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Municipality/Organization:	**Town of Blackstone**
EPA NPDES Permit Number:	**MA041015**
MassDEP Transmittal Number:	**W-040562**
Annual Report Number & Reporting Period:	**Year 14** **April 1, 2016 – March 31, 2017**

NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2017)

Part I. General Information

Contact Person: **James Sullivan** Title: Superintendent of Public Works

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: James M Sullivan

Printed Name: James M Sullivan

Title: Superintendent

Date: 4-26-17

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Part II. Self-Assessment

This report covers permit year 14 (April 2016 through March 2017) of the NPDES Phase II MS4 General Permit for the Town of Blackstone, Massachusetts. The Town continues to perform annual "Good Housekeeping" tasks such as an annual town clean-up day, catch basin cleaning and inspection, street sweeping, drain line and outfall cleaning, infrastructure repair, and ongoing employee education. The Town has also made progress in the Public Education and Public Involvement and Participation sections of the Permit, distributing information regarding stormwater compliance in proposed developments. All known outfalls have been mapped and a consulting firm inspects the Town's outfalls for signs of illicit discharges on a rotating basis each year as part of an IDDE plan. The Program Components of the IDDE plan were described in the April 2005 "NPDES Phase II Stormwater Permit – Illicit Discharge Detection and Elimination (IDDE) Program" report that was submitted as part of the Year 2 Annual Report.

In a previous year, the Town of Blackstone drafted and passed a stormwater bylaw to assist in enforcement related to the removal of illicit connections and to establish general rules and regulations for use of the Town's Stormwater System. Blackstone has also been proactive in stormwater management. Work on a stormwater retrofit for the Town Hall began in 2012 and is now complete. The retrofit included installation of low impact stormwater management measures, such as pervious asphalt, bioretention areas, and tree plantings.

The Town of Blackstone has noted the issuance of the revised Small MS4 General Permit. The Town is in the process of allocating funding to meet the revised requirements and has contracted with a consultant to provide more detailed GPS mapping of the stormwater system, including catch basins and manhole locations.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
1-1	Provide Educational Materials to Residents	Town Engineer	Blackstone will post information annually in the Blackstone Enlightener and through informational pamphlets (see BMP 2-2)	During this reporting period, the Town posted rotating messages regarding ways to reduce stormwater runoff pollution on the Department of Public Works (DPW) web page. This information was also broadcast daily on the local cable access channel. Additional educational material was provided at the annual Town Meeting, when fifty copies of a flyer on stormwater pollution prevention were handed out. The Town also printed notes regarding stormwater pollution prevention on the water and sewer bills, which are mailed to all homeowners. The Town stenciled "no dumping" messages on 20 catch basins during this reporting period. DPW also distributed water and sewer public education materials at "Touch a Truck" day held at the Blackstone Public Library in August 2016. As noted above in BMP 1-1, the Town has provided stormwater pollution prevention information on the website, cable access, at the Town Meeting, and in water and sewer bills. Additionally, the Town website links to the Town wetlands bylaw, the MassDEP regulations and standards page, the Massachusetts Wetland Protection Act, and the MassDEP Rivers Protection Act page.
1-2	Evaluate Potential for Classroom Education	Town Engineer Blackstone Millville Regional School District	Meet with Blackstone Millville Regional School District Science Department. Evaluate development of curriculum for high school students.	The Town made progress on student education during this reporting period. The DPW prepared gift packets including water savers for children who attended the "Touch a Truck" day held at the Blackstone Public Library in August 2016.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
2-1	Request feedback on the Stormwater Management Plan from Town Officials	Town Engineer	Send letter requesting input on the Stormwater Management Plan to Town boards and officials.	The Superintendent of DPW met with the Board of Selectmen and the Planning Board to discuss strategies and funding to meet the requirements of the revised Small MS4 General Permit. As a result, a proposal to finance new stormwater initiatives will be voted on at the Town Meeting in the upcoming permit year.
2-2	Informational Questionnaire to Residents	Town Engineer	Public questionnaire in the Blackstone Enlightener requesting information about storm drain systems (e.g. if they are aware of pipes in their yard, foaming).	This questionnaire was published in 2008 and 2009. The Town continues to solicit information from residents regarding stormwater infrastructure issues.
2-3	Status updates to Town Officials	Town Engineer	Present status update to municipal boards on an annual basis.	As noted in BMP 2-1, the superintendent of DPW met with the Board of Selectmen and the Planning Board to provide status updates and discuss the revised Small MS4 General permit. In addition, the annual Outfall Inspection Report and this annual report are shared with the Town Administrator and Board of Selectmen.
2-4	Public Activities	Town Engineer	Hold annual Town Clean Up Day	The Town held its annual Town Clean-Up day in May 2016, where town residents are encouraged to help clean up litter that might otherwise end up in stormwater.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
3-1	Stormwater System-Existing Conditions	Town Engineer	The Town of Blackstone will develop basemaps	The Town of Blackstone has GPS data and maps for outfalls within the system. All the information including baseline photos and locations of each outfall, are organized into a book. A consultant maintains a GIS database of this information. In anticipation of the revised permit, the same consultant was retained to GPS locate stormwater manholes and catch basins and add them to the GIS database.
3-2	Request information from Town residents regarding illicit discharges	Town Engineer	See BMP 2-2	See 2-2
3-3	Storm Sewer Inspections	Town Engineer	Develop inspection checklist Prioritize inspections Create database for existing conditions Identify source(s) of illicit discharge(s)	An inspection checklist, list of high priority outfalls for annual inspection, and a database of baseline conditions have all been developed in previous reporting years. In Permit Year 14, 16 stormwater outfalls were visually inspected by a consultant. A report of this activity was provided to the Town and is attached to this report. No illicit discharges were found.
3-4	Develop Improvement Program	Town Engineer	Prepare improvement plan Evaluate repair costs Prioritize upgrades based on needs and costs	No illicit discharges requiring elimination through system involvement have been found through the IDDE plan at this time. The Town continues to improve its stormwater and sewer systems; see also BMPs 3-5, 3-6, 6-3, and 6-4.
3-5	Capital Improvement Plan	Town Engineer	Prepare multi-year capital improvement plan Present plan to Capital Outlay Committee	The Town has proposed $100,000 to be used to fund the requirement of the revised Small MS4 General Permit. This funding will be voted on at the next Town Meeting. Thereafter, requirements of the Permit will be acted on in order of priority. Currently the Town is using its annual stormwater budget allocation to meet the anticipated requirements as noted in BMP 3-1.
3-6	Implement Capital Improvement Plan	Town Engineer/DPW	Implement improvement program to the extent allowable within capital and operational means	At this time, drainage capital improvements are being made on an as needed basis.

3-7	Enforcement Procedures Addressing Discharges	Planning Board	Blackstone will review whether local authority is appropriate and able to respond to potential illicit discharges. New bylaws, if necessary will be proposed to Town Meeting.	A new stormwater bylaw was drafted during Year 8. It was proposed during the May 17, 2011 Town Meeting and was passed. No illicit discharges were discovered during this reporting period. Consequently, there has been no illicit discharge related enforcement during this reporting period. An IDDE plan is in place and all Town outfalls are inspected on a rotating basis.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
4-1	Site Plan Review	Town Engineer/ Planning Board	Meet with Planning Board to discuss stormwater requirements	Requirements have been determined and a bylaw has been enacted. The Town retains a consultant to review proposed site plans for compliance with stormwater requirements.
4-2	Construction Stormwater Ordinance	Planning Board	Evaluate opportunities to modify planning bylaws to include stormwater ordinance	A bylaw regarding the BMP was drafted during a previous reporting period. The bylaw was proposed in the May 17, 2011 Town Meeting and was passed. Meeting minutes showing passage of and containing the bylaw were attached to the Permit Year 8 Annual Report.
4-3	Enforcement	Planning Board	Evaluate inspection and enforcement opportunities	The Town retains a consultant to inspect construction projects and recommend enforcement actions when needed. During this reporting period, the DPW Superintendent worked with the developer in the Sycamore Meadows and Harris Pond Estates developments to bring curbing, ground cover, hay bales, and silt fence into compliance with the Town's stormwater protection requirements. Additionally, stormwater infrastructure in the Harris Pond Estates development includes a gate valve which can be closed in case of an oil spill.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
5-1	Ordinance-Post Construction	Planning Board / DPW / Town Engineer	Evaluate opportunities to modify planning regulations requiring contractors to guarantee work.	A bylaw regarding this BMP was drafted during a previous period. The bylaw was proposed in the May 17, 2011 Town Meeting and was passed. Meeting minutes showing passage of and containing the bylaw were attached to the Permit Year 8 Annual Report.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
6-1	Employee Training	Town Engineer/DPW	Establish training needs and program for employees	The Town sent three DPW staffers to a 1 day training session sponsored by the New England Water Works in March 2017. Two staffers also earned licenses in water treatment, climate change, and dams.
6-2	Street Sweeping Program	Town Engineer/DPW	Develop program and schedule for sweeping streets	The DPW has a program for street sweeping. Streets and school and municipal parking lots are swept annually in the spring after road sanding is over for the winter.
6-3	Catch Basin Cleaning Program	Town Engineer/DPW	Develop program and schedule for cleaning storm drain systems	Catch basin cleaning is performed in the summer (after street sweeping) on a rotating basis. The Town monitors catch basin cleaning each year and adjusts the cleaning frequency as required. Some catch basins on trunk lines (where debris has a tendency to accumulate) may be cleaned twice per year if necessary. A catch basin inspection form is used for documentation. In addition, the DPW sends out a staff member after every major storm event to ensure that catch basin grates are clear of obstructions, such as leaves or snow/ice.
6-4	Outfall Cleaning Program	Town Engineer/DPW	Develop program and schedule for clearing outfalls	The Town coordinates with the Department of Corrections to clean up around outfalls and perform roadside maintenance

6-5	Other Programs and Policies	Town Engineer	Evaluate the need for other programs and policies that can improve stormwater quality	The Town jet cleans drainage piping on a rotating basis. After inspections, the Town's consultant recommended corrective action at outfalls 14, 45, 47, 49, and 84. The Town cleaned and/or posted "no dumping" signs at these outfalls as recommended. In addition, the Town is evaluating ways to make recommended upgrades to outfalls. A Town-wide clean-up day was held in May 2016. Household hazardous wastes continue to be accepted at the Blackstone Recycling Center. The DPW also has a plan in place and materials on hand for response to hydraulic oil spills (in case of burst of leaking construction equipment hydraulic lines) on construction sites or in the Town yards.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Not used

Part IV. Summary of Information Collected and Analyzed

Not used

National Pollutant Discharge Elimination System (NPDES)

Phase II Stormwater Management Plan

Outfall Inspection Report

Blackstone, Massachusetts

Prepared for:

Town of Blackstone

15 St. Paul Street

Blackstone, MA 01504

Prepared by:

AECOM

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June 2016

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INTRODUCTION

The Town of Blackstone maintains 96 known stormwater outfalls. These outfalls are permitted under the 2003 NPDES Phase II MS4 General Permit. In 2011, the town contracted AECOM to map and inspect all the known outfalls in order to be in compliance with the permit and follow best management practices. AECOM used a Trimble® GeoXT hand held global positioning satellite (GPS) unit capable of obtaining sub-meter accuracy to record location, size, material, and observations regarding each outfall in 2011. For more detail, refer to the previous annual reports and the "National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Management Plan Outfall Location and Inspection Report", prepared by AECOM, dated February 2012 (2012 Report). In addition to a summary of the outfall inspections, including methodology, observations and recommendations, this report included a recommended Illicit Discharge Detection and Elimination (IDDE) Protocol, which the town continues to follow.

The 2012 report concluded that in general, the known outfalls in the Town of Blackstone are in good condition. However, eight outfalls exhibited signs of potential illicit discharge indicators in 2011; two more exhibited potential signs in 2014. Because the illicit discharge indicators were inconclusive, it was determined that the ten outfalls which showed signs of potential illicit discharge indicators should be monitored on an annual basis in order to determine if the indicators persisted or worsened. Annual monitoring has indicated that some of the indicators have persisted. However, the further investigation has led to the conclusion that the indicators are or were the results of natural processes, not illicit connections to the stormwater system.

OUTFALL INSPECTIONS

As a best practice, Blackstone inspects a representative selection of its stormwater outfalls on an annual, rotating basis. The 2012 Report concluded that annual follow up inspections were required at the eight outfalls which exhibited potential illicit discharge indicators. Two more outfalls were added to this list in 2014. These ten outfalls are referred to as "High Priority Outfalls" in this report. If further evidence of an illicit discharge was found during the follow up inspection(s), more extensive investigation would be required to find and remove the source. The outfalls which showed potential indicators of illicit discharges during the original inspections were numbers 32, 34, 40, 43, 61, 64, 84, and 88; numbers 2 and 8 showed potential indicators in 2014. AECOM, accompanied by Department of Public Works personnel, re-inspected these outfalls and 6 others on May 11, 18, and 25 2016.

Complete reports for each outfall inspection are located in Appendix A. An updated map of Blackstone's stormwater outfalls is located in Appendix B. In accordance with industry best practices, outfall inspections were conducted at least 48 hours after storm events with greater than 0.2 inches of rainfall.

In conjunction with this outfall inspection work, AECOM GPS located the coordinates of the Town's catch basins and will provide a map and database summarizing this work separately.

Summary of Findings—High Priority Outfalls

Outfall 2: This outfall, located at the end of Rathburn Street, is situated behind a municipal pumphouse. It is a circular 12-inch concrete outfall that discharges to a wooded/wetland area. This outfall was added to the "High Priority" list in 2014 due to the presence of what appeared to be biological growth adhered to the rocky bottom of the waterway. The outfall was inspected on 5/11/16. A biological sheen as well as iron staining and adhered growth was visible in the waterway. Because of the obvious presence of dissolved iron in the waterway, as well as the fact that the sheen broke apart and did not flow back together immediately when disturbed, it is believed that the sheen is the result of the natural activity of iron consuming wetland bacteria such as *leptothrix discophora*, not an illicit discharge of petroleum. However, this outfall will remain on the "High Priority" list in an effort to monitor the effluent quality the outfall.

Outfall 8: This outfall is an 18-inch circular corrugated metal pipe which discharges to the north end of Harris Pond. Outfall 8 apparently serves as a culvert between a small unnamed pond on the north side of Carter Ave and Harris Pond. There are catch basins on Carter Ave which are believed by town personnel to connect to the culvert under the roadway. This outfall was added to the "High Priority" list in 2014 due to the presence of dry weather flow, the turbid nature of the flow, and foam. During the 2016 inspection small amounts of what appeared to be naturally occurring biological foam was observed. At this time, the available evidence does not indicate that an illicit discharge is present at Outfall 8. If signs of poor water quality persist, the flow should be sampled and the IDDE protocol should be followed to remove any source of contamination.

Outfall 32: This circular, 30 inch concrete outfall is located on the south side of Summer Street. During the initial 11/14/11 inspection, dry weather flow and the presence of foam was noted. A follow up inspection was recommended to verify that the foam was not caused by illicit discharges of chemical surfactants. The follow up inspections in 2013 through 2016 showed the continued presence of flow and small amounts of foam. However, as noted in 2013 inspection report, it is not believed at this time that these are indicators of illicit discharges. The foam was not chemically perfumed, broke apart easily when disturbed, and generally appeared to be natural, biological foam which occurs when organic materials release compounds into water as they decompose. Additionally, outfall 32 is in a low lying area with some wetland characteristics. Dry weather flow and foam during the spring may be expected in such areas. AECOM recommends that town personnel continue to monitor this outfall during their regular operations. This outfall should remain on the "High Priority" list and be formally inspected again during the next round of annual outfall inspections. If the outfall at any time begins to show any signs of illicit discharges, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 34: This smooth plastic 24 inch outfall is located off Fox Hill Road. During the initial 11/15/11 inspection, dry weather flow and the presence of foam was noted. A follow up inspection was recommended to verify that the foam was not caused by illicit discharges of chemical surfactants. The follow up inspections in 2013 through 2016 showed the continued presence of flow and foam. However, as noted in the 2013 inspection report, it is not believed at

this time that these are indicators of illicit discharges. The foam was not chemically perfumed, broke apart easily when disturbed, and generally appeared to be natural, biological foam which occurs when organic materials release compounds into water as they decompose. Additionally, outfall 34 is in a low lying area with some wetland characteristics. Dry weather flow and foam during the spring may be expected in such areas. AECOM recommends that town personnel continue to monitor this outfall during their regular operations. This outfall should remain on the "High Priority" list and be formally inspected again during the next round of annual outfall inspections. If the outfall at any time begins to show any signs of illicit discharges, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 40: This circular 24 inch concrete outfall is located southeast of the cul-de-sac on Castagnaro Way. During the initial 11/15/11 inspection, dry weather flow and the presence of foam was noted. A follow up inspection was recommended to verify that the foam was not caused by illicit discharges of chemical surfactants. No foam was noted during the annual inspection on 4/22/13, but the outfall remained on the "High Priority" list and follow up inspections in 2014 through 2016 showed the presence of dry weather flow and small amounts of foam. It is not believed at this time that these are indicators of illicit discharges. The foam was not chemically perfumed, broke apart easily when disturbed, and generally appeared to be natural, biological foam which occurs when organic materials release compounds into water as they decompose. Additionally, outfall 34 is in a low lying area with some wetland characteristics. Dry weather flow and foam during the spring may be expected in such areas. No other signs of an illicit discharge were visible; AECOM recommends that this outfall remain on the "High Priority" list and that town personnel continue to monitor this outfall during their regular inspections. This outfall should be formally inspected again during the next annual round of outfall inspections. If the outfall at any time begins to show any signs of illicit connections, the flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 43: This circular 36 inch concrete outfall discharges to a pond east of Carol Lane. During the initial 11/15/11 inspection, dry weather flow and the presence of foam was noted. A follow up inspection was recommended to verify that the foam was not caused by illicit discharges of chemical surfactants. The follow up inspections in 2013 through 2016 showed the continued presence of dry weather flow and small amounts of foam. However, it is not believed at this time that these are indicators of illicit discharges. The outfall is situated behind a fence, so close observation of the flow was not possible, but the small quantity of foam generally appeared to be natural, biological foam which occurs when organic materials release compounds into water as they decompose. Additionally, outfall 43 is in a low lying area with some wetland characteristics. Dry weather flow and foam during the spring may be expected in such areas. AECOM recommends that town personnel continue to monitor this outfall during their regular operations. This outfall should remain on the "High Priority" list and be formally inspected again during the next annual outfall inspections. If the outfall at any time begins to show any signs of illicit connections, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 61: This circular 18 inch concrete outfall is located on Federal Street near house number 155. This outfall was added to the "High Priority" list due to the presence of dry weather flow and foam. This outfall has been monitored each year, but the observations did not indicate an illicit discharge. A small amount of bubbles/foam were noted during the 2016 inspection. It was observed that the foam was not chemically perfumed, broke apart easily when disturbed, and generally appeared to be natural, biological foam which occurs when organic materials release compounds into water as they decompose. Additionally, outfall 61 is in a low lying area with some wetland characteristics. Dry weather flow and foam during the spring may be expected in such areas. Therefore, the available evidence at this time indicates that sampling is not required at this outfall. AECOM recommends that town personnel continue to monitor this outfall during their regular operations. Based on this inspection and past inspections, this outfall should remain on the "High Priority" list and should be formally inspected again during the next annual outfall inspections. If the outfall at any time begins to show any signs of illicit connections, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 64: This circular concrete outfall is located on Blackstone Street near house number 146. This outfall was added to the "High Priority" list due to the presence of dry weather flow and foam. This outfall has been monitored each year, but the observations did not indicate an illicit discharge. Dry weather flow was noted during the 2016 inspection. Foam was not noted. Dry weather flow during the spring may be expected in low lying areas with wetland characteristics, such as outfall 64's location. Therefore, the available evidence at this time indicates that sampling is not required at this outfall. AECOM recommends that town personnel continue to monitor this outfall during their regular operations. This outfall should be formally inspected again during the next annual outfall inspections. If the outfall at any time begins to show any signs of illicit connections, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge. AECOM also noted that the 30 inch concrete bell end of this outfall has broken off. However, this does not appear to be affecting the outfall's performance.

Outfall 84: This outfall is located in the bank of the Blackstone River at the south end of First Avenue. This outfall was added to the "High Priority" list due to the presence of dry weather flow, odor and the presence of foam. During the 2015 inspection, the outfall was found to be completely inaccessible due to dumping of residential yard waste. AECOM recommended that the town clear this yard waste and post "no dumping" signs in the area, which the town accomplished. The 2016 inspection did not show any indicators of illicit discharges. However, this outfall pipe is in poor condition. It is cracked in numerous places and the invert has broken away. The town should begin planning and budgeting for repairs/replacement of this pipe. AECOM recommends that this outfall should remain on the "High Priority" list and be formally inspected again during the next annual outfall inspections. If the outfall at any time begins to show any signs of illicit discharges, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE plan should be followed to eliminate the illicit discharge.

Outfall 88: This circular 18 inch corrugated plastic pipe discharges to a retention basin off the end of TeeJay Lane. This outfall was added to the "High Priority" list due to the presence of dry

weather flow and sheen. This outfall has been monitored each year, but the observations did not indicate the presence of an illicit discharge at the time of the inspection. The sheen was once again observed during the 5/11/16 inspection, as well as significant iron staining on the soil in the retention basin. Because of the obvious presence of dissolved iron in the retention basin, as well as the fact that the sheen broke apart and did not flow back together immediately when disturbed, it is believed that the sheen is the result of the natural activity of iron consuming wetland bacteria such as *leptothrix discophora*, not an illicit discharge of petroleum. AECOM recommends that the outfall remain on the "High Priority" list and that town personnel continue to monitor this outfall during their normal operations. This outfall should be formally inspected again during the next round of annual outfall inspections. If the outfall at any time begins to show any signs of illicit discharges, its flow should be sampled and tested. If the sampling indicates an illicit discharge, the IDDE program should be followed to eliminate the illicit discharge.

Summary of Findings—Other Outfalls

Revised Outfall 22: Since the last period of inspections, a developer has undertaken work on Farm Street which led to the replacement and relocation of outfall 22. This revised outfall was noted as town owned by town personnel. The revised outfall 22 is a 12-inch corrugated plastic pipe on the west side of Farm Street. No flow or indicators of illicit discharges were noted during this inspection. The attached map has been revised to show the new location of outfall 22 (see Appendix B). AECOM has updated the information and location of outfall 22 in the GIS database. See Appendix A.

Outfalls 14, 45, 47, 49, 96: These outfalls were inspected on May 11, 2016 to continue Blackstone's program of conducting outfall inspections on a rotating basis. During the inspection, no indications of illicit discharges were found at these outfalls. However, regular maintenance is required at some of these outfalls as noted in Table 1. AECOM recommends town personnel continue to monitor these outfalls during their normal operations. Because these outfalls showed no signs of illicit discharges and a selection of Blackstone's outfalls are formally inspected each year, AECOM recommends formal re-inspection of these outfalls in two to three years, when formal inspections of all the town's other outfalls have been completed.

As noted in the initial outfall inspection report, a maintenance plan should be developed for outfalls which show excess sediment buildup, when vegetation blocks access to the outfall, or to repair damaged/broken pipes or headwalls. See Appendix A for individual reports for each outfall. Each outfall report contains a full summary of the findings for that outfall. See Appendix B for a map of all outfall locations in Blackstone. Action items for the inspected outfalls are located in Table 1.

Table 1: Outfall Action Items

Outfall No.	Finding	Action Item
14	Excessive washed out road sand; invert has rusted away.	Clear flow channel. Sweep roadway tributary area. Clean catch basin sumps, which may be washing out because they are full. In the long term, consider replacing the outfall pipe.
45	The mouth of this outfall is covered by a welded steel grate, which is approximately 75% obstructed by captured leaves, sticks and debris.	Outfall grate should be cleaned and cleared of obstructions as soon as possible to prevent possible upstream flooding.
47	Outfall is obscured by weeds, debris, and creeping woody plant growth.	Clear a path to the outfall, uncover it for easy location. Ensure flow path is clear and unobstructed. Remove plants and roots which might compromise the outfall pipe.
49	Outfall pipe invert has rusted away.	In the long term, consider replacing the outfall pipe.
84 (High Priority Outfall)	Pipe shows considerable cracking, invert has rotted away. Pipe may be approaching the end of useful life; failure could compromise the headwall it is located in, causing a collapse.	In the long term, consider replacing this outfall pipe as structural collapse could compromise the headwall. Locate record drawings and/or televise the pipe to determine length, age, condition, and probable cost to replace.

Several of the outfalls in Table 1 (14, 49, and 84) appear to be nearing the end of their useful lives. The Town should consider a replacement program, prioritizing areas where pipe failure may damage other property or infrastructure. As is the nature of stormwater outfalls, a majority of these structures are located in wooded areas, along the banks of rivers or other bodies of water, and in other areas that are not easily accessible. A path to each outfall should be established and kept clear for ease of inspection and maintenance. In addition, each outfall should be inspected semi-annually for structural integrity and signs of illicit discharge. The town should develop and implement an outfall maintenance program to address structural issues identified during inspections. Maintenance of drainage manholes and catch basins should be included as part of this plan as rocks, sediment and other debris may damage or obstruct the outfalls. The town should also stencil or otherwise label all catch basins with a "no dumping" message. It may also be productive to post a permanent sign (with the outfall number) in the vicinity of each outfall to make them easier to locate for inspections and in the case of emergencies.

Conclusions

The outfall inspections showed that Blackstone's stormwater outfalls continue to be in generally good condition. Of the 16 outfalls inspected in 2016, none showed conclusive evidence of illicit discharge. The location and characteristics of outfall 22 were updated to reflect changes made

by a developer. Five outfalls were identified to have maintenance needs, in large part because of the age of the infrastructure. The town should follow up on these action items and continue to monitor all outfalls as recommended to ensure that no illicit connections are made to these outfalls in the future. Note that outfall 84 may require replacement to prevent damage to the associated headwall, and the catch grate on outfall 45 should be cleaned as soon as possible and regularly thereafter to prevent upstream flooding.

Some of these outfalls may not be functioning at their capacity due to blockages or broken/damaged pipes. AECOM recommends the creation of implementation of a maintenance plan per the "National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Management Plan Outfall Location and Inspection Report", prepared by AECOM, dated February 2012.

Appendix A: Outfall Inspection Reports

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 2 **GPS Location Date:** 11/14/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: Sewage pumping station

Discharge Receiving Body: Wetland/Stream

Suspect Illicit: Possibly

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
656471.03	2836906.91

Photo Name: OF_002Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
CMP	Round	12 Inch	Yes

Blockage:

Floatables: Algae, oily sheen

Deposits: Some sediment

Vegetation Growth: Red-brown algae

Structural Damage: good

Comment:

Photo Name: OF_002RathburnSt2011-14-11.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: >0.1 gpm

Photo Name: 2_3.jpg

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 8 **GPS Location Date:** 11/14/2011
Location:
Land Use: Residential
Land Use Comment:

Landmark: In lawn at end of driveway

Discharge Receiving Body: Pond
Suspect Illicit: No
Geographic Location:
Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	Northing:
654567.654	2832422.634

Photo Name: OF_008Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
CMP	Round	18 Inch	Estimated

Blockage:
Floatables: Foam
Deposits: None

Vegetation Growth: None
Structural Damage: Good
Comment:

Photo Name: OF_008DianaSt2011-14-11.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection
Flow: 15 gpm

Photo Name: OF_08.jpg

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 14 **GPS Location Date:** 11/14/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: Edgewater Dr between Brown house & Shed towards water

Discharge Receiving Body: Pond

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
654162.091	2834080.69

Photo Name: OF_014Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
CMP	Round	10 Inch	Yes

Blockage: 30%

Floatables: None

Deposits: Sediment

Vegetation Growth: None

Structural Damage: Squashed Laterally

Comment:

~18 in of bottom (measured lenghtwise into pipe) rotted out

Photo Name: OF_014EdgewaterDr2011-14-11.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow:

Photo Name: 14.jpg

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 22 **GPS Location Date:** 11/14/2011

Location: West side of Farm St

Land Use: Residential

Land Use Comment: Drains new development currently under construction

Landmark:

Discharge Receiving Body: Wetland pool w/riprap

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
651049.879	2837782.221

Photo Name: OF_022Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/25/2016

Material	Shape	Diameter	Measured
CPP	Round	12 Inch	Yes

Blockage: 10-25%
Floatables: None
Deposits: Sediment

Vegetation Growth: Normal
Structural Damage: Good

Comment:

New

Photo Name: OF_022New2016-05-25.jpg

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow:

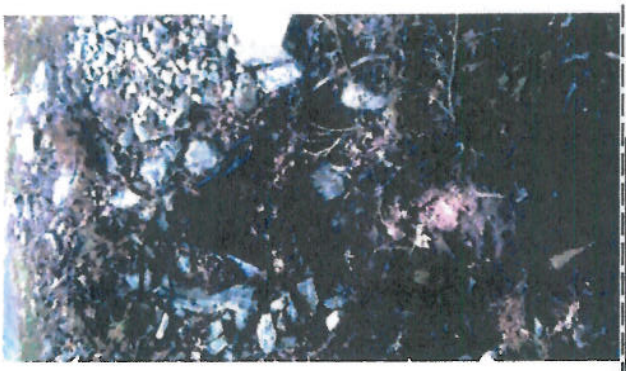


Photo Name: NewOutfall22_052516.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 32 **GPS Location Date:** 11/14/2011
Location:
Land Use: Residential
Land Use Comment:

Landmark: Roadside

Discharge Receiving Body: No
Suspect Illicit: No
Geographic Location:
Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	Northing:
650090.34	2839242.184

Photo Name: OF_032Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Concrete	Round	24 Inch	Yes

Blockage:
Floatables: None
Deposits: Sediment

Vegetation Growth: Some
Structural Damage: Good

Comment:

Photo Name: OF_032SummerSt2011-14-11.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection
Flow: 6 gpm

Photo Name: 32.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 34 **GPS Location Date:** 11/15/2011

Location:

Land Use: Residential

Land Use Comment: Wetland

Landmark:

Discharge Receiving Body: Stream

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
652338.21	2841267.526

Photo Name: OF_034Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Smooth Plastic	Round	24 Inch	Yes

Blockage:

Floatables: Foam w brown top

Deposits: Some sediment

Vegetation Growth: Some

Structural Damage: Good

Comment:

Photo Name: OF_034_1AFoxHillRoad2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 30 gpm

Photo Name: 34.jpg

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 40 **GPS Location Date:** 11/15/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: End of Castagnero Way

Discharge Receiving Body: Retention basin (private)

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
648846.319	2842323.52

Photo Name: OF_040Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Concrete	Round	24 Inch	Estimated

Blockage:

Floatables: Small am't white foam

Deposits: Sediment

Vegetation Growth: Some

Structural Damage: Good

Comment:

Photo Name: OF_040_7ACastagnaroLane(2)2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 5 gpm

Photo Name: 40.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 43 **GPS Location Date:** 11/15/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: W side of pond

Discharge Receiving Body: Retention Pond

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
649474.819	2844801.737

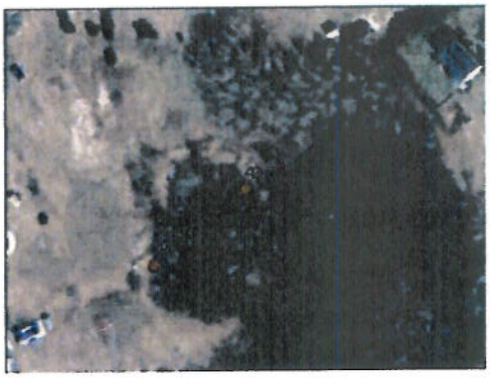


Photo Name: OF_043Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Concrete	Round	36 Inch	Estimated

Blockage:

Floatables: Yard waste, white foam

Deposits: Sediment

Vegetation Growth: Some

Structural Damage: Good

Comment:

Photo Name: OF_043_10ACarolLn(2)2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 15 gpm

Photo Name: 43_2.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 45 **GPS Location Date:** 11/15/2011
Location: End of Crestwood Dr.
Land Use: Residential
Land Use Comment:

Landmark: Near Hop Brook

Discharge Receiving Body: Wetland
Suspect Illicit: No
Geographic Location:
Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	Northing:
645126.264	2843615.853

Photo Name: OF_045Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Concrete	Round	48 Inch	Estimated

Blockage: 75%
Floatables: None
Deposits: Sediment

Vegetation Growth: Excessive
Structural Damage: Good
Comment:

Photo Name: OF_045_12ACrestwoodDrive2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection
Flow: 20 gpm

Photo Name: 45.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 47 **GPS Location Date:** 11/15/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: Milk St. W of Mendon St

Discharge Receiving Body: Woods/Wetland

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
642428.926	2840120.931

Photo Name: OF_047Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
CMP	Round	12 Inch	Estimated

Blockage:

Floatables: None

Deposits: Sediment

Vegetation Growth: Excessive

Structural Damage: Fair, some rusting out

Comment:

Photo Name: OF_047_14AMilkStreet2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow:

Photo Name: 47.JPG

SECTION 4. SAMPLING RESULTS

Conductivity:	**Tempurature:**
Ammonia:	**Surfactants:**
Flow Amount:	**pH:**
Inspection:	**Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 49 **GPS Location Date:** 11/15/2011
Location:
Land Use: Residential
Land Use Comment: Agricultural

Landmark: Milk St. Close to Mendon St Intersection

Discharge Receiving Body: stream

Suspect Illicit: No
Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting: 643424.921 **Northing:** 2840080.209

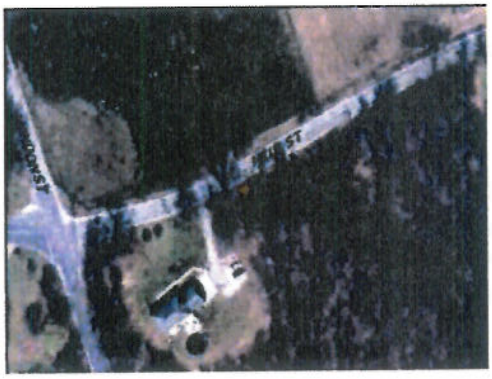


Photo Name: OF_049Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
CMP	Round	18 Inch	Esitmated

Blockage:
Floatables: None
Deposits: Sediment

Vegetation Growth: Some
Structural Damage: Invert of Pipe Rotted at exit; Appr

Comment:

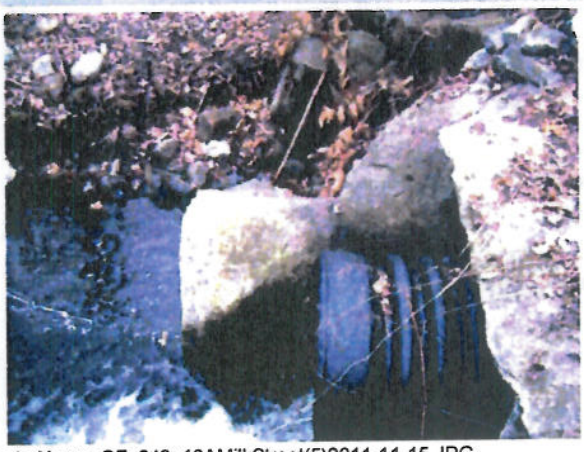


Photo Name: OF_049_16AMilkStreet(5)2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection
Flow: >0.1 gpm

Photo Name: 49.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 61 **GPS Location Date:** 11/15/2011

Location:

Land Use: Residential

Land Use Comment:

Landmark: Across from 153 Federal St

Discharge Receiving Body: Forested wetland

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	Northing:
649750.339	2838456.472

Photo Name: OF_061Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Concrete	Round	18 Inch	Estimated

Blockage:

Floatables: Foam

Deposits: None

Vegetation Growth: Some

Structural Damage: Good

Comment:

Photo Name: OF_061_28AFederalSt2011-11-15.JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 10 gpm

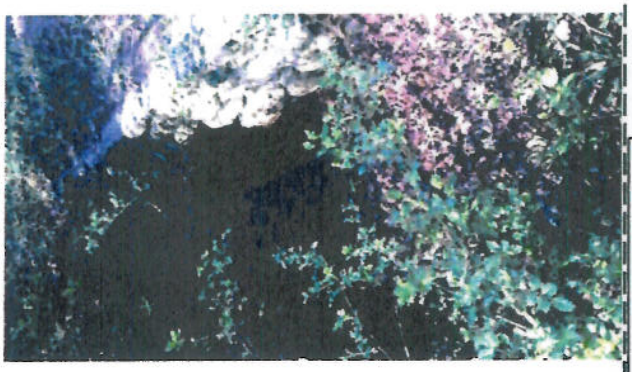


Photo Name: 61.JPG

SECTION 4. SAMPLING RESULTS

Conductivity:

Tempurature:

Ammonia:

Surfactants:

Flow Amount:

pH:

Inspection:

Fecal Coliform:

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 64 **GPS Location Date:** 12/02/2011
Location:
Land Use: Residential
Land Use Comment:

Landmark: Behind 114 Blackstone St

Discharge Receiving Body: Wetland

Suspect Illicit: No
Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
646827.956	2836893.742

Photo Name: OF_064Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/18/2016

Material	Shape	Diameter	Measured
Concrete	Round	30 Inch	Estimated

Blockage:
Floatables: None
Deposits: Sediment

Vegetation Growth: None
Structural Damage: Good (see comment)

Comment:

Photo Name: OF_064_1B_BlackstoneSt2011-12-02(4).JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow:

Photo Name: 64_1.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 84 **GPS Location Date:** 12/05/2011

Location:

Land Use: Dense Residential

Land Use Comment: Commercial

Landmark: End of First Ave near Blackstone River

Discharge Receiving Body: Blackstone River

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
645847.55	2831380.484

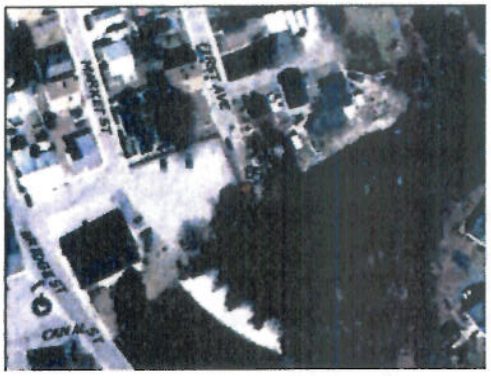


Photo Name: OF_084Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Ceramic	Round	24 Inch	Yes

Blockage:

Floatables: None

Deposits: Sediment

Vegetation Growth: Some

Structural Damage: Last section at exit broken in ???

Comment:

Photo Name: OF_084_8C_FirstStAtBlackstoneRiver2011-12-05(2).JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 1 gpm

Photo Name: 84.JPG

SECTION 4. SAMPLING RESULTS

Conductivity:	**Tempurature:**
Ammonia:	**Surfactants:**
Flow Amount:	**pH:**
Inspection:	**Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 88 **GPS Location Date:** 12/05/2011
Location:
Land Use: Residential
Land Use Comment: Open Wooded

Landmark: End of Tee Jay Ln

Discharge Receiving Body: Wetland
Suspect Illicit: No
Geographic Location:
Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	Northing:
642087.894	2833711.336

Photo Name: OF_088Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
Corrugated Plastic	Round	18 Inch	Estimated

Blockage:
Floatables: None
Deposits: Some Sediment

Vegetation Growth: Excessive
Structural Damage: Good
Comment:

Photo Name: OF_088_12C_TeeJayLn2011-12-05(4).JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection
Flow: >0/1 gpm

Photo Name: 88_2.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**
Ammonia: **Surfactants:**
Flow Amount: **pH:**
Inspection: **Fecal Coliform:**
Comments/Observations:

No Photo Available

Photo Name:

Town of Blackstone
Outfall Inspection Report

SECTION 1. GENERAL LOCATION INFORMATION

Outfall #: 96 **GPS Location Date:** 12/05/2011

Location:

Land Use: Residential

Land Use Comment: Wooded/open

Landmark: Roadside, Federal St

Discharge Receiving Body: Wetland

Suspect Illicit: No

Geographic Location:

Massachusetts State Plane Coordinates (NAD83 Meter)

Easting:	**Northing:**
649478.823	2836449.91

Photo Name: OF_096Locus.jpg

SECTION 2. PHYSICAL OBSERVATIONS

Date Inspected: 05/11/2016

Material	Shape	Diameter	Measured
PVC	Round	6 Inch	Yes

Blockage:

Floatables: None

Deposits: None

Vegetation Growth: Some

Structural Damage: Good

Comment:

Photo Name: OF_096_20C_FederalStAt113_2011-12-05(1).JPG

SECTION 3. DRY WEATHER INSPECTION

Annual Inspection

Flow: 0.1 gpm

Photo Name: 96.JPG

SECTION 4. SAMPLING RESULTS

Conductivity: **Tempurature:**

Ammonia: **Surfactants:**

Flow Amount: **pH:**

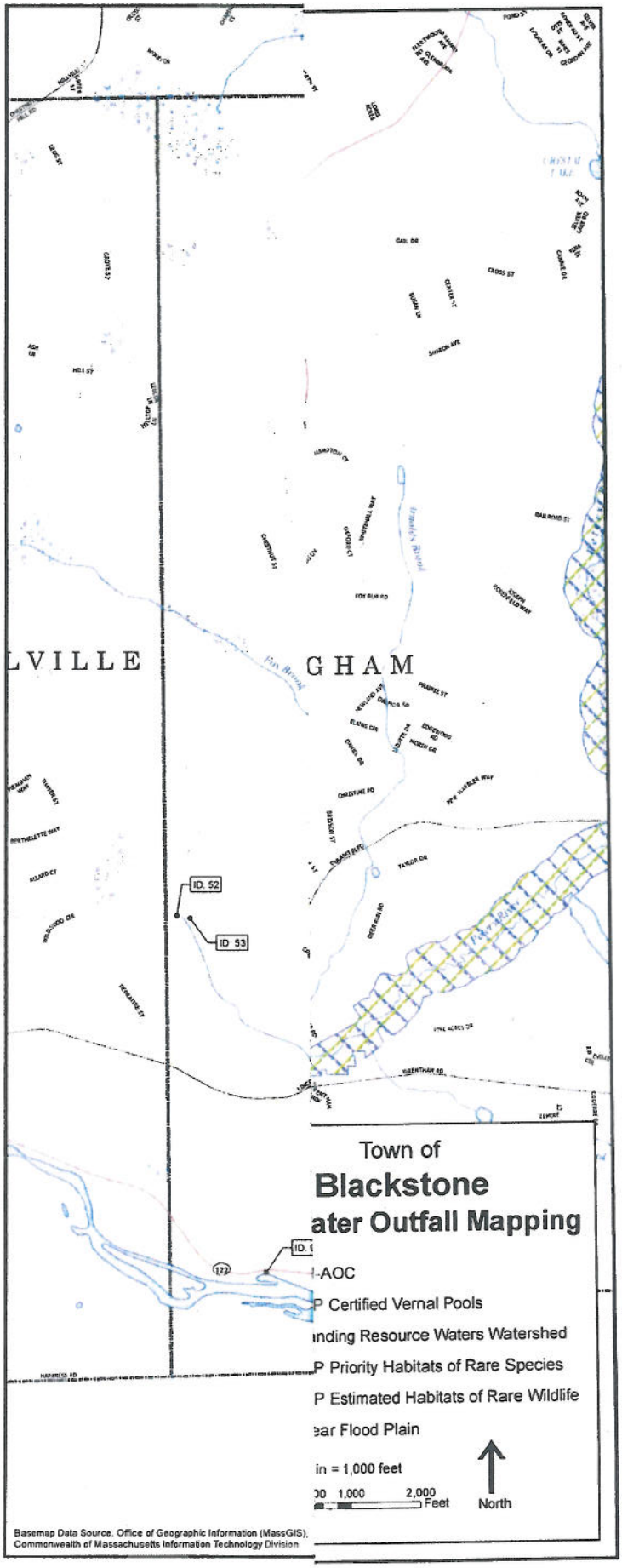
Inspection: **Fecal Coliform:**

Comments/Observations:

No Photo Available

Photo Name:

Appendix B: Stormwater Outfall Map (Revised for 2016)


LVILLE
GHAM
ID. S2
ID. 53
Town of
Blackstone
ater Outfall Mapping
-AOC
P Certified Vernal Pools
nding Resource Waters Watershed
P Priority Habitats of Rare Species
P Estimated Habitats of Rare Wildlife
ear Flood Plain
in = 1,000 feet
00 1,000 2,000
Feet
North
Basemap Data Source. Office of Geographic Information (MassGIS),
Commonwealth of Massachusetts Information Technology Division