



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

A. General Information

Please note:
 this form has
 been modified
 with added
 space to
 accommodate
 the Registry
 of Deeds
 Requirements

Important:
 When filling
 out forms on
 the
 computer,
 use only the
 tab key to
 move your
 cursor - do
 not use the
 return key.



1. From: Fairhaven Conservation Commission
 Conservation Commission
2. This issuance is for
 (check one): a. ☒ Order of Conditions b. ☐ Amended Order of Conditions

3. To: Applicant:

Patrick Norton
 a. First Name b. Last Name
Nye Lubricants, Inc.
 c. Organization
12 Howland Road
 d. Mailing Address
Fairhaven MA 02719
 e. City/Town f. State g. Zip Code

4. Property Owner (if different from applicant):

George Mock III
 a. First Name b. Last Name
Nye Lubricants, Inc.
 c. Organization
12 Howland Road
 d. Mailing Address
Fairhaven MA 02719
 e. City/Town f. State g. Zip Code

5. Project Location:

10/12 Howland Road Fairhaven
 a. Street Address b. City/Town
19 100
 c. Assessors Map/Plat Number d. Parcel/Lot Number

Latitude and Longitude, if known:

d m s d m s
 d. Latitude e. Longitude



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

A. General Information (cont.)

6. Property recorded at the Registry of Deeds for (attach additional information if more than one parcel):
Bristol (S.D.)
 a. County 2539 b. Certificate Number (if registered land) 211
 c. Book 2539 d. Page 211
7. Dates: 7/19/2019 8/26/2019 8/29/2019
 a. Date Notice of Intent Filed b. Date Public Hearing Closed c. Date of Issuance
8. Final Approved Plans and Other Documents (attach additional plan or document references as needed):
Nye Lubricating Building 1 Re-Paving Project
 a. Plan Title
Apex Companies, LLC John B. McAllister, P.E.
 b. Prepared By c. Signed and Stamped by
August 26, 2019 1"=20'
 d. Final Revision Date e. Scale
See Attachment A
 f. Additional Plan or Document Title g. Date

B. Findings

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- a. ☒ Public Water Supply b. ☐ Land Containing Shellfish c. ☒ Prevention of Pollution
 d. ☒ Private Water Supply e. ☒ Fisheries f. ☒ Protection of Wildlife Habitat
 g. ☒ Groundwater Supply h. ☒ Storm Damage Prevention i. ☒ Flood Control

2. This Commission hereby finds the project, as proposed, is: (check one of the following boxes)

Approved subject to:

- a. ☒ the following conditions which are necessary in accordance with the performance standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
SE 023-1304
MassDEP File #
112523
eDEP Transaction #
Fairhaven
City/Town

B. Findings (cont.)

Denied because:

- b. ☐ the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. **A description of the performance standards which the proposed work cannot meet is attached to this Order.**
- c. ☐ the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. **A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).**
3. ☐ Buffer Zone Impacts: Shortest distance between limit of project disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a) a. linear feet

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Resource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4. <input type="checkbox"/> Bank	<u> </u> a. linear feet	<u> </u> b. linear feet	<u> </u> c. linear feet	<u> </u> d. linear feet
5. <input type="checkbox"/> Bordering Vegetated Wetland	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
6. <input type="checkbox"/> Land Under Waterbodies and Waterways	<u> </u> a. square feet <u> </u> e. c/y dredged	<u> </u> b. square feet <u> </u> f. c/y dredged	<u> </u> c. square feet	<u> </u> d. square feet
7. <input type="checkbox"/> Bordering Land Subject to Flooding	<u> </u> a. square feet	<u> </u> b. square feet	<u> </u> c. square feet	<u> </u> d. square feet
Cubic Feet Flood Storage	<u> </u> e. cubic feet	<u> </u> f. cubic feet	<u> </u> g. cubic feet	<u> </u> h. cubic feet
8. <input type="checkbox"/> Isolated Land Subject to Flooding	<u> </u> a. square feet	<u> </u> b. square feet		
Cubic Feet Flood Storage	<u> </u> c. cubic feet	<u> </u> d. cubic feet	<u> </u> e. cubic feet	<u> </u> f. cubic feet
9. <input type="checkbox"/> Riverfront Area	<u> </u> a. total sq. feet	<u> </u> b. total sq. feet		
Sq ft within 100 ft	<u> </u> c. square feet	<u> </u> d. square feet	<u> </u> e. square feet	<u> </u> f. square feet
Sq ft between 100-200 ft	<u> </u> g. square feet	<u> </u> h. square feet	<u> </u> i. square feet	<u> </u> j. square feet



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 023-1304

MassDEP File #

112523

eDEP Transaction #

Fairhaven

City/Town

B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
10. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below			
11. <input type="checkbox"/> Land Under the Ocean	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
12. <input type="checkbox"/> Barrier Beaches	Indicate size under Coastal Beaches and/or Coastal Dunes below			
13. <input type="checkbox"/> Coastal Beaches	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
14. <input type="checkbox"/> Coastal Dunes	a. square feet	b. square feet	c. nourishment cu yd	d. nourishment cu yd
15. <input type="checkbox"/> Coastal Banks	a. linear feet	b. linear feet		
16. <input type="checkbox"/> Rocky Intertidal Shores	a. square feet	b. square feet		
17. <input type="checkbox"/> Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. <input type="checkbox"/> Land Under Salt Ponds	a. square feet	b. square feet		
	c. c/y dredged	d. c/y dredged		
19. <input type="checkbox"/> Land Containing Shellfish	a. square feet	b. square feet	c. square feet	d. square feet
20. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, Inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above			
	a. c/y dredged	b. c/y dredged		
21. <input checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	31,000 a. square feet	31,000 b. square feet		
22. <input checked="" type="checkbox"/> Riverfront Area	27,818 a. total sq. feet	27,818 b. total sq. feet		
Sq ft within 100 ft	16,695 c. square feet	16,695 d. square feet	e. square feet	f. square feet
Sq ft between 100-200 ft	11,123 g. square feet	11,123 h. square feet	i. square feet	j. square feet



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

B. Findings (cont.)

* #23. If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.5.c (BWV) or B.17.c (Salt Marsh) above, please enter the additional amount here.

23. ☐ Restoration/Enhancement *:

a. square feet of BWV

b. square feet of salt marsh

24. ☐ Stream Crossing(s):

a. number of new stream crossings

b. number of replacement stream crossings

C. General Conditions Under Massachusetts Wetlands Protection Act

The following conditions are only applicable to Approved projects.

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
 - a. The work is a maintenance dredging project as provided for in the Act; or
 - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
 - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
6. If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on August 29, 2022 unless extended in writing by the Department.
7. Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



**Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands**

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 023-1304

MassDEP File #

112523

eDEP Transaction #

Fairhaven

City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act

8. This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
10. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]
 "File Number SE 023-1304 "
11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
13. The work shall conform to the plans and special conditions referenced in this order.
14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
19. The work associated with this Order (the "Project")
 - (1) ☒ is subject to the Massachusetts Stormwater Standards
 - (2) ☐ is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

- a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.
- b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that:
 - i. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures;
 - ii. as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;
 - iii. any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement") for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 023-1304

MassDEP File #

112523

eDEP Transaction #

Fairhaven

City/Town

C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
 - 1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
 - 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
 - 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.
- h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.
- i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.
- j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.
- k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.
- l) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

See Attachment A

- 20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 5 – Order of Conditions

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

SE 023-1304

MassDEP File #

112523

eDEP Transaction #

Fairhaven

City/Town

D. Findings Under Municipal Wetlands Bylaw or Ordinance

1. Is a municipal wetlands bylaw or ordinance applicable? ☒ Yes ☐ No
2. The Fairhaven Conservation Commission hereby finds (check one that applies):
 Conservation Commission

- a. ☐ that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

2. Citation

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

- b. ☒ that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

Fairhaven Wetlands Bylaw

Chapter 192

1. Municipal Ordinance or Bylaw

2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See Attachment A



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

Please indicate the number of members who will sign this form.

This Order must be signed by a majority of the Conservation Commission.

8/29/2019
 1. Date of Issuance

5
 2. Number of Signers

The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Signatures:

[Handwritten signatures of three individuals]

☒ by hand delivery on

8/29/2019

Date

☐ by certified mail, return receipt requested, on

Date

F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 5 – Order of Conditions
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:
 SE 023-1304
 MassDEP File #
 112523
 eDEP Transaction #
 Fairhaven
 City/Town

G. Recording Information

Prior to commencement of work, this Order of Conditions must be recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land subject to the Order. In the case of registered land, this Order shall also be noted on the Land Court Certificate of Title of the owner of the land subject to the Order of Conditions. The recording information on this page shall be submitted to the Conservation Commission listed below.

Fairhaven Conservation Commission
 Conservation Commission

Detach on dotted line, have stamped by the Registry of Deeds and submit to the Conservation Commission.

To:

Fairhaven Conservation Commission
 Conservation Commission

Please be advised that the Order of Conditions for the Project at:

10/12 Howland Road
 Project Location

SE 023-1304
 MassDEP File Number

Has been recorded at the Registry of Deeds of:

Bristol (S.D.)
 County

Book

Page

for:

George Mock III
 Property Owner

and has been noted in the chain of title of the affected property in:

2539
 Book

211
 Page

In accordance with the Order of Conditions issued on:

August 29, 2019
 Date

If recorded land, the instrument number identifying this transaction is:

Instrument Number

If registered land, the document number identifying this transaction is:

Document Number

Signature of Applicant



TOWN OF FAIRHAVEN, MASSACHUSETTS

CONSERVATION COMMISSION

Town Hall · 40 Center Street · Fairhaven, MA 02719

Attachment A

DEP File #: SE 023-1304
Fairhaven File #: CON 023-078
Applicant: Nye Lubricants, Inc.
Property: 10/12 Howland Road

Findings, Plans, and Documents

1. Riverfront Area, Land Subject to Coastal Storm Flowage (LSCSF), and Coastal Beach have been identified as a Resource Areas subject to protection under the Wetlands Protection Act (M.G.L. ch. 131 § 40) and Regulations (310 CMR 10.00) and the Fairhaven Wetlands Bylaw (Chapter 192).
2. Riverfront areas are likely to be significant to protect public or private water supply, to protect groundwater, to provide flood control, to prevent storm damage, to prevent pollution, to protect wildlife habitat, and to protect fisheries.

Land adjacent to rivers and streams can protect the natural integrity of these water bodies. The presence of natural vegetation within riverfront areas is critical to sustaining rivers as ecosystems and providing these public values. The riverfront area can prevent degradation of water quality by filtering sediments, toxic substances (such as heavy metals), and nutrients (such as phosphorus and nitrogen) from stormwater, nonpoint pollution sources, and the river itself. Riverfront areas can also trap and remove disease-causing bacteria that otherwise would reach rivers and coastal estuaries where they can contaminate shellfish beds and prohibit safe human consumption. Natural vegetation within the riverfront area also maintains water quality for fish and wildlife.

Where rivers serve as water supplies or provide induced recharge to wells, the riverfront area can be important to the maintenance of drinking water quality and quantity. When riverfront areas lack the capacity to filter pollutants, contaminants can reach human populations served by wells near rivers or by direct river intakes. The capacity of riverfront areas to filter pollutants is equally critical to surface water supplies, reducing or eliminating the need for additional treatment.

By providing recharge and retaining natural flood storage, as well as by slowing surface water runoff, riverfront areas can mitigate flooding and damage from storms. Increases in storage of floodwaters can decrease peak discharges and reduce storm damage. Vegetated riverfronts also dissipate the energy of storm flows, reducing damage to public and private property.

Riverfront areas are critical to maintaining thriving fisheries. Maintaining vegetation along rivers promotes fish cover, increases food and oxygen availability, decreases sedimentation, and provides spawning habitat. Where groundwater recharges surface water flows, loss of recharge as a result of impervious surfaces within the riverfront area may aggravate low flow conditions and increase water temperatures.

Riverfront areas are also important wildlife habitat, providing food, shelter, breeding, migratory, and overwintering areas. Even some predominantly upland species use and may be seasonally dependent on riverfront areas. Riverfront areas promote biological diversity by providing habitats for an unusually wide variety of upland and wetland species. Loss of connectivity, from activities that create barriers to wildlife movement within riverfront areas, results in habitat fragmentation and causes declines in wildlife populations. Wildlife must also be able to move across riverfront areas, between uplands and the river.

3. Land subject to coastal storm flowage is likely to be significant to flood control and storm damage prevention. LSCSF can slow down flood waters and allow them to flow across a natural landform surface, providing frictional resistance and reducing their energy and destruction potential. It can allow flood waters to spread over a wide area without obstructions. Obstructions can cause the channelization of flood waters and storm-wave overwash and an increase in the velocity and volume of flow to adjacent or landward areas. LSCSF can also allow flood waters to be detained, absorbed into the ground, or evaporated into the atmosphere. LSCSF also protects the land from storm erosion by providing a substrate for vegetation that helps to stabilize sediments and slow down flood waters.

Where LSCSF overlaps other coastal resource areas, it plays an important role in determining the delineation and function of these resource areas, specifically coastal beaches and dunes, barrier beaches, and coastal banks.

Particular physical characteristics of LSCSF that are critical to the protection of the flood control and storm damage prevention interests include: topography, slope, surface area, soil characteristics (i.e., composition, size, shape, and density of material), vegetation, erodability, and permeability of sediments. Topography, slope, and permeability are critical for determining how effective an area is in dissipating wave energy, absorbing flood waters, and protecting areas within and landward of these zones from storm damage and flooding.

4. The approved project includes no work on the Coastal Beach.
5. This permit authorizes the removal of asphalt after-the-fact located in the west end parking lot, the replacement of asphalt in a smaller footprint, and the installation of a pea gravel filter, a vegetated buffer strip, and two RainGardens in the same location as shown on the Final Approved Plans referenced in Condition A.6.
6. The breakdown of pervious to impervious in the Riverfront Area is as follows:

Nye Building 1 Repaving – Areas with relation to Riverfront Resource Area			
	0-100 ft	100-200 ft	Total
Impervious	7,663	9,099	16,762
Pervious	9,032	2,024	11,056
Total	16,695	11,123	27,818

7. This project is subject to the Town of Fairhaven Wetlands Bylaw (Chapter 192). Receipt of an Order of Conditions satisfies the requirements under the Wetlands Bylaw.
8. No other work is approved by this Order.
9. Plan titled “Nye Lubricating Building 1 Re-Paving Project”, dated August 26, 2019

10. Operation & Maintenance Plan for Building 1 Parking Area Stormwater BMPs, Nye Lubricants, Inc., 12 Howland Road, Fairhaven, MA 02719; prepared by Apex Companies, LLC
11. Statement on Illicit Discharges; dated August 26, 2019 and signed by Martin J. Weinstein, Director of Quality, Engineering, and EHS
12. Long-Term Pollution Prevention Plan
13. Stormwater Report, Building 1 Parking Lot Re-Paving Project, 12 Howland Road, Fairhaven Mal prepared by Apex Companies, LLC, dated August 8, 2019

Special Conditions

A. General Conditions

1. ACC-1: The Conservation Commission, its employees, and its agents shall have a right of entry to inspect or compliance with the provisions of this Order of Conditions.
2. With respect to all conditions, the Conservation Commission designates the Conservation Agent as its agent with full powers to act on its behalf in administering and enforcing this Order.
3. REC-1: The complete Notice of Intent, a complete set of site plans approved of in the Order of Conditions and the Order of Conditions itself shall be included in all construction contracts and sub-contracts dealing with the work proposed and shall supersede all other contract requirements.
4. REC-2: During the construction phase, the applicant shall be responsible for maintaining a copy of these Orders at the site. The applicant shall be responsible for compliance with the conditions of these Orders.
5. ADD-1: The Commission reserves the right to impose additional conditions on any or all portions of this project that could impact an area of statutory interest under the Act and/or the Fairhaven Wetlands Bylaw.
6. ADD-2: This Order applies only to: the removal of asphalt after-the-fact located in the west end parking lot, the replacement of asphalt in a smaller footprint, and the installation of a pea gravel filter, a vegetated buffer strip, and two RainGardens in the same location. Any future work not approved within the Order subject to jurisdiction under the Wetlands Protection Act will require the filing, at a minimum, of a Request for Determination or Applicability or a new Notice of Intent with the Commission. Prior to the commencement of any such future work, a receipt of a Negative Determination or valid Order of Conditions will be required.
7. ADD-4b: All work shall be done in accordance with final plans dated August 26, 2019 as approved by this Commission. Any deviation must be approved by this Commission in writing prior to commencing work involved in this deviation.
8. ADD-4c: Any changes to the plans identified above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
9. ADD-5: This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this order and to any contractor or other person performing work conditioned by this order.
10. STO-4: There shall be no discharge or spillage of petroleum product, hazardous material, or any other pollutant into any area of statutory interest.
11. STO-5: There shall be no fueling or maintenance of any vehicles or equipment in any area of statutory interest.

12. LOW-2: The erosion and sedimentation barrier shall serve as the alteration limit line. Said barrier shall fully protect the adjacent wetland/resource area, and no work shall be permitted beyond this limit line.
13. All work and subsequent monitoring, operation, and maintenance shall comply with all submitted documentation and plans as attached to this Order of Conditions.

B. Prior to Construction

14. CAP-3: All required permits must be obtained from the Army Corps of Engineers, Massachusetts Department of Environmental Protection, Planning Board, Zoning Board of Appeals, Board of Public Works, Board of Health, Building Department, and/or any other appropriate local, state, or federal agencies and proof of appropriate permits submitted to the Conservation Commission prior to the start of the project.
15. REC-3: Job site posting of a sign clearly visible from the road not less than two square feet or more than three square feet with the words,
Massachusetts Department of Environmental Protection [or MassDEP]
File Number SE 023-1304
Fairhaven Conservation Commission [or FCC]
File Number CON 023-078

Included shall also be the Commission's office phone number (508) 979-4023 for further information. Special orders of the conditions shall be weatherproofed and posted on all activity sites, including a posting on the job site sign. The necessary replacement and maintenance of these postings shall be the sole responsibility of the applicant.

16. DER-1: Proof of recording of these approved special conditions, plan of record, and materials at the Bristol County Registry of Deeds shall be provided by the applicant's liaison to the commission enforcement agent prior to the commencement of any work (including site preparation) on the site.
17. PCC-3: The applicant or the applicant's representative shall notify the Commission, in writing, as to the date that the work will commence on the project. Said notification must be received by the Commission no sooner than ten (10) days and no later than five (5) days prior to the commencement of the approved activity.
18. EMC-1: The Applicant shall provide the Commission with the name(s) and telephone numbers of the site contractor and the project manager(s) responsible on site for compliance with this Order. The project manager shall oversee any emergency placement of erosion and sedimentation controls and be responsible for the regular inspection or replacement of control devices and for the proper disposal of waste products. The commission shall be notified in the event that the project manager or site contractor is changed.
19. PCC-1: The contractor shall notify the Commission immediately following erosion control installation and before groundbreaking to allow the Commission or its Agent opportunity to inspect the erosion controls. No work may proceed on the property until the Commission or its Agent approves the installation and location of erosion controls.
20. SIL-5: Adequate erosion and sedimentation control measures, as specified in the Notice of Intent and in this Order, shall be installed and maintained throughout the entire construction phase, until the site has been stabilized and their removal has been authorized (in writing or by issuance of the Certificate of Compliance) by the Commission or its agent. The erosion control specifications in the Notice of Intent and the erosion control provisions in the Order will be the minimum standards for this project; the Commission may require additional measures. The Commission reserves the right to require additional or modified erosion and siltation controls during construction if it deems that site conditions warrant such measures.

C. During Construction

21. STO-1: At no time shall any construction materials, soils, fills, sediments, dredging or any other substances be stockpiled or stored outside the alteration limit line, or within the area of statutory interest.
22. STO-3: All equipment used on site must be stored or parked in an area outside the buffer zone.
23. MAC-3: All mechanized vehicles under contract, subcontract or lease, participating in any manner, in any phase of activity within resource areas, shall carry on board absorbent materials to immediately respond to inadvertent discharge of petrochemicals.
24. MAC-7: No motorized/construction equipment is to enter or cross a wetland resource area at any time, unless the location of entry or disturbance is clearly indicated on plans and within information contained within the Notice of Intent and approved with the issuance of this Order of Conditions.
25. All equipment shall be inspected regularly for leaks. Any leaking hydraulic lines, cylinders, or any other components shall be fixed immediately.
26. DEB-1: The construction site shall be left in a stable condition at the close of each day. Construction refuse and debris shall be removed daily. The Commission may require specific approval for the disposition of such materials prior to the start of construction.
27. DEB-5: Food trash and related waste shall at all times be confined to appropriate containers, which shall enjoy a routine removal schedule. Air and water-borne disposal of non-indigenous materials from this project into resource areas is hereby prohibited.
28. BLD-3: Any fill used for this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.
29. BLD-4: The source of the fill used for this project will be submitted to the Conservation Commission or its Agent for approval prior to its use.
30. EMC-2: In case of emergencies, problems, or the need to discuss site conditions with the Conservation Commission, please contact the Commission or its Agent during business hours at (508) 979-4023, ext. 128 or after hours/weekends at (508) 837-4427.
31. SIL-3: An adequate stockpile of erosion control materials shall be on site at all times for emergency or routine replacement and shall include materials to repair silt fences, hay bales, stone-rip rap filter dikes or any other devices planned for use during construction.
32. SIL-4: All erosion control devices shall be inspected, cleaned, or replaced during construction and shall remain in place until such time as stabilization of all areas that may impact resource areas is permanent. These devices shall be inspected to assure that maximum control has been provided after any rainfall.
33. SIL-8: If soils are to be disturbed for longer than two (2) months, a temporary cover shall be established, following Natural Resources Conservation Service (NRCS) procedures, to prevent erosion and sedimentation.
 - i. If the season is not appropriate for plant growth, exposed surfaces shall be stabilized by straw, jute netting, or other NRCS-approved methods.
 - ii. Any stabilization materials such as jute netting shall be firmly anchored to prevent them from being washed from slopes by rain or flooding.
34. LOW-3: There shall be no disturbance of the site, including cutting of vegetation, beyond the work limit.
35. WAT-3: There shall be no direct discharge of dewatering operations into any wetland, watercourse, or drainage system without the approval of the Commission. Any

dewatering discharge shall be passed through a sedimentation control device to remove any solids. The contractor is to maintain said sedimentation control devices throughout the entire dewatering operation and repair deficiencies immediately.

D. After Construction/In Perpetuity

36. REV-1: All areas disturbed during construction shall be revegetated immediately following completion of work at the site. No areas shall be left unvegetated for more than 30 days. Mulching shall not serve as a substitute for the requirement to revegetate disturbed areas at the conclusion of work.
37. RES-4: The deed language will be prepared by the applicant's attorney or representative and it will be submitted to the Conservation Staff for review prior to the issuance of the Certificate of Compliance.
38. COC-1: The Fairhaven Conservation Commission reserves the right to request an as-built plan as part of the requirements for a Certificate of Compliance.
39. COC-2: Upon completion of the work described herein, the applicant shall forthwith request in writing that a Certificate of Compliance be issued stating that the work has been satisfactorily completed.

Perpetual Conditions

The below conditions do not expire upon completion of the project.

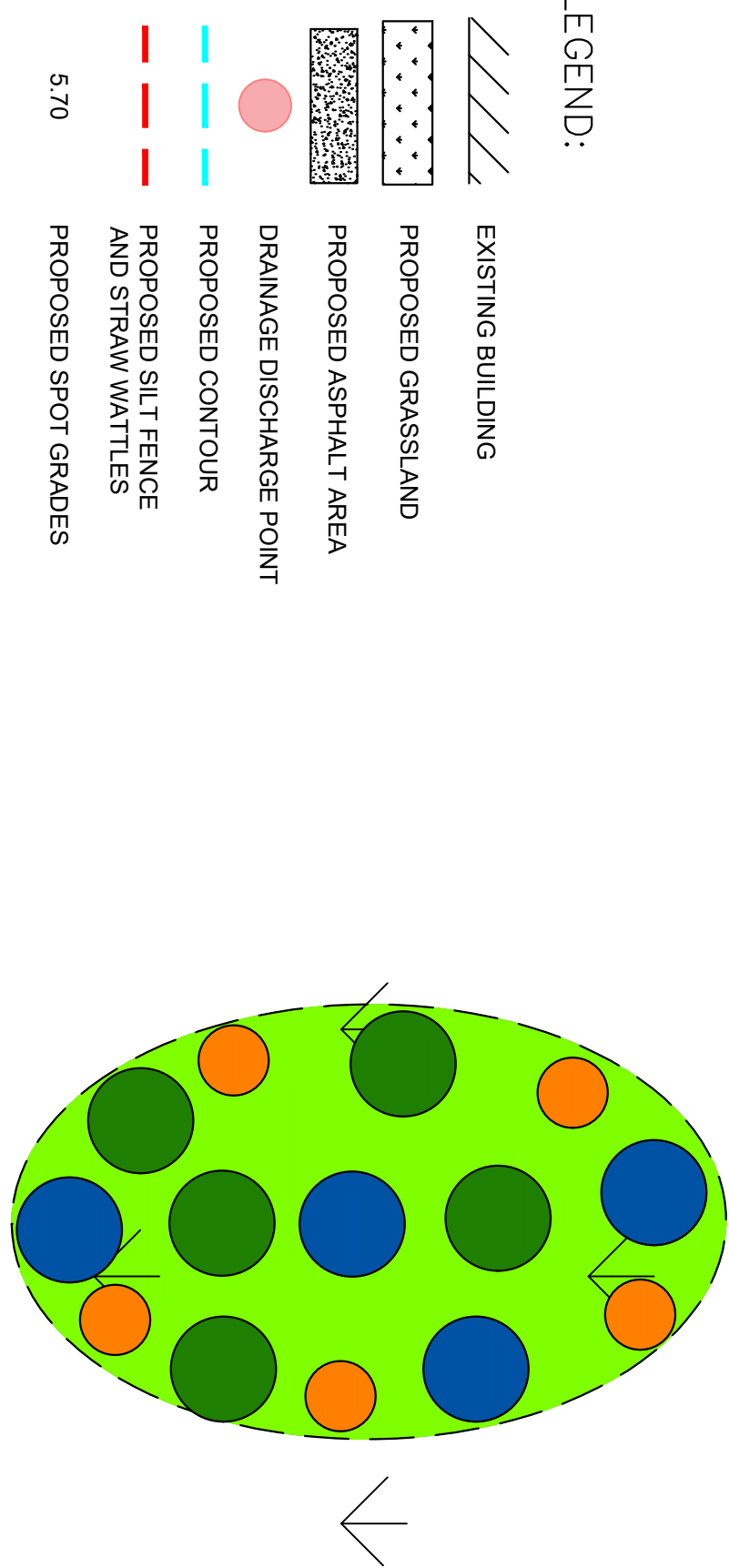
40. CHM-2: No liquid or solid chemical lawn fertilizers, pesticides, herbicides or chemical or petroleum dust control agents shall be applied within the area of statutory interest or anywhere that the surface drainage is discharged into an area of statutory interest. This condition shall survive the expiration of this Order, and shall be included as a continuing condition in perpetuity on the Certificate of Compliance.
41. DER-4: The owner of the property described in this Order must advise any potential buyer of the property that any construction or alteration to said property, including brush cutting or clearance, may require approval by the Fairhaven Conservation Commission. Any instrument conveying any or all of the owners' interest in said property or any portion thereof shall contain language similar to the following:
"This property is subject to the Fairhaven Wetlands Bylaw and/or the Massachusetts Wetlands Protection Act. Any construction or maintenance work performed on this property requires an Order of Conditions and/or a Determination of Applicability from the Fairhaven Conservation Commission."
This condition is ongoing and shall not expire with the issuance of a Certificate of Compliance and shall be recorded in the deed
42. No further alteration within the restoration or mitigation area is permitted, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.
43. All stormwater BMPs shall be operated and maintained in accordance with the design plans and the Operation and Maintenance Plan approved by Conservation Commission.
44. The responsible party shall:
 - i. maintain an operation and maintenance log for the last three years, including inspections, repairs, replacement, and disposal (for disposal, the log shall indicate the type of material and the disposal location);
 - ii. make this log available to MassDEP and the Conservation Commission upon request; and

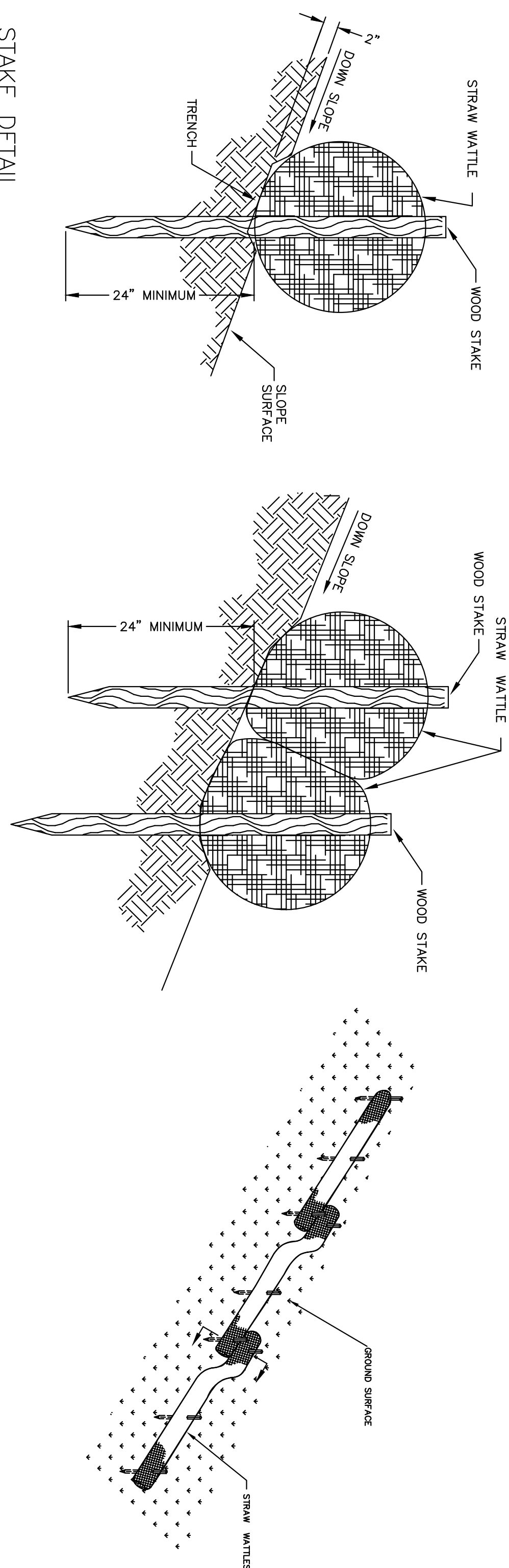
- iii. allow members and agents of the MassDEP and the Conservation Commission to enter and inspect the premises to evaluate and ensure that the responsible party complies with the Operation and Maintenance Plan requirements for each BMP.
45. All stormwater best management practices (BMPs) shall be maintained as specified in the Operation and Maintenance Plan submitted by Apex Companies, LLC with the Notice of Intent titled "Operation & Maintenance Plan for Building 1 Parking Area Stormwater BMPs, Nye Lubricants, 12 Howland Road, Fairhaven, MA 02719," and incorporated in the Order of Conditions. Evidence of maintenance and complete and thorough inspections of the Stormwater Management system using the inspection and maintenance forms in Appendix A of the O&M Plan shall be provided to the Commission on a semi-annual basis (once in the spring and once during the fall) and after major rain events or nor'easter storm events (approximately 2.0 inches of rain). This condition shall be noted on the Certificate of Compliance and shall continue in perpetuity.

E. Stormwater Management

46. All construction and post-construction stormwater management shall be conducted in accordance with the supporting documents submitted with the Notice of Intent, the Department of Environmental Protection Stormwater Management Policy and Stormwater Management Standards, and as approved by the Commission in this Order of Conditions.
- i. If the proposed plantings for the rain gardens change from those on the plan, submit the list of plantings to the Conservation Agent for approval prior to their installation.
 - ii. Runoff shall be directed through the vegetated buffer strip and rain gardens before discharging into the stormwater discharge point.
 - iii. The primary maintenance requirement for RainGardens (Bioretention Systems) is inspection, and repair or replacement of the RainGarden's individual components. The primary maintenance function is the removal of accumulated sediment and debris. Other potential tasks include the replacement of dead vegetation, soil pH regulation, erosion repair at inflow points, mulch replenishment, and repair of inflow structures.
 - iv. Vegetated filter strips will be inspected once during the late spring and once during the fall, however there shall be additional inspections per year for the first growing season following construction. During the initial post-construction period, special attention will be paid to the grass plantings to ensure they are establishing as intended. Filter strips shall be inspected for health of vegetation, soil stability, and erosion and sedimentation. Regular maintenance tasks include mowing, watering, weeding, pest control, and sediment removal.
 - v. Street sweeping shall be conducted to remove sediment and debris that accumulates in the parking structure.
47. All stormwater and infiltration BMPs shall be protected from sedimentation and runoff during construction activities. Discharge to these BMPs will only occur once the site has been stabilized.
48. There shall be no increase in the post-development discharges from the storm drainage system or any other changes in post-development conditions that alter the post-development watershed boundaries as currently depicted in the Notice of Intent and approved by this Order of Conditions, unless specifically approved in writing by the Commission.

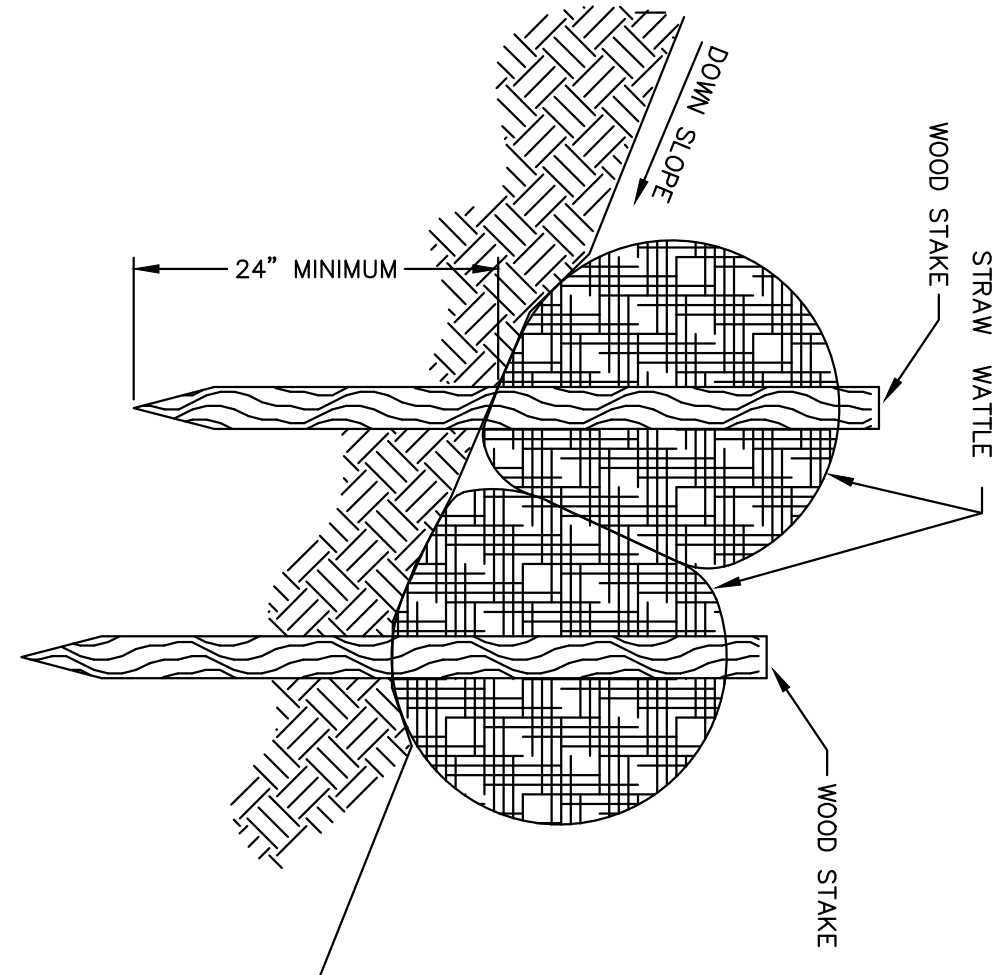
49. There shall be no sedimentation into any resource area or water bodies from discharge pipes or surface runoff leaving the site.
50. Upon requesting a Certificate of Compliance, the responsible party shall submit an O&M Compliance statement to be included with the Certificate of Compliance, which shall identify the party responsible for the implementation of the Operation & Maintenance Plan and state that:
 - i. the site has been inspected for erosion and appropriate steps have been taken to permanently stabilize any eroded areas;
 - ii. all aspects of the stormwater BMPs have been inspected for damage, wear and malfunction, and appropriate steps have been taken to repair or replace the system or portions of the system so that the stormwater at the site may be managed in accordance with the Stormwater Management Standards;
 - iii. future responsible parties must be notified of their continuing legal responsibility to operate and maintain the structures; and
 - iv. the Operation and Maintenance Plan for the stormwater BMPs being implemented.
51. As the proposed work area is located within AE Flood Zone, the work should maintain the existing flood storage volume. Any filling within the AE flood zone should be replicated with a minimum of 1 to 1 ratio. The project engineer shall certify an as-built statement to assure no loss of flood storage volume due to the construction.



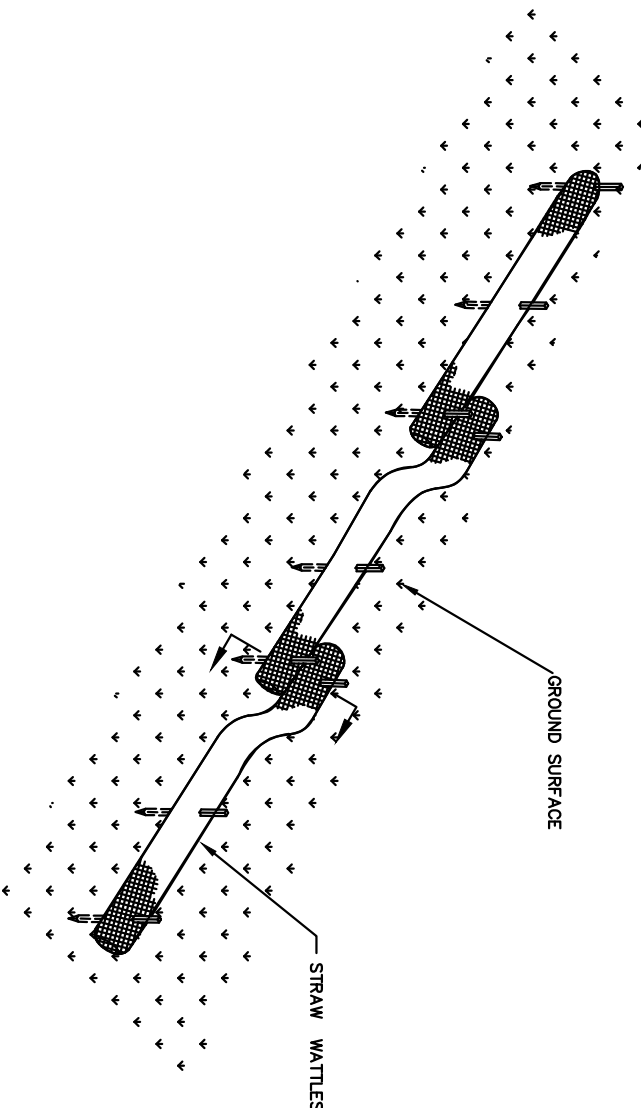


STAKE DETAIL
ON BARE SOIL

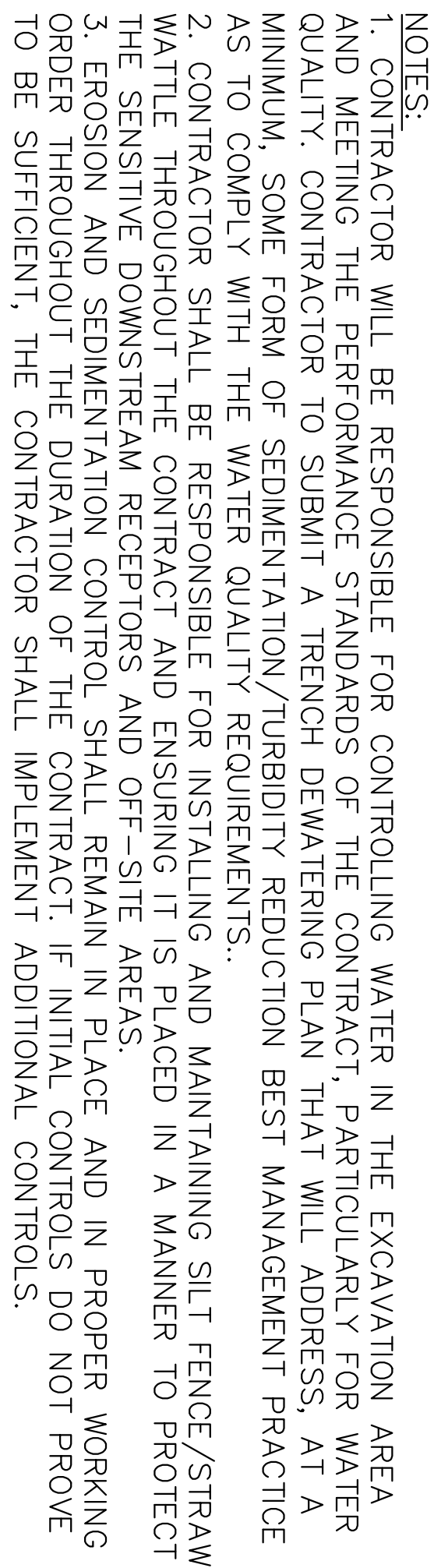
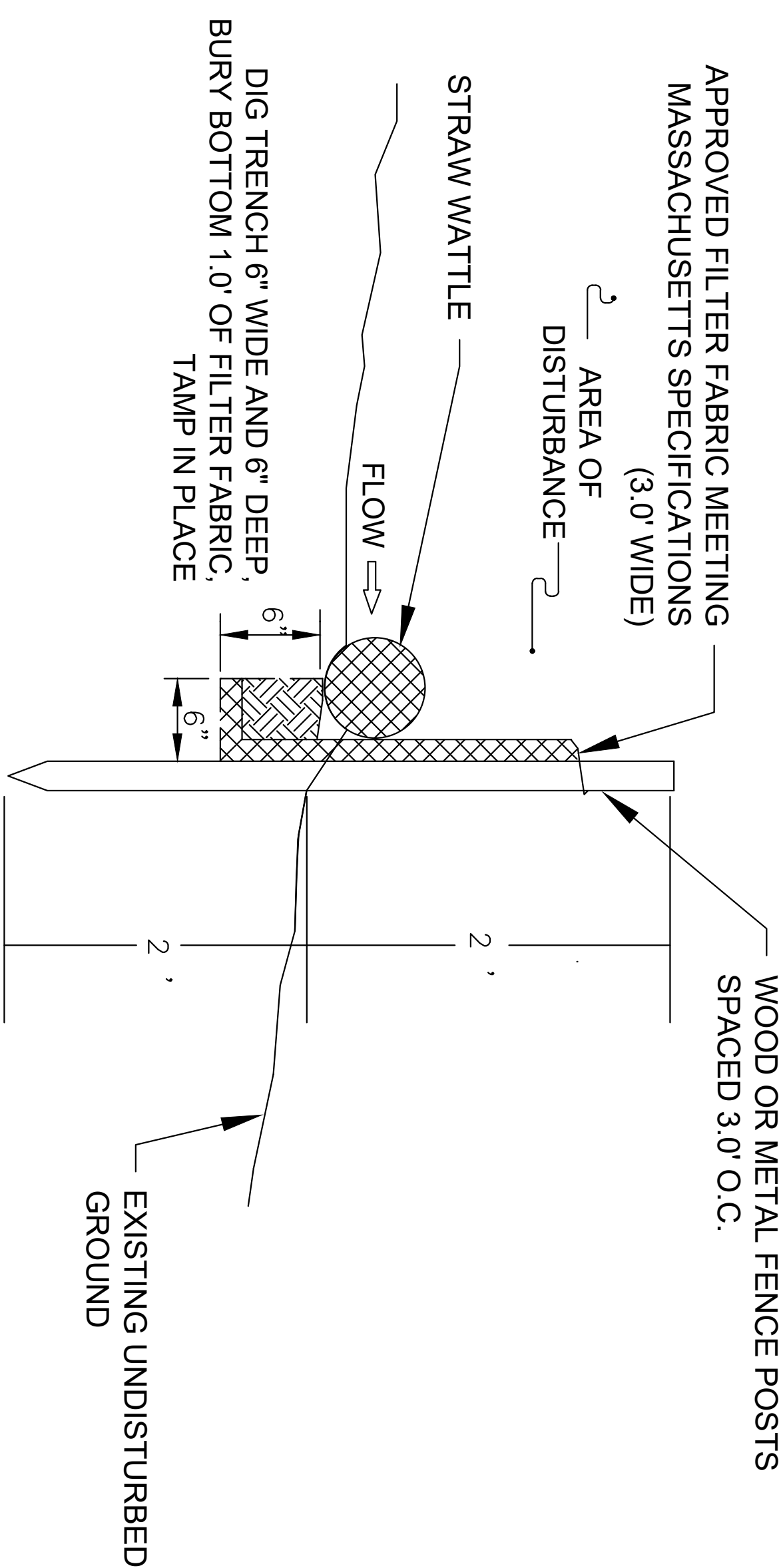
NO SCALE



STAKE DETAIL
NO SCALE

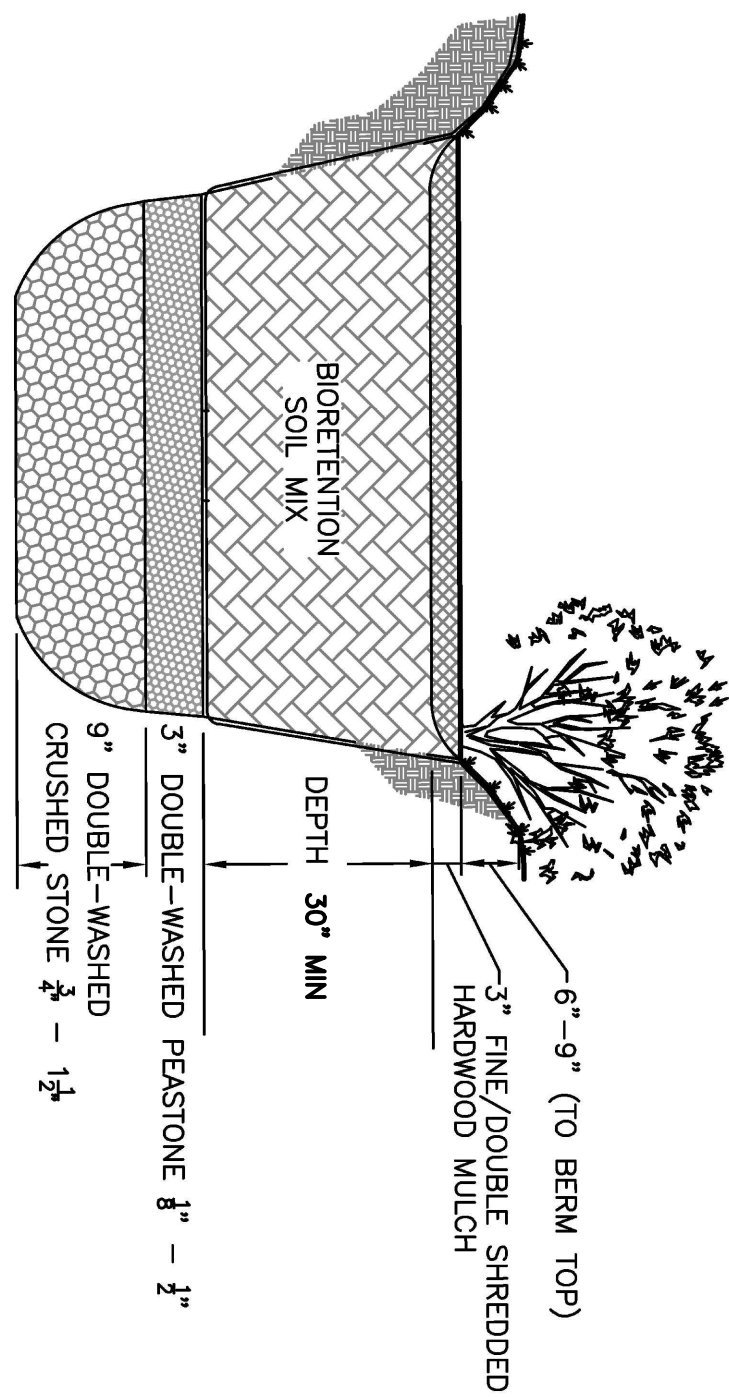


STRAW WATTLE
NO SCALE

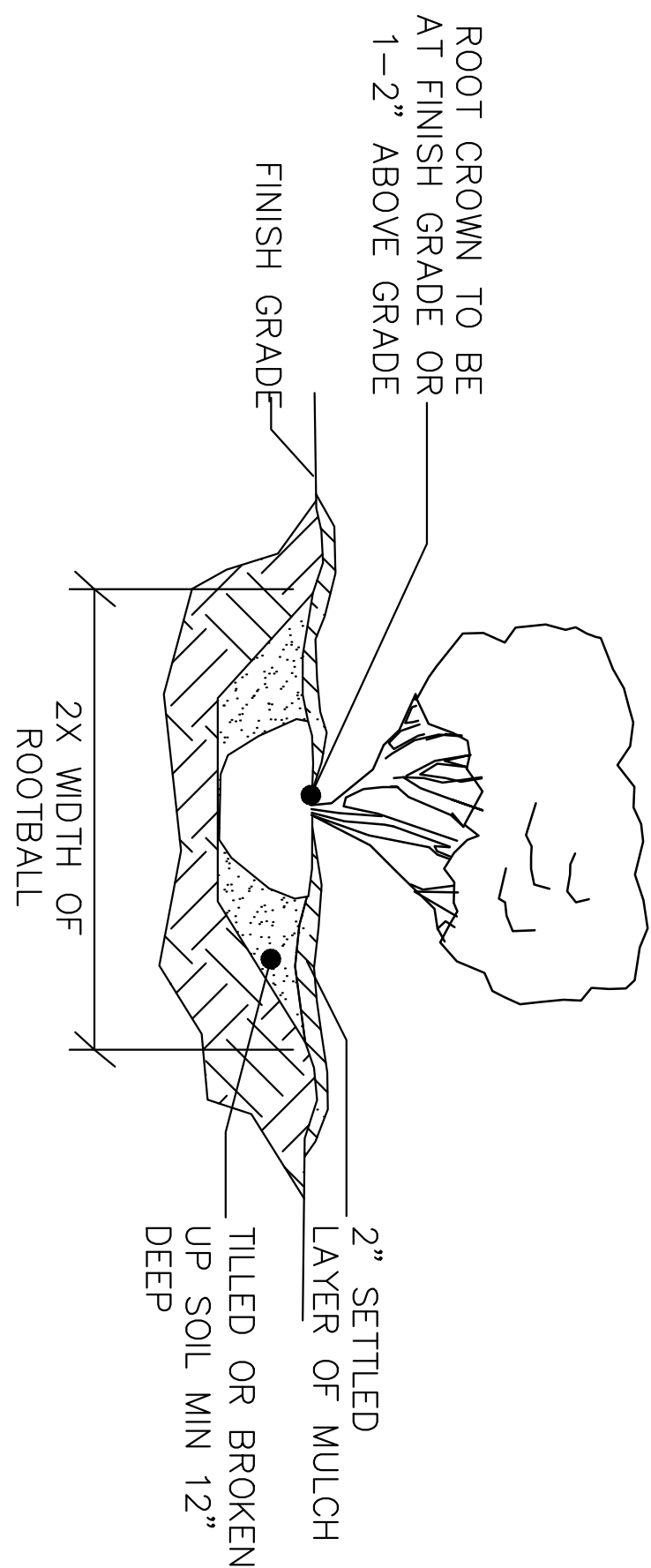


NOTES:

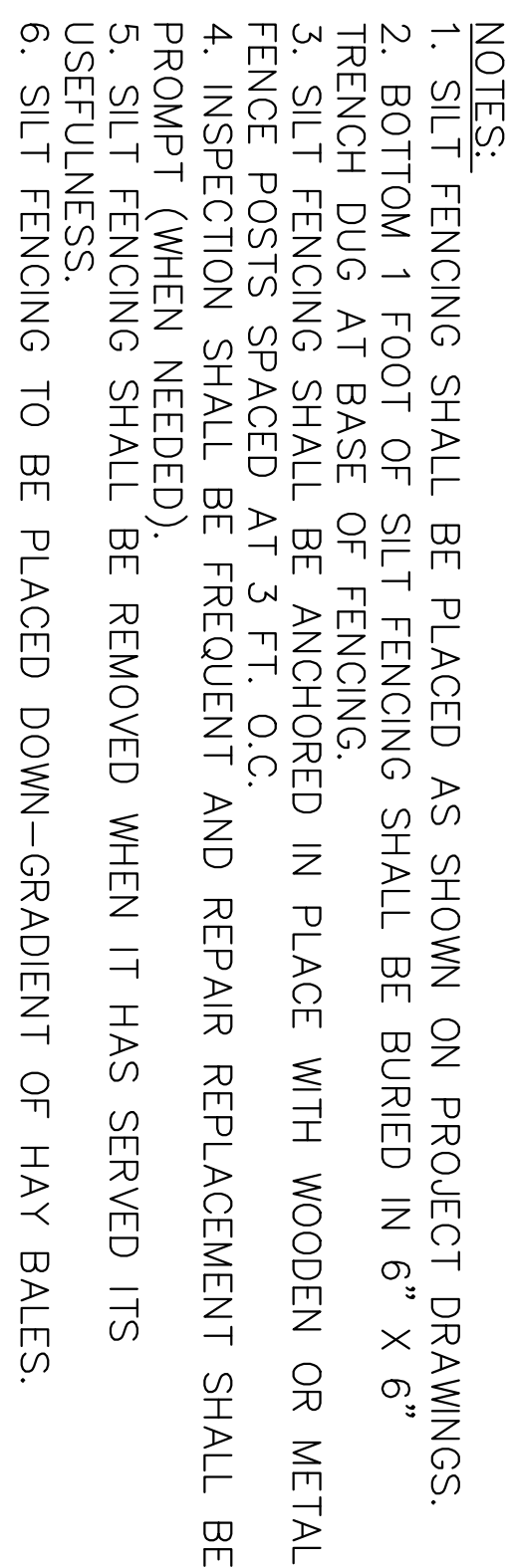
1. CONTRACTOR WILL BE RESPONSIBLE FOR CONTROLLING WATER IN THE EXCAVATION AREA AND MEETING THE PERFORMANCE STANDARDS OF THE CONTRACT, PARTICULARLY FOR WATER QUALITY. CONTRACTOR TO SUBMIT A TRENCH DEWATERING PLAN THAT WILL ADDRESS, AT A MINIMUM, SOME FORM OF SEDIMENTATION/TURBIDITY REDUCTION BEST MANAGEMENT PRACTICE AS TO COMPLY WITH THE WATER QUALITY REQUIREMENTS..
2. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING SILT FENCE/STRAW MATTE THROUGHOUT THE CONTRACT AND ENSURING IT IS PLACED IN A MANNER TO PROTECT THE SENSITIVE DOWNSTREAM RECEPTORS AND OFF-SITE AREAS.
3. EROSION AND SEDIMENTATION CONTROL SHALL REMAIN IN PLACE AND IN PROPER WORKING ORDER THROUGHOUT THE DURATION OF THE CONTRACT. IF INITIAL CONTROLS DO NOT PROVE TO BE SUFFICIENT, THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS.



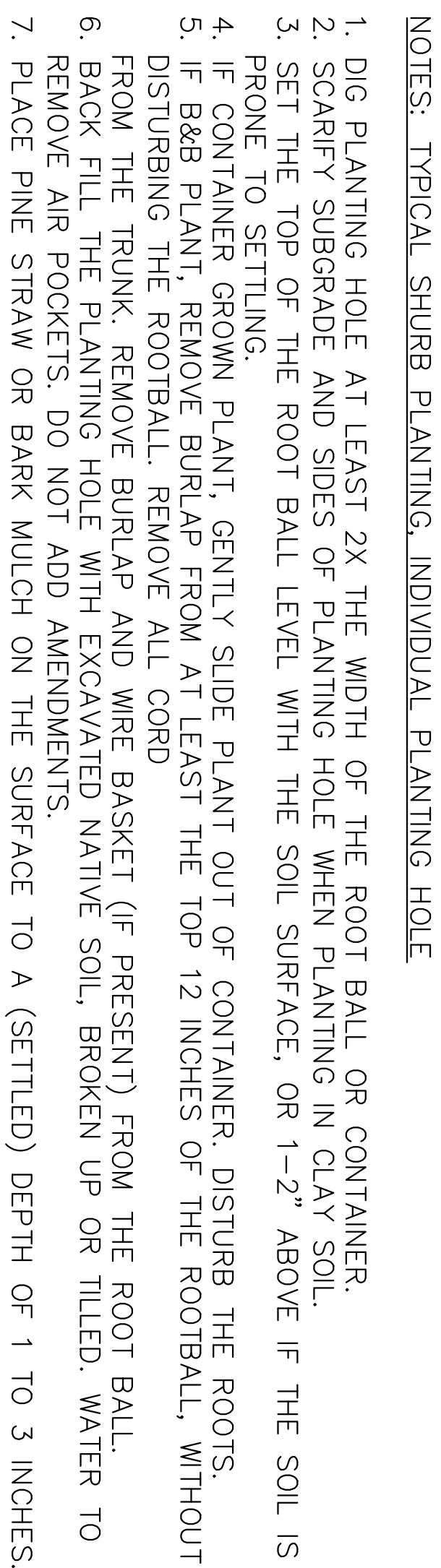
EXFILTRATING BIORETENTION CELL DETAIL



TYP. SHRUB PLANTING
NO SCALE

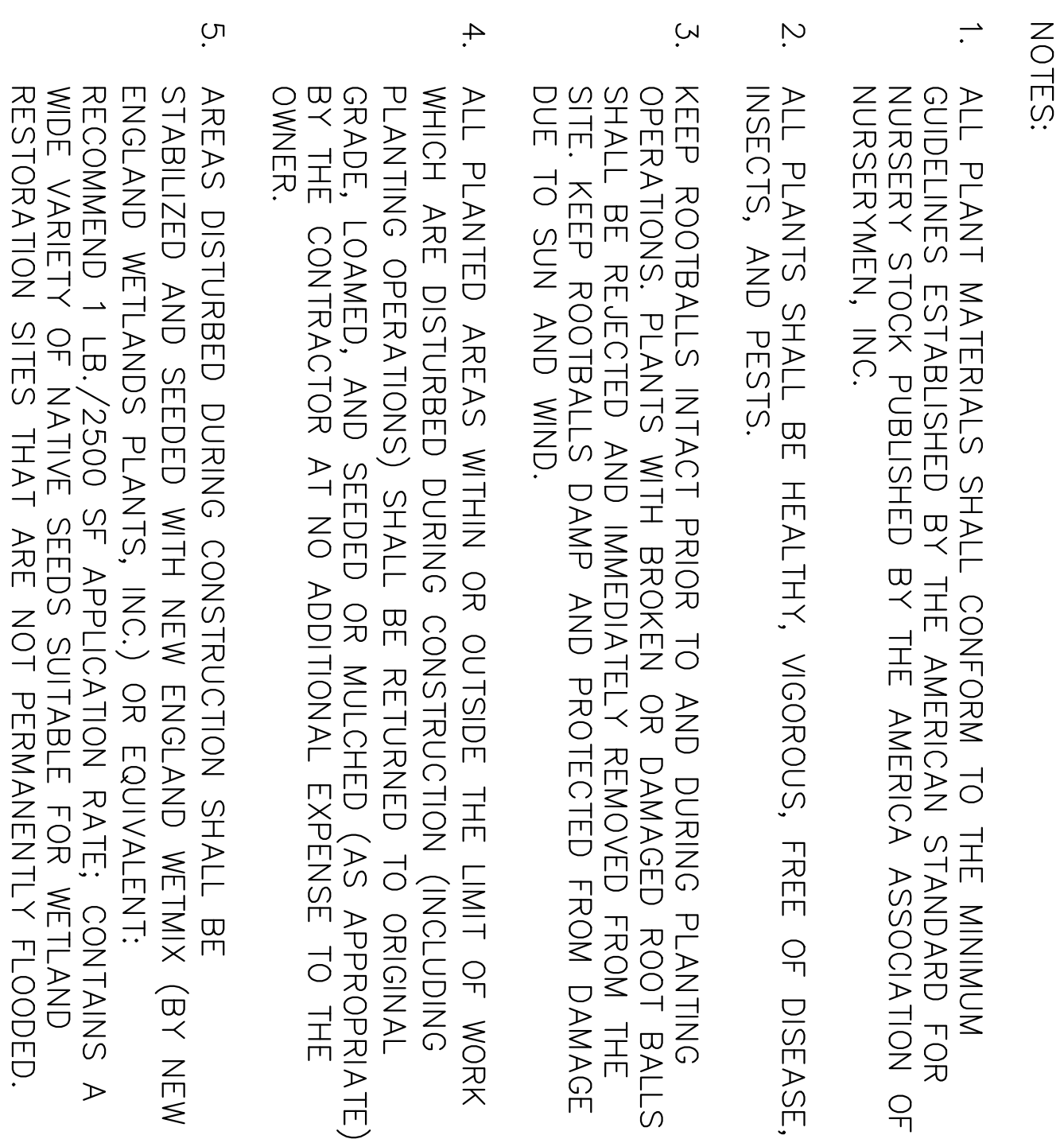


1. SILT FENCING SHALL BE PLACED AS SHOWN ON PROJECT DRAWINGS.
2. BOTTOM 1 FOOT OF SILT FENCING SHALL BE BURIED IN 6" x 6" TRENCH DUG AT BASE OF FENCING.
3. SILT FENCING SHALL BE ANCHORED IN PLACE WITH WOODEN OR METAL FENCE POSTS SPACED AT 3 FT. O.C.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE PROMPT (WHEN NEEDED).
5. SILT FENCING SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS.
6. SILT FENCING TO BE PLACED DOWN-GRADIENT OF HAY BALES.




NOTES. TYPICAL SHURB PLANTING, INDIVIDUAL PLANTING HOLE.

1. DIG PLANTING HOLE AT LEAST 2X THE WIDTH OF THE ROOT BALL OR CONTAINER.
2. SCARIFY SUBGRADE AND SIDES OF PLANTING HOLE WHEN PLANTING IN CLAY SOIL.
3. SET THE TOP OF THE ROOT BALL LEVEL WITH THE SOIL SURFACE, OR 1-2" ABOVE IF THE SOIL IS PRONE TO SETTLING.
4. IF CONTAINER GROWN PLANT, GENTLY SLIDE PLANT OUT OF CONTAINER. DISTURB THE ROOTS.
5. IF B&B PLANT, REMOVE BURLAP FROM AT LEAST THE TOP 12 INCHES OF THE ROOTBALL, WITHOUT DISTURBING THE ROOTBALL. REMOVE ALL CORD FROM THE TRUNK. REMOVE BURLAP AND WIRE BASKET (IF PRESENT) FROM THE ROOT BALL.
6. BACK FILL THE PLANTING HOLE WITH EXCAVATED NATIVE SOIL, BROKEN UP OR TILLED. WATER TO REMOVE AIR POCKETS. DO NOT ADD AMENDMENTS.
7. PLACE PINE STRAW OR BARK MULCH ON THE SURFACE TO A (SETTLED) DEPTH OF 1 TO 3 INCHES.



NOTES:

1. ALL PLANT MATERIALS SHALL CONFORM TO THE MINIMUM GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICA ASSOCIATION OF NURSERYMEN, INC.
2. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, FREE OF DISEASE, INSECTS, AND PESTS.
3. KEEP ROOTBALLS INTACT PRIOR TO AND DURING PLANTING OPERATIONS. PLANTS WITH BROKEN OR DAMAGED ROOT BALLS SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE SITE. KEEP ROOTBALLS DAMP AND PROTECTED FROM DAMAGE DUE TO SUN AND WIND.
4. ALL PLANTED AREAS WITHIN OR OUTSIDE THE LIMIT OF WORK WHICH ARE DISTURBED DURING CONSTRUCTION (INCLUDING PLANTING OPERATIONS) SHALL BE RETURNED TO ORIGINAL GRADE, LOAMED, AND SEEDED OR MULCHED (AS APPROPRIATE) BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AND SEEDED WITH NEW ENGLAND WETMIX (BY NEW ENGLAND WETLANDS PLANTS, INC.) OR EQUIVALENT: RECOMMEND 1 LB./2500 SF APPLICATION RATE. CONTAINS A WIDE VARIETY OF NATIVE SEEDS SUITABLE FOR WETLAND RESTORATION SITES THAT ARE NOT PERMANENTLY FLOODED.

										PROJECT									
										NYE LUBRICATING BUILDING 1 RE-PAVING PROJECT									
										OWNER									
										NYE LUBRICANTS, INC. 12 HOWLAND RD. FAIRHAVEN, MA									
1	NO.	DATE	8/26/19	PEER REVIEW EDIT	JER														
PROJECT NO.				6893-001		DESCRIPTION		BY											
CADD FILE																			
DESIGNED BY				JBM															
DRAWN BY				JER															
CHECKED BY				JBM															
DATE				8/8/19															
DRAWING SCALE				AS NOTED															
GRAPHIC SCALE																			
SCALE: 1"=20'																			
SHEET TITLE																			
EROSION CONTROLS AND DETAILS																			
DRAWING NO.																			
D-1																			
3	OF	3																	

Stormwater Report

Building 1 Parking Lot Re-paving Project

**12 Howland Road
Fairhaven, MA**

Prepared for:
Nye Lubricants, Inc.
12 Howland Road
Fairhaven, MA 02719

Prepared by:
Apex Companies, LLC.
1213 Purchase Street, Room 231
New Bedford, MA 02740
www.apexcoss.com



Project Summary

Nye Lubricants, Inc (Nye) is filing this Notice of Intent (NOI) for the repaving of the parking area south and southwest of Building 1 at the site described by the Fairhaven Assessor's Department as Map 19 Lot 100, also known as 12 Howland Road. This Stormwater Report is being filed in support of the NOI application Nye has made for this project. Nye has retained Reis Asphalt & Landscaping, Inc. as the third-party contractor to remove and replace aggregated material (asphalt) within the project locus at roughly 25,362 sq. ft.

The proposed stormwater control system is designed with multiple stormwater treatment and conveyance Best Management Practices (BMPs) that will capture and treat runoff from the developed site as well as protect the existing on-site wetland resource areas including the Acushnet River Riverfront area. The stormwater management system has been designed in compliance with the Massachusetts Stormwater Management Policy.

The hydrologic conditions were compared for the existing conditions and the proposed conditions using HydroCAD v. 10.0. The existing conditions were divided into two subcatchments, which correspond to a single discharge point. The proposed conditions maintained the two subcatchments with the same two discharge points for analysis to appropriately model the stormwater BMPs with their associated tributary areas. Both the Existing Watershed and Proposed Watershed plans are included with this report. The existing land-cover is pavement, in fair condition (CN= 98) with a small area vegetative cover, in good condition (CN= 61). The proposed land cover will remain mostly pavement in good condition, but with a reduction in the total impervious surface and an increase in the permeable surface, covered with vegetation (CN = 61)).

Stormwater Control and Peak Flow Attenuation

No new untreated discharges will be created as a result of the proposed work and the post development peak discharges will be reduced for all storm events.

	Peak Flow (cfs)		
	Existing Discharge Point		
Storm Event	2 yr storm	10 yr storm	100 yr storm
Existing	2.20	3.30	5.11
Proposed	1.58	2.85	4.45
Reduction	0.62	0.45	0.66

	Runoff Volume (acre-ft)		
	Proposed Discharge Point		
Storm Events	2 yr storm	10 yr storm	100 yr storm

Existing	0.135	0.212	0.335
Proposed	0.041	0.093	0.191
Reduction	0.094	.119	0.144

Soil Information

Soils at the project site area are classified as Urban Soils. The soils are classified by the Natural Resources Conservation Service, and the information was gathered through their WebSoil Survey. For the sake of our modeling and design efforts, based on the hand auger explorations performed below the initial loam horizon, the soils were consistent as mapped, urban fill materials, relatively granular and somewhat dense. In order to proceed with the design, we have characterized the soils as a loam, which is a hydrologic soil group B, which a hydraulic conductivity rating of 0.52 in/hr. Loamy soils per the USDA are medium textured soils, with generally greater than 28% silt but less than 50% silt and predominantly sandy with less than 52% sand. This is consistent with the native soils from the glacial outwash that has occurred along the Acushnet River that we have experienced throughout our work in the harbor.

Hand auger soil explorations were conducted by Apex Companies, LLC in August 2019. Due to the limited nature of the hand augering, we will recommend soils be verified on site during the implementation process and any significant variations in the soils be immediately brought to the attention of the engineer.

Long Term Pollution Prevention Plan

The proposed BMP improvements will be effective in source control and pollution prevention. TSS removal rates will be met and even exceeded areas through the use of LID techniques, vegetated filter strips, raingardens and stormwater recharge. As shown on the attached TSS Removal Rate Sheet, we will reduce TSS by 91%. The pretreatment for the infiltration practices is vegetated filter strip, which will slow the velocity of the water and help settle out large sediment. Attached with this report is a Long-Term Pollution Prevention Plan which references and builds off the Operation and Maintenance Plan prepared for the stormwater BMPs designed for this project as well Spill Prevention Control and Countermeasure Plan, prepared by Woodard and Curran, dated December 4, 2017.

Construction Period Pollution Prevention Plan

Nye Lubricants will be responsible for managing its third-party contractors to comply with the program set forth below. Patrick Norton, as Regulatory Affairs Specialist, will be responsible for ensuring compliance. Mr. Norton or the contractor's designated foreman shall be responsible for verifying daily that erosion and sedimentation controls are properly in place prior to the start of work for the day. The O&M activity log, which is provided in the Operation and Maintenance Plan, shall be used and completed daily with those erosion inspections.

Only the work shown on the accompanying contract plan shall be performed and erosion controls placed in the locations shown on those plans and in the manner presented shall remain functional and effective throughout the duration of the work.

Due to the limited nature of the proposed work, there are no temporary stormwater BMPs proposed for the construction process, however the permanent BMPs will not be installed until after the site has been stabilized (i.e. re-paved) to prevent the accumulation of sediment and debris from the construction process.

In order to maintain the integrity of the water quality in the area and to prevent illicit discharges from entering wetland resource areas surrounding the project site, the following construction sequencing shall be followed:

1. Mobilize to site and develop a staging area within uplands, away from any resource areas.
2. Place environmental protection devices inclusive of siltation fencing and straw bales, as indicated on the project drawings.
3. Clear within work limits only the necessary vegetation.
4. Existing Asphalt has already been ground, but verify subgrade is properly prepared to receive paving course
5. Place subgrade material at elevations specified.
6. Excavate top and subsoil within work area to grade.
7. Place binder course on proposed paved area
8. Place wearing (top) course on proposed paved area
9. Excavate swale and raingarden footprints.
10. Place bioretention soil mix as specified.
11. Loam and seed in swale and filter strip as specified.
12. Place plantings in raingardens as specified.
13. Monitor settlement during construction process.
14. Remove silt and collected debris from environmental protection devices.
15. Verify site has been stabilized, remove erosion controls
16. Demobilize from site.

Stormwater Management Policy Compliance

The proposed stormwater management systems for the Building 1 Re-paving project have been designed in compliance with the Stormwater Management Standards of the Massachusetts DEP. The proposed stormwater BMPs have been designed to protect surface and ground water resources and wetlands. The following describes compliance with each of the Standards of the Massachusetts Stormwater Management Policy handbooks, Volumes 1, 2, and 3 (2008).

As listed and required under the Massachusetts DEP Stormwater Policy Manual, there are ten (10) Stormwater Management Standards required for projects falling under its jurisdiction. The ten standards and how compliance with each will be achieved are discussed below:

1. *No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.* The project is a redevelopment and will not create any new stormwater conveyances. All runoff from the re-paving areas in this project area shall have been effectively treated through a treatment train of structural BMPs prior to any discharge to the resource areas.

2. *Stormwater Management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR 10.04.* For all the design storms modeled, the 2, 10- and 100-year storm events, the peak flows and volumes for each discharge design point are less than or equal to the pre-development peak rates as required by Standard 2. The 2, 10 and 100 year storm events summary flows are shown in the table below.

	Peak Flow (cfs)		
	Existing Discharge Point		
Storm Event	2 yr storm	10 yr storm	100 yr storm
Existing	2.20	3.30	5.11
Proposed	1.58	2.85	4.45
Reduction	0.62	0.45	0.66

3. *Loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, storm water best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from the pre-development conditions based on the soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.*

The Building 1 Re-paving project utilizes vegetated filter strips, swales, and raingardens for recharge of the runoff generated by the paved driveway area. The amount of stormwater recharged through the proposed designs will exceed the required recharge volume as determined by the Massachusetts Stormwater Handbook, employed the "Simple Dynamic" method (as described in Volume 3 of the 2008 Massachusetts Stormwater Management Handbook) to size the infiltration BMPs. The HydroCAD computer model created for this project based on TR-20 was used for the analysis. The simple dynamic analysis accounts for the fact that stormwater is exfiltrating from the BMP at the same time that the voids (storage area) are filling. The required recharge volume and drawdown time for all BMPs are shown in the attached Tables 1, 2, and 3. All calculations were performed as shown in Volume 3 of the Massachusetts Stormwater Management Policy.

4. *Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:*

- a. *Suitable practices for source control and pollution prevention are identified in a long-term pollution prevention plan, and thereafter are implemented and maintained;*

- b. Structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and*
- c. Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.*

Pretreatment is provided for all proposed stormwater BMPs building. The pretreatment BMP used for the is a vegetated filter strip, which is a minimum of 8 feet wide, as required in Volume 2 of the 2008 Massachusetts Stormwater Management Handbook. The water quality treatment volume for all BMPs is shown in the attached Tables 4 and 5. All calculations were performed as shown in Volume 3 of the Massachusetts Stormwater Management Policy. The 80% required removal rate for total suspended solids (TSS) will be achieved with the implementation of vegetated filter strips, swales and bioretention rain gardens. The cumulative total of the structural BMPs exceed the target 80% removal. Detailed TSS removal calculations are attached.

An Operation and Maintenance Plan has been prepared as a separate document and is intended to serve as a long-term pollution prevention plan for the Stormwater BMP Improvement Project development. This long-term O&M Plan has been developed to ensure that the proposed stormwater management systems are properly maintained and function as designed.

5. For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater Discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M. GL c. 21, §§26-53 and the regulations promulgated thereunder at 314 CMR 3. 00, 314 CMR4.00, and 314 CMR 5.00.

The land area involved in this project are not designated as Land Uses with Higher Potential Pollutant Loads. The proposed project represents less than a ½ acre of impermeable surface, and while the area was historically used for unloading materials used in Nye's processes, Nye has committed to moving that operation to another side of the building away from the resource area. Furthermore, that unloading process is governed by their Spill Control and Countermeasure Plan that they have in place.

6. Stormwater discharges with the Zone I or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical areas, require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to Said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2) (a) 1 or (b) to an Outstanding Resource Water or Special

Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

The discharges for this project are not located within a Zone II or an Internet Wellhead Protection Area, or discharge to a critical area. The project does propose a treatment train of structural practices to reduce runoff impacts to the wetland resource areas.

7. A redevelopment project is required to meet the following Storm water Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing Storm water discharges shall comply with Standards 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Storm water Management Standards and improve existing conditions.

This Project is a re-development project, involving the re-paving of an existing paved area. It has been designed to meet all the applicable Stormwater Management Standards and is an improvement upon existing conditions by reducing the amount of impermeable cover and providing structural BMPs.

8. A plan to control construction-related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

In order to maintain the integrity of the water quality in the area and to prevent illicit discharges from entering into wetland resource areas surrounding the project site, a construction sequencing plan and construction methodology plans have been developed and are included with this filing.

9. A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

A site-specific Operation and Maintenance Manual (O&M Manual) is included as part of this report. The draft manual details procedures for maintain the Stormwater BMPs as well as schedules and troubleshooting issues. The O&M manual defines the parties responsible the execution of the procedures detailed within it.

10. All illicit discharges to the stormwater management system are prohibited.

There are no known or suspected illicit discharge within the immediate project site area. No illicit discharges shall be made, and a compliance statement is provided with the Stormwater Report as required by the MA DEP Stormwater Management Policy Manual.

Operation & Maintenance Plan for
Building 1 Parking Area Stormwater BMPs
Nye Lubricants, Inc.
12 Howland Road
Fairhaven, MA 02719

Prepared for:
Nye Lubricants, Inc.
12 Howland Road
Fairhaven, MA 02719

Prepared by:



Apex Companies, LLC
1213 Purchase Street, Room 231
New Bedford, MA 02740

Table of Contents

1.0 Introduction.....	2
2.0 Purpose	2
3.0 Descriptions and Locations	2
3.1 Description	2
3.1.1 RainGardens.....	2
3.1.2 Vegetated Filter Strip	3
3.2 Location.....	3
4.0 Inspection Frequency, Safety, and Schedule	3
4.1 Inspection Frequency.....	3
4.2 Inspection Safety.....	3
4.3 Maintenance	4
5.0 Implementation and Maintenance Procedures	4
5.1 RainGardens.....	4
5.1.1 Checklist	5
5.2 Vegetated Filter Strips	5
5.2.1 Checklist	6
6.0 Inspections and Record Keeping	7

Appendices

Appendix A	Inspection and Maintenance Forms
Appendix B	As-Built Plans (to be included after Construction)

1.0 Introduction

Nye Lubricants, Inc (Nye) is the repaving of the parking area south and southwest of Building 1 at the site described by the Fairhaven Assessor's Department as Map 19 Lot 100, also known as 12 Howland Road. As part of the balance between development and environmental protection, the project proposes various Stormwater Best Management Practices (BMPs) to capture and treat runoff from the developed area and maintain the ecological integrity of the wetland resource areas.

2.0 Purpose

This Operation and Maintenance Plan (O&M Plan) provides a mechanism for the consistent inspection and maintenance of the of stormwater drainage structures installed during the Project. Included in this O&M Plan is a description of the stormwater structure, the location of each structure, an inspection schedule for each stormwater structure, and a standard form to be utilized to document the inspection and maintenance of each stormwater structure. Nye will be responsible for the Operation and Maintenance of the proposed Stormwater BMPs and the vegetative plantings. We estimated that the annual expense will be \$750 for all the tasks described herein.

3.0 Descriptions and Locations

3.1 Description

The proposed activities will include a reduction of impervious area, a vegetated filter strip and two raingardens. For more specific location information and design specifications, please refer to the project plans accompanying this O&M Plan.

3.1.1 RainGardens

RainGardens function as soil and plant-based filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes. The RainGardens used in this Project utilize a bioretention system consisting of a soil bed planted with native vegetation all located above an underdrain layer. Stormwater runoff entering the RainGarden system is filtered through the hardwood bark mulch layer and then the bioretention soil mixture before being collected and then conveyed downstream by the underdrain system. Runoff storage depths above the planting bed surface are less than 6 inches. Bioretention systems are used to remove a wide range of pollutants, such as suspended solids, nutrients, metals, hydrocarbons, and bacteria from stormwater runoff. They can also reduce the peak runoff rates and increase stormwater infiltration when designed as a multi-stage, multi-function facility.¹

¹ New Jersey Stormwater Best Management Practices Manual, February 2004, Chapter 9.1, "Standard for Bioretention Systems."

3.1.2 Vegetated Filter Strip

Vegetated Filter strips, often referred to as grass buffer strips, are uniformly graded vegetated surfaces that receive sheet flow runoff from an adjacent impervious area. These filters are intended slow runoff, filter some of the sediment and promote natural infiltration. They are typically designed as a pre-treatment stormwater BMP and implemented as a first line of defense in a stormwater treatment train.

3.1.3 Street Sweeping

Street sweeping activities are performed to address debris that collects in parking and paved areas. At this site that could include sand, debris, and seashells. This is a non-structural best management practice that is used to removed items that collect on the impervious area that could contain nutrients or contaminants that would be deleterious to the surrounding area if they runoff from the impervious area.

3.2 Location

The site is located at 12 Howland Road in Fairhaven, with the stormwater BMPs located in the southwestern corner of the parking area for Building 1. Locations are also shown in the plans provided in Appendix B of this Manual.

4.0 Inspection Frequency, Safety, and Schedule

4.1 Inspection Frequency

A complete and thorough inspection of the system using the inspection and maintenance forms provided in Appendix A of this Manual shall be performed on a semi-annual basis (once in the spring and once during the fall) and after major rain events or nor'easter storm events (approximately 2.0 inches of rain). See Section 5.0 Implementation and Maintenance Procedures for a description of the inspection activities.

4.2 Inspection Safety

The inspector performing the inspections on the structures and vegetation must have the proper safety equipment (heavy duty gloves, steel-toed boots, hard hat, and first aid kits, etc.) and training before conducting any inspections. If the drainage structures reveal any safety problems the site activities may need to be modified to reduce or eliminate the safety risk. The following is a list of safety precautions the inspector should be aware of when conducting the drainage structure inspections.

- Wear gloves for any inspections. Wearing gloves not only reduces the risk of getting cuts and abrasions, but also reduces the exposure of pollutants to the skin.
- Lift boulders or cobbles carefully. These items can be very heavy and if wet, can be slippery. Also, learn the correct way to lift heavy items to avoid back injury.
- Check the water depth of the system before you take a step in the water. The water may be deeper than you think or there may be steep slopes below the water line.
- Be aware that nails, broken glass, or other sharp debris may be present and can cause injury. Wearing the proper safety clothing will reduce the safety risk associated with these objects.

- Because the site contains vegetation, ticks, mosquitos and other pests can represents a risk. Products containing permethrin kill ticks. Permethrin can be used to treat boots, clothing and camping gear and remain protective through several washings. Use a repellent with DEET on skin. Repellents containing 20% or more DEET (N, N-diethyl-m-toluamide) can protect up to several hours. Always follow product instructions. Long sleeves and long pants are recommended to be worn to minimize exposed skin areas. After the site visit, check clothing and body for ticks, and remove any found as soon as possible, using tweezers and pulling the tick straight out.

4.3 Maintenance

All maintenance work must be done in accordance with OSHA regulations. Maintenance personnel will have the proper safety equipment (heavy duty gloves, steel-toed boots, first aid kits, etc.) and training before performing any maintenance on the Site. The following is a list of safety precautions maintenance personnel should be aware of when they perform maintenance on the drainage structures.

- Operate equipment safely and in accordance with the manufacturer's specifications. Equipment operators must always remain aware of site personnel to avoid causing injury to others.
- Contact Dig Safe System Inc. at 1-888-DIG-SAFE seventy-two (72) hours before excavating a site. Underground utility wires and pipes may be present. Cover excavated areas that cannot be filled in at the end of the day. Also, be aware of overhead electrical wires that could come in contact with maintenance equipment.
- Identify where you will dispose removed sediment or wastes prior to cleaning the drainage structures. Use shovels, trowels or a high-suction vacuum to remove wastes. Do not clean sediment or waste with bare hands. The sediment or waste may be hazardous. Place the sediment or waste in an area where it cannot be washed into a storm drain or water body.
- Wear gloves when performing maintenance work. Wearing gloves not only reduces the risk of getting cuts and abrasions, but also reduces the exposure of pollutants to the skin.

5.0 Implementation and Maintenance Procedures

Nye is responsible for inspecting and maintaining the parking area and the stormwater BMPs being implemented as part of this project. The following list of inspections and maintenance will be performed on the required schedule. All sediment, debris, and hydrocarbons contaminated material that are removed during the maintenance of the stormwater system components should be properly handled and disposed.

5.1 RainGardens

The primary maintenance requirement for RainGardens (Bioretention Systems) is that of inspection, and repair or replacement of the RainGarden's individual components. Typically, these activities consist of nothing more than that which is required of any landscaped area. The primary maintenance function is the removal of accumulated sediment and debris. Other potential tasks include the replacement of dead

vegetation, soil pH regulation, erosion repair at inflow points, mulch replenishment and repair of inflow structures.

5.1.1 Checklist

Table 5-1 RainGarden Maintenance Schedule	
Soil	
<ul style="list-style-type: none"> • Visually inspect and repair in the Spring and Fall. In the event of erosion, stabilize erosion path with ¾ inch crushed stone • Remove accumulated sediment, debris, and litter • Check the soil pH every other Spring. Apply appropriate product to adjust pH, as required. The recommended soil pH levels should range from between 5.0 and 6.0 for the raingardens. 	
Mulch	
<ul style="list-style-type: none"> • Re-mulch any void areas by hand, as needed. • Every Spring add a fresh mulch layer. • Every 3rd year, remove and replace mulch. 	
Plants	
<ul style="list-style-type: none"> • Once a month during the growing season, visually inspect vegetation for disease and pest problems. • Every Spring and Fall, remove and replace all dead and diseased vegetation. • Weed, as needed. • Prune excess growth and dead branches every Spring. • During periods of drought, inspect for signs of stress (wilting, yellow, spotted or brown leaves, loss of leaves, etc.). Water in the early morning as needed. 	
General	
<ul style="list-style-type: none"> • Annually, after a heavy rainstorm, inspect RainGardens for signs of ponding and to make sure water dissipates after a period of 4 to 6 hours. • Monthly, inspect and remove accumulated trash and debris from Raingardens. 	

5.2 Vegetated Filter Strips

Inspections will be performed once during the late spring and once during the fall, however there shall be additional inspections per year for the first growing season following construction. During the initial post-construction period, special attention will be paid to the grass plantings to ensure they are establishing as intended. Filter strips should be inspected for health of vegetation, soil stability, erosion and sedimentation. Regular maintenance tasks include mowing, watering, weeding, pest control and sediment removal.

5.2.1 Checklist

Table 5-2 Vegetated Filter Strip Maintenance Schedule	
Soil	
<ul style="list-style-type: none"> • Visually inspect and repair in the Spring and Fall. In the event of erosion, stabilize erosion path by reestablishing soil, grass, and mulch. • Every Spring and Fall remove accumulated sediments and debris. • Check the soil pH every other Spring. Apply appropriate product to adjust pH, as required. The recommended soil pH levels should range between 5.0 and 6.0 for the water quality swales. 	
Grass	
<ul style="list-style-type: none"> • Once a month during the growing season, visually inspect vegetation for disease and pest problems. • Every Spring and Fall, remove and replace all dead and diseased vegetation. • Weed, as needed. • Reseed if needed, to maintain effectiveness of vegetation for pollutant and sediment removal. • Mow as necessary. Never cut shorter than 4 inches. • During periods of drought, inspect for signs of stress (wilting, yellow, spotted or brown leaves, loss of leaves, etc.). Water in the early morning as needed. 	
General	
<ul style="list-style-type: none"> • In the event of heavy sediment accumulation, the vegetated water quality swale may need to be reconstructed. 	

5.3 Street Sweeping

Nye has an on-site street sweeper which is used for the seashells continually dropped on the parking areas by birds in the area. The street sweeping will also be used to remove sediment and debris that accumulates in the parking structure. The street sweeping proceeds are collected and properly disposed.

5.3.1 Checklist

Table 5-2 Street Sweeping Maintenance Schedule	
Soil	
<ul style="list-style-type: none"> • Visually inspect in the Spring and Fall, particularly in advance of snow storms, and following a heavy snow event and the associated melting. • Every Spring and Fall remove accumulated sediments and debris. • Seashells shall be removed on an as-needed basis. 	
General	
<ul style="list-style-type: none"> • In the event of heavy sediment accumulation, street sweeping may need to occur more frequently. 	

6.0 Inspections and Record Keeping


An "Inspection and Maintenance Form" shall be filled out each time inspectional or maintenance work is performed.

A binder will be kept at the property owner's offices that contains all the completed forms and/or photos and related material. The inspection reports in the binder will be maintained for a minimum of three years and will include photo documentation of the inspections.

A review of all Operation & Maintenance actions will take place annually to ensure that the Site is being taken care of in the manner illustrated in this Operation & Maintenance Plan.

The Nye personnel responsible for implementing this Operations and Maintenance Plan are:

Patrick F. Norton
Regulatory Affairs Specialist
pnorton@nyelubricants.com
508-996-6721



Martin J. Weinstein
Director of Quality, Engineering, EHS
mweinstein@nyelubricants.com
508-996-6721

O&M Activity Log – Building 1 Paving Stormwater BMPs, 12 Howland Rd, Fairhaven, MA

Activity No.	Description of the Activity	Dates of the Activity	Signature of Person Performing Activity	Activity Performed by [Name(s) and Title]
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

BIORETENTION MAINTENANCE INSPECTION FORM

Bioretention Cell: _____ Date: _____ Time: _____
Weather: _____ Inspector(s): _____
Date of last rainfall: _____ Amount: _____ Inches
Street Location: _____

Maintenance Issues:

Comments:

Scoring Breakdown:

N/A = Not Applicable

1 = Monitor (potential for future problem exists)

*Use open space in each section to further explain scoring as needed

N/I = Not Investigated

2 = Routine maintenance required

0 = Not a problem

3 = Immediate repair necessary

1. Outlet, Underdrain, & Cleanout Condition (Inspect underdrain outlet inside catch basin)

Broken (replacement required?)	N/A	N/I	0	1	2	3
Clogging (flushing required)	N/A	N/I	0	1	2	3
Submerged Outlet Pipe (CB cleaning required)	N/A	N/I	0	1	2	3

2. Bioretention Soil Mix Condition

Sediment/debris accumulation > 1"	No	Yes				
Ponding more than 24 hours after rain	No	Yes				
Soil pH						
Sediment Accumulation in soil bed	N/A	N/I	0	1	2	3
Oil/chemical accumulation in soil bed	N/A	N/I	0	1	2	3
Other:	N/A	N/I	0	1	2	3

3. Plant Condition

Disease/Pest Problems	N/A	N/I	0	1	2	3
Weeds	N/A	N/I	0	1	2	3
Excess growth and/or dead branches	N/A	N/I	0	1	2	3
Signs of drought	N/A	N/I	0	1	2	3

4. Mulch Condition

Overall Condition	N/A	N/I	0	1	2	3
-------------------	-----	-----	---	---	---	---

5. Erosion

Soil and/or debris erosion	N/A	N/I	0	1	2	3
----------------------------	-----	-----	---	---	---	---

Overall Condition of Bioretention Cell

Inspector's Summary:

VEGETATED FILTER STRIP MAINTENANCE INSPECTION FORM

Facility Number: _____ Date: _____ Time: _____
 Weather: _____ Inspector(s): _____
 Date of last rainfall: _____ Amount: _____ Inches
 Street Location: _____ GPS Coordinates: _____

Scoring Breakdown: N/A = Not Applicable N/I = Not Investigated 0 = Not a problem	1 = Monitor (potential for future problem exists) 2 = Routine maintenance required 3 = Immediate repair necessary	*Use open space in each section to further explain scoring as needed
---	--	---

1. Transition from Pavement to Filter Strip							
Undermined/eroded	N/A	N/I	0	1	2	3	
Debris/trash accumulations	N/A	N/I	0	1	2	3	
Sediment accumulation	N/A	N/I	0	1	2	3	
2. Grassed Filter							
Disease/Pest problems	N/A	N/I	0	1	2	3	
Sediment/debris accumulation	N/A	N/I	0	1	2	3	
Weeds	N/A	N/I	0	1	2	3	
Signs of drought	N/A	N/I	0	1	2	3	
Consistent mowing (grass kept at minimum height of 4" or greater)	N/A	N/I	0	1	2	3	
Other:	N/A	N/I	0	1	2	3	
3. Erosion							
Soil erosion	N/A	N/I	0	1	2	3	
Foreign Objects causing erosion	N/A	N/I	0	1	2	3	
4. Soil							
pH level _____							
5. Miscellaneous							
Other:	N/A	N/I	0	1	2	3	

Overall Condition of Facility	
Total number of concerns receiving a:	(1) _____ - Needs Monitoring (2) _____ - Routine Repair (3) _____ - Immediate Repair Needed
Inspector's Summary:	

Long Term Pollution Prevention Plan

In support of its efforts to re-pave the area in front of Building 1, Nye Lubricants, Inc (Nye) is also installing a series of stormwater Best Management Practices (BMPs) to provide water quality treatment from the runoff from parking area as well as promote recharge and protect the neighboring wetland resource areas. While Nye will be implementing provisions of their Operations and Maintenance plan for those stormwater BMPs, they are also providing this Long-Term Pollution Prevention Plan to enhance and protect water quality from their operations on site. Note: the Nye property is much larger than the project area in front of Building 1, so this plan will be focused on the project area mostly but may reference activities and locations outside of the project area but still part of the Nye campus.

Contacts

The Nye personnel responsible for implementing this Long-Term Pollution Prevention Plan are:

Patrick F. Norton
Regulatory Affairs Specialist
pnorton@nyelubricants.com
508-996-6721

Martin J. Weinstein
Director of Quality, Engineering, EHS
mweinstein@nyelubricants.com
508-996-6721

Routine Inspections

Routine inspections for the stormwater BMPs will occur as dictated in the Operations and Maintenance plan for the Building 1 Parking Area Stormwater BMPs. Routine inspections for material storage and environmental controls are covered by the Spill Prevention Control and Countermeasure Plan, prepared by Woodard and Curran, dated December 4, 2017.

Vehicle Washing Controls

There is no on-site washing of vehicles, and any maintenance done to vehicles is performed within Building 3.

Spill Prevention

Nye's spill prevention procedures and activities are described and covered in its Spill Prevention Control and Countermeasure Plan, prepared by Woodard and Curran, dated December 4, 2017.

Material Storage

Nye's management and control of storage of hazardous materials on site are described and covered in its Spill Prevention Control and Countermeasure Plan, prepared by Woodard and Curran, dated December 4, 2017.

Maintenance of Landscaped Areas

Nye employs a maintenance staff that handles day to day maintenance of the grounds. In addition, Nye has a Landscaper under contract, who visits the site once or twice per week as needed to maintain the grounds. Nye is committed to having a cleaning landscaped grounds.

Fertilizers, Herbicides and Pesticides

The use of fertilizers, herbicides and pesticides is on a limited basis and performed by its landscaping subcontractor. Application of these materials is not done within 48 of a forecasted storm event.

Pet waste management

There are typically no pets on the grounds at Nye, however if a passerby walking a pet leaves waste unattended, one of Nye's maintenance staff will remove and properly dispose of the waste.

Septic System Management

The Nye facility on Howland Road is serviced the municipal Publicly Owned Treatment Works in the Town of Fairhaven and therefor there is no Septic System management required.

Solid Waste Management

The primary solid waste management is performed behind Building 3, where their trash dumpsters as well as recycling facilities. There is a trash compactor on southern side of Building 1 in the project, on a concrete pad. Nye takes care to maintain and keep clean the areas surrounding these items.

Snow Disposal and Plowing Plans

During winter storm events, snow is typically removed by plowing from the parking areas and stockpiled on site. No stockpile of snow will be allowed on top of the stormwater BMPs being implemented as part of this project.

Salt

Pet friendly salt is used for the paved areas where walking and parking activities occur to ensure safe conditions for workers and visitors at Nye.

Street Sweeping

Nye has an on-site street sweeper which is used for the seashells continually dropped on the parking areas by birds in the area. The street sweeping proceeds are collected and properly disposed.

Illicit Discharges

Nye has already implemented a program to inspect and remove illicit discharges and provided an Illicit Discharge statement with the Notice of Intent filing for the Building 1 Re-paving project. Nye will continue to monitor for and prohibit illicit discharges for its facility.

Training for Staff or Personnel

Nye will continue to oversee and implement this plan, which will include training and educate of maintenance staff and subcontractors, such as landscapers working on the grounds. Training is also included in its Spill Prevention Control and Countermeasure Plan, prepared by Woodard and Curran, dated December 4, 2017.



From: Martin J. Weinstein
Date: August 26, 2019
Subject: Statement on Illicit Discharges

To whom it may concern,

There are no known or suspected illicit discharge within the project site area. All undocumented pipes have been closed off and no longer functional. No illicit discharges shall be made during the construction process and this compliance statement is provided as required by the MA DEP Stormwater Management Policy Manual. In addition, Nye will continue to prohibit and monitor for illicit discharges from the Site as part of its Long Term Pollution Prevention.

Very Respectfully,

Martin J. Weinstein
Director of Quality, Engineering, and EHS
Phone: (508) 996-6721 (ext.627)
Email: mweinstein@nyelubricants.com