



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM00463</b>	Section No. <b>6</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>123 GARRISON AVE</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS02758</b>
City <b>WORCESTER MA</b>	Drainage Area	Dowstream MH <b>SS02759</b>
Loc. details	Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Downstream</b>
Location Code <b>Easement/Right of way</b>	Length surveyed <b>156.12 ft</b>	Section Length <b>156.12 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length
Year Laid	Dia./Height <b>10 inch</b>
Year Rehabilitated	Material <b>Vitrified Clay Pipe</b>
Tape / Media No.	Lining Method

Add. Information :

1:375 Position	Observation	
	Upstream Manhole, Survey Begins	<p>2.2 FT</p>
0.00	Water Level, 5 %of cross sectional area	
2.20	Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES	<p>15.11 FT</p>
15.91	S1 Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start	<p>15.91 FT</p>
43.33	Deposits Attached Grease, 95 %of cross sectional area, from 12 to 12 o'clock, , within 8 inches of joint: YES	<p>43.33 FT</p>
46.04	S2 Roots Ball Barrell, from 07 to 05 o'clock, 80 %, Start	<p>43.33 FT</p>
57.84	Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"	<p>46.04 FT</p>
156.12	F1 Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Finish	<p>46.04 FT</p>
156.12	F2 Roots Ball Barrell, from 07 to 05 o'clock, 80 %, Finish	<p>55.07 FT</p>
156.12	Survey Abandoned / CANT CRAWL UNDERWATER DEBRI	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	5D2E	0	172	172	0	3.31	3.31



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00463</b>	Section No : <b>6</b>
-------------------------------	---------------------------------	--------	--	--------------------------

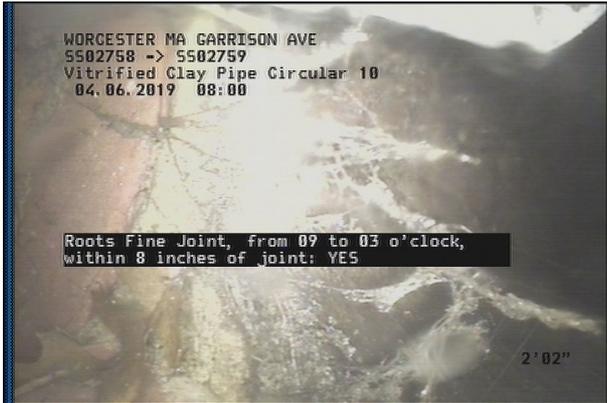


Photo:  
SS02758-SS02759\_04062019\_RFJ\_2.2017\_090839\_A.JPG  
2.2FT, Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES



Photo:  
SS02758-SS02759\_04062019\_DAGS\_15.9122\_091016\_A.JPG  
15.91FT, Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start



Photo:  
SS02758-SS02759\_04062019\_DAGS\_43.3332\_091300\_A.JPG  
43.33FT, Deposits Attached Grease, 95 %of cross sectional area, from 12 to 12 o'clock, , within 8 inches of joint: YES



Photo:  
SS02758-SS02759\_04062019\_RBB\_46.0352\_091401\_A.JPG  
46.04FT, Roots Ball Barrell, from 07 to 05 o'clock, 80 %, Start



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00463</b>	Section No : <b>6</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS02758-SS02759\_04062019\_RBB\_46.0352\_091453\_B.JPG  
46.04FT, Roots Ball Barrell, from 07 to 05 o'clock, 80 %, Start

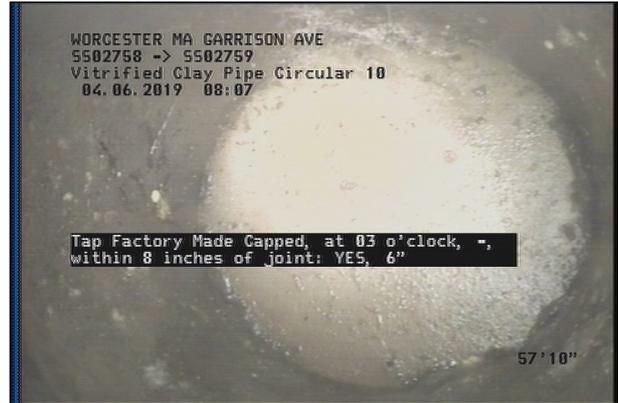


Photo:  
SS02758-SS02759\_04062019\_TFC\_57.8443\_091519\_A.JPG  
57.84FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM12756</b>	Section No. <b>7</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GARRISON AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 187.84 ft</b>	Upstream MH Dowstream MH Dir. of Survey Section Length	<b>SS02759 SS03746 Upstream 187.84 ft</b>
--	--	--	--	---	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>10 inch Vitrified Clay Pipe</b>
--	----------------------------	--	--

Add. Information :

1:306 Position	Observation	
0.00	Downstream Manhole, Survey Begins	
0.00	Water Level, 5 %of cross sectional area	
5.70	<b>S1</b> Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start	
5.70	<b>S2</b> Surface Aggregate Visible Mechanical, from 08 to 04 o'clock, within 8 inches of joint: YES, Start	
11.21	Deposits Attached Grease, 15 %of cross sectional area, from 11 to 01 o'clock, , within 8 inches of joint: YES	
13.21	Tap Break-In, at 09 o'clock, -, within 8 inches of joint: YES, 6"	
13.21	Roots Tap Lateral, at 09 o'clock, 10 %	
48.24	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"	
66.75	Roots Fine Joint, at 09 o'clock, within 8 inches of joint: YES	
69.55	Roots Fine Joint, from 03 to 05 o'clock, within 8 inches of joint: YES	
76.16	Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES	
95.67	Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inches of joint YESR	
98.58	<b>S3</b> Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inches of joint YESR, Start	
111.29	<b>F3</b> Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inches of joint YESR, Finish	
125.70	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"	

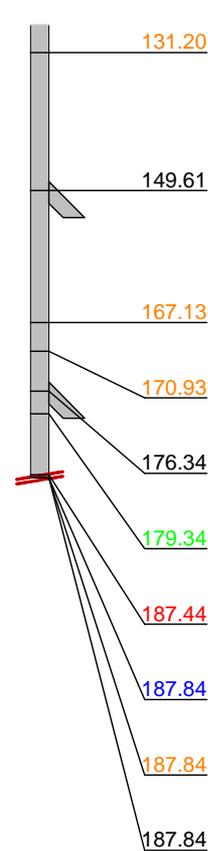


City :  
Tel:  
Fax:  
Email:

# Inspection Report

Date :	Job number :	Weather : <b>Dry</b>	Operator : <b>BRIAN GROM</b>	Counter : <b>7</b>	Section name :
Present :	Vehicle :	Camera :	Preset :	Cleaned : <b>No Pre-Cleaning</b>	Rate :

1:306	Position	Observation
	131.20	Roots Medium Joint, from 09 to 03 o'clock, 15 %, within 8 inches of joint: YESR
	149.61	Tap Break-In, at 09 o'clock, -, within 8 inches of joint: YES, 6"
	167.13	Roots Medium Joint, from 07 to 12 o'clock, 25 %, within 8 inches of joint: YESR
	170.93	Roots Medium Joint, from 07 to 12 o'clock, 20 %, within 8 inches of joint: YESR
	176.34	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"
	179.34	Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES
	187.44	Roots Ball Barrell, from 07 to 05 o'clock, 90 %
	187.84	<b>F1</b> Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Finish
	187.84	<b>F2</b> Surface Aggregate Visible Mechanical, from 08 to 04 o'clock, within 8 inches of joint: YES, Finish
	187.84	Survey Abandoned / CANT MAKE PAST LARGE ROOT IN BARRELL





Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS02759-SS03746\_04062019\_DAGS\_5.7044\_102209\_A.JPG  
5.7FT, Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start

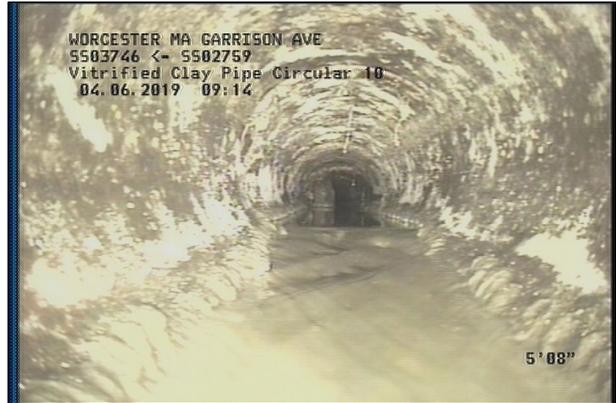


Photo:  
SS02759-SS03746\_04062019\_SAVM\_5.7044\_102245\_A.JPG  
5.7FT, Surface Aggregate Visible Mechanical, from 08 to 04 o'clock, within 8 inches of joint: YES, Start



Photo:  
SS02759-SS03746\_04062019\_DAGS\_11.2086\_102343\_A.JPG  
11.21FT, Deposits Attached Grease, 15 %of cross sectional area, from 11 to 01 o'clock, , within 8 inches of joint: YES

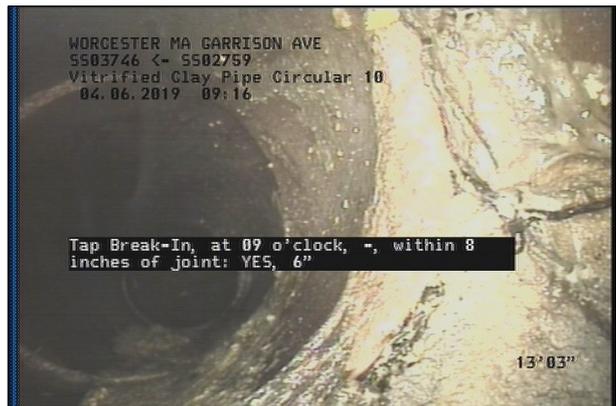


Photo:  
SS02759-SS03746\_04062019\_TB\_13.2101\_102414\_A.JPG  
13.21FT, Tap Break-In, at 09 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------

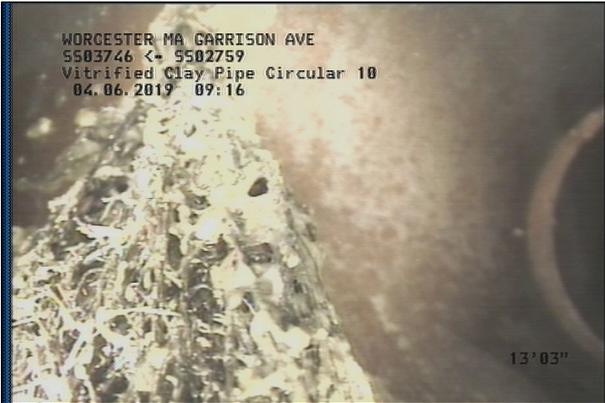


Photo:  
SS02759-SS03746\_04062019\_RTL\_13.2101\_102436\_A.JPG  
13.21FT, Roots Tap Lateral, at 09 o'clock, 10 %

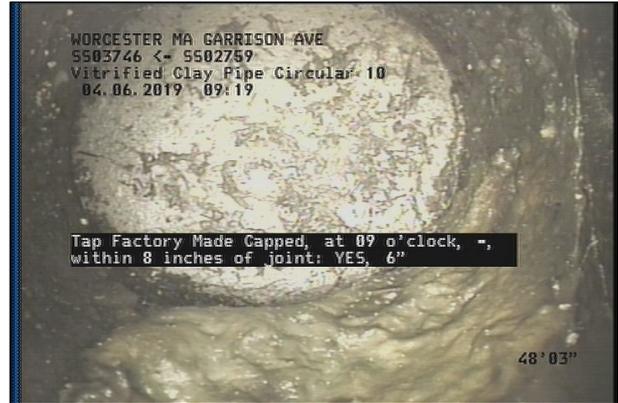


Photo:  
SS02759-SS03746\_04062019\_TFC\_48.2369\_102730\_A.JPG  
48.24FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"

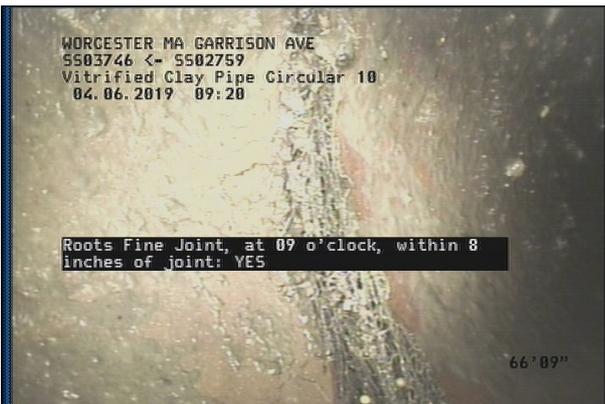


Photo:  
SS02759-SS03746\_04062019\_RFJ\_66.7511\_102902\_A.JPG  
66.75FT, Roots Fine Joint, at 09 o'clock, within 8 inches of joint: YES

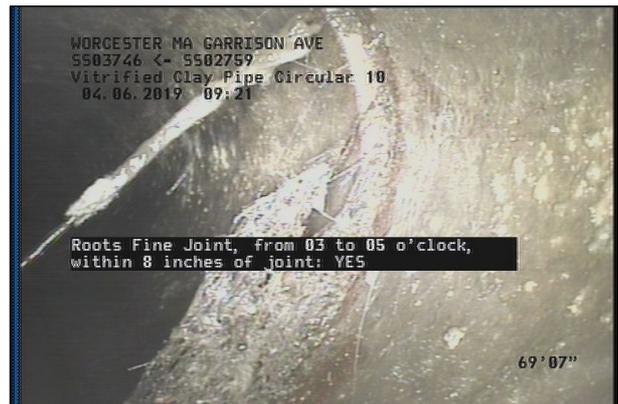


Photo:  
SS02759-SS03746\_04062019\_RFJ\_69.5533\_102931\_A.JPG  
69.55FT, Roots Fine Joint, from 03 to 05 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS02759-SS03746\_04062019\_RFJ\_76.1583\_103027\_A.JPG  
76.16FT, Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES

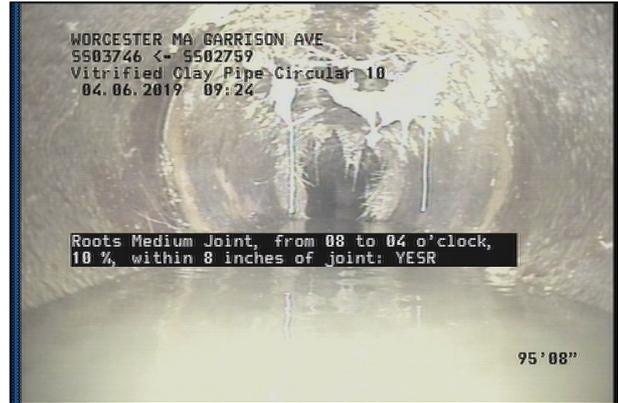


Photo:  
SS02759-SS03746\_04062019\_RMJ\_95.6733\_103232\_A.JPG  
95.67FT, Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inches of joint: YESR

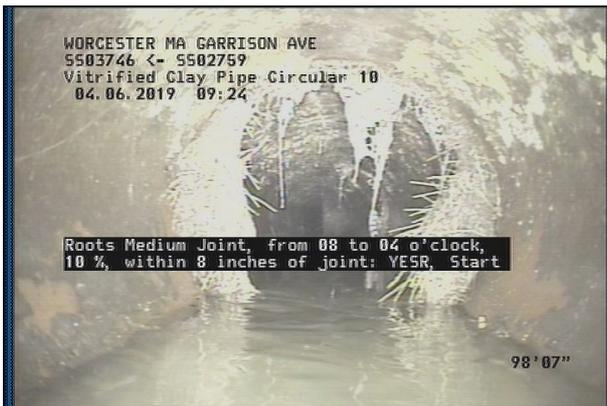


Photo:  
SS02759-SS03746\_04062019\_RMJ\_98.5755\_103301\_A.JPG  
98.58FT, Roots Medium Joint, from 08 to 04 o'clock, 10 %, within 8 inches of joint: YESR, Start



Photo:  
SS02759-SS03746\_04062019\_TFC\_125.6963\_103514\_A.JPG  
125.7FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------

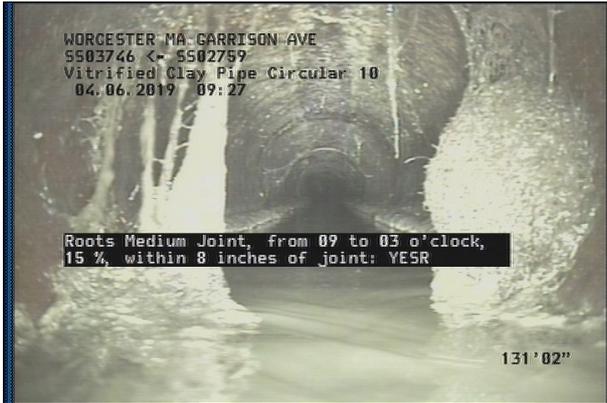


Photo:  
SS02759-SS03746\_04062019\_RMJ\_131.2005\_103602\_A.JPG  
131.2FT, Roots Medium Joint, from 09 to 03 o'clock, 15 %, within 8 inches of joint: YESR



Photo:  
SS02759-SS03746\_04062019\_TB\_149.6146\_103919\_A.JPG  
149.61FT, Tap Break-In, at 09 o'clock, -, within 8 inches of joint: YES, 6"

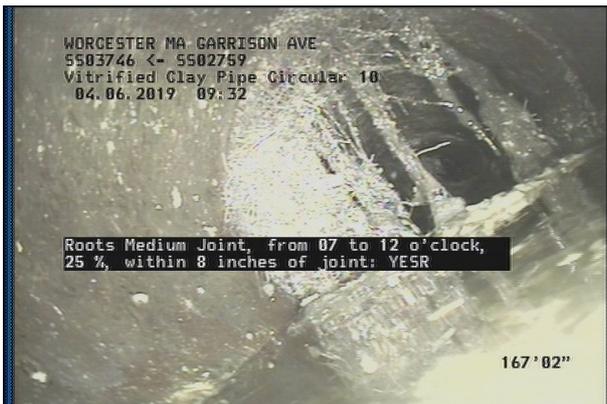


Photo:  
SS02759-SS03746\_04062019\_RMJ\_167.128\_104102\_A.JPG  
167.13FT, Roots Medium Joint, from 07 to 12 o'clock, 25 %, within 8 inches of joint: YESR

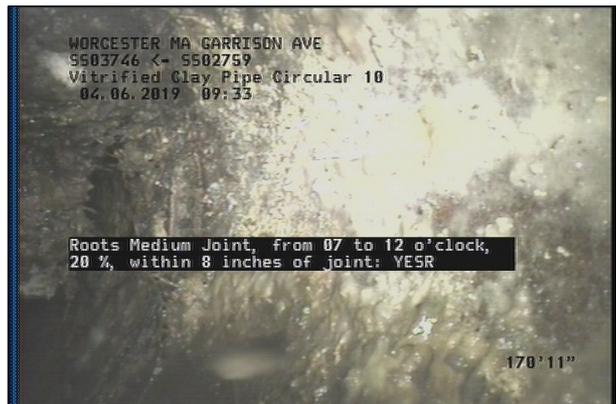


Photo:  
SS02759-SS03746\_04062019\_RMJ\_170.9309\_104138\_A.JPG  
170.93FT, Roots Medium Joint, from 07 to 12 o'clock, 20 %, within 8 inches of joint: YESR



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------

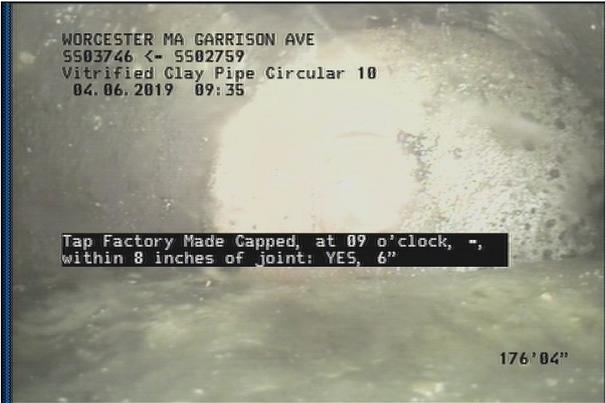


Photo:  
SS02759-SS03746\_04062019\_TFC\_176.335\_104347\_A.JPG  
176.34FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"

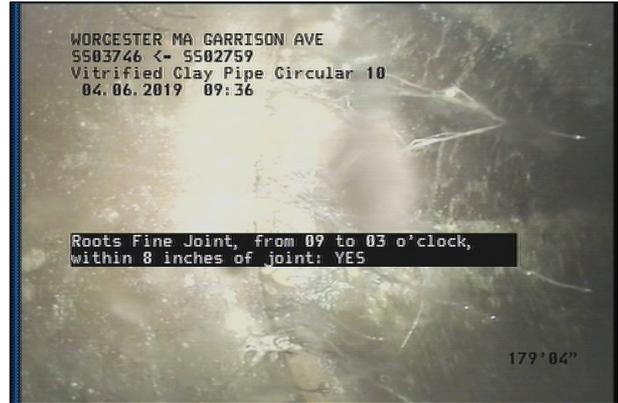


Photo:  
SS02759-SS03746\_04062019\_RFJ\_179.3373\_104423\_A.JPG  
179.34FT, Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES



Photo:  
SS02759-SS03746\_04062019\_RBB\_187.4435\_104534\_A.JPG  
187.44FT, Roots Ball Barrell, from 07 to 05 o'clock, 90 %



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM09251</b>	Section No. <b>8</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GARRISON AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 155.32 ft</b>	Upstream MH Dowstream MH Dir. of Survey Section Length	<b>SS03746 SS14566 Downstream 155.32 ft</b>
--	--	--	--	---	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>8 inch Vitrified Clay Pipe</b>
--	----------------------------	--	---------------------------------------

Add. Information :

1:378 Position	Observation	
<p><b>SS03746</b></p> <p>0.00</p> <p>0.00</p> <p>5.90</p> <p>5.90</p> <p>10.41</p> <p>42.23</p> <p>76.46</p> <p>88.17</p> <p>98.28</p> <p>104.28</p> <p>119.39</p> <p>123.99</p> <p>143.71</p>	<p>Upstream Manhole, Survey Begins</p> <p>Water Level, 5 %of cross sectional area</p> <p><b>S1</b> Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start</p> <p><b>S2</b> Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Start</p> <p><b>S3</b> Roots Medium Joint, from 09 to 03 o'clock, 15 %, within 8 inches of joint: YESR, Start</p> <p><b>F3</b> Roots Medium Joint, from 09 to 03 o'clock, 15 %, within 8 inches of joint: YESR, Finish</p> <p>Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"</p> <p>Roots Medium Joint, from 07 to 05 o'clock, 20 %, within 8 inches of joint: YESR</p> <p>Roots Medium Joint, from 07 to 11 o'clock, 15 %, within 8 inches of joint: YESR</p> <p>Roots Fine Joint, from 03 to 05 o'clock, within 8 inches of joint: YES</p> <p>Roots Fine Joint, from 07 to 02 o'clock, within 8 inches of joint: YES</p> <p>Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"</p> <p>Roots Fine Joint, from 08 to 11 o'clock, within 8 inches of joint: YES</p>	<p>5.9 FT</p> <p>5.9 FT</p> <p>10.41 FT</p> <p>76.46 FT</p> <p>88.17 FT</p>



City :  
Tel:  
Fax:  
Email:

## Inspection Report

Date :	Job number :	Weather : <b>Dry</b>	Operator : <b>BRIAN GROM</b>	Counter : <b>8</b>	Section name :
Present :	Vehicle :	Camera :	Preset :	Cleaned : <b>No Pre-Cleaning</b>	Rate :

1:378	Position	Observation
	<p><u>151.82</u> <b>F1</b></p>	<p>Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Finish</p>
	<p><u>151.82</u> <b>F2</b></p>	<p>Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Finish</p>
	<p><u>155.32</u></p>	<p>Downstream Manhole, Survey Ends</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	382K	0	143	143	0	2.07	2.07



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM09251</b>	Section No : <b>8</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS03746-SS14566\_04062019\_DAGS\_5.9045\_110952\_A.JPG  
5.9FT, Deposits Attached Grease, 5 %of cross sectional area, from 04 to 08 o'clock, , within 8 inches of joint: YES, Start



Photo:  
SS03746-SS14566\_04062019\_DAGS\_5.9045\_110954\_A.JPG  
5.9FT, Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Start

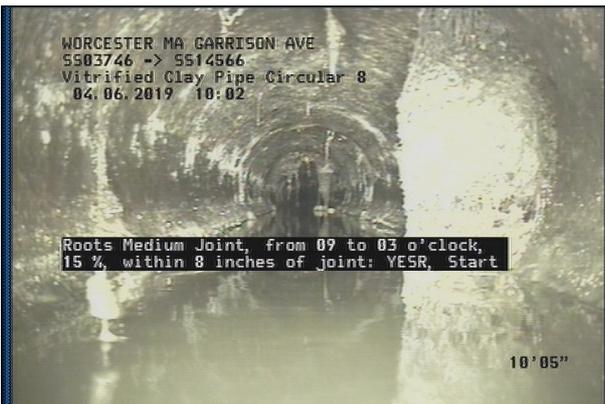


Photo:  
SS03746-SS14566\_04062019\_RMJ\_10.408\_111040\_A.JPG  
10.41FT, Roots Medium Joint, from 09 to 03 o'clock, 15 %, within 8 inches of joint: YESR, Start

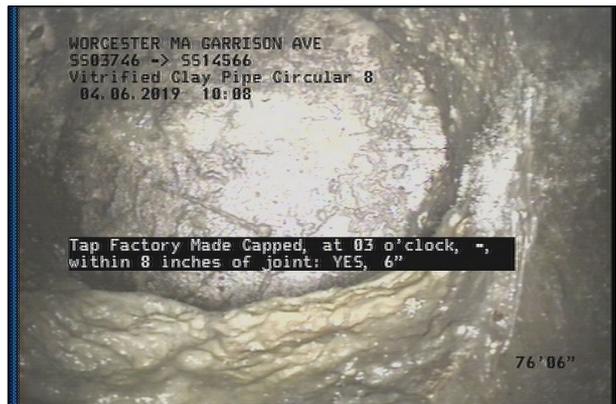


Photo:  
SS03746-SS14566\_04062019\_TFC\_76.4585\_111616\_A.JPG  
76.46FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM09251</b>	Section No : <b>8</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS03746-SS14566\_04062019\_RMJ\_88.1675\_111729\_A.JPG  
88.17FT, Roots Medium Joint, from 07 to 05 o'clock, 20 %, within 8 inches of joint: YESR



Photo:  
SS03746-SS14566\_04062019\_RMJ\_98.2753\_111840\_A.JPG  
98.28FT, Roots Medium Joint, from 07 to 11 o'clock, 15 %, within 8 inches of joint: YESR

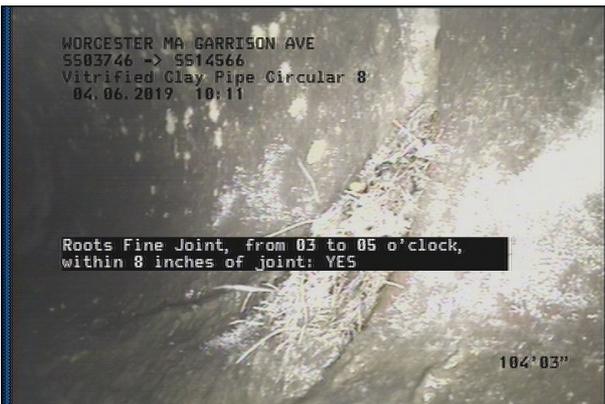


Photo:  
SS03746-SS14566\_04062019\_RFJ\_104.2798\_111921\_A.JPG  
104.28FT, Roots Fine Joint, from 03 to 05 o'clock, within 8 inches of joint: YES

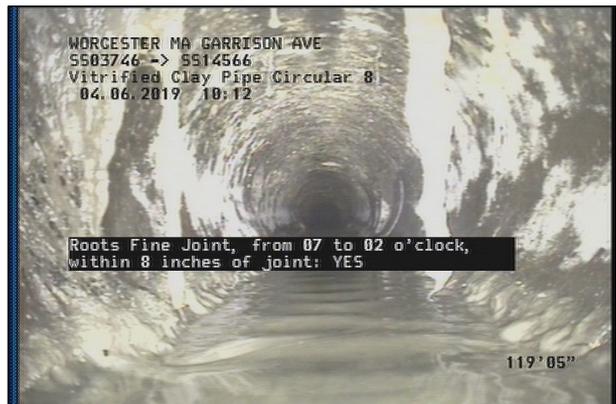


Photo:  
SS03746-SS14566\_04062019\_RFJ\_119.3914\_112036\_A.JPG  
119.39FT, Roots Fine Joint, from 07 to 02 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM09251</b>	Section No : <b>8</b>
-------------------------------	---------------------------------	--------	--	--------------------------

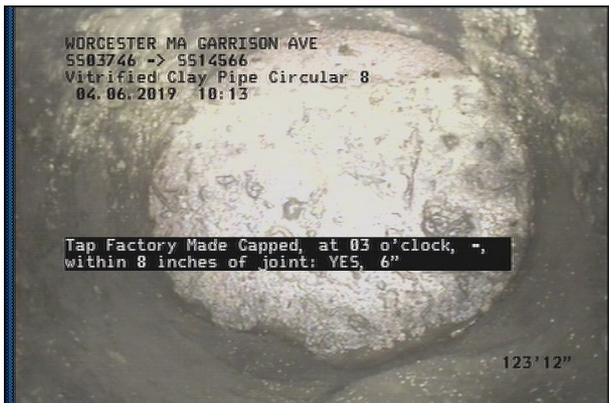


Photo:  
SS03746-SS14566\_04062019\_TFC\_123.9949\_112111\_A.JPG  
123.99FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"

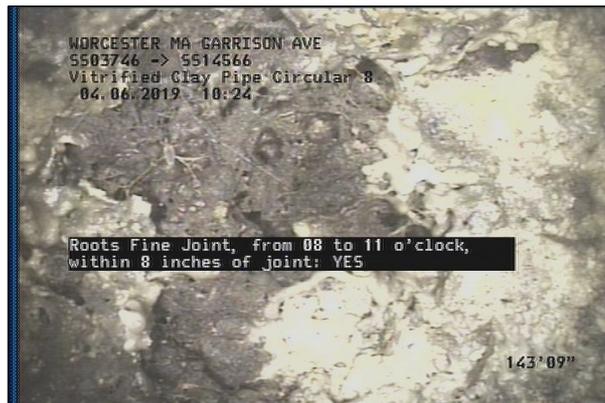


Photo:  
SS03746-SS14566\_04062019\_RFJ\_143.7101\_113309\_A.JPG  
143.71FT, Roots Fine Joint, from 08 to 11 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM00924</b>	Section No. <b>9</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

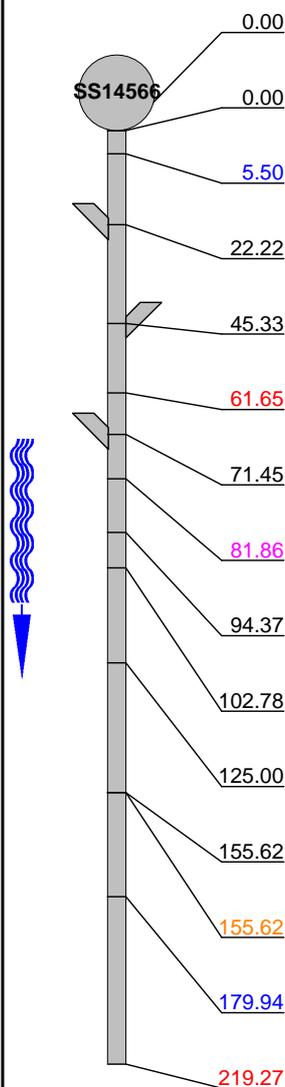
Street <b>123 GARRISON AVE</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS14566</b>
City <b>WORCESTER MA</b>	Drainage Area	Dowstream MH <b>SS02702</b>
Loc. details	Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Downstream</b>
Location Code <b>Easement/Right of way</b>	Length surveyed <b>273.41 ft</b>	Section Length <b>273.41 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length
Year Laid	Dia./Height <b>8 inch</b>
Year Rehabilitated	Material <b>Vitrified Clay Pipe</b>
Tape / Media No.	Lining Method

Add. Information :

1:540 Position

Observation



0.00 Upstream Manhole, Survey Begins

0.00 Water Level, 5 % of cross sectional area

5.50 **S1** Deposits Attached Grease, 5 % of cross sectional area, from 10 to 02 o'clock, , within 8 inches of joint: YES, Start

22.22 Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"

45.33 Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"

61.65 Infiltration Gusher, at 08 o'clock, within 8 inches of joint: YES

71.45 Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"

81.86 Infiltration Runner, at 08 o'clock, within 8 inches of joint: YES

94.37 Material Change, Polyvinyl Chloride (PVC)

102.78 Material Change, Vitrified clay pipe

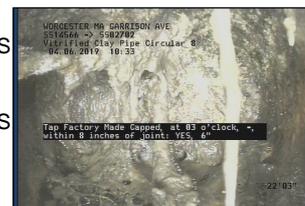
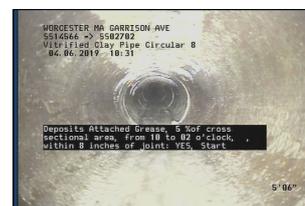
125.00 Material Change, Polyvinyl Chloride (PVC)

155.62 Material Change, Vitrified clay pipe

155.62 Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES

179.94 **S2** Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start

219.27 Broken Soil Visible, from 08 to 10 o'clock, within 8 inches of joint: YES





City :  
Tel:  
Fax:  
Email:

## Inspection Report

Date :	Job number :	Weather : <b>Dry</b>	Operator : <b>BRIAN GROM</b>	Counter : <b>9</b>	Section name :
Present :	Vehicle :	Camera :	Preset :	Cleaned : <b>No Pre-Cleaning</b>	Rate :

1:540	Position	Observation
	<u>220.27</u>	Tap Break-In Defective, at 03 o'clock, -, , within 8 inches of joint: YES, 6" / ROOTS AND LATERAL ISNT LINED UP WITH CONNECTION
	<u>220.27</u>	Broken Soil Visible, at 05 o'clock, within 8 inches of joint: YES
	<u>220.77</u>	<b>F2</b> Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Finish
	<u>220.77</u>	<b>F1</b> Deposits Attached Grease, 5 %of cross sectional area, from 10 to 02 o'clock, , within 8 inches of joint: YES, Finish
	<u>234.38</u>	Roots Fine Joint, from 10 to 02 o'clock, within 8 inches of joint: YES
	<u>244.19</u>	<b>S3</b> Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start
	<u>267.81</u>	Roots Fine Joint, from 02 to 05 o'clock, within 8 inches of joint: YES
	<u>270.71</u>	<b>F3</b> Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Finish
	<u>270.81</u>	General Observation / ROOTS IN MANHOLE
	<u>273.41</u>	Downstream Manhole, Survey Ends

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5231	5141	39	100	139	2.44	2.08	2.17



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00924</b>	Section No : <b>9</b>
-------------------------------	---------------------------------	--------	--	--------------------------

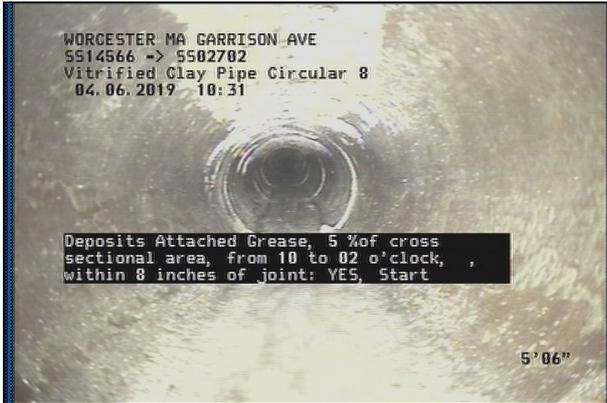


Photo:  
SS14566-SS02702\_04062019\_DAGS\_5.5042\_114008\_A.JPG  
5.5FT, Deposits Attached Grease, 5 %of cross sectional area, from 10 to 02 o'clock, , within 8 inches of joint: YES, Start



Photo:  
SS14566-SS02702\_04062019\_TFC\_22.217\_114149\_A.JPG  
22.22FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS14566-SS02702\_04062019\_TFC\_45.3347\_114406\_A.JPG  
45.33FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"

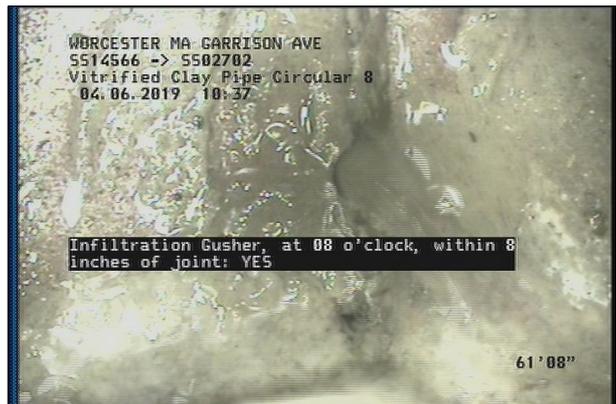


Photo:  
SS14566-SS02702\_04062019\_IG\_61.6472\_114551\_A.JPG  
61.65FT, Infiltration Gusher, at 08 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00924</b>	Section No : <b>9</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS14566-SS02702\_04062019\_TFC\_71.4547\_114730\_A.JPG  
71.45FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"

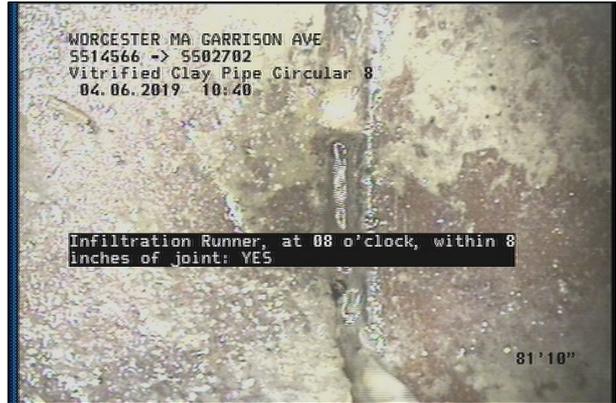


Photo:  
SS14566-SS02702\_04062019\_IR\_81.8627\_114848\_A.JPG  
81.86FT, Infiltration Runner, at 08 o'clock, within 8 inches of joint: YES

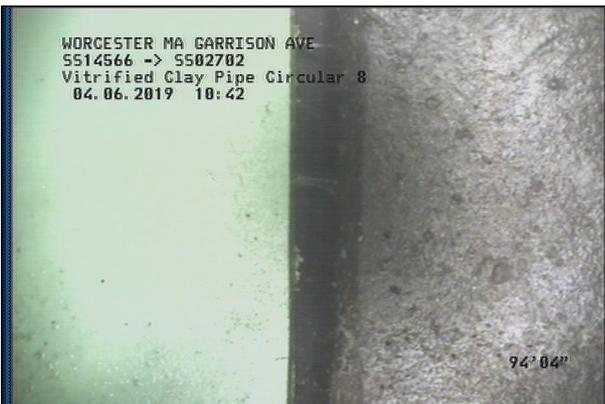


Photo:  
SS14566-SS02702\_04062019 MMC\_94.3723\_115025\_A.JPG  
94.37FT, Material Change, Polyvinyl Chloride (PVC)



Photo:  
SS14566-SS02702\_04062019 MMC\_102.7787\_115114\_A.JPG  
102.78FT, Material Change, Vitrified clay pipe



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00924</b>	Section No : <b>9</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS14566-SS02702\_04062019\_MMC\_124.9957\_115318\_A.JPG  
G  
125FT, Material Change, Polyvinyl Chloride (PVC)



Photo:  
SS14566-SS02702\_04062019\_MMC\_155.6192\_115552\_A.JPG  
G  
155.62FT, Material Change, Vitrified clay pipe

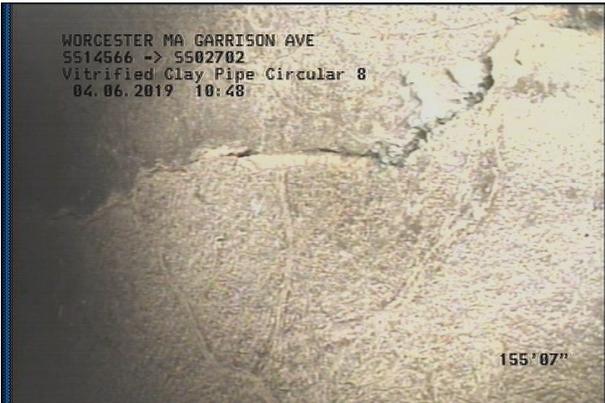


Photo:  
SS14566-SS02702\_04062019\_FL\_155.6192\_115612\_A.JPG  
155.62FT, Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES

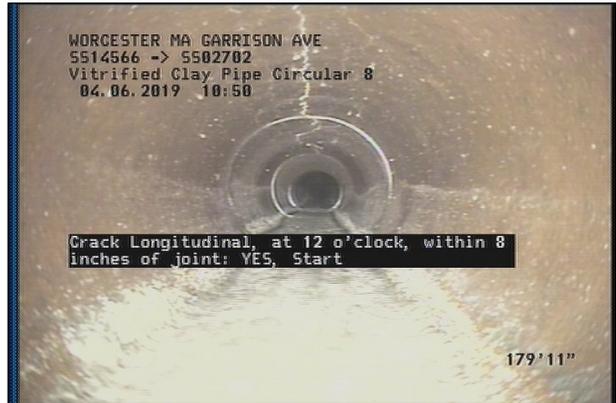


Photo:  
SS14566-SS02702\_04062019\_CL\_179.9378\_115821\_A.JPG  
179.94FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00924</b>	Section No : <b>9</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS14566-SS02702\_04062019\_BSV\_219.2679\_120154\_A.JPG  
219.27FT, Broken Soil Visible, from 08 to 10 o'clock, within 8 inches of joint: YES

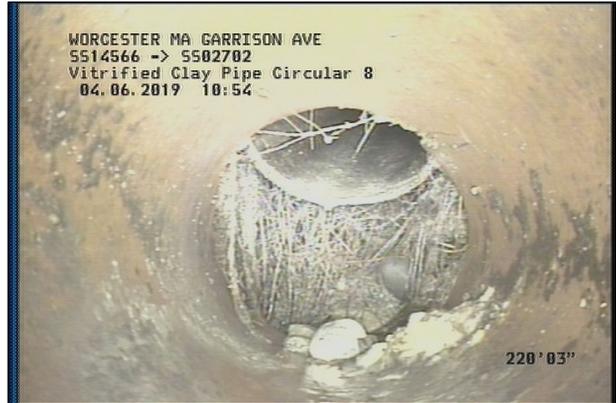


Photo:  
SS14566-SS02702\_04062019\_TBD\_220.2687\_120250\_A.JPG  
220.27FT, Tap Break-In Defective, at 03 o'clock, -, , within 8 inches of joint: YES, 6"



Photo:  
SS14566-SS02702\_04062019\_BSV\_220.2687\_120336\_A.JPG  
220.27FT, Broken Soil Visible, at 05 o'clock, within 8 inches of joint: YES



Photo:  
SS14566-SS02702\_04062019\_RFJ\_234.3795\_120525\_A.JPG  
234.38FT, Roots Fine Joint, from 10 to 02 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00924</b>	Section No : <b>9</b>
-------------------------------	---------------------------------	--------	--	--------------------------

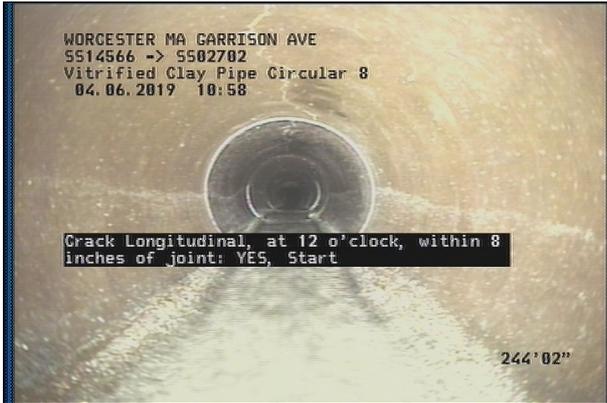


Photo:  
SS14566-SS02702\_04062019\_CL\_244.187\_120632\_A.JPG  
244.19FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start

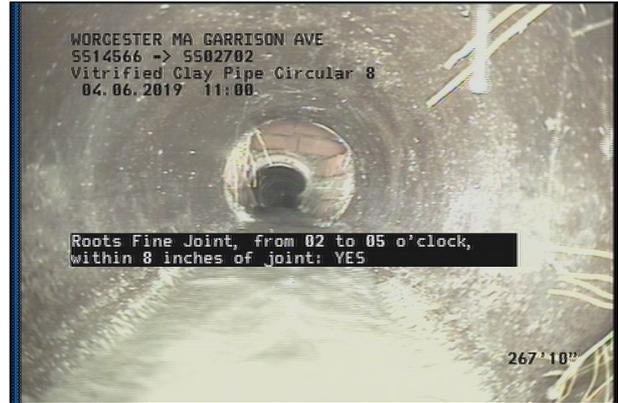


Photo:  
SS14566-SS02702\_04062019\_RFJ\_267.8051\_120815\_A.JPG  
267.81FT, Roots Fine Joint, from 02 to 05 o'clock, within 8 inches of joint: YES

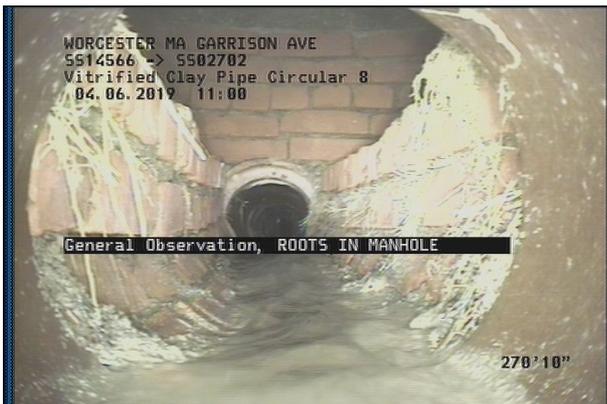


Photo:  
SS14566-SS02702\_04062019\_MGO\_270.8074\_120848\_A.JPG  
270.81FT, General Observation



Tel:  
Fax:  
E-mail:

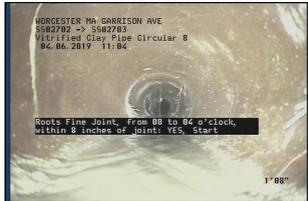
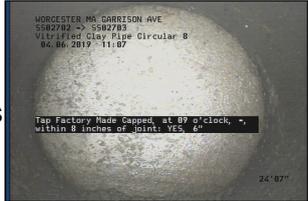
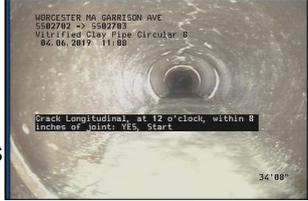
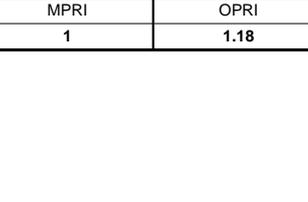
# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM00958</b>	Section No. <b>10</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GARRISON AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 103.58 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS02702 SS02703 Downstream 103.58 ft</b>
--	--	--	--	--	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>8 inch Vitrified Clay Pipe</b>
--	----------------------------	--	---------------------------------------

Add. Information :

1:255 Position	Observation	
SS02702 0.00	Upstream Manhole, Survey Begins	
0.00	Water Level, 5 %of cross sectional area	1.7 FT
1.70 S1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start	
24.62	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"	
34.53 S2	Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start	24.62 FT
39.63 F2	Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Finish	
39.63 F1	Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Finish	34.53 FT
50.94	Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"	
56.14	Material Change, Polyvinyl Chloride (PVC)	50.94 FT
71.65	Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"	
76.46	Material Change, Vitrified clay pipe	56.14 FT
97.98	Crack Longitudinal, at 03 o'clock, within 8 inches of joint: YES	
99.98	Roots Fine Joint, from 01 to 04 o'clock, within 8 inches of joint: YES	
103.58	Survey Abandoned / CANT CRAWL PAST DEBRI	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2200	1900	4	9	13	2	1	1.18



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00958</b>	Section No : <b>10</b>
-------------------------------	---------------------------------	--------	--	---------------------------

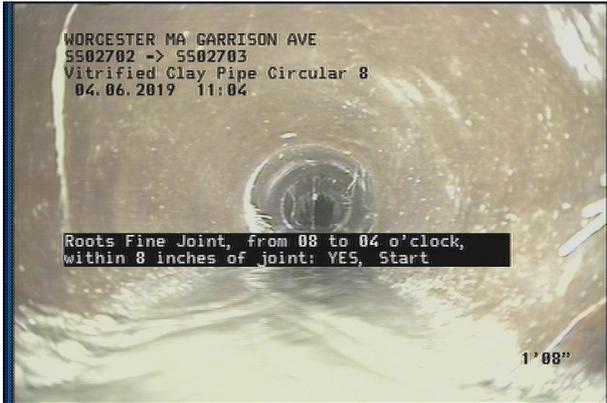


Photo:  
SS02702-SS02703\_04062019\_RFJ\_1.7013\_121302\_A.JPG  
1.7FT, Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start

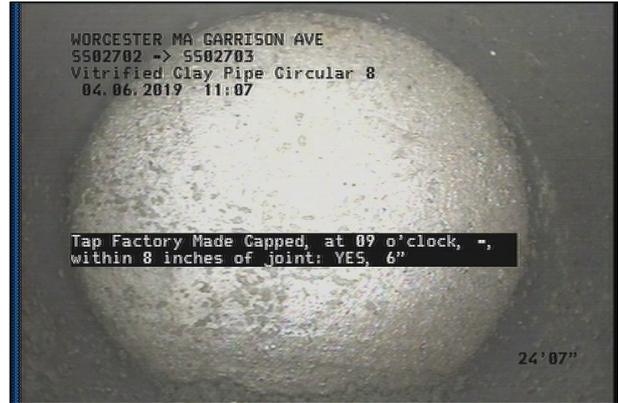


Photo:  
SS02702-SS02703\_04062019\_TFC\_24.6189\_121517\_A.JPG  
24.62FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"

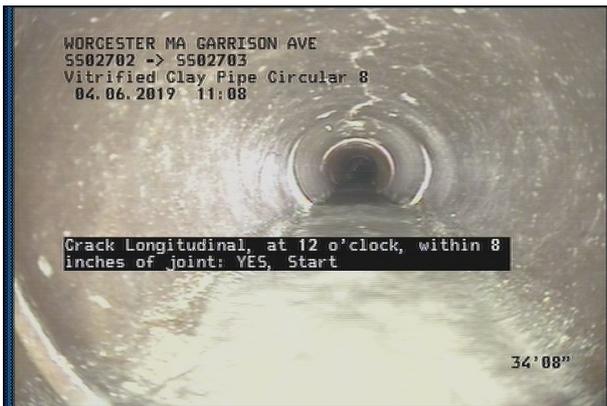


Photo:  
SS02702-SS02703\_04062019\_CL\_34.5264\_121631\_A.JPG  
34.53FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES, Start

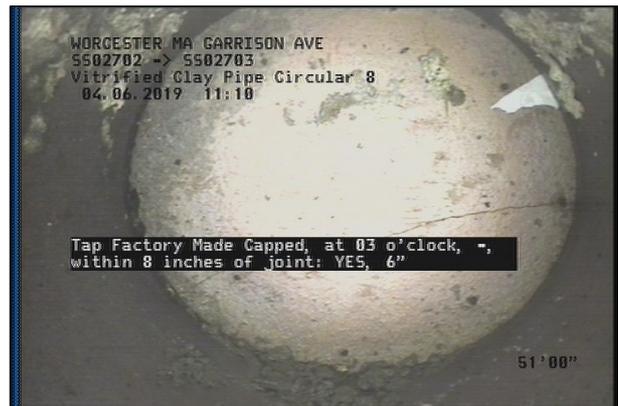


Photo:  
SS02702-SS02703\_04062019\_TFC\_50.939\_121850\_A.JPG  
50.94FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00958</b>	Section No : <b>10</b>
-------------------------------	---------------------------------	--------	--	---------------------------



Photo:  
SS02702-SS02703\_04062019\_MMC\_56.143\_121932\_A.JPG  
56.14FT, Material Change, Polyvinyl Chloride (PVC)

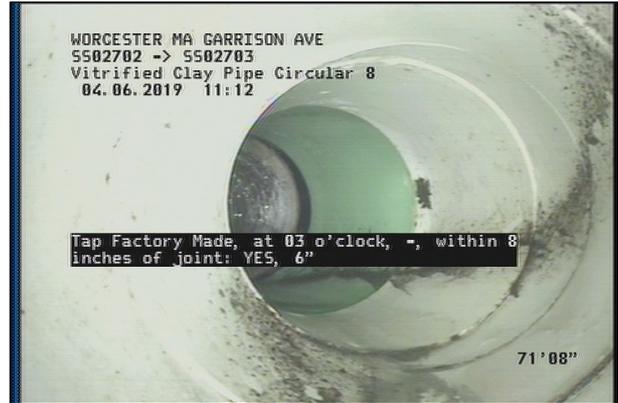


Photo:  
SS02702-SS02703\_04062019\_TF\_71.6549\_122045\_A.JPG  
71.65FT, Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS02702-SS02703\_04062019\_MMC\_76.4585\_122128\_A.JPG  
76.46FT, Material Change, Vitrified clay pipe

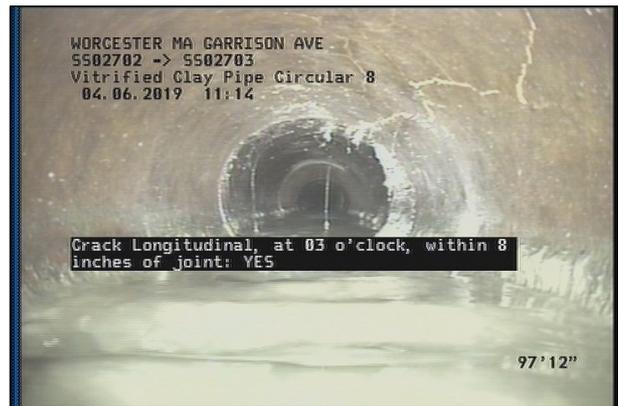


Photo:  
SS02702-SS02703\_04062019\_CL\_97.975\_122310\_A.JPG  
97.98FT, Crack Longitudinal, at 03 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00958</b>	Section No : <b>10</b>
-------------------------------	---------------------------------	--------	--	---------------------------



Photo:  
SS02702-SS02703\_04062019\_RFJ\_99.9765\_122338\_A.JPG  
99.98FT, Roots Fine Joint, from 01 to 04 o'clock, within 8  
inches of joint: YES



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM14592</b>	Section No. <b>11</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GOthic AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 178.84 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS06398 SS06395 Downstream 178.84 ft</b>
--	--	--	--	--	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>8 inch Vitrified Clay Pipe</b>
--	----------------------------	--	---------------------------------------

Add. Information :

1:435 Position	Observation	
	Upstream Manhole, Survey Begins	
0.00	Water Level, 5 %of cross sectional area	27.62 FT
0.00		
27.62	Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"	
29.82	Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"	29.82 FT
30.42	Roots Fine Joint, from 07 to 10 o'clock, within 8 inches of joint: YES	
72.06	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"	
74.26	Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"	30.42 FT
126.50	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"	
128.70	Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"	72.06 FT
178.84	Downstream Manhole, Survey Ends	
		74.26 FT

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	1100	0	1	1	0	1	1



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GOTHIC AVE</b>	Date :	Pipe Segment Reference : <b>SM14592</b>	Section No : <b>11</b>
-------------------------------	-------------------------------	--------	--	---------------------------

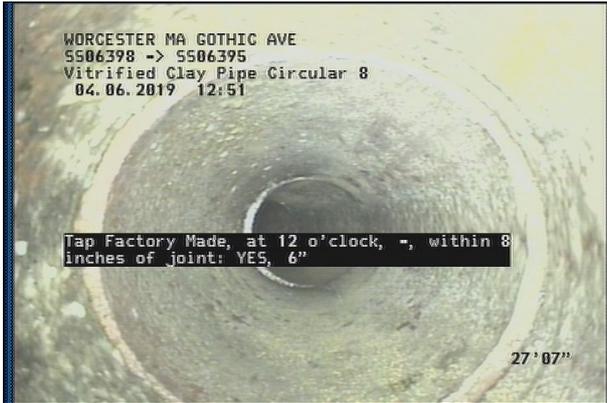


Photo:  
SS06398-SS06395\_04062019\_TF\_27.6211\_135944\_A.JPG  
27.62FT, Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"

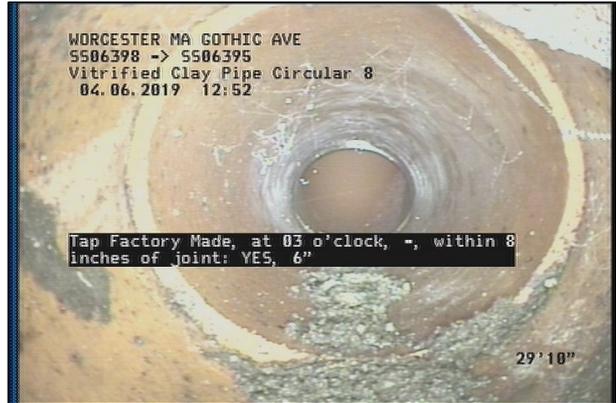


Photo:  
SS06398-SS06395\_04062019\_TF\_29.8228\_140018\_A.JPG  
29.82FT, Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS06398-SS06395\_04062019\_RFJ\_30.4233\_140042\_A.JPG  
30.42FT, Roots Fine Joint, from 07 to 10 o'clock, within 8 inches of joint: YES

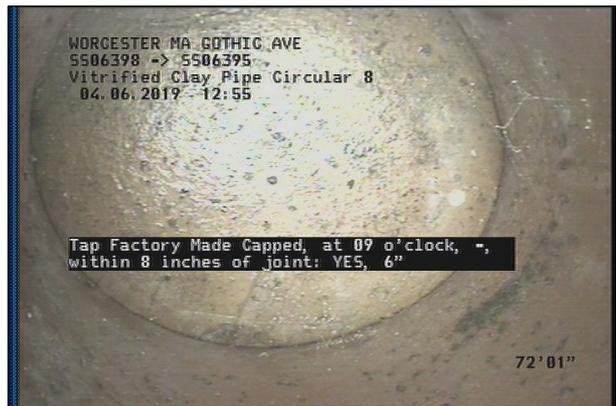


Photo:  
SS06398-SS06395\_04062019\_TFC\_72.0552\_140358\_A.JPG  
72.06FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GOTHIC AVE</b>	Date :	Pipe Segment Reference : <b>SM14592</b>	Section No : <b>11</b>
-------------------------------	-------------------------------	--------	--	---------------------------

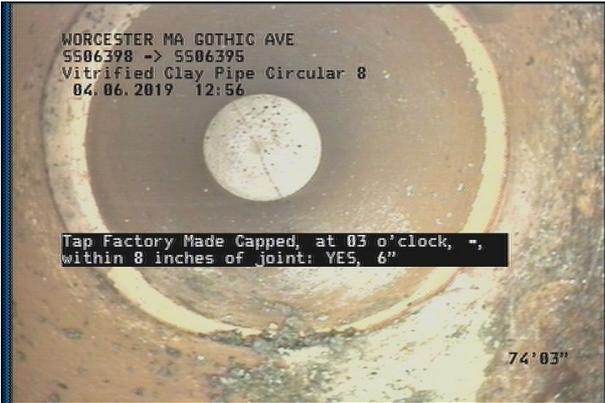


Photo:  
SS06398-SS06395\_04062019\_TFC\_74.2569\_140432\_A.JPG  
74.26FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS06398-SS06395\_04062019\_TFC\_126.4969\_140828\_A.JPG  
126.5FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"

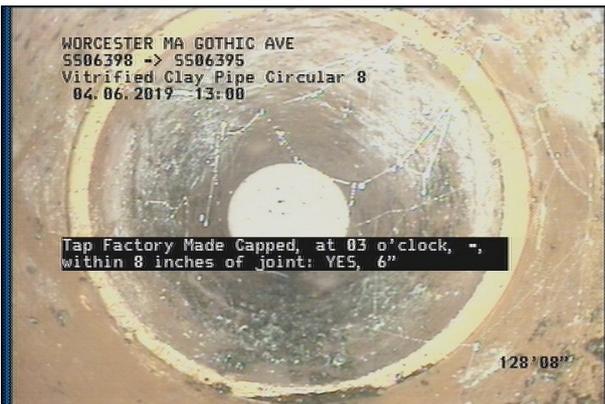


Photo:  
SS06398-SS06395\_04062019\_TFC\_128.6985\_140859\_A.JPG  
128.7FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/4/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference	Section No. <b>12</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/4/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GOthic AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 126.80 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS06723 SS06798 Downstream 126.80 ft</b>
--	--	--	--	--	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>8 inch Vitrified Clay Pipe</b>
--	----------------------------	--	---------------------------------------

Add. Information :

1:315 Position	Observation	
<p>SS06723 0.00</p> <p>0.00</p> <p>7.71</p> <p>35.23</p> <p>35.93 S1</p> <p>46.24</p> <p>58.44</p> <p>59.35 F1</p> <p>69.75</p> <p>93.97</p> <p>104.58</p> <p>105.58</p> <p>105.68</p> <p>SS06798 126.80</p>	<p>Upstream Manhole, Survey Begins</p> <p>Water Level, 5 %of cross sectional area</p> <p><b>Broken, from 08 to 03 o'clock, within 8 inches of joint: YES</b></p> <p><b>Crack Circumferential, from 07 to 10 o'clock, within 8 inches of joint: YES</b></p> <p><b>S1 Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start</b></p> <p>Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"</p> <p>Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"</p> <p><b>F1 Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish</b></p> <p><b>Roots Medium Barrell, from 03 to 05 o'clock, 10 %, within 8 inches of joint: YES</b></p> <p><b>Roots Fine Joint, from 02 to 04 o'clock, within 8 inches of joint: YES</b></p> <p><b>Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES</b></p> <p>Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"</p> <p><b>Roots Ball Barrell, from 12 to 12 o'clock, 90 %</b></p> <p>Downstream Manhole, Survey Ends</p>	<p>7.71 FT</p> <p>7.71 FT</p> <p>35.23 FT</p> <p>35.93 FT</p> <p>59.35 FT</p> <p>69.75 FT</p> <p>93.97 FT</p> <p>104.58 FT</p> <p>105.58 FT</p> <p>105.68 FT</p> <p>46.24 FT</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5131	5141	9	20	29	3	2.5	2.64



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GOTHIC AVE</b>	Date :	Pipe Segment Reference :	Section No : <b>12</b>
-------------------------------	-------------------------------	--------	--------------------------	---------------------------

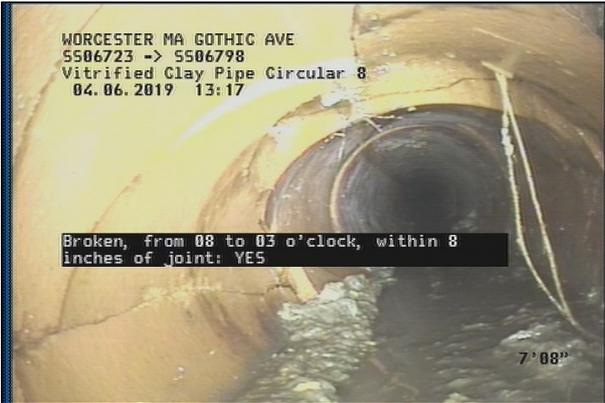


Photo:  
SS06723-SS06798\_04062019\_B\_7.7059\_142607\_A.JPG  
7.71FT, Broken, from 08 to 03 o'clock, within 8 inches of joint:  
YES



Photo:  
SS06723-SS06798\_04062019\_B\_7.7059\_142618\_B.JPG  
7.71FT, Broken, from 08 to 03 o'clock, within 8 inches of joint:  
YES



Photo:  
SS06723-SS06798\_04062019\_CC\_35.227\_142804\_A.JPG  
35.23FT, Crack Circumferential, from 07 to 10 o'clock, within 8 inches of joint: YES

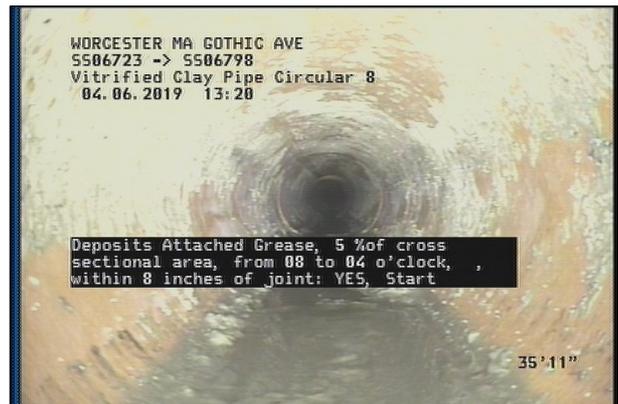


Photo:  
SS06723-SS06798\_04062019\_DAGS\_35.9275\_142824\_A.JPG  
35.93FT, Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GOTHIC AVE</b>	Date :	Pipe Segment Reference :	Section No : <b>12</b>
-------------------------------	-------------------------------	--------	--------------------------	---------------------------

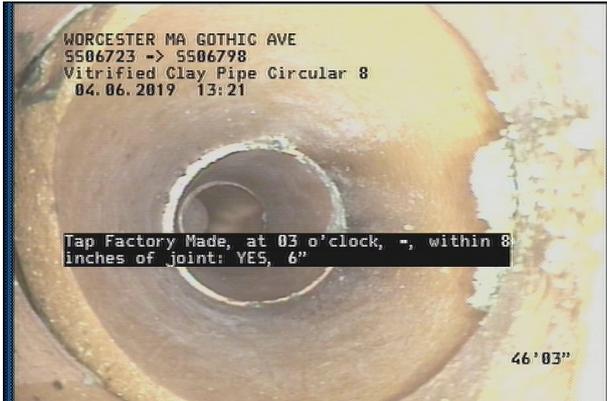


Photo:  
SS06723-SS06798\_04062019\_TF\_46.2354\_142918\_A.JPG  
46.24FT, Tap Factory Made, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS06723-SS06798\_04062019\_TF\_58.4448\_143017\_A.JPG  
58.44FT, Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"

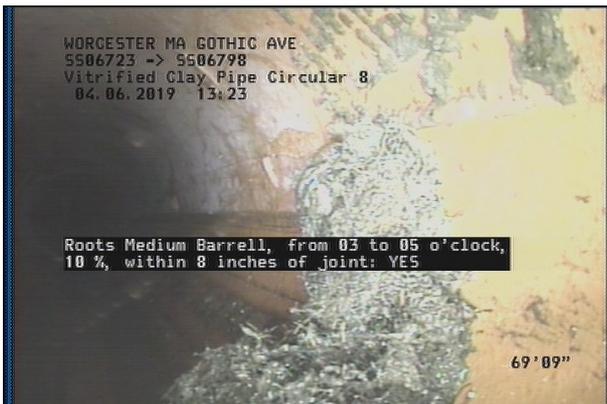


Photo:  
SS06723-SS06798\_04062019\_RMB\_69.7534\_143124\_A.JPG  
69.75FT, Roots Medium Barrell, from 03 to 05 o'clock, 10 %, within 8 inches of joint: YES

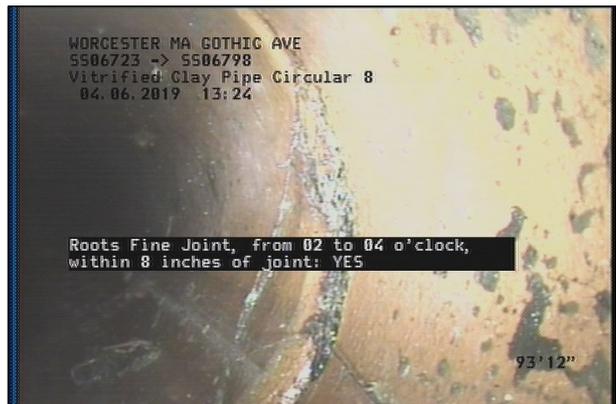


Photo:  
SS06723-SS06798\_04062019\_RFJ\_93.972\_143246\_A.JPG  
93.97FT, Roots Fine Joint, from 02 to 04 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GOTHIC AVE</b>	Date :	Pipe Segment Reference :	Section No : <b>12</b>
-------------------------------	-------------------------------	--------	--------------------------	---------------------------

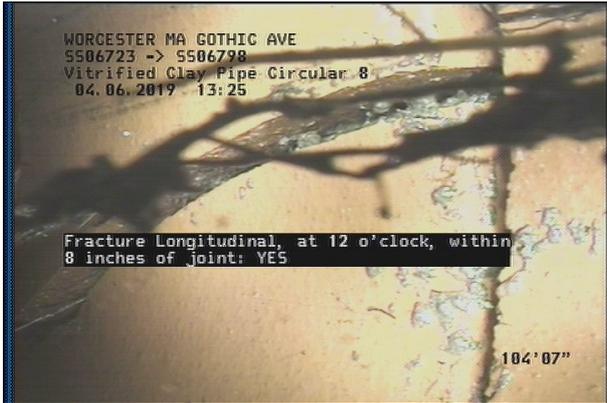


Photo:  
SS06723-SS06798\_04062019\_FL\_104.5801\_143349\_A.JPG  
104.58FT, Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES

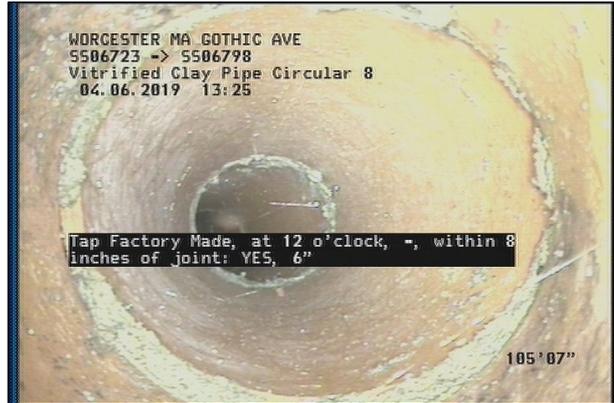


Photo:  
SS06723-SS06798\_04062019\_TF\_105.5808\_143408\_A.JPG  
105.58FT, Tap Factory Made, at 12 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS06723-SS06798\_04062019\_RBB\_105.6809\_143434\_A.JPG  
105.68FT, Roots Ball Barrell, from 12 to 12 o'clock, 90 %



Tel:  
Fax:  
E-mail:

## Inspection Report

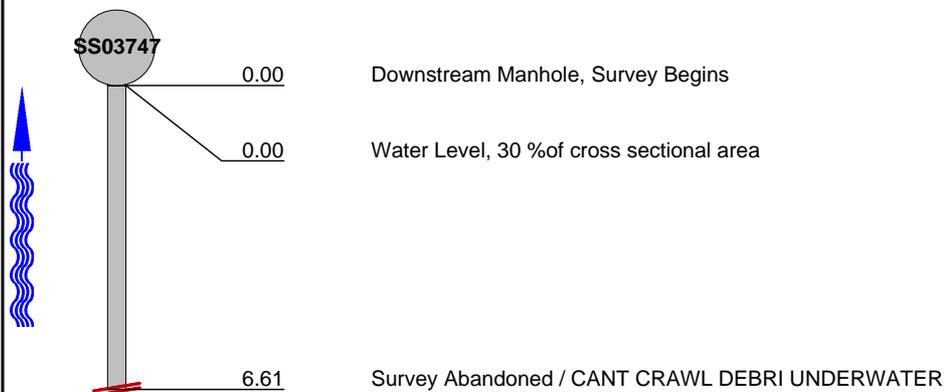
Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference	Section No. <b>1</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>CLARK ST</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS04508</b>
City <b>WORCESTER MA</b>	Drainage Area	Dowstream MH <b>SS03747</b>
Loc. details	Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Upstream</b>
Location Code <b>Easement/Right of way</b>	Length surveyed <b>6.61 ft</b>	Section Length <b>6.61 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length
Year Laid	Dia./Height <b>10 inch</b>
Year Rehabilitated	Material <b>Vitrified Clay Pipe</b>
Tape / Media No.	Lining Method

Add. Information :

**1:50**      **Position**                      **Observation**



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
<b>0000</b>	<b>0000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM17974</b>	Section No. <b>2</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>CLARK ST</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS17472</b>
City <b>WORCESTER MA</b>	Drainage Area	Dowstream MH <b>SS04508</b>
Loc. details	Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Upstream</b>
Location Code <b>Easement/Right of way</b>	Length surveyed <b>130.90 ft</b>	Section Length <b>130.90 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length
Year Laid	Dia./Height <b>10 inch</b>
Year Rehabilitated	Material <b>Vitrified Clay Pipe</b>
Tape / Media No.	Lining Method

Add. Information :

1:315 Position	Observation	
<p>SS04508</p> <p>0.00</p> <p>0.00</p> <p>8.61 <b>S1</b></p> <p>26.82</p> <p>34.73</p> <p>58.14 <b>F1</b></p> <p>62.15 <b>S2</b></p> <p>68.55 <b>F2</b></p> <p>130.90</p> <p>SS17472</p>	<p>Downstream Manhole, Survey Begins</p> <p>Water Level, 10 %of cross sectional area</p> <p>Deposits Attached Grease, 5 %of cross sectional area, from 07 to 05 o'clock, , within 8 inches of joint: YES, Start</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>Deposits Attached Grease, 5 %of cross sectional area, from 07 to 05 o'clock, , within 8 inches of joint: YES, Finish</p> <p>Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start</p> <p>Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish</p> <p>Upstream Manhole, Survey Ends</p>	<p>8.61 FT</p> <p>26.82 FT</p> <p>34.73 FT</p> <p>62.15 FT</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2200	2A00	4	22	26	2	2	2



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM17974</b>	Section No : <b>2</b>
-------------------------------	-----------------------------	--------	--	--------------------------

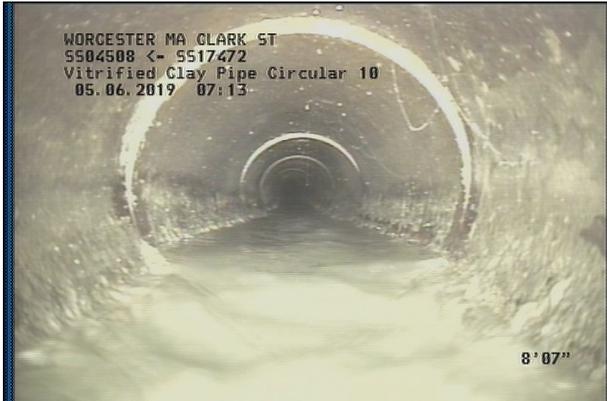


Photo:  
SS17472-SS04508\_05062019\_DAGS\_8.6066\_082208\_A.JPG  
8.61FT, Deposits Attached Grease, 5 %of cross sectional area, from 07 to 05 o'clock, , within 8 inches of joint: YES, Start

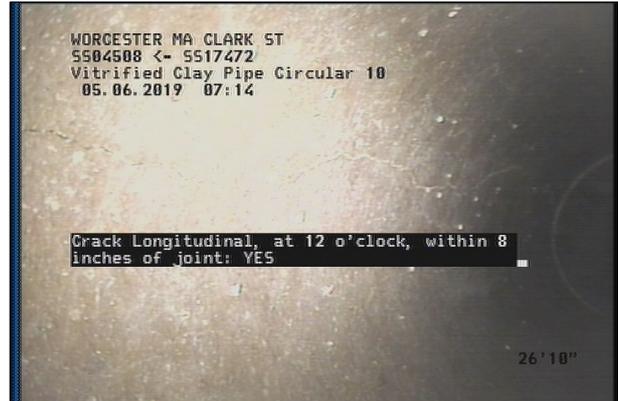


Photo:  
SS17472-SS04508\_05062019\_CL\_26.8205\_082310\_A.JPG  
26.82FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES

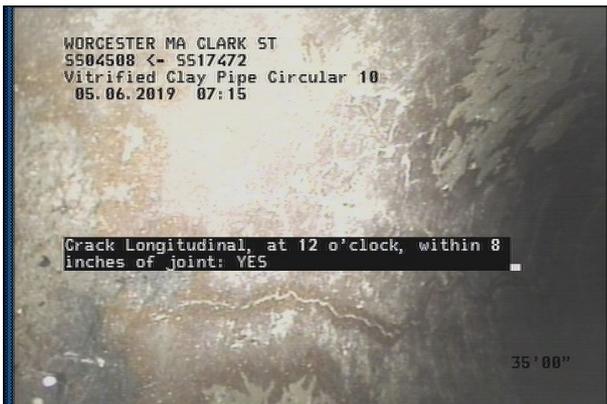


Photo:  
SS17472-SS04508\_05062019\_CL\_34.7266\_082407\_A.JPG  
34.73FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES

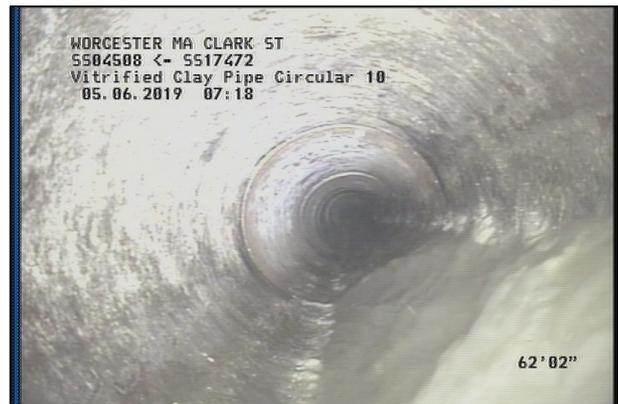


Photo:  
SS17472-SS04508\_05062019\_DAE\_62.1476\_082614\_A.JPG  
62.15FT, Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM07741</b>	Section No. <b>3</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>CLARK ST WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 175.53 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS04507 SS17472 Upstream 175.53 ft</b>
--	--	--	--	--	---

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>10 inch Vitrified Clay Pipe</b>
--	----------------------------	--	--

Add. Information :

1:435 Position	Observation	
<p>SS17472</p> <p>0.00</p> <p>0.00</p> <p>8.61</p> <p>13.71</p> <p>56.54</p> <p>99.88</p> <p>131.30</p> <p>138.91</p> <p>165.33</p> <p>175.53</p> <p>175.53</p> <p>175.53</p> <p>SS04507</p>	<p>Downstream Manhole, Survey Begins</p> <p>Water Level, 10 %of cross sectional area</p> <p><b>S1</b> Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start</p> <p>Roots Fine Joint, at 12 o'clock, within 8 inches of joint: YES</p> <p>Roots Fine Joint, from 10 to 12 o'clock, within 8 inches of joint: YES</p> <p>Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES</p> <p>Roots Medium Joint, from 09 to 02 o'clock, 10 %, within 8 inches of joint: YESR</p> <p><b>S2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start</p> <p>Crack Circumferential, from 09 to 11 o'clock, within 8 inches of joint: YES</p> <p><b>F1</b> Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish</p> <p><b>F2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Finish</p> <p>Upstream Manhole, Survey Ends</p>	<p>13.71 FT</p> <p>56.54 FT</p> <p>99.88 FT</p> <p>131.3 FT</p> <p>138.91 FT</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
1100	312F	1	79	80	1	1.8	1.78



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM07741</b>	Section No : <b>3</b>
-------------------------------	-----------------------------	--------	--	--------------------------

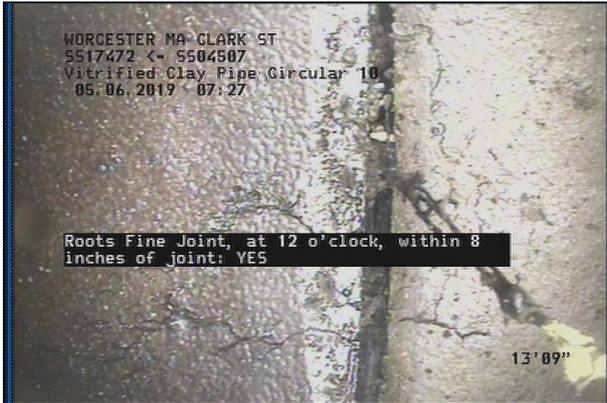


Photo:  
SS04507-SS17472\_05062019\_RFJ\_13.7105\_083516\_A.JPG  
13.71FT, Roots Fine Joint, at 12 o'clock, within 8 inches of joint: YES

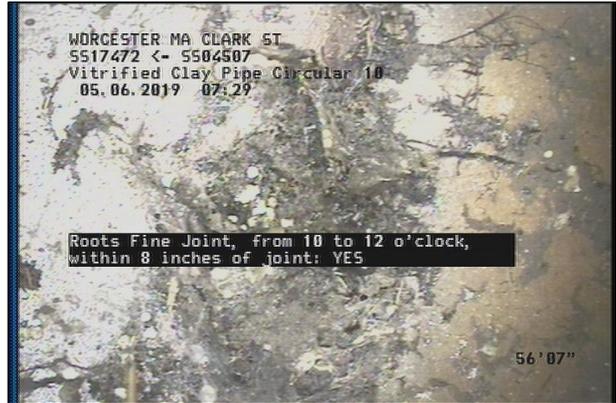


Photo:  
SS04507-SS17472\_05062019\_RFJ\_56.5433\_083720\_A.JPG  
56.54FT, Roots Fine Joint, from 10 to 12 o'clock, within 8 inches of joint: YES

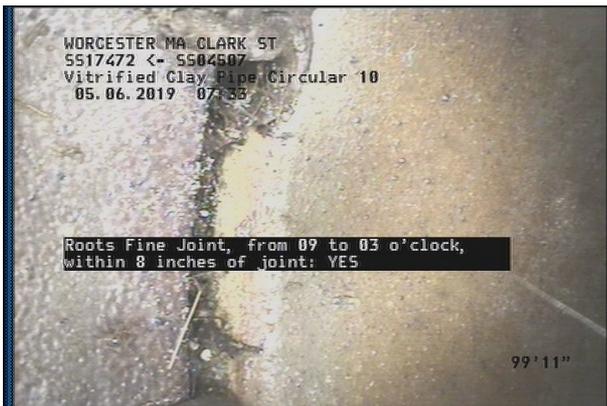


Photo:  
SS04507-SS17472\_05062019\_RFJ\_99.8765\_084126\_A.JPG  
99.88FT, Roots Fine Joint, from 09 to 03 o'clock, within 8 inches of joint: YES

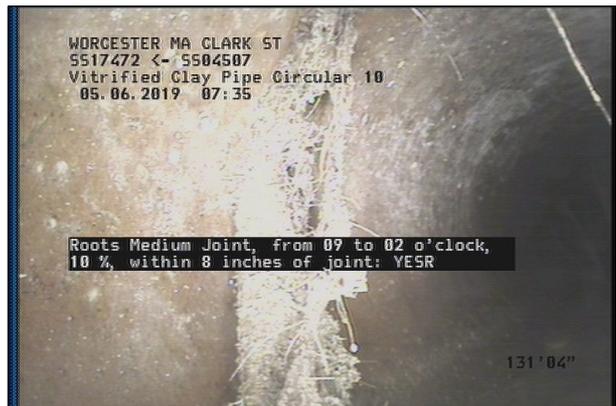


Photo:  
SS04507-SS17472\_05062019\_RMJ\_131.3005\_084338\_A.JPG  
131.3FT, Roots Medium Joint, from 09 to 02 o'clock, 10 %, within 8 inches of joint: YESR



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM07741</b>	Section No : <b>3</b>
-------------------------------	-----------------------------	--------	--	--------------------------

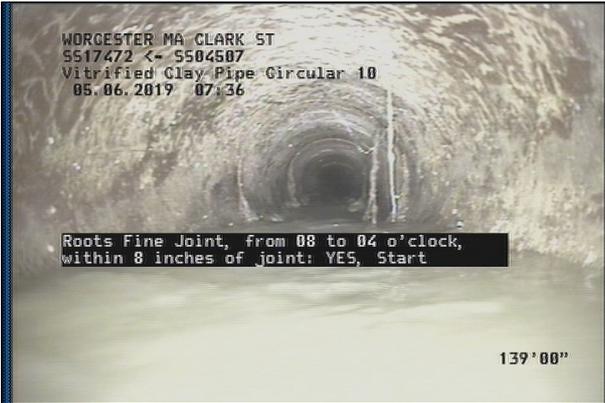


Photo:  
SS04507-SS17472\_05062019\_RFJ\_138.9064\_084415\_A.JPG  
138.91FT, Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start

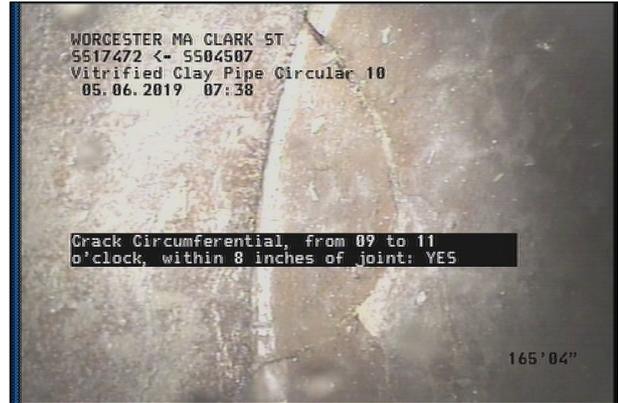


Photo:  
SS04507-SS17472\_05062019\_CC\_165.3266\_084707\_A.JPG  
165.33FT, Crack Circumferential, from 09 to 11 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM07740</b>	Section No. <b>4</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>123 CLARK ST</b>	City <b>WORCESTER MA</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS02705</b>
Loc. details	Location Code <b>Easement/Right of way</b>	Drainage Area	Dowstream MH <b>SS04507</b>
		Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Upstream</b>
		Length surveyed <b>187.84 ft</b>	Section Length <b>187.84 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Year Laid	Year Rehabilitated	Tape / Media No.	Joint Length	Dia./Height <b>10 inch</b>	Material <b>Vitrified Clay Pipe</b>	Lining Method
---	-----------	--------------------	------------------	--------------	-------------------------------	--	---------------

Add. Information :

1:465 Position	Observation	
	<p>Downstream Manhole, Survey Begins</p> <p>Water Level, 10 %of cross sectional area</p> <p><b>S1</b> Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start</p> <p><b>S2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start</p> <p><b>F1</b> Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish</p> <p><b>F2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Finish</p> <p>Survey Abandoned / CANT CRAWL PAST DEBRI UNDER WATER</p>	<p>5.8 FT</p> <p>11.11 FT</p> <p>121.49 FT</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	412F	0	111	111	0	1.54	1.54



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM07740</b>	Section No : <b>4</b>
-------------------------------	-----------------------------	--------	--	--------------------------

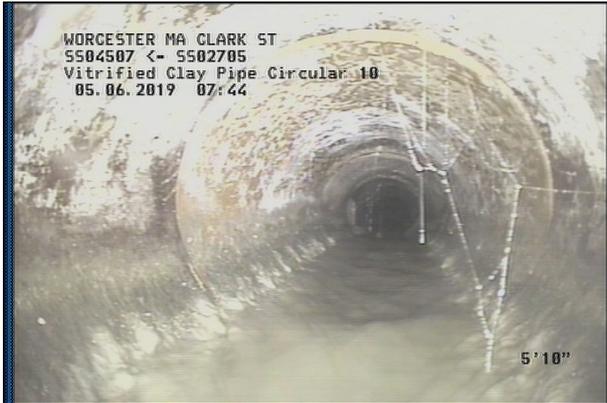


Photo:  
SS02705-SS04507\_05062019\_DAE\_5.8044\_085215\_A.JPG  
5.8FT, Deposits Attached Encrustation, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start

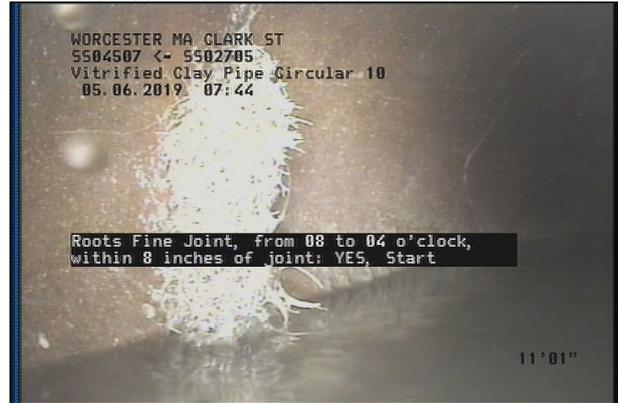


Photo:  
SS02705-SS04507\_05062019\_RFJ\_11.1085\_085302\_A.JPG  
11.11FT, Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start

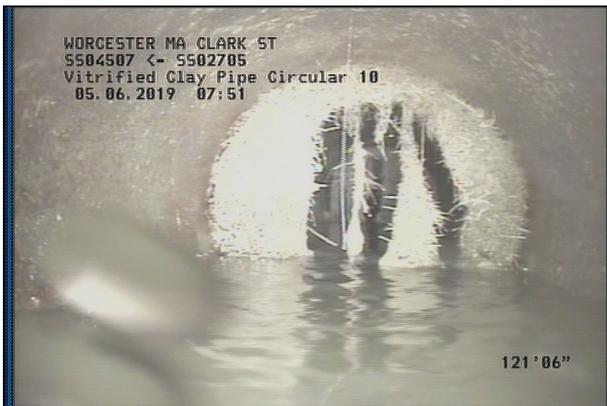


Photo:  
SS02705-SS04507\_05062019\_RMB\_121.493\_085949\_A.JPG  
121.49FT, Roots Medium Barrell, from 07 to 05 o'clock, 40 %, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM14287</b>	Section No. <b>5</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>CLARK ST</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS04508</b>
City <b>WORCESTER MA</b>	Drainage Area	Dowstream MH <b>SS03747</b>
Loc. details	Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Downstream</b>
Location Code <b>Easement/Right of way</b>	Length surveyed <b>218.37 ft</b>	Section Length <b>218.37 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length <b>10 inch</b>
Year Laid	Dia./Height <b>Vitrified Clay Pipe</b>
Year Rehabilitated	Material
Tape / Media No.	Lining Method

Add. Information :

1:525 Position	Observation						
<p>SS04508</p> <p>0.00</p> <p>0.00</p> <p>46.24</p> <p>50.94</p> <p>90.87</p> <p>92.67</p> <p>92.67</p> <p>98.18</p> <p>98.18</p> <p>151.07</p> <p>151.62</p> <p>218.37</p> <p>SS03747</p>	<p>Upstream Manhole, Survey Begins</p> <p>Water Level, 5 %of cross sectional area</p> <p>General Observation / WIRE</p> <p>Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES</p> <p>Fracture Multiple, from 10 to 02 o'clock, within 8 inches of joint: YES</p> <p>Tap Break-In Intruding, at 12 o'clock, -, -, within 8 inches of joint: YES, 6", 1"</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>Crack Longitudinal, at 09 o'clock, within 8 inches of joint: YES</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>Tap Break-In, at 12 o'clock, -, within 8 inches of joint: YES, 6"</p> <p>Downstream Manhole, Survey Ends</p>	<p>WORCESTER MA CLARK ST SS04508 -&gt; SS03747 Vitrified Clay Pipe Circular 18 05.06.2019 08:37</p> <p>General Observation, WIRE</p> <p>46'03"</p> <p>46.24 FT</p> <p>WORCESTER MA CLARK ST SS04508 -&gt; SS03747 Vitrified Clay Pipe Circular 18 05.06.2019 08:38</p> <p>Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES</p> <p>50'11"</p> <p>50.94 FT</p> <p>WORCESTER MA CLARK ST SS04508 -&gt; SS03747 Vitrified Clay Pipe Circular 18 05.06.2019 08:40</p> <p>Fracture Multiple, from 10 to 02 o'clock, within 8 inches of joint: YES</p> <p>90'10"</p> <p>90.87 FT</p> <p>WORCESTER MA CLARK ST SS04508 -&gt; SS03747 Vitrified Clay Pipe Circular 18 05.06.2019 08:41</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>92'08"</p> <p>92.67 FT</p> <p>WORCESTER MA CLARK ST SS04508 -&gt; SS03747 Vitrified Clay Pipe Circular 18 05.06.2019 08:41</p> <p>Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES</p> <p>92'08"</p> <p>92.67 FT</p>					
QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
4131	2200	13	4	17	2.6	2	2.43



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM14287</b>	Section No : <b>5</b>
-------------------------------	-----------------------------	--------	--	--------------------------



Photo:  
SS04508-SS03747\_05062019\_MGO\_46.2354\_094556\_A.JPG  
46.24FT, General Observation

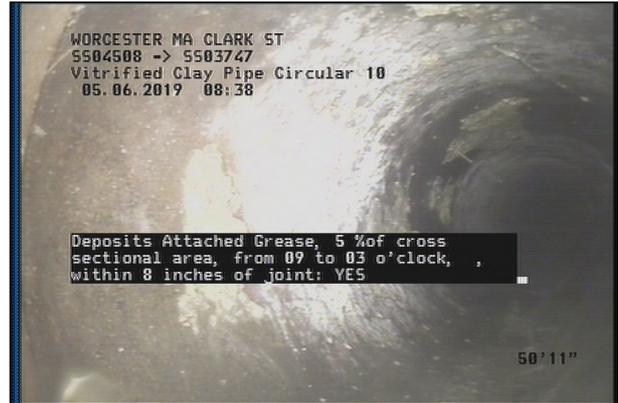


Photo:  
SS04508-SS03747\_05062019\_DAGS\_50.939\_094632\_A.JPG  
50.94FT, Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES

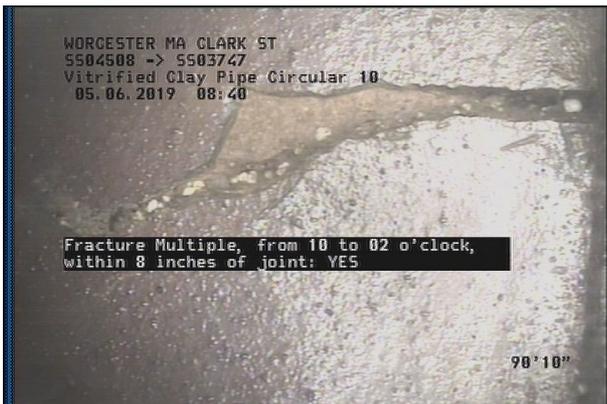


Photo:  
SS04508-SS03747\_05062019\_FM\_90.8696\_094838\_A.JPG  
90.87FT, Fracture Multiple, from 10 to 02 o'clock, within 8 inches of joint: YES

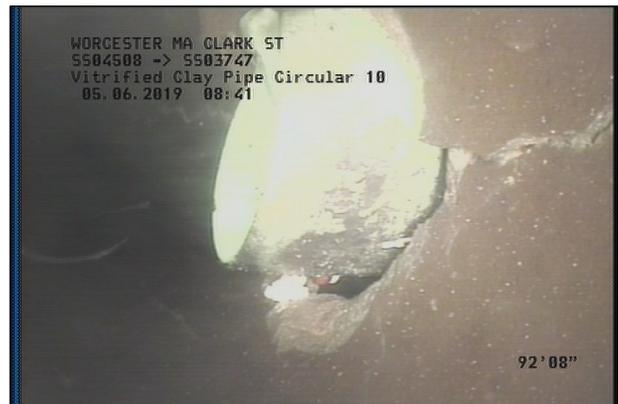


Photo:  
SS04508-SS03747\_05062019\_TBI\_92.671\_094912\_A.JPG  
92.67FT, Tap Break-In Intruding, at 12 o'clock, -, -, within 8 inches of joint: YES, 6", 1"



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM14287</b>	Section No : <b>5</b>
-------------------------------	-----------------------------	--------	--	--------------------------

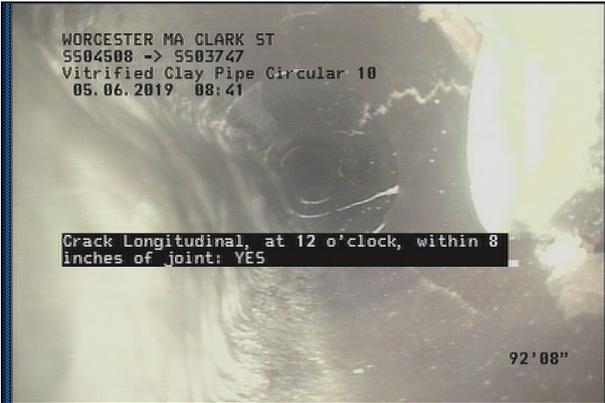


Photo:  
SS04508-SS03747\_05062019\_CL\_92.671\_094929\_A.JPG  
92.67FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES

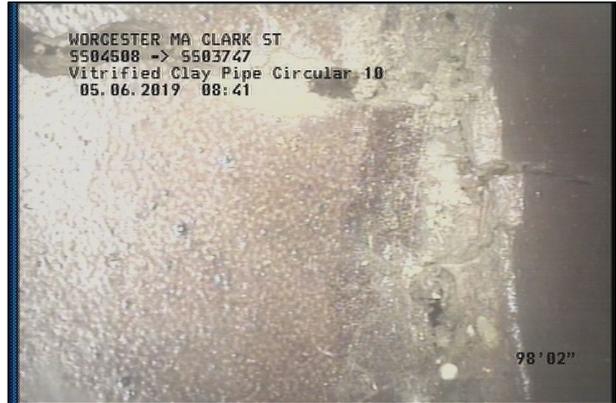


Photo:  
SS04508-SS03747\_05062019\_FL\_98.1752\_095005\_A.JPG  
98.18FT, Fracture Longitudinal, at 12 o'clock, within 8 inches of joint: YES

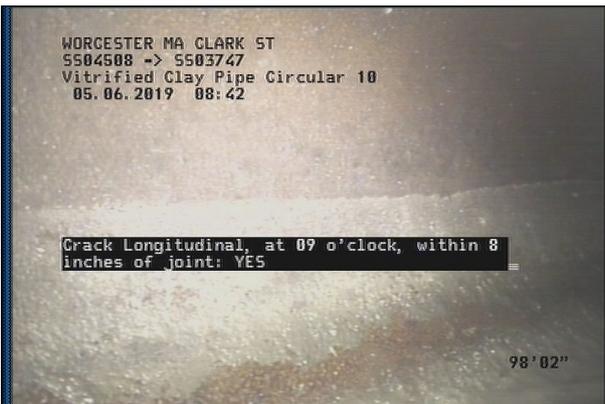


Photo:  
SS04508-SS03747\_05062019\_CL\_98.1752\_095027\_A.JPG  
98.18FT, Crack Longitudinal, at 09 o'clock, within 8 inches of joint: YES

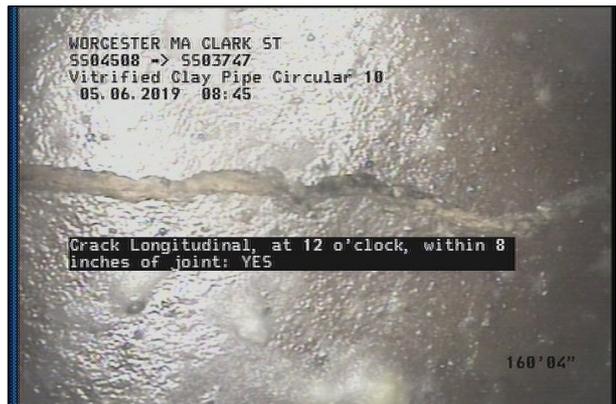


Photo:  
SS04508-SS03747\_05062019\_CL\_160.3228\_095339\_A.JPG  
151.07FT, Crack Longitudinal, at 12 o'clock, within 8 inches of joint: YES



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>CLARK ST</b>	Date :	Pipe Segment Reference : <b>SM14287</b>	Section No : <b>5</b>
-------------------------------	-----------------------------	--------	--	--------------------------

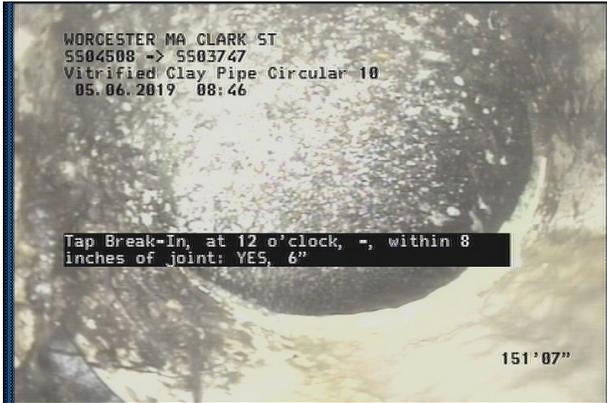


Photo:  
SS04508-SS03747\_05062019\_TB\_151.6161\_095446\_A.JPG  
151.62FT, Tap Break-In, at 12 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM16566</b>	Section No. <b>6</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GARRISON AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 72.26 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS17149 SS14566 Downstream 72.26 ft</b>
--	--	--	---	--	--

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>	Joint Length Dia./Height Material Lining Method	<b>8 inch Vitrified Clay Pipe</b>
--	----------------------------	--	---------------------------------------

Add. Information :

1:180 Position	Observation	
	<p>Upstream Manhole, Survey Begins</p> <p>Water Level, 5 %of cross sectional area</p> <p><b>S1</b> Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Start</p> <p>Crack Spiral, from 08 to 12 o'clock, within 8 inches of joint: YES</p> <p>Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES 6"</p> <p>Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES 6"</p> <p>Tap Break-In, at 09 o'clock, -, within 8 inches of joint: YES, 6"</p> <p>Tap Break-In, at 03 o'clock, -, within 8 inches of joint: YES, 6"</p> <p><b>F1</b> Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Finish</p> <p>Downstream Manhole, Survey Ends</p>	<p>5 FT</p> <p>21.12 FT</p> <p>22.32 FT</p> <p>24.52 FT</p> <p>51.54 FT</p>

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2100	2B00	2	26	28	2	2	2



Tel:  
Fax:  
E-mail:

## Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM16566</b>	Section No : <b>6</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS17149-SS14566\_05062019\_DAGS\_5.0038\_105551\_A.JPG  
5FT, Deposits Attached Grease, 5 %of cross sectional area, from 09 to 03 o'clock, , within 8 inches of joint: YES, Start

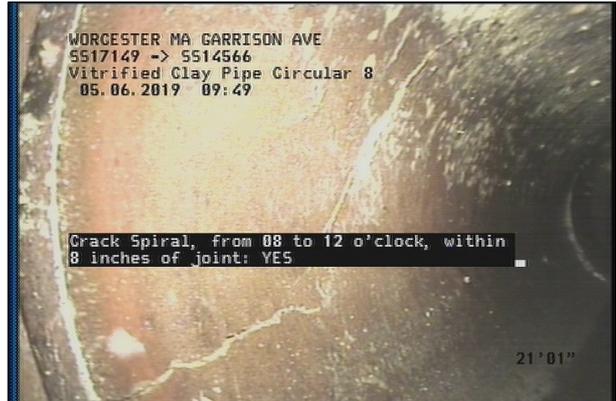


Photo:  
SS17149-SS14566\_05062019\_CS\_21.1162\_105717\_A.JPG  
21.12FT, Crack Spiral, from 08 to 12 o'clock, within 8 inches of joint: YES

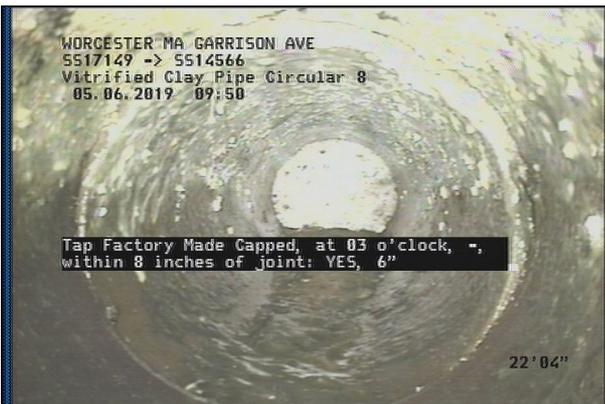


Photo:  
SS17149-SS14566\_05062019\_TFC\_22.3171\_105910\_A.JPG  
22.32FT, Tap Factory Made Capped, at 03 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS17149-SS14566\_05062019\_TFC\_24.5188\_105938\_A.JPG  
24.52FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM16566</b>	Section No : <b>6</b>
-------------------------------	---------------------------------	--------	--	--------------------------

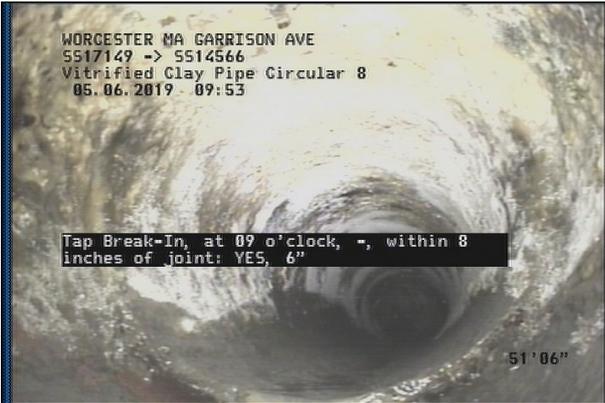


Photo:  
SS17149-SS14566\_05062019\_TB\_51.5395\_110139\_A.JPG  
51.54FT, Tap Break-In, at 09 o'clock, -, within 8 inches of joint:  
YES, 6"

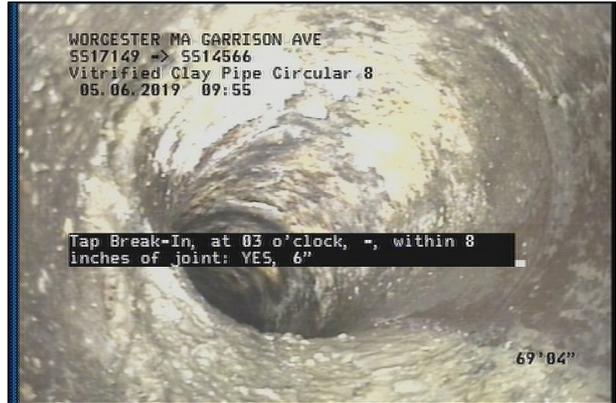


Photo:  
SS17149-SS14566\_05062019\_TB\_69.3531\_110312\_A.JPG  
69.35FT, Tap Break-In, at 03 o'clock, -, within 8 inches of joint:  
YES, 6"



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM12756</b>	Section No. <b>7</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>123 GARRISON AVE</b> City <b>WORCESTER MA</b> Loc. details Location Code <b>Easement/Right of way</b>	Use of Sewer <b>Sanitary</b> Drainage Area Flow Control <b>Not Controlled</b> Length surveyed <b>18.41 ft</b>	Upstream MH <b>SS02759</b> Dowstream MH <b>SS03746</b> Dir. of Survey <b>Downstream</b> Section Length <b>18.41 ft</b>
---	---	---

Purpose of Survey <b>Maintenance Related</b> Year Laid Year Rehabilitated Tape / Media No.	Joint Length <b>10 inch</b> Dia./Height <b>Vitrified Clay Pipe</b> Material Lining Method
--	--

Add. Information :

1:50	Position	Observation					
	0.00	Upstream Manhole, Survey Begins					
	0.00	Water Level, 5 %of cross sectional area					
	5.20	<b>S1</b> Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start					
	6.71	<b>S2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start					
	18.41	<b>F1</b> Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish					
	18.41	<b>F2</b> Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Finish					
	18.41	Downstream Manhole, Survey Ends					
QSR <b>0000</b>	QMR <b>2312</b>	SPR <b>0</b>	MPR <b>8</b>	OPR <b>8</b>	SPRI <b>0</b>	MPRI <b>1.6</b>	OPRI <b>1.6</b>



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM12756</b>	Section No : <b>7</b>
-------------------------------	---------------------------------	--------	--	--------------------------

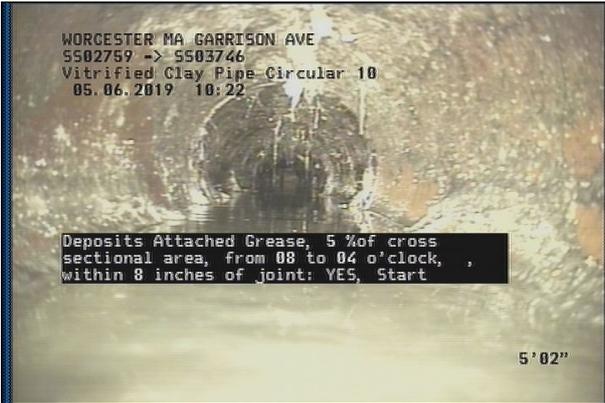


Photo:  
SS02759-SS03746\_05062019\_DAGS\_5.204\_113058\_A.JPG  
5.2FT, Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, within 8 inches of joint: YES, Start

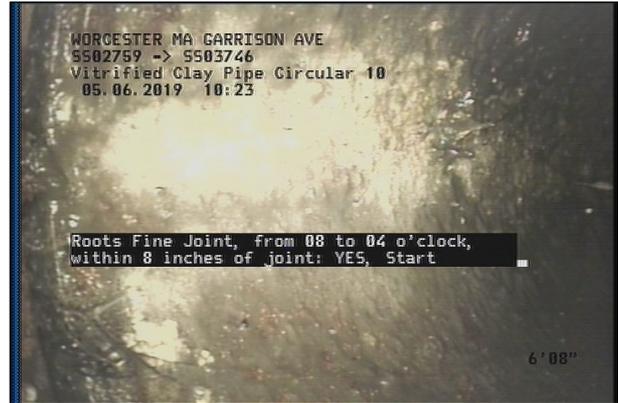


Photo:  
SS02759-SS03746\_05062019\_RFJ\_6.7051\_113141\_A.JPG  
6.71FT, Roots Fine Joint, from 08 to 04 o'clock, within 8 inches of joint: YES, Start



Tel:  
Fax:  
E-mail:

# Inspection Report

Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference <b>SM00463</b>	Section No. <b>8</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street123 City Loc. details Location Code	<b>GARRISON AVE WORCESTER MA Easement/Right of way</b>	Use of Sewer Drainage Area Flow Control Length surveyed	<b>Sanitary Not Controlled 77.66 ft</b>	Upstream MH Downstream MH Dir. of Survey Section Length	<b>SS02758 SS02759 Upstream 77.66 ft</b>
--	--	--	---	--	--

Purpose of Survey Year Laid Year Rehabilitated Tape / Media No.	<b>Maintenance Related</b>  Joint Length Dia./Height Material Lining Method
--	--

Add. Information :

1:195	Position	Observation	
	0.00	Downstream Manhole, Survey Begins	
	0.00	Water Level, 5 %of cross sectional area	
	6.30	<b>S1</b> Roots Medium Joint, from 08 to 04 o'clock, 20 %, within 8 inches of joint YESR, Start	
	22.42	<b>S2</b> Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start	
	24.12	Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"	
	29.42	<b>Roots Ball Barrell, from 12 to 12 o'clock, 95 % / ALSO GREASE IN ROOT BALL</b>	
	77.66	<b>F1</b> Roots Medium Joint, from 08 to 04 o'clock, 20 %, within 8 inches of joint YESR, Finish	
	77.66	<b>F2</b> Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Finish	
	77.66	Survey Abandoned / REVERSEAL TO SPOT THAT CAMERA MADE DOWN STREAM	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	513B	0	69	69	0	2.65	2.65



Tel:  
Fax:  
E-mail:

### Inspection photos

City : <b>WORCESTER MA</b>	Street : <b>GARRISON AVE</b>	Date :	Pipe Segment Reference : <b>SM00463</b>	Section No : <b>8</b>
-------------------------------	---------------------------------	--------	--	--------------------------



Photo:  
SS02758-SS02759\_05062019\_RMJ\_6.3048\_114104\_A.JPG  
6.3FT, Roots Medium Joint, from 08 to 04 o'clock, 20 %, within 8 inches of joint: YESR, Start

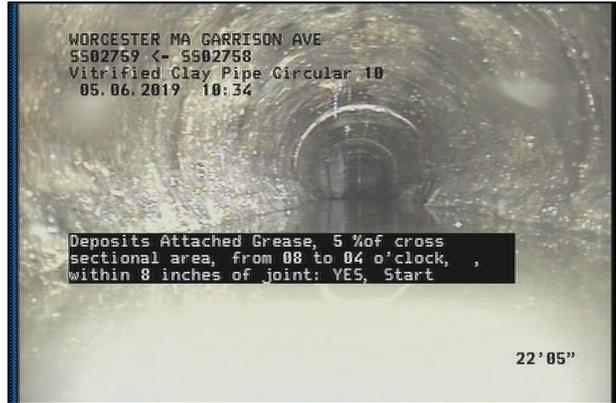


Photo:  
SS02758-SS02759\_05062019\_DAGS\_22.4172\_114220\_A.JPG  
22.42FT, Deposits Attached Grease, 5 %of cross sectional area, from 08 to 04 o'clock, , within 8 inches of joint: YES, Start

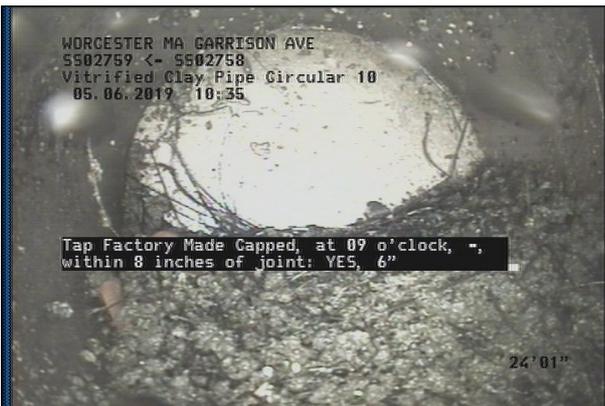


Photo:  
SS02758-SS02759\_05062019\_TFC\_24.1185\_114331\_A.JPG  
24.12FT, Tap Factory Made Capped, at 09 o'clock, -, within 8 inches of joint: YES, 6"



Photo:  
SS02758-SS02759\_05062019\_RBB\_29.4225\_114457\_A.JPG  
29.42FT, Roots Ball Barrell, from 12 to 12 o'clock, 95 %



Tel:  
Fax:  
E-mail:

## Inspection Report

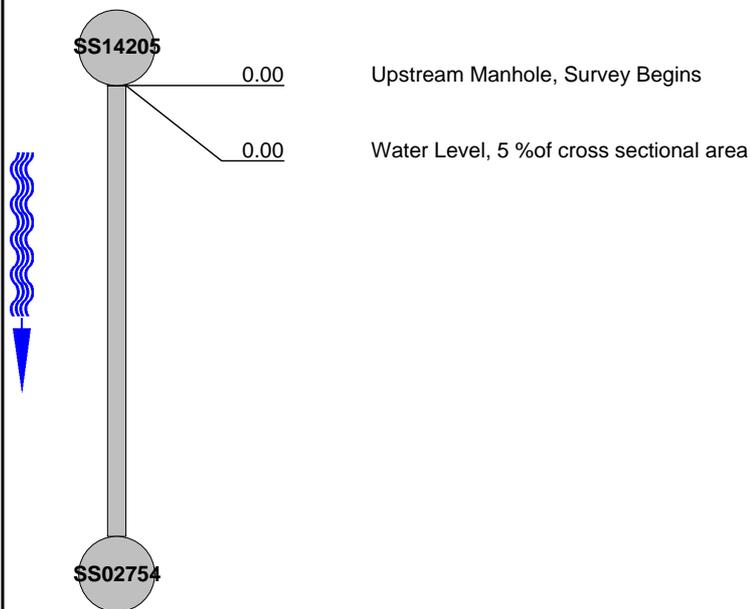
Date <b>6/5/2019</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>BRIAN GROM</b>	Pipe Segment Reference	Section No. <b>9</b>
Certificate No. <b>U-0218030700746</b>	Survey Customer	System Owner	Date Cleaned <b>6/5/2019</b>	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>123 QUINAPOXET LN</b>	City <b>WORCESTER MA</b>	Use of Sewer <b>Sanitary</b>	Upstream MH <b>SS14205</b>
Loc. details	Location Code <b>Easement/Right of way</b>	Drainage Area	Dowstream MH <b>SS02754</b>
		Flow Control <b>Not Controlled</b>	Dir. of Survey <b>Downstream</b>
		Length surveyed <b>9.81 ft</b>	Section Length <b>9.81 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length
Year Laid	Dia./Height <b>8 inch</b>
Year Rehabilitated	Material <b>Vitrified Clay Pipe</b>
Tape / Media No.	Lining Method

Add. Information :

**1:50**      **Position**                      **Observation**



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
<b>0000</b>	<b>0000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>



## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>4</b>	PSR: <b>2853</b>
Total Length of Section:	Survey Customer:	Job #:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

Street: <b>Indian Hill Rd Ease.</b>	Flow Control:	Start MH: <b>SS15404</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS11620</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.16.14</b>	Total length surveyed: <b>290 ft</b>

purpose of Survey: <b>F Routine Assessment</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:

Location details:

1:650	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	3.30	RFJ	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	M 1
	12.60	CM	Crack Multiple, from 11 to 12 o'clock, within 8 inch: YES	S 3
	16.10	CS	Crack Spiral, from 08 to 10 o'clock, within 8 inch: YES	S 2
	22.10	DAGS	Deposits Attached Grease, 5 of cross sectional area, at 02 o'clock, within 8 inch: YES	M 2
	24.40	RFJ	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	M 1
	27.80	JSM	Joint Separated Medium	S 1
	30.90	CL	Crack Longitudinal, at 11 o'clock, within 8 inch: YES	S 2
	101.70	TB	Tap Break-In, at 12 o'clock, 6, within 8 inch: NO	
	158.90	IR	Infiltration Runner, at 09 o'clock, within 8 inch: YES	M 4
	173.80	CM	Crack Multiple, from 11 to 05 o'clock, within 8 inch: YES	S 3
	214.90	CM	Crack Multiple, from 07 to 05 o'clock, within 8 inch: YES	S 3
	237.90	TB	Tap Break-In, at 11 o'clock, 6, within 8 inch: NO, Remark: roots in lateral	
	239.30	CS	Crack Spiral, from 08 to 09 o'clock, within 8 inch: YES	S 2
	239.30	RFJ	Roots Fine Joint, from 03 to 05 o'clock, within 8 inch: YES	M 1
	269.80	CL	Crack Longitudinal, at 01 o'clock, within 8 inch: NO	S 2
	285.10	CS	Crack Spiral, from 01 to 04 o'clock, within 8 inch: YES	S 2
	290.00	AMH	Downstream Manhole, Survey Ends	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3325	4121	20	9	29	2.22	1.8	2.07



## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>5</b>	PSR: <b>2827</b>
Total Length of Section:	Survey Customer:	Job #:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

Street: <b>Indian Hill Rd Ease.</b>	Flow Control:	Start MH: <b>SS11620</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS11619</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.16.14</b>	Total length surveyed: <b>131 ft</b>

purpose of Survey: <b>F Routine Assessment</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
 Location details:

1:186	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	8.20	CM	Crack Multiple, from 07 to 04 o'clock, within 8 inch: YES	S 3
	17.20	CL	Crack Longitudinal, at 10 o'clock, within 8 inch: YES	S 2
	23.50	CS	Crack Spiral, from 09 to 10 o'clock, within 8 inch: YES	S 2
	26.20	CM	Crack Multiple, from 11 to 03 o'clock, within 8 inch: YES	S 3
	29.20	CS	Crack Spiral, from 09 to 10 o'clock, within 8 inch: YES	S 2
	32.10	CS	Crack Spiral, from 11 to 01 o'clock, within 8 inch: YES	S 2
	35.50	CL	Crack Longitudinal, at 09 o'clock, within 8 inch: YES	S 2
	38.50	CS	Crack Spiral, from 03 to 04 o'clock, within 8 inch: YES	S 2
	41.70	CC	Crack Circumferential, from 11 to 01 o'clock, within 8 inch: YES	S 1
	44.70	CS	Crack Spiral, from 09 to 11 o'clock, within 8 inch: YES	S 2
	47.50	CS	Crack Spiral, from 09 to 12 o'clock, within 8 inch: YES	S 2
	47.50	RFJ	Roots Fine Joint, from 12 to 12 o'clock, within 8 inch: YES	M 1
	56.50	CM	Crack Multiple, from 12 to 12 o'clock, within 8 inch: YES	S 3
	62.60	CS	Crack Spiral, from 09 to 12 o'clock, within 8 inch: YES	S 2
	65.80	CS	Crack Spiral, from 01 to 03 o'clock, within 8 inch: YES	S 2
	68.50	CL	Crack Longitudinal, at 10 o'clock, within 8 inch: YES	S 2
	75.20	TB	Tap Break-In, at 10 o'clock, 6, within 8 inch: YES	
	77.80	RFJ	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	M 1
	80.70	CS	Crack Spiral, from 01 to 02 o'clock, within 8 inch: YES	S 2



## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>5</b>	PSR: <b>2827</b>
Total Pipe Length:	Survey Customer:	System Owner:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

1:186	position	code	observation	grade
	<u>84.20</u>	CS	Crack Spiral, from 01 to 03 o'clock, within 8 inch: YES	S 2
	<u>96.30</u>	CL	Crack Longitudinal, at 10 o'clock, within 8 inch: YES	S 2
	<u>99.50</u>	CS	Crack Spiral, from 03 to 05 o'clock, within 8 inch: YES	S 2
	<u>100.10</u>	H	Hole, at 10 o'clock, within 8 inch: NO	S 5
	<u>102.30</u>	CL	Crack Longitudinal, at 02 o'clock, within 8 inch: YES	S 2
	<u>105.70</u>	CS	Crack Spiral, from 08 to 09 o'clock, within 8 inch: YES	S 2
	<u>110.90</u>	RFJ	Roots Fine Joint, from 12 to 12 o'clock, within 8 inch: YES	M 1
	<u>117.20</u>	RFJ	Roots Fine Joint, from 12 to 12 o'clock, within 8 inch: YES	M 1
	<u>117.20</u>	CS	Crack Spiral, from 02 to 05 o'clock, within 8 inch: YES	S 2
	<u>125.90</u>	RBJ	Roots Ball Joint, at 04 o'clock, 5 %, within 8 inch: YES	M 4
	<u>125.90</u>	RBJ	Roots Ball Joint, at 08 o'clock, 5 %, within 8 inch: NO	M 4
	<u>128.70</u>	CC	Crack Circumferential, from 12 to 12 o'clock, within 8 inch: YES	S 1
	<u>131.00</u>	AMH	Downstream Manhole, Survey Ends	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
5133	4214	52	12	64	2.17	2	2.13



## Inspection report

Date: <b>06/18/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>P.FERREIRA</b>	section number: <b>3</b>	PSR: <b>47276</b>
Total Length of Section:	Survey Customer: <b>WESTON SAMPSON</b>	Job #: <b>WEST05-28</b>	Clean Date: <b>6.18.2014</b>	Pre-Cleaned: <b>H Heavy Cleaning</b>	rate:

Street: <b>INDIAN HILL ROAD</b>	Flow Control: <b>N Not Controlled</b>	Start MH: <b>SS09172</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS09171</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-061814-1</b>	Total length surveyed: <b>28 ft</b>

purpose of Survey: <b>A Maintenance Related</b>	Shape/Size: <b>C Circular 10/10</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:

1:75	position	code	observation	grade
	0.00	AMH	Downstream Manhole, Survey Begins	
	7.90	CS	Crack Spiral, from 09 to 11 o'clock, within 8 inch: YES	S 2
	7.90	CC	Crack Circumferential, from 07 to 08 o'clock, within 8 inch: YES	S 1
	7.90	JOM	Joint Offset Medium	S 1
	13.40	CC	Crack Circumferential, from 07 to 11 o'clock, within 8 inch: YES	S 1
	15.80	S1 CM	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, start	S 3
	18.20	CL	Crack Longitudinal, at 06 o'clock, within 8 inch: YES	S 2
	22.80	F1 CM	Crack Multiple, from 08 to 04 o'clock, within 8 inch: YES, end	S 3
	25.90	CC	Crack Circumferential, from 08 to 04 o'clock, within 8 inch: YES	S 1
	28.00	AMH	Upstream Manhole, Survey Begins	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3222	0000	14	0	14	1.75	0	1.75



## Inspection report

Date: <b>06/18/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>P.FERREIRA</b>	section number: <b>2</b>	PSR: <b>32627</b>
Total Length of Section:	Survey Customer: <b>WESTON SAMPSON</b>	Job #: <b>WEST05-28</b>	Clean Date: <b>6.18.2014</b>	Pre-Cleaned: <b>H Heavy Cleaning</b>	rate:

Street: <b>INDIAN HILL ROAD</b>	Flow Control: <b>N Not Controlled</b>	Start MH: <b>SS09171</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS11622</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-061814-1</b>	Total length surveyed: <b>173 ft</b>

purpose of Survey: <b>A Maintenance Related</b>	Shape/Size: <b>C Circular 10/10</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:

1:279	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	0.90	S1 RFJ	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, start	M 1
	9.40	JSM	Joint Separated Medium	S 1
	26.00	ID	Infiltration Dripper, from 09 to 10 o'clock, within 8 inch: YES	M 3
	30.30	JOM	Joint Offset Medium	S 1
	61.00	F1 RFJ	Roots Fine Joint, from 08 to 04 o'clock, within 8 inch: YES, end	M 1
	88.50	JSM	Joint Separated Medium	S 1
	98.00	DAGS	Deposits Attached Grease, 5 % of cross sectional area, at 01 o'clock, within 8 inch: YES	M 2
	98.00	DAGS	Deposits Attached Grease, 5 % of cross sectional area, from 10 to 02 o'clock, within 8 inch: YES	M 2
	103.40	DAGS	Deposits Attached Grease, 5 % of cross sectional area, from 10 to 02 o'clock, within 8 inch: YES	M 2
	110.80	CC	Crack Circumferential, from 07 to 09 o'clock, within 8 inch: YES	S 1
	118.90	DAGS	Deposits Attached Grease, 5 of cross sectional area, from 10 to 11 o'clock, within 8 inch: YES	M 2
	118.90	JOM	Joint Offset Medium	S 1
	118.90	OBZ	Obstacles Other, 5 % of cross sectional area, from 05 to 07 o'clock, Remark: CONCRETE	M 2
	122.70	H	Hole, at 02 o'clock, within 8 inch: NO	S 5



The Environmental  
Protection Specialists

National Water Main Cleaning Co.  
Canton, MA 02021  
Norfolk County  
Tel: (781) 828-0863, Fax: (781) 828-2473

## Inspection report

Date: <b>06/18/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>P.FERREIRA</b>	section number: <b>2</b>	PSR: <b>32627</b>
Total Pipe Length:	Survey Customer: <b>WESTON SAMPSON</b>	System Owner: <b>WEST05-28</b>	Clean Date: <b>6.18.2014</b>	Pre-Cleaned: <b>H Heavy Cleaning</b>	rate:

1:279	position	code	observation	grade
	<u>129.30</u>	JSM	Joint Separated Medium	S 1
	<u>129.30</u>	CS	Crack Spiral, from 03 to 04 o'clock, within 8 inch: NO	S 2
	<u>134.90</u>	JSM	Joint Separated Medium	S 1
	<u>137.90</u>	JSM	Joint Separated Medium	S 1
	<u>144.80</u>	JOM	Joint Offset Medium	S 1
	<u>149.70</u>	JSM	Joint Separated Medium	S 1
	<u>153.70</u>	JSM	Joint Separated Medium	S 1
	<u>153.70</u>	CC	Crack Circumferential, from 08 to 09 o'clock, within 8 inch: YES	S 1
	<u>156.70</u>	B	Broken, from 09 to 11 o'clock, within 8 inch: YES	S 4
	<u>156.70</u>	JSM	Joint Separated Medium	S 1
	<u>162.20</u>	JSM	Joint Separated Medium	S 1
	<u>167.00</u>	JOM	Joint Offset Medium	S 1
	<u>167.20</u>	CL	Crack Longitudinal, at 12 o'clock, within 8 inch: YES	S 2
	<u>170.00</u>	CC	Crack Circumferential, from 12 to 03 o'clock, within 8 inch: YES	S 1
	<u>170.00</u>	CL	Crack Longitudinal, at 12 o'clock, within 8 inch: YES	S 2
	<u>170.00</u>	JOM	Joint Offset Medium	S 1
	<u>173.00</u>	AMH	Downstream Manhole, Survey Ends	



## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>1</b>	PSR: <b>26429</b>
Total Length of Section:	Survey Customer:	Job #:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

Street: <b>Indian Hill Rd Ease.</b>	Flow Control:	Start MH: <b>SS11621</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS16859</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.16.14</b>	Total length surveyed: <b>238 ft</b>

purpose of Survey: <b>F Routine Assessment</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:

1:550	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	11.10	CL	Crack Longitudinal, at 02 o'clock, within 8 inch: YES	S 2
	26.20	TB	Tap Break-In, at 03 o'clock, 6, within 8 inch: NO	
	41.10	TFC	Tap Factory Made Capped, at 09 o'clock, 6, within 8 inch: NO	
	43.00	TFC	Tap Factory Made Capped, at 03 o'clock, 6, within 8 inch: NO	
	70.10	CS	Crack Spiral, from 09 to 10 o'clock, within 8 inch: YES	S 2
	104.70	JOM	Joint Offset Medium	S 1
	117.90	TF	Tap Factory Made, at 09 o'clock, 6, within 8 inch: NO, Remark: fracture in latterl	
	122.00	TFC	Tap Factory Made Capped, at 03 o'clock, 6, within 8 inch: NO	
	130.00	TB	Tap Break-In, at 03 o'clock, 6, within 8 inch: NO	
	157.30	S1 DAGS	Deposits Attached Grease, 5 of cross sectional area, from 03 to 09 o'clock, within 8 inch: YES, start	M 2
	168.90	CS	Crack Spiral, from 09 to 12 o'clock, within 8 inch: YES	S 2
	191.30	TFC	Tap Factory Made Capped, at 09 o'clock, 6, within 8 inch: NO	
	193.40	TFC	Tap Factory Made Capped, at 03 o'clock, 6, within 8 inch: NO	
	205.80	TB	Tap Break-In, at 03 o'clock, 6, within 8 inch: NO	
	228.80	F1 DAGS	Deposits Attached Grease, 5 % of cross sectional area, from 03 to 09 o'clock, within 8 inch: YES, end	M 2
	238.00	AMH	Downstream Manhole, Survey Ends	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2311	2A00	7	28	35	1.75	2	1.94



## Inspection report

Date: <b>06/17/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>p.ferreira</b>	section number: <b>1</b>	PSR: <b>47271</b>
Total Length of Section:	Survey Customer: <b>Weston Sampson</b>	Job #: <b>WEST05-28</b>	Clean Date: <b>6.17.14</b>	Pre-Cleaned: <b>H Heavy Cleaning</b>	rate:

Street: <b>Indian Hill Road</b>	Flow Control: <b>N Not Controlled</b>	Start MH: <b>SS11619</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS15403</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.17.14</b>	Total length surveyed: <b>102 ft</b>

purpose of Survey: <b>A Maintenance Related</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:

1:250	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	17.10	S1 RFJ	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES, start	M 1
	33.10	CS	Crack Spiral, from 12 to 02 o'clock, within 8 inch: YES	S 2
	35.30	F1 RFJ	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES, end	M 1
	43.10	TFC	Tap Factory Made Capped, at 09 o'clock, 6, within 8 inch: NO	
	56.20	CL	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	S 2
	56.40	CL	Crack Longitudinal, at 09 o'clock, within 8 inch: YES	S 2
	68.60	CL	Crack Longitudinal, at 03 o'clock, within 8 inch: YES	S 2
	71.00	RFJ	Roots Fine Joint, from 12 to 03 o'clock, within 8 inch: YES	M 1
	74.00	DAGS	Deposits Attached Grease, 5 % of cross sectional area, from 11 to 01 o'clock, within 8 inch: YES	M 2
	76.70	RFJ	Roots Fine Joint, from 09 to 03 o'clock, within 8 inch: YES	M 1
	76.80	RBJ	Roots Ball Joint, from 07 to 05 o'clock, 75 %, within 8 inch: YES	M 4
	92.30	RFJ	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	M 1
	102.00	AMH	Downstream Manhole, Survey Ends	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
2400	4121	8	13	21	2	1.44	1.62



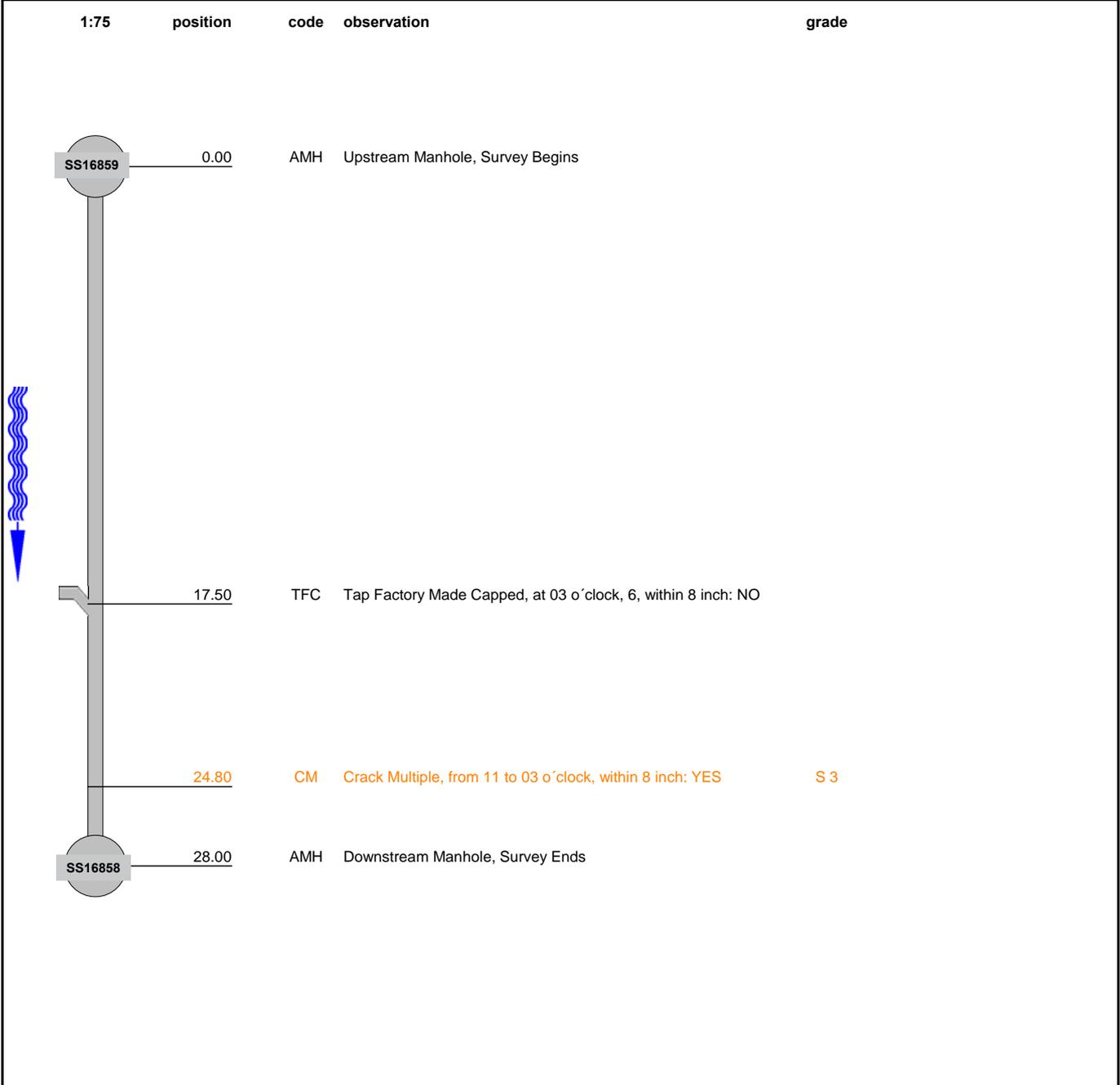
## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>2</b>	PSR: <b>47279</b>
Total Length of Section:	Survey Customer:	Job #:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

Street: <b>Indian Hill Rd Ease.</b>	Flow Control:	Start MH: <b>SS16859</b>
City: <b>Worcester, MA</b>	Year Renewed	End MH: <b>SS16858</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.16.14</b>	Total length surveyed: <b>28 ft</b>

purpose of Survey: <b>F Routine Assessment</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:



QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3100	0000	3	0	3	3	0	3



## Inspection report

Date: <b>06/16/2014</b>	P.O.# / WO.#:	Weather: <b>1 Dry</b>	Surveyed By: <b>C. Medwid</b>	section number: <b>3</b>	PSR: <b>2837</b>
Total Length of Section:	Survey Customer:	Job #:	Clean Date: <b>06/16/2014</b>	Pre-Cleaned: <b>J Jetting</b>	rate:

Street: <b>Indian Hill Rd Ease.</b>	Flow Control:	Start MH: <b>SS16858</b>
City: <b>Worcester, MA</b>	Year Renewed:	End MH: <b>SS15404</b>
Location Code: <b>D Easement/Right of Way</b>	Tape/Media #: <b>TV50-6.16.14</b>	Total length surveyed: <b>218 ft</b>

purpose of Survey: <b>F Routine Assessment</b>	Shape/Size: <b>C Circular 8/8</b>
Use: <b>SS Sanitary</b>	Material: <b>VCP Vitrified Clay Pipe</b> Joint length:
Basin:	Lining:
	Job Name:

Comment:  
Location details:

1:500	position	code	observation	grade
	0.00	AMH	Upstream Manhole, Survey Begins	
	5.80	TFC	Tap Factory Made Capped, at 09 o'clock, 6, within 8 inch: NO	
	37.40	FS	Fracture Spiral, from 03 to 09 o'clock, within 8 inch: YES	S 3
	68.90	TFC	Tap Factory Made Capped, at 03 o'clock, 6, within 8 inch: NO	
	78.60	CS	Crack Spiral, from 07 to 11 o'clock, within 8 inch: YES	S 2
	83.00	CM	Crack Multiple, from 03 to 05 o'clock, within 8 inch: NO	S 3
	106.60	CS	Crack Spiral, from 10 to 11 o'clock, within 8 inch: YES	S 2
	130.30	TB	Tap Break-In, at 03 o'clock, 6, within 8 inch: NO	
	156.10	S1 RMJ	Roots Medium Joint, at 09 o'clock, 5 %, within 8 inch: NO, start	M 3
	168.00	F1 RMJ	Roots Medium Joint, at 09 o'clock, 5 %, within 8 inch: YES, end	M 3
	186.20	RBJ	Roots Ball Joint, at 09 o'clock, 5 %, within 8 inch: YES	M 4
	203.40	RFJ	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	M 1
	203.90	FS	Fracture Spiral, from 08 to 09 o'clock, within 8 inch: YES	S 3
	209.70	RFJ	Roots Fine Joint, at 03 o'clock, within 8 inch: YES	M 1
	209.70	RFJ	Roots Fine Joint, at 09 o'clock, within 8 inch: YES	M 1
	209.70	FC	Fracture Circumferential, from 02 to 09 o'clock, within 8 inch: YES	S 2
	218.00	AMH	Downstream Manhole, Survey Ends	

QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
3323	4132	15	13	28	2.5	2.17	2.33