

Remove and replace 20 lf of Concrete Driveway:  
 ' 9 lf at 2755 S. Greenwood  
 ' 11 lf at 2754 S. Greenwood

Remove and replace 31 lf of Pavement across Greenwood, (including curb & gutter)

Install 57 lf of Flowable Fill

Remove and replace 439 lf of 8" pipe from MH 5544-372 to MH 5544-370

MH 5544-370  
 Approx depth = 5.6 ft

MH 5544-372  
 Reconstruct Manhole  
 Approx depth = 5.2 ft

MH 5544-371  
 Reconstruct Manhole  
 Approx depth = 5.7 ft

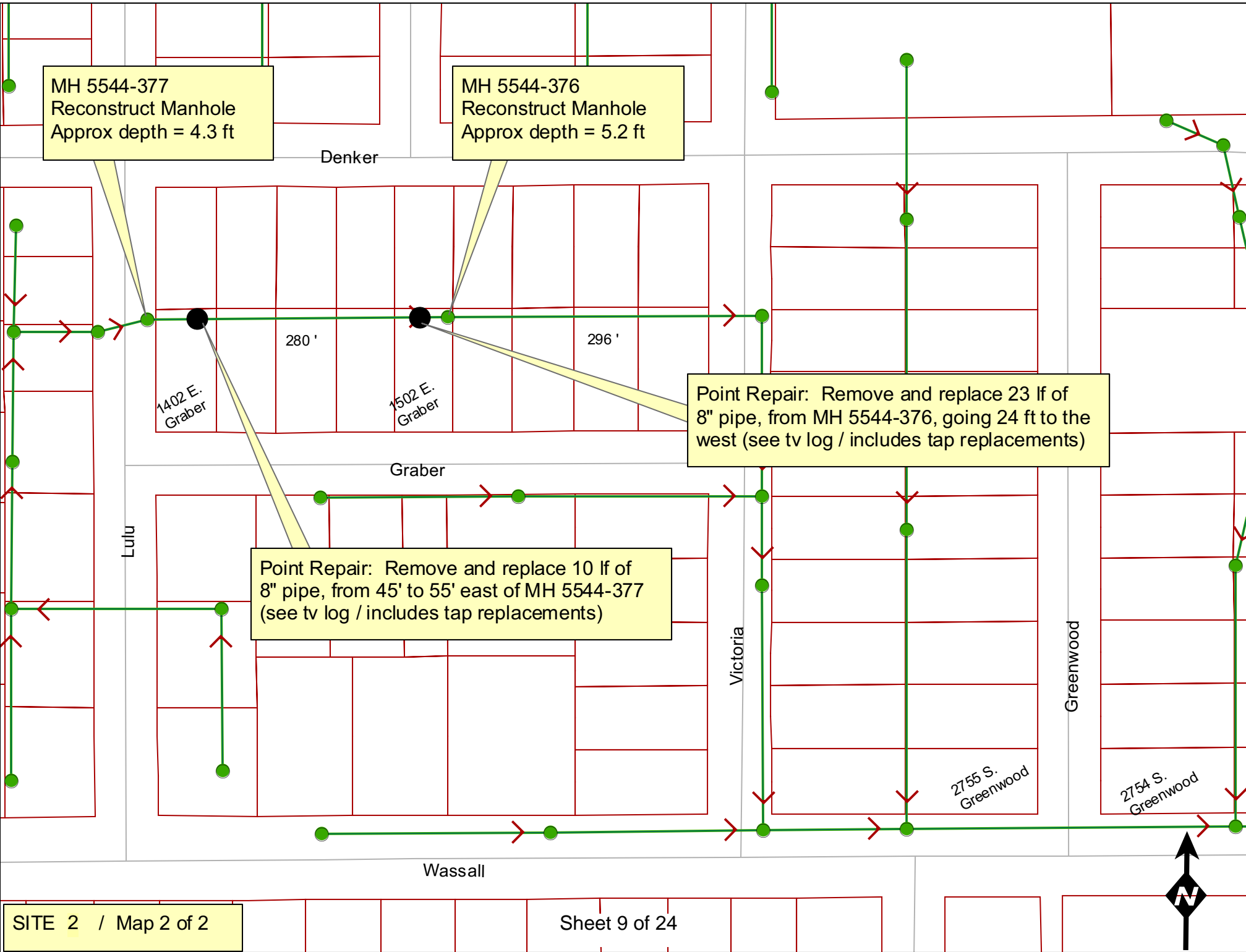


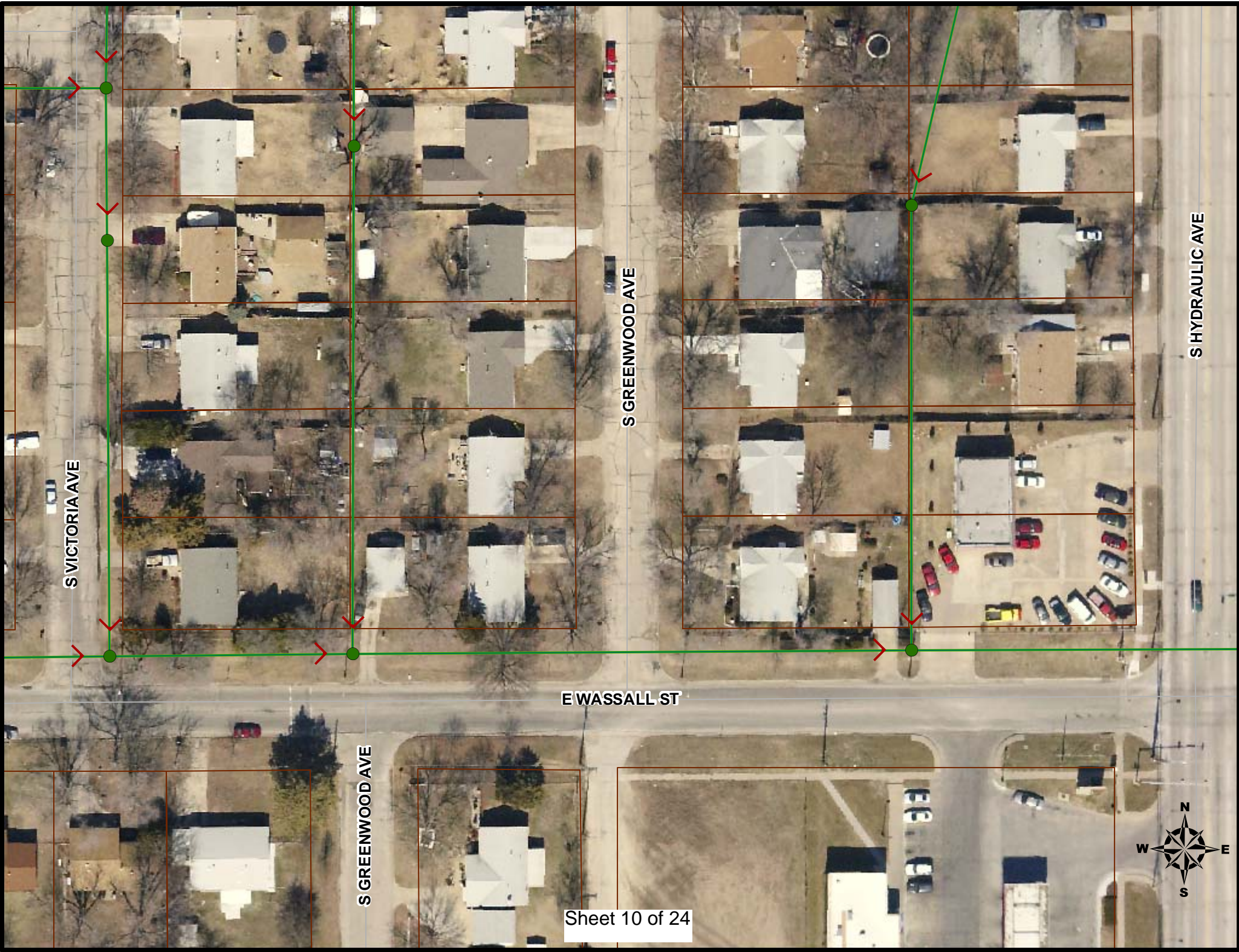
MH 5544-377  
Reconstruct Manhole  
Approx depth = 4.3 ft

MH 5544-376  
Reconstruct Manhole  
Approx depth = 5.2 ft

Point Repair: Remove and replace 23 lf of 8" pipe, from MH 5544-376, going 24 ft to the west (see tv log / includes tap replacements)

Point Repair: Remove and replace 10 lf of 8" pipe, from 45' to 55' east of MH 5544-377 (see tv log / includes tap replacements)





S VICTORIA AVE

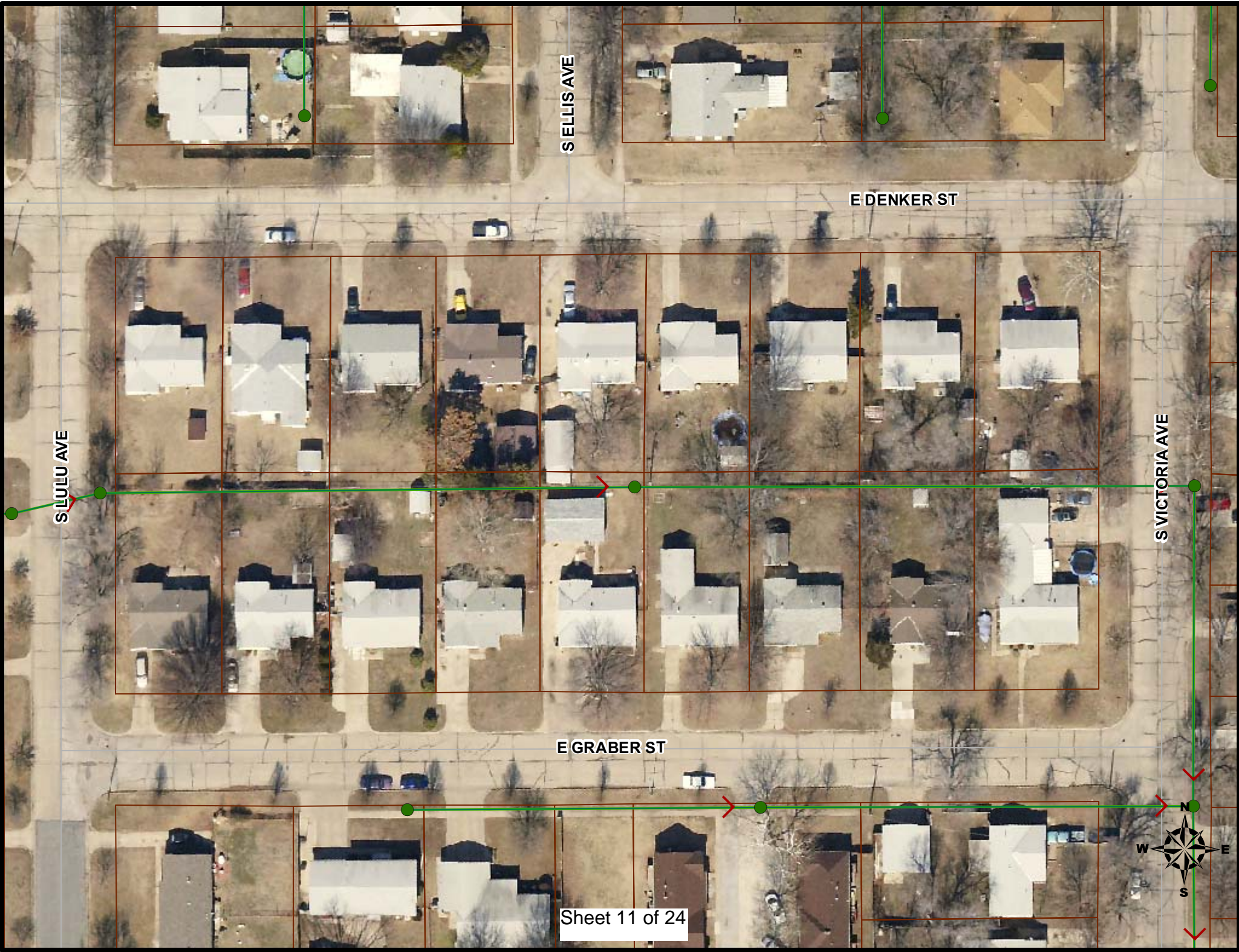
S GREENWOOD AVE

S HYDRAULIC AVE

E WASSALL ST

S GREENWOOD AVE





SELLIS AVE

E DENKER ST

S LULU AVE

S VICTORIA AVE

E GRABER ST

Sheet 11 of 24





# Television Inspection Master Report

12/3/2009

2:55 PM

US Structure: 5544-377      1402 E GRABER ST      Date Insp: 5/18/2007      Basin: TP1  
 DS Structure: 5544-376      1502 E GRABER ST      Dir Televised: Upstream To Downstream

**Pipe Information**

Shape: Round      Length Status:      Project No. : G-013  
 Dia/Ht: 8      Material: VCP      Index:  
 Length: 282.9      Slope: 0.001      Surface:

**Inspection Information**

Crew: 692      Percent Full:      Tape ID: DVD #0283  
 Weather: Sunny      Purpose: TV Existing Line      Counter Start:

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings Struct	Clean	Remain (gpm)
1		0.0	US Manhole	5544-377 (located in grass in east parking of Lulu)						
2		7.5	Start	Begin Sag	2	0.000	0.000	2	0	0.000
3		10.6	End (not bad)	End Sag	1	0.000	0.000	1	0	0.000
4		38.8		Sealed Off Wye North	1	0.000	0.000	0	0	0.000
5		42.1		Sealed Off Wye South	1	0.000	0.000	0	0	0.000
6		46.1	Joint	Offset	5	0.060	0.060	100	0	0.060
7		46.7	North	Wye Service	1	0.000	0.000	0	0	0.000
1401 E DENKER				6" Clay Wye Connection	Comment:	ROOTS 3				
8		49.3	Joint	Offset	4	0.030	0.030	60	0	0.030
9		50.0	South	Wye Service	1	0.000	0.000	0	0	0.000
1402 E GRABER				6" Clay Wye Connection	Comment:	ROOTS 3				
10		51.9	Joint	Offset	5	0.060	0.060	100	0	0.060
<b><u>REPLACE FROM 45' TO 55' EAST OF MANHOLE</u></b>										
<b><u>(repairing the three offset joints and including the replacement of two service taps)</u></b>										
11		67.5	Start	Begin Sag	2	0.000	0.000	2	0	0.000
12		79.6	End (not bad)	End Sag	1	0.000	0.000	1	0	0.000
13		95.9	North	Wye Service	1	0.000	0.000	0	0	0.000
1405 E DENKER				6" Clay Wye Connection	Comment:	1405 E DENKER				
14		97.8	South	Break-In Conn	3	0.004	0.004	2	0	0.004
1406 E GRABER				6" Break In Connection	Comment:	1406 E GRABER				
15		143.2	Start	Sag	3	0.000	0.000	5	0	0.000
16		161.7	North	Wye Service	1	0.000	0.000	0	0	0.000
1409 E DENKER				6" Clay Wye Connection	Comment:	1409 E DENKER				

## Television Inspection Master Report

12/3/2009

2:55 PM

US Structure: 5544-377      1402 E GRABER ST      Date Insp: 5/18/2007      Basin: TP1  
 DS Structure: 5544-376      1502 E GRABER ST      Dir Televised: Upstream To Downstream

17	163.8	South	Wye Service	1	0.000	0	0	0.000
1410 E GRABER			6" Clay Wye Connection	<b>Comment:</b>	1410 E GRABER			
18	166.6	End	Sag	1	0.000	1	0	0.000
19	197.2	Upper Left	Grease	1	0.000	0	0	0.000
20	199.6	Upper Left	Grease	1	0.000	0	0	0.000
21	202.9	Upper Left	Grease	1	0.000	0	0	0.000
22	205.6	Upper Left	Grease	1	0.000	0	0	0.000
23	211.9	North	Wye Service	1	0.000	0	0	0.000
1413 E DENKER			6" Clay Wye Connection					
24	215.0	South	Wye Service	1	0.000	0	0	0.000
1414 E GRABER			6" Clay Wye Connection		Service is separated outside of main	/ roots		
25	235.6	Start	Sag	3	0.000	5	0	0.000
26	259.4	<b>Joint</b>	<b>Offset / Roots</b>	<b>4</b>	0.030	60	0	0.030
27	260.5	South	Wye Service	1	0.000	0	0	0.000
<b>1502 E GRABER</b>			6" Clay Wye Connection	<b>Comment:</b>	1502 E GRABER			
28	262.0	<b>Camera Lens Submerged</b>	<b>Sag</b>	<b>4</b>	0.000	10	0	0.000
29	262.5	<b>Joint</b>	<b>Roots</b>	<b>3</b>	0.008	5	8	0.008
30	264.0	North	Wye Service	1	0.000	0	0	0.000
<b>1501 E DENKER</b>			6" Clay Wye Connection	<b>Comment:</b>	1501 E DENKER			
31	268.2	<b>Camera Lens Emerged</b>	Sag	1	0.000	1	0	0.000
32	271.5	Joint	Roots	1	0.002	1	1	0.002
33	274.2	<b>Joint</b>	<b>Offset / roots</b>	<b>4</b>	0.030	60	0	0.030
34	278.7	DS Manhole 5544-376		3	0.000	0	0	0.000

**REPLACE FROM JOINT AT 256 FEET TO THE DOWNSTREAM MANHOLE (APPROX 23 LF)**  
**(repairing the offset joints, removing the sag and replacing two service taps)**

# Television Inspection Master Report

12/3/2009

2:55 PM

US Structure: 5544-372      2754 S VICTORIA ST      Date Insp: 5/25/2007      Basin: TP1  
 DS Structure: 5544-371      2755 S GREENWOOD AVE      Dir Televised: Upstream To Downstream

**Pipe Information**

Shape: Round      Length Status:      Project No. : G-013  
 Dia/Ht: 8      Material: VCP      Index:  
 Length: 134.6

**Inspection Information**

Crew: 692      Percent Full:      Tape ID: DVD #0285  
 Weather: Sunny      Purpose: TV Existing Line      Counter Start:

**Obs. VTR**

#	Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings			Remain (gpm)
							Est. (gpm)	Struct	Clean	
1		0.0	US Manhole	5544-372	1	0.000	0	0	0.000	
<b>Comment:</b> WE WILL BE USING THE CLEANER TO PULL DOWN WATER DO TO SAG										
(NOTE: from 0' to 70' is a series of small offset joints)										
2		70.3	Crown	(horizontal cracks begin)	Broken Pipe	3	0.010	60	0	0.010
3		72.6	Crown	(pipe shifted in the crown)	Broken Pipe	4	0.030	78	0	0.030
4		75.4	Crown		Broken Pipe	4	0.030	78	0	0.030
5		78.6	Crown		Broken Pipe	4	0.030	78	0	0.030
6		87.3	Crown		Broken Pipe	3	0.010	60	0	0.010
7		90.4	Crown		Broken Pipe	4	0.030	78	0	0.030
8		93.5	Crown		Broken Pipe	4	0.030	78	0	0.030
9		96.4	Crown		Broken Pipe	4	0.030	78	0	0.030
		98.0	Offset Joint / end of the horizontal cracks							
10		111.4	Upper Left		Crack-Horizontal	3	0.004	5	0	0.004
11		116.0	Upper Left		Crack-Horizontal	3	0.004	5	0	0.004
12		128.6	Crown		Broken Pipe	4	0.030	78	0	0.030
13		133.2	DS Manhole	5544-371		1	0.000	0	0	0.000
<b>Comment:</b> TROUGH MISSING IN MH										
2755 S GREENWOOD										

There is an offset joint and a sag just outside of the downstream manhole.  
 The camera never made it into the downstream manhole

# Television Inspection Master Report

12/3/2009

2:55 PM

US Structure: 5544-371      2755 S GREENWOOD AVE      Date Insp: 12/7/2009      Basin: TP1  
 DS Structure: 5544-370      2754 S GREENWOOD AVE      Dir Televised: Upstream To Downstream

**Pipe Information**

Project No. : G-013      Dia/Ht: 8      Material: VCP      Length: 310.1      Slope: 0.400      Tape ID: DVD #0542

Obs. #	VTR Counter	Distance	Location	Description	Rating	Obsrvd (gpm)	Ratings		Remain (gpm)	
							Est. (gpm)	Struct Clean		
1		0.0		5544-371 US Manhole						
2		7.4			Sag	2	0.000	2	0	0.000
3		10.0			Sag	0	0.000	0	0	0.000
4		25.0			Sag	0	0.000	0	0	0.000
5		30.3			Sag	3	0.000	5	0	0.000
6		43.7			Sag	0	0.000	0	0	0.000
7		48.2			Sag	3	0.000	5	0	0.000
8		76.3			Sag	0	0.000	0	0	0.000
9		81.1			Sag	3	0.000	5	0	0.000
10		123.8		Broken Pipe	2	0.008		44	0	0.008
11		129.7		Broken Pipe	3	0.010		60	0	0.010
12		183.8			Sag	3	0.000	5	0	0.000
13		188.3			Sag	3	0.000	5	0	0.000
14		<b>196.8</b>			<b>Sag Begins</b>	0	0.000	0	0	0.000
15		<b>200.4</b>		<b>Crack-Horizontal</b>	2	0.002		2	0	0.002
16		<b>210.1</b>	Water well over the lens	<b>Sag Ends</b>	3	0.000		5	0	0.000
17		220.2		Sag	2	0.000		2	0	0.000
18		223.7		Crack-Horizontal	3	0.004		5	0	0.004
19		226.6		Crack-Horizontal	3	0.004		5	0	0.004
20		228.7		Sag	3	0.000		5	0	0.000
21		244.0		Sag	2	0.000		2	0	0.000
22		248.2		Sag	2	0.000		2	0	0.000
23		250.6		Crack-Horizontal	2	0.002		2	0	0.002
24		<b>258.4</b>	Looks like full-tile sag / need repair	<b>Sag Begins</b>	3	0.000		5	0	0.000
25		<b>271.9</b>		<b>Sag Ends</b>	3	0.000		5	0	0.000
26		<b>297.6</b>		<b>Sag</b>	<b>3</b>	0.000		5	0	0.000
27		<b>300.5</b>		<b>Broken Pipe</b>	<b>3</b>	0.010		60	0	0.010
		<b>302.0</b>		<b>Sag Ends</b>						
28		303.4		5544-370 DS Manhole						(this manhole was rehab'd in 2003)

Flow appears to be OK in the downstream manhole. Camera was in and out of the water the entire segment. The bolded areas indicate the most severe sags. The full tile sag at 258' is a maintenance problem.