Haverhill

Robert E. Ward, Deputy DPW Director
Water/Wastewater Division
Phone: 978-374-2382 Fax: 978-521-4083
rward@haverhillwater.com

October 30, 2019

Ms. Joy Hilton
U.S. Environmental Protection Agency – Region 1
Enforcement and Compliance Assurance Division
Water Compliance Section
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Subject: City of Haverhill, MA NPDES Permit #MA 0101621
Consent Decree Submittal (Civil Action No. 16-11698-IT)
Compliance Report Number 6 – January 1, 2019 through June 30, 2019

Dear Ms. Hilton:

Enclosed is Compliance Report No. 6 as required by Section IX 67, of the Consent Decree. This report is for the January 1, 2019 through June 30, 2019 reporting period.

If you require additional information, please call me at (978) 374-2382.

Sincerely,

Robert E. Ward
Deputy DPW Director

Enclosures

cc: Chief, Environmental Enforcement Section, U.S. DOJ
Susan Poswistilo, U.S. Attorney, MA District
Michael Wagner, USEPA, wagner.michael@epa.gov
Kevin Brander, DEP, kevin.brander@state.ma.us
I. Andrew Goldberg, MA Assistant Attorney General, andy.goldberg@state.ma.us
Mayor James J. Fiorentini, City of Haverhill, mayor@cityofhaverhill.com
William D. Cox, Jr., City Solicitor, billcoxlaw@aol.com
Michael Leon, Nutter, McClennen & Fish LLP, MLeon@nutter.com
Mike Stankovich, DPW Director, mstankovich@cityofhaverhill.com
Carrie Prescott, WWTP Collection System Supervisor, cprescott@haverhillwater.com
Isaiah Lewis, WWTP Facility Manager, ilewis@haverhillwater.com
Kevin Olson, Wright-Pierce, kmo@wright-pierce.com

CITY OF HAVERHILL, MASSACHUSETTS

NPDES PERMIT No. MA0101621

CONSENT DECREE

(Civil Action No. 16-11698-IT, 11/10/16)

COMPLIANCE REPORT No. 6

JANUARY THROUGH JUNE 2019

OCTOBER 2019

CITY OF HAVERHILL, MASSACHUSETTS

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

PERMIT No. MA0101621

CONSENT DECREE

(Civil Action No. 16-11698-IT, 11/10/2016)

COMPLIANCE REPORT No. 6

JANUARY THROUGH JUNE 2019

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INTRODUCTION

1.1 BACKGROUND

The United States Environmental Protection Agency (EPA), Massachusetts Department of Environmental Protection (MassDEP), and the City of Haverhill entered into a Consent Decree to require the City to take measures necessary to meet the requirements of the Clean Waters Act and the Massachusetts Clean Water Act, and to achieve and maintain compliance with the Small Municipal Separate Stormwater Sewer System (MS4) General Permit and the Publicly Owned Treatment Works (POTW) Permit, and all applicable federal and state regulations. The effective date of the Consent Decree is November 10, 2016.

As part of the Consent Decree, the City is required to submit a Compliance Report to EPA and MassDEP for the previous six-month period, referred to as a "Reporting Period." The bi-annual Reporting Periods run from January through June and July through December, with the Compliance Reports due on April 30th and October 31st for the previous period.

The goal of this Compliance Report is to provide the EPA and MassDEP an updated summary of the work performed by the City to achieve and maintain compliance over the course of the Reporting Period.

1.2 REPORT ORGANIZATION

The Compliance Report is divided into several sections including:

- IDDE Program
- SSO and Building/Private Party Backup Events
- Construction Site Inspection and Enforcement Program
- General Status
- Secondary Treatment Bypass
- CMOM Corrective Action Plan (per MassDEP request)

Each section summarizes the City's actions, activities, and events that have occurred over the previous Reporting Period in accordance with the Consent Decree.

1.3 CERTIFICATION STATEMENT

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.

Robert E. Ward
Deputy DPW Director
City of Haverhill, Massachusetts

10/31/19
(date)

SECTION 2

IDDE PROGRAM

2.1 INTRODUCTION

The City identified and inspected 1,200 stormwater outfalls (13 of these outfalls are shared stormwater/combined sewer overflow (CSO) outfalls) as part of the 2014/2015 Stormwater Outfall Inspection Report. Based on the findings, the City established a draft schedule of prioritized inspections.

In 2017, the City prepared the "Illicit Discharge Detection and Elimination (IDDE) Manual." The manual identified the procedures that the City will follow to continue their comprehensive inspections of its stormwater outfalls, upstream system investigations, and enforcement procedures when an illicit connection is identified.

Most recently, the IDDE Manual was revised to include the EPA New England Bacterial Source Tracking Protocol and is currently being reviewed by a consultant to ensure compliance with the new MS4 permit. The City has begun implementing a new computerized maintenance management system (CMMS) for stormwater work orders. Staff have been using this web based CMMS to fill out inspection forms in the field using mobile devices.

The IDDE Manual can be found on the City's Stormwater website at:
www.cityofhaverhill.com/departments/storm_water_program/index.php

2.2 CURRENT REVISED PRIORITY LISTING

The City continues to review and update its list of IDDE Investigation Priorities as field investigations are performed. The revisions include private outfalls that were confirmed and removed from the list. The City will continue to determine ownership of drainage outfalls and remove privately owned outfalls from its list of future outfall investigations and responsibilities under the IDDE program. As the City confirms the ownership of these outfalls, private outfalls owners will be notified as conditions warrant. For some discharges that were originally

identified as MS4 drain system outfalls in the 2014/2015 Outfall Inspection Report, the City has completed additional investigations and determined that these points are culverts with no connections. Accordingly, they have been removed from the list of City owned MS4 infrastructure and the IDDE Investigation Priorities List.

The Revised IDDE Investigation Priorities as of June 2019 is shown in Table 2-1. There are now 26 outfalls with a High, Medium, or Low Priority; 24 Outfalls with non-bacteria indicators; and 7 outfalls requiring follow-up investigations. This list of priorities may change as the investigations progress. Table 2-1 lists the priority outfalls along with their worst case sample results. All sample results for each outfall are shown in the outfall investigation maps located on the City's Stormwater website.

It is important to note that these IDDE priorities were developed based on the City's November 2016 Consent Decree requirements. The 2016 NPDES General Massachusetts MS4 Stormwater Permit for Haverhill requires a different approach to prioritizing system investigations. As the City develops its Stormwater Management Plan, and revises its IDDE Manual, to meet the requirements of the new NPDES permit, the priority list will be updated

2.3 IDDE INVESTIGATION PROGRESS REPORTING

Table 2-2 shows the City's progress to date on their IDDE investigations during the reporting period (January through June 2019).

Using GIS, the City identified a total of 25.8 miles of storm drain piping and 2,590 drainage manholes and catch basins in the tributary area upstream of the outfalls included in the Priorities List as Low, Medium, and High priorities. As the other priorities are investigated, their characteristics will be added to the table. These characteristics, such as lengths of pipe and number of structures, have and will continue to change due to field investigations and updated MS4 mapping. The identified lengths of drain pipe and number of manholes for each basin are shown in Table 2-2, as well as the number of each that have been addressed by the IDDE investigations during the reporting period. A cumulative total for the IDDE Program is also included and has been updated from the previous Compliance Reports.

Investigations by the City were performed using a bottom up approach to look for dry-weather-flows. Manholes and piping were investigated upstream from the outfall until there was no more flow during dry-weather. For some outfalls, the entire inventory of pipes, catch basins, and manholes in that catchment area may not have been physically inspected, however, because there was no upstream observed dry-weather-flow, the City assumed that there are no illicit connections further upstream and is marking that catchment's investigations as 100% complete.

As summarized in Table 2-2, the City has currently addressed 54% of the identified drain piping and 59% of the identified catch basins and manholes for the High, Medium, and Low Priorities. Table 2-2 lists both the upstream basin investigations that took place over the reporting period and the total to date.

Over the Compliance Reporting Period (January through June 2019), the City has continued to re-inspect, locate and/or unbury outfalls on the Outfall Maintenance Priority Table (Table 2-3). 114 outfalls were re-inspected, located, and/or cleared of sediment. The City has completed inspections of all high and medium priority maintenance outfalls and is now working on completing inspections of all low priority maintenance outfalls.

Table 2-1
PRIORITIZED LIST OF OUTFALL SUB-AREA INVESTIGATIONS
(BASED ON OUTFALL INSPECTION PROGRAM)
2014-2019 Dry-Weather MS4/Stormwater Outfall Inspection Program
Summary of Water Quality Testing of Dry Weather Flow at MS4/CSO Outfalls

Outfall Information					Field Inspection Information				Dry-Weather Flow Characteristics					Field Parameter Test Results							Coliform Laboratory Sampling/Analysis						
							Dry Weather																			
GIS Identifier	Diameter	Material	Outfall Location	Owner-ship	Date	Previous Rainfall	< 24 hours	<48 hours	Flow Description	Odor	Color	Floatables	Turbity	Sample Time	Sample Temp (F)	pH	Conduct- ivity	Ammonia (mg/l)	Surfactants (mg/l)	Chlorine (mg/l)	Sample Date for Bacteria	Previous Rainfall (inches)	Previous Rainfall (Date)	Previous Rainfall (End Time)	E.Coli (MPN/ 100 ml)	Entrococcus (MPN/ 100 ml)	Fecal (MPN/ 100 ml)
High Priority																										
UNK0955	36"	RCP	South Main St(Dominator Plaza)	City	9/29/2014	0.36" ON 9/21/14			MODERATE	NONE	CLEAR	NONE	NONE	1058	69.2	7.54	1673	0	0.5		9/21/2015	0.1	9/13/2015		>48,000		
MR24314	24"	RCP	Groveland Street/Water Street	City	9/2/2015	0.19" ON 8/23/15			NO INFORMATION	RANCID/SOUR	BROWN, YELLOW	GREASE	CLOUDY	800	70.1	7.6	1009	0	3	0	9/9/2015	0.19	8/23/2015		>24,000	>24,190	
PL0891	30"	RCP	Main St @ Marsh Ave	City	10/6/2014	0.12" ON 10/4/14			TRICKLE	SEWERAGE	GRAY	OTHER (DEBRIS)	CLOUDY	840	50	7.36	1123	0	3		9/9/2015	0.19	8/23/2015		>24,000		
MR1109	12"	RCP	350 Water Street	City	10/26/2015	0.06" ON 10/25/15			TRICKLE	``	NONE	NONE	NONE	930	59.3	7.31	3	0	0	0	12/10/2015	0.1	12/3/2015		1413.6	> 2420	
UNK1767	36"	CMP	Tudor Ct	City	10/10/2014	0.08" ON 10/8/14			TRICKLE	NONE	CLEAR	DEBRIS	CLEAR	1055	60.6	7.41	373	0	0.25		10/14/2014				2,420		
UNK0951	48"	RCP	61 Brook St	City	9/29/2014	0.36" ON 9/21/14			MODERATE	NONE	CLEAR	NONE	CLEAR	900	65.5	7.98	334	0	0.25		10/14/2014				>2419.6		
DPI0946	48"	RCP	High School	City	11/5/2015	0.02" ON 11/1/15			TRICKLE	NONE	NONE	NONE	NONE	815	56.4	7.22	849	0	0.25	0	12/10/2015	0.1	2/3/2015		>2420		
MR1141	36"	RCP	Merrimac River (River St)	State	9/23/2014	0.36" ON 9/21/14			TRICKLE	NONE	CLEAR	OTHER (DIRT)	CLEAR	945	62	7.88	694	0	0.25		9/30/2014	0.01	9/29/2014		>2,420		
DPO0696	12"	RCP	Pamela Lane	City	6/5/2015	1.38" ON 6/2/15			MODERATE	NONE	NONE	NONE	NONE	1010	64.2	6.75	365	0	0	0	6/12/2015	0.1	6/6/2015		>2,419		
MR1138	36"	RCP	Merrimac River (River St)	City	9/23/2014	0.36" ON 9/21/14			TRICKLE	NONE	CLEAR	OTHER (DIRT)	CLEAR	920	58.6	7.24	613	0	0		9/30/2014	0.01	9/29/2014		2420		
Medium Priority																										
LR1260	3'x4'	OTHER, Blocks	140 Hale Street	City	9/28/2015	0.10" ON 9/13/15			NO INFORMATION	NONE	NONE	NONE	NONE	1040	69.9	7.1	927	0	0.5	0	11/4/2015	0.02	11/1/2015		1986.3		
UNK1166	34"	RCP	8 Franzone Dr	City	9/30/2014	0.03" ON 9/30/14			MODERATE	NONE	CLEAR	NONE	CLEAR	850	59.5	7.25	1437	0	0		10/6/2014	0.12	10/4/2014		1299.7		
UNK1177	48"	RCP	Franzone Dr	City	9/30/2014	0.03" ON 9/30/14			TRICKLE	NONE	CLEAR	NONE	NONE	1105	59	7.05	1537	0	0.25		10/6/2014	0.12	10/4/2014		1299.7		
JC1028	15"	RCP	Kali Way	City	10/7/2014	0.12" ON 10/4/14			TRICKLE	NONE	CLEAR	NONE	CLEAR	950	67.3	7.4	433	0	0		10/20/2014	0.02	10/18/2014		1046.2		
LR0993	16"	CMP	100 Newark Street	City	11/7/2015	0.02" ON 11/1/15			MODERATE	NONE	NONE	NONE	NONE	840	59.6	6.81	765	0	0	0	12/1/2015	0.39	11/28/2015		1046.2	33.6	
Low Priority																										
UNK1835	15"	PVC	Broadway	City	6/10/2015	0.1" ON 6/6/15			NO INFORMATION	NONE	NONE	NONE	NONE	935	69	7.08	240	0	0	0	6/12/2015	0.1	6/6/2015		980.4		
LR1103	15"	RCP	Bennington St	City	9/10/2014	0.5" ON 9/7/14			TRICKLE	NONE	CLEAR	NONE	NONE	830	68.1	7.35	683	0	0		9/16/2014	0.18	9/13/2014		920.8		
BZB0847	15"	RCP	Fermanagh St	City	10/20/2014	0.02" ON 10/19/14			TRICKLE	NONE	CLEAR	NONE	NONE	1306	60	7.7	287	0	1		11/13/2014	0.06	11/7/2014		770.1		
MR20718	10"	RCP	1 Water Street	City	8/14/2015	0.57" ON 8/11/15			NO INFORMATION	NONE	NONE	NONE	NONE	1000	78	7.99	2		0	0	8/31/2015	0.19	8/23/2015		556	631	
MR1164	36	RCP	Water Street	City	8/25/2015	0.36" ON 8/21/15				NONE	CLEAR	NONE	NONE		72.2	7.6	2	0	0	0	08/31/2015	0.19	08/23/2015		461	< 10	
FBO0638	12"	RCP	Hilldale Ave.	City	6/27/2015	0.04" ON 6/27/15			TRICKLE	NONE	NONE	NONE	NONE	945	64.5	6.91	453	0	0	0	7/7/2015	0.02	7/4/2015		435.2		
PL1222	36"	RCP	West Gile St.	City	5/20/2015	0.07" ON 5/19/15			NO INFORMATION	NONE	NONE	NONE	NONE	825	65.4	7	548	0	0.25	0	6/5/2015	1.38	6/2/15		410.6		
UNK0661	24"	RCP	Parkridge Rd.	City	9/26/2014	0.36" ON 9/21/14			TRICKLE	NONE		NONE	NONE		67.1	7.84	815	0	0		11/13/2014	0.06	11/7/2014		365.4		
MR32720	36"	RCP	782/775 River Street	City	11/16/2015	0.04" ON 11/13/15			TRICKLE	NONE	NONE	NONE	NONE	900	57.2	7.31	7	0	0	0	12/1/2015	0.39	11/28/15		325.5		
MR0982	18"	CLAY	20 Back Lane	City	10/14/2015	0.02" ON 10/13/15			NO INFORMATION	NONE	NONE	NONE	NONE	1150	63.1	7.25	3	0	0	0	11/4/2015	0.02	11/1/15		547.5	183.5	
MR23912	8"	STEEL	120 Merrimack St	City	8/27/2015	0.19" ON 8/23/15			TRICKLE	NONE	NONE	NONE	NONE	915	55.1	6.71	6	0	0	0	8/31/2015	0.19	8/23/2015		12.1	148	
Other Priorities (based on non-bacteria results)																										
MR1140	15"	RCP	River St	City	9/23/2014	0.36" ON 9/21/14			TRICKLE	NONE	BROWN	OTHER	CLOUDY		42.6	8.18	484	0	0		11/13/2014	0.06	11/7/2014		62.4		
LRO0995	18"	RCP	Newark St	City	9/10/2014	0.5" ON 9/7/14			TRICKLE	NONE	CLEAR	NONE	CLEAR	915	71.4	7.41	120	0	0.75		10/14/2014	0.18	10/11/2014		52		
MR0834	48"	RCP	Merrimac River (Bradley Ave)	City	9/19/2014	0.02" ON 9/16/14			MODERATE	NONE	CLEAR	NONE	NONE	831	50	7.6	295	0	0		11/13/2014	0.06	11/7/2014		43.2		
UNK0883	12"	CMP		City	9/24/2014	0.36" ON 9/21/14			TRICKLE	NONE	CLEAR	NONE	NONE	925	64.7	7.41	224	0	0.25		10/20/2014	0.02	10/18/2014		28.8		
MR0662	18"	RCP		City	9/25/2014	0.36" ON 9/21/14			TRICKLE	NONE	CLEAR	NONE	NONE	1120	65.4	7.5	475	0	0.25		10/6/2014	0.12	10/4/14		23.8		
LR0963	15"	HDPE	Alvanos St	City	9/11/2014	0.5" ON 9/8/14			MODERATE	NONE	CLEAR	NONE	SLIGHT CLOUDINESS	1015	68.1	7.87	855	0	0.25		9/16/2014	0.18	9/13/2014		22.6		
CB1198	NA	RCP	Research Dr	City	11/4/2014	0.25" ON 11/2/14			MODERATE	NONE	CLEAR	NONE	CLEAR	1003	50.2	7.06	208	0	0.25		11/13/2014	0.06	11/7/2014		21.3		
MR0770	36"	RCP	Merrimac River (River St)	City	9/23/2014	0.36" ON 9/21/14			TRICKLE	NONE	CLEAR	NONE	CLEAR	930	60.6	7.86	713	0	0.25		9/30/2014	0.01	9/29/2014		19.9		
UNK1836	36"	RCP	Computer Dr	City	11/6/2014	0.25" ON 11/2/14			MODERATE	NONE	CLEAR	NONE	CLEAR	850	53.7	7.48	3	0	0.5		11/13/2014	0.06	11/7/2014		18.3		
FP7115	12"	RCP	Brickett Ln	City	5/18/2015	0.03" ON 5/12/15			NO INFORMATION	NONE	BROWN	OTHER	CLOUDY	920	56	7.4	6	0	0.5	0.25	5/22/2015	0.07	5/19/15		8.4		
DPI0969	15"	RCP	Diana Road	City	6/4/2015	1.38" ON 6/2/15		X	MODERATE	NONE	NONE	NONE	NONE	1035	65.3	7.22	610	0	0	0.25	6/5/2015	1.38	6/2/2015		5.2		
DPO0657	45"	RCP	44 Sarah J Circle	City	6/9/2015	0.1" ON 6/6/15			TRICKLE	NONE	NONE	NONE	SLIGHT CLOUDINESS	925	65.4	6.94	206	0	0	0	7/7/2015	0.02	7/4/15		4.1		
UNK1011	24"	RCP	Lake Street	City	6/8/2015	0.1" ON 6/6/15			TRICKLE	NONE	NONE	NONE	NONE	915	59.3	6.95	794	0	0.25	0	6/12/2015	0.1	6/6/2015		3.1		
UNK0627	15"	RCP		City	5/21/2015	0.07" ON 5/19/15			NO INFORMATION	NONE	NONE	NONE	NONE	840	64.5	6.82	791	0	0	0.25	5/22/2015	0.07	5/19/15		2		
DPI0947	18"	RCP	177 Brook Street	City	10/31/2015	0.66" ON 10/29/15			MODERATE	RANCID/ SOUR	NONE	NONE	NONE	800	52.3	7.4	283	0	0	0	12/10/2015	0.1	12/3/15		1		
UNK1189	NA	NA	Primrose St (Dpw)	City	9/12/2014	0.01" ON 9/9/14			TRICKLE	NONE	CLEAR	NONE	CLEAR	1025	64.7	7.86	343	0	0.25		9/16/2014	0.18	9/13/2014		<1		
TS0984	24"	RCP		City	5/11/2015	0.03" ON 5/12/15			MODERATE	NONE	BROWN	NONE	SLIGHT CLOUDINESS	1111	62.2	6.81	76	0	0	0.25	5/22/2015	0.07	5/19/15		<1		
TS0989	24"	RCP	Newton Rd	City	5/18/2015	0.03" ON 5/12/15			SUBSTANTIAL	NONE	Clear	NONE	SLIGHT CLOUDINESS	1100	63.3	7.2	48	0	0	0.25	5/22/2015	0.07	5/19/15		<1		
UNK1020	24"	RCP		Private	9/30/2014	0.36" ON 9/21/14			TRICKLE	NONE	NONE		SLIGHT CLOUDINESS	840	44.9	7.77	301	0	0		11/13/2014	0.06	11/7/2014		34.1		
UNK1750	24"	RCP	36 Magnavista	City	5/18/2015	0.03" ON 5/12/15			TRICKLE	NONE	NONE	NONE	NONE	955	64.7	7.6	574	0	0	0.25	5/22/2015	0.07	5/19/2015		<1		
UNK1040	24"	RCP	Gile St.	City	5/20/2015	0.07" ON 5/19/15			TRICKLE	NONE	ORANGE	NONE	SLIGHT	930	63.1	7.3	877	0	0.25	0	5/22/2015	0.07	5/19/2015		<1		
UNK0902	40"	CMP	Shelley Rd	City	9/24/2014	0.36" ON 9/21/14			MODERATE	NONE	CLEAR	OTHER (RUST)	CLEAR		62.6	7.02	1567	0	0.25								
UNK1680	15"	HDPE	Colonial Farm Road	Private	6/27/2015	0.04" ON 6/27/15			TRICKLE	NONE	BROWN	NONE	NONE		66.9	6.9	238	0	0	0							
DPI1007	54"	CMP	Kenilworth Ln	City	10/10/2014	0.08" ON 10/8/14			TRICKLE	NONE	CLEAR	OTHER (DIRT/DEBRIS)	CLEAR	1040	51.5	7.86	471	0	0.25								

Outfall Information					Field Inspection Information				Dry-Weather Flow Characteristics					Field Parameter Test Results							Coliform Laboratory Sampling/Analysis						
							Dry Weather																			
GIS Identifier	Diameter	Material	Outfall Location	Owner-ship	Date	Previous Rainfall	< 24 hours	<48 hours	Flow Description	Odor	Color	Floatables	Turbity	Sample Time	Sample Temp (F)	pH	Conduct- ivity	Ammonia (mg/l)	Surfactants (mg/l)	Chlorine (mg/l)	Sample Date for Bacteria	Previous Rainfall (inches)	Previous Rainfall (Date)	Previous Rainfall (End Time)	E.Coli (MPN/ 100 ml)	Entrococcus (MPN/ 100 ml)	Fecal (MPN/ 100 ml)
Needs Follow-up Testing (City has attempted to make follow-up visits to these sites but there was no flow)																										
UNK0848	18"	RCP	Woodrow Ave	City	5/15/2015	0.03" ON 5/12/15			SUBSTANTIAL	NONE	NONE	NONE	NONE		69.3	7.38	2	0	0	0							
FBO0723	18"	RCP	Hanna Ridge Rd.	City	5/28/2015	0.07" ON 5/19/15			TRICKLE	NONE	NONE	NONE	NONE		77	7.49	385	0	0	0							
UNK0888	NA	NA	West Lowell Street	City	6/12/2015	0.1" ON 6/6/15			MODERATE																		
UNK1188	32"	RCP	Primrose Street	City	Broken pipe needs to be re-inspected																						
MR38714	6"	PVC		City	3/9/2016	0.01" ON 3/4/16			TRICKLE																		
MR38718	18"	RCP	Merrimack River	City	3/9/2016	0.01" ON 3/4/16			MODERATE																		
LR39512	48"	RCP	Little River	City	3/31/2016	0.85" ON 3/29/16			MODERATE					1130							4/1/2016	0.7	3/28/2016				5

NOTE: Data exceeds one of the parameter thresholds that suggest it should be added to the IDDE program

Laboratory Sampling Dates in Red are the samples taken with less than 48 hours of dry weather.

TABLE 2-2
SUMMARY OF IDDE INVESTIGATIONS OF SYSTEMS WITH POTENTIAL ILLICIT CONNECTIONS BY BASIN
(BASED ON OUTFALL INSPECTION PROGRAM)
2014-2019 Dry-Weather MS4/Stormwater Outfall Inspection Program
REVISED (September 2019) IDDE INVESTIGATION PRIORITIES

				Current Report Period				Completed to Date			
				January 2019 to June 2019				Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Upstream Basin Investigations				Upstream Basin Investigations			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
Buswell Brook	**BZB0847**	**1,697**	**24**	**1697**	**100%**	**24**	**100%**	**1,697**	**100%**	**24**	**100%**
Buswell Brook TOTAL		**1,697**	**24**	**1,697**	**100%**	**24**	**100%**	**1,697**	**100%**	**24**	**100%**
Creek Brook	CB1193	70	0					70	100%		
	CB1198	144	5								
	CB1710	71	0					71	100%		
Creek Brook Outlet TOTAL		**285**	**5**	**0**	**0%**	**0**	**0%**	**141**	**49%**	**0**	**0%**
Detention Pond Outlet	DPO0657	422	7								
	DPO0696	61	2					61	100%	2	100%
	DPO1079	37	0								
Detention Pond Outlet TOTAL		**520**	**9**	**0**	**0%**	**0**	**0%**	**61**	**12%**	**2**	**22%**
Detention Pond Inlet	DPI0946	7,421	172					7,421	100%	172	1
	DPI0947	1,360	11								
	DPI0969	1,515	22								
	DPI1007	1,634	0								
	DPI1074	694	14								
	DPI1094	22	0					22	100%		
Detention Pond Inlet TOTAL		**12,646**	**219**	**0**	**0%**	**0**	**0%**	**7,443**	**59%**	**172**	**79%**
Fishing Brook	FBO0638	852	15								
Fishing Brook TOTAL		**852**	**15**	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Frey's Pond	FP7115	72	3								
Frey's Pond TOTAL		**72**	**3**	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Johnston's Creek	**JC1028**	**1,397**	**12**	**1397**	**100%**	**12**	**100%**	**1,397**	**100%**	**12**	**100%**
Johnston's Creek TOTAL		**1,397**	**12**	**1,397**	**100%**	**12**	**100%**	**1,397**	**100%**	**12**	**100%**
Little River	LR0952	7,268	88								
	LR0963	703	11								
	LR0993	**539**	**4**	**539**	**100%**	**4**	**100%**	**539**	**100%**	**4**	**100%**
	LR0995	822	0								
	LR1103	**4,418**	**4**	**4418**	**100%**	**4**	**100%**	**4,418**	**100%**	**4**	**100%**
	LR1260[1]	26,134	614					6,214	24%	146	24%
Little River TOTAL		**39,884**	**721**	**4,957**	**12%**	**8**	**1%**	**11,171**	**28%**	**154**	**21%**

				Current Report Period				Completed to Date			
				January 2019 to June 2019				Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates		Upstream Basin Investigations				Upstream Basin Investigations			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
Merrimack River	MR0662	210	5								
	MR0770	2,980	47								
	MR0834	756	8								
	MR0982	128	10								
	MR1109	941	12					941	100%	12	100%
	MR1138	289	18					289	100%	18	100%
	MR1140	90	2								
	MR1141[2]	3,899	104					3,899	100%	104	100%
	MR1164	1,746	116					1,746	100%	116	100%
	MR20718	NA									
	MR23912	0	1								
	MR24314	541	24					541	100%	24	100%
	MR32720	NA	3								
Merrimack River TOTAL		**11,580**	**350**	**0**	**0%**	**0**	**0%**	**7,416**	**64%**	**274**	**78%**
Pentucket Lake	PL0891	5,463	128					5,463	100%	128	100%
	PL1222[1]	3,292	102					65	2%	2	2%
Pentucket Lake TOTAL		**8,755**	**230**	**0**	**0%**	**0**	**0%**	**5,528**	**63%**	**130**	**57%**
Tilton Swamp	TS0984	52	1								
	TS0989	3,893	47								
Tilton Swamp		**3,945**	**48**	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Unknown	UNK0627	254	8								
	UNK0661	**410**	**11**	**410**	**100%**	**11**	**100%**	**410**	**100%**	**11**	**100%**
	UNK0668	854	18								
	UNK0788	869	16					869	100%	16	100%
	UNK0836	842	12								
	UNK0883	570	7								
	UNK0898	91	0					91	100%		
	UNK0902	54	2								
	UNK0951	1,910	34					1,910	100%	34	100%
	UNK0953	225	0					225	100%		
	UNK0954	81	0					81	100%		
	UNK0955	6,058	146					6,058	100%	146	100%
	UNK1011	5306	44								
	UNK1020	71	2								
	UNK1040	1,414	21								
	UNK1063	49	0								
	UNK1166	**1,079**	**28**	**1,079**	**100%**	**28**	**100%**	**1,079**	**100%**	**28**	**100%**
	UNK1177	**156**	**3**	**156**	**100%**	**3**	**100%**	**156**	**100%**	**3**	**100%**
	UNK1188	25,926	470					25,926	100%	470	100%
	UNK1189	2,043	17								
	UNK1680	719	8								
	UNK1750	1,239	23								
	UNK1767	2,077	52					2,077	100%	52	100%

			Current Report Period				Completed to Date			
			January 2019 to June 2019				Including this Reporting Period			
Basin ID	Outfall ID	Existing System Estimates	Upstream Basin Investigations				Upstream Basin Investigations			
		Length of Pipe (ft)	Number of Manholes and Catch Basins	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed	Length of Pipe (ft)	Percent Completed	Number of Manholes and Catch Basins	Percent Completed
Unknown	UNK1835	761	10								
	UNK1836	1,179	22								
	UNK1886	20	0					20	100%		
	UNK1887	20	0					20	100%		
	UNK1888	21	0					21	100%		
	UNK1889	21	0					21	100%		
Unknown TOTAL		**54,319**	**954**	**1,645**	**3%**	**42**	**4%**	**38,964**	**72%**	**760**	**80%**
West Meadow Brook	WMB0738	80	0					80	100%		
	WMB0739	80	0					80	100%		
	WMB0740	82	0					82	100%		
	WMB0759	20	0					20	100%		
West Meadow Brook TOTAL		**262**	**0**	**0**	**0%**	**0**	**0%**	**262**	**100%**	**0**	**0%**
GRAND TOTAL		**136,214**	**2,590**	**9,696**	**7%**	**86**	**3%**	**74,080**	**54%**	**1,528**	**59%**
		25.80mi.		**1.84mi.**				**14.03mi.**			

[1] **Estimate Base upon Percentage of Manholes Inspected**

[2] **Catchment includes State owned drainage and outfall. City inspected City owned drainage.**

TABLE 2-3
OUTFALL MAINTENANCE PRIORITY TABLE
January through June 2019

Outfall ID	Work Order Number	High Priority		Medium Priority	Low Priority					Inspection Date	Re-Inspection Date
		Could Not Locate	Buried	Fully Submerged in Sediment	Partially Submerged in Sediment	Fully Submerged in Water	Partially Submerged in Water	Abnormal Vegatation	Outfall Damage		
DPI1056	ST00000521	X								June-18	
KL1227	ST00001275	X								June-18	
LR1101	ST00001276	X								June-18	
UNK1015	ST00001278	X								June-18	
UNK1016	ST00001279	X								June-18	
UNK1035	ST00001280	X								June-18	
DPI0942	ST00000517		X							August-18	
DPI0943	ST00001281		X							August-18	March-19
DPI0944	ST00000518		X							August-18	March-19
LR1150	ST00001282		X							June-19	
MR0778	ST00000536		X							August-18	
UNK0888	ST00000478		X							March-19	
UNK0889	ST00000554		X							August-18	
UNK0905	ST00000556		X							August-18	
UNK0997	ST00000560		X							August-18	
UNK1033	ST00000562		X							June-18	
UNK1136	STI0001311		X							August-18	
UNK1207	STI0001312		X							March-19	
UNK1221	ST00000568		X							August-18	
UNK1907	STI0001313		X							August-18	
UNK35912	STI0001314		X							August-18	
UNK1773	ST00000575		X							March-19	
UNK1774	ST00000576		X							August-18	
BZB0959	ST00000508			X						April-19	
CB1196	ST00000510			X						March-19	
DPI0655	ST00000514			X						March-19	
DPI1008	ST00000520			X						April-19	
DPO1154	ST00000524			X						March-19	
FP7112	ST00000529			X						March-19	
JP1179	ST00000530			X						April-19	
KL1230	ST00001152			X						March-19	
LR0844	ST00000083			X						March-19	
LR1118	ST00001283			X						March-19	
MR1278	ST00000541			X						April-19	
MR24329	ST00000544			X						April-19	
SB11512	ST00000545			X						August-18	
TS0987	ST00000548			X						March-19	
UNK0064	ST00000551			X						April-19	
UNK0782	ST00000553			X						March-19	
UNK0935	ST00000558			X						March-19	
UNK1017	ST00000561			X						March-19	
UNK1076	ST00000563			X						March-19	
UNK1137	ST00000564			X						March-19	
UNK1183	ST00000566			X						March-19	
UNK1678	ST00000572			X						March-19	
UNK1748	ST00000573			X						March-19	
UNK1772	ST00000574			X						March-19	
UNK1906	ST00000580			X						March-19	
UNK25513	ST00000583			X						March-19	
UNK31513	ST00000584			X						March-19	
CB1148	ST00000591				X						
CB1199	ST00000595				X						
CB1200	ST00000596				X						
CB1201	ST00000597				X						
CL0681	ST00000600				X					April-19	
CL0683	ST00000601				X					April-19	
CL0690	ST00000602				X					April-19	
CL0701	ST00000603				X					April-19	
CLO0688	ST00000605				X					April-19	
DPI0634	ST00000606				X					April-19	
DPI0841	ST00000608				X					April-19	
DPI0965	ST00000609				X					April-19	
DPI1001	ST00000612				X					April-19	

Table 2-3 Continued

Outfall ID	Work Order Number	High Priority		Medium Priority	Low Priority					Inspection Date	Re-Inspection Date
		Could Not Locate	Buried	Fully Submerged in Sediment	Partially Submerged in Sediment	Fully Submerged in Water	Partially Submerged in Water	Abnormal Vegatation	Outfall Damage		
DPI1004	ST00000613				X						
DPI1081	ST00000615				X						
DPI1090	ST00000617				X					April-19	
FBO0721	ST00000628				X					April-19	
FP7114	ST00000629				X					April-19	
FP7115	ST00000630				X					April-19	
KL30718	ST00000634				X					April-19	
LR0931	ST00000635				X					April-19	
LR1099	ST00000636				X					April-19	
LR1102	ST00000637				X					April-19	
LR1251	ST00000641				X					April-19	
MR23513	ST00000650				X						
MR23514	ST00000651				X						
MR23515	ST00000652				X						
MR23516	ST00000653				X						
MR23517	ST00000654				X						
MR23518	ST00000655				X						
MR23519	ST00000656				X						
MR23520	ST00000657				X						
MR23522	ST00000659				X						
MR23523	ST00000660				X						
MR23524	ST00000661				X						
MR23525	ST00000662				X						
MR24316	ST00000663				X					April-19	
MR24318	ST00000664				X						
MR24718	ST00000665				X					April-19	
MR5112	ST00000666				X					April-19	
PL1181	ST00000667				X					April-19	
SB1117	ST00000668				X					April-19	
UNK0626	ST00000674				X					April-19	
UNK0663	ST00000677				X					April-19	
UNK0669	ST00000682				X						
UNK0756	ST00000691				X					April-19	
UNK0882	ST00000700				X					April-19	
UNK0885	ST00000701				X					April-19	
UNK0950	ST00000706				X					April-19	
UNK0962	ST00000709				X						
UNK1000	ST00000710				X					April-19	
UNK1005	ST00000711				X					April-19	
UNK1006	ST00000712				X					April-19	
UNK1111	ST00000717				X					April-19	
UNK1123	ST00000718				X					April-19	
UNK1158	ST00000721				X					April-19	
UNK1160	ST00000722				X					April-19	
UNK1170	ST00000724				X					April-19	
UNK1174	ST00000726				X					April-19	
UNK1205	ST00000732				X					April-19	
UNK1213	ST00000734				X					April-19	
UNK1263	ST00000736				X					April-19	
UNK1265	ST00000737				X					April-19	
UNK13512	ST00000738				X					April-19	
UNK16715	ST00000741				X						
UNK1684	ST00000742				X					April-19	
UNK1685	ST00000743				X						
UNK1686	ST00000744				X						
UNK1738	ST00000751				X						
UNK1801	ST00000758				X						
UNK1802	ST00000759				X						
UNK1806	ST00000760				X						
UNK1864	ST00000767				X						
UNK1865	ST00000768				X						
UNK1867	ST00000770				X						
UNK1868	ST00000771				X					April-19	
UNK1880	ST00000772				X					April-19	
UNK1891	ST00000773				X					April-19	
UNK1896	ST00000774				X					April-19	
UNK1899	ST00000775				X						

Table 2-3 Continued

Outfall ID	Work Order Number	High Priority		Medium Priority	Low Priority					Inspection Date	Re-Inspection Date
		Could Not Locate	Buried	Fully Submerged in Sediment	Partially Submerged in Sediment	Fully Submerged in Water	Partially Submerged in Water	Abnormal Vegatation	Outfall Damage		
UNK1900	ST00000776				X						
UNK24721	ST00000780				X						
UNK32717	ST00000791				X					May-19	
UNK34712	ST00000793				X						
UNK34713	ST00000794				X					May-19	
UNK26725	ST00001286				X					May-19	
UNK26726	ST00000784				X						
UNK29512	ST00000787				X					May-19	
CB0976	ST00001287							X		May-19	
CB0977	ST00001288							X			
CB1147	ST00001289							X			
DPO0657	ST00001291							X		May-19	
DPO1007	ST00001292							X			
FB0715	ST00001293							X			
UNK0906	ST00001294							X			
UNK1901	ST00001295							X		May-19	
UNK1902	ST00001296							X		May-19	
UNK5113	ST00001297							X			
CB1198	ST00001298					X				May-19	
DPI0945	ST00000519					X				May-19	
DPI1133	ST00000522					X				May-19	
MR20719	ST00000542					X					
TS0989	ST00000549					X				April-19	
KL26714	ST00000533					X					
DPI0970	ST00000610						X				
DPI1007	ST00000614						X				
DPI1084	ST00000616						X				
DPI1125	ST00000618						X				
DPI1131	ST00000619						X			May-19	
DPI1162	ST00000621						X			May-19	
DPI1197	ST00001299						X				
FBO0719	ST00000627						X			April-19	
KL1178	ST00000633						X			April-19	
LR1260	ST00000642						X				
TS0984	ST00000670						X			April-19	
TS33514	ST00000673						X			April-19	
UNK0665	ST00000678						X			May-19	
UNK0666	ST00000679						X			May-19	
UNK0728	ST00000688						X			May-19	
UNK0729	ST00000689						X				
UNK0730	ST00000690						X			May-19	
UNK0902	ST00000703						X				
UNK0955	ST00000708						X				
UNK1168	ST00000723						X				
UNK1176	ST00000728						X				
UNK1177	ST00000729						X			June-19	
UNK1188	ST00001301						X			April-19	
UNK1206	ST00000733						X			May-19	
UNK1220	ST00000735						X				
UNK1695	ST00000745						X			April-19	
UNK1696	ST00000746						X			April-19	
UNK1749	ST00000752						X			April-19	
UNK1767	ST00000755						X				
UNK1823	ST00000761						X				
UNK1829	ST00000762						X				
UNK1835	ST00000763						X			May-19	
UNK1910	ST00000777						X			May-19	
UNK6316	ST00001303						X			May-19	
UNK8312	ST00000797						X				
UNK1775	ST00000756						X				
LR0979	ST00001304								X	April-19	
MR0607	ST00001305								X	May-19	
TS0983	ST00001307								X	April-19	
UNK1173	ST00001308								X		
MR0927	ST00001309										
UNK1189	ST00001310										
Unknown Ownership Outfalls											

2.4 IDENTIFIED ILLICIT CONNECTIONS AND CURRENT RESOLUTION STATUS

The ongoing and cumulative status of the City's efforts to remove any identified illicit connections or discharges is summarized in Table 2-4.

The status of the four most recently identified illicit connections is as follows:

- Pentucket Lake Basin
  - Outfall PL0891: This catchment area is located on Marsh Avenue and Main Street, and the source of dry weather flow was determined to be from a sewer exfiltrating into an under drain. Correction action has been designed, bid, and the notice of award has been issued to National Water Main. To date the following work has been completed:
    - Cleaning and CCTV inspections of all sewer laterals and mains in the project areas
    - Point repair and rehabilitation of SMH-2190
    - Installation of CIPP main line liner on Main Street
    - Installation of CIPP main line liner on Marsh Avenue
    - Installation of all CIPP sewer lateral liners

    Due to high groundwater levels causing flooding in a home during lining of sewer laterals, the project was on hold until groundwater levels lower and weather permits. Also, during inspection and CCTV of sewers, it was discovered that three sewer lateral connections tied into the top of the sewer main. Due to the angle of the connection, the service laterals cannot be lined. Therefore, the lateral connections were dug and replaced. After review of post lining CCTV, it was determined that a number of segments need to be inspected again because the CCTV does not show the entire extents of the pipes. Also one defect in a lateral liner was found. National Water Main is expected to complete CCTV and fix the defect in the near future. The cost of this project is approximately $446,000.

- Merrimack River Basin
    - Outfall MR1141: The City conducted IDDE investigations on 12/20/2018. This outfall is believed to be owned by the State. The City conducted IDDE investigations on all the City owned drains that discharge to this outfall. During further investigation in DMH-5805, an offset sewer joint was found to be leaking into DMH-5805. DMH-5805 was sealed on 5/16/2019. See work order in Appendix B and map of progress in Appendix C.
    - Outfall MR1109: The City conducted IDDE investigations on 10/22/2018. High enterococci results start in segment DMH-366:DMH-364. Raccoons and animal feces have been observed in pipes upstream of this segment. Sewer main adjacent to DMH-366:DMH-364 was CCTV'd on 1/4/2019 and has no signs of infiltration crack, or fractures. The City will seek assistance from a consultant regarding next steps. See map of progress in Appendix C.

- Unknown or Unnamed Basins
    - Outfall UNK 1166: The City conducted IDDE investigations on 6/24/2019. High E.coli sample results occurred at UNK1166. Also on 6/24/2019, the outfall UNK1177, located just upstream of UNK1166, was sampled and high E.coli sample results were observed. It is suspected that contamination at UNK1166 is caused by UNK1177. More CCTV needs to be conducted to confirm. See inspection reports in Appendix B and map of progress in Appendix C.
    - Outfall UNK1177: The City conducted IDDE investigations on 6/24/2019. High E.coli sample results occurred at UNK1177 and from segment DMH-7485:Culvert Inlet. More CCTV needs to be conducted to help determine cause of contamination. See inspection reports in Appendix B and map of progress in Appendix C.
    - Outfall UNK 0661: The City conducted IDDE investigations on 5/23/2019. All sampling results were below threshold limits. See inspection reports in Appendix B and map of progress in Appendix C.

- Johnson's Creek Basin
    - Outfall JC1028: The City conducted IDDE investigations on 5/23/2019. All sample results were below threshold limits. See inspection reports in Appendix B and map of progress in Appendix C.

- Little River Basin
    - Outfall LR0993: The City conducted IDDE investigations on 5/7/2019. High surfactant sample results occurred at segment CB-1377:CB-1376 and high ammonia sample results occurred at segment CB-1378:CB-1379. CCTV showed no connections to segments and sewer mains are not located near drains. Source of contamination is unknown. The City will seek assistance from a consultant regarding next steps. See inspection reports in Appendix B and map of progress in Appendix C.
    - Outfall LR1103: The City conducted IDDE investigations on 5/7/2019. All sample results were below threshold limits. See inspection reports in Appendix B and map of progress in Appendix C.

- Buswell Brook Basin
    - Outfall BZB0847: The City conducted IDDE investigations on 6/10/2019. High E.coli sample results occurred at segments DMH-546:CB-2775, CB-2775:CB-2770, CB-2770:DMH-545, DMH-545:CB-2767, CB-2767:CB-2768, and DMH-545:CB-2765. High ammonia sample results occurred at segments BZB0847:DMH-546, DMH-546:CB-2775, CB-2775:CB-2770, CB-2770:DMH-545, and DMH-545:CB-2765. More CCTV needs to be conducted to help determine cause of contamination. See inspection reports in Appendix B and map of progress in Appendix C.

TABLE 2-4
SUMMARY OF ILLICIT DISCHARGES IDENTIFIED BY BASIN AND CURRENT STATUS
(January through June 2019)

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				
CD Requirement		67.a.iii.1			67.a.iii.2	67a.iii.7		67.a.iii.8		67.a.iii.9	67.a.iii.3	67.a.iii.4	67.a.iii.5	67.a.iii.6	
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge[1]	Estimated Flow (gpd)	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	Assessment: Is the City in compliance with the schedule?
Little River	LR1260	10/26/2017	29 Union Street	Single family broken sewer	400 gpd	not removed	gave extension	Was removed on 2/24/18						60,000	
Merrimack River	MR1164	11/19/2016	Market Basket Parking Lot	groundwater into drain	Seasonal Flow/ Not able to estimate	N/A	N/A	N/A	N/A	N/A	This dry weather flow appears to be from a groundwater discharge into the drainage system across a parking lot. Additional testing is required to confirm bacteria source is groundwater.	N/A	N/A	N/A	Yes, the City is in compliance with resolving this "illicit discharge".
	MR1141	12/20/2018	River St	Sewer pipe joint offset leaking in DMH	Not able to estimate	Yes		Was repaired 5/16/2019			Sewer pipe joint and DMH were repaired on 5/16/2019	5/16/2019	$500	Not able to estimate	Yes, the City is in compliance
	MR1109		350 Water St	IDDE conducted and needs further investigation to determine the source.											
	MR1138	10/20/2017	River St	Upstream contamination from culvert inlet.											
	MR24314	7/27/2016	15 Groveland St., 19 Groveland St, 312 Water St	3 Single family	N/A		N/A	N/A	N/A		New gravity sewer installed on Nov 11, 2016 and 3 homes removed from drain system	11/4/2016	$ 12,788	26,377	Yes, the City is in compliance
Pentucket Lake	PL0891	10/5/2016	Marsh Avenue	leaking sewer/ exfiltration	Not able to estimate	X	Sewer replacement costs/lengths are extensive; cost exceeds discretionary funds; new fund required in next fiscal year to complete project	Fiscal Year 2019	This connection is being removed as quickly as possible and dependent on the availability of funds within the fiscal year.	N/A	10/5/18-10/10/18: SMH-2190 point repair and manhole rehibilitation complete. 10/11/18-10/16/18: Installation of CIPP main line liner on Main St 10/17/18-10/23/18: Installation of CIPP main line liner on Marsh Ave. 10/24/18: Began installing CIPP of sewer laterals. Groundwater too high causing flooding in homes. Project on hold until mid-end March. Project is complete. Post lining CCTV was reviewed and determined that more CCTV needs to be conducted and 1 defect in lining needs to be repaired.	-	-	-	Marsh Ave sewer repair project was bidded and awarded to National Water Main Cleaning Co. and contract had to be extended to 6/30/19 due to high groundwater. Project was completed by the end of June 2019 but after review of CCTV, it was determined that more CCTV needs to be conducted and 1 defect in lining needs to be repaired.
Unknown	UNK0951	11/1/2017	Brook Street	Leaking sewer running through drain	Not able to estimate	not removed	Not able to fix due to weather	As soon as weather permits	-	-	Section of sewer was dug up and replaced	4/17/2018	$ 4,277	-	Yes, the City is in compliance
	UNK0788	7/27/2016	West Lowell Ave	Possible contamination from leaching septic system	Not able to estimate	N/A	N/A	N/A	N/A	N/A	City drain was disconnected from culvert and residence was connected to City sewer.	Jun-18	$ 16,700	-	Yes, the City is in compliance
	UNK1767	7/16/2018	Tudor Ct	IDDE conducted. CCTV needs to be completed. High ammonia from private pipe. Dye tested home and their wastes go to sewer.											

Description		Illicit Discharge/Connection Verified				Ongoing Illicit Discharge Removal Activities					Final Illicit Connection Removal Actions				Assessment: Is the City in compliance with the schedule?
CD Requirement		67.a.iii.1			67.a.iii.2	67a.iii.7		67.a.iii.8		67.a.iii.9	67.a.iii.3	67.a.iii.4	67.a.iii.5	67.a.iii.6	
Basin ID	Outfall ID	Date Verified	Address Location	Type of Discharge[1]	Estimated Flow (gpd)	Removed?	Reasons Why Not	Schedule for Removal	Reason why expedited	Legal Actions against Private Property Owners	Actions Taken (with Dates)	Date Connection Eliminated	Est. Cost of Removal	Estimated Volume Removed (gallons)	
	UNK0955	10/14/2016	South Main St	Contaminated private line discharges to City line.											
	UNK1188	12/25/2012	34 Columbia Pk., 66 Columbia Pk., 74 Columbia Pk., 80 Columbia Pk., 90-92 Columbia Pk.	5 Single family		N/A	N/A	N/A	N/A	N/A	5-house sewer services through a drain pipe that were dripping. Install a PVC sleeve through drain	6/8/2016	$ 13,000	26,481	City is in compliance. 60 day deadline was not applicable until November 2016.
Detention Pond Outlet	DPO0696	6/12/2015	Pamela Lane	Private drain and outfall DPI0697 that discharge to detention pond and not contaminated. Contaminated detention pond.											

[1] Type of Discharge single-family residential, multifamily residential, commercial, industrial, exfiltration from a sanitary sewer

Current Report Period Total =	$ -	-
Grand Total =	$ 47,265	112,858

SECTION 3

3.1 SSO AND BUILDING/PRIVATE PARTY BACKUP EVENTS

A chronological list of the sanitary sewer overflows (SSO) and building/private party backup events that occurred during this Reporting Period (January through June 2019), are listed in Table 3-1 and shown in Figure 3-1.

Over the Reporting Period, there were a total of six reportable SSO events associated with the City's sewer collection system and are listed in Table 3-1. One of the six reported SSO's associated with the City occurred previously and was addressed as follows:

- SSO 19-3: Sewer line was flushed and inspected; added to preventative maintenance schedule

It is important to note that the SSO's associated with the City collection system operations continue to not be a result of pipe capacity deficiencies, and the City continues to make significant progress in reducing the number of SSOs that occur in the system attributed to City operations. For this six-month reporting period, the City had six SSOs that were directly attributable to unanticipated collection system conditions. The EPA reported annual average SSOs in a typical nationwide system is about four SSOs per 100 miles. Accordingly, Haverhill continues to have fewer SSOs than the national average.

TABLE 3-1
SANITARY SEWER OVERFLOW EVENTS
JANUARY THROUGH JUNE 2019

SSO Ownership City or Private	CITY	CITY	CITY	CITY	CITY	CITY
MaintStar Work Order	WW00001610	WW00001616	WW00001630	WW00001631	WW00001648	WW00001633
SSO ID	SSO-19-01	SSO-19-02	SSO-19-03	SSO-19-04	SSO-19-05	SSO-19-06
SSO Address	NORTH AVE	40 SOUTH CROSS RD	160 MERRILL AVE	105 CARLETON ST	355 CONCORD ST	BETHANY AVE
Start Date/Time	2/27/19 3:07 AM	3/4/19 5:00 PM	4/9/19 9:00 AM	4/16/19 7:00 AM	6/1/19 2:30 PM	6/6/19 6:30 AM
End Date/Time	2/27/19 4:07 AM	3/4/19 5:30 PM	4/9/19 10:05 AM	4/16/19 8:00 AM	6/1/19 3:30 PM	6/6/19 7:15 AM
Date Reported EPA/DEP	2/27/2019	3/5/2019	4/10/2019	4/16/2019	6/2/2019	6/7/2019
Who notified	RESIDENT	RESIDENT	RESIDENT	RESIDENT	RESIDENT	RESIDENT
Reason for occurrence	SEWER SYSTEM BLOCKAGE	TRANSDUCER LEVEL FAILURE	SEWER SYSTEM BLOCKAGE	PUMP STATION FAILURE	SEWER SYSTEM BLOCKAGE	SEWER SYSTEM BLOCKAGE
Date of last SSO occurrence	FIRST OCCURANCE	FIRST OCCURANCE	10/13/2012	FIRST OCCURANCE	FIRST OCCURANCE	FIRST OCCURANCE
SSO est. vol.	216,000	500	100	3,000	500	2,000
Receiving Waters if sewerage entered	SNOW BROOK	NONE	LITTLE RIVER	CREEK BROOK	NONE	MERRIMACK RIVER
Method Use to Estimate volume	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL	VISUAL
Nearest CB location ID	NONE	NONE	CB-2602	NONE	CB-3729	CB-3357
Distance to Nearest CB (ft.)	NA	N/A	137	N/A	200	137
Name of receive Water whether or not there was a release	SNOW BROOK	NONE	LITTLE RIVER	CREEK BROOK	NONE	MERRIMACK RIVER
Entered CB Yes or No	NO	NO	YES	NO	NO	YES
MEASURED TAKEN STOP SSO	FLUSHED LINE UNTIL BLOCKAGE WAS RELIEVED. BLOCKAGE WAS CAUSED BY A MASSIVE GREASE AND RAG BALL.	OVERRIDED TRANSDUCER CONTROLS AND PUMPED DOWN STATION	FLUSHED SEWER MAIN	PUMPS CLEANED	FLUSHED CITY SEWER	FLUSHED CITY SEWER
Decontaminate	YES	YES	YES	YES	YES	YES
Measures taken to prevent future overflows	SEND BROCHURES TO UPSTREAM RESIDENTS.PM SCHEDULED.	TRANSDUCER WAS REPLACED. HAS BACKUP FLOATS.	PM, CCTV LINE TO DETERMINE SOLUTION	PUMP STATION ALARMS WILL BE TESTED, STATION BEING REPLACED SOON.	CITY PIPE TO BR CCTV'D AND CLEANED WITH VAC TRUCK	CCTV CITY PIPE AND CLEANED WITH VAC TRUCK
SEWERAGE LOCATION INTO STREAM	DIRECT TO RECEIVING WATER	NONE	LRO0875	DIRECT TO RECEIVING WATER	SUMP PUMP TO BACKYARD	MR1164

Roads, surface water, and town boundaries from MassGIS and NH GRANIT. SSO and facility locations from City of Haverhill. Map produced by Wright-Pierce.

ATKINSON, NH

PLAISTOW, NH

MERRIMAC

WEST NEWBURY

GROVELAND

METHUEN

NORTH ANDOVER

BOXFORD

SALEM, NH

SSO-19-03

SSO-19-01

SSO-19-05

SSO-19-04

SSO-19-06

SSO-19-02

AMESBURY ROAD

NORTH BROADWAY

BROADWAY

KENOZA AVENUE

WTF

KENOZA LAKE

Merrimack River

S MAIN STREET

WILLOW AVENUE

KINGSBURY AVENUE

495

Legend

- SSO
- WTF — Water Treatment Facility
- WPAF

N

0 0.25 0.5 1 Miles

SSO and Building/Private Party Backup Locations

January through June, 2019

City of Haverhill, MA

Haverhill

DATE: 10/18/2019

FIGURE: 3-1

JMN W:\GIS_Development\Projects\MA\Haverhill\13703_EPA-ConsentDecree\MXDs\SSOs_Jan-June2019_11x17.mxd

SECTION 4

4.1 CONSTRUCTION SITE INSPECTION AND ENFORCEMENT PROGRAM

At their June 26, 2018 Haverhill City Council meeting, the Council passed and adopted a Pre and Post Construction Stormwater Management Ordinance as required as part of the Consent Decree.

Currently, there are two projects within the City that are one acre or more of land disturbance, however both projects did not require an individual stormwater permit as they were exempt under Section 219-7H of the City Code. Stormwater discharges resulting from the activities that are wholly subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Stormwater Management Standards as reflected in an Order of Conditions issued by the Conservation Commission are exempt from obtaining a stormwater permit under Chapter 219.

SECTION 5

GENERAL STATUS

5.1 INTRODUCTION

This section summarizes the actions taken by the City of Haverhill to achieve Consent Decree compliance within the Reporting Period.

For the sixth Reporting Period (January through June 2019) there were three deliverables and/or activities due within that timeframe to achieve compliance. Those three deliverables/activities are shown in Table 5-1 below.

In addition, the City entered into agreement with a consulting firm to perform study, engineering and design services related to the City's Combined Sewer Overflow Control Plan. The scope of work includes the following tasks.

- Middle Siphon Interceptor and Bradford Interceptor Cleaning and Inspection
- CSO Dry Weather Connector Pipe Improvements
- Post-Construction Monitoring and System Optimization
- Green Infrastructure Demonstration Project
- Locke Street Interceptor Area CSO Reduction

Construction continued on the Odor Control and Administration Building HVAC Improvements at the City's Water Pollution Abatement Facility

Construction commenced for the replacement of the Carleton Street Pump Station as part of the Carleton Street and North Avenue Pump Stations Upgrade Project.

Outfall inspections and investigations work orders are generated from the City's computerized maintenance management system (CMMS). There were no outfall (prefix STI) inspection programs during this reporting period. In previous Compliance Reports, outfall inspections were

included within Appendix A, for continuality, work orders generated for outfall investigations (prefix ST) during this reporting period are attached in Appendix B.

TABLE 5-1

SUBMISSIONS WITHIN CURRENT REPORTING PERIOD

Part	Activity	Due Date	Submittal Date
Effective Date of Consent Decree (11/10/2016)			
M	CSO Monitoring		
	Submit Annual CSO Activation Report	4/30/2019	4/23/2019
IX	Compliance Reporting		
	Compliance Report No. 5	4/30/2019	4/30/2019
VIII	SEP		
	From Appendix 8 Construction Completion	5/10/2019	Substantial Completion 4/26/2019 Final Completion 6/13/2019 Report Submitted 7/11/2019

5.2 ISSUES OF NONCOMPLIANCE

The City is in compliance with the requirements of this Consent Decree.

5.3 LOOKING AHEAD - SIX MONTH FORECAST

The anticipated future deliverables required under the Consent Decree for the next Reporting Period, July to December 2019, are shown in Table 5-2.

TABLE 5-2

FUTURE DELIVERABLES DURING THE PROCEEDING REPORTING PERIOD

(JUNE THROUGH DECEMBER 2019)

Part	Activity	Trigger Event	# Days Due Post Trigger Event	Due Dates
Effective Date of Consent Decree		11/10/2016		
IX	Compliance Reporting			
	Compliance Report No. 6	4/30/19	180	10/31/2019
C	Illicit Discharge Prohibition and Removal from MS4 System			
	Eliminate all sources known as of Effective Date to cause pollutants in stormwater	Effective Date	Time Extension for Marsh Ave, due to high groundwater conditions	Per letter to EPA dated 12/28/17, the City requested extension for all high, medium, and low areas to be complete by 12/31/19. All remaining areas by 2023.

SECTION 6

SECONDARY TREATMENT BYPASS

6.1 INTRODUCTION

The intent of this section is to summarize the secondary treatment bypass events that occurred at the City of Haverhill's Water Pollution Abatement Facility during the reporting period, January through June 2019.

6.2 BYPASS EVENTS

There were no secondary treatment bypass events that occurred during the reporting period. Particularly of note, this is the third consecutive reporting period that the secondary treatment bypass facilities have not been activated. They have not been activated since September 7, 2017.

SECTION 7

CMOM CORRECTIVE ACTION PLAN

7.1 INTRODUCTION

Pursuant to the Consent Decree, the City of Haverhill submitted the Capacity, Management, Operation, and Maintenance Program Assessment Corrective Action Plan (CMOM), dated February 22, 2017, to MassDEP and EPA. In their review letter dated August 3, 2017, MassDEP requested that a summary of the status of CMOM-Related corrective actions that occurred during the reporting period be including in the Compliance Reporting.

7.2 CMOM CORRECTIVE ACTIONS

The CMOM identified 27 deficiencies, their recommended corrective actions, and an implementation schedule, which are listed below in Table 7-1. Table 7-1 also provides an updated status for each corrective action.

7.3 ADDITIONAL CMOM-RELATED ACTIVITIES

In addition to the corrective activities, the City has also performed additional activities as outlined and recommended in the CMOM Program. The collection system maintenance activities that were performed from January through June 2019 (Reporting Period 6) and their associated costs are listed in Table 7-2 below.

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
1	The City does not have a formal long-term plan to mitigate SSO.	The recommendations in the Wastewater Treatment Plant & Collection System Staffing Analysis (Woodard & Curran, 2017), Collection System CIP and Sewer Inspection SOP (Appendices B and F), and the Pump Station Evaluation (Wright Pierce, 2016) will serve as a long term plan to reduce the causes of SSOs.	Ongoing	The City has a capital improvement plan which includes recommendations from the Wastewater Treatment Plant & Collection System Staffing Analysis, Collection System CIP and Sewer Inspection SOP, and the Pump Station Evaluation which is the long-term plan to reduce the causes of SSOs. Implementation of the plan is ongoing.
2	The City does not have a comprehensive system to prioritize investigations, repairs, and rehabilitation.	Use the risk-based methods described in Appendices B and F to prioritize investigations, repairs, and rehabilitation.	Ongoing	A PEF was submitted to complete planning and implementation of various CMOM corrective action plans including pipe inspections. The City has also began adding CCTV and LOF pipe ratings to their new CMMS software (Utility Cloud). The City has also added sewer rehab/repair work to the Water Departments Phase II water main replacement project. This included CCTV and inspection of about 19,000 ft of sewer, a sewer rehab recommendation technical memorandum from an Engineering firm, and design of all excavation sewer repairs. This investigation, recommendation, and design cost the City about $134,000. This project went out to bid and is expected to begin September 2019. This project is expected to cost about $1.3 million.
3	The City does not have updated job descriptions that match technical requirements for a modern collection system utility.	Update job descriptions for the revised organizational structure proposed in the Wastewater Treatment Plant & Collection System Staffing Analysis (Woodard & Curran, 2017)	Within **one year** after EPA approves the CMOM Action Plan	All collection system job descriptions are updated except for the Senior Collection System Operator. This job description is currently being revised and is expected to be completed by the end of 2019.
4	Although the City training program includes some key safety training, staff would benefit from a formalized safety and technical training program.	Implement a staff training program using the guidelines outlined in Appendix C.	Within **one year** after EPA approves the CMOM Action Plan	The city is contact with innovative safety to put a training schedule in place. The city plans to get all necessary training done to be OSHA compliant

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
5	Although the City uses MaintStar to track customer complaints, they do not use the database to prioritize preventative maintenance.	Annually review customer complaint data using GIS to identify areas that may require further investigation.	Within **one year** after EPA approves the CMOM Action Plan	The city investigates customer complaints as they are received to determine appropriate action (i.e., schedule CCTV inspection, schedule further investigation, perform work to address issue, schedule preventative maintenance, add to capital improvements plan, etc.)
6	The City lacks a comprehensive, risk based approach to maintenance planning.	Use the risk-based methods described in Appendices B and F to prioritize investigations, repairs, and rehabilitation.	Ongoing	The City has been using GIS to analyze the current collection system and to prioritize investigations. The City will also be performing another assessment study of certain areas in the City. Also, the City has begun implementing a new CMMS software that is map based. This software will include easy access to CCTV, pipe ratings, CoF, and LoF.
7	Local limits need to be updated.	Perform a local limits study and update the limits table in the ordinance (per Appendix E, Sewer Ordinance Review).	Within **one year** after EPA approves the CMOM Action Plan	A draft of the local limits evaluation is is complete. The city is expecting a new NPDES permit in the fall of 2019 which will impact the local limits evaluation. We will finalize the evaluation after receiving the final permit and hope to have a submittal ready for the EPA by the end of 2019.
8	The City needs to improve implementation and enforcement of their Sewer Use Ordinance (SUO).	Improve implementation and enforcement of the SUO. Begin mapping Food Service Establishments in GIS and building database of grease trap inspectional data.	Within **one year** after EPA approves the CMOM Action Plan	An excel database of all Food Service Establishments has been created. The City has hired an engineering firm to conduct all Food Service Establishment Inspections. Using the excel database, the City has begun implementing a new CMMS software (Utility Cloud) to manage FOG inspections. This is expected to go live in the near future.
9	The City should update recordkeeping pertaining to private systems.	Input private lift stations into CMMS to track issues & contact information.	Within **three months** after EPA approves the CMOM Action Plan	Complete

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
10	The City does not have a finalized version of their capital improvement plan – which will include pump station upgrades, collection system rehabilitation, and WWTP upgrades.	The City should finalize their CIP and appropriate funds as necessary.	Within **three months** after EPA approves the CMOM Action Plan	The CIP is complete. As part of the annual budget process, the city updates the CIP each year. The CIP is used to develop the wastewater 5-year financial plan to fund the CIP. The CIP includes pump station upgrades, collection system rehabilitation, and WWTP upgrades.
11	The City does not have a finalized version of their capital improvement plan – which will include pump station upgrades, collection system rehabilitation, and WWTP upgrades.	The City should finalize their CIP and appropriate funds as necessary.	Within **three months** after EPA approves the CMOM Action Plan	See status of Action #10.
12	The City has not verified that other air relief valves do not exist. Maintenance of air relief valves has not been performed historically.	Review record drawings and inspect force main routes to confirm location of air relief valves. If located, enter in GIS and schedule routine maintenance in CMMS.	Within **one year** after EPA approves the CMOM Action Plan	
13	The City does not have a standard procedure for maintaining safety training records.	The City will utilize their CMMS program to organize safety training records.	Within **one year** after EPA approves the CMOM Action Plan	The City is utilizing their MaintStar along with problem code training.
14	The City has a general emergency response plan (ERP). The Division recently completed an ERP for responding to SSOs. The Division lacks ERP for other collection system emergencies.	Develop ERP for collections-specific emergencies, in particular those affecting critical assets. For example, there should be an SOP for providing backup power to pump stations during a system-wide power outage.	Within **one year** after EPA approves the CMOM Action Plan	SOP For Generators completed
15	The City does not have formal emergency response training.	Implement a program for training and practicing emergency response.	Within **one year** after EPA approves the CMOM Action Plan	The city is working with Innovative Safety to put a training schedule in place. The city plans to get all necessary training done to be OSHA compliant.
16	The City has a hydraulic model for interceptors and CSOs, but there is no city-wide hydraulic model.	Although developing a comprehensive hydraulic model is not a high priority, Woodard & Curran recommends building out the model as required to address capacity issues and plan for new development as the need arises.	As Needed	Ongoing

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
17	The City does not have adequate staff to perform sufficient preventative maintenance on all 36 pump stations part of the collection system.	Follow the recommendations of the Wastewater Treatment Plant & Collection System Staffing Analysis (Woodard & Curran, 2017) to assign sufficient resources to keep up with required maintenance.	Within **one year** after EPA approves the CMOM Action Plan	The City had developed a job description for a new Collection System MEO/laborer and has hired a qualified candidate. The City outsources many tasks. See response to Item #19. The Mission systems improve the monitoring of pump stations resulting in reduced staff time for routine inspections (weekly vs. daily) and more time on preventative maintenance
18	Although there is generally sufficient redundancy of pumps and level controls, some stations require specific upgrades related to redundancy.	The City will utilize the recommendations of the Pump Station Evaluation (Wright Pierce, 2016) to evaluate future rehabilitation. The City is planning for Carleton Street PS and North Ave PS to be in construction by EOY 2019.	Ongoing	The replacement of the North Avenue Pump Station is ongoing and expected to be complete by the end of 2019. Carleton Street Pump Station is complete, with the exception of installing a fence and porous pavement. The City will be standardizing all their pump stations during upgrades.
19	Not all pump stations have communication ability. Lack of communication at pump stations has contributed to SSOs.	The City will utilize the recommendations of the SCADA Study (Woodard & Curran, 2011) and Pump Station Evaluation (Wright Pierce, 2016) to evaluate communication improvements.	Ongoing	All pumping stations have the ability to communicate alarms. City has selected the use of Mission RTU for communication. The City had hired Weston and Sampson to install 7 new Mission alarms at Farrwood Dr, Ferry Rd, River St, Peoples Pl, Srybny Ave, Rosemont St, and Alvanos Dr sewer lift stations. Carleton St Pump Station also has Mission alarms installed as part of the upgrade. Currently 15 out of the 36 pump stations have Mission alarms. The City has budgeted money to install Mission RTU alarms at 5+/- additional stations this fiscal year (the number of stations will depend on the bid price).

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
20	11 pump stations do not have working backup power, though most of these have connections for a portable generator or are small enough to pump out.	The City will utilize the recommendations of the SCADA Study (Woodard & Curran, 2011) and Pump Station Evaluation (Wright Pierce, 2016) to evaluate emergency power improvements. Develop an ERP to address a system-wide power outage including monitoring fuel supplies, mobilizing portable generators, and pumping out with trucks.	Ongoing ERP for system wide power outage will be developed within **three month**s after EPA approves the CMOM Action Plan	Complete
21	There is currently no schedule for cleaning sewer lines on a system-wide basis.	The City will utilize a 20-year plan to inspect all sewer pipes calculated to have a consequence of failure value ≥ 3 (approximately 57% of system). See the Collection System CIP (Appendix B) for additional information.	Will begin to implement program within **six months** after EPA approves the CMOM Action Plan	The City has focused on cleaning major interceptors and siphons to increase capacity within the system and increase storage. The Middle Siphons, Middle Interceptor, Bradford Interceptor, and all the combined sewers in the Locke St CSO catchment area are expected to be cleaned by the end of 2019. The City is also looking into purchasing their own vac truck.
22	The City does not have a dedicated location for offloading and dewatering sewer cleanings. The City does not have an enclosed location for storage of their sewer maintenance vehicles.	The City will purchase a dewatering dumpster for sewer cleanings. The City will construct a facility for storage of sewer maintenance vehicles.	Within **three years** after EPA approves the CMOM Action Plan	The City currently rents dumpsters and stores them at the Wastewater Treatment Plant. These dumpsters are watertight and covered. Cleaning debris is dewatered at the septage receiving area and then offloaded into the dumpsters.
23	The City does not have a list of assets located on right-of-ways. The City has also not developed an SOP for maintenance of right-of-ways and easements.	Identify off-street assets using GIS. Schedule preventative maintenance for maintaining accessibility in CMMS. Develop SOPs for specific easements as necessary, including contacting property owners to obtain keys, etc.	Within **two years** after EPA approves the CMOM Action Plan	The City has inputted easements into GIS. These assets will be populated and SOPs will be made.

Table 7-1
CMOM Corrective Action Plans & Status

Action #	Deficiency	Recommended Corrective Action	Implementation Schedule	Status
24	There is no systematic program for uncovering manholes that have been paved over.	Develop an SOP which includes: • Identification of paved over manholes as part of routine inspections • Add paved-over manholes to GIS. • Adding work orders to CMMS for raising paved-over manholes.	Within **two years** after EPA approves the CMOM Action Plan	The City's highway department distributes a street paving list to each department. The engineering department investigates those streets and puts a list together of buried manholes. This list is then given to the contractor and the contractor raises the manholes. Paved over manholes are added to GIS on an ongoing basis as they are discovered.
25	Although the City has identified areas with high measured inflow, building inspections have not been performed.	The City will perform trial building inspections to a sample of 10% of buildings located in Areas 14 & 23 Infiltration and Inflow Report (CDM Smith, 2011). Sample brochures will be sent out to buildings where inspections are not successfully completed.	Within **two years** after EPA approves the CMOM Action Plan	
26	The City lacks public education materials associated with roof leaders and sump pumps.	The City will consider using a public education campaign to inform residents of proper plumbing in areas of separated sewer.	Within **one year** after EPA approves the CMOM Action Plan	
27	The City does not have a system-wide manhole inspection program.	Perform manhole inspections using NASSCO Level 1 MACP. Prioritize and schedule using the risk-based approach described in Appendices B and F rehabilitation. The City plans to complete manhole inspections while performing pipe inspections.	Will begin to implement program within **six months a**fter EPA approves the CMOM Action Plan	As the City contracts CCTV, they will contract manhole inspections

TABLE 7-2

CMOM-RELATED ACTIVITIES THAT OCCURRED

DURING REPORTING PERIOD 6

(JANUARY THROUGH JUNE 2019)

Month	Project	Costs
January	CSO Flow Metering	$4,785
	Pretreatment Sampling	$1,242
	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$13,360
	Easement Plan Review and Survey	$250
	MS4 Sampling	$1,785
	Sewer Pump Station Generator Maintenance	$1,440
	CMMS Software	$1,812
	Sewer & Drain Repairs, Replacement, and Materials	$13,010
	Engineering Services for Sewer Rehab & Repair	$67,164
February	Sewer & Drain Repairs, Replacement, and Materials	$3,350
	MS4 Sampling	$105
	Public Education	$966
	CSO Flow Metering	$4,785
	SCADA (Part Collections and Part Treatment Plant)	$14,188
	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$19,940
March	Public Education	$614
	Sewer Pump Station Operation & Maintenance	$6,408
	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$2,431
	Pretreatment Sampling	$1,787
	Sludge Disposal and Dumpster Rental for Grit Removal	$3,300
	CSO Flow Metering	$4,785
	Sewer Pump Station Generator Maintenance	$2,009
April	Pretreatment Sampling	$326
	Equipment Maintenance	$4,236
	Sewer & Drain Repairs, Replacement, and Materials	$9,920
	CSO Flow Metering	$4,785
	Sewer Pump Station Operation & Maintenance	$3,798
	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$740

May	Public Education	$1,964
	SCADA (Part Collections and Part Treatment Plant)	$990
	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$24,930
	Sewer Pump Station Operation & Maintenance	$1,974
	Sewer & Drain Repairs, Replacement, and Materials	$1,691
	Sludge Disposal and Dumpster Rental for Grit Removal	$3,345
	CSO Flow Metering	$4,785
	Pretreatment Sampling	$590
	Sewer Pump Station Generator Maintenance	$2,185
June	Sewer & Drain Assessment, Inspection, Cleaning, and Maintenance	$12,320
	Sewer & Drain Repairs, Replacement, and Materials	$8,295
	Pretreatment Sampling	$470
	MS4 Sampling	$1,830
	Sewer Pump Station Operation & Maintenance	$1,848
	CSO Flow Metering	$4,785
	Equipment Maintenance	$2,599
	Sludge Disposal and Dumpster Rental for Grit Removal	$2,440
Total Spent During Reporting Period		$270,362


HAVERHILL
PENTUCKET
SETTLED 1640. INSTITUTED A CITY. 1870.

CITY OF HAVERHILL, MASSACHUSETTS

NPDES PERMIT No. MA0101621

CONSENT DECREE

(Civil Action No. 16-11698-IT, 11/10/16)

COMPLIANCE REPORT No. 6

JANUARY THROUGH JUNE 2019

APPENDICES

OCTOBER 2019

APPENDIX A

CMMS GENERATED WORK ORDERS – OUTFALL INSPECTIONS

(NONE PERFORMED THIS REPORTING PERIOD)

APPENDIX B

CMMS GENERATED WORK ORDERS – OUTFALL INVESTIGATIONS

MaintStar Storm Work Order

7/17/2019

Created By SMARINEZ

W/O # ST00001668	**ADM Sys.**	**Activity** STORMWATER STORMWATER UTILITY	**Priority** 9
Issued 05/16/19 08:57	**Target** 05/16/19 08:57	**Assign to** BECK001	**Approv. By** PRES001
Closed 07/17/19 17:36	**W/O Type** CORRUNPLND	Beckwith Derek	PRESCOTT CARRIE

Acc. No.	Proj. No.	Map ID	Map Sheet

Customer Info

First Name **Last Name** **Phone1** - - - **Phone2** - - -

Cross Street

Complaint ***Comments***

Problem Address ☐ **Use Customer Address** **Cross Street** **WReq. #**

Location Description ***Notes***

wo_udf1	wo_udf2	wo_udf3	wo_udf4	wo_udf5
wo_udf6	Futher Action ☐	Claim Filed ☐	State Problem ☐	Customer Problem ☐

Task Descr/Complaint: *COMPLETE :*

Action Taken:

Repair to sewer segment goimg thru DMH-5805.

Cemented around the joints of sewer line going thru DMH-5805.

Problem

IDDE ILLICIT DISCHARGE DETECTION EL

Action

113 Repair

Seq	Date	Type	Code / Description	Hr	mm	Pay Type	Qty	Unit	Activity Location
1	05/16/19 00:00	labor	ROSA001 - Rosario Pedro	4	:00	REG			
2	05/16/19 00:00	labor	DAY001 - Day Zebulun	4	:00	REG			
3	05/16/19 00:00	labor	BECK001 - Beckwith Derek	4	:00	REG			
4	05/16/19 00:00	equip	VEH-S14 - 2014 F350 4X4	4	:00				
5	05/16/19 00:00	equip	VEH-S13 - 2013 F350 4X4	4	:00				

Seq	Asset Type	Asset Id	Rating	Asset Descr	Cst Shr	%	Block #	Street / Cross Street / City ,State Zip
1	MANHOLE	DMH-5805	.00	Cross Country	1.00	100.00		CROSS COUNTRY

Labor Cost	$301.20	**Material Cost**	$0.00	**Equipment Cost**	$160.00
Contractors Cost	$0.00	**Misc. Cost**	$0.00	**Total W/O Cost**	$461.20

Print Name _____ Signature _____ Date ____/____/____ ☐

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA

ASSET ID:	UNK1166	**OUTFALL ID:**	UNK1166
Date/Time:	2019-06-24 7:39:00		
Temperature: °F	68	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Pedro Rosario|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Shape	Diameter/Dimension (in.)	Submerged	
Outfall Pipe	CB-9423	Reinforced Concrete	Circle	36	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Substantial	Estimated GPM:	18

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-25 7:40:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	63		EXTECH EC500
pH	7.48		EXTECH EC500
Specific Conductivity (uS)	832		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	461.1	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :

Signature of Inspector :

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA

ASSET ID:	CB-9423	**OUTFALL ID:**	
Date/Time:	2019-06-24 7:43:00		
Temperature: °F	67	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	FRANZONE DR		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	Reinforced Concrete	Circle	40	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-1790	Reinforced Concrete	9:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	10

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 7:48:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	67		EXTECH EC500
pH	7.11		EXTECH EC500
Specific Conductivity (uS)	373		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	7.7	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

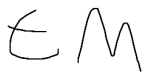
Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

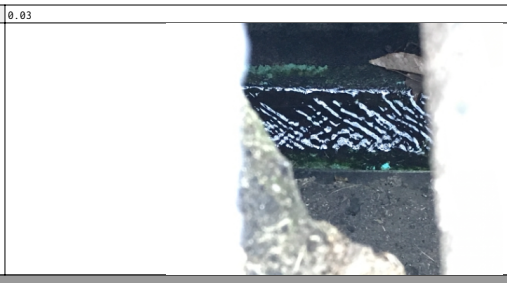
Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	Inline CB
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA			
ASSET ID:	CB-1795	**OUTFALL ID:**	
Date/Time:	2019-06-24 7:58:00		
Temperature: °F	70	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	FRANZONE DR		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures



SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	PVC	Circle	12	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-1792	PVC	12:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	8

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 7:57:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	64		EXTECH EC500
pH	7.03		EXTECH EC500
Specific Conductivity (uS)	934		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	2.2	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	Inline CB
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA			
ASSET ID:	CB-1792	**OUTFALL ID:**	
Date/Time:	2019-06-24 8:08:00		
Temperature: °F	70	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	FRANZONE DR		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	PVC	Circle	12	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-1787	PVC	12:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	No		**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-1793	PVC	3:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	Yes	Moderate	**Estimated GPM:**	5

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 8:10:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	68		EXTECH EC500
pH	6.69		EXTECH EC500
Specific Conductivity (uS)	317		EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	2.2	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

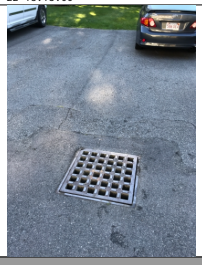
Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-1793		**OUTFALL ID:**		
Date/Time:	2019-06-24 8:03:00				
Temperature: °F	68		**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey	
Street Name/Structure Location:	FRANZONE DR				
Previous Precipitation Date/End Time:	2019-06-22 15:15:00		**Amount (inches):**	0.03	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Excellent	PVC	Circle	12	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 1	Private	PVC	11:00	Circle	6	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	10

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-24 8:08:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	68		EXTECH EC500
pH	6.65		EXTECH EC500
Specific Conductivity (uS)	326		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	
Signature of Inspector :	EC

Haverhill IDDE Inspection Form
Culvert Inlet

SECTION 1: BACKGROUND DATA			
ASSET ID:	Cul-106	**OUTFALL ID:**	
Date/Time:	2019-06-24 7:57:00		
Temperature: °F	67	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	FRANZONE DR		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03
Pictures			

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION					
Location	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Culvert Inlet Pipe	Reinforced Concrete	Circle	48	In Water:	Partially
				With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Substantial	**Estimated GPM:**	20

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-24 7:57:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	68		EXTECH EC500
pH	7.45		EXTECH EC500
Specific Conductivity (uS)	820		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	228.25	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA			
ASSET ID:	UNK1177	**OUTFALL ID:**	UNK1177
Date/Time:	2019-06-24 8:23:00		
Temperature: °F	70	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Outfall Pipe	DMH-7485	Reinforced Concrete	Circle	48	In Water:	Partially
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	10

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-24 8:26:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	63.1		EXTECH EC500
pH	7.82		EXTECH EC500
Specific Conductivity (uS)	778		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	410.6	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :

Signature of Inspector :

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-7485	**OUTFALL ID:**	UNK1177
Date/Time:	2019-06-24 8:30:00		
Temperature: °F	70	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Good	Reinforced Concrete	Circle	48	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	Culvert inlet	Reinforced Concrete	11:00	Circle	60	In Water:	Partially
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	Estimated GPM:	20

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 8:40:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	63.3		EXTECH EC500
pH	7.43		EXTECH EC500
Specific Conductivity (uS)	732		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	360.9	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	Unknown	PVC	1:00	Circle	12	In Water:	Partially
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	Yes	Moderate	Estimated GPM:	5

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 9:00:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	60.6		EXTECH EC500
pH	6.71		EXTECH EC500
Specific Conductivity (uS)	2480		EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	0.08	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	79.8	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3	DMH-1286	Reinforced Concrete	2:00	Circle	24	In Water:	No
						With Sediment:	Partially

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.3 Flowing?	Yes	Trickle	Estimated GPM:	2

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 8:50:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)	64.3		EXTECH EC500
pH	6.53		EXTECH EC500
Specific Conductivity (uS)	2400		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	<1.1	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	Outlet pipe size 48
Signature of Inspector :	

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-1286	**OUTFALL ID:**	UNK1177
Date/Time:	2019-06-24 8:40:00		
Temperature: °F	71	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Excellent	Reinforced Concrete	Circle	24	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	Unknown	Reinforced Concrete	12:00	Circle	36	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	Estimated GPM:	2

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-24 8:44:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	64		EXTECH EC500
pH	6.45		EXTECH EC500
Specific Conductivity (uS)	2940		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	Cb-3724	Reinforced Concrete	1:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	No		Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)		≥ Reporting Limit	EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature (degrees F)			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity (uS)			EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)		≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)		≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)		> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	Couldn't find upstream location or where flow was coming from. Inlet Pipe No. 2 is bricked up at CB-3724.
Signature of Inspector :	

Haverhill IDDE Inspection Form
Culvert Inlet

SECTION 1: BACKGROUND DATA			
ASSET ID:	End of Pipe:DMH-7485	**OUTFALL ID:**	UNK1177
Date/Time:	2019-06-24 9:18:00		
Temperature: °F	70	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Samuel Marinez|Zebulan Day|Derek Beckworth|Erin McGuire|Evelynn Cousey
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-22 15:15:00	**Amount (inches):**	0.03

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION					
Location	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Culvert Inlet Pipe	Reinforced Concrete	Circle	60	In Water:	No
				With Sediment:	Partially

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	25

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-24 9:22:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature (degrees F)	65.8		EXTECH EC500
pH	7.45		EXTECH EC500
Specific Conductivity (uS)	715		EXTECH EC500
Salinity (ppm S)			EXTECH EC500
Chlorine (ppm)	0	≥ Reporting Limit	Hach Test Strips
Ammonia (mg/L)	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants (mg/L)	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli (cfu/100mL)	175.34	> 235 cfu/100mL	To be sent to lab
Enterococcus (cfu/100mL)		> 61 cfu/100mL	To be sent to lab
Phosphorus (mg/L)			To be sent to lab

Comments :	No inlet pipes but a small stream
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA			
ASSET ID:	JC1028	**OUTFALL ID:**	JC1028
Date/Time:	2019-05-23 7:32:00		
Temperature: °F	54	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Shape	Diameter/Dimension (in.)	Submerged	
Outfall Pipe	DMH-8058	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	5

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-23 7:30:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	54		EXTECH EC500
pH	7.21		EXTECH EC500
Specific Conductivity	588		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :

Signature of Inspector :

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-8058	**OUTFALL ID:**	JC1028
Date/Time:	2019-05-23 7:48:00		
Temperature: °F	56	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Excellent	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	DMH-996	Vitrified Clay	1:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	Estimated GPM:	5

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-23 7:48:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	55		EXTECH EC500
pH	7.21		EXTECH EC500
Specific Conductivity	528		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.2 Flowing?			Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA			
ASSET ID:	DMH-996	**OUTFALL ID:**	JC1028
Date/Time:	2019-05-23 7:59:00		
Temperature: °F	56	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	KALI WAY		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06
Pictures			

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Excellent	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	Culvert	Reinforced Concrete	10:00	Circle	12	In Water:	Partially
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	No		Estimated GPM:	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	DMH-995	Reinforced Concrete	1:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	No		Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	Mason block in DMH
Signature of Inspector :	

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA

ASSET ID:	LR0993	**OUTFALL ID:**	LR0993
Date/Time:	2019-05-07 7:43:00		
Temperature: °F	50	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	NEWARK ST		
Previous Precipitation Date/End Time:	2019-05-05 5:30:00	**Amount (inches):**	0.05

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Shape	Diameter/Dimension (in.)	Submerged	
Outfall Pipe	CB-1377	Corrugated Metal	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	Corrosion			
Deposits/Stains	None			
Pool Quality	Suds			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	10

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)

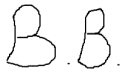
Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-07 7:45:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	52.4		EXTECH EC500
pH	6.4		EXTECH EC500
Specific Conductivity	1064		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	0.11	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :

Signature of Inspector :



Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-1377			**OUTFALL ID:**	LR0993
Date/Time:	2019-05-07 7:55:00				
Temperature: °F	51			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	NEWARK ST				
Previous Precipitation Date/End Time:	2019-05-05 5:30:00		**Amount (inches):**	0.05	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Excellent	Corrugated Metal	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 1	CB-1378	Corrugated Metal	11:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	10

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 8:01:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	56.4		EXTECH EC500
pH	6.07		EXTECH EC500
Specific Conductivity	805		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 2	CB-1376	Corrugated Metal	1:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	**Estimated GPM:**	0.5

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 8:05:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	56.1		EXTECH EC500
pH	6.68		EXTECH EC500
Specific Conductivity	1935		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	0.64	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA

ASSET ID:	CB-1376	**OUTFALL ID:**	LR0993
Date/Time:	2019-05-07 8:26:00		
Temperature: °F	54	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	NEWARK ST		
Previous Precipitation Date/End Time:	2019-05-05 5:30:00	**Amount (inches):**	0.05

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	Ductile Iron	Circle	12	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1						In Water:	
						With Sediment:	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.1 Flowing?			Estimated GPM:	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.2 Flowing?			Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	BB

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-1378			**OUTFALL ID:**	LR0993
Date/Time:	2019-05-07 8:50:00				
Temperature: °F	61			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	NEWARK ST				
Previous Precipitation Date/End Time:	2019-05-05 5:30:00		**Amount (inches):**	0.05	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Good	PVC	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1	CB-1379	Corrugated Metal	9:00	Circle	8	In Water: No
						With Sediment: No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	Brown			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	**Estimated GPM:**	0.1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	Yes	Brown	Easily Detected
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 8:50:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	62.9		EXTECH EC500
pH	7.42		EXTECH EC500
Specific Conductivity	4670		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	1	≥ 0.5 mg/L	Hach Test Strips
Surfactants	0.06	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-1379			**OUTFALL ID:**	LR0993
Date/Time:	2019-05-07 8:43:00				
Temperature: °F	54			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	NEWARK ST				
Previous Precipitation Date/End Time:	2019-05-05 5:30:00		**Amount (inches):**	0.05	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Good	Ductile Iron	Circle	8	In Water:	No
					With Sediment:	Partially

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1						In Water:
						With Sediment:

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.1 Flowing?		**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.2 Flowing?		**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

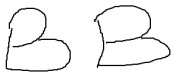
Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	Full of sand
Signature of Inspector :	

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA			
ASSET ID:	LR1103	**OUTFALL ID:**	LR1103
Date/Time:	2019-05-07 9:23:00		
Temperature: °F	60	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-05-05 5:30:00	**Amount (inches):**	0.05
Pictures			

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Outfall Pipe	CB-3621	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	Other	Purple		
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	6

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 9:20:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	60.4		EXTECH EC500
pH	7.6		EXTECH EC500
Specific Conductivity	1061		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	BB

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-3621			**OUTFALL ID:**	LR1103
Date/Time:	2019-05-07 9:39:00				
Temperature: °F	60			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	BENNINGTON ST				
Previous Precipitation Date/End Time:	2019-05-05 5:30:00		**Amount (inches):**	0.05	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Excellent	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 1	CB-3622	Reinforced Concrete	12:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	6

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 9:36:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	58.8		EXTECH EC500
pH	7.46		EXTECH EC500
Specific Conductivity	1084		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 2	CB-4066	Vitrified Clay	2:00	Circle	8	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	No		**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	BB

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-3622			**OUTFALL ID:**	LR1103
Date/Time:	2019-05-07 9:53:00				
Temperature: °F	60			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	BENNINGTON ST				
Previous Precipitation Date/End Time:	2019-05-05 5:30:00		**Amount (inches):**	0.05	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Fair	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-3620	Reinforced Concrete	12:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	6

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-07 9:50:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	57.9		EXTECH EC500
pH	7.4		EXTECH EC500
Specific Conductivity	1101		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	BB

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA			
ASSET ID:	CB-3620	**OUTFALL ID:**	LR1103
Date/Time:	2019-05-07 10:04:00		
Temperature: °F	61	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	BENNINGTON ST		
Previous Precipitation Date/End Time:	2019-05-05 5:30:00	**Amount (inches):**	0.05
Pictures			

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Excellent	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1	Unknown Location	Vitrified Clay	11:00	Circle	8	In Water: No
						With Sediment: No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	**Estimated GPM:**	6

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-05-07 10:04:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	58.8		EXTECH EC500
pH	6.11		EXTECH EC500
Specific Conductivity	1064		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA

ASSET ID:	BZB0847	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 7:25:00		
Temperature: °F	62	**Inspector(s):**	Andres Hurtado|Erin McGuire
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Shape	Diameter/Dimension (in.)	Submerged	
Outfall Pipe	DMH-546	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Other	Moss/vegetation		
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Moderate	Estimated GPM:	10

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 7:25:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	60		EXTECH EC500
pH	6.8		EXTECH EC500
Specific Conductivity	768		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	1	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	113.7	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :

Signature of Inspector : EM

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-546	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 7:30:00		
Temperature: °F	62	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	FERNWOOD AVE		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Good	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-2774	Reinforced Concrete	12:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 7:30:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	60		EXTECH EC500
pH	6.9		EXTECH EC500
Specific Conductivity	870		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-2775	Reinforced Concrete	3:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	Spalling			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 7:30:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	60		EXTECH EC500
pH	6.9		EXTECH EC500
Specific Conductivity	916		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	2	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	488.4	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	BB

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-2774			**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 7:46:00				
Temperature: °F	63			**Inspector(s):**	Carrie Prescott|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	FERNWOOD AVE				
Previous Precipitation Date/End Time:	2019-06-06 7:15:00		**Amount (inches):**	0.85	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Fair	Reinforced Concrete	Circle	18	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 1	CB-2773	Reinforced Concrete	10:00	Circle	6	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	No		**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 2	CB-2772	Reinforced Concrete	12:00	Circle	18	In Water:	Partially
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	**Estimated GPM:**	1

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-10 7:48:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	60.6		EXTECH EC500
pH	6.74		EXTECH EC500
Specific Conductivity	616		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	Slight odor
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-2772			**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 9:09:00				
Temperature: °F	63			**Inspector(s):**	Carrie Prescott|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	FERNWOOD AVE				
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85		
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Good	Reinforced Concrete	Circle	24	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1	CB-2771	Reinforced Concrete	9:00	Rectangle	12	In Water: No
						With Sediment: No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage	None		
Deposits/Stains	None		
Pool Quality	None		
Pipe Algae/Growth	None		
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No		
Is Inlet Pipe No.1 Flowing?	No	**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.2 Flowing?		**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA

ASSET ID:	CB-2775	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:00:00		
Temperature: °F	63	**Inspector(s):**	Carrie Prescott
Street Name/Structure Location:	FERMANAGH ST		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Poor	Reinforced Concrete	Circle	12	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1		Ductile Iron	9:00	Circle	2	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	No		**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-2770	Reinforced Concrete	12:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	**Estimated GPM:**	3

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	Yes	Sulfide	Easily Detected
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-07 8:02:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	61.8		EXTECH EC500
pH	7.16		EXTECH EC500
Specific Conductivity	496		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	3	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	>2400	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3	CB-2776	Vitrified Clay	3:00	Circle	8	In Water:	No
						With Sediment:	No

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage	None	
Deposits/Stains	None	
Pool Quality	None	
Pipe Algae/Growth	None	
*Do physical indicators suggest an illicit discharge is present (Y/N):	No	
Is Inlet Pipe No.3 Flowing?	No	Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-2770			**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:15:00				
Temperature: °F	62			**Inspector(s):**	Carrie Prescott|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	FERMANAGH ST				
Previous Precipitation Date/End Time:	2019-06-06 7:15:00		**Amount (inches):**	0.85	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Fair	Reinforced Concrete	Circle	24	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1	DMH-545	Reinforced Concrete	12:00	Circle	24	In Water: No
						With Sediment: No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	**Estimated GPM:**	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor	Yes	Sulfide	Easily Detected
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:	2019-06-10 8:22:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	61.3		EXTECH EC500
pH	6.99		EXTECH EC500
Specific Conductivity	936		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	3	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	2419.6	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS				
Indicator	**Indicator Present?**	**Indicator Description**		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-545	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:27:00		
Temperature: °F	62	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	LEXINGTON AVE		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Good	Reinforced Concrete	Circle	24	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	DMH-544	Reinforced Concrete	9:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 8:38:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	62.7		EXTECH EC500
pH	7.1		EXTECH EC500
Specific Conductivity	506		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	1	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	>2400	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-2767	Reinforced Concrete	11:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 8:40:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	61.8		EXTECH EC500
pH	6.95		EXTECH EC500
Specific Conductivity	442		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	1413.6	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

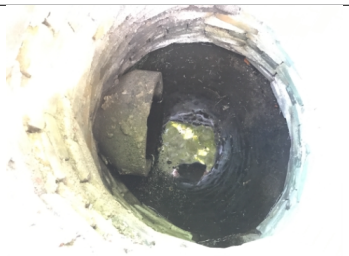
Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA

ASSET ID:	CB-2767	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:46:00		
Temperature: °F	62	**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado
Street Name/Structure Location:	LEXINGTON AVE		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85

Pictures



SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	Reinforced Concrete	Circle	18	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-2768	Reinforced Concrete	2:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	**Estimated GPM:**	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-06-10 8:46:00		
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature	62		EXTECH EC500
pH	6.52		EXTECH EC500
Specific Conductivity	477		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	387.64	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
***Do physical indicators suggest an illicit discharge is present (Y/N):**				
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

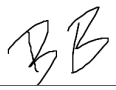
Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA					
ASSET ID:	CB-2768			**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:55:00				
Temperature: °F	62			**Inspector(s):**	Andres Hurtado|Erin McGuire
Street Name/Structure Location:	FERMANAGH ST				
Previous Precipitation Date/End Time:	2019-06-06 7:15:00		**Amount (inches):**	0.85	
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION						
Location	**CB Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
CB Outlet Pipe	Good	Reinforced Concrete	Circle	18	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION							
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**	
Inlet Pipe No. 1	CB-9389	Reinforced Concrete	10:00	Circle	18	In Water:	Partially
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage	None		
Deposits/Stains	Flow Line		
Pool Quality	None		
Pipe Algae/Growth	None		
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No		
Is Inlet Pipe No.1 Flowing?	No	**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.2 Flowing?		**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA					
ASSET ID:	DMH-544			**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 8:30:00				
Temperature: °F	62			**Inspector(s):**	Carrie Prescott|Brett Baron|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	LEXINGTON AVE				
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85		
Pictures					

SECTION 2: OUTLET PIPE ASSET DESCRIPTION					
Location	**DMH Interior Condition**	**Material**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
DMH Outlet Pipe					In Water:
					With Sediment:

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 1						In Water:
						With Sediment:

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.1 Flowing?			**Estimated GPM:**

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION						
Location	**Upstream Asset ID**	**Material**	**Clock Postion (Outlet Pipe at 6:00)**	**Shape**	**Diameter/Dimension (in.)**	**Submerged**
Inlet Pipe No. 2						In Water:
						With Sediment:

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS			
Indicator	**Indicator Present?**	**Indicator Description**	
Asset Damage			
Deposits/Stains			
Pool Quality			
Pipe Algae/Growth			
***Do physical indicators suggest an illicit discharge is present (Y/N):**			
Is Inlet Pipe No.2 Flowing?			**Estimated GPM:**

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)			
Indicator	**Indicator Present (Yes/No)**	**Description**	**Severity**
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)			
Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	DMH is buried. Could not locate.
Signature of Inspector :	

Haverhill IDDE Inspection Form
Catch Basin

SECTION 1: BACKGROUND DATA

ASSET ID:	CB-2765	**OUTFALL ID:**	BZB0847
Date/Time:	2019-06-10 9:02:00		
Temperature: °F	63	**Inspector(s):**	Carrie Prescott|Andres Hurtado|Erin McGuire
Street Name/Structure Location:	LEXINGTON AVE		
Previous Precipitation Date/End Time:	2019-06-06 7:15:00	**Amount (inches):**	0.85
Pictures			

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	CB Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
CB Outlet Pipe	Good	Reinforced Concrete	Circle	12	In Water:	Partially
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	DMH-543	Reinforced Concrete	12:00	Circle	8	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	Flow Line			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	No		**Estimated GPM:**	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-2766	Reinforced Concrete	3:00	Circle	8	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.2 Flowing?	No		**Estimated GPM:**	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	**Result**	**Typical EPA Benchmarks**	**Equipment**
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.3 Flowing?		Estimated GPM:

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.4 Flowing?		Estimated GPM:

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description
Asset Damage		
Deposits/Stains		
Pool Quality		
Pipe Algae/Growth		
*Do physical indicators suggest an illicit discharge is present (Y/N):		
Is Inlet Pipe No.5 Flowing?		Estimated GPM:

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	EM

Haverhill IDDE Inspection Form
Outfall

SECTION 1: BACKGROUND DATA

ASSET ID:	UNK0661	**OUTFALL ID:**	UNK0661
Date/Time:	2019-05-23 8:49:00		
Temperature: °F	60	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	Cross Country		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTFALL PIPE ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Shape	Diameter/Dimension (in.)	Submerged	
Outfall Pipe	DMH-4891	Reinforced Concrete	Circle	18	In Water:	No
					With Sediment:	No

SECTION 3: OUTFALL PIPE PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
***Do physical indicators suggest an illicit discharge is present (Y/N):**	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	**Estimated GPM:**	1

SECTION 4: OUTFALL PIPE PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 5: OUTFALL PIPE SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time: 2019-05-23 8:50:00

Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	57		EXTECH EC500
pH	7		EXTECH EC500
Specific Conductivity	1151		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :

Signature of Inspector : BB

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-4891	**OUTFALL ID:**	UNK0661
Date/Time:	2019-05-23 9:05:00		
Temperature: °F	62	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	PARKRIDGE RD		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Excellent	Reinforced Concrete	Circle	24	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	CB-2158	Reinforced Concrete	11:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	No		Estimated GPM:	

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	DMH-4892	Reinforced Concrete	12:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-23 9:10:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	62.2		EXTECH EC500
pH	10.1		EXTECH EC500
Specific Conductivity	1272		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3	CB-2157	Reinforced Concrete	1:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	Brown			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.3 Flowing?	No		Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	
Signature of Inspector :	

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-4892	**OUTFALL ID:**	UNK0661
Date/Time:	2019-05-23 9:34:00		
Temperature: °F	64	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	PARKRIDGE RD		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Excellent	Reinforced Concrete	Circle	24	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	DMH-4890	Reinforced Concrete	12:00	Circle	24	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-23 9:25:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	65.4		EXTECH EC500
pH	7.34		EXTECH EC500
Specific Conductivity	1178		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	0.06	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2						In Water:	
						With Sediment:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.2 Flowing?			Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3						In Water:	
						With Sediment:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.3 Flowing?			Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

Comments :	Animal fecal on shelf. Note picture
Signature of Inspector :	

Haverhill IDDE Inspection Form
Drain Manhole

SECTION 1: BACKGROUND DATA

ASSET ID:	DMH-4890	**OUTFALL ID:**	UNK0661
Date/Time:	2019-05-23 9:45:00		
Temperature: °F	64	**Inspector(s):**	Carrie Prescott|Brett Baron|Erin McGuire
Street Name/Structure Location:	PARKRIDGE RD		
Previous Precipitation Date/End Time:	2019-05-20 4:00:00	**Amount (inches):**	0.06

Pictures

SECTION 2: OUTLET PIPE ASSET DESCRIPTION

Location	DMH Interior Condition	Material	Shape	Diameter/Dimension (in.)	Submerged	
DMH Outlet Pipe	Good	Reinforced Concrete	Circle	24	In Water:	No
					With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 1	DMH-9364	Reinforced Concrete	9:00	Circle	18	In Water:	No
						With Sediment:	No

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.1 Flowing?	Yes	Trickle	Estimated GPM:	1

SECTION 3A: INLET PIPE NO. 1 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor	No		
Color	No		
Turbidity	-	-	Clear
Floatables (Does Not Include Trash)	No		-

SECTION 3A: INLET PIPE NO. 1 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:	2019-05-23 9:34:00		
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature	68.9		EXTECH EC500
pH	6.88		EXTECH EC500
Specific Conductivity	812		EXTECH EC500
Chlorine	0	≥ Reporting Limit	Hach Test Strips
Ammonia	0	≥ 0.5 mg/L	Hach Test Strips
Surfactants	<0.05	≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli	<1	> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3B: INLET PIPE NO. 2 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 2	CB-2156	Reinforced Concrete	10:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.2 Flowing?	No		Estimated GPM:	

SECTION 3B: INLET PIPE NO. 2 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3B: INLET PIPE NO. 2 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3C: INLET PIPE NO. 3 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 3	CB-2155	Reinforced Concrete	1:00	Circle	12	In Water:	No
						With Sediment:	No

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage	None			
Deposits/Stains	None			
Pool Quality	None			
Pipe Algae/Growth	None			
*Do physical indicators suggest an illicit discharge is present (Y/N):	No			
Is Inlet Pipe No.3 Flowing?	No		Estimated GPM:	

SECTION 3C: INLET PIPE NO. 3 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3C: INLET PIPE NO. 3 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3D: INLET PIPE NO. 4 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 4						In Water:	
						With Sediment:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.4 Flowing?			Estimated GPM:	

SECTION 3D: INLET PIPE NO. 4 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3D: INLET PIPE NO. 4 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3E: INLET PIPE NO. 5 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 5						In Water:	
						With Sediment:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.5 Flowing?			Estimated GPM:	

SECTION 3E: INLET PIPE NO. 5 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3E: INLET PIPE NO. 5 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

SECTION 3F: INLET PIPE NO. 6 ASSET DESCRIPTION

Location	Upstream Asset ID	Material	Clock Postion (Outlet Pipe at 6:00)	Shape	Diameter/Dimension (in.)	Submerged	
Inlet Pipe No. 6						In Water:	
						With Sediment:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS

Indicator	Indicator Present?	Indicator Description		
Asset Damage				
Deposits/Stains				
Pool Quality				
Pipe Algae/Growth				
*Do physical indicators suggest an illicit discharge is present (Y/N):				
Is Inlet Pipe No.6 Flowing?			Estimated GPM:	

SECTION 3F: INLET PIPE NO. 6 PHYSICAL INDICATORS (ALL FLOWING ASSETS)

Indicator	Indicator Present (Yes/No)	Description	Severity
Odor			
Color			
Turbidity	-	-	
Floatables (Does Not Include Trash)			-

SECTION 3F: INLET PIPE NO. 6 SAMPLING/TESTING RESULTS (ALL FLOWING ASSETS)

Sample Date/Time:			
Parameter	Result	Typical EPA Benchmarks	Equipment
Temperature			EXTECH EC500
pH			EXTECH EC500
Specific Conductivity			EXTECH EC500
Chlorine		≥ Reporting Limit	Hach Test Strips
Ammonia		≥ 0.5 mg/L	Hach Test Strips
Surfactants		≥ 0.25 mg/L	To be sent to Lab or CHEMets Detergents Kit K-9400
E.coli		> 235 cfu/100mL	To be sent to lab
Enterococcus		> 61 cfu/100mL	To be sent to lab
Phosphorus			To be sent to lab

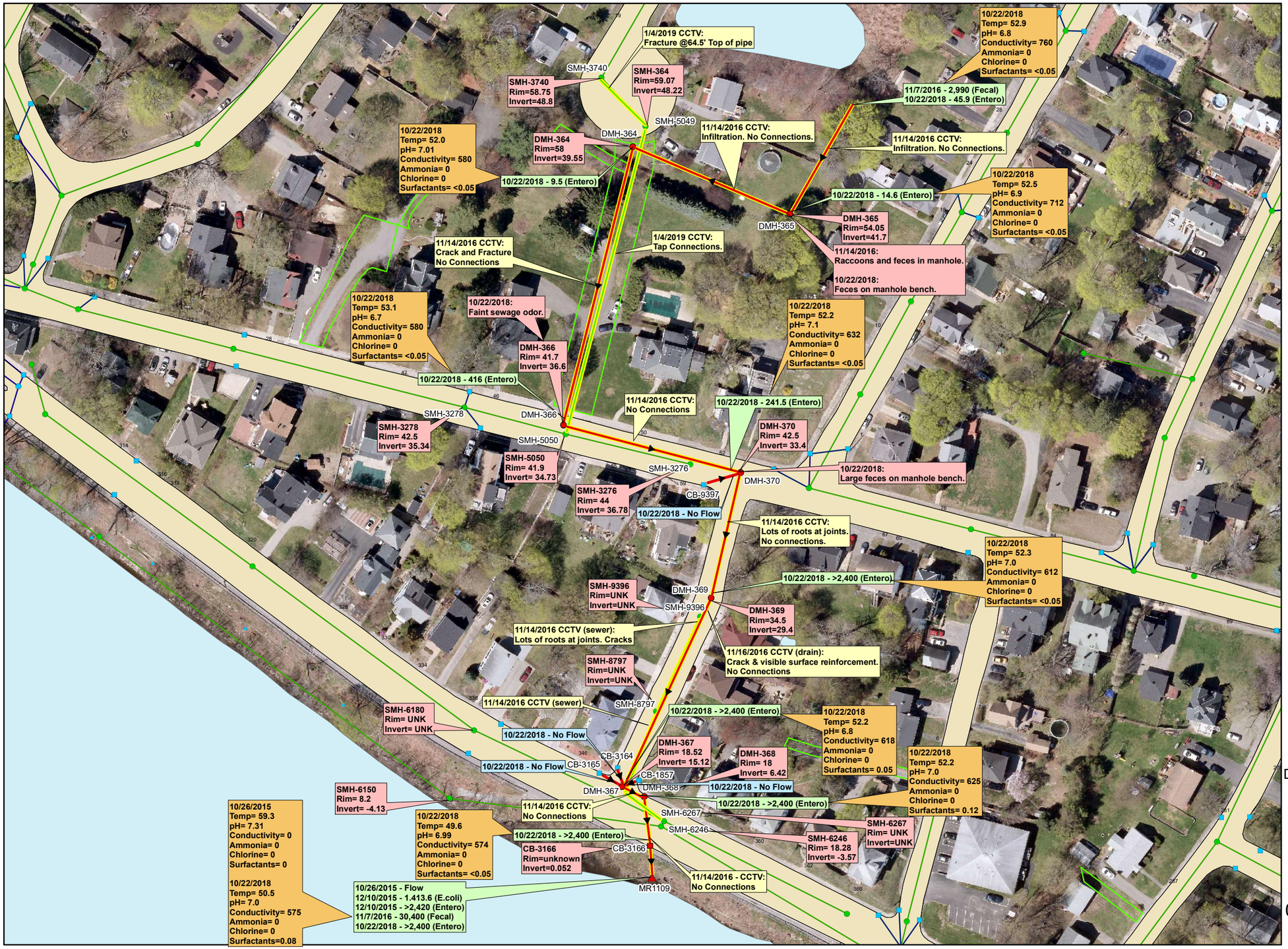
Comments :	Flow from private lot
Signature of Inspector :	BB

APPENDIX C

IDDE PROGRAM SUPPORTING DOCUMENTS

Outfall MR1109

Summary of IDDE Investigations



Assets

- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N

W E

S

0 37.5 75 150 225 300 Feet

June 25, 2019

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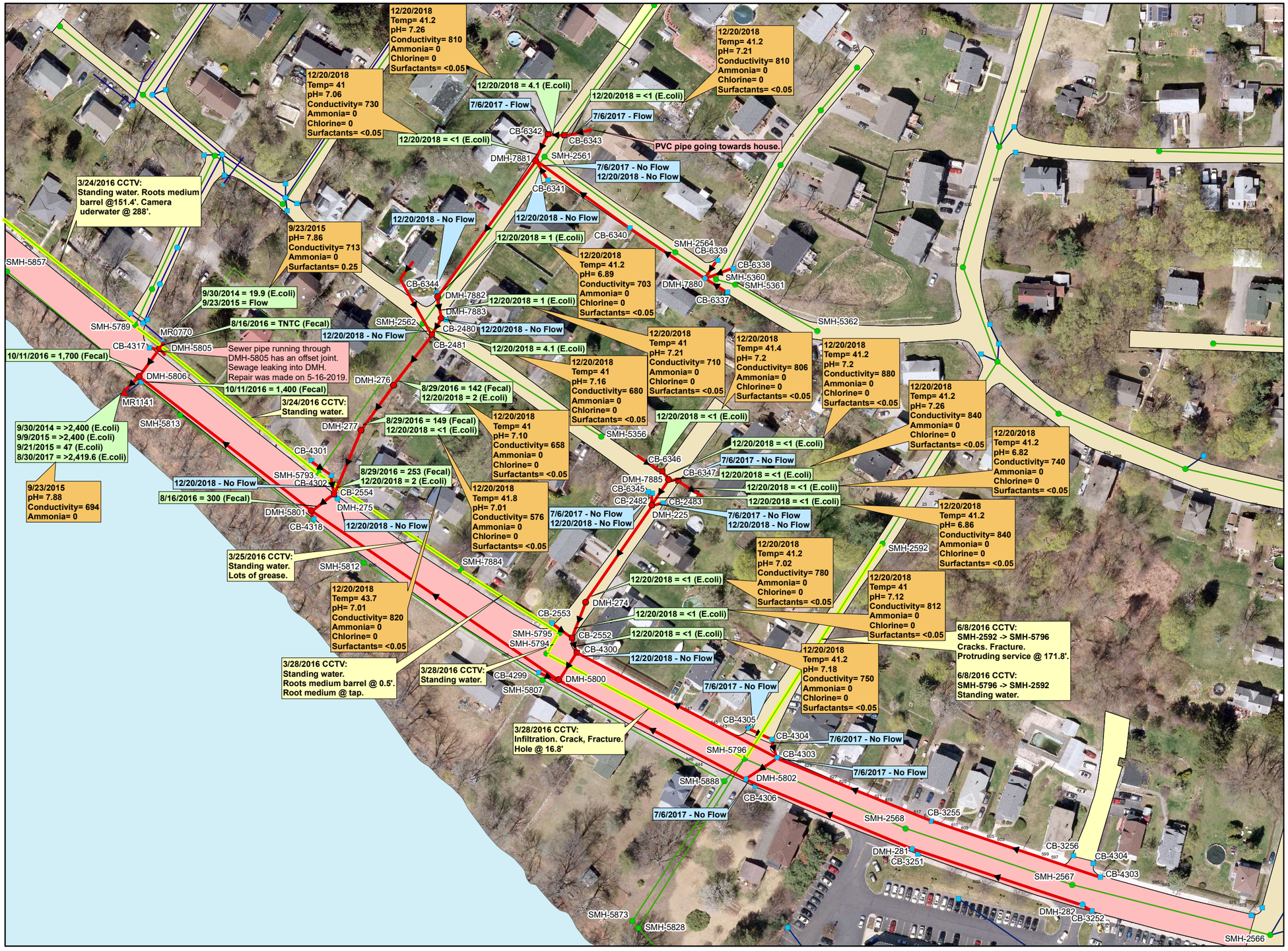
Outfall MR1141

Summary of IDDE Investigations



Assets

- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N W E S

0 30 60 120 180 240 300 Feet

June 25, 2019

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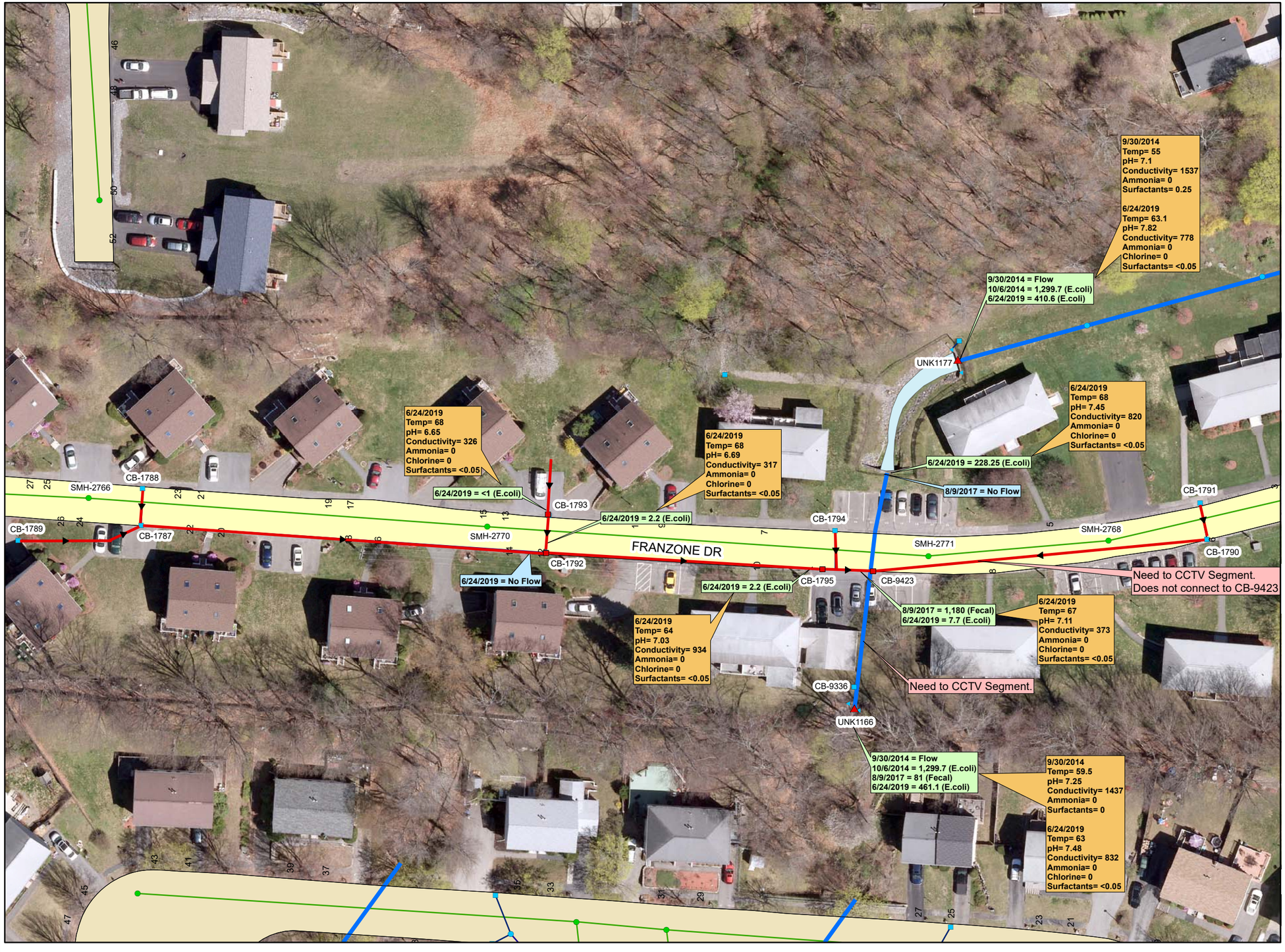
Outfall UNK1166

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N E S W

0 15 30 60 90 120 150 Feet

August 26, 2019

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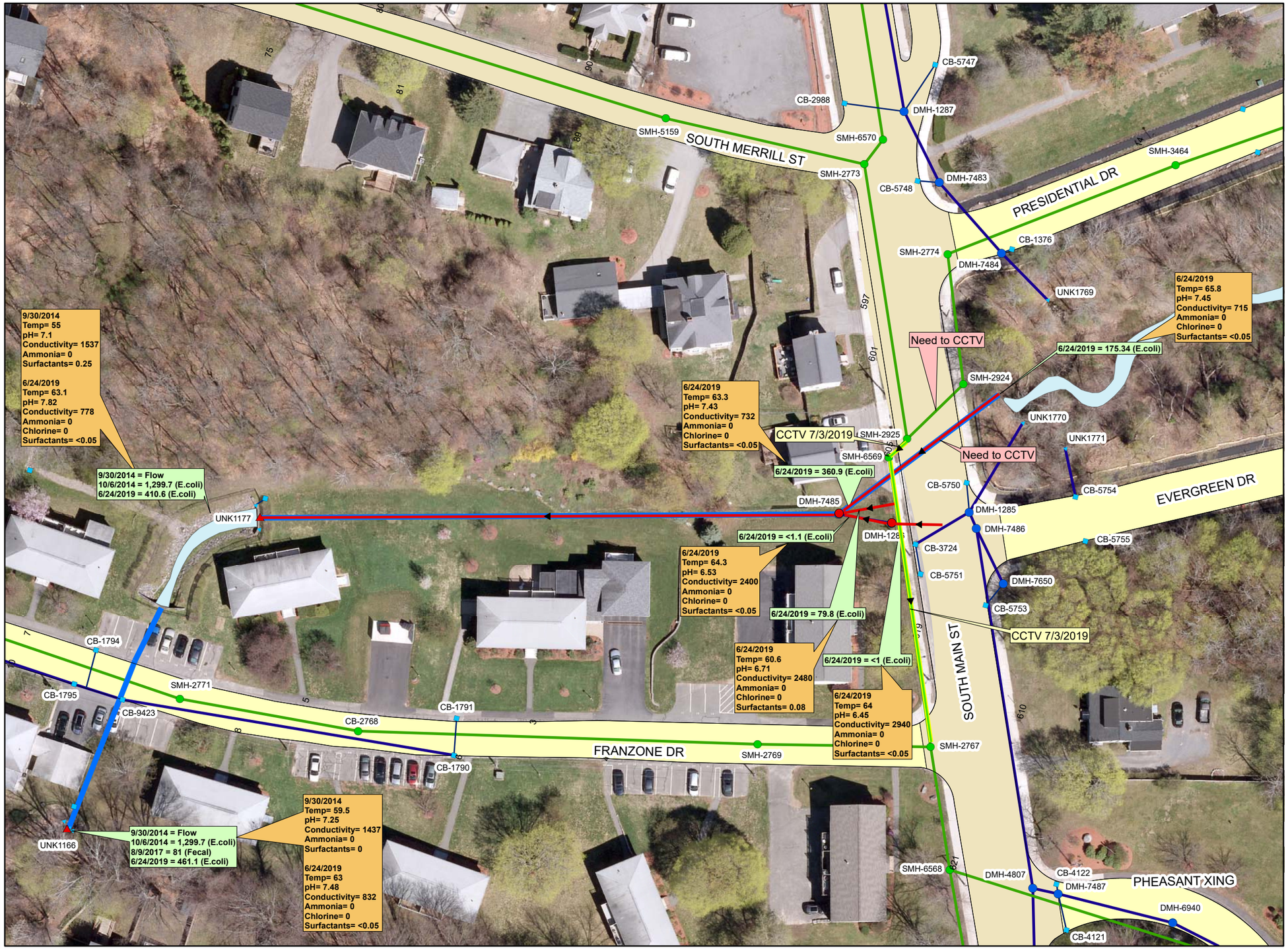
Outfall UNK1177

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N E S W

0 15 30 60 90 120 150 Feet

September 4, 2019

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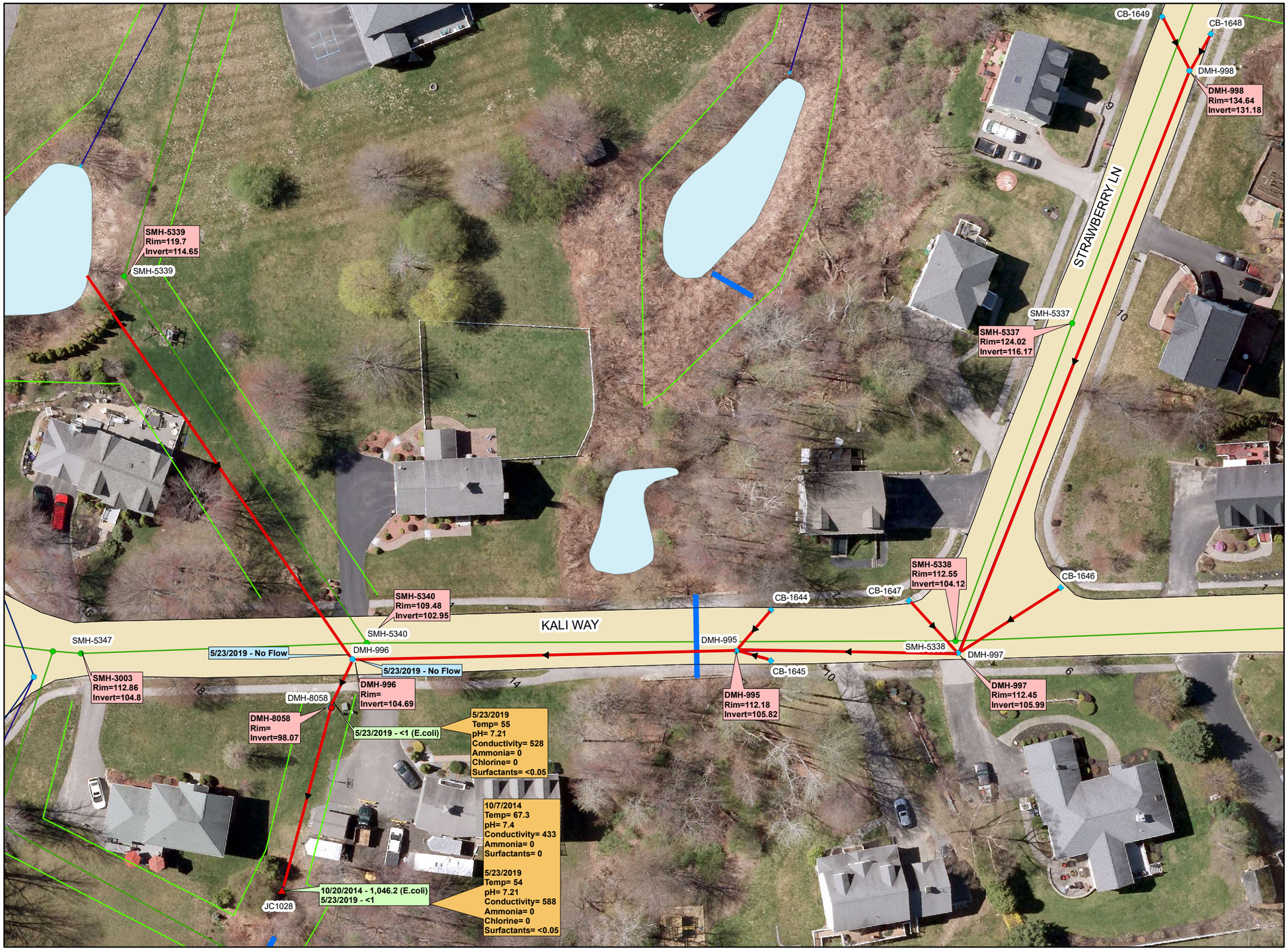
Outfall JC1028

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N W E S

0 12.5 25 50 75 100 125 Feet

June 2019

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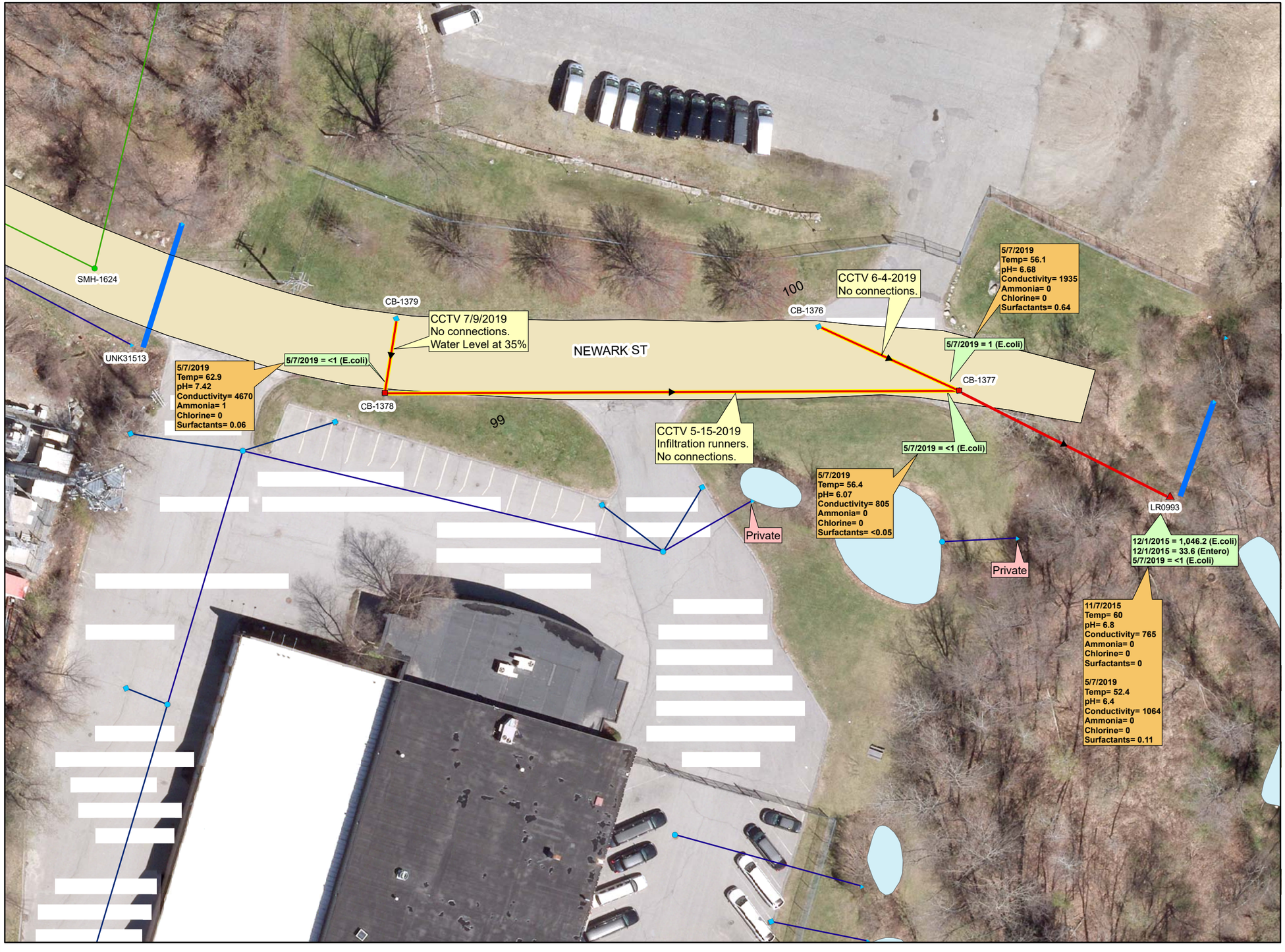
Outfall LR0993

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N E S W

0 10 20 40 60 80 100 Feet

September 4, 2019

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Outfall LR1103

Summary of IDDE Investigations

Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N W E S

0 20 40 80 120 160 200 Feet

June 26, 2019

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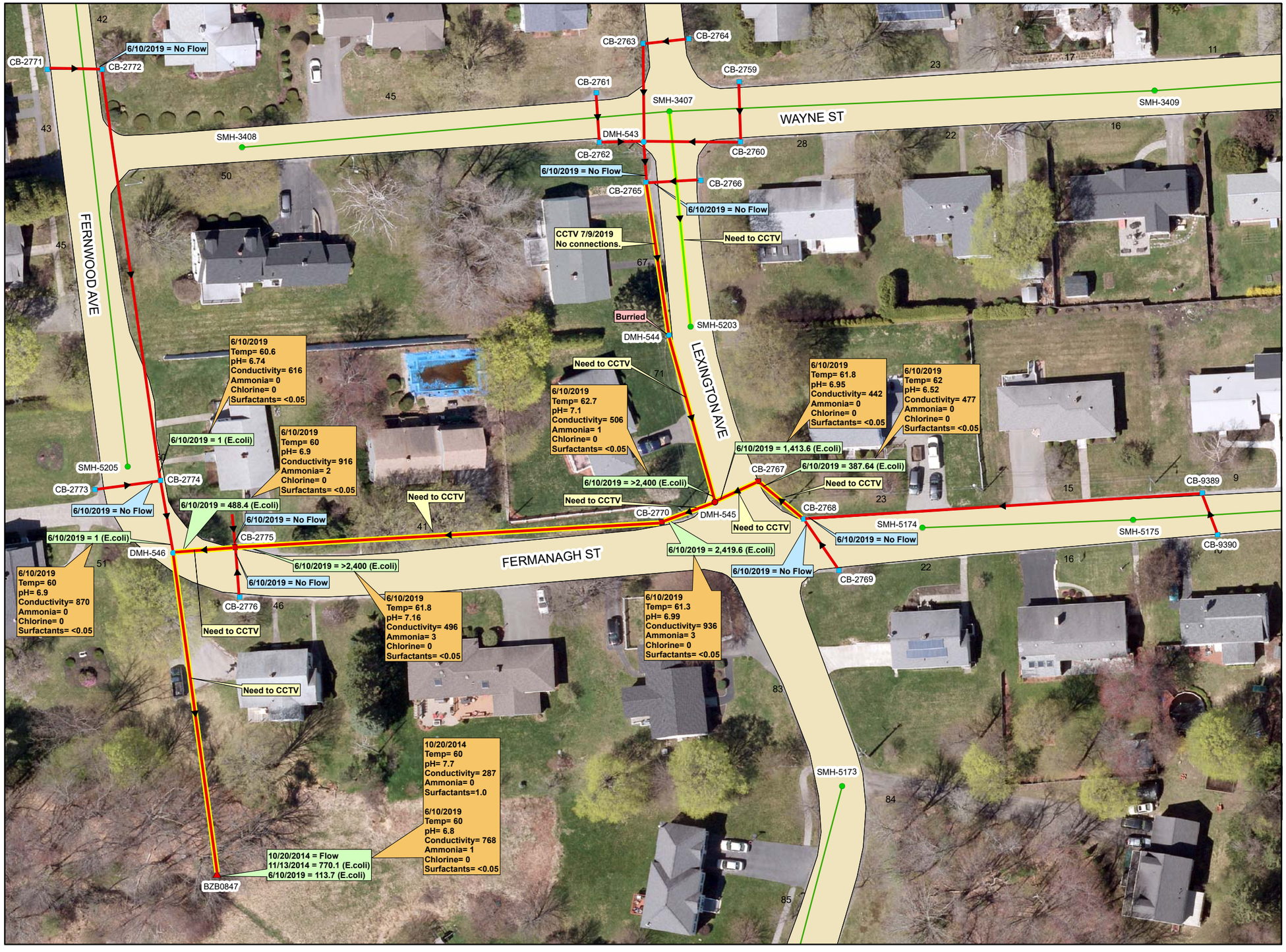
Outfall BZB0847

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N W E S

0 15 30 60 90 120 150 Feet

September 4, 2019

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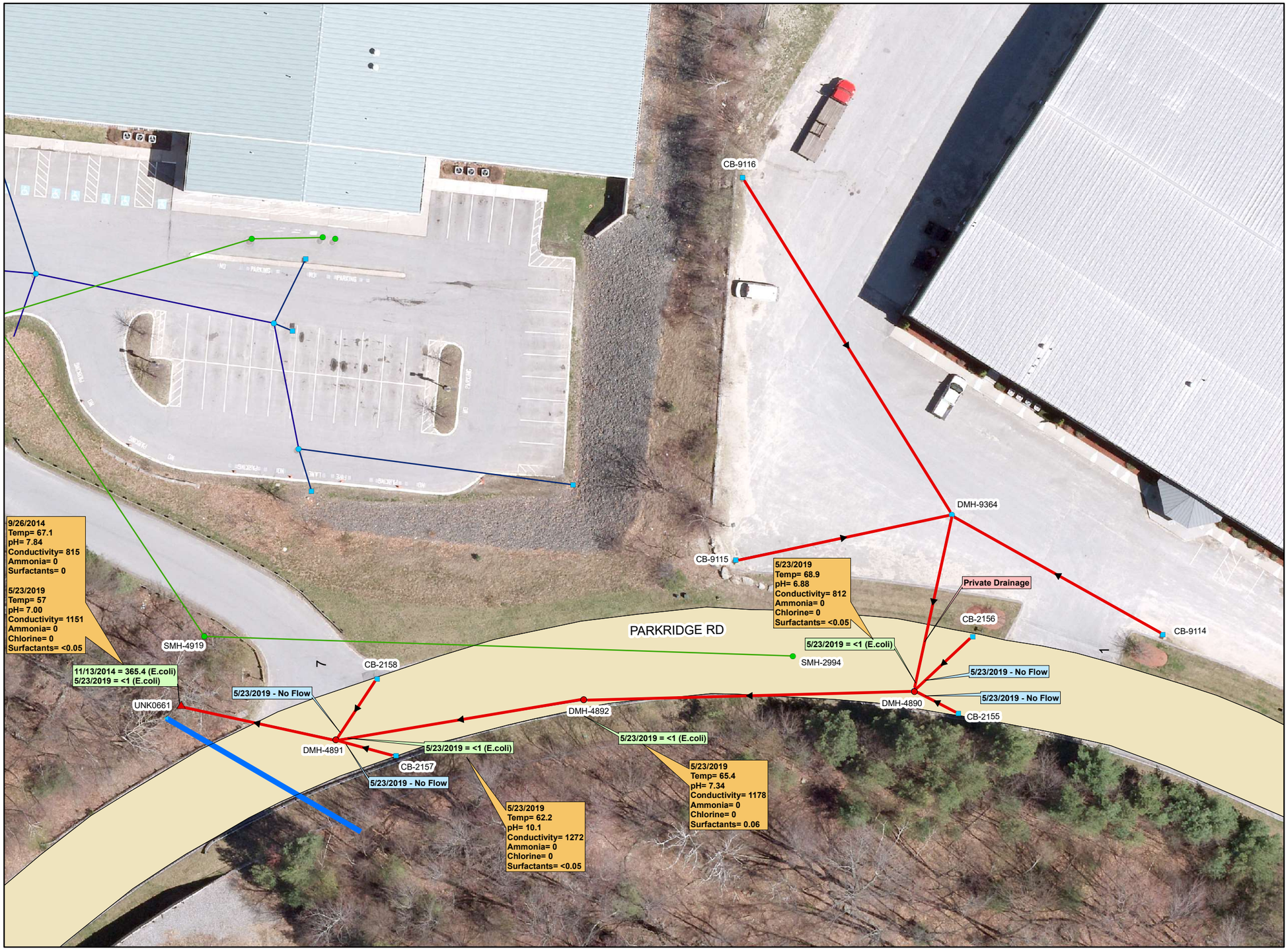
Outfall UNK0661

Summary of IDDE Investigations



Assets

- Culvert
- Sewer
- Stormwater
- Catchment Pipes
- Sewer CCTV
- Catchment CCTV
- Manhole Sampled
- Catch Basin Sampled
- Outfall Sampled

CCTV Comments

Miscellaneous Comments

Inspection Results

Bacteria Results

Other Sampling Parameter Results

- City Owned Road
- Private Owned Road
- State Owned Road

Dry weather flow samples collected in each DMH from the mainline pipe entering the DMH. Branch flow collected as noted on plans.

Each inspection result is noted with a date, flow/no flow (at time of inspection), sample parameter and concentration.

Pipes that are not highlighted in red do NOT connect to this drainage system

DMH and SMH invert elevations in NGVD 1929 Datum

N E S W

0 10 20 40 60 80 100 Feet

June 25, 2019

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HAVERHILL
PENTUCKET
SETTLED 1640. INSTITUTED A CITY. 1870.