

Liberty Utilities (EnergyNorth Natural Gas) Corp.
d/b/a Liberty Utilities

Cast Iron/Bare Steel Replacement Program
Results
Fiscal Year 2018

April 16, 2018

Submitted by:



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INTRODUCTION

Pursuant to the settlement agreement approved by the New Hampshire Public Utilities Commission (the “Commission”) as part of the National Grid/KeySpan merger in Docket No. DG 06-107 and the settlement agreement in Docket No. DG 11-040 (the “Settlement Agreement”) approved by Order No. 25,370, Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities (“Liberty” or the “Company”) submits the results of the Cast Iron Bare Steel (“CIBS”) Replacement Program for fiscal year 2018 (April 1, 2017, to March 31, 2018). As required by the Settlement Agreement, the Company submits the following information in connection with this report, the pre-filed Joint Testimony of Shawn D. Furey and Brian R. Frost, and the Testimony of David Simek and Catherine A. McNamara: (1) A report detailing the actual amount of capital investments made in accordance with implementing the CIBS program during fiscal year 2018 (Attachment SDF/BRF-2 to Joint Furey-Frost Testimony); (2) A calculation of the incremental revenue requirement associated with placing the capital investments into rate base above a base spending level of \$527,275 (Attachment DBS-1 to Simek/McNamara Testimony); (3) A description of variances between actual results and the original plan; and (4) a request for a permanent increase in base distribution delivery rates in the amount of \$777,172 effective for usage on and after July 1, 2018.

SECTION 1: ACTUAL CAPITAL EXPENDITURES

Actual capital expenditures incurred during implementation of the CIBS program for fiscal year 2018 are detailed in Attachment SDF/BRF-2 to the Furey/Frost Testimony. Through a series of technical sessions that began in 2008, the Commission Staff and the Company have agreed that the capital investment amounts to be included for recovery under CIBS may include

all prudently incurred direct and indirect¹ costs associated with: (i) replacement or abandonment² of cast iron and bare steel mains, including replacement of existing pipe with replacement pipe of the same size,³ with recovery for the costs of “upsizing” the pipe allowed only when specifically justified;⁴ (ii) replacement or abandonment of cast iron or bare steel service lines directly connected to bare steel or cast iron main replacement projects; and (iii) tie over of connected service lines not replaced or abandoned as part of a cast iron bare steel main replacement project.

Categories of costs that may not be included for recovery under CIBS include: (i) replacement or abandonment of plastic main; (ii) replacement or abandonment of coated steel main, regardless of vintage, unless approved by the Safety Division of the Commission; (iii) replacement, abandonment, or reconnecting of plastic or coated steel services that were connected to existing cast iron or bare steel main replacement projects; (iv) the differential in cost to replace existing cast iron or bare steel mains with pipe of a diameter that is greater than the existing main and the cost to replace that main with a pipe that is larger than the existing main, unless specifically justified; (v) relocation of customer meters from inside to outside; (vi) random cast iron or bare steel service replacements not connected to a cast iron or bare steel main replacement project; (vii) carryover costs in aggregate exceeding 5% of the approved estimated total expenditures under the CIBS program for the construction year, unless approved

¹ Indirect costs mean overheads such as pension, OPEBs and other fringe benefits, payroll taxes, material handling costs and other general & administrative expenses that are loaded on all labor and material transactions. Categories of costs that may not be included for recovery under the plan include costs related to CIBS planning (other than normal engineering and project planning), reporting and filing.

² For purposes of ii and iii, abandonments such as mains that are not servicing a customer via a service will not be allowed. Other abandonments will be considered by Staff on a case by case basis.

³ 3-inch pipes, which are no longer standard size, will be routinely replaced with 4-inch pipes.

⁴ See Settlement Agreement in DG 11-040, Attachment J, section (20) n.

by the Safety Division; and (viii) replacements made under the Cast Iron Encroachment Policy are not eligible for accelerated rate recovery in the Cast Iron/Bare Steel Program unless a special circumstance is approved by the Safety Division.

On January 13, 2017, the Company made its proposed FY 2018 CIBS program filing with the Commission. On April 18, 2017, the filing was reviewed with Staff for project selection and scope.

The FY 2017 carryover costs that were captured within the FY 2018 program that are recoverable under CIBS rates totaled \$2,718,259. Under the Settlement Agreement in Docket No. DG 11-040, the Company cannot recover through the CIBS program “carryover costs in aggregate exceeding 5% of the approved estimated total expenditures under the CIBS program for the construction year, unless approved by the Safety Division.” The estimated total cost associated with completed FY 2018 projects is \$14,716,035, resulting in a 5% cap of \$735,802 of allowable carryover cost. The Company is seeking the revenue requirement associated with \$1,402,570 of FY 2017 carryover costs above the allowable carryover cost as part of the step increase in Docket No. DG 17-048. Therefore, the Company is only seeking the allowable 5% FY 2017 carryover cap of \$735,802 in this filing. The amount of CIBS FY 2017 carryover costs that are above the 5% cap and above the \$1,402,570 included in Docket No. DG 17-048 of \$579,887 will be recovered during the Company’s next distribution rate case.

Line 86 column BE of Attachment SDF/BRF-2 shows the actual recoverable expenditures of the FY 2018 projects, totaling \$10,247,781 (including carryover costs at the 5% cap). After removing from the actual expenditures the CIBS base amount of \$527,275 in

accordance with the terms of the Settlement Agreement, the total incremental expenditures to be included in rate base is \$9,720,506. Appendix A to this report is the Condition Bare Steel Main Replacement Program – Sample Analysis Report for FY 2018. This report contains photographs and descriptions of various pipe segments removed and catalogued as part of the FY 2018 CIBS program.

SECTION 2: CALCULATIONS OF INCREMENTAL REVENUE REQUIREMENT

In this filing, Liberty is seeking recovery in rates of the incremental revenue requirement associated with an additional \$9,720,506 of CIBS recoverable capital investments. As set forth in Attachment DBS/CAM-1, page 1 to the Simek/McNamara Testimony, the revenue requirement associated with the CIBS cumulative capital expenditures is \$3,535,855 (line 35(j)) with a corresponding revenue deficiency of \$777,172 (line 39 (j)). Consistent with prior delivery rate increases for the CIBS program, the Company proposes to apply the increase pro rata across all customer classes. Attachment DBS/CAM-1, page 4 to the Simek/McNamara Testimony also provides the annual bill impacts for an average residential customer and commercial customers in rate classes G-41, G-42, and G-52. Attachment DBS/CAM-2 is a computation of the cumulative revenue requirement associated with the CIBS program since its inception in FY 2009.

SECTION 3: DIFFERENCES BETWEEN INITIAL ESTIMATED EXPENDITURES AND FISCAL YEAR-END ESTIMATED EXPENDITURES

The Company's FY 2018 CIBS Plan provided for the replacement or abandonment of 13.23 miles of cast iron and bare steel pipe at an estimated cost of \$17,613,444. As shown on Attachment SDF/BRF-2 (line 57 column AJ), the Company eliminated 11.58 miles of cast iron

and bare steel at a cost of \$15,313,206 (line 56, column BL). A reconciliation of the total costs to the total recoverable costs is shown in the table below:

		<u>Attachment SDF/BRF-2</u> <u>Reference</u>
Actual Loaded Costs	\$15,313,206	line 57, column BL
FY 2017 allowable carry-over costs	\$735,802	line 84, column BE
FY 2017 remaining carry-over costs	\$1,982,457	line 85, column BE
Less: Expected FY 2018 carry-over costs	-\$3,698,261	line 56, column BG
Non-recoverable main costs	-\$650,141	line 56, column BA
Non-recoverable service costs	-\$1,452,825	line 56, column BB
Total Recoverable Costs	\$10,247,781	line 86, column BE

Details of the variances between estimated and actual costs by project are shown in Attachment SDF/BRF-2 columns BK through BN.

SECTION 4: STATUS OF THE LITIGATION BETWEEN LIBERTY AND THE CITIES OF CONCORD AND MANCHESTER

In 2010, National Grid filed actions in Hillsborough and Merrimack County Superior Courts against the Cities of Manchester and Concord seeking injunctions against enforcement of regulations concerning street opening permit fees (“degradation fees”), as well as requests for declaratory judgments invalidating such fees. The matters were docketed as No. 216-2010-EQ 001722 in Hillsborough County and No. 217-2010-CV-00402 in Merrimack County. The Company filed motions for summary judgment in both cases in April and May, 2011. The cases were consolidated in Merrimack County Superior Court.

On August 25, 2011, the Merrimack County Superior Court granted summary judgment to National Grid on the basis that the degradation fees at issue were pre-empted by state law. The City of Concord appealed to the New Hampshire Supreme Court, which held that the City

ordinance was not preempted by State law. The Supreme Court also concluded that there was a factual dispute between EnergyNorth and the City regarding whether patching an excavated paved road with new pavement diminishes or restores the road's original life expectancy, and remanded the case to Superior Court for trial, which was completed in May 2015. The trial court issued an order in July 2015 which struck down the penalty provisions in each ordinance for excavating new pavement, but otherwise upheld the ordinances. Both parties appealed. The Supreme Court issued an order on June 16, 2017, that upheld both the ordinances and their penalty provisions, effectively making the Company responsible for all the degradation fees charged over the ensuing years.

For FY 2018, the Company has included degradation fees in its proposed CIBS rates. Accrued Manchester degradation fees from prior year CIBS filings are included in the pending distribution rate case, Docket No. DG 17-048. The Company paid the Concord degradation fees while the case was pending, so no adjustment was necessary.

SECTION 5: TAX DEDUCTION FOR REPAIR EXPENSES

In 2009, the Internal Revenue Service issued guidance, under Internal Revenue Code Section 162, regarding the eligibility of certain repair and maintenance expenses for an immediate deduction for income tax purposes, but capitalized by the Company for book purposes. This tax deduction has the effect of increasing deferred taxes and lowering the revenue requirement that customers will pay under the CIBS program. Repairs resulting in the replacement of less than 20 percent of an original unit of property qualify for a repairs tax deduction. A gas company's gas subsystem is considered a "unit of property" for the purposes of the repairs tax deduction. As explained in the Simek/McNamara Testimony, projects

included in the CIBS program are expected to qualify as repairs; thus, when computing the revenue requirement, the Company reflects a tax deductibility of 100 percent for all CIBS jobs.

SECTION 6: CAST IRON/BARE STEEL REPLACED UNDER MUNICIPAL PROJECTS AND THE CAST IRON ENCROACHMENT POLICY

In FY 2018, the Company replaced approximately 30 feet of cast iron through the Cast Iron Encroachment Policy and approximately 15,570 feet of cast iron and bare steel through municipal projects, totaling to approximately 2.95 miles of replacement. This amounts to a total of approximately 14.53 miles of cast iron and bare steel replacement in FY 2018. A yearly summary of cast iron and bare steel replacement through municipal projects and encroachments can be seen below:

Fiscal Year	Footage of Cast Iron/Bare Steel Replaced	
	Municipal Projects	Encroachments
2008-2009	10,980	171
2009-2010	19,920	28
2010-2011	11,649	62
2011-2012	17,791	40
2012-2013	12,524	53
2013-2014	19,118	55
2014-2015	10,587	169
2015-2016	12,206	248
2016-2017	15,663	30
2017-2018	15,570	30
Total Footage	146,008	886
Total Mileage	27.65	0.17

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**APPENDIX A: FY 2018 CONDITION BARE STEEL MAIN REPLACEMENT PROGRAM –
SAMPLE ANALYSIS**

Over the course of the FY 2018 construction season, bare steel pipe and soil samples were collected from the CIBS main replacement program. Each sample was sand blasted to expose the pipe down to the bare metal and will be provided for visual representation. Soil samples were taken as close to the pipe samples as possible in an effort to retrieve native soil. Chemical testing was conducted to determine the existing pH, chloride, sulfide, and sulfate levels. Microbiological testing for Acid Producing Bacteria (APB) and Sulfate Reducing Bacteria (SRB) were performed as well. Both chemical and microbiological tests were conducted as soon as possible. The table below shows the threshold of bacteria levels based on the results of bacterial colonies per milliliter.

Number of Positive Bottles	Bacteria Colonies/ml	Reporting Value Colonies/ml	Bacteria Level
0	< 1 - 10	< 10	Low
1	10	10	Low
2	10 - 100	100	Medium
3	100 - 1000	1,000	Medium
4	1,000 - 10,000	10,000	High
5	> 10,000 - 100,000	100,000	High

Positive APB and SRB vials with corresponding reporting values.

Details and testing results for the six pipe and soil samples collected are summarized on the following pages:

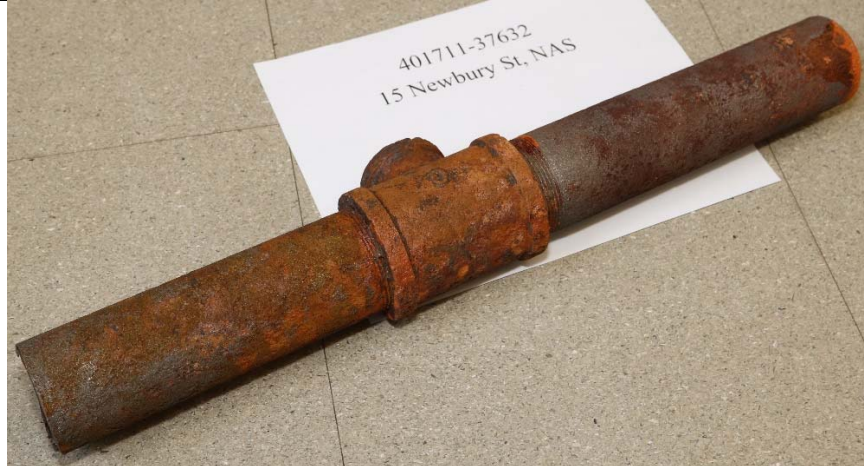
Sample 1

Work Order & Project:	401711-37632 5-67 WILLIAMS ST, NAS, NEWBURY ST
Sample Location:	In Front of 15 Newbury St
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1940
Soil Sample Details:	Dark Brown Sandy Soil
Test Date:	10/13/2017

Soil Testing Results

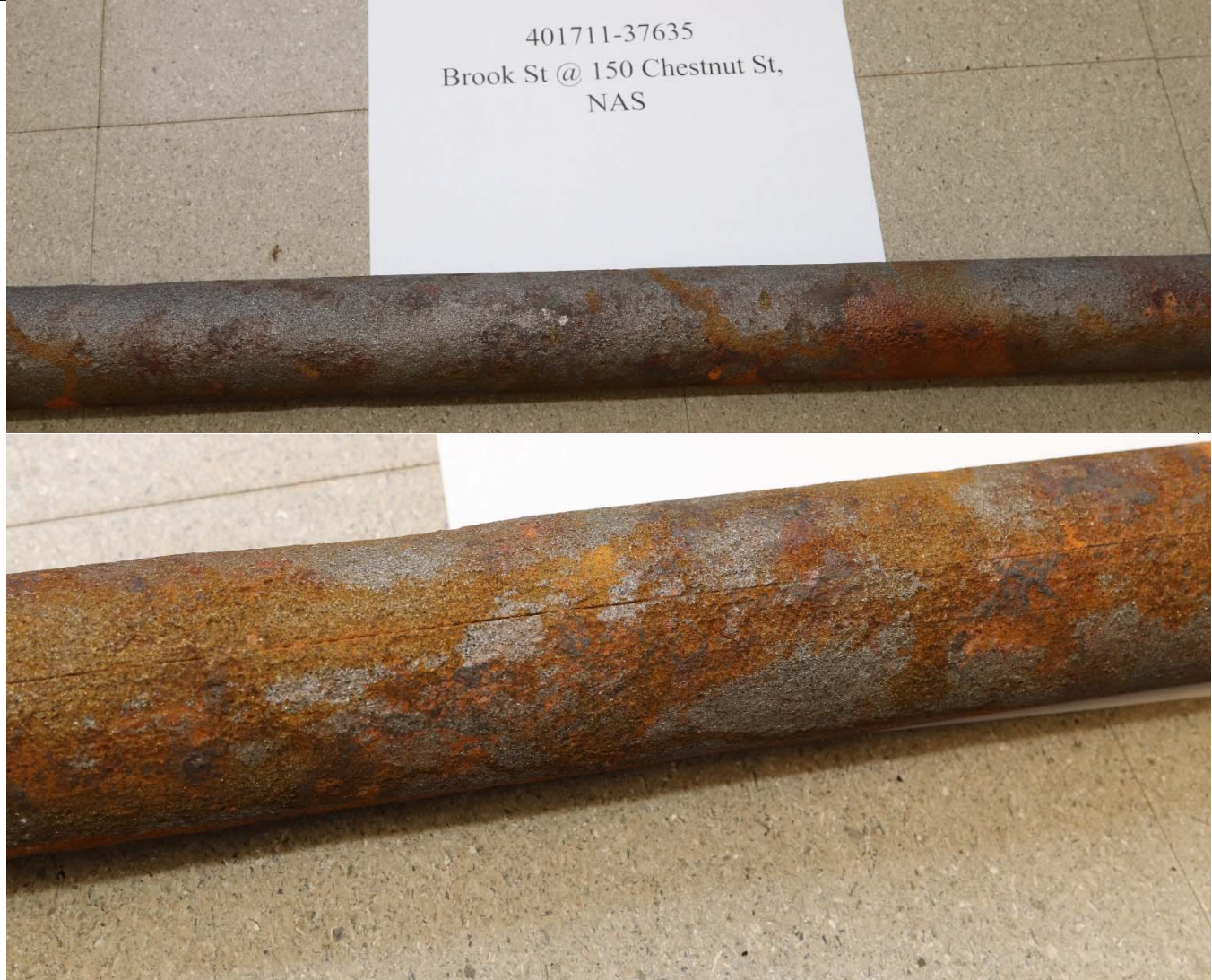
	Quantitative Value	Qualitative Value
pH:	7.5	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	10,000	High
SRB Level (Colonies/ml):	100	Medium

Sample Condition: Generalized corrosion pitting over entire pipe, approximately 30% wall loss in pits.



Sample 2

Work Order & Project:	401711-37635 14-38 BROOK ST, NAS, ASH ST & LOVELL ST	
Sample Location:	In Front of 150 Chestnut St on Brook St	
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1924	
Soil Sample Details:	Medium Brown Sandy Soil	
Test Date:	12/18/2017	
Soil Testing Results		
	Quantitative Value	Qualitative Value
pH:	7	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	10,000	High
SRB Level (Colonies/ml):	100	Medium
Sample Condition: Generalized corrosion pitting over entire pipe, approximately 25-50% wall loss in pits.		



Sample 3

Work Order & Project:	401711-37638 4-26 NUTT ST, NAS, BUCHANAN ST & FAXON ST
Sample Location:	Buchanan St Near Intersection with Main St
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1924
Soil Sample Details:	Dark Reddish Sandy Soil
Test Date:	3/2/2018

Soil Testing Results

	Quantitative Value	Qualitative Value
pH:	6	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	100	Medium
SRB Level (Colonies/ml):	<10	Low

Sample Condition: Heavy corrosion pitting over entire pipe, 100% wall loss in pits.



Sample 4

Work Order & Project:	401711-37641 3-75 BLOSSOM ST, NAS, HANOVER & WILDER
Sample Location:	In Front of 36 Blossom St
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1915
Soil Sample Details:	Light Brown Sandy Soil
Test Date:	3/2/2018

Soil Testing Results

	Quantitative Value	Qualitative Value
pH:	7	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	400	Low
APB Level (Colonies/ml):	<10	Low
SRB Level (Colonies/ml):	1,000	Medium

Sample Condition: Moderate corrosion pitting over entire pipe, 100% wall loss in service connection.



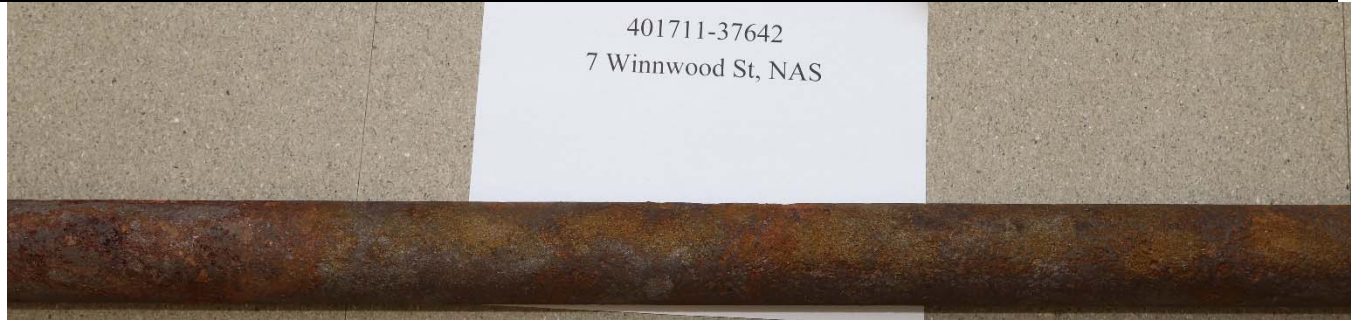
Sample 5

Work Order & Project:	401711-37642 28-36 FIFIELD ST, NAS & WINNWOOD ST
Sample Location:	In Front of 7 Winnwood St
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1959
Soil Sample Details:	Medium Brown Sandy Soil
Test Date:	9/8/2017

Soil Testing Results

	Quantitative Value	Qualitative Value
pH:	7	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	100,000	High
SRB Level (Colonies/ml):	1,000	Medium

Sample Condition: Generalized corrosion pitting over entire pipe, approximately 30% wall loss in pits.



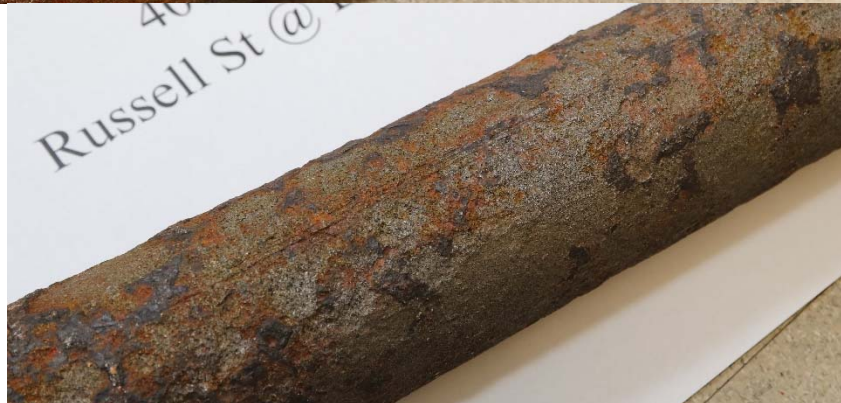
Sample 6

Work Order & Project:	401711-37639 75-235 LAKE ST, NAS
Sample Location:	Russell St at Intersection With Lake St
Pipe Sample Details:	2" Bare Steel, Standard Wall (0.154"), Low Pressure, Installed in 1900
Soil Sample Details:	Light Brown Sandy Soil
Test Date:	3/2/2017

Soil Testing Results

	Quantitative Value	Qualitative Value
pH:	7	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	1,000	Medium
SRB Level (Colonies/ml):	100	Medium

Sample Condition: Generalized pitting and scaling over entire pipe, approximately 30% wall loss in pits.



Sample 7

Work Order & Project:	401711-37614 4-22 PEABODY ST, TIL, CEDAR ST & HIGH ST
Sample Location:	Peabody St at Intersection With Winter St
Pipe Sample Details:	4" Bare Steel, Standard Wall (0.237"), Low Pressure, Installed in 1931
Soil Sample Details:	Dark Brown Sandy Soil
Test Date:	10/16/2017

Soil Testing Results

	Quantitative Value	Qualitative Value
pH:	7	-
Chloride (mg/l):	0	None
Sulfide (mg/l):	< 5	Not Appreciably Present
Sulfate (mg/l):	<200	Low
APB Level (Colonies/ml):	10,000	High
SRB Level (Colonies/ml):	10,000	High

Sample Condition: Light corrosion pitting over entire pipe, approximately 20% wall loss in pits.



Conclusions/Recommendations:

- (1) Bare steel cutouts locations should continue to be identified on designs and reference dimensions to leak repair locations. This is to ensure a piece of poor condition bare steel pipe is collected.
- (2) A representative should be on site to verify that the pipe sample is acceptable and that the soil taken is valid for analysis. The soil sample should be tested as soon as possible. Testing the soil when it is “fresh” will provide more accurate results as it relates to the existing chemical and microbiological conditions at each location.
- (3) The criteria used for the segment selection process should continue to include references to deep pitting and/or poor condition. This data has proven to be useful and indicative of pipe that is in need of replacement.
- (4) Special attention should be paid to locations where bare steel segments are to remain in service and the pH is highly acidic or highly alkaline.
- (5) Special attention should be paid to locations where bare steel segments are to remain in service and high levels of bacteria are recorded.
- (6) MSES Consultants, Inc. – Corrosion Products Division recommended incorporating results from sulfide and sulfate levels as it relates to the aggressiveness of potential corrosion. Special attention should be paid to locations where bare steel segments are to remain in service and high levels sulfide and/or sulfate are recorded.

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC					
1	Priority	Work Order #	Town Code	Street	From	To	Material	System Pressure (PSIG)	Ext Diameter (Inches)	YOI	Relay Diameter	Bare Steel Services	Coated Steel Services	Plastic Services	Total Services	Relay Footage (Inc. PL & CS)	New Main Footage	Abandon Only Leak Prone Footage	Excluded PL & CS Relay Footage	Total Footage	Cost Estimate (Direct)	Cost Estimate (Loaded)	Estimated Degradation Fee	Total Cost Estimate (Direct)	Total Cost Estimate (Loaded)	Loading %	Cost/Ft (Loaded)	Estimated Recoverable Cost (Loaded)	Comments					
NORTHERN DIVISION																																		
3	1	401711-37601	CCD	66-89 STATE ST, CCD	LAUREL ST	DOWNING ST	CI	LP	10"	1892	8" PL LP for entire scope.				15	15	545			545	\$133,158	\$172,514	\$6,840	\$139,998	\$179,354	28%	\$329.09	\$134,515	10 joint leaks. Active grade 3 leak.					
4	2	401711-37602	CCD	25-50 RIDGE RD, CCD & FRANKLIN ST	AUBURN ST	EOM	CI	LP	4"	1928/1939	6" PL LP for entire scope.	12		10	22	1,400				1,400	\$220,201	\$288,003	\$16,080	\$236,281	\$304,083	29%	\$217.20	\$255,528	Prior main break.					
5	3	401711-37603	CCD	1-10 LANGDON AV, CCD, S MAIN ST	S MAIN ST	EOM	CI	LP	4" & 6"	1954	6" PL LP on S Main St. 4" PL LP on Langdon Ave.	2		1	3	695			74	695	\$95,252	\$124,729	\$1,335	\$96,587	\$126,064	31%	\$181.39	\$105,491	History of numerous joint leaks in project area.					
6	4	401711-37604	CCD	53-79 DOWNING ST, CCD, WHEATON AV	SOUTH ST	REDWOOD AV	CI/BS	LP / LP to 60	1.25" & 4"	1923	4" PL LP on Downing St. 2" PL LP on Wheaton Ave.	5		3	8	400				400	\$94,503	\$124,198	\$6,000	\$100,503	\$130,198	30%	\$325.49	\$117,992	Tap for Wheaton Ave previously broke off.					
7	5	401711-37605	CCD	8-42 CENTRE ST, CCD, N STATE ST & PARK ST	N MAIN ST	PLEASANT ST	CI	LP / LP to 60	4", 6", 8" & 10"	1892/1893/1894/1938	4" PL LP on N State St. 8" PL LP on Pleasant St and S State St. Abandon Centre St.	8	9	7	24	2,460		570	15	3,045	\$377,789	\$495,200	\$31,950	\$409,739	\$527,150	29%	\$214.29	\$436,881	Supports Concord Steam conversion. Active grade 3 leak.					
8	6	401711-37606	CCD	76-113 SCHOOL ST, CCD, CENTRE ST, LIBERTY ST & MERRIMACK ST	LIBERTY ST	MERRIMACK ST	CI	LP	4", 6" & 8"	1892/1894/1933/1937/1968	8" PL LP on Centre St from Liberty St to Tahanto St. 8" PL LP on Liberty St and School St (entire length). 4" PL LP on Merrimack St.	22	1	11	34	2,780		905	85	3,685	\$520,307	\$680,512	\$40,850	\$561,157	\$721,362	29%	\$259.48	\$626,970	History of numerous joint leaks in project area.					
9	7	401711-37607	CCD	59-105 PLEASANT ST, CCD & PINE ST	LIBERTY ST	SPRING ST	CI	LP to 60	3", 4", 6", 8"	1892/1893/1934	4" PL LP on Pleasant St. 2" PL LP on Spring St.	24	3	23	50	3,625		60	10	3,695	\$509,761	\$675,625	\$49,530	\$559,291	\$725,155	30%	\$196.79	\$620,382	Supports Concord Steam conversion. Active grade 3 leak. History of numerous joint leaks in project area.					
10	8	401711-37608	CCD	7-70 RECTORY RD, CCD, ARMOUR PL & LIBRARY RD	HOPKINTON RD	HOCKEY LN	CI	LP to 60	4" & 8"	1900	4" PL LP on Rectory Rd. 2" PL LP on all other laterals. Abandon 60" to LP regulator station.	5	1	9	15	2,930		25	2,930	\$304,651	\$407,001	\$0	\$304,651	\$407,001	34%	\$138.91	\$336,563	Broken main. Allows retirement of low pressure regulator station.						
11	9	401711-37609	CCD	5-22 CHAPEL ST, CCD	ROLLINS ST	N STATE ST	CI/BS	LP to 60	1.25" & 4"	1907/1930	Run 2" PL LP for entire scope.	6	1	7	14	495		30	495	\$109,367	\$145,348	\$6,500	\$115,867	\$151,848	31%	\$306.76	\$123,254	City paving Chapel St in project area.						
12	10	401711-37610	CCD	GLADSTONE ST, CCD	FRANKLIN	EOM	CI	LP	4"	1927	4" PL LP for entire scope.	9		3	12	765				765	\$101,282	\$132,449	\$9,110	\$110,392	\$141,559	28%	\$185.04	\$132,712						
13	11	401711-37611	CCD	65-112 WARREN ST, CCD	PINE ST	RUMFORD ST	CI	LP	4", 6" & 8"	1892/1904	6" PL LP on Warren St.	10		2	12	1,045			70	1,045	\$181,280	\$227,036	\$12,950	\$194,230	\$239,986	24%	\$229.65	\$208,180	Active grade 3 leak.					
14	13	401711-37613	CCD	13-42 ROCKINGHAM ST, CCD, DONOVAN ST & WIGGIN ST	BROADWAY	FELLOWS ST	CI	LP	4" & 6"	1931/1956	6" PL LP for entire scope.	17		7	25	1,960		225	215	2,185	\$310,816	\$406,624	\$23,500	\$334,316	\$430,124	33%	\$219.45	\$351,128	2 broken main leaks. Active grade 3 leak.					
15	14	401711-37614	TIL	4-22 PEABODY ST, TIL, CEDAR ST & HIGH ST	W MAIN ST	WINTER ST	BS	60	4"	1931	4" PL LP on Peabody St. 2" PL LP on Cedar and High Sts.			3	6	9	1,185			1,185	\$137,465	\$183,490	\$0	\$137,465	\$183,490	33%	\$154.84	\$137,618	High pressure bare steel main.					
Northern Division Totals												120	19	104	243	20,285	60	1,700	524	22,070	\$3,095,831	\$4,062,729	\$204,645	\$3,300,476	\$4,267,374	29%	\$209.75	\$3,587,214						
												Mileage		3.84	0.01	0.32	0.10	4.18																
CENTRAL DIVISION																																		
19	1	401711-37615	MNC	1750-1883 ELM ST, MNC & SALMON ST	SALMON ST	WEBSTER ST	CI	LP to 60	6"	1901/1926	2" PL LP from Webster St to North St. Abandon North St to Salmon St. Reinforce with 6" PL LP on Salmon St to connect LP system.	2		2	4	460		440	825	1,725	\$152,002	\$204,148	\$29,000	\$181,002	\$233,148	29%	\$259.05	\$32,175	2 prior main breaks.					
20	2	401711-37616	MNC	167-323 HANOVER ST, MNC & BEECH ST	PINE ST	MAPLE ST	CI	LP	3", 4" & 6"	1921/1922/1927/1934	4" PL LP for entire scope.	16	1	6	23	1,910		60	80	1,970	\$303,467	\$405,600	\$59,700	\$363,167	\$465,300	28%	\$243.61	\$361,997	4 prior broken mains and joint leaks in project area.					
21	3	401711-37617	MNC	69-152 HARRISON ST, MNC, BEECH ST & HAZEL ST	PINE ST	ASH ST	CI	LP	4" & 8"	1906/1921/1922/1924	8" PL LP on Harrison St. 4" PL LP on Beech St and Hazel St.	10	3	10	23	1,540				1,540	\$256,766	\$341,576	\$60,480	\$317,246	\$402,056	27%	\$261.08	\$293,310	City paving section of Harrison St in 2018. Joint leaks and broken main.					
22	4	401711-37618	MNC	436-514 RIMMON ST, MNC	KELLEY ST	AMORY ST	CI	LP	4"	1902	6" PL LP for entire scope.	11	1	6	18	580				580	\$125,943	\$167,442	\$25,830	\$151,773	\$193,272	27%	\$333.23	\$145,363	City paving Rimmon St in 2018. Prior broken main and 2 joint leaks.					
23	5	401711-37619	MNC	111-59 PLUMMER ST, MNC, UNION ST & PINE ST	SILVER ST	SOMERVILLE ST	CI	LP	4" & 8"	1915/1916/1949	4" PL LP for entire scope.	9		17	26	1,305				1,305	\$217,484	\$290,726	\$53,100	\$270,584	\$343,826	27%	\$263.47	\$243,204	2 broken main leaks.					
24	6	401711-37620	MNC	7-89 DIONNE DR, MNC	MCGREGOR ST	MONTCALM ST	CI	LP to 60	6"	1926	2" PL LP for entire scope.			5	4	9	570		50	620	\$84,001	\$112,776	\$24,870	\$108,871	\$137,846	27%	\$222.33	\$77,300	6 joint leaks on small length of pipe.					
25	7	401711-37621	MNC	160-411 CALEF RD, MNC	QUEEN CITY AV	MITCHELL ST	CI	LP	4" & 6"	1904/1924/1927/1931	6" PL LP from Melrose St to Baker St. 8" PL LP from Baker St to Rosedale Ave. 6" PL LP from Rosedale Ave to Mitchell St.	19	2	18	39	3,195		205	3,195	\$537,259	\$710,905	\$116,990	\$654,249	\$827,895	27%	\$259.12	\$573,403	City paving Calef Rd in late 2017 or early 2018. 2 active grade 3 leaks. History of joint leaks.						
26	8	401711-37622	MNC	135-189 WILSON ST, MNC, SILVER ST & HARVARD ST	SOMMerville ST	HARVARD ST	CI	LP / LP to 60	4" & 6"	1902/1912/1913/1956	2" PL LP on Silver St. 6" PL LP on Wilson St. 4" PL LP on Harvard St.	19	6	24	49	1,945		235	2,180	\$367,807	\$492,180	\$83,070	\$450,877	\$575,250	28%	\$295.76	\$416,846	Active grade 3 leak. 2 broken mains. 7 joint leaks.						
27	9	401711-37623	MNC	1-146 ORANGE ST, MNC & UNION ST	ELM ST	UNION ST	CI	LP / LP to 60	3" & 6"	1894	4" PL LP on Orange St. 6" PL LP on Union St.	16	6	3	25	2,285				2,285	\$328,371	\$437,803	\$87,870	\$416,241	\$525,673	26%	\$230.05	\$390,851	City paving Union St in 2018. Prior broken main and joint leak.					
28	10	401711-37624	MNC	750-855 MAPLE ST, MNC, NORTH ST & OAK ST	SAGAMORE ST	WEBSTER ST	CI	LP to 60	4" & 6"	1926/1929/1940/1944/1947	4" PL LP on Maple St from North St to Sagamore St. 2" PL LP for rest of scope.	16	5	20	41	2,970				2,970	\$392,692	\$526,369	\$102,720	\$495,412	\$629,089	27%	\$211.81	\$446,130	City paving Maple St over entire project area. History of prior joint leaks.					
29	11	401711-37625	MNC	607-655 CHESTNUT ST, MNC & BLODGETT ST	BROOK ST	PENACOOK ST	CI	LP	3" & 4"	1894/1922/1927	4" PL LP for entire scope.	7		7	14	1,190				1,190	\$193,957	\$259,099	\$46,830	\$240,787	\$305,929	27%	\$257.08	\$226,712	City paving Chestnut St in 2019. Prior service leaks with remaining bare steel services in project area.					
30	12	401711-37626	MNC	8-74 CARPENTER ST, MNC, CHESTNUT ST & RAY ST	ELM ST	UNION ST	CI	LP / LP to 60	4" & 8"	1895/1911/1914/1925/1927	2" PL LP on Chestnut St & N Bay St extending along Carpenter to Elm St. 8" PL LP on N Adams St. 6" PL LP on Carpenter St from Chestnut St to Union St.	32	5	33	70	4,365		85	250	10	4,710	\$728,456	\$972,417	\$168,150	\$896,606	\$1,140,567	27%	\$256.31	\$816,573	2 broken mains and 13 joint leaks.				
31	13	401711-37627	MNC	401-500 LAUREL ST, MNC	BEACON ST	CASS ST	CI	LP to 60	4"	1898/1913/1920	2" PL LP for entire scope.	12	3	14	29	1,300				1,300	\$207,772	\$278,625	\$52,110	\$259,882	\$330,735	27%	\$254.41	\$237,792	City paving Laurel St in 2018.					
32	14	401711-37628	MNC	20-154 S MAPLE ST, MNC & OAKDALE AVE	S WILLOW ST	CILEY RD	CI	LP	4" & 6"	1925/1926	6" PL LP on S Maple St. 4" PL LP on Oakdale Ave.	3	3	4	10	1,210				1,210	\$219,169	\$291,675	\$45,100	\$264,269	\$336,775	27%	\$278.33	\$240,632	City paving S Maple St in 2019. Leak developed in September 2016 @ Brunelle Ave (broken main). Liberty crew had difficulty tying into 6" CI as it was completely graphitized.					
33	1A	401711-37646	MNC	560-604 BEECH ST, MNC	BRIDGE ST	LOWELL ST	CI	LP to 60	3" & 4"	1915	2" PL LP on Beech St.	4	5	6	15	600		85	685	\$105,481	\$141,373	\$21,250	\$126,731	\$162,623	28%	\$237.41	\$100,434	2 broken mains on short segment.						
34	3A	401711-37647	MNC	400-429 WILSON ST, MNC, & CEDAR ST	SPRUCE ST	AUBURN ST	CI	LP	4" & 6"	1898	6" PL LP on Wilson St. 4" PL LP on Cedar St	11	1	6	18	1,030				1,030	\$181,563	\$241,656	\$40,650	\$222,213	\$282,306	27%	\$274.08	\$218,162	Project not completed in calendar year 2016. City paving early 2017, could see reduction in final restoration cost. 1 Broken Main and 6 joint leaks within relay footage. Chapel nearby.					
Central Division Totals												187	46	180	413	26,455	660	1,370	295	28,495	\$4,115,145	\$5,874,571	\$1,017,720	\$5,419,908	\$6,892,291	27%	\$254.19	\$4,820,884						
												Mileage		5.01	0.13	0.26	0.06	5.40																
SOUTHERN DIVISION																																		
37	1	401711-37629	NAS	2-30 AUBURN ST, NAS, LOCUST ST & HIGHLAND ST	ADHERST ST	CHARLES ST	BS/CI	LP	2" & 4"	1924/1925/1926/1927	6" PL LP for every street except Highland Pl. 4" PL LP on Highland Pl.	14	2	10	26	2,540		150	2,540	\$651,167	\$870,688	\$0	\$651,167	\$870,688	34%	\$342.79	\$708,010	Cluster of broken main leaks.						
38	2	401711-37630	NAS	21-28 BEVERLE DR, NAS, HILLS FERRY RD & BIRCHWOOD DR	W ADLELADE AV	SMITHFIELD TER	BS/CI	LP	2", 4" & 6"	1955/1957	6" PL LP on Hills Ferry Rd. 4" PL LP for rest of scope.	4		1	5	990				990	\$185,689	\$245,990	\$0	\$185,689	\$245,990	32%	\$248.48	\$233,691	Corrosion and joint leaks.					
39	3	401711-37631	NAS	69-85 LOCK ST, NAS, LUCIER ST, LESSARD ST & AETNA CT	TOLLES ST	CHANDLER ST	BS/CI	LP	2", 4" & 6"	1911/1915/1919/1925	8" PL LP on Lock St. 4" PL LP on Lessard St and Lucier St.	14	4	7	25	1,430			50	1,430	\$316,083	\$424,874												

A	B	C	D	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN		
Priority	Work Order #	Item Code	Street	Actual Start Date	Actual Completion Date	Status	Actual Footage Installed	CS & PE Relay & New Main Footage	Upstream Footage	Total CIBS Eliminated (AG-HH)	Actual Service Relays BS	Actual Service Relays CS	Actual Service Relays PE	Actual Service Relays PE & CS	Actual Service Relays PE & CS & PE	Actual Service Relays PE & CS & PE & CS	Actual Service Relays PE & CS & PE & CS & PE	Actual Service Relays PE & CS & PE & CS & PE & CS	Degradation Fees	Actual Main Cost - Direct (REGADATION INCL)	Actual Service Cost - Direct	Actual Total Cost - Direct	(AT) Actual Main Cost - Loaded (REGADATION INCL)	Actual Service Cost - Loaded	Actual Total Cost - Loaded (AW + AX)	Loading %	Main Costs to be Removed (Non-removable)	Service Costs to be Removed (Non-removable)	Removable Main Cost (AW - BA)	Removable Service Cost (AX - BB)	Total Removable Cost (BE - BF)	Estimated Carriover Costs	Estimated Carriover Costs Loaded	Estimated Direct Cost	Actual Cost Direct (INC. CARRYOVER)	Direct Variance %	Estimated Loaded Cost	Actual Loaded Cost (INC. CARRYOVER)	Loaded Cost Variance %	Variance Comments		
NORTHERN DIVISION																																										
1	40171-37601	CCD	16-89 S ST, CCD	11/7/2017	12/27/2017	CASBUILT	1,487	0	1,400	1,487	11	0	1	0	8	0	0	20	\$15,220	\$18,693	\$49,993	\$208,686	\$170,464	\$54,575	\$225,038	8%	\$15,400	\$17,244	\$155,064	\$37,331	\$192,394	\$67,234	\$47,004	\$216,281	\$275,920	17%	\$304,083	\$132,442	3%	Project not started in 2017. On budget.		
2	40171-37602	CCD	25-50 RIDGE RD, CCD & FRANKLIN ST	11/7/2017	12/27/2017	CASBUILT	1,487	0	1,400	1,487	11	0	1	0	8	0	0	20	\$15,220	\$18,693	\$49,993	\$208,686	\$170,464	\$54,575	\$225,038	8%	\$15,400	\$17,244	\$155,064	\$37,331	\$192,394	\$67,234	\$47,004	\$216,281	\$275,920	17%	\$304,083	\$132,442	3%	Project not started in 2017. On budget.		
3	40171-37603	CCD	11-10 LANGFORD RD, CCD, KIRKMAN ST	6/27/2017	7/19/2017	CASBUILT	820	0	756	820	8	0	0	0	0	0	0	4	\$5,789	\$13,059	\$14,867	\$133,023	\$12,546	\$149,167	11%	\$11,573	\$12,546	\$118,228	\$6	\$118,228	\$21,729	\$18,515	\$8,587	\$124,124	\$82,687	66%	\$126,084	\$124,124	1%	Over budget. 2' cut back compared not 1' as shown for Langford Ave in estimate. 3. Main restoration to be completed in 2018. On budget.		
4	40171-37604	CCD	51-79 DOWNING ST, CCD, WHEATON AV	6/6/2017	6/27/2017	CASBUILT	425	0	425	4	0	0	0	0	3	0	0	7	\$5,620	\$50,137	\$16,429	\$66,566	\$66,566	\$20,802	\$87,368	22%	\$0	\$7,079	\$60,566	\$13,723	\$74,389	\$37,103	\$48,234	\$100,503	\$100,000	0%	\$130,138	\$129,602	0%	Project not started in 2017. On budget.		
5	40171-37605	CCD	8-42 CENTRE ST, CCD, N STATE ST & PARK ST	10/13/2017	12/30/2017	CASBUILT	3,083	70	1,420	3,918	19	0	3	0	8	0	0	30	\$44,340	\$479,783	\$96,262	\$576,045	\$483,483	\$105,084	\$688,567	2%	\$26,508	\$27,495	\$456,886	\$77,589	\$534,475	\$140,881	\$183,145	\$561,157	\$736,296	28%	\$721,362	\$773,712	7%	On budget.		
6	40171-37606	CCD	76-113 SCHOOL ST, CCD, CENTRE ST, LIBERTY ST & MERRIMACK ST	10/13/2017	12/30/2017	CASBUILT	3,083	70	1,420	3,918	19	0	3	0	8	0	0	30	\$44,340	\$479,783	\$96,262	\$576,045	\$483,483	\$105,084	\$688,567	2%	\$26,508	\$27,495	\$456,886	\$77,589	\$534,475	\$140,881	\$183,145	\$561,157	\$736,296	28%	\$721,362	\$773,712	7%	On budget.		
7	40171-37607	CCD	59-105 PLEASANT ST, CCD & PINE ST	10/13/2017	12/30/2017	CASBUILT	3,083	70	1,420	3,918	19	0	3	0	8	0	0	30	\$44,340	\$479,783	\$96,262	\$576,045	\$483,483	\$105,084	\$688,567	2%	\$26,508	\$27,495	\$456,886	\$77,589	\$534,475	\$140,881	\$183,145	\$561,157	\$736,296	28%	\$721,362	\$773,712	7%	On budget.		
8	40171-37608	CCD	770 RECTORY RD, CCD, ARMOUR PL & LIBRARY RD	6/21/2017	9/25/2017	COMP	3,743	450	0	3,293	2	1	3	1	26	0	0	33	\$0	\$33,071	\$74,397	\$496,469	\$318,639	\$78,840	\$397,479	2%	\$38,708	\$76,195	\$280,331	\$5,645	\$283,976	\$0	\$0	\$304,651	\$406,469	33%	\$407,061	\$397,479	3%	Project not started in 2017. On budget.		
9	40171-37609	CCD	522 CHAFFET ST, CCD	4/24/2017	5/17/2017	CASBUILT	420	30	0	390	5	0	3	5	0	0	0	13	\$7,948	\$24,680	\$33,179	\$97,319	\$40,801	\$138,122	28%	\$58,951	\$24,517	\$90,368	\$56,267	\$106,634	\$23,543	\$30,403	\$153,867	\$133,410	13%	\$153,848	\$136,725	13%	Slightly over budget. Additional ledge and extra depth at tie-ins. On budget.			
10	40171-37610	CCD	643 S14 RIMMON ST, MNC	10/20/2017	12/26/2017	COMP	765	0	0	765	9	0	0	0	3	0	0	1	13	\$0	\$10,508	\$55,176	\$116,684	\$112,418	\$55,176	\$167,594	7%	\$20,244	\$20,244	\$112,418	\$147,349	\$116,634	\$24,224	\$110,192	\$126,118	59%	\$143,550	\$139,818	16%	Over budget. Additional test holes required due to unmarked drop line where gas line was initially being installed. Additional saw cut for new location. Degradation fees not paid yet. On budget.		
11	40171-37611	CCD	10-112 WASHINGTON ST, CCD, UNION ST & PINE ST	10/20/2017	12/26/2017	COMP	1,050	70	0	1,020	10	0	1	0	1	0	0	14	\$15,890	\$43,128	\$59,344	\$192,409	\$166,812	\$26,597	\$199,411	11%	\$15,890	\$26,514	\$166,812	\$17,881	\$184,693	\$20,808	\$19,240	\$205,200	\$21,963	30%	\$230,988	\$209,661	13%	Over budget. City crew time due to permit restriction near school. Drain repair, permits each permit. Additional test holes. On budget.		
12	40171-37612	CCD	11-42 ROCKINGHAM ST, CCD, BONDWAGON ST & WIGGIN ST	10/20/2017	12/26/2017	CASBUILT	1,100	200	0	900	12	0	2	0	5	1	0	17	\$16,930	\$127,585	\$38,099	\$210,684	\$182,416	\$43,136	\$225,553	21%	\$48,781	\$18,991	\$163,864	\$24,546	\$188,410	\$14,300	\$14,300	\$240,240	\$220,376	-11%	\$410,124	\$280,083	-30%	Under budget. City start. City would only allow work on Downson St & Wiggin St. Rockingham to be completed in 2018 under project e. On budget.		
13	40171-37613	CCD	11-42 ROCKINGHAM ST, CCD, BONDWAGON ST & WIGGIN ST	10/20/2017	12/26/2017	CASBUILT	1,100	200	0	900	12	0	2	0	5	1	0	17	\$16,930	\$127,585	\$38,099	\$210,684	\$182,416	\$43,136	\$225,553	21%	\$48,781	\$18,991	\$163,864	\$24,546	\$188,410	\$14,300	\$14,300	\$240,240	\$220,376	-11%	\$410,124	\$280,083	-30%	Under budget. Mobilization and install bid higher than estimate due to this project being on 3 separate streets. Additional ledge. On budget.		
14	40171-37614	TL	14-22 PARODY ST, TL, CEDAR ST & HIGH ST	5/8/2017	7/13/2017	CASBUILT	1,277	0	0	1,277	0	0	0	0	4	0	0	11	\$0	\$147,175	\$22,056	\$169,431	\$171,108	\$25,323	\$196,431	16%	\$0	\$25,323	\$171,108	\$0	\$171,108	\$67,409	\$60,420	\$137,405	\$237,100	72%	\$143,430	\$287,054	56%	Over budget. Mobilization and install bid higher than estimate due to this project being on 3 separate streets. Additional ledge. On budget.		
15	Northern Division Totals						18,222	894	4,715	18,498	69	1	17	7	3	1	3	162	\$113,128	\$5,772,295	\$466,300	\$2,333,054	\$3,913,356	\$950,927	\$4,864,283	6%	\$168,790	\$260,689	\$2,643,667	\$1,940,725	\$4,584,392	\$87,938	\$2,630,459	\$2,630,459	\$2,630,459	\$2,630,459	22%	\$2,835,716	\$1,960,377	6%		
16	Mileage						2.69	0.17	0.89	2.74																																
CENTRAL DIVISION																																										
1	40171-37615	MNC	1750-1885 ELM ST, MNC & SALMON ST	4/13/2017	5/10/2017	CASBUILT	1,012	440	0	1,397	0	2	0	2	0	0	0	4	\$14,165	\$180,952	\$13,124	\$194,276	\$181,783	\$13,350	\$195,133	0%	\$79,036	\$6,383	\$102,747	\$6,966	\$109,713	\$0	\$0	\$181,002	\$194,276	7%	\$233,148	\$195,133	-16%	Under budget. Actual degradation fees lower than estimated. Actual loadings lower than estimate. On budget.		
2	40171-37616	MNC	167-323 HANOVER ST, MNC & BEECH ST	5/24/2017	10/27/2017	COMP	2,070	80	0	2,050	11	0	2	0	5	0	0	18	\$0	\$50,672	\$69,735	\$662,406	\$649,179	\$75,966	\$725,145	10%	\$25,097	\$33,840	\$624,282	\$42,125	\$666,407	\$59,700	\$71,440	\$363,167	\$722,106	99%	\$465,300	\$796,985	71%	Over budget. Concrete and rebar found during project where pipe was to be installed. Put back in reinforced concrete on top of 2' cutback. Additional thickness of asphalt. On budget.		
3	40171-37617	MNC	69-152 HARRISON ST, MNC, BEECH ST & HAZEL ST	6/12/2017	7/31/2017	CASBUILT	643	45	580	598	10	0	0	0	8	0	0	21	\$29,335	\$160,208	\$48,044	\$208,252	\$142,712	\$50,236	\$192,948	7%	\$16,368	\$24,889	\$126,345	\$25,346	\$151,699	\$0	\$0	\$151,779	\$208,252	37%	\$193,272	\$192,948	0%	On budget.		
4	40171-37618	MNC	436-514 RIMMON ST, MNC	4/24/2017	5/17/2017	CASBUILT	420	30	0	390	5	0	3	5	0	0	0	13	\$7,948	\$24,680	\$33,179	\$97,319	\$40,801	\$138,122	28%	\$58,951	\$24,517	\$90,368	\$56,267	\$106,634	\$23,543	\$30,403	\$153,867	\$133,410	13%	\$153,848	\$136,725	13%	Slightly over budget. Additional ledge and extra depth at tie-ins. On budget.			
5	40171-37619	MNC	7-89 DUNN DR, MNC	4/25/2017	6/19/2017	CASBUILT	788	50	0	738	2	1	1	11	0	0	0	15	\$0	\$12,030	\$20,959	\$182,089	\$142,463	\$62,086	\$204,548	12%	\$9,040	\$56,566	\$133,423	\$5,519	\$138,942	\$24,870	\$29,644	\$168,871	\$230,932	91%	\$137,846	\$234,932	70%	Over budget. Actual service work completed was less than estimate. On budget.		
6	40171-37620	MNC	7-89 DUNN DR, MNC	4/25/2017	6/19/2017	CASBUILT	788	50	0	738	2	1	1	11	0	0	0	15	\$0	\$12,030	\$20,959	\$182,089	\$142,463	\$62,086	\$204,548	12%	\$9,040	\$56,566	\$133,423	\$5,519	\$138,942	\$24,870	\$29,644	\$168,871	\$230,932	91%	\$137,846	\$234,932	70%	Over budget. Additional complex services found to be fed from across property lines. On budget.		
7	40171-37621	MNC	160-111 CALEF RD, MNC	8/2/2017	12/28/2017	CASBUILT	3,731	150	1,215	3,581	14	0	5	0	12	0	0	31	\$0	\$465,264	\$106,720	\$551,984	\$431,802	\$121,666	\$553,468	0%	\$30,725	\$59,242	\$401,077	\$62,424	\$463,501	\$202,985	\$263,881	\$654,249	\$754,969	15%	\$827,895	\$817,349	-1%	On budget.		
8	40171-37622	MNC	135-189 WALTON ST, MNC, SILVER ST & HARVARD ST	11/13/2017	12/27/2017	CASBUILT	2,094	20	0	2,094	13	3	3	11	15	0	0	45	\$0	\$147,494	\$121,589	\$279,083	\$138,338	\$121,901	\$260,239	-7%	\$13,321	\$76,312	\$137,017	\$45,569	\$182,586	\$134,534	\$174,894	\$450,877	\$413,617	-8%	\$575,250	\$485,133	-24%	Under budget. Actual loadings lower than estimate. On budget.		
9	40171-37623	MNC	146-695 MAPLE ST, MNC & UNION ST	4/24/2017	7/21/2017	CASBUILT	2,321	20	755	2,301	13	0	15	0	0	0	28	\$0	\$28,307																							