates that street waste soils may be contaminated by regulated contaminants due to the presence and breakdown of asphalt pavement, the normal operation of motor vehicles, and other non-point sources of pollution ubiquitous in the roadway network. "Soil with contamination," as defined by Env-Or 602.07, is classified as solid waste and therefore regulated pursuant to RSA 149-M and the NH Solid Waste Rules, Env-Sw 100 – Env-2000 (SW Rules). The SW Rules require, in part, that management of soils with contamination occur at permitted facilities. Solid waste facility permits are location specific. Therefore, under current SW Rules, the practice of using street waste soils as grading material and construction fill requires each location where the street waste soils are managed to be permitted as a solid waste management facility.

The general purpose of permitting solid waste management facilities is to establish enforceable adequate controls to minimize risks to the environment and public health and safety (see Env-Sw 101.01) and preserve the natural environment and conserve precious and dwindling natural resources (see RSA 149-M:1).

Because the type and concentration of the regulated contaminants typically found in street waste soils are likely to be present in existing surface soils within the highway right-of-ways, and because those contaminants are not highly leachable, the practice of using street waste soils as fill within the highway right-of-ways is not likely to adversely impact the environment of the highway right-of-ways or result in an increased risk to human health or safety. By limiting the type of street waste soils that may be used as fill to only those that are not obviously contaminated and by restricting the locations where it may be used to areas where the potential for erosion and discharge to surface waters is minimized, the risks, if any, are further minimized. While such limitations and restrictions could be established through issuance of individual location-specific custom permits for each site where NHDOT manages its street waste soils, doing so would be overly complex and burdensome for both NHDES and NHDOT, and would serve no particular purpose that could not be achieved by other more practical means. Therefore, the purpose of this Waiver Approval is to establish, outside the solid waste facility permit system but for the same purposes, authorization for NHDOT to manage, on a statewide basis on property owned by NHDOT, street waste soil generated by NHDOT, with limitations and restrictions to protect the environment, public health and safety, preserve the natural environment, and conserve precious and dwindling natural resources.

2. Basis. The decision to issue this waiver is based in part on information and data provided in the Inter-Department Communication from NHDOT to NHDES, titled "Management of Mildly-Contaminated Soils – NHDOT Division of Operations," dated February 1, 2016. Two of the attachments submitted with that memorandum are herein incorporated by reference in Condition 5 and Condition 6, and are attached hereto for reference, as follows:

- a. Attachment A: NHDOT Work Instructions Document #: BHM-EMS-WI-008 (SHA REV 03), dated January 12, 2016.



b. Attachment B: "NHDOT Storage Bin Details", dated April 17, 2014, identified as Attachment C of the above-referenced inter-department communication.

3. Applicability. This waiver approval applies only to street waste that is generated and managed by NHDOT or contractors hired by the NHDOT District offices operating under the management and control of NHDOT District staff.

4. Definitions. As used in this waiver approval, the term:

- a. "Street waste" shall mean the soil material collected through various routine highway maintenance activities, including street sweeping, ditch cleaning (ditching), and cleaning out catch basins and other stormwater management infrastructure, such as hydrodynamic separators and detention pond forebays.
- b. "Obviously contaminated" shall mean the status of street waste that is determined based on visual and/or olfactory observations by properly trained NHDOT personnel to have any of the following characteristics:
 - i. Liquid content, other than water, including oils, gasoline, paints, colored liquids, and/or liquids with a non-organic sheen;
 - ii. Petroleum, chemical, acrid, or noxious odors;

5. Authorization to store street waste. This Waiver Approval authorizes NHDOT to temporarily store street waste removed from the site of generation, provided that:

- a. The street waste is not obviously contaminated;
- b. The storage facility and practices comply with the Universal Environmental Performance Requirements specified in Env-Sw 1002;
- c. In the case of catch basin and other stormwater infrastructure clean out solids, storage conforms to the provisions in Section 7.5 of NHDOT Work Instructions Document #BHM-EMS-WI-008, (SHA REV 03), dated January 12, 2016, (see Attachment A appended hereto); and the NHDOT Storage Bin Details dated 4/17/2014 (see Attachment B appended hereto);
- d. In the case of street sweepings and roadside drainage ditch cleaning materials, storage conforms to the provisions specified in Section 8.2 of NHDOT Work Instructions Document #BHM-EMS-WI-008 (SHA Rev 03), dated January 12, 2016, (see Attachment A appended hereto); and
- e. Following cessation of use, NHDOT shall properly close the storage facility in general accordance with Env-Sw 1006.

6. Authorization to process street waste. This Waiver Approval authorizes NHDOT to process street waste to remove litter and debris and/or to combine street waste from different source locations, provided that:

- a. The street waste is not obviously contaminated;
- b. Processing occurs only at the site of generation or a storage area established in conformance with Condition 5 above;
- c. The processing facility and practices comply with the Universal Environmental Performance Requirements specified in Env-Sw 1002);
- d. The removed litter and debris is managed in accordance with the NH Solid Waste Rules, Env-



Sw 100 – Env-Sw 2000; and

e. Following cessation of use, NHDOT shall properly close the processing facility in general accordance with Env-Sw 1006.

7. Authorization to dispose of and use street waste as grading material and construction fill.

This Waiver Approval authorizes NHDOT to permanently place street waste in or on the land as fill material, provided that:

- a. The street waste is not obviously contaminated;
- b. The street waste is free of litter and debris;
- c. Placement and filling complies with the Universal Environmental Performance Requirements specified in Env-Sw 1002; and
- c. The street waste is placed and used in accordance with the limitations specified in Section 9 of NHDOT Work Instructions Document #BHM-EMS-WI-008 (SHA Rev 03), dated January 12, 2016 (see Attachment A appended hereto).

8. Recordkeeping and Reporting.

- a. NHDOT shall keep records as necessary to demonstrate compliance with the provisions of this Waiver Approval.
- b. NHDOT shall report to NHDES such information and data it obtains that may indicate the basis of this waiver approval is no longer sound or may require adjustment to achieve the purposes stated in Condition 1.
- c. NHDOT shall report to NHDES-Spill Response and Complaint Investigation Section, information it obtains during visual and olfactory inspection of street waste that indicates the street waste is obviously contaminated and not manageable under the provisions of this Waiver Approval.
- d. NHDOT shall report in accordance with Env-Sw 1005.09, incidents or situations at any of the facilities authorized by this Waiver Approval that involve an imminent and substantial risk to human health, safety or the environment or which constitute a violation of this Waiver Approval.

9. Waiver Administration.

- a. This Waiver Approval is non-transferable.
- b. This Waiver Approval is subject to suspension or revocation pursuant to Env-Sw 306.
- c. This Waiver Approval shall terminate upon notice by NHDES that amendments to the NH Solid Waste Rules have taken effect that cause this Waiver Approval to be either obsolete or invalid.
- d. Any modification to the terms and conditions of this Waiver Approval shall be subject to NHDES approval. Any request by NHDOT to modify this Waiver Approval shall be filed in general conformance with the provisions for a Type I-B permit modification pursuant to Env-Sw 315 and processed by NHDES in general conformance with Env-Sw 304 and Env-Sw 305.
- e. All activities by NHDOT pursuant to this Waiver Approval shall be subject to audit or inspection by NHDES to confirm compliance.



Title: Street Waste

Page 1 of 5

Document #: BHM-EMS-WI-008

Revision #: SH Rev 03

Date: 01/12/2016

1.0 PURPOSE

- 1.1 To provide guidance for the proper handling, storage, disposal, and reuse of street waste at NHDOT Division of Operations facilities in an effort to maintain compliance with local, state, and federal requirements.

2.0 DEFINITIONS

- 2.1 **Street Wastes** – Soils through various routine maintenance activities, such as street sweeping, ditch cleaning (ditching), and catch basin (CB) cleanouts (which includes routine maintenance of other stormwater management infrastructure, including hydrodynamic separators and detention pond forebays). Street waste soils may be impacted by regulated contaminants due to the presence and breakdown of asphalt pavement, the normal operation of motor vehicles, and other “non-point sources” of pollution ubiquitous in the roadway network.
- 2.2 **Regulated Contaminant** – As defined in Env-Or 602.26, “Regulated contaminant” means “regulated contaminant” as defined in RSA 485-C:2, XIII (reprinted in Appendix C of Env-Or 602.26).

3.0 SCOPE

- 3.1 This work instruction is intended to assist all BHM employees with the proper handling, storage, and disposal of street wastes to reduce the potential to adversely affect human health or the environment.

4.0 RESPONSIBILITIES

- 4.1 To Be Determined:
 - 4.1.1 Develop work instructions and provide training to all appropriate personnel.
 - 4.1.2 Provide the equipment and materials necessary to handle, store, dispose, and reuse street waste in a safe and environmentally correct manner.
- 4.2 To Be Determined:
 - 4.2.1 Provide technical assistance and training to District personnel as needed.
 - 4.2.2 Propose revisions to the work instructions, as appropriate.
 - 4.2.3 Maintain records related to employee training.
 - 4.2.4 Perform independent visual and olfactory evaluation of street wastes if reported to be potentially contaminated. If visual or olfactory examination indicates that street wastes are obviously contaminated, call NHDES Spill Response and Complaint Investigation Section (SRCIS, 603-271-3899) between the hours of 8:00 AM and 4:00 PM, otherwise contact the NH State Police (603-223-4381).
 - 4.2.5 Confirm catch basin storage bins are constructed in accordance with design and new bins are included in NHDOT’s NHDES Env-Wq 402 registration.
- 4.3 To Be Determined:
 - 4.3.1 Provide technical assistance to the Highway Patrol Foreman as necessary.
- 4.4 To Be Determined:

Title: Street Waste

Document #: BHM-EMS-WI-008

Revision #: SH Rev 03

Page 2 of 5
Date: 01/12/2016

- 4.4.1 Provide guidance to all Crew Members and hired equipment operators pertaining to handling, storage, disposal, and reuse of street wastes.
- 4.4.2 Correct deficiencies within the means of the position.
- 4.4.3 Report deficiencies outside of the means of the position to the Maintenance Supervisor or Safety Environmental Coordinator.
- 4.5 To Be Determined:
 - 4.5.1 Comply with all parts of this work instruction.
- 4.6 To Be Determined:
 - 4.6.1 Provide technical assistance to the BHM as needed.
 - 4.6.2 Provide relevant Best Management Practices to the BHM as they are released to the industry.
 - 4.6.3 Communicate changes in local, state, or federal requirements to the BHM.

5.0 REFERENCES

- 5.1. NHDES Env-Or 600 Contaminated Site Management
- 5.2. NHDES Env-Sw 903 Contaminated Soils
- 5.3. NHDES Env-Wq 400 Groundwater Protection
- 5.4. NHDES Env-Hw 400 Identification and Listing of Hazardous Wastes
- 5.5. NHDES Env-Hw 502 Hazardous Waste Determination
- 5.6. NHDOT Catch Basin Solids Storage Bin Details, latest version
- 5.7. NHDOT/NHDES Agreement

6.0 RECORDS

- 6.1 Training records at District Office
- 6.2 NHDOT Street Waste Summary Form
- 6.3 Maintain Street Waste Summary Forms at District Offices

7.0 PROCEDURE: Collection and Storage of Catch Basin Cleaning Soils

- 7.1 Preparation
 - 7.1.1 Patrol Shed staff shall obtain measurements of catch basin debris depth prior to eductor or clam shell arriving at the Patrol Shed. Catch basins to be cleaned shall be marked on the pavement to expedite cleaning operations.
 - 7.1.2 Schedule the eductor to start near the prior District and finish near the next District.
 - 7.1.3 It is important to have Patrol Shed staff available to accompany the eductor to increase efficiency without significant backtracking.
 - 7.1.4 An attenuator is required for Interstates and Interstate ramp work. Appropriate traffic control/sign packages shall be provided by District forces in all cases.
- 7.2 Inspection
 - 7.2.1 Perform visual and olfactory examination of catch basin materials prior to and during collection operations. Materials containing liquids other than water such as oils, non-organic sheens, gasoline, paints, and colored liquids are considered to be obviously contaminated. Materials that have petroleum, chemical, acid, or

Title: Street Waste

Document #: BHM-EMS-WI-008

Revision #: SH Rev 03

Page 3 of 5
Date: 01/12/2016

- noxious odors are considered to be obviously contaminated. Visual and olfactory observations shall be documented on the NHDOT Street Waste Summary form.
- 7.2.2 Contact the SEC if visual or olfactory examination indicates that catch basin materials are obviously contaminated. Do not collect obviously contaminated catch basin waste, as indicated by visual or olfactory examinations, until the SEC performs an independent evaluation.
- 7.2.3 The SEC will perform an independent visual and olfactory evaluation of catch basins reported to be obviously contaminated by Patrol Shed staff. In situations where the independent observations do not indicate a condition of obviously contaminated materials, the material may be removed, stored and disposed of in accordance with this work instruction. If the independent visual and olfactory observations confirm that the material is obviously contaminated, the SEC will contact NHDES Spill Response and Complaint Investigation Section (SRCIS).
- 7.3 Clean catch basins at least once per two years.
- 7.4 When using the eductor, decant fluids back into the drainage system prior to delivering the eductor load to the catch basin storage bin location.
- 7.5 Storage
- 7.5.1 Catch basin solids that are not obviously contaminated shall be placed in approved catch basin solids storage bins and allowed to dry in a manner that limits the potential for erosion by wind or water and limits the potential for downgradient sedimentation and reduce the potential to adversely affect human health or the environment.
- 7.5.2 Catch basin solids storage bins shall be located in accordance with criteria below.
- 7.5.2.1 Storage bins shall be located on Department-owned property.
- 7.5.2.2 Storage bins shall be constructed in accordance with NHDOT Catch Basin Solids Storage Bin details.
- 7.5.2.3 The base of the storage bin filter media shall be at least 3 feet above seasonal high groundwater.
- 7.5.2.4 Storage bins shall be registered in accordance with NHDES Env-Wq 402.
- 7.5.3 Litter and debris (e.g., organics, car parts, etc.) associated with the catch basin solids shall be removed and disposed of properly.
- 7.5.4 The catch basin solids storage bins shall be cleaned of all filter media and catch basin solids as needed. The filter media and catch basins solids shall be thoroughly mixed.
- 7.5.5 Once catch basin solids are removed from the storage bins, they shall be temporarily stockpiled on Department-owned property in a manner that limits the potential for erosion by wind or water and the potential for downgradient sedimentation, and reduces the potential to adversely affect human health or the environment prior to reuse.

Title: Street Waste

Document #: BHM-EMS-WI-008

Revision #: SH Rev 03

Page 4 of 5
Date: 01/12/2016

- 7.6 Reuse
 - 7.6.1 Catch basin cleaning materials that are not obviously contaminated may be reused in accordance with criteria in Section 9.
 - 7.6.2 Catch basin cleaning materials may be combined with other street wastes.
- 7.7 Do not accept or allow any catch basin solids from private contractors. The only exception to this is for private contractors hired by the District office operating under the management and control of District staff.

8.0 PROCEDURE: Collection and Storage of Street Sweepings and Roadside Drainage Ditch Soils

- 8.1 Inspection
 - 8.1.1 Perform visual and olfactory examination of street sweepings and roadside drainage ditch cleaning materials prior to and during collection operations. Materials containing liquids other than water such as oils, non-organic sheens, gasoline, paints, and colored liquids are considered to be obviously contaminated. Materials that have petroleum, chemical, acid, or noxious odors are considered to be obviously contaminated. Visual and olfactory observations shall be documented on the NHDOT Street Waste Summary form.
 - 8.1.2 Contact the SEC if visual or olfactory examination indicates that street sweepings and roadside drainage ditch cleaning materials are obviously contaminated. Do not collect obviously contaminated street wastes, as indicated by visual or olfactory examinations, until the SEC performs an independent evaluation.
 - 8.1.3 The SEC will perform an independent visual and olfactory evaluation of street sweepings and roadside drainage ditch cleaning materials reported to be obviously contaminated by Patrol Shed staff. In situations where the independent observations do not indicate a condition of obviously contaminated materials, the material may be removed, stored and disposed of in accordance with this work instruction. If the independent visual and olfactory observations confirm that the material is obviously contaminated, the SEC will contact NHDES SRCIS.
- 8.2 Storage
 - 8.2.1 Street sweepings and roadside drainage ditch cleaning materials shall be temporarily stockpiled on Department-owned property in a manner that limits the potential for erosion by wind or water and the potential for downgradient sedimentation, and reduces the potential to adversely affect human health or the environment to reuse.
 - 8.2.2 Litter and debris (e.g., organics, car parts, etc.) associated with street sweepings and roadside drainage ditch cleaning materials shall be removed and disposed of properly.
- 8.3 Reuse
 - 8.3.1 Street sweepings and roadside drainage ditch cleaning materials that are not obviously contaminated may be reused in accordance with criteria in Section 9.
 - 8.3.2 Street sweepings and roadside drainage ditch cleaning materials may be combined with other street wastes prior to reuse.



Title: Street Waste

Document #: BHM-EMS-WI-008

Revision #: SH Rev 03

Date: 01/12/2016

8.4 Do not accept or allow any street sweepings and roadside drainage ditch cleaning materials from private contractors. The only exception to this is for private contractors hired by the District office operating under the management and control of District staff.

9.0 PROCEDURE: Reuse of Street Wastes

9.1 Street wastes that are not obviously contaminated shall be reused within Department-owned right-of-ways (ROWs) associated with the roadway network in locations where these soils would not be reasonably expected to be eroded and discharged to surface waters with the following limitations:

- 9.1.1 Street wastes shall not be reused in drainage features that provide for stormwater infiltration, unless adequate separation to groundwater is provided (consisting of more than four vertical feet of separation to the seasonal high groundwater table);
- 9.1.2 Street wastes shall not be reused within a 100-year floodplain or wetland.
- 9.1.3 Street wastes shall not be reused within a recharge area of any sole source drinking water supply.
- 9.1.4 Street wastes shall not be reused within 100 feet of any surface water.
- 9.1.5 Street wastes shall not be reused in areas of intensive public use (e.g., rest areas, weigh stations, park and ride facilities) unless two feet of clean cover soils are placed over street wastes.
- 9.1.6 Street wastes shall not be reused in any:
 - 9.1.6.1 Other state-owned property outside the Department-owned ROW;
 - 9.1.6.2 Property under temporary ROWs and/or non-permanent ownership/control by the Department;
 - 9.1.6.3 Other public property; or
 - 9.1.6.4 Private property with the exception of properly licensed disposal facilities.

10.0 AUDIT AND TRAINING

To Be Determined

11.0 DOCUMENT CONTROL

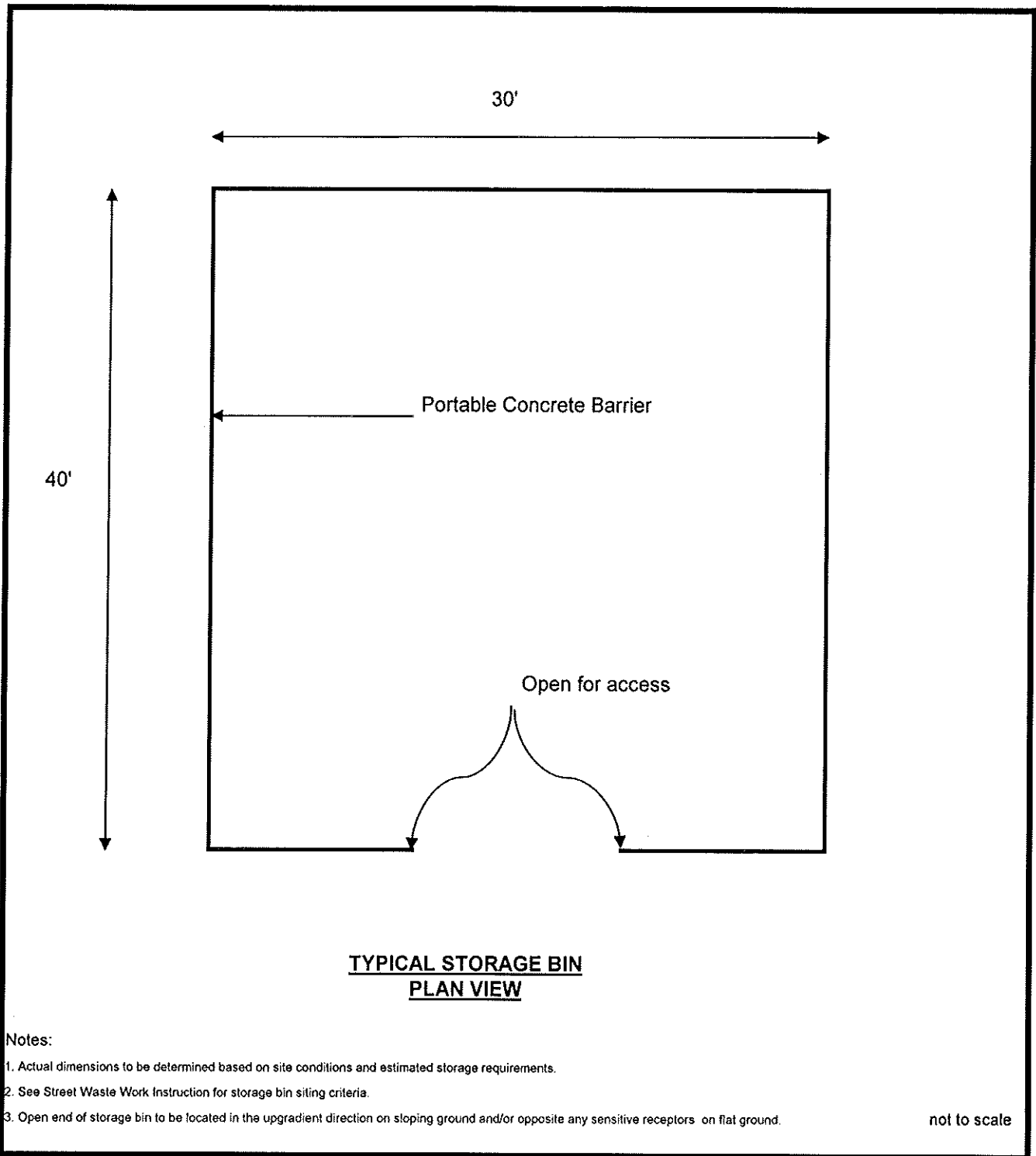
To Be Determined

Approved:		REVISION NO.:	_____
_____		DATE:	_____
Name	Date	SUPERSEDES EDITION:	_____
Title			

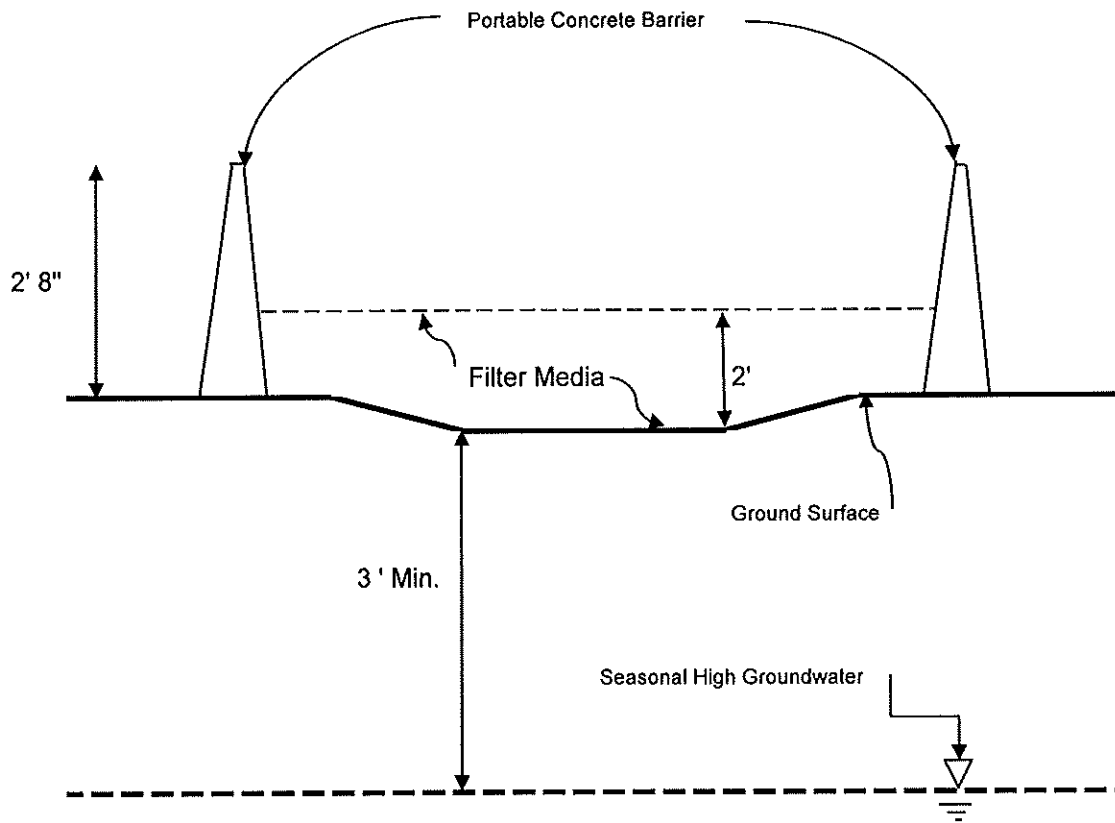
New Hampshire Department of Transportation

Street Waste Management Program

Catch Basin Solids Storage Bin Detail



Catch Basin Solids Storage Bin Detail



**TYPICAL STORAGE BIN
CROSS SECTION**

Notes:

1. Filter Media Option A or B in accordance with Table 4-3, Page 103, of New Hampshire Storm Water Manual, Volume I, December 2008.
2. See Street Waste Work Instruction for siting criteria.

not to scale

New Hampshire Department of Transportation

Street Waste Management Program

Catch Basin Solids Storage Bin Detail

Approximate Storage Bin Capacity			
<u>Bin Length,</u> <u>feet</u>	<u>Bin Width,</u> <u>feet</u>	<u>Solids</u> <u>Depth, feet</u>	<u>Capacity,</u> <u>Cubic</u> <u>Yards</u>
40	30	2	89
50	30	2	111
60	30	2	133
70	30	2	156
80	30	2	178
90	30	2	200
100	30	2	222

Notes:

1. Filter media volume required is approximately equal to bin waste storage capacity.
2. Bin width of 30 feet based on managing solids with extendable backhoe from outside bin.
3. Catch basin solids to be dumped into storage bin from outside bin.

MAINTENANCE REQUIREMENTS

- Systems should be inspected at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24 hour period, with maintenance or rehabilitation conducted as warranted by such inspection.
- Pretreatment measures should be inspected at least twice annually, and cleaned of accumulated sediment as warranted by inspection, but no less than once annually.
- Trash and debris should be removed at each inspection.
- Manufactured filter media should be replaced periodically per manufacturer's specifications
- At least once annually, system should be inspected for drawdown time. If a filtration system does not drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore filtration function, including but not limited to removal of accumulated sediments or reconstruction of the filter.

DESIGN REFERENCES

- Claytor & Schueler (1996)
- UNH Stormwater Center
- EPA (1999c)

Component Material	Percent of Mixture by Volume	Gradation of Material	
		Sieve No.	Percent by Weight Passing Standard Sieve
<i>Filter Media Option A</i>			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5
<i>Filter Media Option B</i>			
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5
Loamy coarse sand	70 to 80	10	85 to 100
		20	70 to 100
		60	15 to 40
		200	8 to 15