

TOWN OF SCITUATE

Planning Board



600 Chief Justice Cushing Hwy
Scituate, Massachusetts 02066
Phone: 781-545-8730
FAX: 781-545-8704

**Common Driveway Site Plan Administrative Review and Stormwater Permit
93 Elm Street Lot 6
To remain as 93 Elm Street
Decision: APPROVED with Conditions**

Owner: Cristina & Robert Counihan
Applicant: Cristina & Robert Counihan
Date: August 11, 2022
Location: 93 Elm Street Lot 6
Assessor's Map: #44-2-17

Plans: Common Driveway Plan, 93 Elm Street (Lots 5 & 6) in Scituate, MA dated May 11 with revisions through July 5, 2022 consisting of two sheets prepared by Morse Engineering Co., Inc.; Stormwater Site Plan, Lot 6 Elm Street (portion of Assessor's Parcel 44-2-17), Scituate prepared by Morse Engineering Co., Inc. dated 5/10/2022 with revisions through 7/5/2022; Stormwater Permit Application Proposed New Single Family Dwelling Lot 6 Elm Street, Scituate, MA Assessor's Parcels 42-2-17 dated May 10, 2022 with revisions through June 15, 2022; Letter dated June 22, 2022 with Operation and Maintenance Plans revised 6/22/2022 and illicit discharge statements.

Members Hearing Special Permit Application: Patricia Lambert, Benjamin Bornstein, Stephen Pritchard, Ann Burbine and Robert MacLean.

Background: 93 Elm Street Lots 5 and 6 are located in the Residential R-2 Zoning District and Water Resource Protection District on a lot of 20,001 sq. ft. for Lot 5 and 40,377 sq. ft. for Lot 6 according to the Common Driveway Plan. The Common Driveway is proposed as a 118 feet long driveway serving two lots with adjoining legal frontage to serve two new dwellings as the

RECEIVED
2022 AUG 11 PM 3:00
TOWN OF SCITUATE
TOWN CLERK

existing home at 93 Elm Street will be razed. A Stormwater Permit is required as there is over 15,000 sq. ft. of disturbance of land.

Procedural Summary: This request for a Site Plan Administrative Review and Stormwater permit was filed with the Town Clerk and the Planning Board on May 25, 2022. A Public Meeting before the Planning Board was duly noticed and notices sent to all abutters contiguous to the parcel and across the street. The meeting was opened on June 23, 2022 and continued until July 28, 2022 when it was closed and the Planning Board approved the Site Plan Administrative Review and Stormwater Permit with conditions.

Hearing Summary: The public meeting was opened on June 23, 2022 with the applicants, Mr. and Mrs. Counihan and their engineer, Greg Morse present. Mr. Morse reviewed the property at 93 Elm Street and indicated an ANR was previously endorsed for it. He indicated they want to construct new homes on lots 5 and 6 to be served by a Common Driveway. He said the Common Driveway meets the criteria of the zoning bylaw and has been peer reviewed by Horsley Witten Group with all issues addressed and complied with. Several Board members indicated they did not like the emergency turnaround as it leaves minimal parking for the Lot 5 house. Mr. Morse indicated the Fire Department signed off and that more impervious area would be needed. The Board did not want more impervious area. The lot lines were reviewed and stormwater for the Common Driveway was also reviewed. Mr. Morse indicated Lot 5 will be responsible for stormwater on Lot 5 and Lot 6 will be responsible for stormwater on Lot 6 including the common driveway stormwater facilities. The Board requested the utilities to be underground.

Public Comment: Mark Donovan, Deputy Fire Chief, indicated the 12-foot width beyond the turnaround and the turnaround are approved. Becky Malamut of the Water Resources Commission commented that any building on the lots should comply with the Water Resource Protection District, Section 520 of the Zoning Bylaw requirements. Comments received by the Planning Board's consulting engineer, Horsley Witten Group show that the Common Driveway meets the Scituate Zoning Bylaw and stormwater management system meets the stormwater standards.

Steve Bjorklund commented that this Common Driveway is similar to his project on Bridge Street and Crescent Ave and the drive there was extended so there was no parking in the common driveway easement. He opined the Deputy Chief just wants to make sure an ambulance can turn around.

There was no public comment at the July 28, 2022 meeting.

Findings of Fact: A motion was duly made and seconded to make the following Findings of Fact concerning the common driveway and stormwater permit for 93 Elm Street Lot 6 to be renumbered to 95 Elm Street:

1. Cristina & Robert Counihan (the "Applicant") filed an application for a Site Plan Administrative Review for a Common Driveway less than 500 feet long to serve two lots with adjoining legal frontage and a Stormwater Permit for Lots 5 and 6 Elm Street known as Assessor's Map/Block/Lot 44-2-17 (the "Property") with the Town Clerk on May 25,

2022. The Applicant's deed is recorded with the Plymouth County Registry of Deeds at Book 54250, p. 116.

2. One Common Driveway is proposed (the "Common Driveway"). According to the revised plan dated July 5, 2022 which measures the drive from the property line, the length of it is 118'. It serves 2 lots with adjoining legal frontage.
3. Lot 6 Elm Street contains 40,3771 sq. ft. of land of which 40,070 sq. ft. is upland and 306 sq. ft. is wetland according to the Common Driveway Plan. The lot is in the Residence R-2 Zoning District. A portion of Lot 65 is in the Water Resource Protection District (WRPD) and portions are also in Zone A as well as the 100-foot buffer to bordering vegetated wetlands. The Planning Board endorsed a Form A Plan creating lots 5 and 6 on March 24, 2022.
4. Portions of Lot 6 are in the Water Resource Protection District and Zone A. The zoning bylaw establishes a Water Resource Protection District "to include areas significant to the Town's drinking water supply source which require zoning protection." The Water Resource Protection District requires "all runoff from impervious surfaces to be recharged on the site, diverted toward areas covered with vegetation from surface infiltration to the extent possible or as otherwise directed from the Scituate DPW and Scituate Conservation Commission." 1" of roof runoff is recharged for the entire roof. A pervious paver patio is proposed for the Lot 6 pool area. The first inch of runoff is recharged on Lot 6 for all impervious areas in the Zone A and WRPD according to DEP requirements. The proposed stormwater management practices do not discharge into the Zone A or WRPD.
5. The zoning bylaw prohibits rendering impervious any lot/parcel more than 15% or 2,500 sq. ft., whichever is greater, unless a system of artificial recharge is provided that will not result in degradation of water quality. This is further restricted in the Zone A to no more than 20% with artificial recharge. Lot 6 shows greater than 15% impervious, but below 20% impervious lot area; however, the engineer indicates the water quality will not be degraded as evidenced in a signed and stamped certification by engineer Gregory J. Morse, P.E. dated June 16, 2022.
6. Under the Stormwater bylaw, Section 32050 of the General Bylaws, all development and redevelopment projects that will disturb over 15,000 sq. ft. of land in a Residential zoning district, render 25% or more of an undeveloped lot impervious or increase the impervious area of a developed lot by 25% or more, even if it is conducted over separate phases and/or by separate owners require a Stormwater Permit. The proposed total impervious area of Lot 6 is 7,840 sq. ft. (as indicated in the application). There is no existing impervious area on Lot 6, thus there is an increase of 100%. The proposed area of disturbance for re-grading or clearing is 23,396 sq. ft. according to the application or approximately 58% of the site for Lot 6. Disturbance may be slightly higher according to our peer review engineer. 80% TSS removal has been provided and adequate recharge has been provided for Lot 6.
7. The standards of the Common Driveway indicate that the location and construction of the Common Driveway should minimize soil disturbance, vegetation removal, and drainage impacts, and preserve existing trees over 12" caliper and other natural features of special

significance. The plan shows soil disturbance and vegetation removal for constructing the Common Driveway, its' drainage systems, and two four-bedroom single family dwellings, two septic systems and one pool. Fill is needed to construct the site. Anywhere from 1- 6' of fill will be brought in to construct the two lots as shown. At least two trees over 12" caliper must be removed. The proposed stormwater management system has been reviewed by the Town's consulting engineer, Horsley Witten Group whose comments indicate the stormwater system is adequately addressed. Based on the Findings of Fact presented in numbers 1-7, the Common Driveway meets the standards of Section 720.7A

8. The Common Driveway is 16 feet in width for 99 feet, just passed the separate driveway for Lot 5. The driveway has been reduced to 12 feet up to the Lot 6 house. The Common Driveway Section includes two-foot grass shoulders on each side. The Fire Department has indicated that the width is acceptable to service two lots. The Common Driveway meets the requirements of Section 720.7B.
9. The Common Driveway is accessed from Elm Street, a public road in Scituate. The common driveway is not connected to any other common driveway. The Common Driveway meets the requirements of Section 720.7 C.
10. The Common Driveway shall be located in an easement which allows space for installation of water lines and utilities. The water line and electric line are shown to be in the common driveway easement as well as the gas line for Lot 6. Utilities are shown as underground utilities. Lot 5 utilities are shown coming in from Elm Street. The Common Driveway meets the requirements of Section 720.7 D.
11. The Common Driveway cross section shows a top course of 1 ½" of bituminous concrete top course Type I-1 over a 1 ½ bituminous binder Type I-1 over a 12" compacted sorted gravel sub-base. Frost free subgrade shall be provided between the sub-base and parent material. The Common Driveway meets the requirements of Section 720.7 E.
12. The Common Driveway is approximately 118' long measured from the property line to Sta 1+ 46, a location approximately 30' beyond the driveway for Lot 5. This is less than 1000 feet and meets the requirements of Section 720.7 F.
13. A Stormwater Permit has been filed simultaneously with the Common Driveway Special Permit. The plan indicates there is no increase in rate or volume of stormwater to abutting properties. The site is in the Water Resource Protection District, so the Board must review the adequacy of measures proposed to maximize recharge and surface infiltration of surface runoff from impervious surfaces and the diversion of runoff toward vegetated areas. The Applicant has stamped and certified there will be no increase in rate or volume of runoff to abutting properties for the 1, 2, 10 and 100 year 24-hour storm events. Horsley Witten Group has indicated the stormwater management system will work and runoff draining to abutting properties shall not exceed that which existed prior to construction of the Common Driveway and development on Lot 6. The Common Driveway meets the requirements of Section 720.7 G. As the site is partially in the Water Resource Protection District, infiltration of surface runoff is maximized by underground infiltration chambers for the entire roof area of Lot 6 and the pool.

14. No impervious areas are proposed to be located above the major components of the proposed septic system. The Common Driveway meets the requirements of Section 720.7 H. as no impervious areas are above the proposed septic system. The proposed septic system will meet all of the Board of Health requirements. The standards of review for Section 770.6 D are met.
15. The Common Driveway will be buffered by vegetation from the adjacent single-family house at 91 Elm Street. The Common Driveway Plan shows four red cedar plantings to enhance the existing vegetation to remain along the easterly edge of the common driveway. This should buffer the adjacent single-family home. The Common Driveway meets the requirement of Section 720.7 I. for screening and reducing visual impacts.
16. A turnaround for emergency vehicles shall be provided with a minimum length of 30' and width of 20' in locations approved by the Fire Chief. The Scituate Deputy Fire Chief indicated there was no issue with the turnaround. The Common Driveway meets the requirements of Section 720.7 J.
17. The Common Driveway Plan 93 Elm Street (Lots 5 & 6) in Scituate MA dated July 5, 2022 shows the stopping sight distance requirements at the Common Driveway entrance have been met for the posted speed limit of 25 mph and American Association of State Highway and Transportation Officials (AASHTO) standards are met. The Common Driveway meets the requirements of Section 720.7 K.
18. Lot width for lots served by a Common Driveway may be measured parallel to the Common Driveway, except in the case of fifty-foot frontage lots. The lot width of Lot 6 is specified as 184.6' and is not measured parallel to the common driveway. Lot 6 is a 50-foot frontage lot. The Common Driveway meets the requirements of requirements of Section 720.7 L.
19. Based on these findings and information submitted by the applicant and reviewed by the Board, the Common Driveway meets the requirements of Section 720 of the Scituate Zoning Bylaw.

Based upon the testimony presented at the Public meetings and public hearing, application and plans, minutes of the meetings, documents and comments submitted and the Findings of Fact, I move to approve the Site Plan Administrative Review for a Common Driveway and Stormwater Permit at 93 Elm Street Lot 6 to be renumbered to 93 Elm Street subject to the following conditions:

1. The Common Driveway and Lot 6 shall be constructed according to plans entitled Common Driveway Plan 93 Elm Street (Lots 5 & 6) in Scituate, MA dated July 5, 2022 consisting of 2 sheets prepared for applicant Cristina & Robert Counihan by Morse Engineering Co., Inc.; Stormwater Site Plan Lot 6 Elm Street dated 5/10/22 with revisions through July 5, 2022 by Morse Engineering Co., Inc.; Stormwater Permit Application for proposed New Single Family Dwelling Lot 6 Elm Street dated May 10, 2022 with revisions through June 15, 2022 inclusive of all information including calculations, operation and maintenance information, Cultec stormwater chamber information ; all cover letters with submittals and as further

revised to meet these conditions. A copy of the approved plans and conditions shall be kept on the site at all times during construction.

2. 93 Elm Street Lot 5 & Lot 6 shall access over the Common Driveway as depicted on the plans. No further extensions or attachments of any other roadways or Common Driveways, or other access to any other lots besides those created by the plan shall be permitted without the approval of the Planning Board. The Common Driveway shall remain private in perpetuity and shall never be considered for acceptance as a Town road and that all maintenance and repair of the Common Driveway and drainage facilities shall be the responsibility of the owners of the property. A note shall be placed on the plan and deed for each lot serviced by the Common Driveway stating the above with proof provided to the Planning Board prior to occupancy of the first unit.
3. The Applicant shall mean the current applicant and all its successors in interest. This Common Driveway Special Permit and stormwater permit shall lapse within two years from the date of its issuance, which shall not include such time required to pursue or await the determination of appeal under Mass General Laws Chapter 40A, from the grant thereof unless substantial use or construction has commenced prior to that time in accordance with MGL Chapter 40A, Section 9. The Planning Board may extend such period, for good cause shown, upon receiving a written request from the Applicant prior to the expiration of said period, which shall provide a detailed description of good cause necessitating an extension. The Planning Board office must receive written notification at least one week prior to any change of ownership of the property occurring during construction.
4. Copies of this approval including the plans and Common Driveway Easement shall be provided to subsequent owners who shall be advised of the need for maintenance of the Stormwater System per the Operation and Maintenance Plan and the need to retain the grading on the lot as approved. Prior to the transfer of the property, the owner shall provide to the subsequent owner and the Planning Office an inspection report certified by a professional engineer showing compliance with the Operation and Maintenance Plan. The Planning Office must receive written notification within least one week of any change in ownership of the property during construction.
5. There shall be no further division or subdivision of any lot shown on the plan for purposes of constructing additional units or buildings; there shall be no further expansion of any building or impervious surface on the site; no swimming pools are allowed without further review; no additional dwelling units shall be added; no additional expansion of the limit of work is allowed without further approval of the Scituate Planning Board.
6. The Applicant shall consent to allow members and Town officials from the Planning Board and other persons acting under the Planning Board or its agents, to enter upon any lands and carry out such surveys and inspections as may be deemed necessary, and place and maintain monuments. The Applicant shall cooperate with the Planning Board and Town officials and assist them in their effort to verify that the layout, design and construction work are satisfactory and conform to Town specifications and requirements of the Board.

7. Prior to the pre-construction conference, the applicant must obtain all necessary approvals and meet all requirements from the Board of Health (BOH), Conservation Commission, Fire Department, Building Department and Department of Public Works (DPW), and these shall be deemed conditions of the Planning Board approval. Any state and federal permits must be obtained if required and supplied to the Planning Board Office prior to scheduling the preconstruction conference and are also deemed to be conditions of the Planning Board approval. This includes a NPDES Permit.
8. Construction shall meet all requirements of the Scituate Zoning Bylaw. All contractors are responsible for all conditions shown on the plans and in the written decision.
9. No new in ground irrigation systems shall be allowed to connect to the Town's water distribution system or in any manner use municipal water. In accordance with this policy rule, all irrigation systems installed in Scituate must be supplied by on-site sources at the expense of the property owner. Fines for violating this rule may be levied on the homeowner as well as the system installer.
10. The septic system for Lot 6 shall meet all the requirements of Title V and 310 CMR 22 including a reserve area. Any changes to the plan necessitated by compliance with any BOH provision, requires notification of the Town Planner to determine if the change is significant and requires further input from the Planning Board.
11. No work is allowed beyond the limit of work/tree line without approval of the Planning Board. The entire limit of work is to be staked with erosion control during construction. Fines shall be imposed for disturbance beyond the limit of work and any disturbance beyond the limit of work will be subject to full restoration with a restoration plan to be submitted to and approved by the Planning Board.
12. The Post Construction Operation and Maintenance Plan shall be strictly adhered to so that 80% Total Suspended Solid (TSS) removal is achieved at all times. An annual report is to be provided to the Planning Board yearly by June 30 certifying all required maintenance has been completed per the plan.
13. All utilities shall be placed underground.
14. The recharge chambers shall be installed to have the bottom elevation a minimum of three feet above seasonal high groundwater elevations. Stormwater during construction as well as after construction is not allowed to increase in rate or volume to adjacent properties, the street or offsite.
15. A stabilized construction entrance shall be installed prior to any work on the site and shall be maintained throughout construction to prevent dirt tracking onto the road.
16. No sediment (including silty water) shall be allowed to leave the site during construction.

17. The proposed four (4) red cedar trees to be planted at the beginning of the Common Driveway on the east side shall be 6 to 8 feet in height to provide the intended screening. No substitutions are allowed without written permission of the Town Planner/Planning Board
18. The grassed swale and rain garden on the east side of the Common Driveway may not be altered in any form without additional permission from the Town Planner/Planning Board. The seed mix or plants may not be altered. The Operation and Maintenance Plan is revised to include manufacturer's recommendations for installation and maintenance of the seed mix.
19. The roof top runoff infiltration chambers, pea stone diaphragm and rain garden swale must be retained and maintained as designed as they are components of the stormwater system. Maintenance must be per the approved Post Construction Phase Operation and Maintenance Plan. Proper maintenance of the systems is required beyond the issuance of a Certificate of Completion.
20. Any condition contained herein that varies from the plans supersedes the plans where different.
21. A sign shall be placed at the entrance of the common driveway prior to occupancy clearly depicting the house numbers. House numbers must be clearly visible at all times for emergency response purposes.

Common Driveway Agreement

22. A Common Driveway Agreement shall assign to the owners of 93 Elm Street Lot 5 and 6 the responsibilities and costs of maintenance and repair of the Common Driveway (including snowplowing), as well as the pea stone diaphragm and grassed swale and rain garden, and all other drainage devices, grading and all other improvements for stormwater management in the Common Driveway Easement.

The responsibilities of maintenance in the Common Driveway Agreement shall include all requirements of the Operation & Maintenance Plan, which shall be attached to the Agreement together with other typical maintenance such as snow-plowing and driveway repair.

The agreement shall indicate no parking is allowed in the Common Driveway Easement area and a sign indicating there is no parking must be placed in the easement area.

The Agreement shall require annual certification, to be submitted to the Town Planner by June 30 yearly, by an engineer that the stormwater system is being properly inspected and maintained per the Operation & Maintenance Plan. The Operation & Maintenance Plan shall also be provided to the Planning Board as a stand-alone document.

The standard format from the Planning office shall be used. A final draft of the Agreement shall be provided to the Planning Board within two weeks of the approval of this Common

Driveway Special Permit and Stormwater Permit. The Agreement shall be recorded at the Registry of Deeds with the Site Plan Administrative Review Permit and Stormwater Permit. No preconstruction conference or building permits will be issued without a recorded Common Driveway Agreement.

23. Any plan changes or changes from the proposed materials shall be submitted to the Planning Office to determine if the changes are insignificant or require a permit modification approved by the Board or Town Planner. The stormwater management system including all recharge chambers and components of the system, house, driveways, grading and site amenity locations shall not be changed or expanded without prior written approval of the issuing authority. Expansion includes additional pavement areas. Failure to obtain written approval is a violation of the Town of Scituate Stormwater Bylaw and subject to fines.
24. The use of pesticides and fertilizers shall be strictly prohibited.

Construction

25. A pre-construction conference will be required prior to the start of construction including the Planning Board's consulting engineer, a representative of DPW, the site design engineer, the applicant, the owner, the site contractor and the Town Planner.
26. Prior to scheduling the pre-construction conference, the applicant shall provide to the Town Planner:
 - a. Record copy of the plan, decision and Common Driveway Agreement at the Plymouth County Registry of Deeds and proof of recording;
 - b. An initial deposit with the Town Planner of \$5,000 under G.L. c. 44 s 53G to secure construction review and inspections by the Town of Scituate consulting engineer. The deposit shall be applied toward the cost of construction inspections for the common driveway and stormwater improvements. The specific amount provided to the Planning Department shall be based on the consulting engineer's estimate and shall be subject to amendment from time to time and be supplemented by the Applicant as requested;
 - c. The Applicant shall provide surety for \$10,000 in a form acceptable to the Planning Board prior to beginning construction of the Common Driveway to guarantee completion of the common driveway(s), the drainage system(s), site work, landscaping and clean-up of the site and compliance with the stormwater plan and conditions. After the Town Planner has inspected the site and found grading, loaming and seeding, clean-up of earth materials and construction debris to be complete along with the as-built approved and a Certificate of Completion issued, these funds shall be returned to the Applicant; and
 - d. A schedule of construction activities including approximate dates for installation of erosion control and other site stabilization features for all phases of the project and all applicable items in the Subdivision Rules and Regulations 9.1.3 shall be given to the Town Planner and Applicant shall provide funds to cover the cost of inspections and

attendance at the pre-construction conference by the Town's consulting engineer. Temporary drainage measures shall be provided onsite in the initial phase of construction prior to house construction.

27. The Town Planner is to be notified when construction begins and when construction is completed.
28. Prior to scheduling the preconstruction conference, the Applicant shall provide the Town Planner with permits from the Scituate DPW for street openings and a curb cut. Installation of all water mains and appurtenances shall be performed according to the specifications of the DPW Water Division. Any upgrades, modifications, or connections shall be at the Applicant's expense. The consulting engineer along with the Town shall review the construction activity to assure compliance with the Town's rules and regulations.
29. The property line and boundary of the limit of clearing shall be marked or flagged in the field under the direction of a surveyor and notification given to the Town Planner and Consulting Engineer a minimum of five days prior to the start of construction. The property line and limit of clearing shall remain staked in the field throughout construction.
30. All clearing and earth moving operations shall only occur while erosion and sedimentation control measures, approved by the Town Planner and shown on the plan are in place. Such control measures shall remain in place until the Town Planner determines that the danger of erosion or sedimentation no longer exists.
31. Any proposed changes in grading and drainage from the approved plan must be reviewed by the Town Planner and Town's consulting engineer to determine if they are materially significant. The Applicant's Engineer shall certify that such changes shall result in no impact on the drainage system and shall not increase runoff onto Elm Street, abutting lots, or the rate and volume of the post condition from the predevelopment condition.
32. All proposed lawns and swale areas shall have a minimum of 6" of clean screened loam.
33. There shall be no flow to the subsurface systems until the tributary area is stabilized.
34. No use of hydrants on-site or on adjacent roads off-site is allowed for construction use. A hydrant may be available at the water treatment plant for construction use if water supply allows and permission is obtained from DPW.
35. The inspections for this development will be done in accordance with Section 9.1.3 of the Town of Scituate Subdivision Rules and Regulations as modified in the next sentence. The Town's consulting engineer shall perform these inspections with costs paid by the owner. All required inspections shall take place and be inspected by the consulting engineer including water lines (along with DPW). Timely reports shall be submitted to the Planning Board stating results of all required inspections unless more frequent reports are needed. 48 hours minimum advance notice is required for all inspections. All stormwater recharge

structures require inspection of the bottom of the excavation by the consulting engineer. SWPPP inspections for the NPDES permit by the applicant must be submitted after every ½” storm.

36. Construction of the Common Driveway, site drainage systems, grading and water system shall be supervised by a registered professional engineer approved by the Planning Board who shall certify in writing to the Planning Board at completion that the driveways, grading, drainage structures and utilities were constructed in accordance with the approved plans. This certification shall be accompanied by as-built plans, signed and stamped by a registered professional land surveyor and the supervising professional engineer. No Certificate of Occupancy shall be issued until the Planning Board is satisfied that access, construction of the driveways, grading, installation of drainage structures and stormwater management features, installation of utilities and site stabilization are in full compliance with the approved plans and permit. The stormwater system must be functioning in accordance with design requirements and the as-built certification must include a statement that any variation in grade is immaterial and does not materially alter the performance of the stormwater system. All grading and landscaping must be submitted prior to the final as-built submittal.
37. Grade stakes shall be provided for inspection of the consulting engineer prior to gravel and shall remain for inspection through final paving installation.
38. Prior to the issuance of an occupancy permit, the Board’s Consulting Engineer shall inspect the lots and notify the Board and Building Commissioner that the Common Driveway, grading drainage, site utilities and stabilization conforms to that shown on the Common Driveway and Stormwater Permit Plan.
39. Construction work shall not begin prior to 7 am on weekdays and 8 am on weekends and shall cease no later than 7 pm or sunset whichever is earlier. No construction is permitted on Sundays and federal and legal state holidays. Construction work includes any operation of machinery and idling of vehicles. The name and phone number of a 24-hour contact shall be provided to the Town Planner, Building Department, Police Department and Department of Public Works to be used in the event of an emergency prior to the preconstruction conference.
40. There shall be no parking, loading or unloading of construction equipment, staging or idling of vehicles on Elm Street or adjacent public roads during construction unless a Police Detail is provided if warranted as determined by the Police Department.
41. Stockpiles shall be located as shown on the plans and must be protected with erosion controls including but not limited to silt socks and temporary seeding.
42. Construction activities shall be conducted in a workman like manner at all times. Noise mitigation and proper dust controls shall be implemented so that levels conform to Mass DEP policies. All equipment that emanates sound shall be kept in proper working order through regular maintenance. Street sweeping shall be used to control dust from leaving the site. A

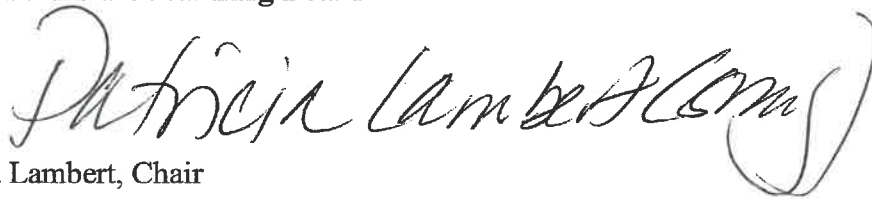
wheel wash station may be required to prevent sediment from leaving the site. Blowing dust or debris shall be controlled by the Applicant through stabilization, wetting down or other proper storage and disposal methods.

43. Construction activities on site shall conform to Town of Scituate General Bylaws.
44. Sight lines on Elm Street shall be maintained per the plans.
45. All construction shall comply with all applicable requirements of the Water Resource Protection District in Section 520 of the Zoning bylaw. No finished slope shall exceed 4:1.
46. No Certificate of Occupancy shall be issued until both the Planning Board and Building Commissioner are satisfied that access, construction of the Common Driveway and installation of necessary utilities are in full compliance with the approved plans and the Special Permit conditions.
47. If the drainage system is not performing as designed and conditioned or stormwater is observed going to abutting properties or to the street, the Stormwater Authority can request necessary mitigation to remedy the situation. This condition applies to all construction activities and survives the issuance of a Certificate of Completion.

Administration

48. This Site Plan Review and Stormwater Permit shall run with the land and be void if it is not recorded at the Registry of Deeds within 90 days of the expiration of the appeal period. The Applicant shall provide proof of this recording to the Planning Board prior to construction.
49. Failure to comply with any condition of this permit shall cause it to be deemed invalid.

NOTE: The pervious pool pavers cannot be made impervious without a new Stormwater Permit before the Planning Board

A handwritten signature in black ink that reads "Patricia Lambert". The signature is written in a cursive style and is positioned above the printed name.

Patricia Lambert, Chair

Cc: Cristina & Robert Counihan
Gregory Morse
Town Clerk
Building Commissioner
DPW

Construction Phase
Operation & Maintenance Plan
Best Management Practices
MA DEP Stormwater Management Policy

Project
Lot 6 Elm Street
Scituate, MA 02066
Portion of Assessor's Parcel: 44-2-17
Proposed New Single-Family Dwelling

Applicant/Owner
Cristina & Robert Counihan
55 Common Street
Scituate, MA 02066

Date: May 10, 2022
Revised: August 11, 2022



*Registered Professional Engineers,
Project Managers & Environmental Consultants*

10 New Driftway Street, P.O. Box 92
Scituate, MA 02066
Tel. 781.545.0895
GMorse@Morsecoinc.com

www.MorseCoInc.com

Construction Phase Operation & Maintenance Plan Best Management Practices

**Lot 6 Elm Street
Scituate, MA**

Responsible Parties & Contact Information:

Applicant:

Cristina & Robert Counihan
55 Common Street
Scituate, MA 02066
tinacounihan@gmail.com

Contractor / Stormwater Manager:

Name:

Address:

Address:

Contact:

Inspection & Record Keeping:

The responsible party shall maintain an operation and maintenance log during construction to control construction-related impacts, including erosion, sedimentation and other pollutant sources and land disturbance activities.

The responsible party shall inspect the construction site at least once every 14 calendar days and within 24 hours of a storm event of ½ inch or greater. Inspections shall be performed until the site is fully stabilized and the temporary sedimentation controls have been removed. The inspector shall inspect each measure to determine if it was installed/performed correctly. The inspector shall also determine if the measures have been damaged and if so the corrective action.

The log shall be kept on-site at all times and shall be made available to MassDEP and Town officials upon request. Member and agents of MassDEP and the Town officials shall be allowed 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.

Operation & Maintenance:

During land disturbance and construction activities, project proponents must implement controls that prevent erosion, control sediment movement, and stabilize exposed soils to prevent pollutants from moving offsite or entering wetlands or waters. Land disturbance activities include demolition, construction, clearing, excavation, grading, filling and reconstruction.

Construction activities increase the potential for erosion and sedimentation at a site which may adversely impact wetland resource areas. To prevent this impact, the following conditions shall be imposed to control erosion and sedimentation:

Erosion Control Barrier: An erosion control barrier shall be placed along the down-gradient limit of work/clearing prior to commencement of any construction activity. The integrity of the erosion control barrier shall be maintained by periodic inspection and replacement as necessary. The erosion control barrier shall remain in place until all disturbed surfaces have been loamed and seeded and vegetation has been established.

Stabilized Construction Entrance: A crushed stone construction entrance shall be installed at the entrance to the proposed construction area to prevent the migration of mud and sediments off-site. The entrance shall be inspected weekly and maintained in good condition. Additional stone shall be applied as necessary. Mud and sediment tracked onto the way shall be removed immediately.

Stabilization Practices: Disturbed areas shall be stabilized and protected as soon as practicable. Disturbed areas shall be stabilized when construction activity in the area has ceased for more than 14 days unless not feasible due to snow cover or if construction activities will resume within 21 days after construction temporarily ceased. Stabilization measures include the following:

- Temporary Seeding
- Geotextiles
- Mulching and Netting
- Permanent Seeding

Air Quality/Dust: Dust can be generated by dumping, excavating and moving the raw materials and exposed soil storage during periods of mechanical disturbance, transfer operations or high winds. Measures to mitigate dust emissions shall be utilized to reduce emissions and to minimize related impacts. These measures include: watering areas of exposed soils on a regular basis, vegetative cover, calcium chloride, stone and the use of tarpaulin covered trucks when transporting material.

Storage and Disposal of Hazardous Materials: Hazardous materials shall be stored and disposed of in accordance with the U.S. Environmental Protection Agency hazardous waste regulations and all other applicable regulations to ensure they do not adversely impact the environment.

In the event of a spill, the supervisor is to first contact the Fire Department and then notify the Police Department, Department of Public Works, Board of Health, and Conservation Commission. The Fire Department will assess the spill and determine if additional notifications are necessary and the level of cleanup.

The following equipment and materials shall be stored on-site at all times; sorbent pads, sand bags, speedi-dri absorbent and square end shovels.

Stockpiling: Temporary construction phase soil storage piles shall be stabilized or protected with sediment trapping measures to keep soil in place and prevent sediment runoff. Temporary perimeter protection such as berms, dikes and silt fences shall be applied to all soil piles. Stockpiles to be stored for an extended period of time shall be stabilized with vegetative cover.

Construction Phase: Erosion Control Maintenance Schedule & Checklist

Construction Practices

Best Management Practice	Inspection Frequency (1)	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check (1)	Cleaning/Repair Needed: <input type="checkbox"/> yes <input type="checkbox"/> no (List items)	Date of Cleaning/Repair	Performed by
Construction Site Stabilization	Weekly			Construction Site Stabilization Inspection/ Maintenance, temporary seeding, mulching etc.			
Land Grading	Weekly			Check for washouts and/or gullies. Check for accumulated silt.			
Permanent Seeding	Bi-Weekly			Permanent Seeding Inspection/ Maintenance			
Soil Stockpiling	Daily			Check mulch sock around piles.			
Construction Entrance	Weekly			Shall be maintained in good condition and have stone replaced as necessary. Mud and sediment tracked into the way shall be removed as necessary.			

Stormwater Control Manager _____

Post-Construction Phase
Operation & Maintenance Plan
Best Management Practices
MA DEP Stormwater Management Policy

Project
Lot 6 Elm Street
Scituate, MA 02066
Portion of Assessor's Parcel: 44-2-17
Proposed New Single Family Dwelling

Applicant/Owner
Cristina & Robert Counihan
55 Common Street
Scituate, MA 02066

Date: May 10, 2022
Revised: August 11, 2022



*Registered Professional Engineers,
Project Managers & Environmental Consultants*

10 New Driftway, P.O. Box 92
Scituate, MA 02066
Tel. 781.545.0895
GMorse@Morsecoinc.com

www.MorseCoInc.com

Post Construction Phase Operation & Maintenance Plan Best Management Practices

Lot 6 Elm Street
Scituate, MA

Responsible Parties & Contact Information:

Applicant:

Cristina & Robert Counihan
55 Common Street
Scituate, MA 02066
tinacounihan@gmail.com

Record Keeping:

The responsible party shall maintain an operation and maintenance log for a minimum of three years prior including inspections, repairs, replacement and disposal. The log shall be kept on-site at all times.

The log shall be made available to MassDEP and the Town upon request. Members and agents of MassDEP and the Town shall be allowed 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.

Operation & Maintenance:

In order to maintain the integrity of the stormwater management system, frequent inspections and maintenance shall be performed by the owner. The BMPs require continuous inspections and maintenance in order to function properly. The BMPs should be inspected and maintained as specified and after all major storm events.

Ground Cover shall be inspected at a minimum of every month and maintained as necessary. Maintenance includes removing any accumulated sediment, trash and debris and repairing erosion. Disposal of accumulated sediment must be in accordance with applicable local, state and federal guidelines and regulations. Important items to check during inspection include: signs of differential settlement or cracking of the pavement, erosion, tree growth on any embankments, condition of riprap and the health of the turf.

Roof Drywells & Gutter Downspout Systems shall be inspected at a minimum of twice a year and maintained as necessary. Maintenance includes inspecting water levels, removing debris, cleaning out gutter and downspouts systems, and replacing drywell systems if standing water is observed for greater than 72 hours after a storm event. Refer to Cultec O&M guidelines that have been attached with this document.

Sediment Forebays & Rain Gardens shall be inspected monthly. Accumulated sediment shall be removed, particularly when the sediment in the forebay has reached higher than three inches. The rain garden shall have all trash, debris, and dead vegetation removed. The rain garden shall consist of a combination of a New England erosion control restoration mix for dry sites and a showy northeast wildflower mix. Per the supplier, late Spring through Mid-Summer seeding will benefit from a light mulching of weed-free straw to conserve moisture. If conditions are drier than usual, watering will be required. Fertilization is not required unless the soils are particularly infertile. Preparation of a clean weed free seed bed is necessary for optimal results. The rain garden should be annually mulched, pruned, and fertilized, and routinely pruned. No snow should be stored within the rain garden.

Grass Swale shall be inspected regularly for the first few months after construction, and thereafter whenever mowed. Any signs of rilling or gullies shall be repaired, and swale should be mowed frequently enough to prevent grass height from exceeding 6". Accumulated sediment and debris shall be removed as necessary, and reseeding done in the spring if required.

Annual maintenance costs are estimated to be approximately \$1,500.

Illicit Discharges:

No illicit discharges shall be created. An illicit discharge is any discharge that is not composed entirely of stormwater.

Storage and Disposal of Hazardous Materials:

Hazardous materials shall be stored and disposed of in accordance with the U.S. Environmental Protection Agency hazardous waste regulations and all other applicable regulations to ensure they do not adversely impact the environment.

The exterior storage of hazardous materials shall be prohibited.

In the event of a spill, the supervisor is to first contact the Fire Department and then notify the Police Department, Department of Public Works, Board of Health, and Conservation Commission. The Fire Department will assess the spill and determine if additional notifications are necessary and the level of cleanup.

Pesticides, Herbicides and Fertilizers

Fertilizers shall be restricted to organic fertilizers only. Pesticides and herbicides shall be used sparingly and applied by a professional applicator licensed under the Massachusetts Department of Agriculture.

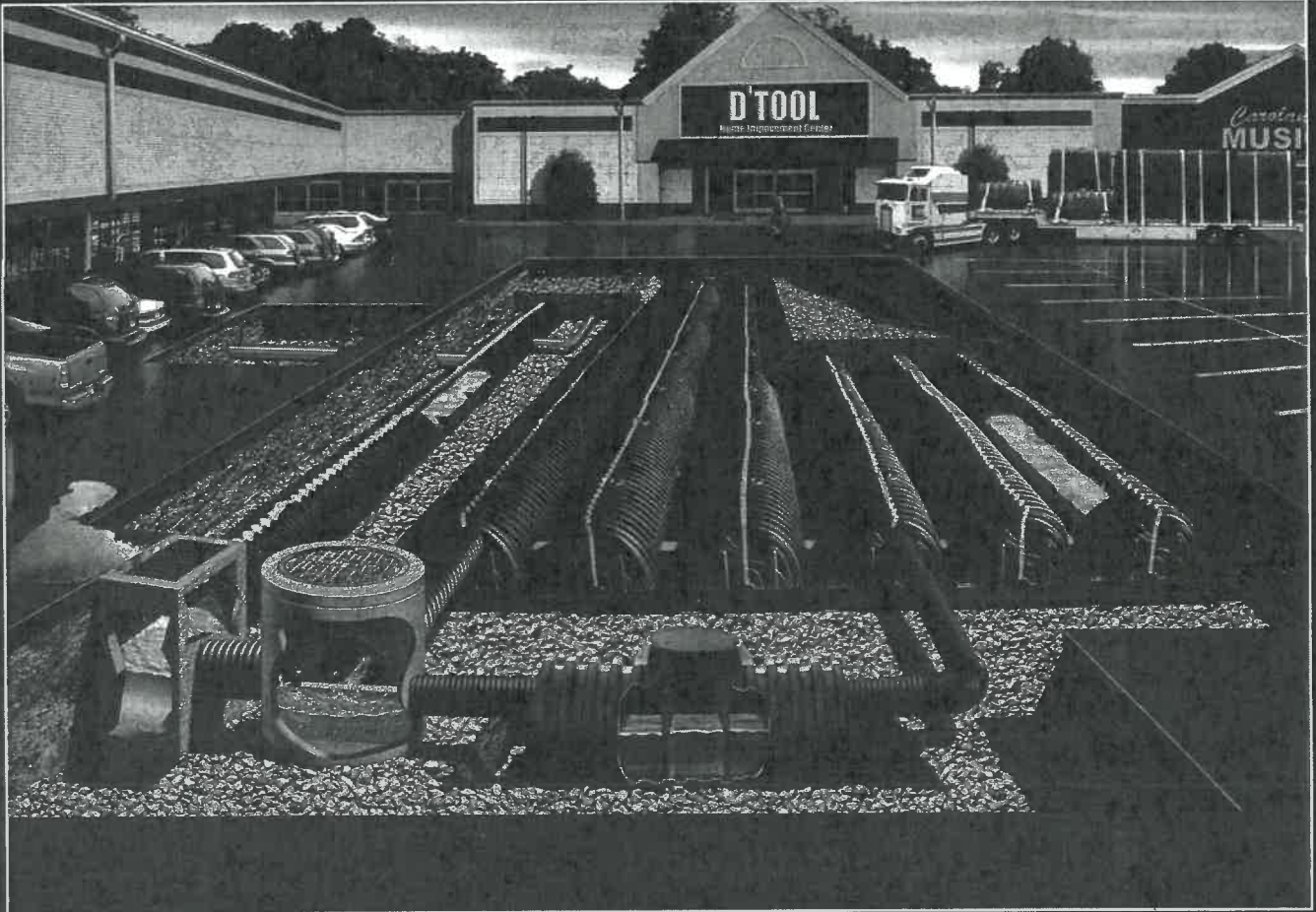
The exterior storage of fertilizers, herbicides and fertilizers shall be prohibited.

Project Location: Lot 6 Elm Street, Scituate, MA
Stormwater Management – Post Construction Phase
Best Management Practices – Inspection Schedule and Evaluation Checklist

Long Term Practices

Best Management Practice	Inspection Frequency (1)	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check (1)	Cleaning/Repair Needed: <input type="checkbox"/> yes <input type="checkbox"/> no (List Items)	Date of Cleaning/Repair	Performed by
Roof Drywells	Semi-Annually			Refer to Cultec O&M Guidelines in Appendix A.			
Gutter and Downspout System	Quarterly			Remove material in gutters and downspouts. Install gutter guards. Inspect for signs of overflow to surcharge.			
Sediment Forebay	Monthly			Clean forebay of accumulated sediment four times a year, or when sediment has accumulated past three inches.			
Rain Garden	Monthly 2-12x annually			Inspection and remove trash or debris. Mow grasses twice annually, mulch & fertilize, remove dead vegetation, replace removed vegetation, and prune. Do not stockpile snow within the rain garden. Maintain seed mixes in accordance with supplier's specifications.			
Turf Management	Semi-Annually			Repair eroded site areas. Plant grass or mulch exposed soil surfaces.			
Driveway Surface	Semi-Annually			Sweep clean of accumulated sediments.			
Grass Swale	2-12x Annually			Repair and rills or gullies. Mow as necessary, though grass height should not exceed 6". Reseed as required.			

Stormwater Chambers



Operation and Maintenance Guidelines
for CULTEC Stormwater Management Systems

The Founder of Plastic Chamber Technology

www.cultec.com | 1-800-451-7777 | 404-441-1100

CULTEC

Operations and Maintenance Guidelines

CULTEC

Published by
CULTEC, Inc.
P.O. Box 280
878 Federal Road
Brookfield, Connecticut 06804 USA
www.cultec.com

Copyright Notice

© 2017 CULTEC, Inc.
All rights reserved.
Printed in the USA.

This document and any accompanying CULTEC products are copyrighted by CULTEC, Inc. Any reproduction and/or distribution without prior written consent from CULTEC, Inc. is strictly prohibited.

Disclaimers:

The drawings, photographs and illustrations shown in this document are for illustrative purposes only and are not necessarily to scale. Actual designs may vary.

CULTEC reserves the right to make design and/or specification changes at any time without notice at CULTEC's sole discretion.

CULTEC is not responsible for typographical errors.

Protected by one or more of the following patents:

Protected by one or more of the following patents:

U.S. Patents 6,129,482; 6,322,288; 6,854,925; 7,226,241; 7,806,627; 8,366,346; 8,425,148; and others; U.S. Designs D613819; D638,095; D668,318 and others; Canadian Patent 2,591,255 and others; Community Designs 1092191; 1745209; and others.

CULTEC, the CULTEC logo, RECHARGER, CONTACTOR, HVLV, PAC, STORMFILTER, STORMGENIE and The Chamber with The Stripe are registered trademarks of CULTEC, Inc.

Chamber of Choice, 902, HD, 100, 125, 150, 150XL, 180, 280, 330, 330XL, V8, 902, Field Drain Panel, C-1, C-2, C-3, C-4, EZ-24, Landscape Series are trademarks of CULTEC, Inc. All rights reserved.

Contact Information:

For general information on our other products and services, please contact our offices within the United States at (800)428-5832, (203)775-4416 ext. 202, or e-mail us at custservice@cultec.com.

For technical support, please call (203)775-4416 ext. 203 or e-mail tech@cultec.com.

Visit www.cultec.com/downloads.html for Product Downloads and CAD details.

Doc ID: CULG008 05-17
May 2017

*These instructions are for single-layer traffic applications only. For multi-layer applications, contact CULTEC.
All illustrations and photos shown herein are examples of typical situations. Be sure to follow the engineer's drawings.
Actual designs may vary.*

This manual contains guidelines recommended by CULTEC, Inc. and may be used in conjunction with, but not to supersede, local regulations or regulatory authorities. OSHA Guidelines must be followed when inspecting or cleaning any structure.

Introduction

The CULTEC Subsurface Stormwater Management System is a high-density polyethylene (HDPE) chamber system arranged in parallel rows surrounded by washed stone. The CULTEC chambers create arch-shaped voids within the washed stone to provide stormwater detention, retention, infiltration, and reclamation. Filter fabric is placed between the native soil and stone interface to prevent the intrusion of fines into the system. In order to minimize the amount of sediment which may enter the CULTEC system, a sediment collection device (stormwater pretreatment device) is recommended upstream from the CULTEC chamber system. Examples of pretreatment devices include, but are not limited to, an appropriately sized catch basin with sump, pretreatment catchment device, oil grit separator, or baffled distribution box. Manufactured pretreatment devices may also be used in accordance with CULTEC chambers. Installation, operation, and maintenance of these devices shall be in accordance with manufacturer’s recommendations. Almost all of the sediment entering the stormwater management system will be collected within the pretreatment device.

Best Management Practices allow for the maintenance of the preliminary collection systems prior to feeding the CULTEC chambers. The pretreatment structures shall be inspected for any debris that will restrict inlet flow rates. Outfall structures, if any, such as outlet control must also be inspected for any obstructions that would restrict outlet flow rates. OSHA Guidelines must be followed when inspecting or cleaning any structure.

Operation and Maintenance Requirements

I. Operation

CULTEC stormwater management systems shall be operated to receive only stormwater run-off in accordance with applicable local regulations. CULTEC subsurface stormwater management chambers operate at peak performance when installed in series with pretreatment. Pretreatment of suspended solids is superior to treatment of solids once they have been introduced into the system. The use of pretreatment is adequate as long as the structure is maintained and the site remains stable with finished impervious surfaces such as parking lots, walkways, and pervious areas are properly maintained. If there is to be an unstable condition, such as improvements to buildings or parking areas, all proper silt control measures shall be implemented according to local regulations.

II. Inspection and Maintenance Options

A. The CULTEC system may be equipped with an inspection port located on the inlet row. The inspection port is a circular cast box placed in a rectangular concrete collar. When the lid is removed, a 6-inch (150 mm) pipe with a screw-in plug will be exposed. Remove the plug. This will provide access to the CULTEC Chamber row below. From the surface, through this access, the sediment may be measured at this location. A stadia rod may be used to measure the depth of sediment if any in this row. If the depth of sediment is in excess of 3 inches (76 mm), then this row should be cleaned with high pressure water through a culvert cleaning nozzle. This would be carried out through an upstream manhole or through the CULTEC StormFilter Unit (or other pretreatment device). CCTV inspection of this row can be deployed through this access port to determine if any sediment has accumulated in the inlet row.

B. If the CULTEC bed is not equipped with an inspection port, then access to the inlet row will be through an upstream manhole or the CULTEC StormFilter.

1. Manhole Access

This inspection should only be carried out by persons trained in confined space entry and sewer inspection services. After the manhole cover has been removed a gas detector must be lowered into the manhole to ensure that there are not high concentrations of toxic gases present. The inspector should be lowered into the manhole with the proper safety equipment as per OSHA requirements. The inspector may be able to observe sediment from this location. If this is not possible, the inspector will need to deploy a CCTV robot to permit viewing of the sediment.

2. StormFilter Access

Remove the manhole cover to allow access to the unit. Typically a 30-inch (750 mm) pipe is used as a riser from the StormFilter to the surface. As in the case with manhole access, this access point requires a technician trained in confined space entry with proper gas detection equipment. This individual must be equipped with the proper safety equipment for entry into the StormFilter. The technician will be lowered onto the StormFilter unit. The hatch on the unit must be removed. Inside the unit are two filters which may be removed according to StormFilter maintenance guidelines. Once these filters are removed the inspector can enter the StormFilter unit to launch the CCTV camera robot.

- C. The inlet row of the CULTEC system is placed on a polyethylene liner to prevent scouring of the washed stone beneath this row. This also facilitates the flushing of this row with high pressure water through a culvert cleaning nozzle. The nozzle is deployed through a manhole or the StormFilter and extended to the end of the row. The water is turned on and the inlet row is back-flushed into the manhole or StormFilter. This water is to be removed from the manhole or StormFilter using a vacuum truck.

III. Maintenance Guidelines

The following guidelines shall be adhered to for the operation and maintenance of the CULTEC stormwater management system:

- A. The owner shall keep a maintenance log which shall include details of any events which would have an effect on the system's operational capacity.
- B. The operation and maintenance procedure shall be reviewed periodically and changed to meet site conditions.
- C. Maintenance of the stormwater management system shall be performed by qualified workers and shall follow applicable occupational health and safety requirements.
- D. Debris removed from the stormwater management system shall be disposed of in accordance with applicable laws and regulations.

IV. Suggested Maintenance Schedules

A. Minor Maintenance

The following suggested schedule shall be followed for routine maintenance during the regular operation of the stormwater system:

Frequency	Action
Monthly in first year	Check inlets and outlets for clogging and remove any debris, as required.
Spring and Fall	Check inlets and outlets for clogging and remove any debris, as required.
One year after commissioning and every third year following	Check inlets and outlets for clogging and remove any debris, as required.

B. Major Maintenance

The following suggested maintenance schedule shall be followed to maintain the performance of the CULTEC stormwater management chambers. Additional work may be necessary due to insufficient performance and other issues that might be found during the inspection of the stormwater management chambers. (See table on next page)

	Frequency	Action
Inlets and Outlets	Every 3 years	<ul style="list-style-type: none"> Obtain documentation that the inlets, outlets and vents have been cleaned and will function as intended.
	Spring and Fall	<ul style="list-style-type: none"> Check inlet and outlets for clogging and remove any debris as required.
CULTEC Stormwater Chambers	2 years after commissioning	<ul style="list-style-type: none"> Inspect the interior of the stormwater management chambers through inspection port for deficiencies using CCTV or comparable technique. Obtain documentation that the stormwater management chambers and feed connectors will function as anticipated.
	9 years after commissioning every 9 years following	<ul style="list-style-type: none"> Clean stormwater management chambers and feed connectors of any debris. Inspect the interior of the stormwater management structures for deficiencies using CCTV or comparable technique. Obtain documentation that the stormwater management chambers and feed connectors have been cleaned and will function as intended.
	45 years after commissioning	<ul style="list-style-type: none"> Clean stormwater management chambers and feed connectors of any debris. Determine the remaining life expectancy of the stormwater management chambers and recommended schedule and actions to rehabilitate the stormwater management chambers as required. Inspect the interior of the stormwater management chambers for deficiencies using CCTV or comparable technique. Replace or restore the stormwater management chambers in accordance with the schedule determined at the 45-year inspection. Attain the appropriate approvals as required. Establish a new operation and maintenance schedule.
Surrounding Site	Monthly in 1 st year	<ul style="list-style-type: none"> Check for depressions in areas over and surrounding the stormwater management system.
	Spring and Fall	<ul style="list-style-type: none"> Check for depressions in areas over and surrounding the stormwater management system.
	Yearly	<ul style="list-style-type: none"> Confirm that no unauthorized modifications have been performed to the site.

For additional information concerning the maintenance of CULTEC Subsurface Stormwater Management Chambers, please contact CULTEC, Inc. at 1-800-428-5832.