

2018
Annual Report on Compliance
City of Bangor, Maine

Pursuant to the requirements of
United States and State of Maine v. City of Bangor Consent Decree
Civil Action No. 1:15-cv-00350-NT

January 31, 2019



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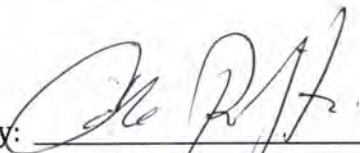
Appendices

- A. Illicit Connection Map
- B. CCTV Inspection Log
- C. Manhole Inspection Log
- D. CCTV Repair, Replacement, and Upgrade Log
- E. Cleaning Log
- F. SSO Event Log
- G. Location Map of Sanitary Sewer Overflows

Certification Statement

City of Bangor, Maine

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.

By: 
Andrew Rudzinski
Director of Water Quality

Date: 1-29-19

2018 Annual Report on Compliance

I. Introduction

The City of Bangor (the “City” or “Bangor”) is pleased to submit this Annual Report on Compliance, pursuant to the requirements of the *United States and State of Maine v. City of Bangor Consent Decree*, Civil Action No. 1:15-cv-00350-NT, entered on November 13, 2015 (the “Consent Decree”), for the reporting period beginning on January 1, 2018, and ending on December 31, 2018.

II. Status of Compliance

A. Submittals Required by the Consent Decree during the Reporting Period

<u>Date Submitted</u>	<u>Deliverable</u>
January 30, 2018	Annual Report on Compliance for calendar year 2017
February 28, 2018	Annual CSO Report for calendar year 2017
May 29, 2018	Mid-year meeting with EPA and DEP
June 29, 2018	GIS Deliverable (per Par. 9.a of the Consent Decree)
September 13, 2018	MS4 Permit Year 5 Report, 2013-2018 Permit Cycle (per Par. 10 of the Consent Decree)
Various	ADS Flow Monitoring Reports (per Par. 22 of the Consent Decree)

B. Identification of any Non-Compliance

There were no incidences of non-compliance with the requirements of the Consent Decree were identified for the 2018 reporting period.

III. Compliance Activities

A. Measures Taken to Reduce CSO and SSO Volumes

1. Capital Improvement Projects (CIP)

French, State and Exchange Street Utility Upgrade Project - This replacement and separation project in the Kenduskeag East subsection is complete except for final pavement. A total of 2,576 feet of sewer line was laid, 1,052 feet of which was separated sanitary line, and 10 catch basins were removed.

Dow Main Abandonment - This project involves abandoning 12 sewer manholes and approximately 3,700 linear feet of sewer main in the Dow subsection, eliminating

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significant infiltration and inflow. Existing services will be rerouted with 927 feet of new PVC main. This project went out to bid on April 10, 2018. Because there were no responses from contractors, the project could not be completed by the end of the year as expected. The project was re-released for bid on October 24, 2018, and awarded on December 10, 2018. Work is expected to start in Spring 2019 and be completed by June 30, 2019.

Odlin Road Pump Station – This project consists of replacing the pump station at Odlin Road and abandoning the trunk line from the pump station to the intersection with the main at Thatcher Street. The pump station is located in the Dow subsection, and the trunk line runs through the Dow and Barkersville subsections. The project is being funded through CWSRF and has been reviewed by Maine DEP. The pump station has been replaced. Connection to SCADA system is on-going, as is the trunk line abandonment.

Railroad Street Regulator – This project in the Davis Brook subsection consists of a new regulator structure and re-configured piping to both the storage tank and the CSO outfall. This project went out to bid in December 2018, and a contract will be awarded in January 2019 for construction to start upon award. The project was designed by consulting engineering firm AECOM and is being funded through CWSRF. It is a precursor to the new Davis Brook Storage Tank project, which is currently in the design stage.

SCADA Needs Assessment and Upgrades – The City contracted with Wright Pierce for a SCADA needs assessment and implementation plan for upgrades. The needs assessment was completed on July 6, 2018. Based on the plan's recommendations, the City has begun Phase I of the SCADA Upgrade Project, which includes replacing critical components at the WTP and Kenduskeag Pump Station.

2. Weir and Regulator Adjustments

No weirs or regulators were adjusted during the reporting period.

The City is currently designing a replacement regulator and reconfigured piping upstream of the Davis Brook storage conduit. (See Railroad Street Regulator project in section III.A.1 above.)

The City has had no overflows from the Cemetery outfall (CSO #016) for at least five years. This CSO location was formally closed on August 9, 2018.

3. Other

- Continued clearing cross-country sewer easement areas. Cleared cross-country easements have been maintained.

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- Performed visual inspections of the cross-country sewer easements in May, August and November 2018.
- Inspected and photo-documented the Davis Brook CSO tank on October 30-31, 2018, through a contractor who is recommending and completing repairs. The anticipated repairs will reduce tidal infiltration.
- Installed nine new manholes in collection system to increase accessibility of mains in Kenduskeag West, Carr Brook, and Davis Brook subsections.
- Removed one catch basin discovered on the sewer main in the separated portion of Carr Brook subsection.
- Met with sewer maintenance department to discuss CCTV procedures, train on new apps for use in the field, review NASSCO requirements, and answer questions.

4. Annual CSO Progress Report

The City of Bangor monitors flow at each of its CSO outfalls, either through the Supervisory Control and Data Acquisition (SCADA) system, a contract with ADS Environmental Services for electronic flow meters, or visual means. These data were used to prepare the Annual CSO Progress Report for 2017, which was submitted to Maine DEP on February 28, 2018. This report was copied to EPA.

Pursuant to the requirements of the City's Maine Pollutant Discharge Elimination (MEPDES) permit ME0100781, as revised, dated August 8, 2016, the City will submit the Annual CSO Progress Report for 2018 to Maine DEP by March 1, 2019. A copy of the report will also be submitted to EPA.

B. Illicit Connections

1. List of Illicit Connections

The City discovered one illicit connection during the reporting period. As part of an MS4 investigation, it was discovered on October 23, 2018, that a business on Pleasant Street was directly connected to the stormwater system. City staff dye-tested other buildings in the vicinity and conducted CCTV inspections of adjacent lines to be certain there were no other illicit connections. The City hired a contractor who installed a new service connection to the sanitary sewer at a higher elevation through the foundation wall (31 inches of stone and mortar construction). This was completed on December 27, 2018. On January 2, 2019, the interior plumbing was re-routed to and connected to the new sanitary sewer stub. The existing illicit connection was abandoned, capped, and marked "NO DUMPING DRAINS TO WATERWAYS" to prevent future pollution. The estimated flow redirected is 150 gal/day of office and pre-treated rug cleaning industry flow.

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2. GIS Map of Each Illicit Connection

The location of the illicit connection discovered within the reporting period is shown in [Appendix A](#).

C. Collection System Assessments and Maintenance

Based on the most current GIS data available, the length of the inspectable portion of the City's sewer collection system is approximately **715,200** linear feet, or **135.5** miles. The length of the remaining components of the sewer collection system, including interceptors, force mains, siphons, and leads, is approximately **82,100** linear feet, or approximately **15.5** miles. Generally, interceptors, force mains, siphons, and leads are not able to be inspected using CCTV or flushed under normal operating circumstances using standard industry practices. There are approximately **3,346** manholes in the collection system, including new ones added this year.

1. CCTV Assessments

The City and/or its subcontractors completed **90,823** linear feet of CCTV inspections within the publicly owned sewer collection system. This amount includes repeat CCTV inspections. The total length of system pipe investigated is **49,681** linear feet, or about **12.7%** of the inspectable portion of the sewer collection system. Refer to [Appendix B](#) (CCTV Inspection Log) for a complete listing of CCTV inspections completed during the reporting period.

2. Manhole Assessments

The City and/or its subcontractors completed manhole inspections on **376** publicly owned sewer collection system manholes in 2018, which is about **11.2%** of the total number of public manholes in the system. This number does not include repeat inspections. Refer to [Appendix C](#) (Manhole Inspection Log) for a complete listing of inspections completed during the reporting period.

3. Repairs, Replacements, or Upgrades Identified by CCTV

Refer to [Appendix D](#) (CCTV Repair, Replacement, and Upgrade Log) for a listing of repairs, replacements, or upgrades that were identified during CCTV investigations, as well as a schedule for implementation for those repairs, replacements, or upgrades that were not completed during the reporting period.

4. Cleaning

The City and/or its subcontractors cleaned **155,591** linear feet of pipe within the publicly owned sewer collection system in 2018, including repeat cleanings. The total length of pipe cleaned excluding repeat cleanings is **73,957** linear feet, or about **10.3%** of the inspectable portion of the sewer collection system. Refer to [Appendix E](#) (Cleaning Log), for a complete

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listing of cleaning completed during the reporting period. This includes cleaning done in advance of CCTV work and performed as part of routine maintenance activities. Note that lines are not always cleaned in advance of CCTV work, as sometimes it is beneficial to perform a CCTV investigation on a pipe without prior cleaning.

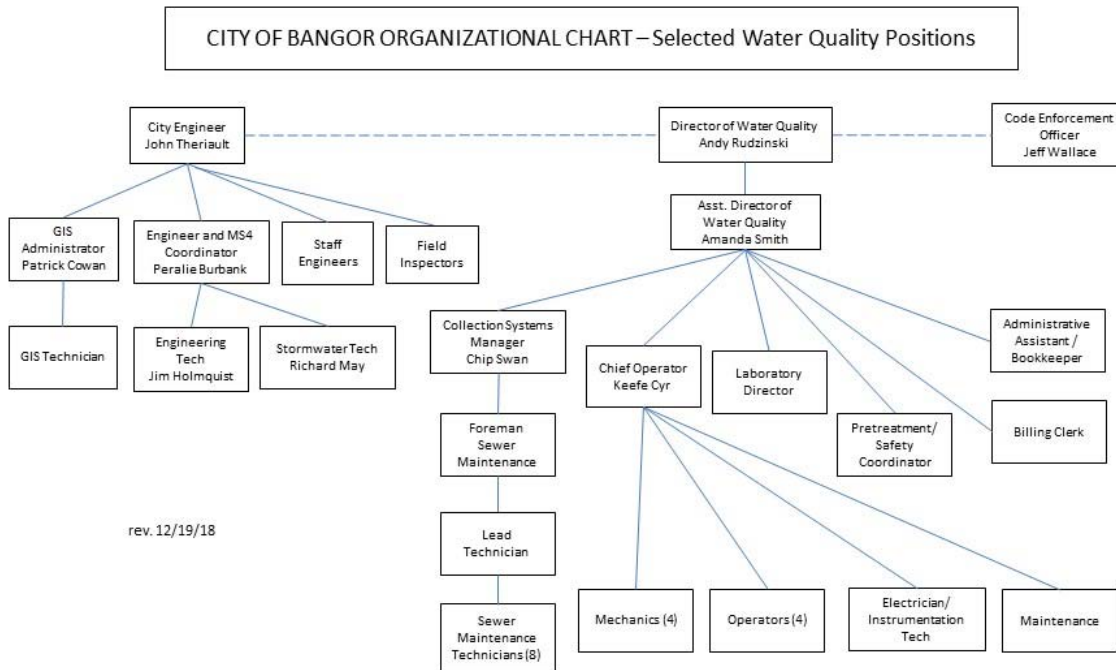
D. Maintenance Improvement Plan (MIP)

The City revises and updates the MIP on a yearly basis. The following substantive changes were made in 2018.

1. Plan Updates

a) *Organizational Structure, Information Management, Contacts*

The following is the current organization chart showing key positions.



b) *Changes to System Maps*

The collection system mapping is updated continuously throughout the year as part of the City's ongoing GIS infrastructure mapping program. The GIS dataset containing sewer, stormwater, and other relevant features is provided to EPA annually on July 1 pursuant to Par. 9.a. of the Consent Decree.

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c) Incorporation of Cleaning, Inspection, and Assessment Programs

The City has a goal to clean, inspect, and assess 10% of its sewer collection system per year. The lists of pipe that were inspected and cleaned during the reporting period are included in [Appendix B](#) (CCTV Inspections) and [Appendix E](#) (Cleaning Log), respectively. The list of manholes that were inspected during the reporting period is included as [Appendix C](#) (Manhole Inspection Log).

d) Changes to Sewer Use Ordinance or Fats, Oils, and Grease Program

There were no changes to the ordinance. The City has implemented an internal process whereby applications for renewal of victualer licenses must be accompanied by grease trap maintenance logs. The logs and CCTV footage in the vicinity are reviewed before the license renewal is granted.

e) Collection System Capacity Analysis Updates

The City maintains a hydraulic model of selected portions of its collection system, in part to assist in evaluating available capacity in the collection system. The model was developed using the EPA Stormwater Management Model (SWMM) module is periodically updated by AECOM, the City's engineering consultant.

SWMM model update work will continue during the 2019 reporting period as needed when projects are completed and new information becomes available.

2. Performance Metrics

a) SSOs

SSO events that occurred during the reporting period are summarized in the table below. For a detailed listing of SSO events that occurred during the reporting period, refer to [Appendix F](#) (SSO Event Log).

Total number of SSOs	10
Estimated total volume of SSOs	3335 gallons
Number of dry weather SSOs	5
Number of wet weather SSOs	2
Number of SSOs where weather was either unknown or irrelevant to type of incident	3
Number of SSOs caused primarily by pipe blockage (debris, grease)	5
Number of SSOs caused primarily by pipe failure	1*
<i>*temporary pipe connection used during construction could not withstand storm flow</i>	

b) Routine Cleaning and CCTV Assessment

For the total amount of collections system pipe that was inspected by CCTV and cleaned during the reporting period, refer to [Appendix C](#) (CCTV Inspection Log) and [Appendix F](#) (Cleaning Log), respectively.

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c) Pump Station Work Orders

There were 53 pump station work orders completed during the reporting period. Kenduskeag pump station is checked seven days per week. The other pump stations are visited a minimum of twice per week. During these checks, housekeeping, minor repairs, and adjustments are made that are not reflected on work orders.

d) Fats, Oils, and Grease (FOG)

During the 2018 reporting period, the City permitted the installation of 13 grease traps or interceptors, 11 of which have been installed and inspected. No facilities are known to be operating without a license or grease trap.

IV. Sanitary Sewer Overflows (SSOs)

A. Chronological List of SSOs

There were ten SSOs, including Private Property Backups, that occurred during the reporting period. Refer to [Appendix F](#) (SSO Event Log) for a complete listing of SSOs that occurred within the reporting period, as well as details regarding each incident.

B. GIS Map of Each SSO

Location maps of SSOs that occurred within the reporting period are included as [Appendix G](#) (Location Map of Sanitary Sewer Overflows).

V. Sanitary System Evaluation Survey (SSES) Update

The City continued manhole evaluations and pipe inspection in the Carr Brook, Davis Brook and Barkersville subsections. The following manholes with infiltration were noted.

Manhole	Type	Amount (GPD)
BV060	infiltration	20
BV061	infiltration	20
BV102	infiltration	20
BV121	infiltration	45
BV202	infiltration	90
BV555	infiltration	90
BV556	infiltration	20
CB110	infiltration	20
CB111	infiltration	800
CB120	infiltration	90
CB121	infiltration	20
CB140	infiltration	20
CB160	infiltration	20

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Manhole	Type	Amount (GPD)
CB506	infiltration	20
CB851	infiltration	20

Based on review of the inspection data, no known or suspected exfiltration into the storm drain system or surface waters was identified.

VI. CSO Long-Term Control Plan (LTCP) Update

The City has removed 15,600 GPD of infiltration and inflow from the system since 2015.

Year	No. of Projects	I/I removed (GPD)
2016	1	5,600
2017	3	5,800
2018	1	4,200
TOTAL	5	15,600

In 2018, the City removed one catch basin in the Carr Brook subsection and removed 10 catch basins and 2,576 feet of brick pipe from the Kenduskeag East subsection.

VII. Compliance Activities Planned for Following Reporting Period

The following activities, in no particular order, are planned for the next reporting period in order to achieve compliance with the requirements of the Consent Decree and reduce CSO and SSO volumes:

- Locate and redirect illicit connections as part of Municipal Separate Storm Sewer System (MS4) permit compliance activities.
- Continue work under the City's Sewer Spot Repair Contract to prioritize and repair trouble spots and other defects in the collection system.
- Continue work with consultant on modeling, to determine if capacity is available to make further adjustments on CSO weirs and regulator structures.
- Clean, perform CCTV inspections, and identify upgrades, repairs, or replacements needed in the collection system, covering a minimum of 10% of the collection system per year. Areas of focus for the next reporting period include the Kenduskeag East, Davis Brook, and Barkersville subsections.
- Continue collection system maintenance activities such as easement clearing and easement inspections.

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- Submit the Annual CSO Progress Report to DEP and EPA, due on or before March 1, 2019.
- Submit the Annual Report for MS4 PY6 to DEP and EPA, due on or before September 15, 2019.
- Complete design of the second holding tank in the Davis Brook subsection.
- Complete design and begin construction of Wing Park sewer modifications.
- Complete design and begin construction on three replacement projects in the Airport subsection and one project in the Davis Brook subsection.

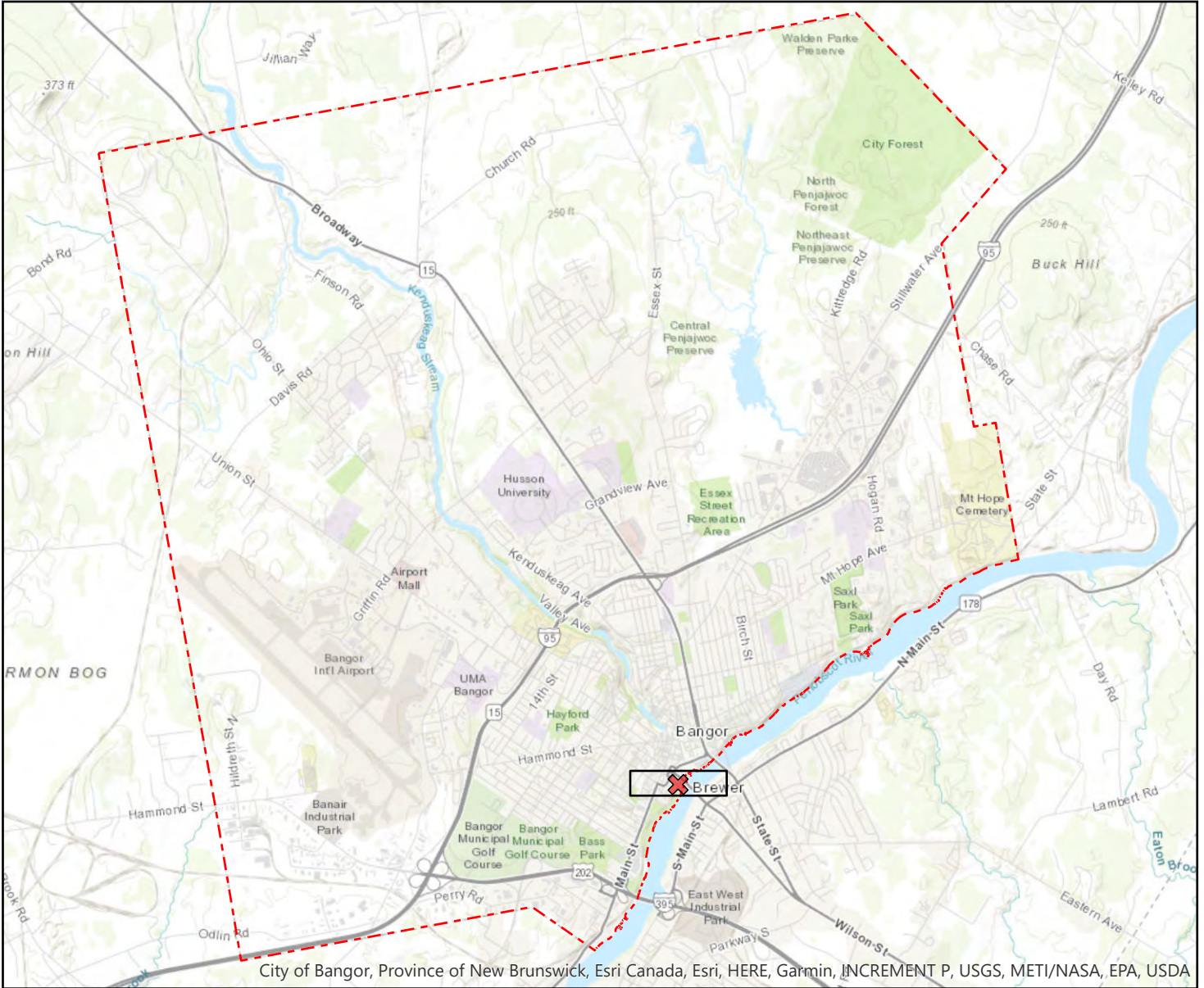
Note that certain of the above-described tasks planned for the next reporting period may be subject to adjustment due to changing priorities (including, among other things, the need to prioritize emergency repairs) and to take advantage of opportunities that may arise to align capital projects with other utility or roadway resurfacing work.

Appendices

- A. Location Map of Illicit Connections**
- B. CCTV Inspection Log**
- C. Manhole Inspection Log**
- D. CCTV Repair, Replacement, and Upgrade Log**
- E. Cleaning Log**
- F. SSO Event Log**
- G. Location Map of Sanitary Sewer Overflows**

Appendix A
Illicit Connection Map

Illicit Connection Removed 2018



Appendix B

CCTV Inspection Log

APPENDIX B: CCTV INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Pipe Segment ID	Subsection	Inspection Date	Length of Inspection (FT)	Repeat Inspection	Justification for Repeat Inspection
AB017	ARCTIC BROOK	12/5/2018	238.5	Yes	Post Rehabilitation Survey
AB018	ARCTIC BROOK	12/5/2018	263.8	Yes	Post Rehabilitation Survey
AB019	ARCTIC BROOK	12/5/2018	29.7	Yes	Post Rehabilitation Survey
AB019A	ARCTIC BROOK	12/5/2018	159.1	No	
AB053	ARCTIC BROOK	2/9/2018	54.2	Yes	Capital Improvement Program Assessment
AB054	ARCTIC BROOK	2/9/2018	216.5	Yes	Capital Improvement Program Assessment
AB056	ARCTIC BROOK	2/13/2018	277.6	Yes	Capital Improvement Program Assessment
AB060	ARCTIC BROOK	2/8/2018	49.5	Yes	Capital Improvement Program Assessment
AB061	ARCTIC BROOK	2/8/2018	278.4	Yes	Capital Improvement Program Assessment
AB062	ARCTIC BROOK	2/8/2018	171	Yes	Capital Improvement Program Assessment
AB063	ARCTIC BROOK	2/8/2018	59.6	Yes	Capital Improvement Program Assessment
AB064	ARCTIC BROOK	2/7/2018	71.5	No	
AB065	ARCTIC BROOK	2/7/2018	188.2	Yes	Capital Improvement Program Assessment
AB076	ARCTIC BROOK	2/13/2018	265.9	Yes	Reversal
AB076	ARCTIC BROOK	2/13/2018	180.4	Yes	Capital Improvement Program Assessment
AB137	ARCTIC BROOK	10/9/2018	17.7	Yes	Post Rehabilitation Survey
AB137	ARCTIC BROOK	10/9/2018	254.7	Yes	Reversal
AB137	ARCTIC BROOK	5/10/2018	15.7	Yes	Capital Improvement Program Assessment
AB137	ARCTIC BROOK	5/10/2018	92.3	Yes	Reversal
AB142	ARCTIC BROOK	10/9/2018	249.5	Yes	Resurvey
AB142	ARCTIC BROOK	10/5/2018	59.6	Yes	Post Rehabilitation Survey
AB142	ARCTIC BROOK	10/5/2018	189.2	Yes	Reversal
AB400	ARCTIC BROOK	12/5/2018	548.2	Yes	Routine Assessment
AB401	ARCTIC BROOK	12/5/2018	341.9	Yes	Post Rehabilitation Survey
AB404A	Arctic Brook	10/18/2018	141.8	No	
AB411	ARCTIC BROOK	10/18/2018	366.8	No	
AB435	ARCTIC BROOK	5/21/2018	21	Yes	Maintenance Related
AB435	ARCTIC BROOK	5/21/2018	220	Yes	Reversal
AB550	ARCTIC BROOK	2/15/2018	49.3	Yes	Capital Improvement Program Assessment
AB550	ARCTIC BROOK	2/15/2018	321	Yes	Reversal
AB590	ARCTIC BROOK	4/2/2018	50.7	Yes	Post Rehabilitation Survey
AB601	ARCTIC BROOK	10/3/2018	38.1	Yes	Maintenance Related
AB621	ARCTIC BROOK	10/2/2018	300.8	Yes	Post Rehabilitation Survey
AP026	AIRPORT	10/2/2018	36.6	Yes	Reversal
AP026	AIRPORT	10/2/2018	150.2	Yes	Resurvey
AP026	AIRPORT	10/1/2018	117.6	Yes	Routine Assessment
AP027	AIRPORT	10/3/2018	279.1	Yes	Resurvey
AP027	AIRPORT	10/2/2018	161.9	Yes	Routine Assessment
AP070	AIRPORT	10/1/2018	284.6	No	
AP071	AIRPORT	10/1/2018	116.3	No	
AP072	AIRPORT	10/1/2018	216.4	Yes	Reversal
AP072	AIRPORT	10/1/2018	14.8	Yes	Routine Assessment
AP200	AIRPORT	3/5/2018	98.7	No	
AP201	AIRPORT	3/5/2018	69.8	No	
AP202	AIRPORT	3/5/2018	93.2	No	

APPENDIX B: CCTV INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Pipe Segment ID	Subsection	Inspection Date	Length of Inspection (FT)	Repeat Inspection	Justification for Repeat Inspection
AP203	AIRPORT	3/5/2018	165.1	Yes	Maintenance Related
AP205	AIRPORT	3/5/2018	35.4	Yes	Maintenance Related
AP312	AIRPORT	12/27/2018	6.3	Yes	Routine Assessment
AP345	AIRPORT	12/26/2018	175.7	Yes	Pre-Rehabilitation Survey
AP345	AIRPORT	12/26/2018	79.9	Yes	Reversal
AP352	AIRPORT	11/13/2018	317.9	Yes	Routine Assessment
AP370	AIRPORT	12/18/2018	14.3	Yes	Maintenance Related
AP371	AIRPORT	12/18/2018	41.3	Yes	Maintenance Related
AP372	AIRPORT	12/26/2018	53.7	Yes	Pre-Rehabilitation Survey
AP372	AIRPORT	12/26/2018	94.4	Yes	Reversal
AP373	AIRPORT	12/27/2018	74.1	Yes	Reversal
AP373	AIRPORT	12/27/2018	211.9	Yes	Pre-Rehabilitation Survey
AP373	AIRPORT	12/26/2018	43	Yes	Pre-Rehabilitation Survey
AP374	AIRPORT	12/27/2018	1	No	
AP380	AIRPORT	12/26/2018	123.8	Yes	Pre-Rehabilitation Survey
AP416	AIRPORT	2/5/2018	89.6	Yes	Maintenance Related
AP422	AIRPORT	1/9/2018	24.7	Yes	Capital Improvement Program Assessment
AP422	AIRPORT	1/9/2018	185.5	Yes	Capital Improvement Program Assessment
AP447	AIRPORT	4/4/2018	192.7	No	
AP506	AIRPORT	2/26/2018	68.6	Yes	Maintenance Related
AP506A	AIRPORT	2/26/2018	20.9	No	
AP507	AIRPORT	2/21/2018	114.3	No	
AP508	AIRPORT	2/21/2018	197.1	No	
AP513	AIRPORT	6/6/2018	194.2	Yes	Routine Assessment
AP514	AIRPORT	6/6/2018	49.6	No	
AP520	AIRPORT	3/1/2018	356.6	Yes	Maintenance Related
AP521	AIRPORT	2/22/2018	186	Yes	Maintenance Related
AP522	AIRPORT	2/26/2018	258.2	Yes	Maintenance Related
AP530	AIRPORT	2/23/2018	243.2	Yes	Maintenance Related
AP531	AIRPORT	2/23/2018	209.5	No	
AP533	AIRPORT	1/31/2018	143.1	Yes	Maintenance Related
AP540	AIRPORT	2/21/2018	150.3	No	
AP541	AIRPORT	2/21/2018	108.2	Yes	Maintenance Related
AP541A	AIRPORT	2/21/2018	151.3	No	
AP542	AIRPORT	2/21/2018	180.1	No	
AP601	AIRPORT	9/11/2018	300.4	No	
AP650	AIRPORT	8/1/2018	399	No	
AP651	AIRPORT	7/31/2018	337.1	Yes	Maintenance Related
AP660	AIRPORT	8/2/2018	339.2	Yes	Maintenance Related
AP661	AIRPORT	8/22/2018	413.6	Yes	Maintenance Related
AP741	AIRPORT	5/11/2018	104.3	Yes	Capital Improvement Program Assessment
AP750	AIRPORT	5/11/2018	54.9	No	
BS001	BLANCHARD STREET	5/30/2018	44.5	No	
BS002	BLANCHARD STREET	5/30/2018	12.2	No	
BS003	BLANCHARD STREET	5/30/2018	237	No	

APPENDIX B: CCTV INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Pipe Segment ID	Subsection	Inspection Date	Length of Inspection (FT)	Repeat Inspection	Justification for Repeat Inspection
BS004	BLANCHARD STREET	5/30/2018	360.4	No	
BU604	BURLEIGH	6/8/2018	265.4	Yes	Maintenance Related
BV004	BARKERSVILLE	3/16/2018	56.8	No	
BV005	BARKERSVILLE	3/16/2018	80.5	No	
BV017	BARKERSVILLE	2/14/2018	248.9	Yes	Capital Improvement Program Assessment
BV023	BARKERSVILLE	1/11/2018	223.1	No	
BV024	BARKERSVILLE	1/11/2018	229.6	No	
BV032	BARKERSVILLE	3/22/2018	249.9	Yes	Post Rehabilitation Survey
BV033	BARKERSVILLE	3/12/2018	244.2	Yes	Post Rehabilitation Survey
BV050	BARKERSVILLE	3/16/2018	541.6	No	
BV051	BARKERSVILLE	3/13/2018	272.2	No	
BV052	BARKERSVILLE	3/12/2018	232.1	No	
BV053	BARKERSVILLE	3/12/2018	32.1	No	
BV056	BARKERSVILLE	2/1/2018	170.3	No	
BV060	BARKERSVILLE	5/7/2018	306	No	
BV061	BARKERSVILLE	7/17/2018	251.2	Yes	Post Rehabilitation Survey
BV061	BARKERSVILLE	5/3/2018	242.9	Yes	Capital Improvement Reversal
BV061	BARKERSVILLE	5/2/2018	316.9	Yes	Capital Improvement Program Assessment
BV062	BARKERSVILLE	4/25/2018	166.4	Yes	Capital Improvement Program Assessment
BV062	BARKERSVILLE	4/25/2018	58.4	Yes	Reversal
BV063	BARKERSVILLE	5/1/2018	313	Yes	Resurvey
BV063	BARKERSVILLE	4/25/2018	274.6	Yes	Capital Improvement Program Assessment
BV064	BARKERSVILLE	7/9/2018	405.3	Yes	Post Rehabilitation Survey
BV064	BARKERSVILLE	5/1/2018	395.3	Yes	Capital Improvement Program Assessment
BV100	BARKERSVILLE	3/15/2018	581.4	No	
BV101	BARKERSVILLE	3/15/2018	502.5	Yes	Capital Improvement Program Assessment
BV102	BARKERSVILLE	3/13/2018	190.1	No	
BV107	BARKERSVILLE	1/31/2018	10.8	No	
BV108	BARKERSVILLE	1/31/2018	59.5	Yes	Reversal
BV108	BARKERSVILLE	1/30/2018	10.9	Yes	Routine Assessment
BV109	BARKERSVILLE	1/31/2018	191.6	Yes	Reversal
BV109	BARKERSVILLE	1/30/2018	39.1	Yes	Routine Assessment
BV110	BARKERSVILLE	1/31/2018	258	Yes	Reversal
BV110	BARKERSVILLE	1/30/2018	2.4	Yes	Routine Assessment
BV111	BARKERSVILLE	1/16/2018	3.2	Yes	Routine Assessment
BV115	BARKERSVILLE	3/16/2018	16.3	No	
BV116	BARKERSVILLE	2/1/2018	393.3	No	
BV117	BARKERSVILLE	2/1/2018	22.4	No	
BV122	BARKERSVILLE	3/27/2018	115	Yes	Resurvey
BV125	BARKERSVILLE	2/1/2018	109.1	No	
BV125A	BARKERSVILLE	2/1/2018	108.7	No	
BV126	BARKERSVILLE	2/1/2018	54.5	No	
BV127	BARKERSVILLE	2/1/2018	95.2	No	
BV128	BARKERSVILLE	2/1/2018	100.7	Yes	Reversal
BV128	BARKERSVILLE	2/1/2018	29.7	Yes	Routine Assessment

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BV128A	BARKERSVILLE	2/1/2018	38.7	No	
BV129	BARKERSVILLE	1/31/2018	59.9	Yes	Routine Assessment
BV129	BARKERSVILLE	1/31/2018	180.7	Yes	Reversal
BV135	BARKERSVILLE	2/1/2018	47.2	Yes	Routine Assessment
BV136	BARKERSVILLE	2/1/2018	152.1	No	
BV300	BARKERSVILLE	2/14/2018	3.5	No	
BV301	BARKERSVILLE	2/14/2018	154	Yes	Capital Improvement Program Assessment
BV301	BARKERSVILLE	2/14/2018	58.7	Yes	Reversal
BV310	BARKERSVILLE	1/30/2018	220.7	No	
BV410	BARKERSVILLE	1/25/2018	379.3	No	
BV411	BARKERSVILLE	1/24/2018	520	No	
BV412	BARKERSVILLE	1/24/2018	171.8	Yes	Routine Assessment
BV412	BARKERSVILLE	1/24/2018	77.3	Yes	Reversal
BV413	BARKERSVILLE	1/24/2018	43.2	No	
BV415	BARKERSVILLE	1/30/2018	86.8	No	
BV421	BARKERSVILLE	1/29/2018	221	No	
BV436	BARKERSVILLE	1/25/2018	25.3	No	
BV445	BARKERSVILLE	1/26/2018	123.4	No	
BV451	BARKERSVILLE	2/14/2018	404.3	Yes	Capital Improvement Program Assessment
BV475	BARKERSVILLE	1/22/2018	340.4	No	
BV501	BARKERSVILLE	3/29/2018	161.5	Yes	Resurvey
BV503	BARKERSVILLE	1/11/2018	119.6	Yes	Reversal
BV503	BARKERSVILLE	1/2/2018	227.7	Yes	Routine Assessment
BV504	BARKERSVILLE	1/2/2018	249.5	No	
BV505	BARKERSVILLE	1/11/2018	159	Yes	Resurvey
BV506	BARKERSVILLE	1/3/2018	135.2	No	
BV511	BARKERSVILLE	1/12/2018	173.8	No	
BV520A	BARKERSVILLE	12/3/2018	61.9	No	
BV521	BARKERSVILLE	12/3/2018	149.5	No	
BV525	BARKERSVILLE	1/11/2018	366.4	No	
BV552	BARKERSVILLE	10/24/2018	70.6	No	
BV556	BARKERSVILLE	5/15/2018	324.5	Yes	Resurvey
BV556	BARKERSVILLE	4/27/2018	67.5	Yes	Capital Improvement Program Assessment
BV557	BARKERSVILLE	4/27/2018	285.7	No	
BV576	BARKERSVILLE	4/2/2018	234.4	Yes	Reversal
BV576	BARKERSVILLE	4/2/2018	372	Yes	Routine Assessment
BV627	BARKERSVILLE	10/16/2018	77	Yes	Post Rehabilitation Survey
BV670	BARKERSVILLE	2/13/2018	163	No	
BV671	BARKERSVILLE	10/24/2018	304.9	No	
BV701	BARKERSVILLE	11/1/2018	230.8	No	
BV702	BARKERSVILLE	11/1/2018	241.9	No	
BV703	BARKERSVILLE	11/2/2018	0.4	Yes	Reversal
BV703	BARKERSVILLE	11/1/2018	141.8	Yes	Routine Assessment
BV740	BARKERSVILLE	3/20/2018	208.1	Yes	Routine Assessment
BV740	BARKERSVILLE	3/20/2018	133.7	Yes	Reversal

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BV742	BARKERSVILLE	3/19/2018	58.2	Yes	Reversal
BV751	BARKERSVILLE	10/29/2018	298.9	No	
BV820	BARKERSVILLE	3/27/2018	299.7	Yes	Reversal
BV820	BARKERSVILLE	3/20/2018	487.6	Yes	Post Rehabilitation Survey
CB037	CARR BROOK	10/12/2018	188.7	Yes	Post Rehabilitation Survey
CB107	CARR BROOK	10/12/2018	295.6	Yes	Post Rehabilitation Survey
CB109	CARR BROOK	2/23/2018	85.4	Yes	INFILTRATION/INFLOW INVESTIGATION
CB112	CARR BROOK	4/10/2018	174.4	Yes	Routine Assessment
CB121	CARR BROOK	4/4/2018	271.4	Yes	Resurvey
CB126	CARR BROOK	10/11/2018	355.6	Yes	Post Rehabilitation Survey
CB140	CARR BROOK	4/26/2018	407.9	Yes	Reversal
CB140	CARR BROOK	4/25/2018	269	Yes	Capital Improvement Program Assessment
CB145	CARR BROOK	4/26/2018	66	Yes	Reversal
CB160	CARR BROOK	3/27/2018	285.7	Yes	Reversal
CB215	CARR BROOK	10/12/2018	82.4	Yes	Post Rehabilitation Survey
CB215	CARR BROOK	6/21/2018	69.1	Yes	Routine Assessment
CB253	CARR BROOK	10/11/2018	360.3	Yes	Post Rehabilitation Survey
CB502	CARR BROOK	9/11/2018	147.1	Yes	Post Rehabilitation Survey
CB504	CARR BROOK	10/11/2018	538.3	Yes	Post Rehabilitation Survey
CB506	CARR BROOK	10/12/2018	265.2	Yes	Post Rehabilitation Survey
CB603	CARR BROOK	7/9/2018	116	Yes	Maintenance Related
CB851	CARR BROOK	3/29/2018	401.9	Yes	Routine Assessment
CM009	CEMETERY	5/30/2018	135.9	Yes	Capital Improvement Program Assessment
CM009A	CEMETERY	5/30/2018	311.3	Yes	Capital Improvement Program Assessment
CM010	CEMETERY	5/30/2018	23.2	No	
CM010A	CEMETERY	5/30/2018	195.3	Yes	Capital Improvement Program Assessment
CM011	CEMETERY	5/30/2018	219.6	Yes	Capital Improvement Program Assessment
CM100A	CEMETERY	5/14/2018	57.9	Yes	Capital Improvement Program Assessment
CM103A	CEMETERY	5/14/2018	146.5	Yes	Capital Improvement Program Assessment
CM104	CEMETERY	5/14/2018	91.4	Yes	Capital Improvement Program Assessment
CM691	CEMETERY	3/9/2018	298	Yes	Post Rehabilitation Survey
DB009	DAVIS BROOK	4/17/2018	357.2	No	
DB010	DAVIS BROOK	4/17/2018	6.8	No	
DB011	DAVIS BROOK	4/17/2018	265.8	No	
DB012	DAVIS BROOK	4/18/2018	179.4	Yes	Infiltration/Inflow Investigation
DB013	DAVIS BROOK	4/18/2018	290.2	Yes	Infiltration/Inflow Investigation
DB014	DAVIS BROOK	4/18/2018	177.5	Yes	Infiltration/Inflow Investigation
DB015	DAVIS BROOK	4/18/2018	35.1	No	
DB016	DAVIS BROOK	4/18/2018	53.5	Yes	Reversal
DB016	DAVIS BROOK	4/18/2018	188.7	Yes	Infiltration/Inflow Investigation
DB016A	DAVIS BROOK	4/9/2018	245.2	No	
DB024	DAVIS BROOK	3/20/2018	752.2	Yes	Capital Improvement Program Assessment
DB241	DAVIS BROOK	4/6/2018	468.5	No	
DB303A	DAVIS BROOK	4/6/2018	123.3	No	
DB406	DAVIS BROOK	4/30/2018	672.9	Yes	Infiltration/Inflow Investigation

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DB406	DAVIS BROOK	4/30/2018	44.2	Yes	Infiltration/Inflow Reversal
DB407	DAVIS BROOK	4/30/2018	275.5	Yes	Infiltration/Inflow Investigation
DB420	DAVIS BROOK	4/30/2018	213.5	Yes	Infiltration/Inflow Investigation
DB421	DAVIS BROOK	4/30/2018	192.5	Yes	Infiltration/Inflow Investigation
DB421	DAVIS BROOK	4/30/2018	4.6	Yes	Infiltration/Inflow Reversal
DB422	DAVIS BROOK	4/30/2018	78.5	Yes	Reversal
DB422	DAVIS BROOK	4/30/2018	4	Yes	Infiltration/Inflow Investigation
DB423	DAVIS BROOK	4/30/2018	169.6	Yes	Infiltration/Inflow Investigation
DB440A	DAVIS BROOK	4/6/2018	30.1	No	
DB470	DAVIS BROOK	4/18/2018	230.6	No	
DB471	DAVIS BROOK	4/18/2018	42.5	No	
DB472	DAVIS BROOK	4/20/2018	299.8	Yes	Infiltration/Inflow Investigation
DB472	DAVIS BROOK	4/20/2018	18.7	Yes	Reversal
DB472	DAVIS BROOK	3/21/2018	18.1	Yes	Reversal
DB472	DAVIS BROOK	3/21/2018	424.5	Yes	Routine Assessment
DB473	DAVIS BROOK	4/20/2018	182.2	No	
DB500	DAVIS BROOK	4/23/2018	241.5	No	
DB501	DAVIS BROOK	4/20/2018	540.1	Yes	Infiltration/Inflow Investigation
DB505	DAVIS BROOK	4/9/2018	142.9	Yes	Infiltration/Inflow Investigation
DB506	DAVIS BROOK	4/9/2018	154	No	
DB507	DAVIS BROOK	4/9/2018	89.4	No	
DB508	DAVIS BROOK	4/9/2018	17.2	No	
DB510	DAVIS BROOK	5/4/2018	245.4	Yes	Post Rehabilitation Survey
DB511	DAVIS BROOK	5/9/2018	241.4	No	
DB512	DAVIS BROOK	5/9/2018	32.4	No	
DB520	DAVIS BROOK	4/20/2018	71.1	Yes	Infiltration/Inflow Investigation
DB526	DAVIS BROOK	3/28/2018	87.7	Yes	Resurvey
DB535	DAVIS BROOK	9/11/2018	87	Yes	Maintenance Related
DB535	DAVIS BROOK	7/9/2018	87.8	Yes	Post Rehabilitation Survey
DB535	DAVIS BROOK	4/3/2018	307.3	Yes	Reversal
DB535	DAVIS BROOK	3/19/2018	3.9	Yes	Capital Improvement Program Assessment
DB545	DAVIS BROOK	5/8/2018	20.4	No	
DB546	Davis Brook	5/8/2018	8.5	No	
DB547	Davis Brook	5/8/2018	13.8	No	
DB551	DAVIS BROOK	4/9/2018	59.7	No	
DB552	DAVIS BROOK	5/4/2018	319.1	Yes	Post Rehabilitation Survey
DB554	DAVIS BROOK	5/7/2018	197.9	Yes	Reversal
DB554	DAVIS BROOK	5/7/2018	220.6	Yes	Infiltration/Inflow Investigation
DB555	DAVIS BROOK	5/7/2018	224.7	No	
DB556	DAVIS BROOK	5/7/2018	0.2	No	
DB560	DAVIS BROOK	4/9/2018	23.6	No	
DB561	DAVIS BROOK	5/9/2018	377.5	Yes	Infiltration/Inflow Investigation
DB561	DAVIS BROOK	5/8/2018	72.5	Yes	Infiltration/Inflow Investigation
DB562	DAVIS BROOK	5/9/2018	372.9	Yes	Infiltration/Inflow Investigation
DB563	DAVIS BROOK	5/3/2018	58.7	Yes	Infiltration/Inflow Reversal

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DB563	DAVIS BROOK	5/3/2018	302.3	Yes	Infiltration/Inflow Investigation
DB564	DAVIS BROOK	9/27/2018	165.2	Yes	Post Rehabilitation Survey
DB564	DAVIS BROOK	5/3/2018	137.6	Yes	Infiltration/Inflow Investigation
DB565	DAVIS BROOK	5/3/2018	2.2	Yes	Infiltration/Inflow Investigation
DB566	DAVIS BROOK	5/3/2018	165.6	No	
DB575	DAVIS BROOK	5/8/2018	38.6	No	
DB580	DAVIS BROOK	5/7/2018	85.4	No	
DB585	DAVIS BROOK	5/4/2018	107.2	No	
DB596	DAVIS BROOK	5/2/2018	40.5	Yes	Infiltration/Inflow Investigation
DB601	DAVIS BROOK	4/24/2018	220.7	Yes	Infiltration/Inflow Investigation
DB601	DAVIS BROOK	3/26/2018	264.8	Yes	Post Rehabilitation Survey
DB605	DAVIS BROOK	4/23/2018	323	Yes	Infiltration/Inflow Investigation
DB606	DAVIS BROOK	4/23/2018	49.6	No	
DB612	DAVIS BROOK	4/23/2018	293.4	Yes	Infiltration/Inflow Investigation
DB620	DAVIS BROOK	4/25/2018	1	No	
DB621	DAVIS BROOK	4/25/2018	85.9	No	
DB622	DAVIS BROOK	4/25/2018	23.5	No	
DB630	DAVIS BROOK	4/24/2018	68	Yes	Reversal
DB630	DAVIS BROOK	4/23/2018	356.6	Yes	Infiltration/Inflow Investigation
DB630	DAVIS BROOK	2/7/2018	65	Yes	Capital Improvement Program Assessment
DB630	DAVIS BROOK	2/7/2018	348.6	Yes	Reversal
DB631	DAVIS BROOK	2/7/2018	57	No	
DB700	DAVIS BROOK	4/17/2018	67.5	Yes	Infiltration/Inflow Investigation
DB701	DAVIS BROOK	4/17/2018	28	No	
DB702	DAVIS BROOK	4/17/2018	250.9	No	
DB702A	DAVIS BROOK	4/17/2018	73.3	Yes	Infiltration/Inflow Investigation
DB703	DAVIS BROOK	5/16/2018	269.9	No	
DB730	DAVIS BROOK	4/17/2018	74.3	Yes	Infiltration/Inflow Investigation
DB730	DAVIS BROOK	4/17/2018	48.3	Yes	Reversal
DB731	DAVIS BROOK	4/12/2018	143	No	
DB732	DAVIS BROOK	4/12/2018	101	Yes	Reversal
DB732	DAVIS BROOK	4/12/2018	369.4	Yes	Infiltration/Inflow Investigation
DB750	DAVIS BROOK	4/25/2018	174.3	No	
DB960	DAVIS BROOK	1/16/2018	213.1	No	
DB961	DAVIS BROOK	1/16/2018	378.7	No	
DB962	DAVIS BROOK	1/16/2018	32.2	No	
DN001	DUTTON	6/28/2018	46.3	No	
DN002	DUTTON	6/28/2018	126.3	No	
DN003	DUTTON	6/28/2018	117.8	No	
DN004	DUTTON	6/28/2018	71.5	No	
DN150	DUTTON	6/28/2018	46.4	No	
DW601	DOW	1/9/2018	94.9	Yes	Capital Improvement Program Assessment
DW601A	DOW	1/9/2018	166.2	Yes	Capital Improvement Program Assessment
DW601B	DOW	1/9/2018	69.5	No	
DW613	DOW	1/8/2018	208.4	Yes	Capital Improvement Program Assessment

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EK009	KENDUSKEAG EAST	9/5/2018	128.8	No	
EK010	KENDUSKEAG EAST	10/23/2018	222.3	Yes	Resurvey
EK010	KENDUSKEAG EAST	10/22/2018	21.3	Yes	Maintenance Related
EP061	EPI	4/27/2018	49.4	No	
ES003	EVERETT STREET	5/15/2018	159.5	No	
ES004	EVERETT STREET	5/17/2018	166.2	Yes	Capital Improvement Resurvey
ES004	EVERETT STREET	5/17/2018	14.3	Yes	Capital Improvement Reversal
ES200	EVERETT STREET	2/20/2018	187.7	No	
ES201	EVERETT STREET	2/20/2018	214.5	No	
ES202	EVERETT STREET	2/15/2018	162	No	
FK003	FRANKLIN STREET	12/19/2018	112.8	No	
FK004	FRANKLIN STREET	12/19/2018	87.1	No	
FK005	FRANKLIN STREET	12/19/2018	223.1	No	
FK008	FRANKLIN STREET	12/10/2018	82.5	No	
FK011	FRANKLIN STREET	12/12/2018	75.5	No	
FK012	FRANKLIN STREET	12/19/2018	127.4	No	
FK014	FRANKLIN STREET	12/31/2018	43.8	No	
FK200	FRANKLIN STREET	12/12/2018	207.4	No	
FK300	FRANKLIN STREET	12/6/2018	161.1	Yes	Routine Assessment
FK301	FRANKLIN STREET	12/6/2018	343.4	No	
FK302	FRANKLIN STREET	12/7/2018	271	No	
FK303	FRANKLIN STREET	12/7/2018	340.5	No	
FK350	FRANKLIN STREET	12/7/2018	210.9	No	
FK351	FRANKLIN STREET	12/7/2018	183.7	No	
FK400	FRANKLIN STREET	12/31/2018	96.7	No	
FK401	FRANKLIN STREET	12/31/2018	248.7	No	
FK402	FRANKLIN STREET	12/4/2018	349.5	No	
FK403	FRANKLIN STREET	12/4/2018	214	No	
FK404	FRANKLIN STREET	12/4/2018	305.5	No	
FK405	FRANKLIN STREET	12/4/2018	93.5	No	
FK407	FRANKLIN STREET	12/4/2018	263.2	No	
FK408	FRANKLIN STREET	12/4/2018	249.8	No	
FK460	FRANKLIN STREET	12/4/2018	199.5	No	
FS202	FOURTEENTH STREET	2/13/2018	671.6	Yes	Capital Improvement Program Assessment
FS202	FOURTEENTH STREET	2/9/2018	475.9	Yes	Capital Improvement Program Assessment
FS203	FOURTEENTH STREET	2/9/2018	150.8	No	
FS204	FOURTEENTH STREET	2/9/2018	1	No	
FS605	FOURTEENTH STREET	6/28/2018	250.9	No	
GW002	GLENWOOD	5/17/2018	242.9	Yes	Capital Improvement Resurvey
GW003	GLENWOOD	5/15/2018	193.7	No	
GW004	GLENWOOD	10/29/2018	174.5	No	
GW005	GLENWOOD	10/29/2018	114.6	No	
HK104	HANCOCK	10/10/2018	212.4	Yes	Post Rehabilitation Survey
HK213	HANCOCK	3/21/2018	367.3	Yes	Maintenance Related
HP003	HILDRETH-PERRY	3/13/2018	179.2	No	

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HP232	HILDRETH-PERRY	12/3/2018	363.5	No	
HP233	HILDRETH-PERRY	12/3/2018	294.4	No	
HP234	HILDRETH-PERRY	12/3/2018	310.6	No	
HP235	HILDRETH-PERRY	12/3/2018	245.4	No	
HP473	HILDRETH-PERRY	4/3/2018	193.8	No	
HP902	HILDRETH-PERRY	7/17/2018	172.9	Yes	Resurvey
HP902	HILDRETH-PERRY	6/14/2018	156.9	Yes	Routine Assessment
HP903	HILDRETH-PERRY	7/26/2018	135.2	No	
HP904	HILDRETH-PERRY	7/26/2018	149.5	No	
HP950	HILDRETH-PERRY	7/17/2018	322.1	Yes	Resurvey
HP950	HILDRETH-PERRY	6/14/2018	323.6	Yes	Routine Assessment
HP951	HILDRETH-PERRY	7/17/2018	403.2	Yes	Resurvey
HP951	HILDRETH-PERRY	6/14/2018	258.8	Yes	Routine Assessment
HP951	HILDRETH-PERRY	6/14/2018	142.7	Yes	Reversal
HS006A	HUSSON	3/19/2018	83.7	Yes	Reversal
HS006A	HUSSON	3/19/2018	60.9	Yes	Capital Improvement Program Assessment
HS103	HUSSON	4/10/2018	347.3	Yes	Routine Assessment
HS105	HUSSON	5/24/2018	150.3	No	
HS106	HUSSON	5/24/2018	111.6	No	
HS107	HUSSON	5/24/2018	236.9	No	
HS108	HUSSON	5/24/2018	406.9	No	
HS200	HUSSON	10/29/2018	30.4	No	
HS201	HUSSON	10/26/2018	226.3	No	
HS202	HUSSON	10/26/2018	236.4	Yes	Resurvey
HS203	HUSSON	10/25/2018	129.5	Yes	Reversal
HS203	HUSSON	10/24/2018	284	Yes	Routine Assessment
HS204	HUSSON	10/24/2018	338.5	No	
KE050	KENDUSKEAG EAST	6/6/2018	248.8	Yes	Capital Improvement Program Assessment
KE102	KENDUSKEAG EAST	10/22/2018	10.2	Yes	Maintenance Related
KE260A	KENDUSKEAG EAST	9/28/2018	66.4	No	
KE261	KENDUSKEAG EAST	9/28/2018	159.1	Yes	Maintenance Related
KE261A	KENDUSKEAG EAST	9/28/2018	304.1	Yes	Maintenance Related
KE300	KENDUSKEAG EAST	5/11/2018	296.4	Yes	Post Rehabilitation Survey
KE300A	KENDUSKEAG EAST	5/11/2018	364.1	No	
KE350	KENDUSKEAG EAST	5/11/2018	171.9	Yes	Post Rehabilitation Survey
KE351	KENDUSKEAG EAST	5/11/2018	146.6	Yes	Post Rehabilitation Survey
KW010	KENDUSKEAG WEST	3/26/2018	84	No	
KW011	KENDUSKEAG WEST	3/26/2018	190	No	
KW012	KENDUSKEAG WEST	3/23/2018	189.2	No	
KW013	KENDUSKEAG WEST	3/23/2018	266.2	No	
KW014	KENDUSKEAG WEST	3/29/2018	425.3	No	
KW050	KENDUSKEAG WEST	12/6/2018	43	Yes	Post Rehabilitation Survey
KW071	KENDUSKEAG WEST	3/23/2018	248.3	No	
KW100B	KENDUSKEAG WEST	11/1/2018	229.5	No	
KW102B	KENDUSKEAG WEST	10/29/2018	486.7	No	

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KW102C	KENDUSKEAG WEST	11/1/2018	194.9	No	
KW260	KENDUSKEAG WEST	4/4/2018	180.4	No	
MB003	MEADOWBROOK	6/28/2018	246.2	Yes	Routine Assessment
MB327	MEADOWBROOK	3/1/2018	23.1	Yes	Reversal
MB327	MEADOWBROOK	2/20/2018	53.8	Yes	Capital Improvement Program Assessment
MB329	MEADOWBROOK	10/16/2018	192	No	
MB477	MEADOWBROOK	6/15/2018	13	No	
MB515	MEADOWBROOK	6/15/2018	123.3	Yes	Maintenance Related
MB516	MEADOWBROOK	6/15/2018	174.1	Yes	Maintenance Related
MB517	MEADOWBROOK	6/15/2018	50.3	No	
MB518	MEADOWBROOK	6/15/2018	26.8	No	
MB520	MEADOWBROOK	7/9/2018	301.3	Yes	Post Rehabilitation Survey
MB520	MEADOWBROOK	6/19/2018	40.5	Yes	Reversal
MB520	MEADOWBROOK	6/18/2018	260	Yes	Routine Assessment
MB653	MEADOWBROOK	6/4/2018	23.2	No	
MB654	MEADOWBROOK	6/4/2018	188.2	No	
MB655	MEADOWBROOK	6/4/2018	93.7	Yes	Capital Improvement Program Assessment
MB655	MEADOWBROOK	6/4/2018	131.1	Yes	Reversal
MB657	MEADOWBROOK	6/4/2018	408.8	No	
MB813	MEADOWBROOK	7/18/2018	350.5	Yes	Maintenance Related
MB966	MEADOWBROOK	2/12/2018	181.8	Yes	Capital Improvement Program Assessment
MB970	MEADOWBROOK	3/1/2018	231	Yes	Capital Improvement Program Assessment
MS200	MILL STREET	5/31/2018	300.9	No	
MS201	MILL STREET	5/31/2018	166.8	No	
MS202	MILL STREET	5/31/2018	129	No	
MS203	MILL STREET	5/31/2018	210.2	No	
MS204	MILL STREET	5/31/2018	147.7	No	
MS205	MILL STREET	5/31/2018	142.7	No	
MS206	MILL STREET	5/31/2018	310.2	No	
MS207	MILL STREET	5/31/2018	118.1	No	
MS300	MILL STREET	5/31/2018	183.2	No	
MS301	MILL STREET	6/1/2018	207.2	Yes	Resurvey
MY001	MAY STREET	10/23/2018	76.5	No	
MY002	MAY STREET	11/29/2018	17.5	Yes	Reversal
MY002	MAY STREET	11/29/2018	68.6	Yes	Maintenance Related
MY003	MAY STREET	10/22/2018	6.8	Yes	Maintenance Related
MY003	MAY STREET	10/22/2018	72.8	Yes	Reversal
MY100	MAY STREET	2/28/2018	1.5	Yes	Reversal
MY100	MAY STREET	2/27/2018	470.9	Yes	Capital Improvement Program Assessment
OC028	OLD CAPEHART	6/8/2018	171	Yes	Resurvey
OC028	OLD CAPEHART	6/8/2018	123.6	Yes	Reversal
OC400	OLD CAPEHART	4/15/2018	217.4	Yes	Maintenance Related
OC460	OLD CAPEHART	10/5/2018	133.6	Yes	Post Rehabilitation Survey
OC462	OLD CAPEHART	10/3/2018	236.4	Yes	Post Rehabilitation Survey
PJ008	PENJAJAWOC	12/19/2018	278.3	No	

APPENDIX B: CCTV INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Pipe Segment ID	Subsection	Inspection Date	Length of Inspection (FT)	Repeat Inspection	Justification for Repeat Inspection
PJ059	PENJAJAWOC	5/10/2018	189.5	No	
PJ060	PENJAJAWOC	5/10/2018	296.8	No	
PJ061	PENJAJAWOC	5/10/2018	302.1	No	
PJ062	PENJAJAWOC	2/14/2018	345	No	
PJ063	PENJAJAWOC	2/14/2018	229	No	
PJ064	PENJAJAWOC	2/14/2018	110.3	No	
PJ065	PENJAJAWOC	2/14/2018	357.4	No	
PJ150	PENJAJAWOC	5/10/2018	244.2	No	
PJ151	PENJAJAWOC	5/10/2018	245.9	No	
PJ152	PENJAJAWOC	5/10/2018	66.8	Yes	Reversal
PJ152	PENJAJAWOC	5/10/2018	232	Yes	Capital Improvement Program Assessment
PJ153	PENJAJAWOC	5/10/2018	196.7	No	
PJ260	PENJAJAWOC	5/14/2018	123.3	No	
PJ261	PENJAJAWOC	5/14/2018	193.9	No	
PJ262	PENJAJAWOC	5/10/2018	258.6	No	
PJ263	PENJAJAWOC	5/10/2018	13.3	No	
PJ264	PENJAJAWOC	5/14/2018	300.5	No	
PJ301	PENJAJAWOC	11/6/2018	5.4	Yes	Routine Assessment
PJ301	PENJAJAWOC	11/6/2018	276.8	Yes	Reversal
PJ302	PENJAJAWOC	11/6/2018	294.3	No	
PJ303	PENJAJAWOC	11/6/2018	235.3	No	
PJ305	PENJAJAWOC	11/6/2018	292.8	No	
PJ306	PENJAJAWOC	11/2/2018	247.4	No	
PJ307	PENJAJAWOC	11/2/2018	245.7	No	
PJ308	PENJAJAWOC	11/2/2018	297.5	No	
PJ309	PENJAJAWOC	11/2/2018	84.3	No	
PJ563	Penjajawoc	5/11/2018	164.1	No	
PJ576	PENJAJAWOC	9/11/2018	151.4	No	
PJ937	PENJAJAWOC	11/29/2018	245.1	Yes	Maintenance Related
PJ938	PENJAJAWOC	11/29/2018	175.3	Yes	Maintenance Related
PJ952	PENJAJAWOC	4/26/2018	78.3	No	
PJ953	PENJAJAWOC	4/26/2018	141.8	No	
PJ955	PENJAJAWOC	4/26/2018	13.5	No	
PJ960	PENJAJAWOC	4/27/2018	36.2	No	
PJ970	PENJAJAWOC	4/27/2018	40.4	No	
WL002	WOODLAWN	3/12/2018	32.5	No	
WL003	WOODLAWN	3/12/2018	33.6	No	
WL100	WOODLAWN	3/7/2018	258.9	No	
WL101	WOODLAWN	3/6/2018	348.3	Yes	Capital Improvement Program Assessment
WL102	WOODLAWN	3/6/2018	215.3	Yes	Capital Improvement Program Assessment
WL103	WOODLAWN	3/6/2018	293.4	Yes	Capital Improvement Program Assessment
WL104	WOODLAWN	3/6/2018	20.3	No	
WL105	WOODLAWN	3/12/2018	8.1	No	
WL120	WOODLAWN	3/12/2018	24.7	No	
WL401	WOODLAWN	2/15/2018	313.1	No	

APPENDIX B: CCTV INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Pipe Segment ID	Subsection	Inspection Date	Length of Inspection (FT)	Repeat Inspection	Justification for Repeat Inspection
WL450	WOODLAWN	2/15/2018	310.8	No	
WL451	WOODLAWN	2/15/2018	268.9	No	
WL531	WOODLAWN	2/7/2018	371.9	Yes	Capital Improvement Program Assessment
WL601	WOODLAWN	10/12/2018	182.7	Yes	Post Rehabilitation Survey
WL601	WOODLAWN	2/26/2018	115.4	Yes	Maintenance Related
WL700	WOODLAWN	3/13/2018	57.5	No	
WL701	WOODLAWN	3/13/2018	295.3	No	
Total Feet			90,823.1		
Total Miles			17.2		

Appendix C

Manhole Inspection Log

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
AB019	ARCTIC BROOK	4/2/2018		
AB019A	ARCTIC BROOK	8/8/2018		
AB136	ARCTIC BROOK	10/9/2018		
AB141	ARCTIC BROOK	10/5/2018		
AB142	ARCTIC BROOK	10/5/2018		
AB423	ARCTIC BROOK	5/21/2018		
AB435	ARCTIC BROOK	5/21/2018		
AB590	ARCTIC BROOK	3/21/2018		
AB621	ARCTIC BROOK	10/2/2018		
AP025	AIRPORT	10/2/2018		
AP071	AIRPORT	10/1/2018		
AP072	AIRPORT	10/1/2018		
AP345	AIRPORT	12/26/2018		
AP352	AIRPORT	11/13/2018		
AP370	AIRPORT	12/18/2018		
AP372	AIRPORT	12/26/2018		
AP373	AIRPORT	12/27/2018		
AP505A	AIRPORT	4/2/2018		
AP508	AIRPORT	6/6/2018		
AP509	AIRPORT	6/6/2018		
AP513	AIRPORT	6/6/2018		
AP650	AIRPORT	8/1/2018		
AP651	AIRPORT	7/31/2018		
AP660	AIRPORT	8/1/2018		
AP740	AIRPORT	5/11/2018		
AP741	AIRPORT	5/11/2018		
AP742	AIRPORT	3/30/2018		
AP743	AIRPORT	3/30/2018		
BS003	BLANCHARD ST	5/30/2018		
BS004	BLANCHARD ST	5/30/2018		
BU032	BURLEIGH	7/13/2018		
BU603	BURLEIGH	6/8/2018		
BV003	BARKERSVILLE	3/16/2018		
BV005	BARKERSVILLE	3/16/2018		
BV028A	BARKERSVILLE	3/20/2018		
BV032	BARKERSVILLE	3/20/2018		
BV033	BARKERSVILLE	3/12/2018		
BV051	BARKERSVILLE	3/19/2018		
BV052	BARKERSVILLE	3/13/2018		
BV055	BARKERSVILLE	3/22/2018		
BV060	BARKERSVILLE	5/3/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
BV061	BARKERSVILLE	5/2/2018		
BV062	BARKERSVILLE	4/25/2018		
BV063	BARKERSVILLE	5/1/2018		
BV100	BARKERSVILLE	3/15/2018		
BV101	BARKERSVILLE	3/15/2018		
BV102	BARKERSVILLE	3/13/2018		
BV115	BARKERSVILLE	3/19/2018		
BV121	BARKERSVILLE	3/22/2018		
BV122	BARKERSVILLE	3/22/2018		
BV201	BARKERSVILLE	3/30/2018		
BV202	BARKERSVILLE	3/30/2018		
BV500	BARKERSVILLE	3/27/2018		
BV501	BARKERSVILLE	3/27/2018		
BV520A	BARKERSVILLE	12/3/2018		
BV555	BARKERSVILLE	4/27/2018		
BV556	BARKERSVILLE	4/27/2018		
BV575	BARKERSVILLE	4/2/2018		
BV576	BARKERSVILLE	4/2/2018		
BV701	BARKERSVILLE	11/1/2018		
BV702	BARKERSVILLE	11/1/2018		
BV703	BARKERSVILLE	11/2/2018		
BV715	BARKERSVILLE	3/19/2018		
BV740	BARKERSVILLE	3/20/2018		
BV741	BARKERSVILLE	3/19/2018		
CB107	CARR BROOK	10/12/2018		
CB109	CARR BROOK	3/30/2018		
CB110	CARR BROOK	4/10/2018		
CB111	CARR BROOK	4/10/2018		
CB112	CARR BROOK	4/10/2018		
CB114	CARR BROOK	3/27/2018		
CB120	CARR BROOK	4/3/2018		
CB121	CARR BROOK	4/3/2018		
CB130	CARR BROOK	4/25/2018		
CB140	CARR BROOK	4/25/2018		
CB141	CARR BROOK	10/26/2018		
CB160	CARR BROOK	3/27/2018		
CB210	CARR BROOK	10/25/2018		
CB211	CARR BROOK	4/12/2018		
CB212	CARR BROOK	4/12/2018		
CB215	CARR BROOK	10/12/2018		
CB451	CARR BROOK	4/3/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
CB502	CARR BROOK	9/11/2018		
CB504	CARR BROOK	10/12/2018		
CB506	CARR BROOK	10/12/2018		
CB603	CARR BROOK	3/29/2018		
CB851	CARR BROOK	3/29/2018		
CM002	CEMETERY	8/14/2018		
CM008	CEMETERY	5/30/2018		
CM009A	CEMETERY	5/30/2018		
CM010	CEMETERY	5/24/2018		
CM011	CEMETERY	5/30/2018		
CM100A	CEMETERY	5/14/2018		
CM103A	CEMETERY	5/14/2018		
CM690	CEMETERY	3/9/2018		
CM691	CEMETERY	3/9/2018		
CM711	CEMETERY	11/29/2018		
CM712	CEMETERY	11/29/2018		
CM790	CEMETERY	11/29/2018		
DB006	DAVIS BROOK	11/2/2018		
DB007	DAVIS BROOK	11/5/2018		
DB008	DAVIS BROOK	11/5/2018		
DB009	DAVIS BROOK	4/17/2018		
DB010	DAVIS BROOK	4/17/2018		
DB012	DAVIS BROOK	4/18/2018		
DB013	DAVIS BROOK	4/18/2018		
DB014	DAVIS BROOK	4/18/2018		
DB016	DAVIS BROOK	4/18/2018		
DB016A	DAVIS BROOK	10/26/2018		
DB017	DAVIS BROOK	10/25/2018		
DB021	DAVIS BROOK	4/17/2018		
DB023	DAVIS BROOK	3/20/2018		
DB024	DAVIS BROOK	3/20/2018		
DB101	DAVIS BROOK	11/5/2018		
DB101A	DAVIS BROOK	11/5/2018		
DB101B	DAVIS BROOK	11/5/2018		
DB110	DAVIS BROOK	11/5/2018		
DB140	DAVIS BROOK	11/5/2018		
DB141	DAVIS BROOK	11/5/2018		
DB202	DAVIS BROOK	11/2/2018		
DB202	DAVIS BROOK	11/5/2018		
DB230	DAVIS BROOK	11/5/2018		
DB235	DAVIS BROOK	11/2/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
DB240	DAVIS BROOK	11/2/2018		
DB241	DAVIS BROOK	4/6/2018		
DB242	DAVIS BROOK	11/5/2018		
DB260	DAVIS BROOK	11/2/2018		
DB265	DAVIS BROOK	11/2/2018		
DB280	DAVIS BROOK	11/5/2018		
DB300	DAVIS BROOK	11/2/2018		
DB301A	DAVIS BROOK	11/2/2018		
DB302	DAVIS BROOK	11/2/2018		
DB303	DAVIS BROOK	11/2/2018		
DB303A	DAVIS BROOK	4/6/2018		
DB304A	DAVIS BROOK	11/2/2018		
DB305A	DAVIS BROOK	11/2/2018		
DB330	DAVIS BROOK	11/2/2018		
DB331	DAVIS BROOK	11/2/2018		
DB332	DAVIS BROOK	11/2/2018		
DB333	DAVIS BROOK	11/2/2018		
DB361	DAVIS BROOK	11/2/2018		
DB401	DAVIS BROOK	11/2/2018		
DB403	DAVIS BROOK	11/5/2018		
DB404	DAVIS BROOK	11/5/2018		
DB405	DAVIS BROOK	4/30/2018		
DB406	DAVIS BROOK	4/30/2018		
DB407	DAVIS BROOK	4/30/2018		
DB420	DAVIS BROOK	4/30/2018		
DB421	DAVIS BROOK	4/30/2018		
DB422	DAVIS BROOK	4/30/2018		
DB430	DAVIS BROOK	11/5/2018		
DB440	DAVIS BROOK	4/6/2018		
DB450	DAVIS BROOK	11/5/2018		
DB470	DAVIS BROOK	4/18/2018		
DB471	DAVIS BROOK	3/21/2018		
DB472	DAVIS BROOK	3/21/2018		
DB500	DAVIS BROOK	4/23/2018		
DB501	DAVIS BROOK	11/2/2018		
DB502	DAVIS BROOK	11/2/2018		
DB504	DAVIS BROOK	4/3/2018		
DB505	DAVIS BROOK	4/9/2018		
DB506	DAVIS BROOK	4/9/2018		
DB507	DAVIS BROOK	4/9/2018		
DB508	DAVIS BROOK	4/9/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
DB509	DAVIS BROOK	5/8/2018		
DB510	DAVIS BROOK	5/4/2018		
DB511	DAVIS BROOK	11/5/2018		
DB512	DAVIS BROOK	11/5/2018		
DB525	DAVIS BROOK	3/28/2018		
DB526	DAVIS BROOK	4/18/2018		
DB527	DAVIS BROOK	11/5/2018		
DB535	DAVIS BROOK	3/19/2018		
DB536	DAVIS BROOK	5/17/2018		
DB541	DAVIS BROOK	11/5/2018		
DB542	DAVIS BROOK	11/5/2018		
DB543	DAVIS BROOK	11/5/2018		
DB545	DAVIS BROOK	5/8/2018		
DB550	DAVIS BROOK	4/9/2018		
DB551	DAVIS BROOK	4/9/2018		
DB552	DAVIS BROOK	5/4/2018		
DB553	DAVIS BROOK	5/7/2018		
DB554	DAVIS BROOK	5/7/2018		
DB555	DAVIS BROOK	5/7/2018		
DB561	DAVIS BROOK	5/8/2018		
DB562	DAVIS BROOK	5/3/2018		
DB563	DAVIS BROOK	5/3/2018		
DB564	DAVIS BROOK	9/27/2018		
DB566	DAVIS BROOK	5/3/2018		
DB590	DAVIS BROOK	5/8/2018		
DB595	DAVIS BROOK	5/2/2018		
DB600	DAVIS BROOK	3/27/2018		
DB600	DAVIS BROOK	10/26/2018		
DB605	DAVIS BROOK	4/23/2018		
DB610	DAVIS BROOK	10/25/2018		
DB611	DAVIS BROOK	10/25/2018		
DB612	DAVIS BROOK	4/24/2018		
DB620	DAVIS BROOK	4/24/2018		
DB621	DAVIS BROOK	4/24/2018		
DB630	DAVIS BROOK	4/24/2018		
DB631	DAVIS BROOK	4/24/2018		
DB700	DAVIS BROOK	10/25/2018		
DB701	DAVIS BROOK	4/18/2018		
DB702	DAVIS BROOK	4/17/2018		
DB703	DAVIS BROOK	4/25/2018		
DB720	DAVIS BROOK	3/27/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
DB730	DAVIS BROOK	11/5/2018		
DB731	DAVIS BROOK	4/12/2018		
DB732	DAVIS BROOK	4/12/2018		
DB850A	DAVIS BROOK	11/2/2018		
DB851	DAVIS BROOK	11/5/2018		
DB852	DAVIS BROOK	11/5/2018		
DN150	DUTTON ST	6/28/2018		
EK010	EAST KENDUSKEAG INT	10/23/2018		
EK018	EAST KENDUSKEAG INT	1/10/2019		
EP027	EAST PENOBSCOT INT	7/26/2018		
EP028	EAST PENOBSCOT INT	7/26/2018		
EP042	EAST PENOBSCOT INT	3/12/2018		
EP061	EAST PENOBSCOT INT	4/26/2018		
ES003	EVERETT ST	5/15/2018		
ES004	EVERETT ST	5/15/2018		
FK006	FRANKLIN ST	1/7/2019		
FK014	FRANKLIN ST	12/31/2018		
FK100	FRANKLIN ST	1/7/2019		
FK101	FRANKLIN ST	1/7/2019		
FK300	FRANKLIN ST	12/6/2018		
FK301	FRANKLIN ST	12/7/2018		
FK304	FRANKLIN ST	1/2/2019		
FK405	FRANKLIN ST	12/4/2018		
FK407	FRANKLIN ST	12/4/2018		
GW002	GLENWOOD	5/15/2018		
GW003	GLENWOOD	5/15/2018		
GW004	GLENWOOD	10/25/2018		
GW005	GLENWOOD	10/25/2018		
GW100	GLENWOOD	10/25/2018		
GW102	GLENWOOD	10/25/2018		
HK213	HANCOCK	3/21/2018		
HP002	HILDRETH PERRY	3/13/2018		
HP226	HILDRETH PERRY	1/11/2019		
HP233	HILDRETH PERRY	12/3/2018		
HP406	HILDRETH PERRY	4/3/2018		
HP472	HILDRETH PERRY	4/3/2018		
HP473	HILDRETH PERRY	4/3/2018		
HP801	HILDRETH PERRY	1/11/2019		
HP803	HILDRETH PERRY	1/10/2019		
HP850	HILDRETH PERRY	1/11/2019		
HP903	HILDRETH PERRY	7/26/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
HP950	HILDRETH PERRY	6/14/2018		
HP951	HILDRETH PERRY	6/14/2018		
HS006	HUSSON	3/19/2018		
HS006A	HUSSON	3/19/2018		
HS102	HUSSON	4/10/2018		
HS103	HUSSON	4/10/2018		
HS104	HUSSON	5/24/2018		
HS105	HUSSON	5/24/2018		
HS106	HUSSON	5/23/2018		
HS107	HUSSON	5/24/2018		
HS108	HUSSON	5/24/2018		
HS200	HUSSON	10/29/2018		
HS201	HUSSON	10/25/2018		
HS202	HUSSON	10/24/2018		
HS203	HUSSON	10/24/2018		
HS204	HUSSON	10/24/2018		
KE050	KENDUSKEAG EAST	6/6/2018		
KE101	KENDUSKEAG EAST	10/22/2018		
KE260	KENDUSKEAG EAST	9/28/2018		
KE261A	KENDUSKEAG EAST	9/28/2018		
KE350	KENDUSKEAG EAST	11/5/2018		
KE351	KENDUSKEAG EAST	11/5/2018		
KI085	KENDUSKEAG INT	8/15/2018		
KW009A	KENDUSKEAG WEST	3/26/2018		
KW010	KENDUSKEAG WEST	3/26/2018		
KW011	KENDUSKEAG WEST	3/26/2018		
KW012	KENDUSKEAG WEST	3/26/2018		
KW013	KENDUSKEAG WEST	3/29/2018		
KW050	KENDUSKEAG WEST	12/6/2018		
KW051	KENDUSKEAG WEST	12/6/2018		
KW070	KENDUSKEAG WEST	3/23/2018		
KW204	KENDUSKEAG WEST	4/4/2018		
MB004	MEADOWBROOK	5/31/2018		
MB329	MEADOWBROOK	10/16/2018		
MB503	MEADOWBROOK	6/15/2018		
MB515	MEADOWBROOK	6/15/2018		
MB516	MEADOWBROOK	6/15/2018		
MB517	MEADOWBROOK	6/15/2018		
MB518	MEADOWBROOK	6/15/2018		
MB520	MEADOWBROOK	6/19/2018		
MB652	MEADOWBROOK	6/4/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
MB654	MEADOWBROOK	6/4/2018		
MB656	MEADOWBROOK	6/4/2018		
MB657	MEADOWBROOK	6/4/2018		
MB812	MEADOWBROOK	7/18/2018		
MB832	MEADOWBROOK	11/29/2018		
MB840	MEADOWBROOK	11/29/2018		
MB851	MEADOWBROOK	11/29/2018		
MB852	MEADOWBROOK	11/29/2018		
MB853	MEADOWBROOK	11/29/2018		
MB854	MEADOWBROOK	11/29/2018		
MB860	MEADOWBROOK	11/29/2018		
MB863	MEADOWBROOK	11/29/2018		
MB864	MEADOWBROOK	11/29/2018		
MB865	MEADOWBROOK	11/29/2018		
MB866	MEADOWBROOK	11/29/2018		
MB870	MEADOWBROOK	11/29/2018		
MB923	MEADOWBROOK	3/29/2018		
MS103	MILL ST	6/1/2018		
MS200	MILL ST	6/1/2018		
MS201	MILL ST	6/1/2018		
MS202	MILL ST	6/1/2018		
MS203	MILL ST	6/1/2018		
MS204	MILL ST	6/1/2018		
MS205	MILL ST	6/1/2018		
MS206	MILL ST	5/31/2018		
MS207	MILL ST	6/1/2018		
MS300	MILL ST	5/31/2018		
MS301	MILL ST	6/1/2018		
MY002	MAY ST	10/22/2018		
MY003	MAY ST	10/22/2018		
OC451	OLD CAPEHART	10/5/2018		
OC462	OLD CAPEHART	10/3/2018		
PJ058	PENJAJAWOC	5/10/2018		
PJ059	PENJAJAWOC	5/10/2018		
PJ060	PENJAJAWOC	5/10/2018		
PJ061	PENJAJAWOC	5/10/2018		
PJ150	PENJAJAWOC	5/10/2018		
PJ151	PENJAJAWOC	5/10/2018		
PJ152	PENJAJAWOC	5/10/2018		
PJ153	PENJAJAWOC	5/10/2018		
PJ261	PENJAJAWOC	5/14/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
PJ262	PENJAJAWOC	5/10/2018		
PJ263	PENJAJAWOC	5/10/2018		
PJ300	PENJAJAWOC	11/6/2018		
PJ301	PENJAJAWOC	11/6/2018		
PJ302	PENJAJAWOC	11/6/2018		
PJ303	PENJAJAWOC	11/6/2018		
PJ304	PENJAJAWOC	11/6/2018		
PJ305	PENJAJAWOC	11/6/2018		
PJ306	PENJAJAWOC	11/5/2018		
PJ307	PENJAJAWOC	11/5/2018		
PJ308	PENJAJAWOC	11/5/2018		
PJ309	PENJAJAWOC	11/5/2018		
PJ562	PENJAJAWOC	5/11/2018		
PJ563	PENJAJAWOC	5/11/2018		
PJ576	PENJAJAWOC	9/11/2018		
PJ705	PENJAJAWOC	11/29/2018		
PJ706	PENJAJAWOC	11/29/2018		
PJ707	PENJAJAWOC	11/29/2018		
PJ708	PENJAJAWOC	11/29/2018		
PJ709	PENJAJAWOC	11/29/2018		
PJ937	PENJAJAWOC	11/29/2018		
PJ951	PENJAJAWOC	4/26/2018		
PJ952	PENJAJAWOC	4/27/2018		
PJ953	PENJAJAWOC	4/27/2018		
PJ955	PENJAJAWOC	4/26/2018		
PJ960	PENJAJAWOC	4/27/2018		
PJ970	PENJAJAWOC	4/27/2018		
WL001	WOODLAWN	3/12/2018		
WL002	WOODLAWN	3/7/2018		
WL003	WOODLAWN	3/7/2018		
WL006	WOODLAWN	6/27/2018		
WL007	WOODLAWN	6/27/2018		
WL008	WOODLAWN	6/27/2018		
WL100	WOODLAWN	3/7/2018		
WL102	WOODLAWN	3/6/2018		
WL103	WOODLAWN	3/6/2018		
WL104	WOODLAWN	3/7/2018		
WL105	WOODLAWN	3/7/2018		
WL120	WOODLAWN	3/12/2018		
WL301	WOODLAWN	6/27/2018		
WL302	WOODLAWN	6/27/2018		

APPENDIX C: MANHOLE INSPECTION LOG

City of Bangor, Maine
Calendar Year 2018

Manhole ID	Subsection	Date of Inspection	Repeat Inspection	Justification for Repeat Inspection
WL303	WOODLAWN	6/27/2018		
WL304	WOODLAWN	6/27/2018		
WL305	WOODLAWN	6/27/2018		
WL306	WOODLAWN	6/27/2018		
WL307	WOODLAWN	6/27/2018		
WL700	WOODLAWN	3/13/2018		
WL701	WOODLAWN	3/13/2018		
TOTAL MANHOLES INSPECTED				376

Appendix D

CCTV Repair, Replacement and Upgrade Log

APPENDIX D: CCTV REPAIR, REPLACEMENT, AND UPGRADE LOG

City of Bangor, Maine
Calendar Year 2018

Subsection	Pipe ID	Description of Repair or Defect	Date Repaired or Future Implementation Schedule
Arctic Brook	AB017	CIPP UV lined 235 ft of 24" VCP	5/31/2018
Arctic Brook	AB017	hole in liner	2019
Arctic Brook	AB019A	defect in liner	2019
Arctic Brook	AB137	replaced 12 ft of 8" main	6/12/2018
Arctic Brook	AB137	broken, hole, sag, offset joint	2019
Arctic Brook	AB142	replaced 26 ft of 8" main	6/15/2018
Arctic Brook	AB435	hole, sag, deformed	2019
Arctic Brook	AB621	replaced 40 ft of 12" main	8/10/2018
Airport	AP380	broken pipe, access manhole needed	2019
Airport	AP508	hole in crown	2019
Barkersville	BV032	CIPP UV lined 250 ft of 12" VCP	3/7/2018
Barkersville	BV033	CIPP UV lined 260 ft of 12" VCP	3/8/2018
Barkersville	BV061	replaced 14 ft of 10" main	6/19/2018
Barkersville	BV061	replaced 18 ft of 10" main	6/20/2018
Barkersville	BV061	replaced 40 ft of 10" main	6/22/2018
Barkersville	BV061	replaced 11 ft of 8" main	8/24/2018
Barkersville	BV061	hole, plug abandoned tap	2019
Barkersville	BV410	fractures, deformed, collapsing	2019
Barkersville	BV511	broken pipe, access manhole needed	2019
Barkersville	BV627	replaced 22 ft of 10" main	10/10/2018
Barkersville	BV715	replaced 10 ft of 8" main	8/23/2018
Barkersville	BV742	broken pipe	2019
Carr Brook	CB037	replaced 15 ft of 10" main	7/26/2018
Carr Brook	CB037	replaced 12 ft of 10" main	7/30/2018
Carr Brook	CB701	replaced 60 ft of 8" main	8/21/2018
Carr Brook	CB126	replaced 13 ft of 8" main	7/24/2018
Carr Brook	CB211	hole in liner, leak near service	2019
Carr Brook	CB215	replaced 85 ft of 8" main	7/13/2018
Carr Brook	CB253	replaced 35 ft of 12" main	6/27/2018
Carr Brook	CB502	replaced 14 ft of 12" main	7/13/2018
Carr Brook	CB502	hole at connection to manhole	2019
Carr Brook	CB504	replaced 42 ft of 10" main	7/16/2018
Carr Brook	CB506	replaced 52 ft of 8" main	7/23/2018
Cemetery	CM010A	gusher near manhole	2019
Cemetery	CM691	CIPP UV lined 300 ft of 10" VCP	3/6/2018
Davis Brook	DB510	Pipe burst 250 ft of 12" VCP with 12"HDPE	5/3/2018
Davis Brook	DB535	replaced 32 ft of 10" main	6/29/2018
Davis Brook	DB552	CIPP UV lined 330 ft of 10" VCP	5/4/2018
Davis Brook	DB564	replaced 167 ft of 8" main	9/7/2018

APPENDIX D: CCTV REPAIR, REPLACEMENT, AND UPGRADE LOG

City of Bangor, Maine
Calendar Year 2018

Subsection	Pipe ID	Description of Repair or Defect	Date Repaired or Future Implementation Schedule
Davis Brook	DB960	broken pipe	2019
Fourteenth St	FS202	replaced 10 ft of 10" clay	12/18/2018
Hancock	HK104	replaced 13 ft of 8" main	8/16/2018
Hancock	HK703	replaced 13 ft of 12" main	8/14/2018
Hancock	HK705	replaced 15 ft of 8" main	8/15/2018
MeadowBrook	MB477	broken pipe	2019
MeadowBrook	MB520	replaced 13 ft of 8" main	6/30/2018
MeadowBrook	MB655	broken pipe, leak near service	2019
May Street	MY100	massive infiltration, failing brick	2019
Old Capehart	OC460	replaced 10 ft of 8" main	5/31/2018
Old Capehart	OC462	replaced 14.5 ft of 8" main	5/31/2018
Woodlawn	WL601	replaced 5 ft of 10" main	7/3/2018
Woodlawn	WL601	hole, broken pipe	2019

Appendix E
Cleaning Log

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
2/12/2018		AB056	285	2	570		
2/12/2018		AB076	454	2	908		
10/9/2018		AB142	314	2	628		
10/2/2018		AP026	296	4	1184		
11/9/2018		AP350	61	1	61		
11/9/2018		AP351	184	2	368		
11/9/2018		AP352	291	2	582		
11/9/2018		AP353	273	2	546		
11/9/2018		AP354	53	2	106		
11/9/2018		AP355	312	2	624		
11/9/2018		AP356	350	2	700		
12/4/2018		AP370	205	2	410		
12/18/2018		AP370	205	1	205		trouble spot
12/20/2018		AP370	205	2	410		trouble spot
3/9/2018		AP402	209	5	1045		
3/7/2018		AP403	293	5	1465		
3/6/2018		AP404	300	5	1500		
3/6/2018		AP405	302	5	1510		
2/5/2018		AP415A	167	3	501		
8/30/2018		AP415A	125	2	250		trouble spot
2/5/2018		AP417	90	2	180		
12/21/2018		AP417	90	2	180		trouble spot
2/5/2018		AP418	290	2	580		
12/21/2018		AP418	290	2	580		trouble spot
2/20/2018		AP504	451	4	1804		
2/26/2018		AP505A	50	2	100		
2/26/2018		AP506	124	3	372		
2/26/2018		AP506A	34	3	102		
2/26/2018		AP520	346	2	692		
2/26/2018		AP522	262	3	786		
2/22/2018		AP530	246	8	1968		
2/22/2018		AP531	214	10	2140		
12/4/2018		AP740A	132	2	264		
11/5/2018		BU018	331	1	331		
11/5/2018		BU021	249	1	249		
9/10/2018		BU027	338	2	676		
8/29/2018		BU532	187	1	187		
11/9/2018		BU532	187	1	187		trouble spot
8/29/2018		BU533	116	1	116		
8/29/2018		BU535	268	1	268		
11/9/2018		BU535	268	1	268		trouble spot
10/24/2018		BU553	396	2	792		
10/24/2018		BU554	424	1	424		
11/5/2018		BU603	270	1	270		
11/5/2018		BU604	271	1	271		
11/5/2018		BU605	101	1	101		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
11/5/2018		BU606	100	1	100		
11/5/2018		BU607	300	1	300		
11/5/2018		BU650	334	1	334		
11/5/2018		BU651	198	1	198		
11/5/2018		BU750	251	1	251		
11/5/2018		BU751	206	1	206		
11/5/2018		BU801	274	1	274		
11/5/2018		BU802	274	1	274		
11/5/2018		BU803	287	2	574		
4/27/2018		BV062	231	3	693		
4/27/2018		BV063	318	3	954		
4/26/2018		BV064	402	3	1206		
3/13/2018		BV101	503	5	2515		
3/13/2018		BV102	195	4	780		
2/5/2018		BV108	363	3	1089		
3/23/2018		BV122	125	5	625		
12/21/2018		BV335	103	2	206		
2/5/2018		BV451	403	4	1612		
2/5/2018		BV452	394	3	1182		
3/23/2018		BV501	163	1	163		
5/1/2018		BV556	530	1	530		
3/30/2018		BV576	604	2	1208		
11/8/2018		CB023	161	2	322		
11/8/2018		CB024	104	2	208		
11/8/2018		CB025	114	2	228		
11/8/2018		CB026	113	2	226		
11/13/2018		CB027	338	2	676		
11/13/2018		CB028	402	2	804		
11/26/2018		CB032	251	2	502		
11/28/2018		CB104	209	2	418		
11/28/2018		CB105	310	2	620		
11/28/2018		CB106	300	2	600		
11/28/2018		CB107	301	2	602		
11/28/2018		CB108	329	2	658		
11/28/2018		CB109	304	2	608		
11/28/2018		CB111	421	2	842		
4/4/2018		CB120	77	8	616		
4/26/2018		CB140	675	3	2025		
3/23/2018		CB160	287	5	1435		
11/26/2018		CB301	318	2	636		
11/26/2018		CB302	320	2	640		
11/26/2018		CB303	319	2	638		
11/26/2018		CB304	309	2	618		
11/26/2018		CB403	354	2	708		
11/9/2018		CB406	146	1	146		
11/9/2018		CB407	159	1	159		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
11/8/2018		CB500	290	2	580		
11/8/2018		CB501	290	2	580		
11/8/2018		CB502	153	2	306		
11/8/2018		CB503	453	2	906		
11/13/2018		CB505	400	2	800		
11/13/2018		CB506	219	2	438		
11/8/2018		CB550	161	2	322		
11/13/2018		CB601	360	2	720		
11/13/2018		CB603	533	2	1066		
3/23/2018		CB604	117	3	351		
5/1/2018		CB604	117	5	585		trouble spot
11/13/2018		CB650	420	2	840		
11/9/2018		CB702	432	1	432		
11/26/2018		CB750	213	2	426		
11/26/2018		CB851	407	2	814		
11/13/2018		CM510	300	1	300		
11/13/2018		CM511	306	1	306		
11/13/2018		CM512	290	1	290		
11/13/2018		CM513	301	1	301		
11/13/2018		CM514	328	1	328		
11/13/2018		CM515	283	1	283		
11/13/2018		CM516	46	1	46		
11/13/2018		CM517	319	1	319		
11/13/2018		CM518	344	1	344		
11/13/2018		CM570	44	1	44		
11/13/2018		CM571	121	1	121		
11/13/2018		CM651	253	1	253		
11/13/2018		CM652	285	1	285		
11/13/2018		CM741	373	1	373		
3/1/2018		DB110A	387	1	387		
6/8/2018		DB526	281	10	2810		
2/12/2018		DB595	405	2	810		
3/27/2018		DB601	271	6	1626		
4/27/2018		DB601	271	2	542		trouble spot
1/12/2018		DB961	383	1	383		
2/5/2018		DW265	108	1	108		
8/27/2018		DW265	108	2	216		trouble spot
10/15/2018		DW606	121	4	484		
2/5/2018		DW614	206	2	412		
8/30/2018		DW614	225	1	225		trouble spot
8/29/2018		EK008	16	2	32		
8/29/2018		EK009	351	10	3510		
8/30/2018		EK009	351	6	2106		heavy cleaning needed
2/16/2018		FS603	272	5	1360		
10/24/2018		GW003	194	2	388		
10/24/2018		GW004	180	2	360		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
10/24/2018		GW005	119	2	238		
10/24/2018		GW100	248	2	496		
11/26/2018		HK218	36	2	72		
11/26/2018		HK220	137	2	274		
11/26/2018		HK221	21	2	42		
11/26/2018		HK222	62	2	124		
11/26/2018		HK223	175	2	350		
11/26/2018		HK257	325	1	325		
11/26/2018		HK258	281	1	281		
11/26/2018		HK291	298	2	596		
11/26/2018		HK292	225	2	450		
11/26/2018		HK293	175	2	350		
11/6/2018		HK511	145	1	145		
11/6/2018		HK512	140	1	140		
11/6/2018		HK513	280	1	280		
11/6/2018		HK514	305	1	305		
11/6/2018		HK515	221	1	221		
11/6/2018		HK516	199	1	199		
11/26/2018		HK519	197	2	394		
11/26/2018		HK520	14	2	28		
11/26/2018		HK521	189	2	378		
11/26/2018		HK522	187	2	374		
11/8/2018		HK554	297	2	594		
11/8/2018		HK555	256	2	512		
11/8/2018		HK556	228	2	456		
11/6/2018		HK576	211	1	211		
11/6/2018		HK577	233	1	233		
11/6/2018		HK578	283	1	283		
11/6/2018		HK579	165	1	165		
11/6/2018		HK580	239	1	239		
8/2/2018		HP406	539	2	1078		
2/1/2018		HP485	399	1	399		
6/19/2018		HP902	174	9	1566		
6/25/2018		HP903	142	3	426		
6/25/2018		HP950	320	5	1600		
6/25/2018		HP951	402	5	2010		
6/19/2018		HS103	344	2	688		
5/23/2018		HS105	150	3	450		
6/19/2018		HS201	232	2	464		
6/20/2018		HS202	242	2	484		
6/20/2018		HS203	397	2	794		
6/20/2018		HS204	311	2	622		
8/21/2018		HS500	295	1	295		
12/21/2018		HS500	295	2	590		trouble spot
6/5/2018		KE050	252	10	2520		
9/28/2018		KE261	184	3	552		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
9/27/2018		KE261A	296	5	1480		
7/10/2018		MB047	178	2	356		
11/26/2018		MB730	272	1	272		
11/26/2018		MB731	298	1	298		
11/26/2018		MB732	338	1	338		
11/26/2018		MB733	276	1	276		
11/26/2018		MB751	304	1	304		
11/26/2018		MB752	305	1	305		
11/26/2018		MB753	211	1	211		
11/26/2018		MB754	272	1	272		
11/26/2018		MB757	226	2	452		
11/26/2018		MB758	183	2	366		
11/26/2018		MB760	299	1	299		
11/26/2018		MB761	297	1	297		
11/26/2018		MB762	298	1	298		
11/26/2018		MB763	313	1	313		
11/28/2018		MB836	125	2	250		
11/28/2018		MB840	266	2	532		
11/28/2018		MB850	307	1	307		
11/28/2018		MB851	421	1	421		
11/28/2018		MB852	251	1	251		
11/28/2018		MB853	259	2	518		
11/28/2018		MB854	411	2	822		
11/28/2018		MB855	231	2	462		
11/28/2018		MB860	239	1	239		
11/28/2018		MB861	199	1	199		
11/28/2018		MB862	219	1	219		
11/28/2018		MB863	227	1	227		
11/28/2018		MB864	105	1	105		
11/28/2018		MB865	342	1	342		
11/28/2018		MB866	329	1	329		
11/28/2018		MB870	145	2	290		
11/13/2018		MB911	145	2	290		
11/13/2018		MB912	68	2	136		
11/13/2018		MB913	252	2	504		
11/13/2018		MB914	256	2	512		
11/13/2018		MB915	93	2	186		
11/13/2018		MB920	246	2	492		
11/13/2018		MB921	331	2	662		
11/13/2018		MB922	318	2	636		
11/13/2018		MB923	295	2	590		
11/13/2018		MB925	257	2	514		
11/13/2018		MB960	297	2	594		
2/16/2018		MB970	258	4	1032		
11/9/2018		MB996	351	1	351		
2/16/2018		MY100	500	3	1500		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
11/30/2018		OC029	254	2	508		
11/30/2018		OC030	98	2	196		
11/30/2018		OC031	152	2	304		
12/21/2018		OC403	226	2	452		
12/21/2018		OC420	95	2	190		
11/30/2018		OC800	131	2	262		
11/30/2018		OC801	203	2	406		
11/30/2018		OC810	90	2	180		
11/30/2018		OC850	278	2	556		
11/30/2018		OC851	290	2	580		
11/30/2018		OC852	58	2	116		
11/30/2018		OC860	151	2	302		
11/30/2018		OC870	151	2	302		
11/30/2018		OC901	370	2	740		
11/30/2018		OC902	388	2	776		
11/29/2018		OC903	165	2	330		
11/29/2018		OC904	301	2	602		
11/29/2018		OC905	283	2	566		
11/29/2018		OC906	235	2	470		
11/29/2018		OC907	235	2	470		
11/29/2018		OC910	234	2	468		
11/29/2018		OC911	237	2	474		
11/29/2018		OC920	238	2	476		
11/29/2018		OC921	237	2	474		
11/29/2018		OC951	335	2	670		
11/29/2018		OC952	129	2	258		
11/29/2018		OC953	350	2	700		
11/29/2018		OC954	347	2	694		
12/21/2018		PJ111	50	2	100		
12/21/2018		PJ112	370	2	740		
12/21/2018		PJ113	269	2	538		
12/21/2018		PJ114	105	2	210		
12/21/2018		PJ150	246	2	492		
12/21/2018		PJ151	251	2	502		
12/21/2018		PJ152	304	2	608		
12/21/2018		PJ153	202	2	404		
11/9/2018		PJ400	186	1	186		
11/29/2018		PJ706	263	2	526		
11/29/2018		PJ707	122	2	244		
11/29/2018		PJ708	123	2	246		
11/29/2018		PJ709	108	2	216		
11/30/2018		PJ908	248	1	248		
11/30/2018		PJ909	248	1	248		
11/30/2018		PJ910	250	1	250		
11/30/2018		PJ911	251	1	251		
11/30/2018		PJ912	253	1	253		

APPENDIX E: CLEANING LOG

City of Bangor, Maine
Calendar Year 2018

Date of Cleaning	Subsection	Pipe Segment ID	Length of Pipe Segment	# Passes	Approx. Length Cleaned (FT)	Repeat Cleaning	Justification for Repeat Cleaning
11/30/2018		PJ912	253	1	253		
11/30/2018		PJ913	245	1	245		
11/29/2018		PJ914	251	1	251		
11/29/2018		PJ915	252	1	252		
11/29/2018		PJ916	234	1	234		
11/29/2018		PJ917	235	1	235		
11/29/2018		PJ918	130	1	130		
11/29/2018		PJ931	269	1	269		
11/29/2018		PJ932	250	1	250		
11/29/2018		PJ933	246	1	246		
11/29/2018		PJ934	250	1	250		
11/29/2018		PJ935	249	1	249		
11/29/2018		PJ936	252	2	504		
11/28/2018		PJ937	250	2	500		
11/28/2018		PJ938	181	1	181		
3/23/2018		WL106	583	5	2915		
2/5/2018		WL510	50	2	100		
1/6/2018		WL530	244	1	244		
1/6/2018		WL531	369	1	369		

TOTAL FEET	73,957	155,591
TOTAL MILES	14.01	29.47

Appendix F

SSO Event Log

APPENDIX F: SSO EVENT LOG

City of Bangor, Maine
Calendar Year 2018

Event No.	Date/Time Reported or Discovered	Date/Time Stopped	Location (Nearest Address)	Final Disposition (Ground, Street, MS4, Surface Water)	Source of Notification	Suspected Cause of Event	Due to blockage or hydraulic limitation within publicly owned Collection System	Measures Taken to Stop Event	Estimated Release Volume (gal)/ Methodology	Date of Most Recent Prior SSO Event at Location
18-01	1/13/2018	1/13/2018	Wing Park, 410 State St (mh CB011)	Penobscot River through CSO outfall	sewer crew observation	heavy rain, hydraulically inadequate lines	yes	drained to stormwater line and discharged at CSO outfall	3000 gal / visual evidence	2/17/2016
18-02	2/16/2018	2/16/2018	530 Maine Ave (mh AP505)	returned to system	city staff	grease	yes	flushed line to release blockage	10 gal/ field estimate	none
18-03	5/16/2018	5/16/2018	489 State St (mh EP029)	ground, possibly reaching Penobscot River	sewer crew observation	surcharged interceptor, flow escaped defective manhole	no	none - discovered after the fact	unknown	none
18-04	6/6/2018	6/6/2018	250 Odlin Rd (mh DW091)	ground, possible reaching small stream	property owner	grease	yes	flushed line to release blockage	100 gal/ visual estimate	none
18-05	6/19/2018	6/19/2018	4 Glenwood Drive	contained in basement, returned to system	Roto Rooter at property	grease and rags	yes	flushed line to release blockage	15 gal/ field estimate	none
18-06	8/9/2018	8/9/2018	State Street (pipe KE203)	Kenduskeag Stream	city staff	failure of temporary connection during construction	no	sewer connections repaired	unknown (combined with rain)	none
18-07	8/14/2018	8/14/2018	Griffin Road (mh AP001)	ground	sewer crew observation	surcharged interceptor, flow escaped defective manhole cone	no	none - discovered after the fact	unknown	6/11/2015
18-08	8/14/2018	8/14/2018	1232 Kenduskeag Ave (mh BU002 and BU003)	ground	sewer crew observation	surcharged line, flow escaped manholes	no	none - discovered after the fact	unknown	none
18-09	9/29/2018	9/29/2018	308 Godfrey Blvd	MS4 to Birch Stream	city staff	grease	yes	redirected flow to a sewer manhole, removed blockage	200 gal/ visual estimate	none
18-10	12/18/2018	12/18/2018	1207 Union St (line AP370)	returned to system	property owner	grease and rags in line with reduced capacity due to roots and breaks	yes	flushed line to release blockage, cut roots	minimal	none

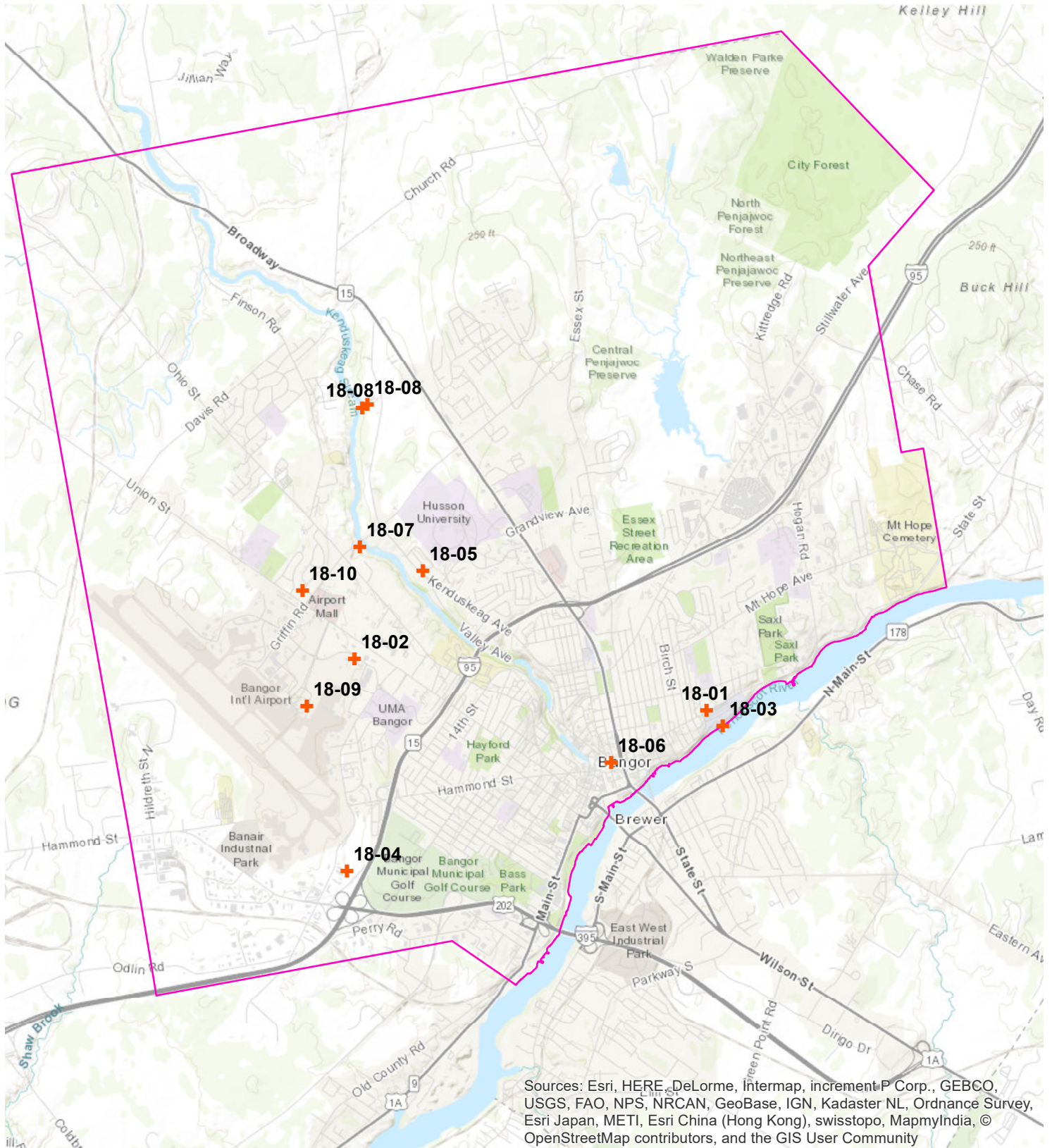
NOTES:

- 18-01 Known area of concern. Hydraulic limitation due to bends in main. City designing new main to be constructed in 2019.
- 18-02 Blockage caused by grease. Investigation revealed source was nursing home with no grease trap. Grease trap was installed. Code Enforcement inspected to confirm.
- 18-03 Records show other overflows in the vicinity in 2012, but none at this manhole.
- 18-04 Investigation by Code Enforcement revealed failed grease trap at nearby restaurant. Grease trap replaced. Code Enforcement inspected to confirm proper function.
- 18-07 Manhole cone repaired to prevent recurrence.
- 18-08 Manhole covers bolted to prevent recurrence.
- 18-09 Blockage caused by grease. Investigation revealed grease trap in vicinity was poorly maintained. Code Enforcement staff provided education and will conduct follow-up inspection in 2019.
- 18-10 Line is due for replacement in 2019 construction season. Door hangers with FOG prevention information will be distributed in the neighborhood in summer 2019.

Appendix G

Location Map of Sanitary Sewer Overflows

Location of Sewer Overflows 2018



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

