

Remove and replace 8 lf of Concrete Pavement  
Remove and replace 15 lf of Concrete Approach

Remove and replace 462 lf of 8" pipe  
from MH 5548-143 to 5548-141  
  
Remove and replace 639 lf of 8" pipe  
from MH 5548-140 to MH 5548-094

Remove and replace 12 lf of Concrete Pavement  
Remove and replace 4 lf of Concrete Approach

Remove and replace 16 lf of Concrete Approach  
Remove and replace 11 lf of Concrete Pavement

MH # 5548-142  
Approx depth = 9.0 ft

MH # 5548-139  
Remove Manhole

MH # 5548-138  
Remove Manhole

MH # 5548-143  
Replace Manhole Frame & Cover  
Approx depth = 7.2 ft

MH # 5548-141  
Replace Manhole Frame & Cover  
Rework Manhole Bench & Invert  
Approx depth = 9.4 ft

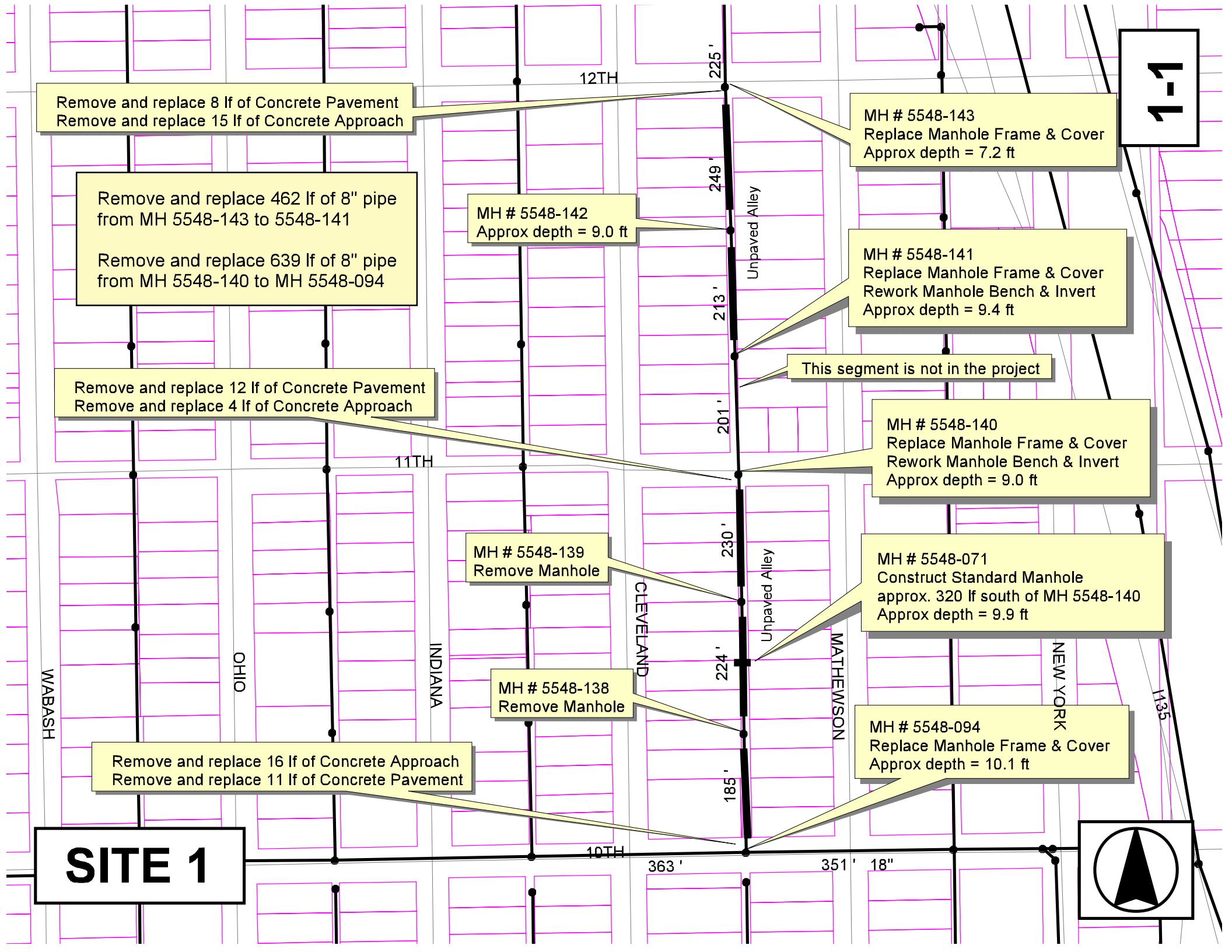
This segment is not in the project

MH # 5548-140  
Replace Manhole Frame & Cover  
Rework Manhole Bench & Invert  
Approx depth = 9.0 ft

MH # 5548-071  
Construct Standard Manhole  
approx. 320 lf south of MH 5548-140  
Approx depth = 9.9 ft

MH # 5548-094  
Replace Manhole Frame & Cover  
Approx depth = 10.1 ft

**SITE 1**



12TH

225'

249'

213'

201'

11TH

230'

224'

185'

10TH

363'

351' 18"

1435

Unpaved Alley

Unpaved Alley

WABASH

OHIO

INDIANA

CLEVELAND

MATHEWSON

NEW YORK



12TH

135

INDIANA

CLEVELAND

MATHEWSON

11TH

10TH

  
 N  
 1-2

# Television Inspection Master Report

9/9/2003  
11:13:15AM  
C03C

US Manhole: 5548-143  
DS Manhole: 5548-142

1413 E 12TH N ST  
1224 N CLEVELAND ST

Date Insp: 10/21/2002

Basin:

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:	Project No.:	D-140
Dia/Ht Width:	8 0	Material:	VCP	Index:
Length:	249.0	Slope:	0.129	Surface:
Pipe Sec Length:	Comment:			

Obs. #	VTR Counter Comment	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		27.0	West	Pipe Seal						
3		28.0	Invert	Crack-Radial	3		0.004	5	0	0.004
4		29.0	East	Pipe Seal						0.000
5		30.0	Crown	Crack-Radial	3		0.004	5	0	0.004
6		32.0	West	Break-In Conn	1		0.001	0	0	0.001
7		49.0	West	Pipe Seal						0.000
8		52.0	East	Pipe Seal						
9		53.0	Quad 1 / U-Rt	Broken Pipe	5		0.060	100	0	0.060
10		63.0	Crown	Crack-Radial	3		0.004	5	0	0.004
11		69.0	East	Break-In Conn	1		0.001	0	0	0.001
12		74.0	West	Pipe Seal			0.000	0	0	0.000
13		77.0	East	Pipe Seal						
14		94.0	East	Break-In Conn	1		0.001	0	0	0.001
15		99.0	West	Break-In Conn	1		0.001	0	0	0.001
16		102.0	East	Pipe Seal						0.000
17		106.0	East	Break-In Conn / connection needs replaced / lots of grease here too						
18		113.0	Invert	Sag / 39% Flow						0.000
19		116.0	Invert	Sag WE ARE USING HIGH PRESSURE CLEANER TO PULL DOWN WATER						
20		123.0	Quad 1 / U-Rt	Broken Pipe	3		0.010	60	0	0.010
21		124.0	West	Pipe Seal						0.000
22		126.0	Quad 1 / U-Rt	Broken Pipe	5		0.060	100	0	0.060
23		127.0	East	Pipe Seal						0.000
24		128.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
25		135.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
26		137.0	West	Break-In Conn	3		0.004	2	0	0.004
27		147.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
28		148.0	Crown	Crack-Radial	3		0.004	5	0	0.004
29		149.0	West	Pipe Seal						0.000
30		150.0	East	Break-In Conn	1		0.001	0	0	0.001
31		151.0	Crown	Broken Pipe	5		0.060	100	0	0.060
32		152.0	East	Wye Service	3		0.000	2	0	0.000
33		153.0	West	Break-In Conn	1		0.001	0	0	0.001
34		153.0	Quad 2 / L-Rt	Broken Pipe	3		0.010	60	0	0.010
35		174.0	West	Pipe Seal						0.000
36		177.0	East	Pipe Seal						
37		178.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
38		182.0	Crown	Crack-Radial	3		0.004	5	0	0.004
39		186.0	Crown	Crack-Radial	3		0.004	5	0	0.004
40		196.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
41		201.0	West	Wye Service / connection busted outside of the main line						
42		220.0	Quad 4 / U-Lt	Crack-Radial	2		0.002	2	0	0.002
43		225.0	West	Pipe Seal						0.000
44		227.0	West	Pipe Seal						
45		238.0	Crown	Crack-Radial	3		0.004	5	0	0.004
46		241.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
47		243.0	DS Manhole							

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# Television Inspection Master Report

9/9/2003  
11:13:15AM

US Manhole: 5548-142  
DS Manhole: 5548-141

1224 N CLEVELAND ST  
1216 N CLEVELAND AVE

Date Insp: 10/21/2002

Basin: C03C

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:	Project No.:	D-140
Dia/Ht Width:	8 0	Material:	VCP	Index:
Length:	212.7	Slope:	0.122	Surface:
Pipe Sec Length:	Comment:			

Obs. #	VTR Counter	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		7.0	West	Pipe Seal						
3		8.0	Crown	Crack-Radial	3		0.004	5	0	0.004
4		9.0	East	Pipe Seal						0.000
5		14.0	West	Break-In Conn	1		0.001	0	0	0.001
37		19.0	West	Pipe Seal						0.000
6		25.0	Crown	Crack-Radial	2		0.002	2	0	0.002
7		30.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
8		32.0	West	Pipe Seal						
9		35.0	East	Pipe Seal						
10		48.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
11		53.0	Crown	Crack-Radial	2		0.002	2	0	0.002
12		53.0	Crown	Broken Pipe	5		0.060	100	0	0.060
13		57.0	West	Wye Service	1		0.000	0	0	0.000
14		60.0	East	Pipe Seal						0.000
15		61.0	Crown	Crack-Radial	2		0.002	2	0	0.002
16		61.0	Joint	Offset	3		0.010	20	0	0.010
17		62.0	Crown	Connection or Observation Hole? (leaking/cavity/broken pipe)						0.000
18		63.0	Crown	Broken Pipe	5		0.060	100	0	0.060
19		66.0	Crown	Crack-Radial	3		0.004	5	0	0.004
20		81.0	Crown	Broken Pipe	4		0.030	78	0	0.030
21		85.0	West	Pipe Seal						0.000
22		88.0	East	Wye Service	3		0.000	2	0	0.000
23		101.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
24		104.0	Quad 1 / U-Rt	Broken Pipe	3		0.010	60	0	0.010
25		111.0	West	Wye Service	3		0.000	2	0	0.000
26		111.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
27		113.0	East	Pipe Seal						0.000
28		136.0	West	Pipe Seal						
29		138.0	East	Break-In Conn	1		0.001	0	0	0.001
30		152.0	Crown	Crack-Radial	3		0.004	5	0	0.004
31		160.0	Crown	Crack-Radial	3		0.004	5	0	0.004
32		161.0	West	Break-In Conn	1		0.001	0	0	0.001
33		164.0	West	Pipe Seal						0.000
34		166.0	East	Break-In Conn	1		0.001	0	0	0.001
35		167.0	Crown	Broken Pipe	4		0.030	78	0	0.030
36		172.0	Quad 2 / L-Rt	Broken Pipe	5		0.060	100	0	0.060
38		192.0	East	Pipe Seal						
39		192.0	Quad 3 / L-Lt	Crack-Radial	2		0.002	2	0	0.002
40		197.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
41		210.0	Crown	Crack-Radial	2		0.002	2	0	0.002
42		212.0	DS Manhole							0.000

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# Television Inspection Master Report

9/9/2003  
11:13:15AM

US Manhole: 5548-141  
DS Manhole: 5548-140

1216 N CLEVELAND AVE  
1418 E 11TH N ST

Date Insp: 10/21/2002

Basin: C03C

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:	Project No.:	D-140
Dia/Ht Width:	8 0	Material:	VCP	Index:
Length:	201.3	Slope:	0.129	Surface:
Pipe Sec Length:	Comment:			

Obs. #	VTR Counter	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		4.0	East	Pipe Seal						
3		5.0	West	Break-In Conn	1		0.001	0	0	0.001
4		10.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
5		18.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
6		23.0	Quad 1 / U-Rt	Crack-Horizontal	2		0.002	2	0	0.002
7		27.0	West	Pipe Seal						0.000
8		30.0	East	Pipe Seal						
9		48.0	Quad 1 / U-Rt	Crack-Horizontal	2		0.002	2	0	0.002
10		55.0	East	Break-In Conn	1		0.001	0	0	0.001
11		60.0	West	Pipe Seal						0.000
12		63.0	East	Pipe Seal			0.000	0	0	0.000
13		78.0	Quad 3 / L-Lt	Crack-Radial	3		0.004	5	0	0.004
14		85.0	West	Pipe Seal						0.000
15		87.0	East	Pipe Seal						
16		108.0	Quad 1 / U-Rt	Broken Pipe	2		0.008	44	0	0.008
17		110.0	West	Wye Service	1		0.000	0	0	0.000
18		112.0	East	Pipe Seal						0.000
19		126.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
20		128.0	East	Break-In Conn	1		0.001	0	0	0.001
21		129.0	Crown	Broken Pipe	5		0.060	100	0	0.060
22		135.0	West	Wye Service	1		0.000	0	0	0.000
23		138.0	East	Pipe Seal						0.000
24		160.0	West	Wye Service	1		0.000	0	0	0.000
25		163.0	East	Pipe Seal						0.000
26		176.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
27		183.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
28		186.0	Quad 4 / U-Lt	Crack-Radial	2		0.002	2	0	0.002
29		188.0	Invert	Debris	3		0.000	0	0	0.000
30		190.0	Crown	Broken Pipe	5		0.060	100	0	0.060
31		192.0	Quad 1 / U-Rt	Broken Pipe	4		0.030	78	0	0.030
32		193.0	Crown	Crack-Radial	3		0.004	5	0	0.004
33		194.0	Crown	Crack-Radial	2		0.002	2	0	0.002
34		200.0	DS Manhole							0.000

THIS SEGMENT IS NOT INCLUDED IN THE PROJECT.  
TV LOG IS FOR POSSIBLE REFERENCE TO LOCATE CONNECTIONS.

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# Television Inspection Master Report

9/9/2003  
11:13:15AM

US Manhole: 5548-140  
DS Manhole: 5548-139

1418 E 11TH N ST  
1138 N CLEVELAND ST

Date Insp: 10/22/2002

Basin: C03C

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:	Project No.:	D-140
Dia/Ht	Width: 8 0	Material:	VCP	Index:
Length:	229.5	Slope:	0.170	Surface:
Pipe Sec Length:	Comment:			

Obs. #	VTR Counter Comment	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		6.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
3		19.0	Invert	Debris / WE WILL NEED A CLEANER TO REMOVE THE SILT.						
4		20.0	Crown	Crack-Radial	2		0.002	2	0	0.002
5		42.0	West	Wye Service	3		0.000	2	0	0.000
6		43.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
7		44.0	East	Wye Service	3		0.000	2	0	0.000
8		48.0	Crown	Crack-Radial	3		0.004	5	0	0.004
9		67.0	East	Pipe Seal						0.000
10		69.0	East	Pipe Seal						
11		76.0	Quad 4 / U-Lt	Crack-Radial	2		0.002	2	0	0.002
12		77.0	East	Break-In Conn	1		0.001	0	0	0.001
13		81.0	Crown	Crack-Horizontal	2		0.002	2	0	0.002
14		83.0	East	Break-In Conn / protruding & jagged						
15		84.0	West	Break-In Conn	1		0.001	0	0	0.001
16		91.0	Crown	Crack-Radial	3		0.004	5	0	0.004
17		92.0	West	Pipe Seal						0.000
18		95.0	East	Pipe Seal						
19		105.0	Crown	Crack-Radial	3		0.004	5	0	0.004
20		113.0	Crown	Crack-Radial	3		0.004	5	0	0.004
21		115.0	Crown	Crack-Radial	2		0.002	2	0	0.002
22		120.0	West	Pipe Seal						0.000
23		122.0	East	Pipe Seal						
24		123.0	Crown	Crack-Radial	3		0.004	5	0	0.004
25		124.0	Invert	Sag 35% flow						0.000
26		125.0	Crown	Crack-Radial	3		0.004	5	0	0.004
27		129.0	Invert	Sag / out of sag						0.000
28		140.0	Crown	Crack-Radial	3		0.004	5	0	0.004
29		147.0	West	Wye Service	3		0.000	2	0	0.000
30		150.0	East	Pipe Seal						0.000
31		163.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
32		172.0	West	Pipe Seal						0.000
33		174.0	East	Pipe Seal						
34		195.0	East	Break-In Conn	1		0.001	0	0	0.001
35		197.0	West	Pipe Seal						0.000
36		198.0	Quad 3 / L-Lt	Broken Pipe	2		0.008	44	0	0.008
37		199.0	East	Pipe Seal						0.000
38		214.0	Invert	Sag 35% flow / bad sag ahead						
39		216.0	Invert	Sag 70% FLOW / WE WILL USE A CLEANER TO PULL DOWN WATER.						
40		216.0	Crown	Broken Pipe	5		0.060	100	0	0.060
41		221.0	Crown	Crack-Radial	3		0.004	5	0	0.004
42		223.0	West	Wye Service	3		0.000	2	0	0.000
43		225.0	East	Pipe Seal						0.000
44		227.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
45		230.0	DS Manhole							0.000

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# Television Inspection Master Report

9/9/2003  
11:13:15AM

US Manhole: 5548-139  
DS Manhole: 5548-138

1138 N CLEVELAND ST  
1110 N CLEVELAND ST

Date Insp: 10/22/2002

Basin: C03C

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:	Project No.:	D-140
Dia/Ht Width:	8 0	Material:	VCP	Index:
Length:	223.7	Slope:	0.174	Surface:
Pipe Sec Length:	Comment:			

Obs. #	VTR Counter	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		19.0	East	Break-In Conn	1		0.001	0	0	0.001
3		21.0	West	Wye Service	3		0.000	2	0	0.000
4		23.0	Quad 4 / U-Lt	Broken Pipe	5		0.060	100	0	0.060
5		30.0	Quad 1 / U-Rt	Broken Pipe	5		0.060	100	0	0.060
6		32.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
7		44.0	West	Pipe Seal						0.000
8		47.0	East	Pipe Seal						
9		48.0	Quad 1 / U-Rt	Broken Pipe	5		0.060	100	0	0.060
10		50.0	Crown	Crack-Radial	3		0.004	5	0	0.004
11		58.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
12		69.0	West	Pipe Seal						
13		71.0	Quad 2 / L-Rt	Crack-Radial	3		0.004	5	0	0.004
14		72.0	West	Break-In Conn	1		0.001	0	0	0.001
15		72.0	East	Pipe Seal						0.000
16		73.0	Quad 4 / U-Lt	Crack-Radial	2		0.002	2	0	0.002
17		78.0	Crown	Crack-Radial	3		0.004	5	0	0.004
18		91.0	Quad 1 / U-Rt	Crack-Radial	2		0.002	2	0	0.002
19		95.0	West	Wye Service	1		0.000	0	0	0.000
20		97.0	East	Pipe Seal						0.000
21		106.0	Crown	Crack-Radial	3		0.004	5	0	0.004
22		119.0	West	Pipe Seal						0.000
23		122.0	East	Pipe Seal						
24		141.0	Crown	Crack-Radial	3		0.004	5	0	0.004
25		143.0	East	Break-In Conn	1		0.001	0	0	0.001
26		145.0	West	Wye Service	1		0.000	0	0	0.000
27		147.0	East	Pipe Seal						0.000
28		150.0	Invert	Crack-Radial	3		0.004	5	0	0.004
29		170.0	West	Wye Service	1		0.000	0	0	0.000
30		172.0	West	Pipe Seal						0.000
31		183.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
32		187.0	East	Break-In Conn	1		0.001	0	0	0.001
33		191.0	West	Break-In Conn	1		0.001	0	0	0.001
34		195.0	West	Wye Service	3		0.000	2	0	0.000
35		197.0	East	Pipe Seal						0.000
36		211.0	Crown	Crack-Radial	2		0.002	2	0	0.002
37		213.0	East	Break-In Conn	1		0.001	0	0	0.001
38		216.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
39		218.0	Crown	Crack-Horizontal	3		0.004	5	0	0.004
40		219.0	Quad 4 / U-Lt	Crack-Radial	2		0.002	2	0	0.002
41		220.0	West	Pipe Seal						0.000
42		223.0	DS Manhole							

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# Television Inspection Master Report

9/9/2003  
11:13:15AM

US Manhole: 5548-138  
DS Manhole: 5548-094

1110 N CLEVELAND ST  
1058 E 10TH N ST

Date Insp: 10/22/2002

Basin: C03C

Dir Televised: Upstream To Downstream

## Pipe Information

Shape:	Round	Length Status:		Project No.:	D-140
Dia/Ht Width:	8	Material:	VCP	Index:	
Length:	185.0	Slope:	0.216	Surface:	
Pipe Sec Length:		Comment:			

Obs. #	VTR Counter	Dist	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole							
2		3.0	Quad 3 / L-Lt	Broken Pipe	5		0.060	100	0	0.060
3		22.0	West	Pipe Seal						0.000
4		25.0	East	Pipe Seal						
5		32.0	Quad 1 / U-Rt	Crack-Horizontal	2		0.002	2	0	0.002
6		33.0	West	Break-In Conn	1		0.001	0	0	0.001
7		34.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
8		48.0	West	Pipe Seal						0.000
9		51.0	East	Wye Service / full of roots			0.000	2	0	0.000
10		55.0	Quad 1 / U-Rt	Broken Pipe	5		0.060	100	0	0.060
11		60.0	Invert	Sag						0.000
			35% FLOW							
12		65.0	Invert	Sag						
			OUT OF SAG							
13		74.0	West	Pipe Seal						
14		76.0	East	Pipe Seal						
15		85.0	Quad 3 / L-Lt	Crack-Horizontal	3		0.004	5	0	0.004
16		90.0	Quad 3 / L-Lt	Crack-Radial	2		0.002	2	0	0.002
17		92.0	Crown	Crack-Radial	3		0.004	5	0	0.004
18		99.0	West	Pipe Seal						0.000
19		102.0	East	Wye Service	1		0.000	0	0	0.000
20		110.0	Crown	Crack-Radial	3		0.004	5	0	0.004
21		120.0	Crown	Crack-Radial	3		0.004	5	0	0.004
22		125.0	West	Pipe Seal						0.000
23		127.0	East	Pipe Seal						
24		128.0	West	Break-In Conn	1		0.001	0	0	0.001
25		136.0	East	Break-In Conn	1		0.001	0	0	0.001
26		141.0	Quad 3 / L-Lt	Crack-Radial	2		0.002	2	0	0.002
27		143.0	Quad 3 / L-Lt	Crack-Radial	2		0.002	2	0	0.002
28		150.0	West	Pipe Seal						0.000
29		152.0	East	Pipe Seal						
30		156.0	Quad 3 / L-Lt	Crack-Radial	2		0.002	2	0	0.002
31		163.0	Crown	Crack-Radial	3		0.004	5	0	0.004
32		166.0	Quad 1 / U-Rt	Crack-Radial	3		0.004	5	0	0.004
33		171.0	Crown	Crack-Radial	3		0.004	5	0	0.004
34		174.0	Quad 2 / L-Rt	Crack-Radial	2		0.002	2	0	0.002
35		180.0	Quad 2 / L-Rt	Broken Pipe	5		0.060	100	0	0.060
36		185.0	DS Manhole							0.000