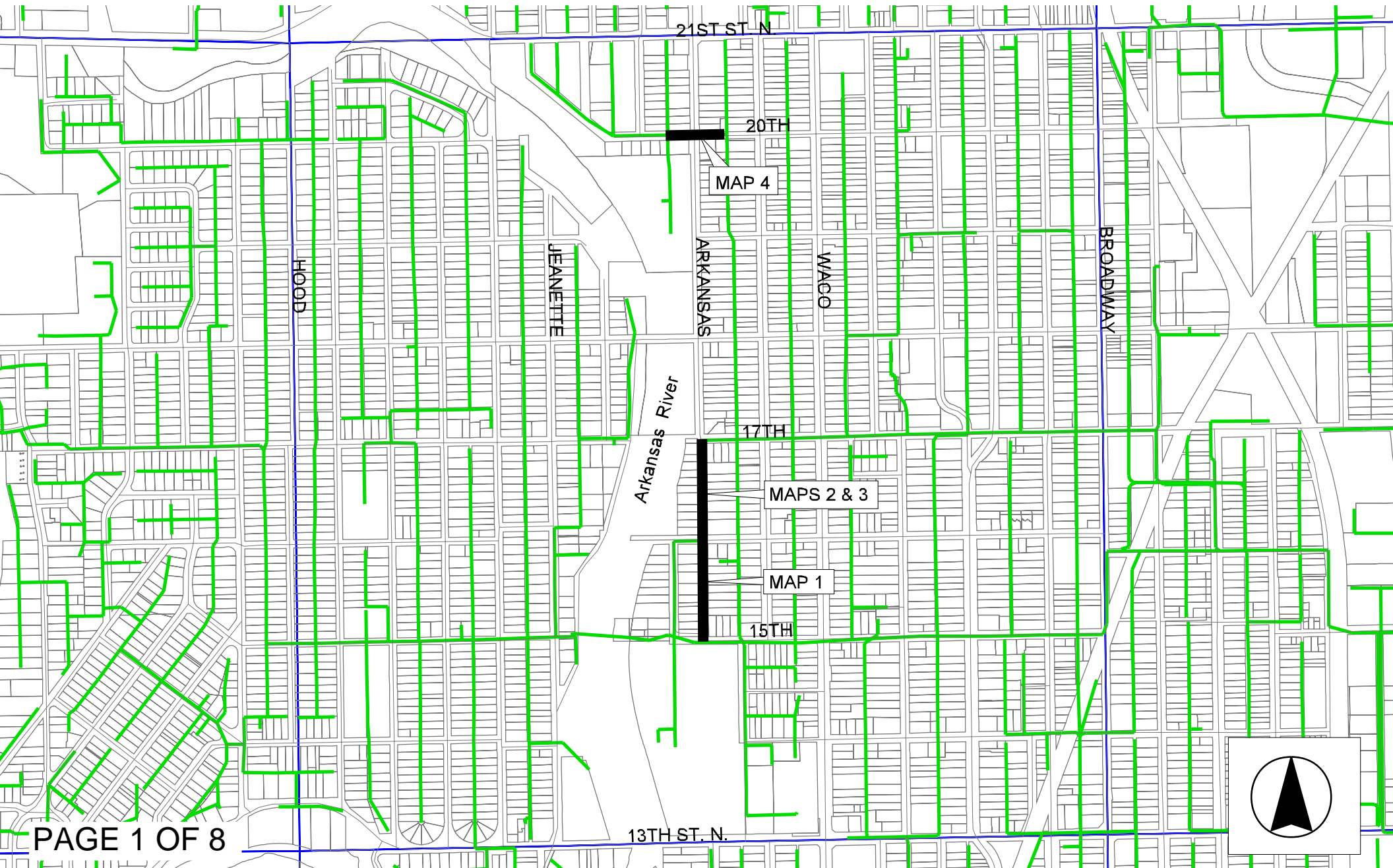


SANITARY SEWER IMPROVEMENTS
ARKANSAS STREET
FROM 15TH ST. N. TO 20TH ST. N.

OCA 620480 / 468-84372

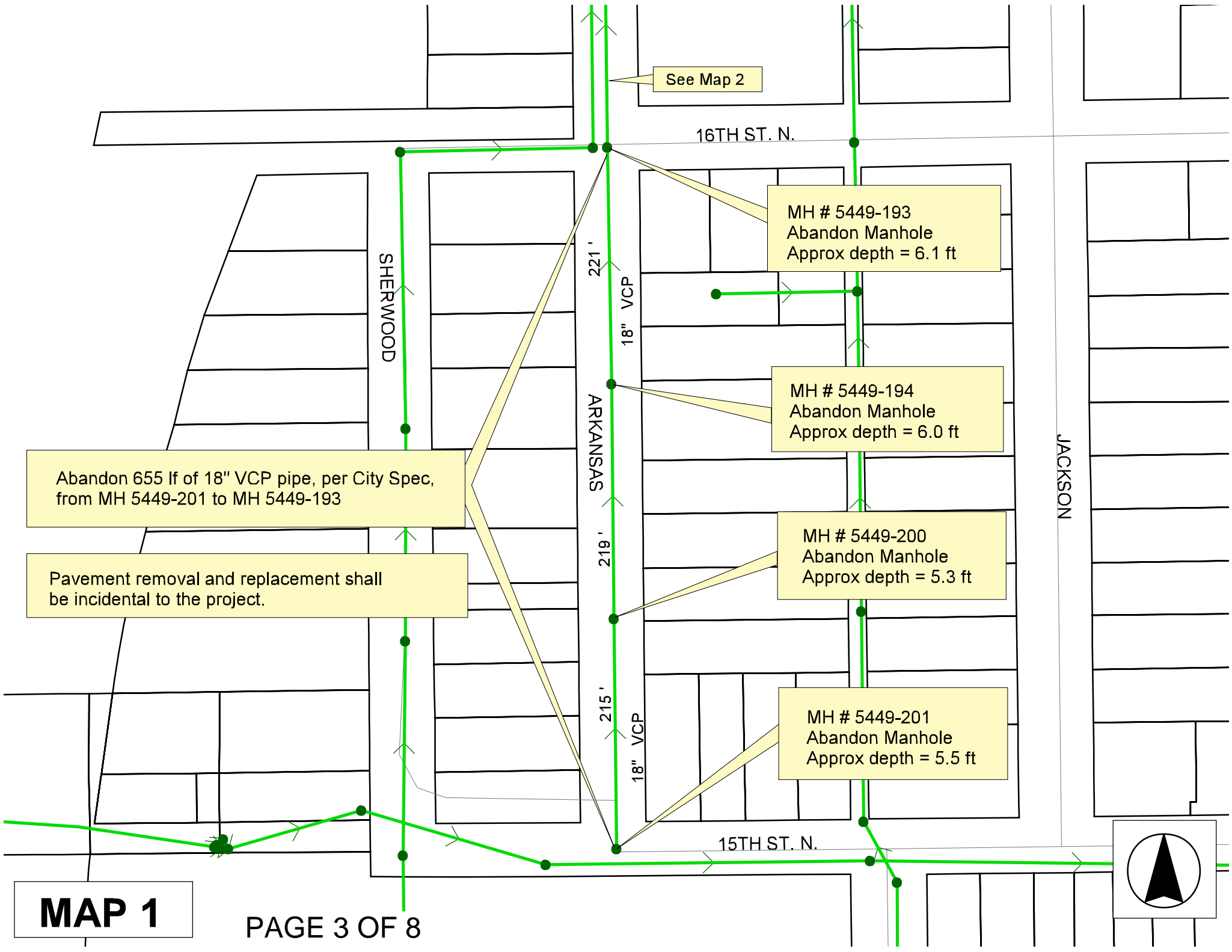


Bid Items

Sanitary Sewer Improvements

Arkansas Avenue, from 15th Street to 20th Street

Bid Item	<u>Map 1</u>	<u>Map 2</u>	<u>Map 3</u>	<u>Map 4</u>	<u>Totals</u>	
18" Pipe Abandoned	655	657			1312	lf
8" Pipe Removed & Replaced				390	390	lf
18" Pipe Removed & 8" Pipe Installed			7		7	lf
Relocate Service Connection		2			2	ea
Replace Service Connection			3		3	ea
Remove Manhole				1	1	ea
Abandon Manhole	4	2			6	ea
Replace Manhole Frame & Cover				1	1	ea
Remove & Replace Manhole Bench & Invert				1	1	ea
Soil Erosion BMPs					1	ls
Site Preparation & Restoration					1	ls



See Map 2

MH # 5449-193
Abandon Manhole
Approx depth = 6.1 ft

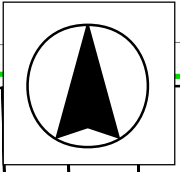
MH # 5449-194
Abandon Manhole
Approx depth = 6.0 ft

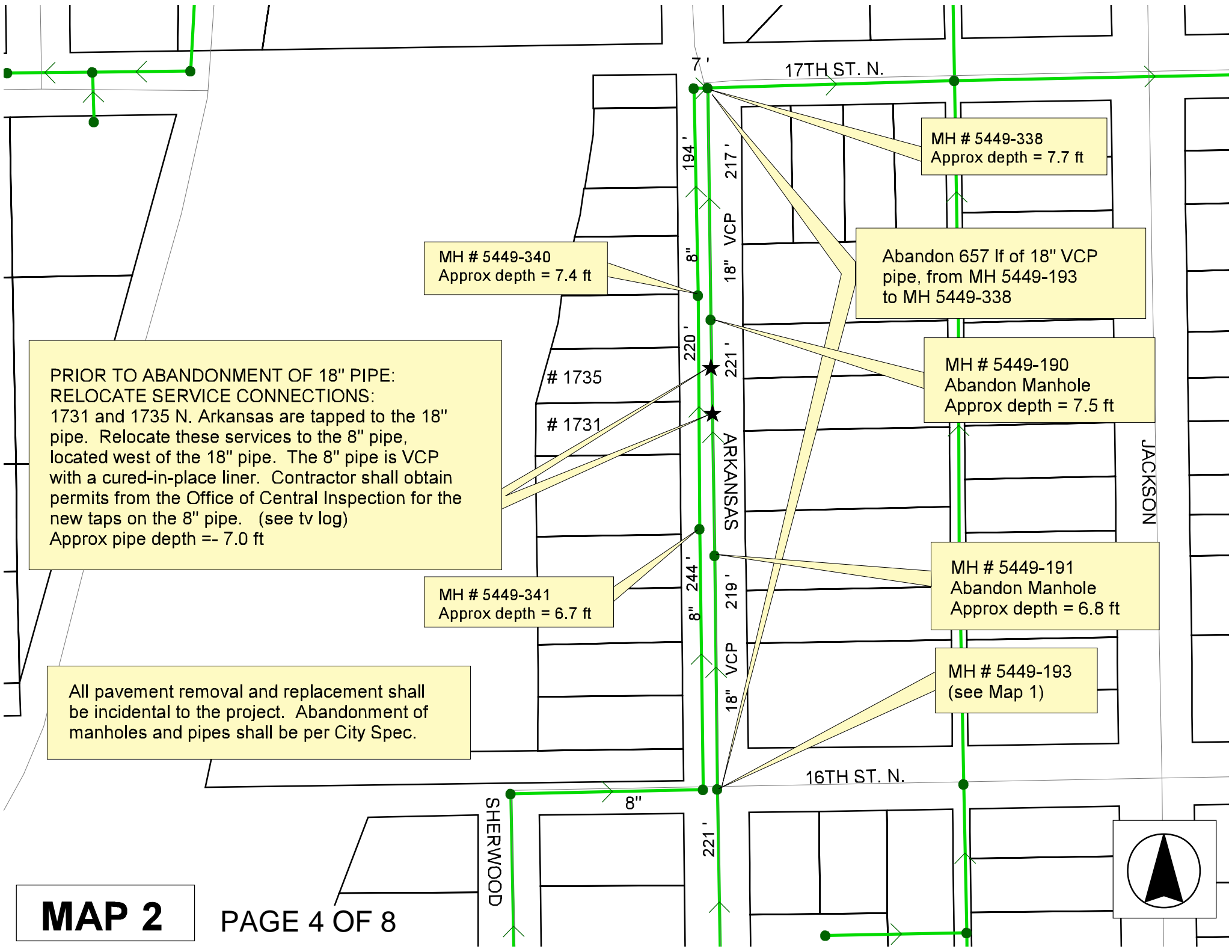
MH # 5449-200
Abandon Manhole
Approx depth = 5.3 ft

MH # 5449-201
Abandon Manhole
Approx depth = 5.5 ft

Abandon 655 lf of 18" VCP pipe, per City Spec,
from MH 5449-201 to MH 5449-193

Pavement removal and replacement shall
be incidental to the project.





**PRIOR TO ABANDONMENT OF 18" PIPE:
RELOCATE SERVICE CONNECTIONS:**
1731 and 1735 N. Arkansas are tapped to the 18" pipe. Relocate these services to the 8" pipe, located west of the 18" pipe. The 8" pipe is VCP with a cured-in-place liner. Contractor shall obtain permits from the Office of Central Inspection for the new taps on the 8" pipe. (see tv log)
Approx pipe depth =- 7.0 ft

MH # 5449-340
Approx depth = 7.4 ft

Abandon 657 lf of 18" VCP pipe, from MH 5449-193 to MH 5449-338

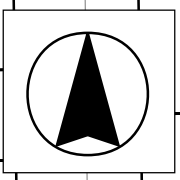
MH # 5449-190
Abandon Manhole
Approx depth = 7.5 ft

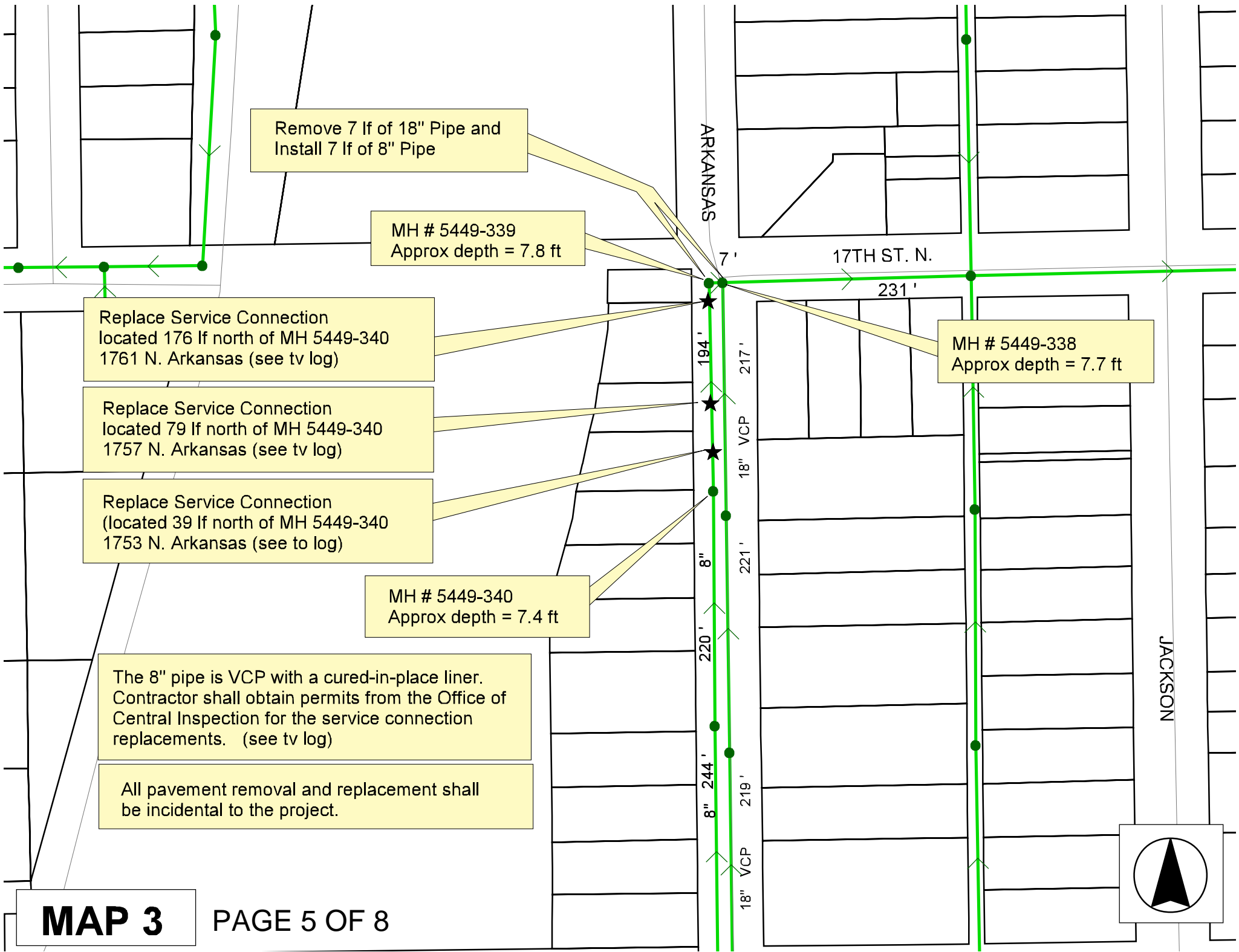
MH # 5449-341
Approx depth = 6.7 ft

MH # 5449-191
Abandon Manhole
Approx depth = 6.8 ft

MH # 5449-193
(see Map 1)

All pavement removal and replacement shall be incidental to the project. Abandonment of manholes and pipes shall be per City Spec.





Remove 7 lf of 18" Pipe and Install 7 lf of 8" Pipe

MH # 5449-339
Approx depth = 7.8 ft

Replace Service Connection located 176 lf north of MH 5449-340 1761 N. Arkansas (see tv log)

Replace Service Connection located 79 lf north of MH 5449-340 1757 N. Arkansas (see tv log)

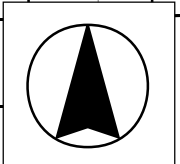
Replace Service Connection (located 39 lf north of MH 5449-340 1753 N. Arkansas (see to log)

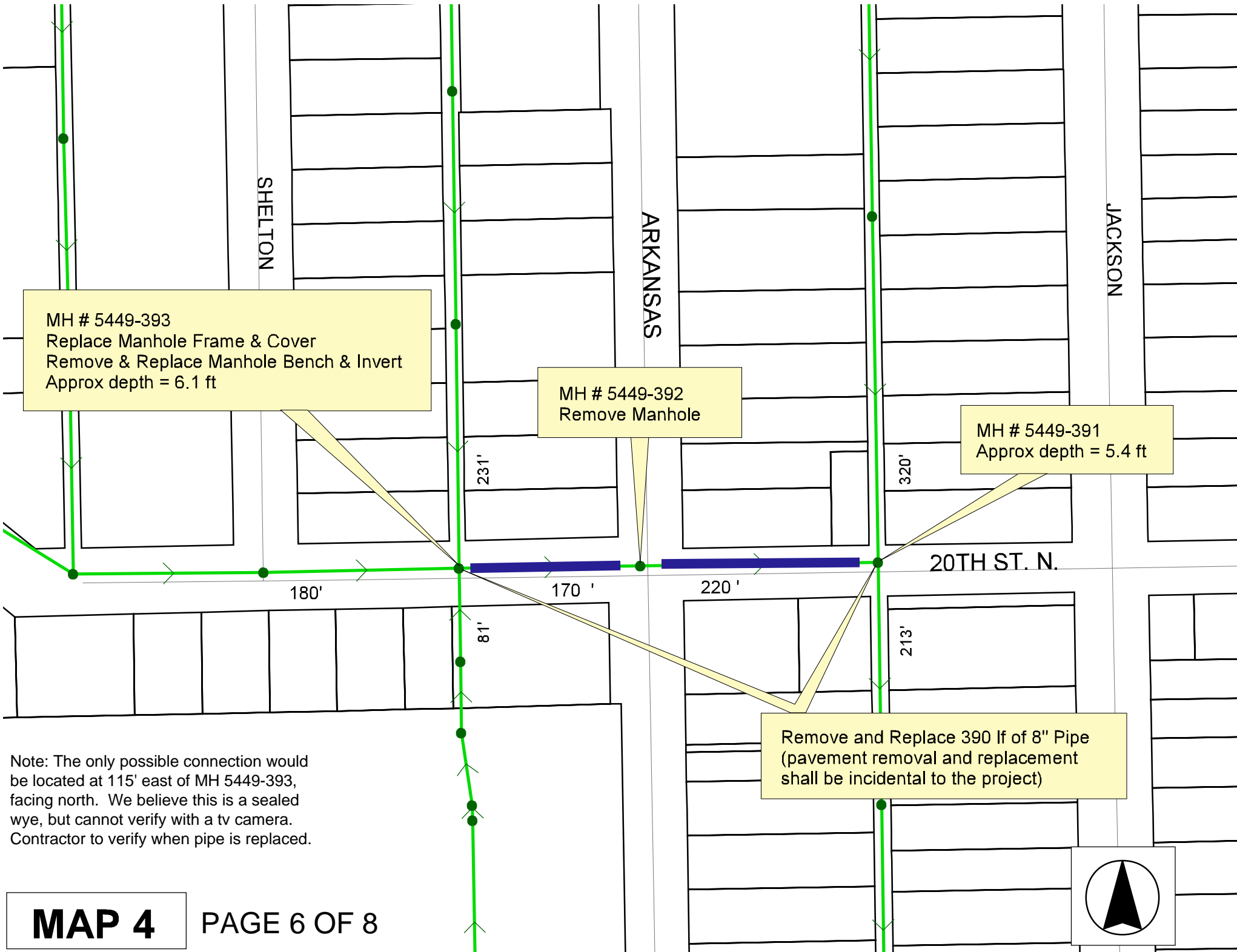
MH # 5449-340
Approx depth = 7.4 ft

MH # 5449-338
Approx depth = 7.7 ft

The 8" pipe is VCP with a cured-in-place liner. Contractor shall obtain permits from the Office of Central Inspection for the service connection replacements. (see tv log)

All pavement removal and replacement shall be incidental to the project.





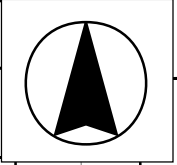
MH # 5449-393
 Replace Manhole Frame & Cover
 Remove & Replace Manhole Bench & Invert
 Approx depth = 6.1 ft

MH # 5449-392
 Remove Manhole

MH # 5449-391
 Approx depth = 5.4 ft

Remove and Replace 390 lf of 8" Pipe
 (pavement removal and replacement shall be incidental to the project)

Note: The only possible connection would be located at 115' east of MH 5449-393, facing north. We believe this is a sealed wye, but cannot verify with a tv camera. Contractor to verify when pipe is replaced.



Television Inspection Master Report

5/7/2007
7:58 AM

C03F

US Structure: 5449-191
DS Structure: 5449-190

Date Insp: 3/26/2007 Basin:
Dir Televised: Upstream To Downstream

Pipe Information

Project No.: D-019 Dia: 18" Material: VCP Length: 221.0 Slope: 0.120

Inspection Information

Crew: 692 Percent Full: Tape ID: DVD #0264
Weather: Cloudy Purpose: TV Existing Line Counter Start:
Surface Cond: Trees Flow: Normal Flow Counter Stop:

Obs. #	VTR Counter Comment	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings		
								Struct	Clean	Remain (gpm)
1		0.0	US Manhole	5449-191	1		0.000	0	0	0.000
2		132.8	West	Break-In Conn	1		0.001	0	0	0.001
3		1731 N. Arkansas 178.0	West	Break-In Conn	1		0.001	0	0	0.001
4		1735 N. Arkansas 221.3	DS Manhole		1		0.000	0	0	0.000

These two taps need to be removed from the 18" main and tied into the 8" main in Arkansas.

(the 8" main is VCP with a cured-in-place liner)

Television Inspection Master Report

5/7/2007
7:58 AM

US Structure: 5449-340 1749 N ARKANSAS AVE Date Insp: 6/19/2006 Basin: C03F
DS Structure: 5449-339 1757 N ARKANSAS ST Dir Televised: Upstream To Downstream

Pipe Information

Project No.: D-071 Dia: 8 Material: VCP Length: 193.9 Slope: 0.098

Obs. #	VTR Counter Comment	Distance	Location	Description	Rating	Obsrvd (gpm)	Est. (gpm)	Ratings		
								Struct	Clean	Remain (gpm)
1		0.0	US Manhole	5449-340	1		0.000	0	0	0.000
2		4.1		Crack-Radial	3		0.000	0	0	0.000
3		8.1	West	Sealed Off Wye West	1		0.000	0	0	0.000
4		15.2		Crack-Radial	3		0.000	0	0	0.000
5		20.3		Crack-Radial	3		0.000	0	0	0.000
6		25.6		Crack-Horizontal	3		0.000	0	0	0.000
7		31.8	West	Sealed Off Wye/Roots	1		0.000	0	0	0.000
8		38.8		Crack-Radial	3		0.000	0	0	0.000
9		39.7	West	Break-In Conn	1		0.000	0	0	0.000
1753 NORTH ARKANSAS / replace service connection										
10		41.5		Crack-Horizontal	3		0.000	0	0	0.000
11		46.9		Crack-Horizontal	3		0.000	0	0	0.000
12		55.9	West	Sealed Off Wye/Roots	1		0.000	0	0	0.000
13		56.4	Crown	PREVIOUSLY MADE POINT REPAIR						
14		57.2		Crack-Radial	4		0.000	0	0	0.000
15		70.5		Crack-Radial	4		0.000	0	0	0.000
16		79.3	West	Break-In Conn	1		0.000	0	0	0.000
1757 N ARKANSAS / replace service connection										
17		96.7		Crack-Radial	3		0.000	0	0	0.000
18		102.3		Crack-Radial	3		0.000	0	0	0.000
19		103.1	West	Sealed Off Wye/Roots	3		0.003	0	0	0.003
20		104.4		Crack-Radial	3		0.000	0	0	0.000
21		109.8		Crack-Radial	3		0.000	0	0	0.000
22		112.5		Crack-Radial	3		0.000	0	0	0.000
23		114.7		Crack-Radial	3		0.000	0	0	0.000
24		117.6		Crack-Radial	3		0.000	0	0	0.000
25		127.0	West	Sealed Off Wye/Roots	3		0.003	0	0	0.003
26		138.8		Crack-Radial	3		0.000	0	0	0.000
27		141.2		Crack-Radial	3		0.000	0	0	0.000
28		144.0		Crack-Radial	3		0.000	0	0	0.000
29		146.7		Crack-Radial	3		0.000	0	0	0.000
30		153.0	West	Sealed Off Wye/Roots	3		0.003	0	0	0.003
31		154.7		Crack-Radial	3		0.000	0	0	0.000
32		159.8		Crack-Radial	3		0.000	0	0	0.000
33		164.8		Crack-Radial	3		0.000	0	0	0.000
34		176.5		Wye Service	3		0.000	0	0	0.000
1761 N ARKANSAS / wye is broken outside of the main / replace service connection										
35		178.2		Crack-Horizontal	3		0.000	0	0	0.000
36		183.2		Crack-Radial	3		0.000	0	0	0.000
37		185.7		Crack-Radial	4		0.000	0	0	0.000
38		193.8		Crack-Horizontal	4		0.000	0	0	0.000
39		196.5		Crack-Horizontal	4		0.000	0	0	0.000
40		199.2	DS Manhole	5449-339						