

CITY OF SPRINGFIELD SPRINGFIELD, ILLINOIS

SEWER REHABILITATION, SRF

ISSUE DATE 1/12/2026
CITY CONTRACT NO. - PW26-04-12
IEPA PROJECT NO. - L17-7124

REVISION 1
1/12/26

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SANGAMON	22	1
		ILLINOIS	CONTRACT NO.	



INDEX OF SHEETS		
SHEET NO.	STREET ID.	DESCRIPTION
1		COVER SHEET
2		URBAN LANE CLOSURES
3		SIDEWALK & CROSSWALK CLOSURES
4		ROAD CLOSURES
5		TRAFFIC CONTROL DEVICES
6		SEWER REHABILITATION GENERAL NOTES AND SUMMARY OF QUANTITIES
7-8		NASSCO PACP REFERENCE
9		2ND, 5TH, & 6TH ST. COMBINED SEWER REHABILITATION KEY MAP
2ND STREET COMBINED SEWER REHABILITATION		
10	2ND-1	2ND STREET - COMBINED SEWER REHABILITATION
11	2ND-2	2ND STREET - COMBINED SEWER REHABILITATION
12	2ND-3	2ND STREET - COMBINED SEWER REHABILITATION
13	2ND-4	2ND STREET - COMBINED SEWER REHABILITATION
14	2ND-5	2ND STREET - COMBINED SEWER REHABILITATION
5TH STREET COMBINED SEWER REHABILITATION		
15	5TH-1	5TH STREET - COMBINED SEWER REHABILITATION
16	5TH-2	5TH STREET - COMBINED SEWER REHABILITATION
17	5TH-3	5TH STREET - COMBINED SEWER REHABILITATION
6TH STREET COMBINED SEWER REHABILITATION		
18	6TH-1	6TH STREET - COMBINED SEWER REHABILITATION
19	6TH-2	6TH STREET - COMBINED SEWER REHABILITATION
TYPICAL DETAILS		
20		MANHOLE DETAILS
21		TYPICAL DETAILS
MANHOLE INDEX		
22		NUMERICAL INDEX OF MAINS

6TH STREET
COMBINED SEWER
REHABILITATION
SEE KEY MAP
(SHEET 9)

2ND STREET
COMBINED SEWER
REHABILITATION
SEE KEY MAP
(SHEET 9)

5TH STREET
COMBINED SEWER
REHABILITATION
SEE KEY MAP
(SHEET 9)



LOCATION MAP

UTILITY COMPANIES:

CWLP WATER
MIKE JOHNSON
11TH AND MASON
SPRINGFIELD, IL 62703
217-789-2323 EXT 1617

COMCAST
KEITH KOSHINSKI
711 S. DIRKSEN PARKWAY
SPRINGFIELD, IL 62703
KEITH.KOSHINSKI@COMCAST.COM

CITY OF SPRINGFIELD
VINCE SMITH
ROOM 201 MUNICIPAL CENTER WEST
7TH AND MONROE
SPRINGFIELD, IL 62701
217-789-2260

CWLP ELECTRIC
BRAD BIXBY
10TH AND MILLER
SPRINGFIELD, IL 62702
217-757-8520 EXT 2163

AT&T
TERESA MAYER
529 S. 7TH ST. FLOOR 3B
SPRINGFIELD, IL 63703
217-789-8367

AMEREN ILLINOIS NORTH
MARK MANCOWITZ
825 NORTH MACARTHUR
SPRINGFIELD, IL 62702
217-753-5150

SANGAMON COUNTY WATER
RECLAMATION DISTRICT
JASON JACOBS
3017 NORTH 8TH STREET
SPRINGFIELD, IL 62707
217-528-0491

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 6
GREG HECKEL
3215 EXECUTIVE PARK DRIVE
SPRINGFIELD, IL 62703
217-782-4501

SPRINGFIELD PUBLIC SCHOOLS
TRANSPORTATION DEPARTMENT
RICK KOOPMAN
1900 W. MONROE ST.
SPRINGFIELD, IL 63704
217-525-3096

SPRINGFIELD MASS
TRANSIT DISTRICT
RON BOUVET
928 S. 9TH ST.
SPRINGFIELD, IL 62703
217-522-6087

REVISION 1
1/12/26

TOLL FREE #
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
(J.U.L.I.E.) TELEPHONE NUMBER
1-800-892-0123

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



DATE SIGNED: 1/12/2026
LISC. EXP. DATE 11/30/2027

APPROVED: _____
CITY ENGINEER



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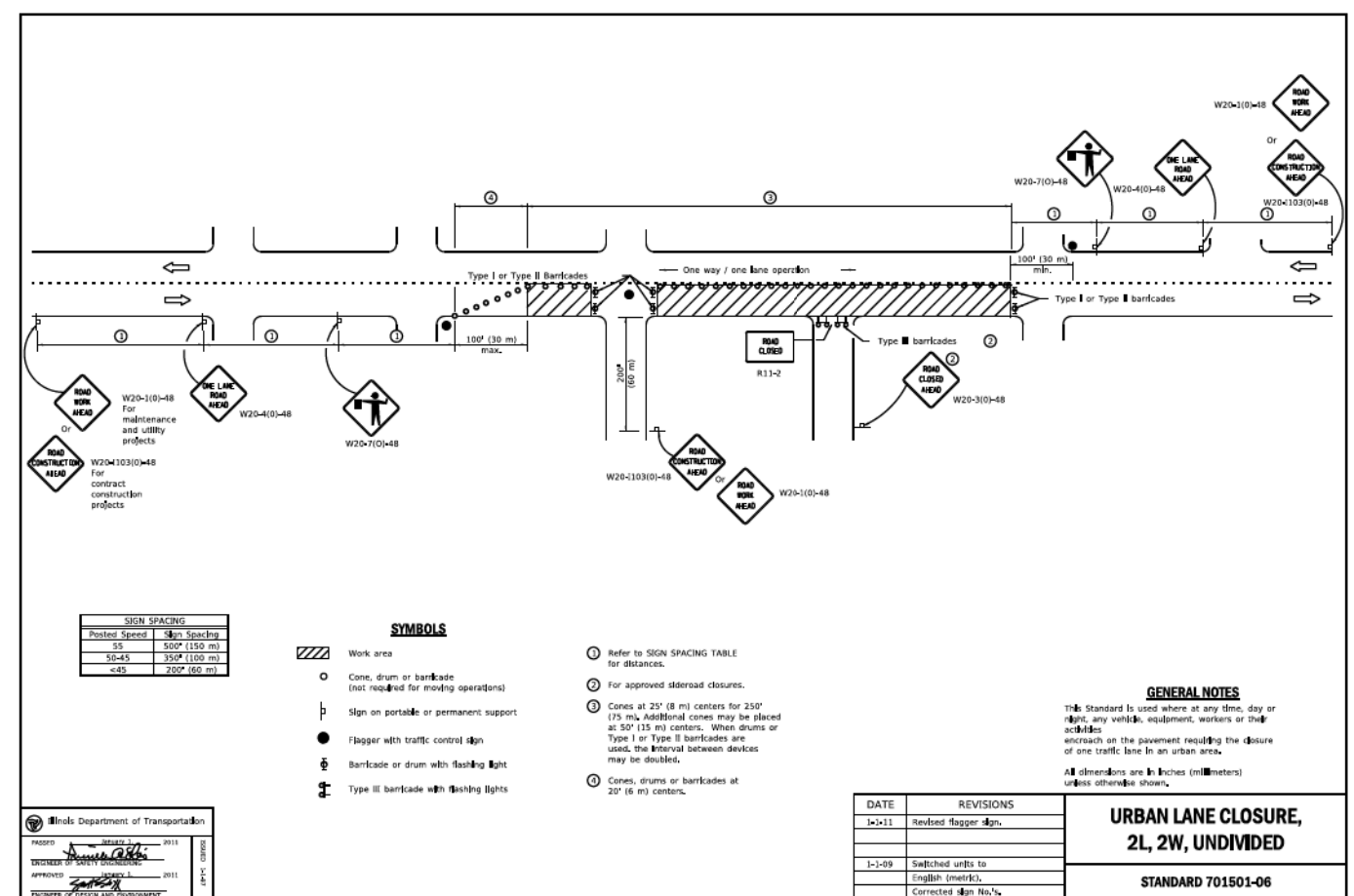
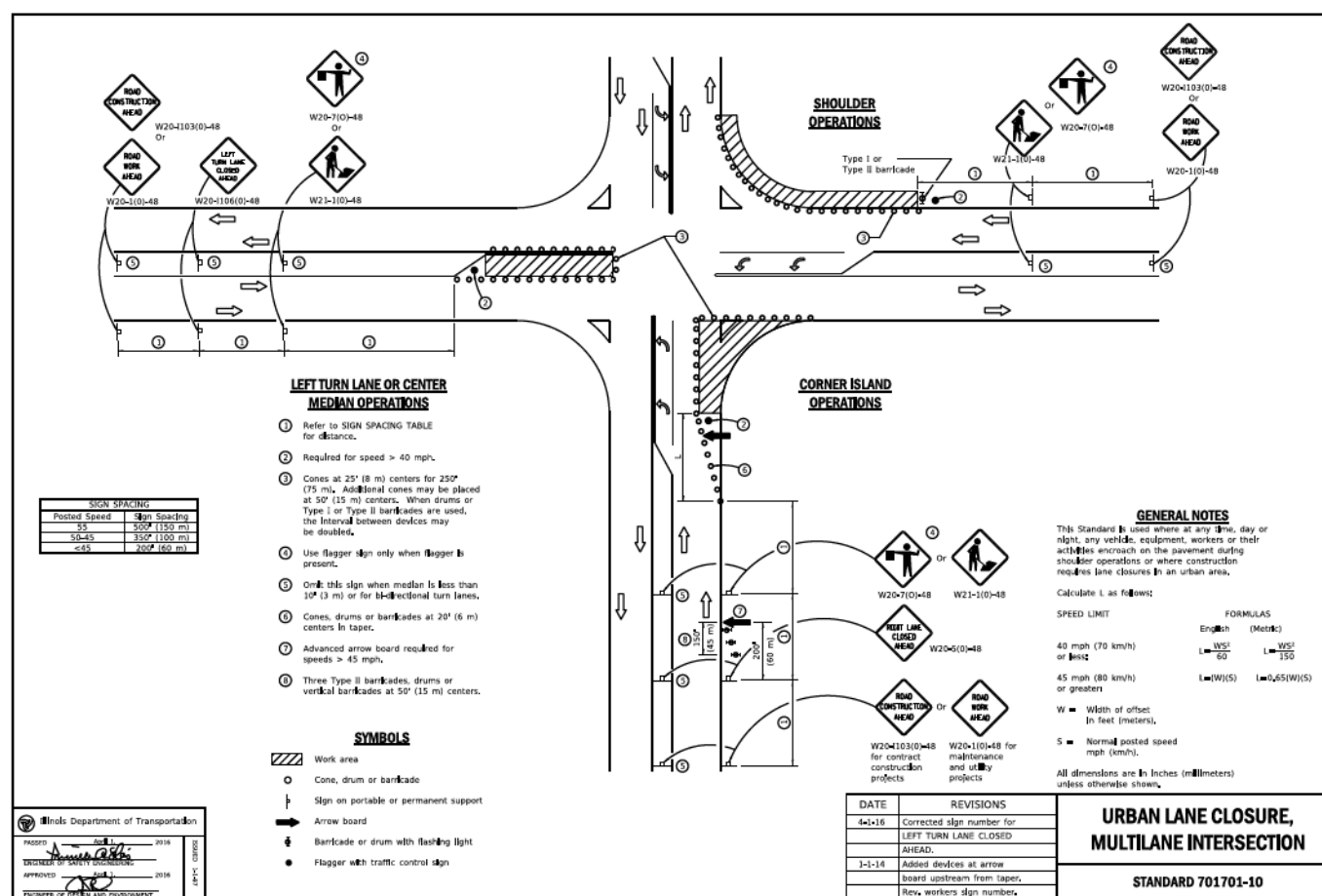
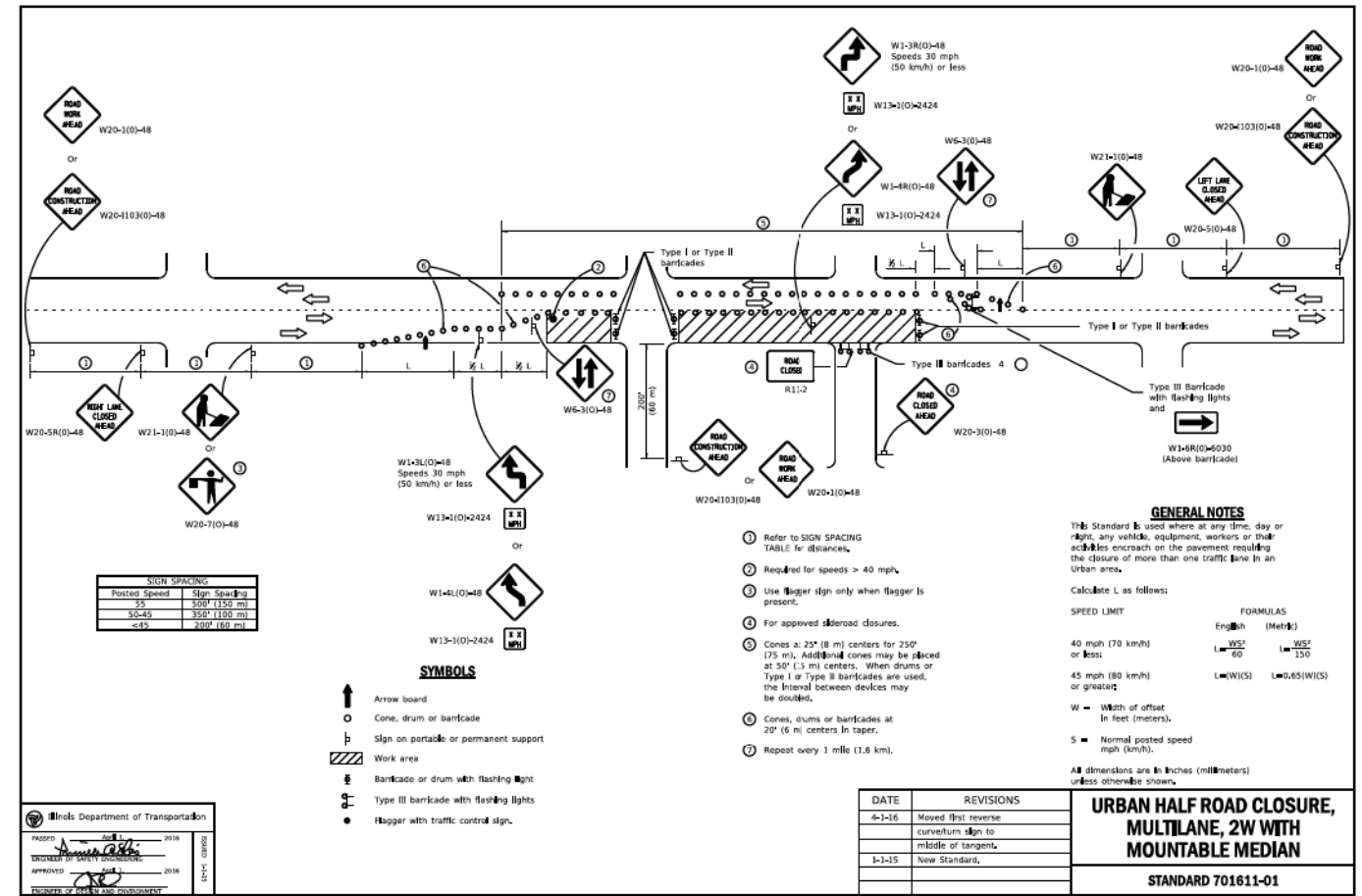
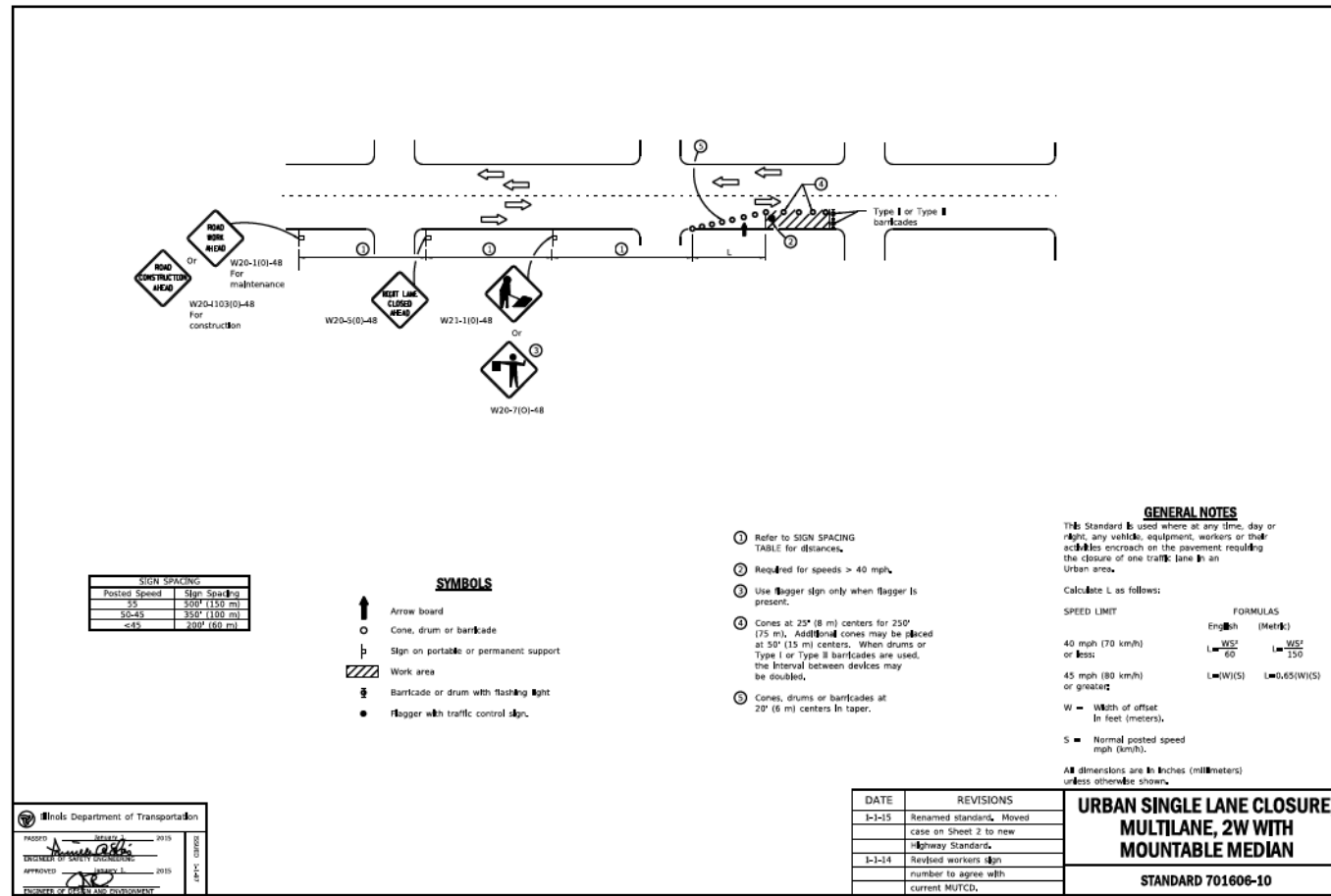
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Offices Nationwide

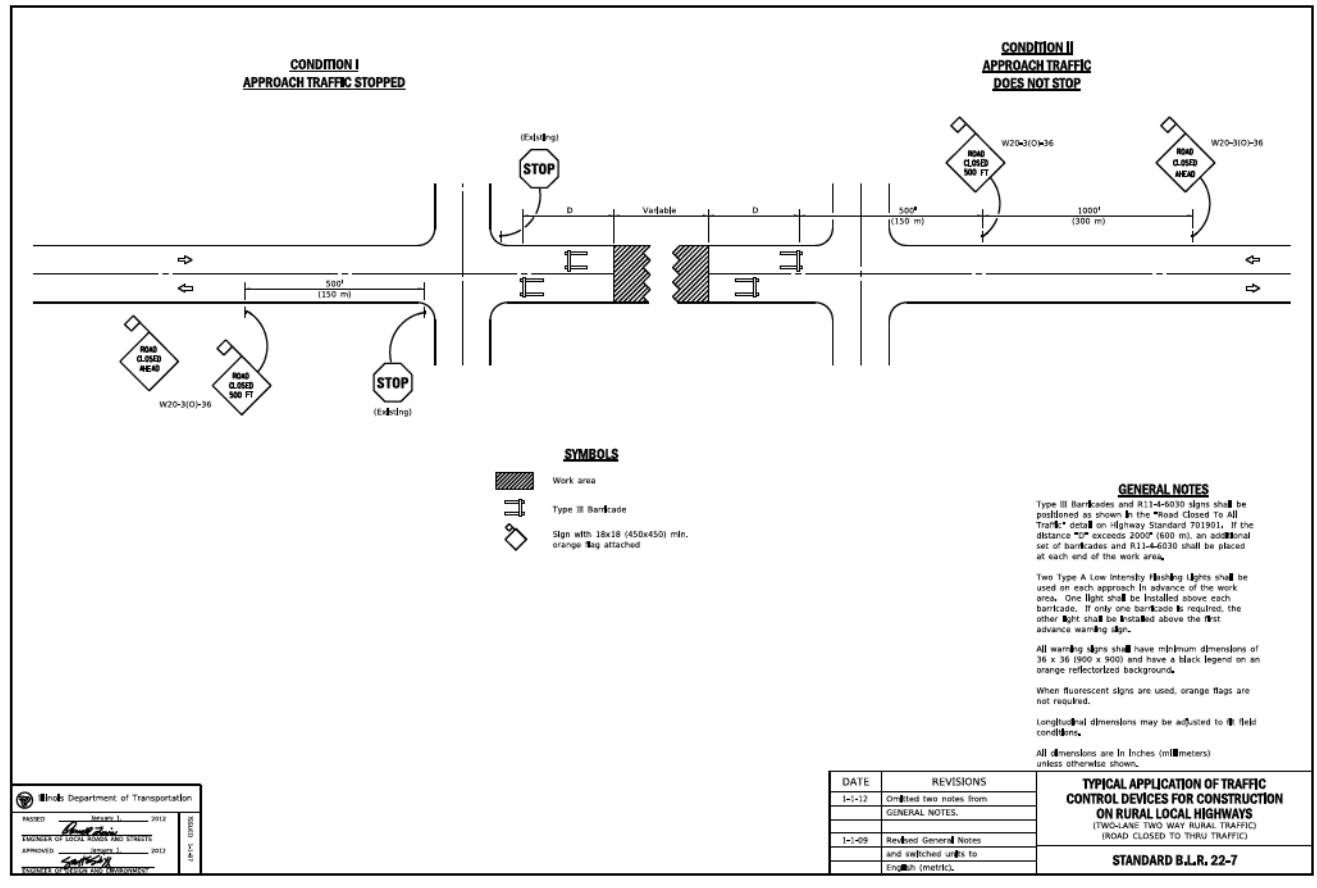
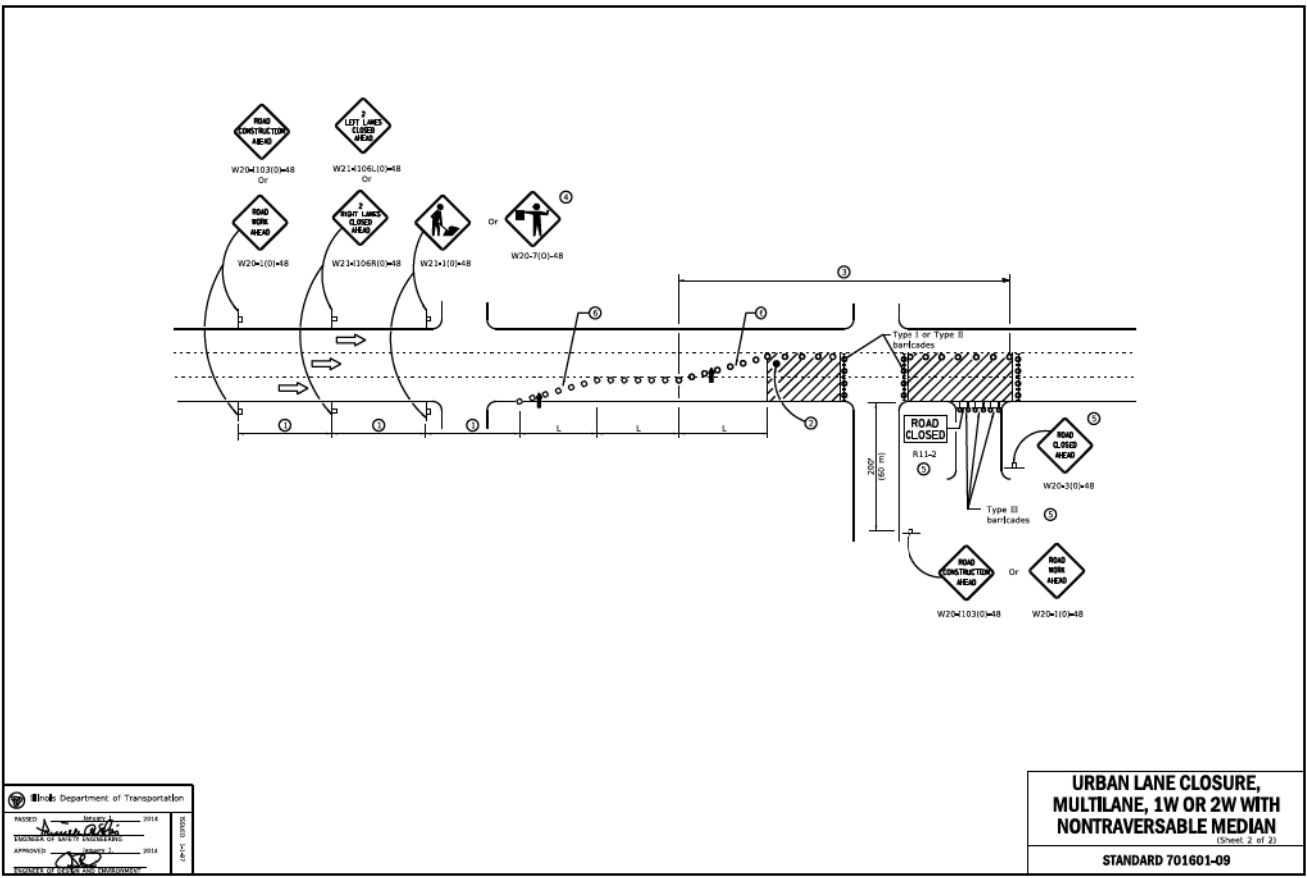
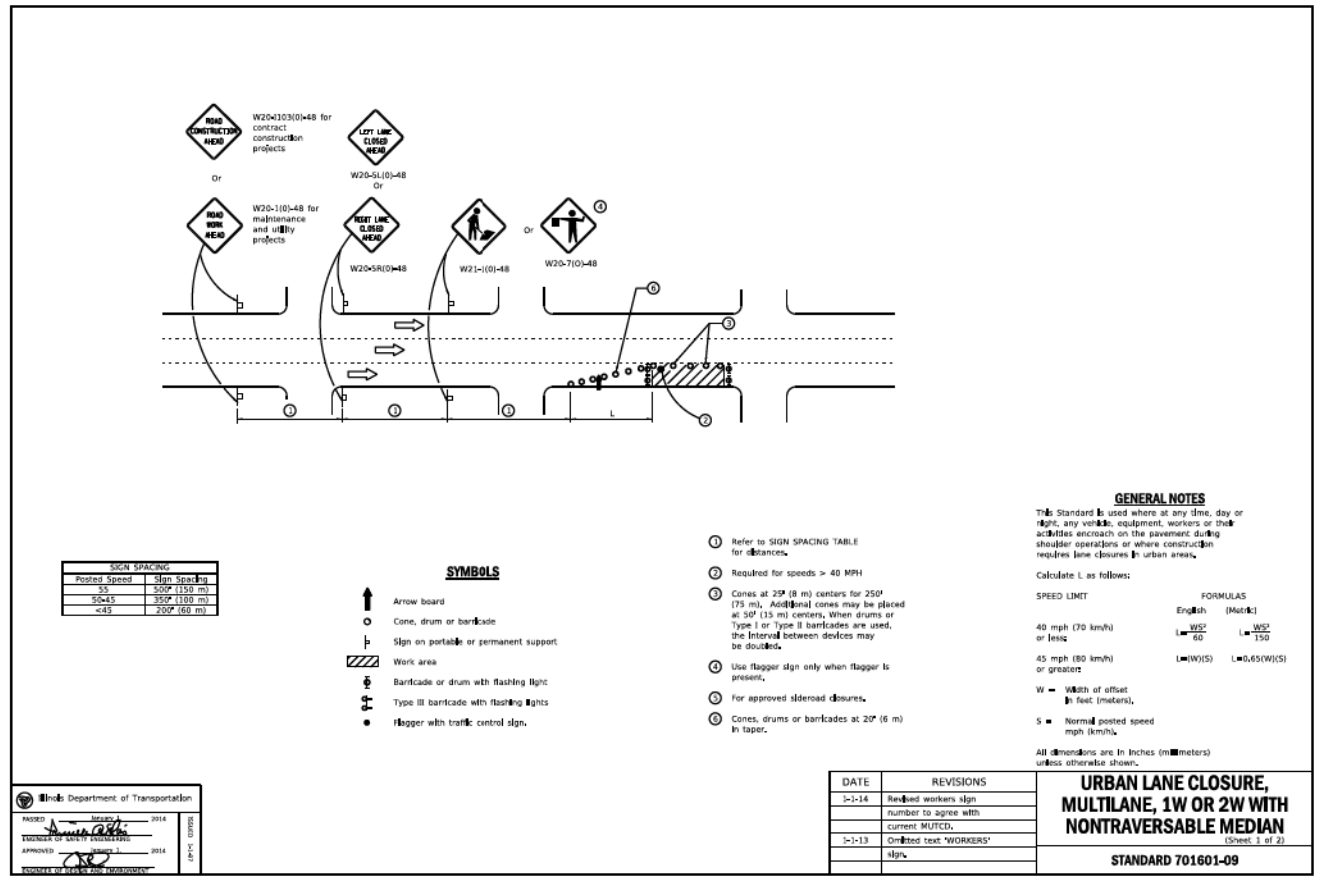
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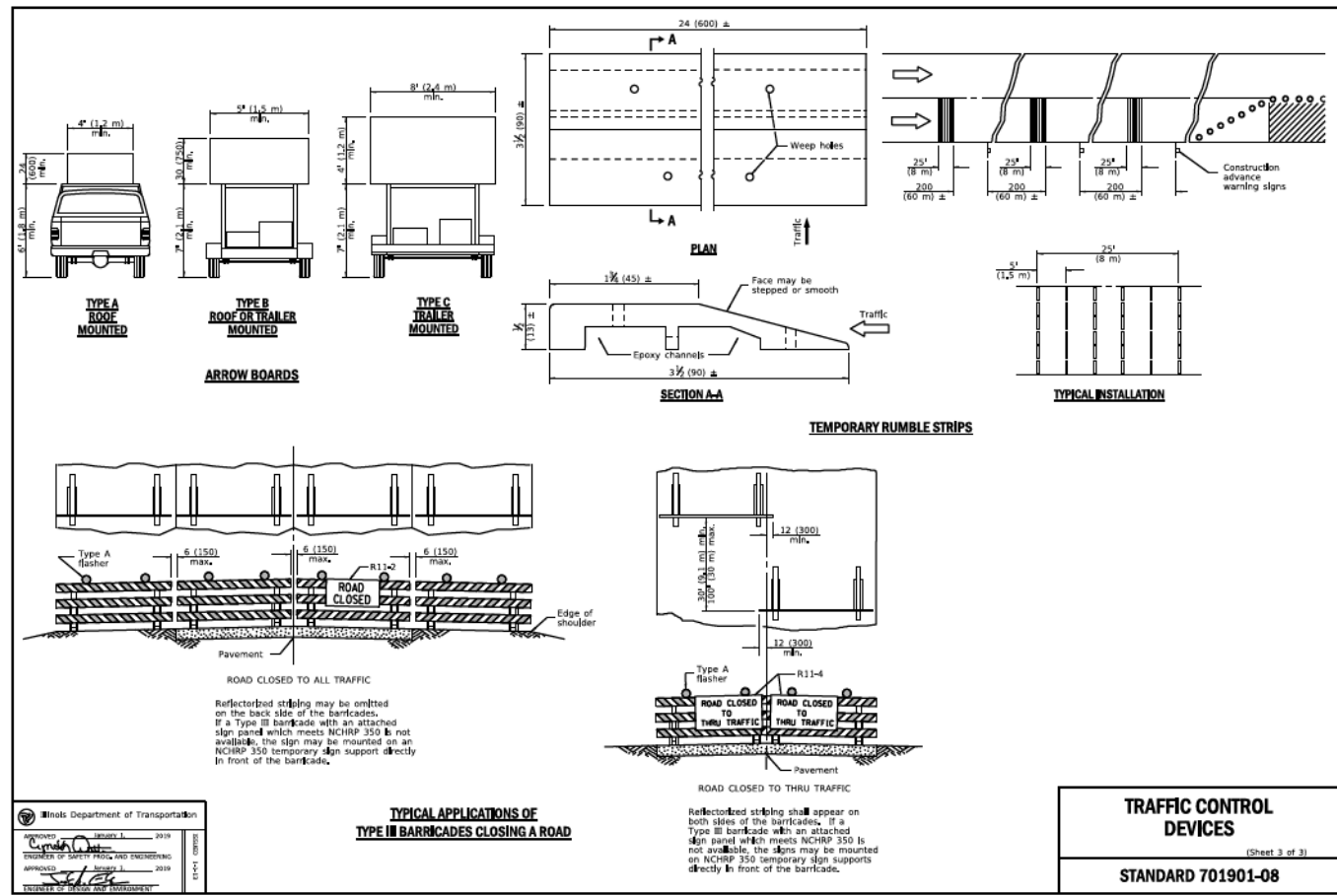
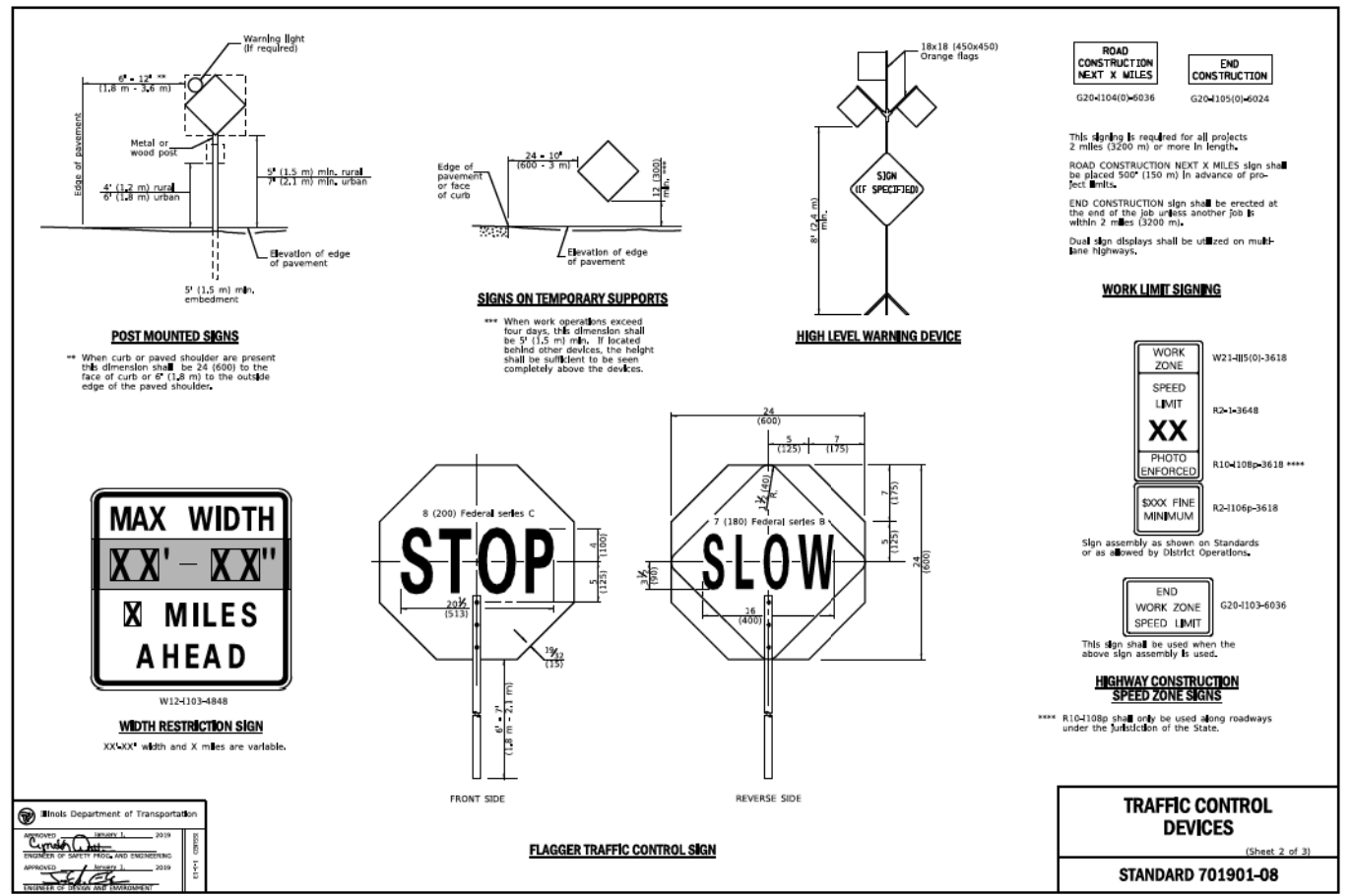
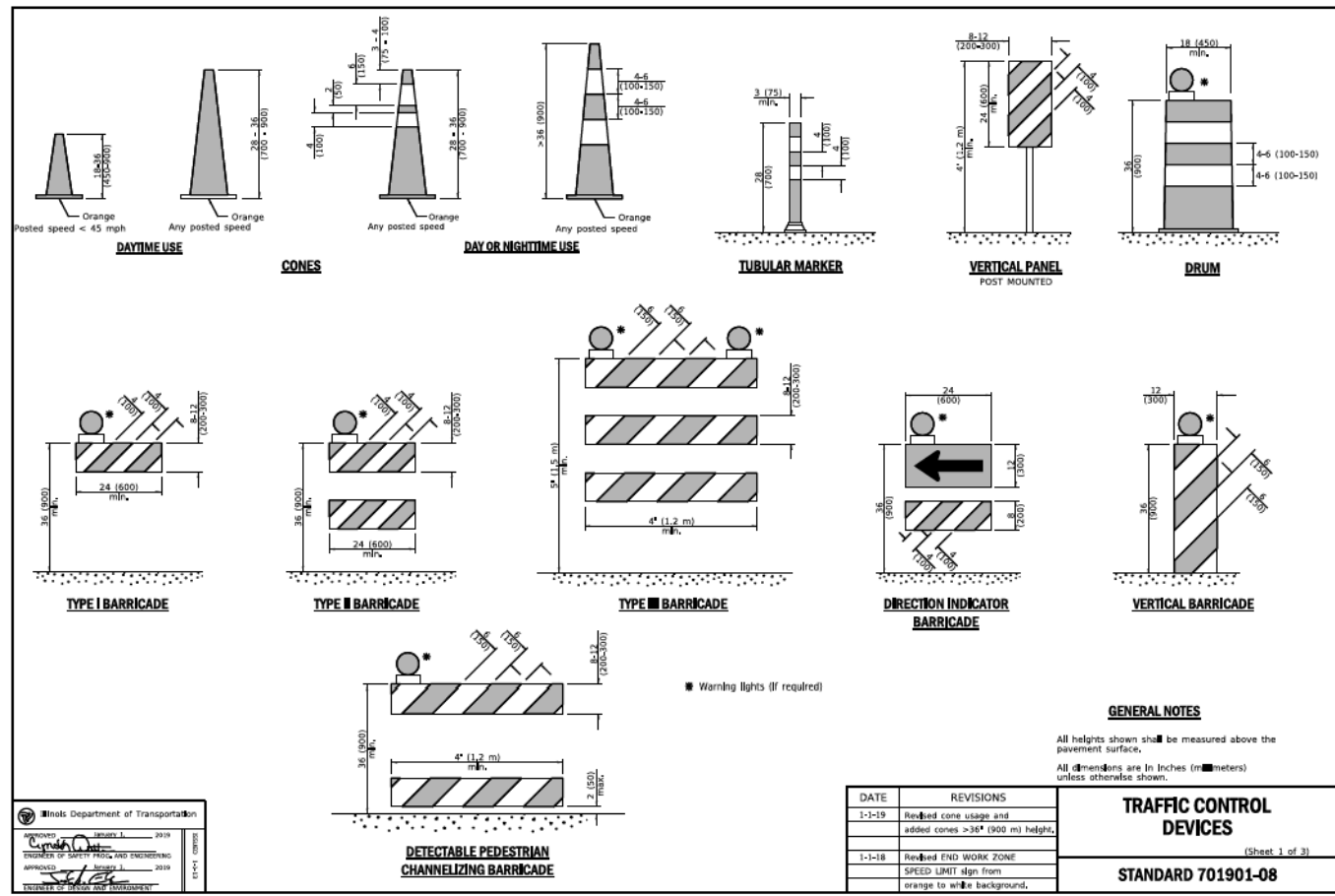
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PLOT DATE = 1/12/2026
PLOT SCALE = 1"=100'
PLOT REFERENCE = SRF#







LEGEND

<u>EXISTING</u>	
	SURFACE WATER LINE
	SECTION LINE
	TREE/CROP LINE
	PROPERTY LINE
	RIGHT-OF-WAY
	EDGE OF PAVEMENT
	EDGE OF SHOULDER
	GUARDRAIL
	FENCE LINE
	BURIED TELECOMMUNICATIONS
	BURIED FIBER OPTIC
	WATER VALVE
	FIRE HYDRANT
	MANHOLE
	LIGHT POLE
	UTILITY POLE

<u>EXISTING</u>	<u>PROPOSED</u>	
		WATER
		GAS
		ELECTRIC
		SANITARY
		CABLE TELEVISION
		PERMANENT EASEMENT
		TEMPORARY EASEMENT
		BUILDING
		PLUG VALVE
		TRANSITION SLEEVE
		TELEPHONE SPLICE BOX
		HANDHOLE
		SPLICE BOX

GENERAL NOTES

- IN ACCORDANCE WITH STATE OF ILLINOIS STATUTE 220 ILCS 50, THE CONTRACTOR IS TO NOTIFY ALL UTILITY COMPANIES NOT MORE THAN 14 DAYS NOR LESS THAN 48 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS) IN ADVANCE OF THE START OF EXCAVATION OR DEMOLITION.
J.U.L.I.E. TELEPHONE NUMBER
1-800-892-0123
- IN ADDITION TO THE REQUIREMENTS OF SECTIONS 5-5 AND 20-2.16 OF THE STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL, PRIOR TO STARTING EXCAVATION, ASCERTAIN FROM ALL LOCAL UTILITIES, ESPECIALLY GAS AND WATER, THE EXACT LOCATIONS OF ALL MAINS AND BUILDING SERVICES IN THE AREA OF OPERATIONS, WHETHER SUCH ARE INDICATED ON THE PLANS OR NOT. ANY SUCH MAINS AND SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED. WHENEVER POSSIBLE, BUILDING OWNERS OR OCCUPANTS SHALL BE NOTIFIED IN ADVANCE IF THEIR UTILITY SERVICE IS TO BE DISCONNECTED AND NO BUILDING SHALL BE LEFT WITHOUT SERVICE OVERNIGHT.
- ALL MATERIALS SHALL BE APPROVED BY ENGINEER AND THE CITY OF SPRINGFIELD PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL ACQUIRE NECESSARY PERMITS FROM THE CITY OF SPRINGFIELD OFFICE OF PUBLIC WORKS TO WORK IN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES. THE CONTRACTOR SHALL FIELD VERIFY THE LENGTHS OF THE SEWER MAINS PRIOR TO FABRICATION OF THE CIPP LINERS.
- PROPERTY OWNERS SHALL BE CONTACTED TWO WEEKS PRIOR TO WORK COMMENCING FOLLOWED UP WITH A 48 HOUR NOTIFICATION.
- THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PROTECT PUBLIC AND PRIVATE PROPERTY. IF AT ANY TIME, PUBLIC OR PRIVATE PROPERTY IS DAMAGED OR DESTROYED, THE CONTRACTOR SHALL, AT HIS/HER OWN EXPENSE, RESTORE SUCH PROPERTY TO A CONDITION EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE.
- MANHOLE MODIFICATIONS, LIKE THE CASTING REMOVAL, SHALL BE COORDINATED THROUGH THE ENGINEER & THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE WHETHER COMPLETE INVERSION OF THE LINER FOR EACH MAIN SEGMENT CAN BE ACHIEVED PER THE ACCESS POINTS SHOWN ON THE PLANS. ANY ADDITIONAL MANHOLE, ACCESS POINT, OR MANHOLE MODIFICATION DEEMED NECESSARY FOR INVERSION ACCESS THAT IS NOT INCLUDED IN THE PLANS SHALL BE CONSIDERED INCIDENTAL.

SUMMARY OF BASE BID QUANTITIES FOR SEWER REHABILITATION

ITEM	UNIT	QUANTITY
TRAFFIC CONTROL	LS	1
VERIFICATION OF RESIDENTIAL AND COMMERCIAL LATERALS	EA	183
VERIFICATION OF STORM LATERALS	EA	58
15" DIA. SEWER MAIN CLEANING (HEAVY CLEANING)	LF	1,438
24" DIA. SEWER MAIN CLEANING (HEAVY CLEANING)	LF	3,525
30" DIA. SEWER MAIN CLEANING (HEAVY CLEANING)	LF	722
15" DIA. CURED-IN-PLACE PIPE (CIPP)	LF	1,438
24" DIA. CURED-IN-PLACE PIPE (CIPP)	LF	3,525
30" DIA. CURED-IN-PLACE PIPE (CIPP)	LF	722
HYDROPHILIC PIPE END SEAL 15"	EA	8
LATERAL REINSTATEMENT	EA	184
WIRE BRUSH LATERAL	EA	184
POINT REPAIR - MAIN REHABILITATION 24" DIA.	EA	3
POINT REPAIR - LATERAL REHABILITATION, 4" DIA.	EA	1
POINT REPAIR - LATERAL REHABILITATION, 6" DIA.	EA	1
POINT REPAIR - ADD NEW DOGHOUSE MANHOLE, 5 FT. DIA.	EA	2
POINT REPAIR - ADD NEW DOGHOUSE MANHOLE, 7 FT. DIA.	EA	1

POINT REPAIR NOTES

- ALL EXCESS EARTH FROM THE TRENCHES SHALL BE DISPOSED OF LAWFULLY BY THE CONTRACTOR OFF SITE. DISPOSAL OF EXCESS EARTH SHALL BE CONSIDERED INCIDENTAL TO THE POINT REPAIRS.
- PAVEMENT REMOVED DURING CONSTRUCTION SHALL BE REPLACED.
- OPEN EXCAVATIONS SHALL BE FENCED OFF DAILY WHEN CREWS ARE NOT ON SITE.
- ALL MANHOLE CASTINGS FOR MANHOLE FRAME & LID REMOVALS SHALL BE COLLECTED AND DELIVERED TO THE CITY OF SPRINGFIELD PUBLIC WORKS SEWER DEPARTMENT AT 222 NORTH 17TH STREET, SPRINGFIELD, IL.

NASSCO'S PIPELINE ASSESSMENT CERTIFICATION PROGRAM® (PACP®)

Section 4 — Structural Defect Coding

C CRACK 4-3 CL Longitudinal CC Circumferential CM Multiple CS Spiral CH Hinge (2, 3, 4)	F FRACTURE 4-9 FL Longitudinal FC Circumferential FM Multiple FS Spiral FH Hinge (2, 3, 4)	B BROKEN 4-17 BSV Soil Visible BVV Void Visible	H HOLE 4-21 HSV Soil Visible HVV Void Visible	D DEFORMED 4-25 (Rigid) DR Deformed Rigid No modifiers used.	D DEFORMED 4-25 (Flexible) DFBR Bulging Round DFBI Bulging Inv.Curv. DFC Creasing DFE Elliptical	D DEFORMED 4-25 (Brick) DTBR Bulging Round DTBI Bulging Inv.Curv.
X COLLAPSE 4-37 X Collapse No descriptors and no modifiers used.	J JOINT 4-43 JOS Offset Small JOM Offset Medium JOL Offset Large	J JOINT 4-43 JOSD Offset Small Defect JOMD Offset Medium Defect JOLD Offset Large Defect	J JOINT 4-43 JSS Separation Small JSM Separation Med. JSL Separation Large	J JOINT 4-43 JAS Angular Small JAM Angular Medium JAL Angular Large	S SURFACE 4-51 DAMAGE SRI Roughness Increased SAV Aggregate Visible SAP Aggregate Projecting SAM Aggregate Missing	S SURFACE 4-51 DAMAGE SRV Reinforcement Visible SRP Reinforcement Projecting SRC Reinforcement Corroded SMW Missing Wall
S SURFACE 4-51 DAMAGE SSS Surface Spalling SSC Surface Spalling Coating SCP Surface Damage Corrosion SZ Other	LF LINING FEATURES 4-67 LFAC Abn'd Connection LFAS Annular Space LFB Blistered Lining LFCS Service Cut Shifted	LF LINING FEATURES 4-67 LFD Detached LFDC Discoloration LFDE Defective End LFDL Delamination	LF LINING FEATURES 4-67 LFOC Overcut Service LFRS Resin Slug LFUC Undercut Service LFW Winkled LFZ Other	WF WELD FAILURE 4-85 WFC Circumferential WFL Longitudinal WFM Multiple WFS Spiral WFZ Other	RP POINT REPAIR 4-89 RPL Liner RPLD Liner Defective RPP Patch RPPD Patch Defective	RP POINT REPAIR 4-89 RPR Replacement RPRD Replmt. Defective RPZ Other RPZD Other Defective
BRICKWORK 4-97 DB Displaced MB Missing DI Dropped Invert	BRICKWORK 4-97 MMS Mortar Missing Small MMM Mortar Missing Med. MML Mortar Missing Large					

NASSCO'S PIPELINE ASSESSMENT CERTIFICATION PROGRAM® (PACP)®

Section 5 — Operation and Maintenance

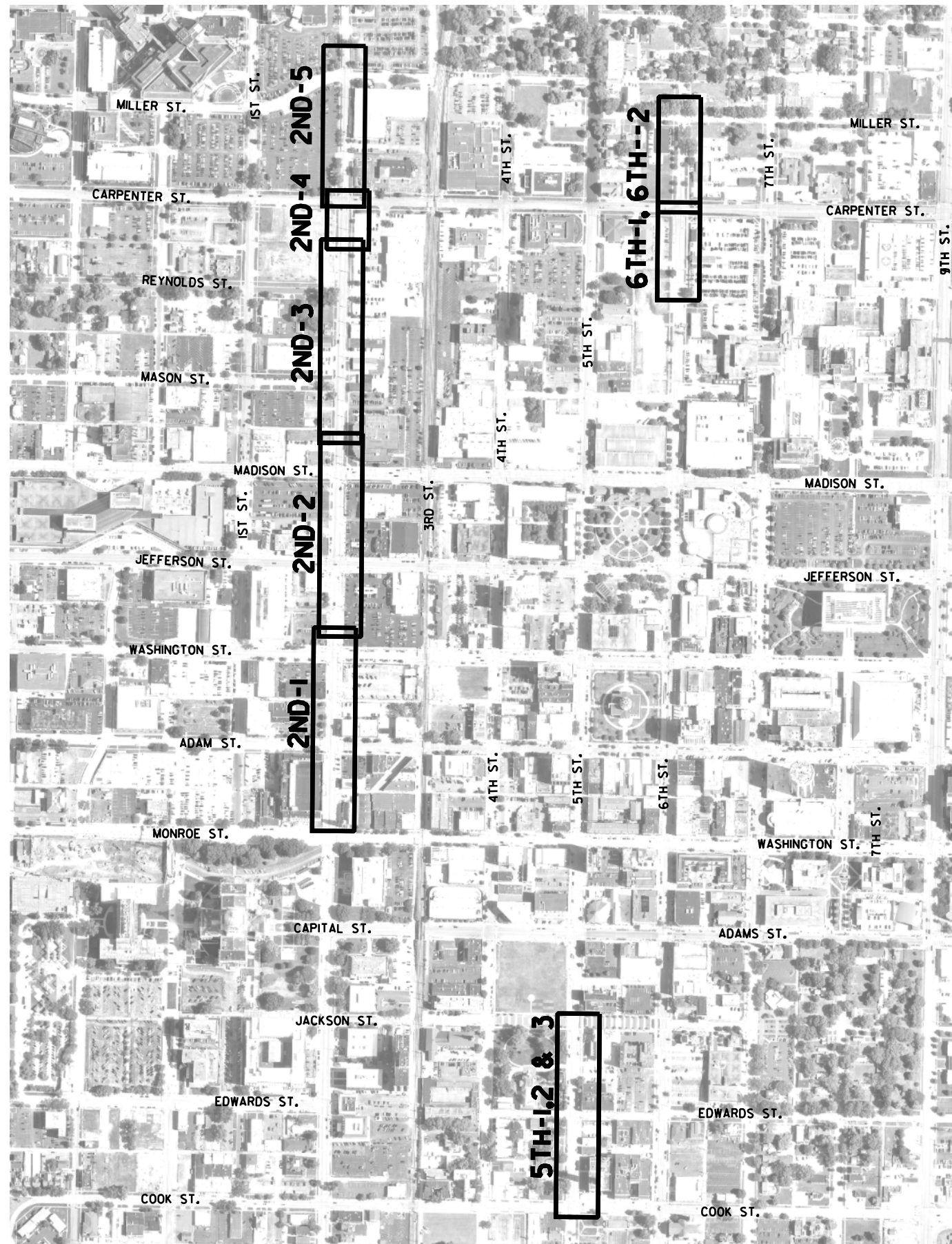
D DEPOSITS 5-3 (Attached) DAE Encrustation DAGS Grease DAR Ragging DAZ Other	D DEPOSITS 5-4 (Settled) DSF Fine DSGV Gravel DSC Hard/Compact DSZ Other	D DEPOSITS 5-4 (Ingress) DNF Fine (silt/sand) DNGV Gravel DNZ Other	R ROOTS 5-11 (Fine) RFB Barrel RFL Lateral RFC Connection RFJ Joint	R ROOTS 5-11 (Medium) RMB Barrel RML Lateral RMC Connection RMJ Joint	R ROOTS 5-11 (Ball) RBB Barrel RBL Lateral RBC Connection RBJ Joint	R ROOTS 5-11 (Tap) RTB Barrel RTL Lateral RTC Connection RTJ Joint	
I INFILTRATION 5-19 IS Stain ISB Barrel ISC Connection ISJ Joint ISL Lateral	I INFILTRATION 5-19 IW Weeper IWB Barrel IWC Connection IWJ Joint IWL Lateral	I INFILTRATION 5-19 ID Dropper IDB Barrel IDC Connection IDJ Joint IDL Lateral	I INFILTRATION 5-19 IR Runner IRB Barrel IRC Connection IRJ Joint IRL Lateral	I INFILTRATION 5-19 IG Gusher IGB Barrel IGC Connection IGJ Joint IGL Lateral	OB OBSTACLES 5-31 OBSTRUCTIONS OBB Brick or Masonry OBC Object Through Connection OBI Object Intruding Through Wall	OB OBSTACLES 5-31 OBSTRUCTIONS OBJ Object in Joint OBM Pipe Material in Invert OBN Construction Debris OBP External Pipe Cable	
OB OBSTACLES 5-31 OBSTRUCTIONS OBR Rocks OBS Built In Structure OBZ Other	V VERMIN 5-45 VR Rat VC Cockroach VZ Other	G GROUT TEST 5-49 & SEAL GTP Grout Test Passed GTPJ Joint GTPL Lateral GTF Grout Test Failed GTFJ Joint GTFL Lateral	G GROUT TEST 5-49 & SEAL GTU Grout Test Unable GTUJ Joint GTUL Lateral GRT Grout Test Location				

Section 6 — Construction Features

T TAP 6-3 TB Break-In/Hammer TBI Intruding TBD Defective TBC Capped TBA Activity TBB Abandoned	T TAP 6-3 TF Factory Made TFI Intruding TFD Defective TFC Capped TFA Activity TFB Abandoned	T TAP 6-3 TR Rehabilitated TRI Intruding TRD Defective TRC Capped TRA Activity TRB Abandoned	T TAP 6-3 TS Saddle TSI Intruding TSD Defective TSC Capped TSA Activity TSB Abandoned	IS INTRUDING SEALING MATERIAL 6-15 ISSR Sealing Ring ISSRB Broken ISSRH Hanging ISSRL Loose ISGT Grout ISZ Other
L LINE 6-21 (of sewer) LD Down LL Left LLD Left Down LLU Left Up	L LINE 6-21 (of sewer) LR Right LRD Right Down LRU Right Up LU Up	A ACCESS POINT 6-25 ACB Catch Basin ACO Cleanout ACOM Mainline ACOP Property ACOH House	A ACCESS POINT 6-25 ADP Discharge Point AEP End of Pipe AJB Junction Box AM Meter AMH Manhole	A ACCESS POINT 6-25 AOC Other Structure ATC Tee Connection AWA Wastewater Access AWW Wetwell AZ Other

Section 7 — Miscellaneous Features

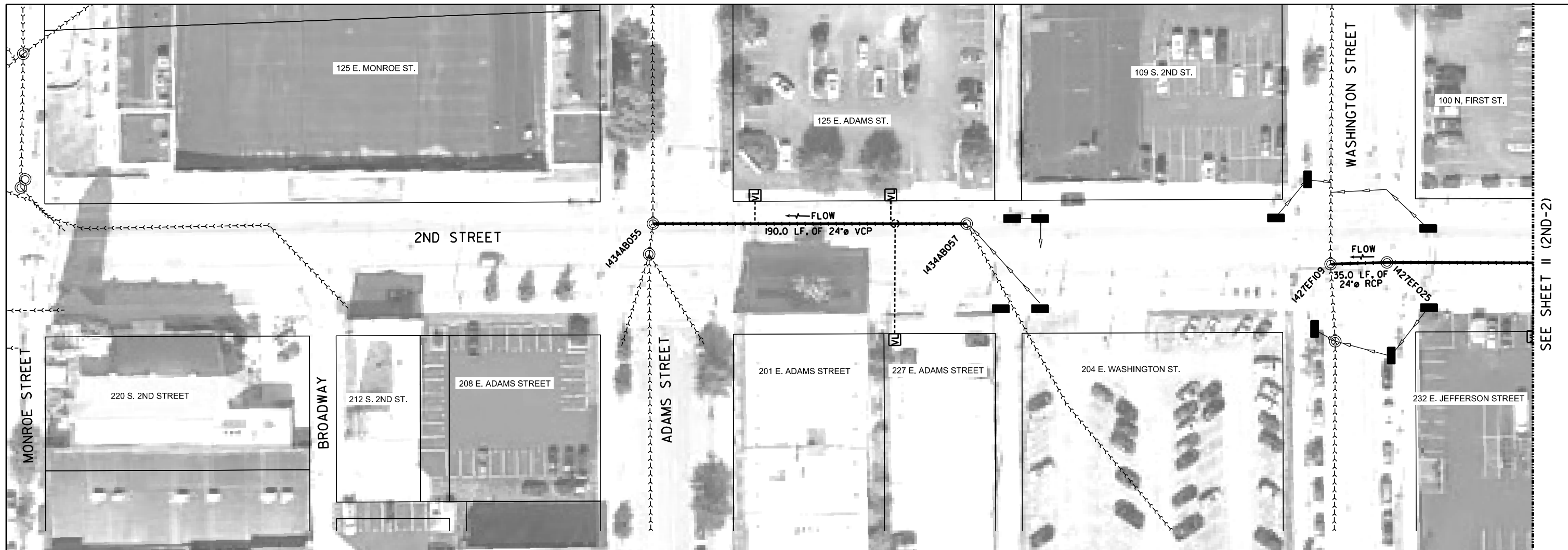
M MISCELLANEOUS FEATURES 7-1 MCU Camera Underwater MGO General Observation MGP General Photograph MJL Joint Length	M MISCELLANEOUS FEATURES 7-1 MLC Lining Change MMC Material Change MSC Shape/Size Change MSA Survey Abandoned MWL Water Level
M MISCELLANEOUS FEATURES 7-1 MWLS Water Level Sag MWM Water Mark MY Dye Test MYV Dye Visible MYN Not Visible	



2ND, 5TH & 6TH ST. COMBINED SEWER REHABILITATION
KEY MAP

2ND, 5TH & 6TH COMBINED SEWER REHABILITATION KEY TABLE		
PIPE SEGEMENT	ID	SHEET NO.
2ND STREET		
1434AB057-1434AB055	2ND-1	10
1427EF025-1427EF109	2ND-1	10
1427EF073-1427EF025	2ND-2	11
1427EF111-1427EF073	2ND-3	11
1427EF074-1427EF111	2ND-3	12
1427EF102-1427EF074	2ND-3	12
1427EF101-1427EF100	2ND-4	13
1427EF100-1427EF099	2ND-5	14
5TH STREET		
1434AB026-1434AB029	5TH-1	15
1434AB029-1434AB094T	5TH-1	15
1434AB027-1434AB030	5TH-2	16
1434AB030-1434AB096T	5TH-2	16
1434AB028-1434AB031	5TH-3	17
1434AB031-1434AB097T	5TH-3	17
6TH STREET		
1427EF080-1427EF087	6TH-1	18
1427EF087-1427EF092	6TH-2	19





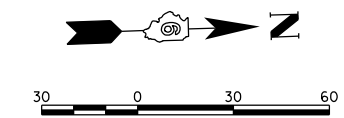
SEE SHEET II (2ND-2)

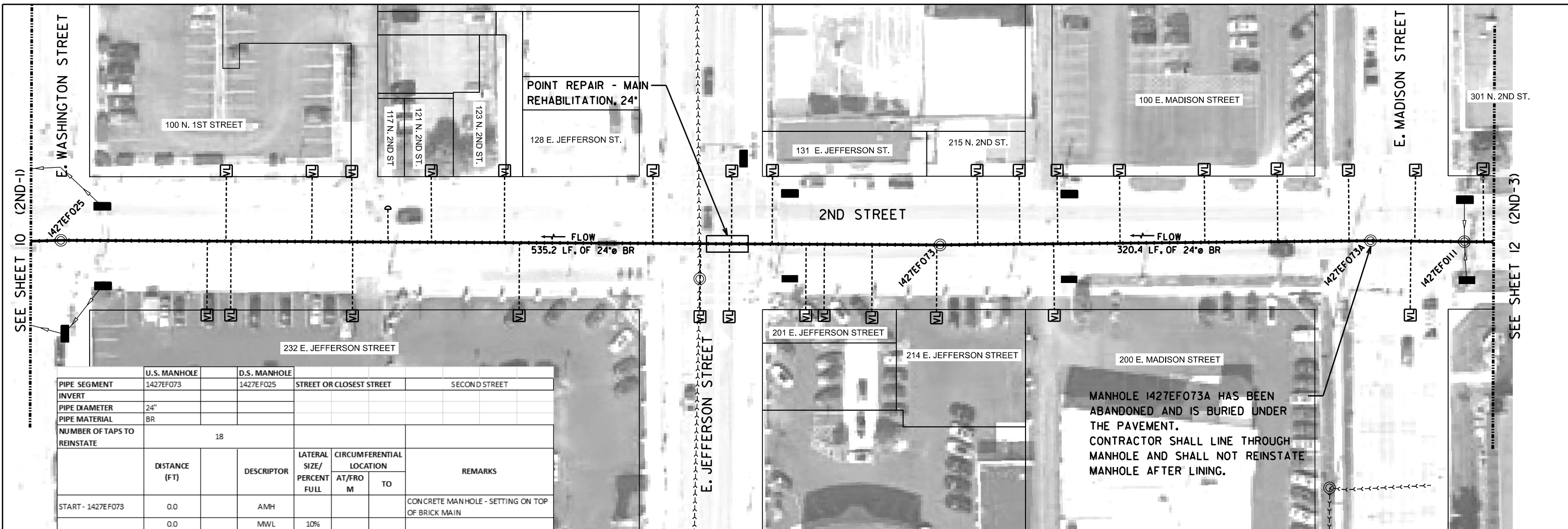
PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET			REMARKS
INVERT	1434AB057	1434AB055	SECOND STREET			
PIPE DIAMETER	24"					
PIPE MATERIAL	VCP					
NUMBER OF TAPS TO REINSTATE	3					
	DISTANCE (FT)		DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS
START - 1434AB055	0.0		AMH			BRICK MANHOLE
	0.0		MWL	15%		
	5.0	S01	CH3		9 3	CRACKS - SOME WITH LEAK STAINS AND CALCIUM DEPOSITS
	61.4		TBI	6"	10	TAP BREAK IN - VCP - INTRUDING 3" - ACTIVE - CRACKED PIPE IN LATERAL - TRIM FLUSH TO MAIN
	63.6	F01	CH3		9 3	CRACKS - SOME WITH LEAK STAINS AND CALCIUM DEPOSITS
	72.2		CL		11 1	CRACK
	106.6		JOM			OPEN JOINT
	119.6		CL		3	CRACK WITH CALCIUM DEPOSITS AND LEAK STAINS
	133.1	S02	CM		7 5	CRACKS
	143.1		TB	6"	10	TAP BREAK IN - VCP - OPEN AROUND THE TAP CONNECTION
	144.1		JOM			OPEN JOINT
	144.1		OBJ	5%	3	PIECE OF WOOD IN JOINT
	145.7		TB	6"	12	TAP BREAK IN - VCP
	154.0	S03	DAE	10%	7 5	REMOVE ENCRUSTATIONS
	174.5	F03	DAE	10%	7 5	REMOVE ENCRUSTATIONS
	187.0	F02	CM		7 5	CRACKS
END - 1434AB057	190.0		AMH			MANHOLE 1434AB057 BRICK MANHOLE

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET			REMARKS
INVERT	1427EF025	1427EF0109	SECOND STREET			
PIPE DIAMETER	24"					
PIPE MATERIAL	RCP					
NUMBER OF TAPS TO REINSTATE	0					
	DISTANCE (FT)		DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS
START - 1427EF025	0.0		AMH			CONCRETE MANHOLE
	0.0		MWL	15%		
	7.0		MGO		11	LIFT HOLE WITH INTRUDING LIFTER
	13.1		MGO		1	LIFT HOLE WITH INTRUDING LIFTER
	28.8		MGO		10	LIFT HOLE WITH INTRUDING LIFTER
END - 1427EF0109	35.0		AMH			MANHOLE - 1427EF109 CONCRETE MANHOLE

CIPP LEGEND

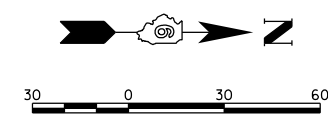
- STORM SEWER
- COMBINED SEWER
- LINED CIPP SEWER
- LATERAL
- TAP NOT TO BE REINSTATED (GUIDE)
- CAPPED LATERAL
- POINT REPAIR
- LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
- TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
- LATERAL TO BE VERIFIED
- STORM STRUCTURE - TO BE VERIFIED
- STORM STRUCTURE - NOT TO BE VERIFIED
- STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE



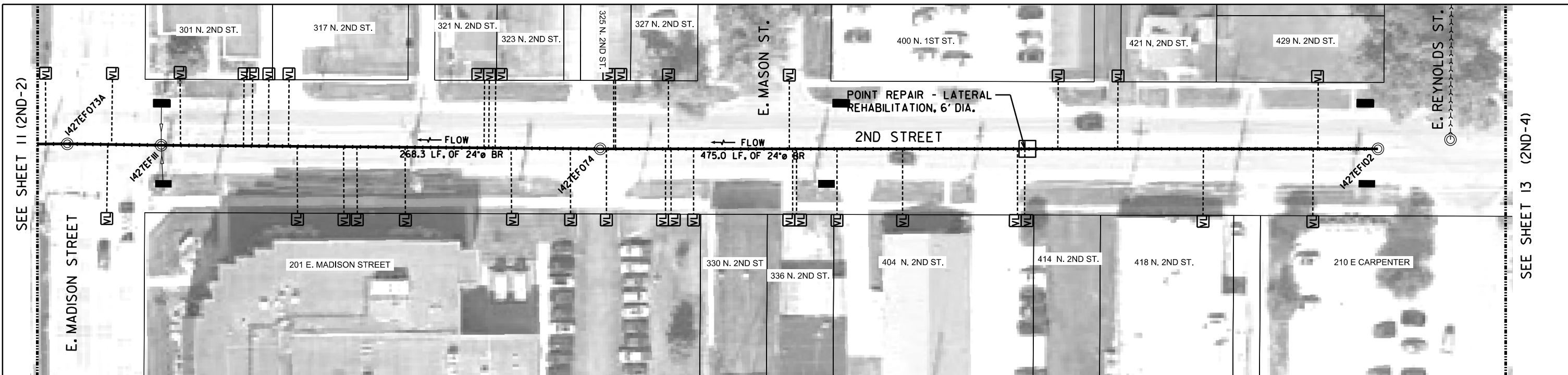


PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET			
INVERT	1427EF073	1427EF025	SECOND STREET			
PIPE DIAMETER	24"					
PIPE MATERIAL	BR					
NUMBER OF TAPS TO REINSTATE	18					
	DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS	
START - 1427EF073	0.0	AMH			CONCRETE MANHOLE - SETTING ON TOP OF BRICK MAIN	
	0.0	MWL	10%			
	0.0	S01	MML		MISSING MORTAR	
	2.0	TBI	12"	9	TAP BREAK IN - RPM - INTRUDING 6" - TRIM FLUSH TO MAIN - TAP IS RIGHT NEXT TO MANHOLE	
	40.8	TB	8"	10	TAP BREAK IN - VCP	
	69.5	TB	6"	9	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)	
	80.5	TB	8"	9	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~90%)	
	100.9	TB	6"	3	TAP BREAK IN - VCP	
	125.3	TBI	12"	2	TAP BREAK IN - RPM - INTRUDING 4" - TRIM FLUSH TO MAIN	
	126.5	TB	12"	10	TAP BREAK IN - VCP	
	136.2	S01	MB	8	10	SIGNIFICANT AMOUNT OF BRICK MISSING - SOIL VISIBLE
POINT REPAIR	136.2 - 146.0	MGO			POINT REPAIR - MAIN REHABILITATION 24" DIA. REMOVE AND REPLACE 24" DIAMETER MAIN TO REPAIR AREA MISSING BRICKS	
	144.0	TB	4"	9	TAP BREAK IN - VCP	
	146.0	F01	MB	8	10	SIGNIFICANT AMOUNT OF BRICK MISSING - SOIL VISIBLE
	159.9	MB		8	MISSING BRICK	
	172.6	TBI	12"	3	TAP BREAK IN - VCP - INTRUDING 2"	
	252.8	TB	8"	9	TAP BREAK IN - VCP	
	261.7	TB	10"	3	TAP BREAK IN - PVC	
	305.4	TB	4"	3	TAP BREAK IN - VCP	
	305.4	HSV		3	HOLE ABOVE TO PIPE	
	331.5	TB	6"	3	TAP BREAK IN - VCP - CAPPED	
	352.7	TF	15"	9	TAP FACTORY - BR - DEBRIS IN LATERAL (~25%)	
	353.5	TB	6"	2	TAP BREAK IN - VCP - HSV UNDER TAP	
	377.3	TB	6"	2	TAP BREAK IN - VCP	
	425.8	TB	6"	10	TAP BREAK IN - VCP	
	428.8	TBI	6"	3	TAP BREAK IN - VCP - INTRUDING 2" - ACTIVE	
	440.0	TB	10"	8	TAP BREAK IN - VCP - INTRUDING 2"	
	535.2	F01	MML		MISSING MORTAR	
END - 1427EF025	535.2	AMH			MANHOLE - 1427EF025 CONCRETE MANHOLE	

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET			
INVERT	1427EF111	1427EF073	SECOND STREET			
PIPE DIAMETER	24"					
PIPE MATERIAL	BR					
NUMBER OF TAPS TO REINSTATE	10					
	DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS	
START - 1427EF111	0.0	AMH			CONCRETE MANHOLE WITH OPEN PICK HOLE	
	0.0	MWL	5%			
	0.0	S01	MML		MISSING MORTAR	
	0.0	S02	DAE	5	5	REMOVE ENCRUSTATIONS
	27.6	DB		3		TURNT INTO THE MAIN
	29.8	TB	12"	3		TAP BREAK IN - VCP
	32.1	TB	12"	9		TAP BREAK IN - VCP
	53.5	F02	DAE	5	5	REMOVE ENCRUSTATIONS
	53.5	MGO				MANHOLE 1427EF073A BURIED MANHOLE TO BE LINED THROUGH WITH NO REINSTATEMENT AT MANHOLE
	66.4	TBI	2"	3		TAP BREAK IN - VCP - INTRUDING 6" - FULL OF DEPOSITS (100%). TRIM FLUSH TO MAIN.
	109.2					TAP BREAK IN - VCP - BRICKS AT CONNECTION WILL INHIBIT 100% OPENING AFTER LINING.
	153.0	TB	4"	2		TAP BREAK IN - VCP
	203.9	TBI	6"	3		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN.
	241.3	TB	10"	3		TAP BREAK IN - VCP
	243.6	TBI	10"	9		TAP BREAK IN - VCP - INTRUDING 1" - ACTIVE
	264.1	TB	4"	3		TAP BREAK IN - VCP
	289.4	TB	8"	3		TAP BREAK IN - VCP - FULL OF DEPOSITS (20%)
	320.4	F01	MML			MISSING MORTAR
END - 1427EF073	320.4	AMH				MANHOLE 1427EF073



- CIPP LEGEND**
- STORM SEWER
 - COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - TAP NOT TO BE REINSTATED (GUIDE)
 - CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - STORM STRUCTURE - NOT TO BE VERIFIED
 - STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE



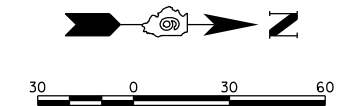
SEE SHEET 11 (2ND-2)

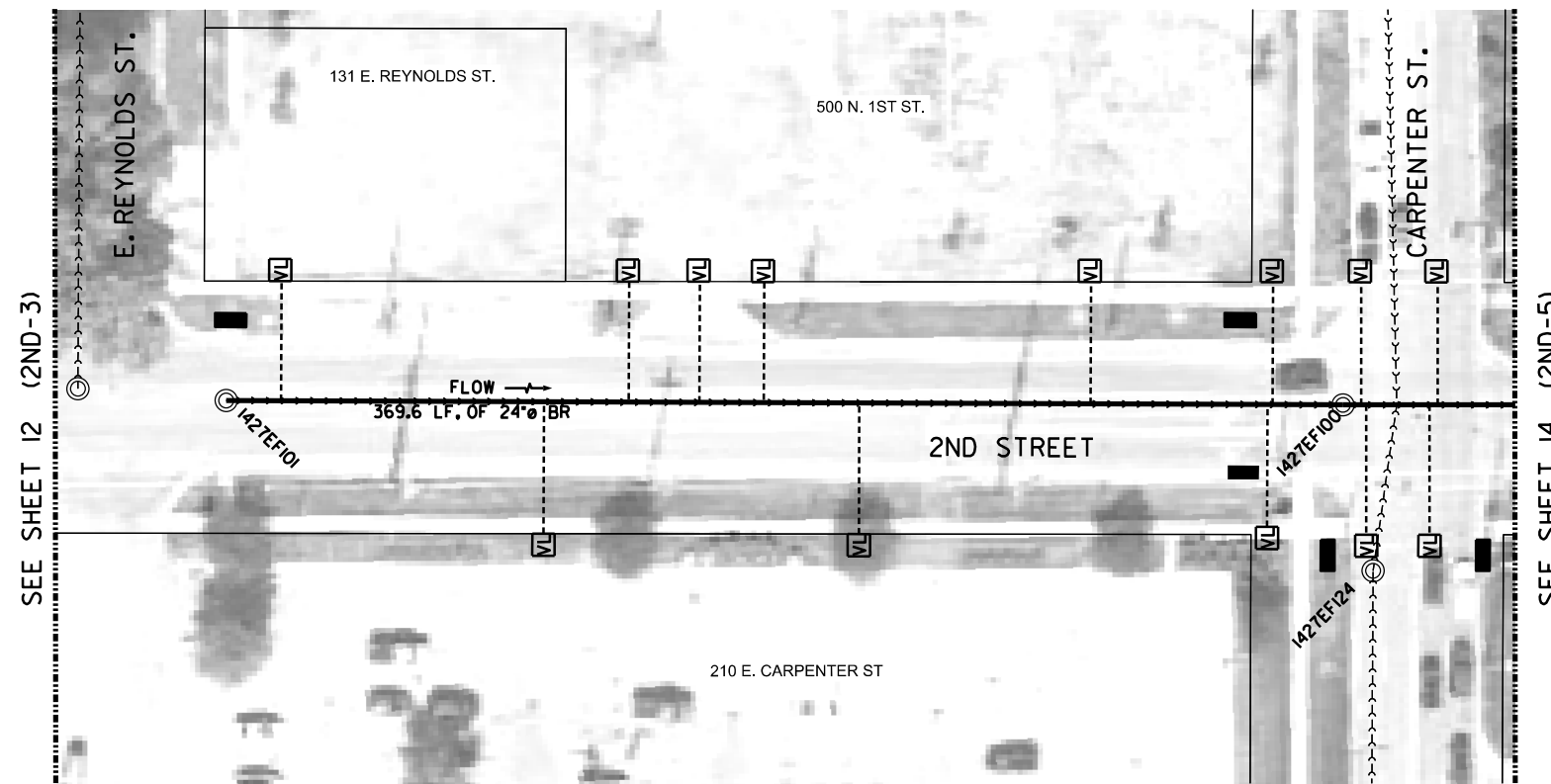
SEE SHEET 13 (2ND-4)

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	SECOND STREET
INVERT	1427EF074	1427EF111		
PIPE DIAMETER	24"			
PIPE MATERIAL	BR			
NUMBER OF TAPSTO REINSTATE	14			
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/ PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FRO M TO	REMARKS
START - 1427EF074	0.0	AMH		
	0.0	MVIL	25%	
	0.0	S01	MVIL	MISSING MORTAR
	0.0	S02	DSGV	25% 4 8 REMOVE GRAVEL
	18.0	TB	12" 10	TAP BREAK IN - VCP
	33.5	TB	8" 10	TAP BREAK IN - VCP
	63.1	TB	6" 2	TAP BREAK IN - VCP
	66.9	TBI	4" 2	TAP BREAK IN - VCP - INTRUDING 1"
	68.8	TBI	4" 2	TAP BREAK IN - VCP - INTRUDING 1"
	70.0	HSV		HOLE ADJACENT TO TAP
	117.2	TB	6" 10	TAP BREAK IN - VCP
	146.1	TBI	6" 10	TAP BREAK IN - VCP - INTRUDING 1" - TAP IS CRACKED AT CONNECTION
	154.1	TBI	6" 10	TAP BREAK IN - VCP - INTRUDING 1"
	171.7	DAE	9% 7 9	REMOVE ENC RUSTATIONS
	182.0	TB	6" 10	TAP BREAK IN - VCP
	187.2	TB	6" 3	TAP BREAK IN - VCP
	187.2	S03	DAE	9% 3 9 REMOVE ENC RUSTATIONS
	199.3	TB	6" 2	TAP BREAK IN - PVC
	209.0	TB	6" 3	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)
	214.2	TB	15" 3	TAP BREAK IN - VCP
	214.2	HSV		HSV AROUND TAP AT CONNECTION
	252.0	TB	6" 2	TAP BREAK IN - VCP
	261.0	F02	DSGV	25% 4 8 REMOVE GRAVEL
	261.0	F03	DAE	9% 3 9 REMOVE ENC RUSTATIONS
	265.3	F04	MVIL	MISSING MORTAR
END - 1427EF111	265.3	AMH		MANHOLE 1427EF111

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	SECOND STREET
INVERT	1427EF102	1427EF074		
PIPE DIAMETER	24"			
PIPE MATERIAL	BR			
NUMBER OF TAPSTO REINSTATE	19			
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/ PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FRO M TO	REMARKS
START - 1427EF102	0.0	AMH		
	0.0	MVIL	9%	
	0.0	S01	DSZ	39% 5 7 REMOVE DEBRIS
	0.0	S02	MVIL	MISSING MORTAR
	36.1	TB	6" 4	TAP BREAK IN - VCP
	36.1	HSV		HOLE UNDER TAP AND MISSING BRICKS AROUND CONNECTION
	38.9	TBD	10" 8	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~90%)
	68.0	F01	DSZ	39% 5 7 REMOVE DEBRIS
	68.0	S05	DSZ	10% 5 7 REMOVE DEBRIS
	104.8	TB	8" 9	TAP BREAK IN - VCP
	152.4	F03	DSZ	10% 5 7 REMOVE DEBRIS
	156.3	TBI	6" 2	TAP BREAK IN - VCP - INTRUDING 2"
	156.3	HSV		HOLE UNDER TAP
	178.4	S04	DSZ	19% 5 7 REMOVE DEBRIS
	192.2	TF	21" 3	TAP FACTORY - BR - DEBRIS IN LATERAL (~40%)
	212.0	TBI	6" 10	TAP BREAK IN - VCP - INTRUDING 2" - REINSTATING TAP AFTER LINING WILL NOT BE FULLY OPEN DUE TO ANGLE INTO PIPE AND BLOCKED BY BRICK AT CROWN.
POINT REPAIR	212.0	MGO	6" 10	POINT REPAIR - LATERAL REHABILITATION, 6' DIA. REMOVE AND REPLACE LATERAL CONNECTION (VERIFY DIA. IN FIELD)
	216.4	TB	6" 10	TAP BREAK IN - VCP
	229.9	S05	DAE	9% 7 11 REMOVE ENC RUSTATIONS
	232.6	S06	DAE	9% 1 4 REMOVE ENC RUSTATIONS
	285.4	TBI	6" 9	TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
	324.8	TBI	6" 9	TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
	328.1	F05	DAE	9% 7 11 REMOVE ENC RUSTATIONS
	349.1	TB	12" 9	TAP BREAK IN - VCP
	351.4	TB	6" 9	TAP BREAK IN - VCP
	353.4	TB	8" 4	TAP BREAK IN - VCP - BRICK AT TAP FLOWLINE MAY AFFECT REINSTATING AND NOT 100% OPEN.
	353.4	HSV		HOLE WITH DISPLACED BRICKS
	359.0	F06	DAE	9% 1 4 REMOVE ENC RUSTATIONS
	373.1	DAE	9% 7 9 REMOVE ENC RUSTATIONS	
	401.5	HSV		HOLE BETWEEN BRICKS
	410.9	TB	6" 9	TAP BREAK IN - VCP
	416.2	DAE	9% 7 9 REMOVE ENC RUSTATIONS	
	424.6	TBI	6" 9	TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
	426.0	TB	12" 2	TAP BREAK IN - VCP
	427.8	TB	6" 8	TAP BREAK IN - VCP
	457.8	TBI	8" 2	TAP BREAK IN - VCP - INTRUDING 6" - TRIM FLUSH TO MAIN
	458.5	VR		RAT
	458.9	TBI	8" 2	TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
	472.8	TB	4" 8	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~100%) POSSIBLY CAPPED
	475.0	F02	MVIL	MISSING MORTAR
	475.0	F04	DSZ	10% 5 7 REMOVE DEBRIS
END - 1427EF074	475.0	AMH		MANHOLE - 1427EF074 COVER HAS OPEN PICK HOLE

- CIPP LEGEND**
- STORM SEWER
 - COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - TAP NOT TO BE REINSTATED (GUIDE)
 - CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - STORM STRUCTURE - NOT TO BE VERIFIED
 - STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE





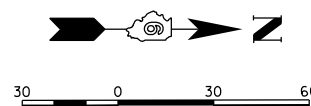
SEE SHEET 12 (2ND-3)

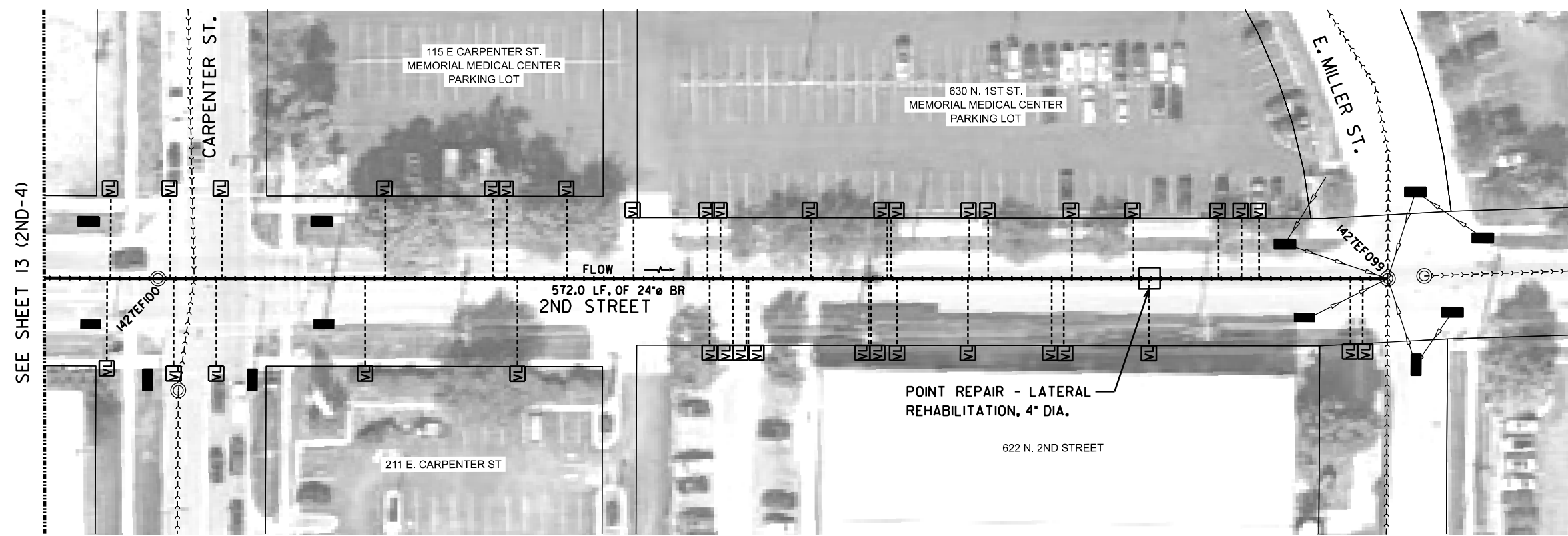
SEE SHEET 14 (2ND-5)

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	SECOND STREET				
1427EF101		1427EF100						
INVERT								
PIPE DIAMETER	24"							
PIPE MATERIAL	BR							
NUMBER OF TAPS TO REINSTATE	9							
	DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS		
				AT/FROM	TO			
START - 1427EF100	0.0	AMH						
	0.0	MWL	15%					
	0.0	S01	MML			MISSING MORTAR - HEAVY AT TIMES AND NOT SURE HOW BRICKS ARE STAYING IN PLACE.		
	0.0	S02	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
	21.7	HSV				4	HOLE ADJACENT TO TAP	
	22.3	TB	12"			3	TAP BREAK IN - VCP	
	23.9	TBD	12"			9	TAP BREAK IN - VCP - DEFECTIVE - UPSTREAM PIPE SECTION HAS DROPPED AND NO CONTINUOUS CONNECTION IN THE PIPE EXISTS.	
	31.1	F02	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
	80.0	TB	8"			3	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
	153.3	TB	4"			9	TAP BREAK IN - VCP - AT CONNECTION BLOCKED BY BRICKS AT FLOW LINE AND CROWN. WILL NOT BE 100% OPENED AFTER CIPP LINING. DEBRIS IN LATERAL (~25%)	
	169.7	MB				9	MISSING BRICK	
	181.2	DAE	5%			12	3	REMOVE ENCRUSTATIONS
	183.6	TB	8"			3	TAP BREAK IN - VCP - DEBRIS IN LATERAL (~75%)	
	194.6	S03	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
	204.0	TB	6"			2	TAP BREAK IN - VCP	
	204.0	VR					RAT	
	217.7	HSV				9	HOLE BETWEEN BRICKS	
	226.4	TB	4"			3	TAP BREAK IN - CP - FULL OF DEBRIS (100%)	
	226.4	MYV					DYE TEST VISIBLE - CAME OUT FROM AROUND THE OUTSIDE OF THE TAP. NO DRAINAGE FROM THE TAP.	
	234.0	MB				9	MISSING BRICKS	
	253.3	TR	6"			4	TAP BREAK IN - VCP	
	319.2	MWL	35%					
	336.6	TBA	6"			3	TAP BREAK IN - VCP - ACTIVE	
	369.6	F01	MML				MISSING MORTAR - HEAVY AT TIMES AND NOT SURE HOW BRICKS ARE STAYING IN PLACE.	
	369.6	F03	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
END - 1427EF101	369.6	AMH					MANHOLE 1427EF101	

CIPP LEGEND

- STORM SEWER
- COMBINED SEWER
- LINED CIPP SEWER
- LATERAL
- TAP NOT TO BE REINSTATED (GUIDE)
- CAPPED LATERAL
- POINT REPAIR
- LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
- TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
- LATERAL TO BE VERIFIED
- STORM STRUCTURE - TO BE VERIFIED
- STORM STRUCTURE - NOT TO BE VERIFIED
- STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE

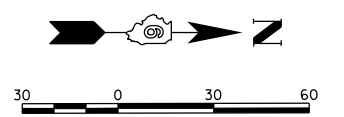


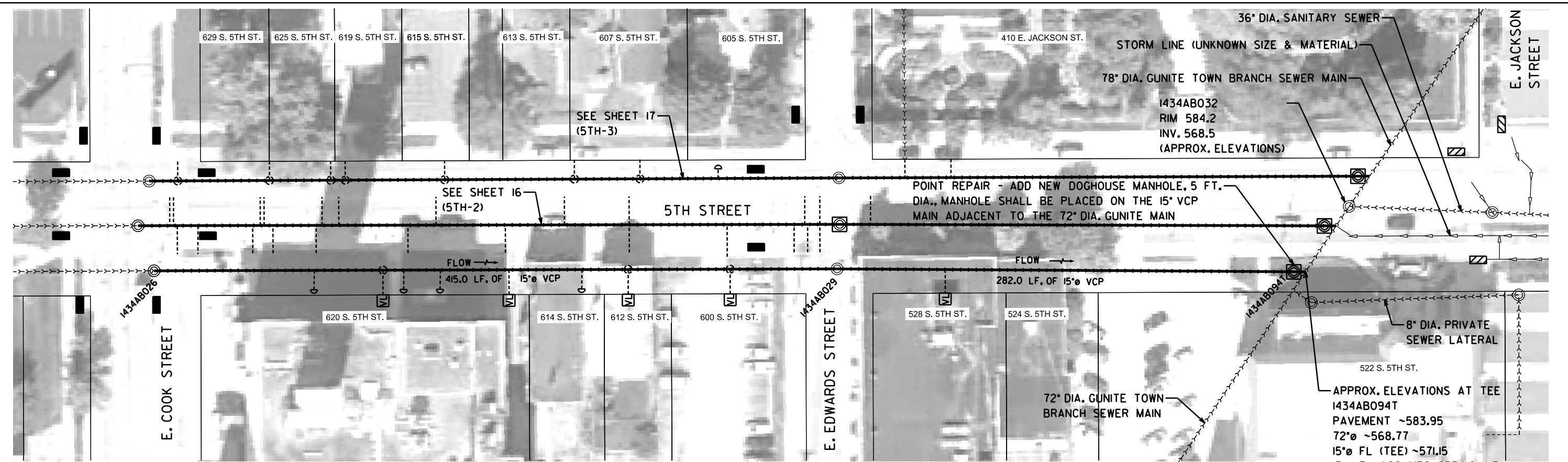


PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	SECOND STREET		
1427EF100	1427EF100	1427EF099				
PIPE DIAMETER	24"					
PIPE MATERIAL	BR					
NUMBER OF TAPS TO REINSTATE	36					
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M	TO	REMARKS	
START - 1427EF100						
0.0	AMH					
0.0	MWL	15%				
0.0	S01	MML			MISSING MORTAR	
2.0	DSZ	15%			REMOVE SILT AND DEBRIS	
5.4	HVV		8	9	HOLE - INFILTRATION/EXFILTRATION	
5.8	TBI	15"	9		TAP BREAK IN - VCP - INTRUDING 4" - ACTIVE - TRIM FLUSH TO MAIN	
7.4	TF	24"	3		TAP FACTORY - BR - THIS IS THE MAIN FROM MANHOLE 1427EF124	
27.4	TB	10"	3		TAP BREAK IN - VCP	
30.0	TB	10"	9		TAP BREAK IN - VCP	
33.6	S02	DSZ	15%	5	7	REMOVE SILT AND DEBRIS
97.4	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)	
106.9	TBI	6"	10		TAP BREAK IN - VCP - INTRUDING 4" - TRIM FLUSH TO MAIN	
157.4	TB	6"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
163.9	TBI	6"	9		TAP BREAK IN - VCP - INTRUDING 2" - DEBRIS IN LATERAL (~25%)	
168.9	TB	4"	3		TAP BREAK IN - VCP	
192.2	TB	6"	10		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN	
223.5	TB	6"	10		TAP BREAK IN - VCP	
246.4	F02	DSZ	15%	5	7	REMOVE SILT AND DEBRIS
258.3	HSV		9		HOLE ADJACENT TO THE TAP	
258.7	TB	6"	9		TAP BREAK IN - VCP	
259.3	TBI	6"	2		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN	
264.4	TB	6"	10		TAP BREAK IN - VCP	
270.3	TB	4"	2		TAP BREAK IN - VCP	
271.8	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
276.6	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
277.5	TBI	4"	1		TAP BREAK IN - VCP - INTRUDING 2"	
306.8	TB	6"	10		TAP BREAK IN - VCP	
333.5	HSV		2		HOLE ADJACENT TO THE TAP	
334.0	TBI	6"	2		TAP BREAK IN - VCP - INTRUDING 1"	
335.2	TB	4"	2		TAP BREAK IN - VCP	

CONTINUATION OF 1427EF100 TO 1427EF099						
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M	TO	REMARKS	
342.9	TB	6"	10		TAP BREAK IN - VCP	
344.5	TB	6"	10		TAP BREAK IN - VCP	
347.4	TB	6"	3		TAP BREAK IN - VCP	
362.5	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
380.7	TB	6"	2		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
381.4	TB	6"	10		TAP BREAK IN - VCP	
381.4	HSV		10		HOLE UNDER TAP	
390.3	TBI	4"	11		TAP BREAK IN - VCP - INTRUDING 1"	
402.2	S03	DSZ	15%	5	7	REMOVE SILT AND DEBRIS
418.5	F03	DSZ	15%	5	7	REMOVE SILT AND DEBRIS
420.1	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
425.8	TB	6"	2		TAP BREAK IN - VCP	
425.8	HSV		3		HOLE UNDER TAP	
429.6	TB	6"	10		TAP BREAK IN - VCP	
444.1	DTBI		7	11	BRICK WALL PUSHED OUT	
458.6	TBI	6"	10		TAP BREAK IN - VCP - INTRUDING 2"	
462.5	DSZ	15%	5	7	REMOVE SILT AND DEBRIS	
465.8	TB	4"	1		TAP BREAK IN - VCP - ANGLE OF TAP ENTERING MAIN WILL LOOK SMALLER OPENING AFTER LINING	
POINT REPAIR	465.8	MGO	4"	1	POINT REPAIR - LATERAL REHABILITATION, 4" DIA. REMOVE AND REPLACE LATERAL CONNECTION (VERIFY DIA. IN FIELD)	
498.4	TBI	6"	11		TAP BREAK IN - VCP - INTRUDING 2"	
509.2	TB	6"	9		TAP BREAK IN - VCP	
517.5	TB	6"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)	
546.7		UBI		11	TWO UTILITY PIPES THROUGH CROWN OF MAIN - OWNER OK TO LINE THROUGH AS IS	
556.1	F01	MML			MISSING MORTAR	
556.1	MMC				BR TO PVC	
560.5	TB	6"	2		TAP BREAK IN - PVC	
566.2	TF	8"	6		TAP FACTORY - PVC - OUTSIDE DROP CONNECTION TO MANHOLE	
END - 1427EF099	572.0	AMH			MANHOLE 1427EF099	

- CIPP LEGEND**
- STORM SEWER
 - COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - TAP NOT TO BE REINSTATED (GUIDE)
 - CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - STORM STRUCTURE - NOT TO BE VERIFIED
 - STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE

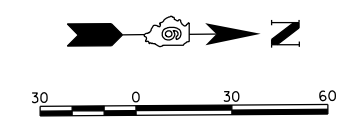


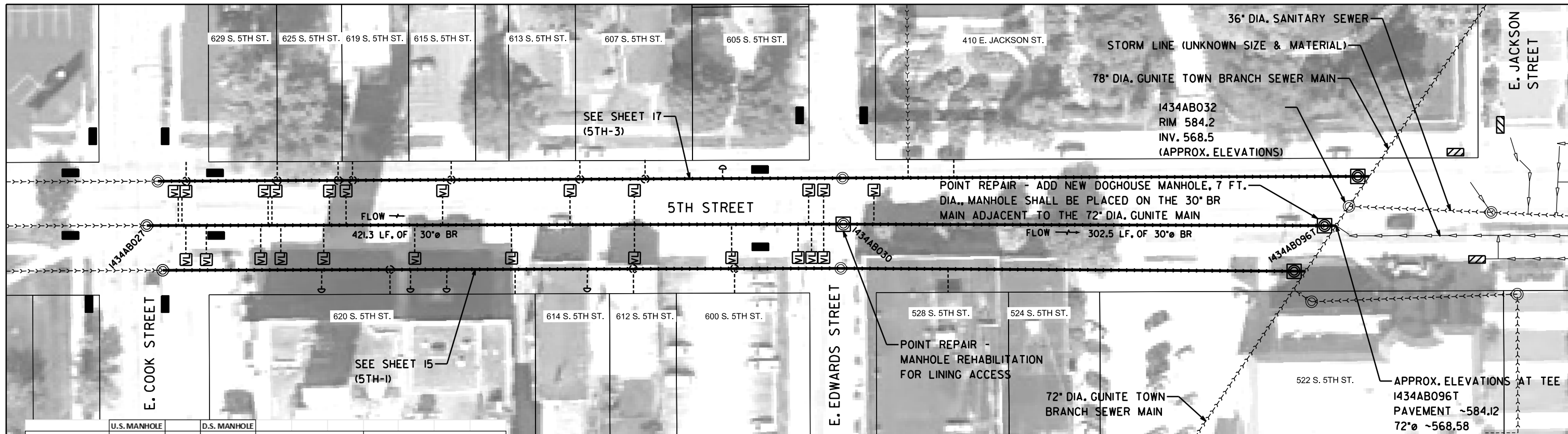


PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET			
1434AB026	1434AB029		FIFTH STREET			
NOTE: VIDEO STATES MAIN IS 15" CLAY BUT THE TYPED IN FO SA						
PIPE DIAMETER	15"					
PIPE MATERIAL	VCP					
NUMBER OF TAPS TO REINSTATE	4					
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS	
			AT/FROM	TO		
START - 1424AB029	0.0	AMH				
	0.0	MWL	15%			
	63.9	TF	6"	12	TAP FACTORY - VCP	
	63.9	C		12	CRACK	
	87.0	C		12	CRACK	
	98.3	CH2		9	CRACK AT HINGES	
	111.5	C		12	CRACK	
	124.1	C		12	CRACK	
	124.8	TFA	6"	12	TAP FACTORY - VCP - ACTIVE	
	125.1	C		12	CRACK	
	152.4	TFC	6"	9	TAP FACTORY - VCP - CAPPED	
	158.4	S01	C	12	CRACK	
	196.9	TBA	6"	11	TAP BREAK IN - VCP - ACTIVE	
	237.0	TFC	6"	11	TAP FACTORY - VCP - CAPPED	
	258.8	TFC	6"	11	TAP FACTORY - VCP - CAPPED	
	267.1	S02	CH2	3	9	CRACK AT HINGES
	270.1	RPP		7	12	WALL MISSING NEAR SERVICE. HEAVY CALCIUM DEPOSITS. APPEARS PATCHED BECAUSE THERE IS CONCRETE NOT SOIL WHERE MISSING WALL
	271.3	TBI	4"	12	12	TAP BREAK IN - VCP - INTRUDING 1"
	282.8	F02	CH2	3	9	CRACK AT HINGES
	295.5	F01	C	12	12	CRACK
	302.7	DSZ	25%	5	7	UNKNOWN DEPOSITS IN FLOWLINE OF PIPE - TO BE REMOVED PRIOR TO LINING
	306.0	S03	CS	11	1	CRACK
	312.3	TFC	6"	11		TAP FACTORY - VCP - CAPPED - LEAK STAINS AND DEPOSITS
	312.6	F03	CS	11	1	CRACK
	312.6	MMC				VCP TO RPM
END - 1424AB026	415.0	AMH				MANHOLE - 1434AB026

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET				
1434AB029	1434AB094T		FIFTH STREET				
PIPE DIAMETER	15"						
PIPE MATERIAL	VCP						
NUMBER OF TAPS TO REINSTATE	1						
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS		
			AT/FROM	TO			
START - 1434AB029	0.0	AMH			BRICK MANHOLE		
	0.0	MWL	15%				
	7.0	CS		5	CRACK		
	10.0	S01	CL	12	CRACK		
	20.0	F01	CL	12	CRACK		
	39.5	RFJ	5%	3	5	REMOVE ROOTS	
	43.6	RFJ	5%	7	9	REMOVE ROOTS	
	58.3	CL		12	CRACK		
	62.3	CM		8	11	CRACK	
	64.6	TBI	6"	1		TAP BREAK IN - CP - INTRUDING 1" - ACTIVE	
	103.0	S02	RFJ	5%	9	3	REMOVE ROOTS
	124.0	S03	CL	12	12	CRACK	
	131.8	CL		9	9	CRACK	
	130.2	F02	RFJ	5%	9	3	REMOVE ROOTS
	152.7	F03	CL	12	12	CRACK	
	162.4	S04	CM	9	12	CRACK	
	167.5	CH3		9	3	CRACK	
	188.5	F04	CM	9	12	CRACK	
	188.5	S05	RFJ	5%	7	5	REMOVE ROOTS
	204.8	S06	CL	11	1	CRACK	
	223.6	F06	CL	11	1	CRACK	
	239.2	F05	RFJ	5%	7	5	REMOVE ROOTS
	261.2	RFJ	5%	7	5	REMOVE ROOTS	
	276.8	RBJ	25%	2	5	REMOVE ROOTS	
	279.0	S07	DAGS	5%	9	12	REMOVE GREASE
	280.0	RFJ	10%	11	3	REMOVE ROOTS	
	282.0	F07	DAGS	5%	9	12	REMOVE GREASE
END - 1434AB094T	282.0	ATC				TEE CONNECTION TO MAIN POINT REPAIR - ADD NEW DOGHOUSE MANHOLE, 5 FT. DIA. CONSTRUCT A 5 FT. DIAMETER DOGHOUSE MANHOLE AT TEE	

- CIPP LEGEND**
- STORM SEWER
 - COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - TAP NOT TO BE REINSTATED (GUIDE)
 - CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - STORM STRUCTURE - NOT TO BE VERIFIED
 - STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE





PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	FIFTH STREET	
INVERT	1434AB027	1434AB030			
PIPE DIAMETER	30"				
PIPE MATERIAL	BR				
NUMBER OF TAPS TO REINSTATE	23				
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS
			AT/FROM	TO	
0.0	AMH				POINT REPAIR - MANHOLE REHABILITATION FOR LINING ACCESS: REMOVE MANHOLE FRAME AND LID, CHIMNEY, AND CONE AS NEEDED FOR LINING ACCESS FOR 30" LINER. RESET COMPONENTS AFTER CIPP IS COMPLETED (SEE SEGMENT 1434AB030-1434AB096T)
0.0	MWL	10%			
0.0	SO1	MML			MISSING MORTAR
11.5	MB		7	9	MISSING BRICKS AROUND CONNECTION
11.9	HVV		9		HOLE ABOVE TAP CONNECTION WHERE MISSING BRICKS. VOID ABOVE LATERAL
11.9	TB	6"	8		TAP BREAK IN - VCP - SERVICE MAY HAVE DROPPED AS WELL FROM ORIGINAL CONNECTION ELEVATION
11.9	TBI	12"	2		TAP BREAK IN - RPM - INTRUDING 2" - ACTIVE
19.2	TB	12"	9		TAP BREAK IN - VCP - DEBRIS (DIRT) IN LATERAL (~30%)
20.9	TBI	6"	2		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
21.9	HSV		3		HOLE SOIL VISIBLE WHERE MISSING A BRICK
27.3	TBI	12"	10		TAP BREAK IN - VCP - INTRUDING 6" - TRIM FLUSH TO MAIN
42.8	MB		7		MISSING BRICK AT EDGE OF FLOW LINE OF PIPE
54.3	MB		7		MISSING BRICK
67.3	TBI	8"	10		TAP BREAK IN - VCP
122.4	MB		4		MISSING BRICK - INFILTRATING SOIL INTO MAIN
125.8	TB	10"	3		TAP BREAK IN - VCP
125.8	TB	8"	10		TAP BREAK IN - VCP
125.8	MB		7	8	MISSING BRICK - INFILTRATING SOIL INTO MAIN
164.5	TB	8"	3		TAP BREAK IN - VCP
199.8	TB	6"	9		TAP BREAK IN - VCP AT CONNECTION WITH PVC LATERAL
221.2	MMC				BR TO CP

CONTINUATION OF I427AB027 TO I427AB030

DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS
			AT/FROM	TO	
238.5	MMC				CP TO BR
241.2	TB	8"	3		TAP BREAK IN - VCP
254.8	MB		9		MISSING BRICK AND LOOSE BRICK
258.0	TBI	8"	9		TAP BREAK IN - VCP - INTRUDING 2"
299.3	TB	6"	2		TAP BREAK IN - VCP
309.5	TBI	6"	2		TAP BREAK IN - VCP - INTRUDING 2"
312.8	TB	8"	9		TAP BREAK IN - VCP - DEBRIS (DIRT) IN LATERAL (~40%)
338.6	TB	6"	9		TAP BREAK IN - VCP
341.0	MB		2		MISSING BRICK
343.9	TBI	8"	2		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
346.2	TBI	6"	2		TAP BREAK IN - VCP - INTRUDING 4" - TRIM FLUSH TO MAIN
350.7	TB	8"	10		TAP BREAK IN - VCP
365.2	RPP		3	5	PATCH IN MAIN
365.2	DTBI		5	7	DEFORMED BRICK - BRICKS PUSHED DOWN
365.2	RPP		7	9	PATCH IN MAIN
383.5	TB	8"	9		TAP BREAK IN - VCP
395.8	TB	12"	9		TAP BREAK IN - VCP
399.3	TB	6"	3		TAP BREAK IN - VCP - DEBRIS (DIRT) IN LATERAL (~50%)
400.3	TBI	12"	3		TAP BREAK IN - VCP - INTRUDING 3" - TRIM FLUSH TO MAIN
421.3	FO1	MML			MISSING MORTAR
421.3	AMH				MANHOLE - 1434AB027

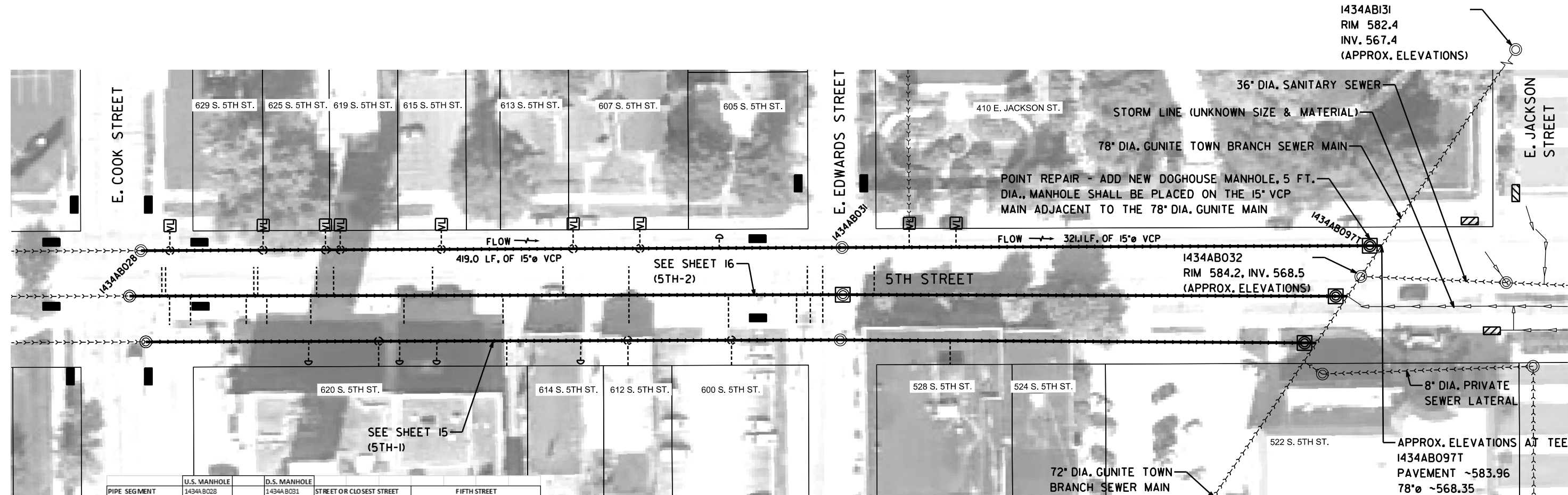
CIPP LEGEND

- S Storm Sewer
- Combined Sewer
- Lined CIPP Sewer
- Lateral
- Tap Not to be Reinstated (Guide)
- Capped Lateral
- Point Repair
- Lateral at Noon with Assumed Direction (Guide)
- Tap at 6 O'clock that is Outside Drop to Manhole
- Lateral to be Verified
- Storm Structure - to be Verified

- Storm Structure - Not to be Verified
- Storm Lateral to be Verified with Unknown Structure

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	FIFTH STREET	
INVERT	1434AB030	1434AB096T			
PIPE DIAMETER	30"				
PIPE MATERIAL	BR				
NUMBER OF TAPS TO REINSTATE	1				
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS
			AT/FROM	TO	
0.0	AMH				CONCRETE MANHOLE SET OVER THE BRICK MAIN
0.0	SO1	MML			POINT REPAIR - MANHOLE REHABILITATION FOR LINING ACCESS: REMOVE MANHOLE FRAME AND LID, CHIMNEY, AND CONE AS NEEDED FOR LINING ACCESS FOR 30" LINER. RESET COMPONENTS AFTER CIPP IS COMPLETED (SEE SEGMENT 1434AB027-1434AB030)
14.9	OBB	10%	5	7	MISSING MORTAR
18.4	TB	10"	9		TAP BREAK IN - CP
28.3	OBB	10%	5	7	REMOVE BRICKS
97.5	HSV	15%	5	8	HOLE IN MAIN. FLOW LINE MISSING AS WELL AS SIDE OF PIPE. SOIL VISIBLE
205.9	MB		6		MISSING BRICKS
242	DB	10%	12		BRICKS DISPLACED AROUND CROWN OF PIPE
242	RPP				PIPE REPAIR
269.5	MB		4		MISSING BRICKS
302.5	FO1	MML			MISSING MORTAR
302.5	ATC				TEE CONNECTION TO MAIN
					POINT REPAIR - ADD NEW DOGHOUSE MANHOLE, 7 FT. DIA. CONSTRUCT A 7 FT. DIAMETER DOGHOUSE MANHOLE AT TEE

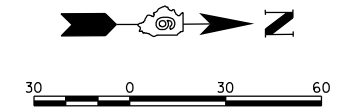


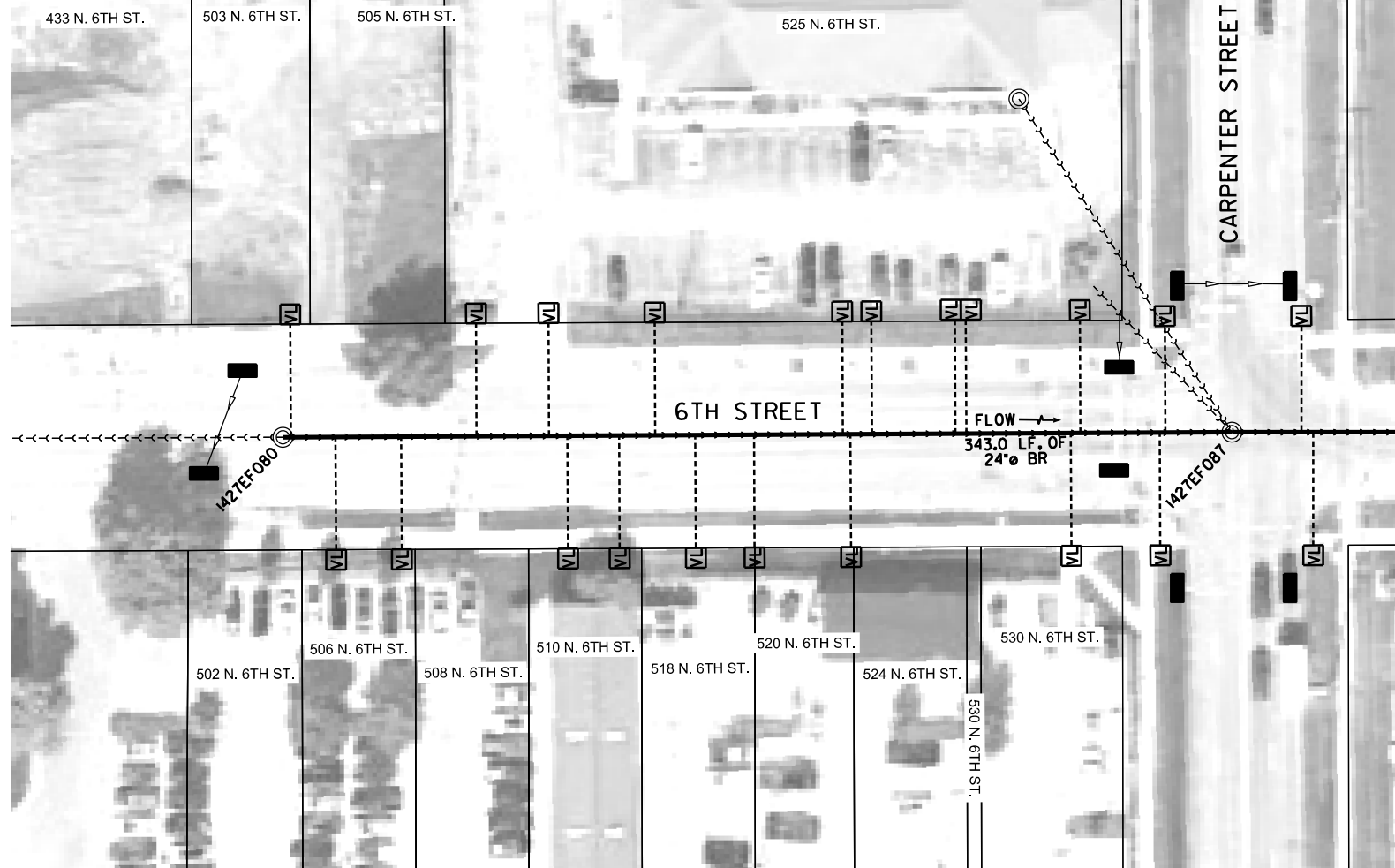


PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	FIFTH STREET	
INVERT	1434AB028	1434AB031			
PIPE DIAMETER	15"				
PIPE MATERIAL	VCP				
NUMBER OF TAPS TO REINSTATE	7				
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS	
0.0	AMH			BRICK MANHOLE	
0.0	MWL	15%			
4.0	IR		1	INFILTRATION RUNNER AT JOINT	
17.1	TFD	6"	12	TAP FACTORY - VCP - 75% BLOCKED BY DEBRIS OR AN OLD CAP	
20.3	SO1	C	12	CRACK	
54.7	C		9	CRACK	
61.2	RTJ	10%	1	REMOVE ROOTS IN JOINT	
66.9	RFJ	5%	11	REMOVE ROOTS IN JOINT	
71.2	F01	C	12	CRACK	
71.9	TF	6"	12	TAP FACTORY - VCP - FULL OF ROOTS (100%)	
83.8	SO2	RFJ	10%	9	REMOVE ROOTS IN JOINT
94.5	F02	RFJ	10%	9	REMOVE ROOTS IN JOINT
96.5	RTJ	10%	7	REMOVE ROOTS IN JOINT	
98.5	SO3	RFJ	5%	9	REMOVE ROOTS IN JOINT
102.5	F03	RFJ	5%	9	REMOVE ROOTS IN JOINT
107.5	ISSR	10%	6	REMOVE INTRUDING SEALING RING	
108.5	TFA	6"	12	TAP FACTORY - VCP - ACTIVE	
117.2	TFA	6"	12	TAP FACTORY - VCP - ACTIVE	
133.2	C		12	CRACK	
135.2	CM		12	2	CRACK
150.1	C		2	CRACK	
166.5	CS		8	9	CRACK
176.6	TF	6"	12	TAP FACTORY - VCP - ACTIVE	
215.8	RMJ	10%	7	9	REMOVE ROOTS IN JOINT
230.8	RTJ	5%	3	REMOVE ROOTS IN JOINT	
233.0	CS		7	9	CRACK
				TAP FACTORY - VCP - ROOTS IN LATERAL AND INTO MAIN - REMOVE ROOTS IN MAIN	
254.1	TFD	6"	12		
260.8	SO4	CS	11	2	CRACK
274.6	F04	CS	11	2	CRACK
293.3	TF	6"	12	TAP FACTORY - VCP	
319.3	SO5	CS	11	1	CRACK
336.4	RTJ	5%	3	REMOVE ROOTS IN JOINT	
				TAP FACTORY - VCP - CAPPED CAP IS BROKEN	
339.9	TFC	6"	9		
401.4	F05	CS	11	1	CRACK
END - 1434AB031	419.0	AMH			MANHOLE - 1434AB031 BRICK MANHOLE

PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	FIFTH STREET		
INVERT	1434AB031	1434AB097T				
PIPE DIAMETER	15"					
PIPE MATERIAL	VCP					
NUMBER OF TAPS TO REINSTATE	2					
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS		
0.0	AMH			BRICK MANHOLE		
0.0	MWL	25%				
2.0	DSF	10%	6	REMOVE GRIT		
16.6	MWL	10%				
37.4	CL		12	1	CRACK	
39.5	TBI	6"	10		TAP BREAK IN - VCP - INTRUDING 3" - ACTIVE - TRIM FLUSH TO MAIN	
47.6	CS		9	12	CRACK	
50.4	CS		8	10	CRACK	
50.4	RTJ	5%	9		REMOVE ROOTS	
56.2	RFJ	10%	12		REMOVE ROOTS	
67.0	TB	6"	10		TAP BREAK IN - CP	
67.0	RFC	5%	10		ROOTS IN LATERAL AT CONNECTION	
67.0	DAGS	5%	7	10	REMOVE GREASE	
87.8	CM		12	2	CRACK	
96.6	RFJ	5%	8	3	REMOVE ROOTS	
111.3	CL		12		CRACK	
134.4	RFJ	5%	7	9	CRACK	
136.4	RFJ	5%	7	9	CRACK	
140.5	CS		1	4	CRACK	
193.1	SO1	RFJ	5%	7	3	REMOVE ROOTS
206.2	F01	RFJ	5%	7	3	REMOVE ROOTS
231.7	MWL	25%				
306.7	LD				LINE TURNS DOWN	
315.3	SMW		3	7	MISSING PIPE WALL	
315.3	BSV		1	7	BROKEN PIPE	
END - 1434AB097T	POINT REPAIR	321.1	ATC		TEE CONNECTION TO MAIN POINT REPAIR - ADD NEW DOGHOUSE MANHOLE, 5 FT. DIA. CONSTRUCT A 5 FT. DIAMETER DOGHOUSE MANHOLE AT TEE	

- CIPP LEGEND**
- > STORM SEWER
 - > COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - X--- TAP NOT TO BE REINSTATED (GUIDE)
 - ⊕--- CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - VL--- LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - ▨ STORM STRUCTURE - NOT TO BE VERIFIED
 - VS---> STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE



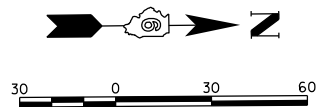


SEE SHEET 19 (6TH-2)

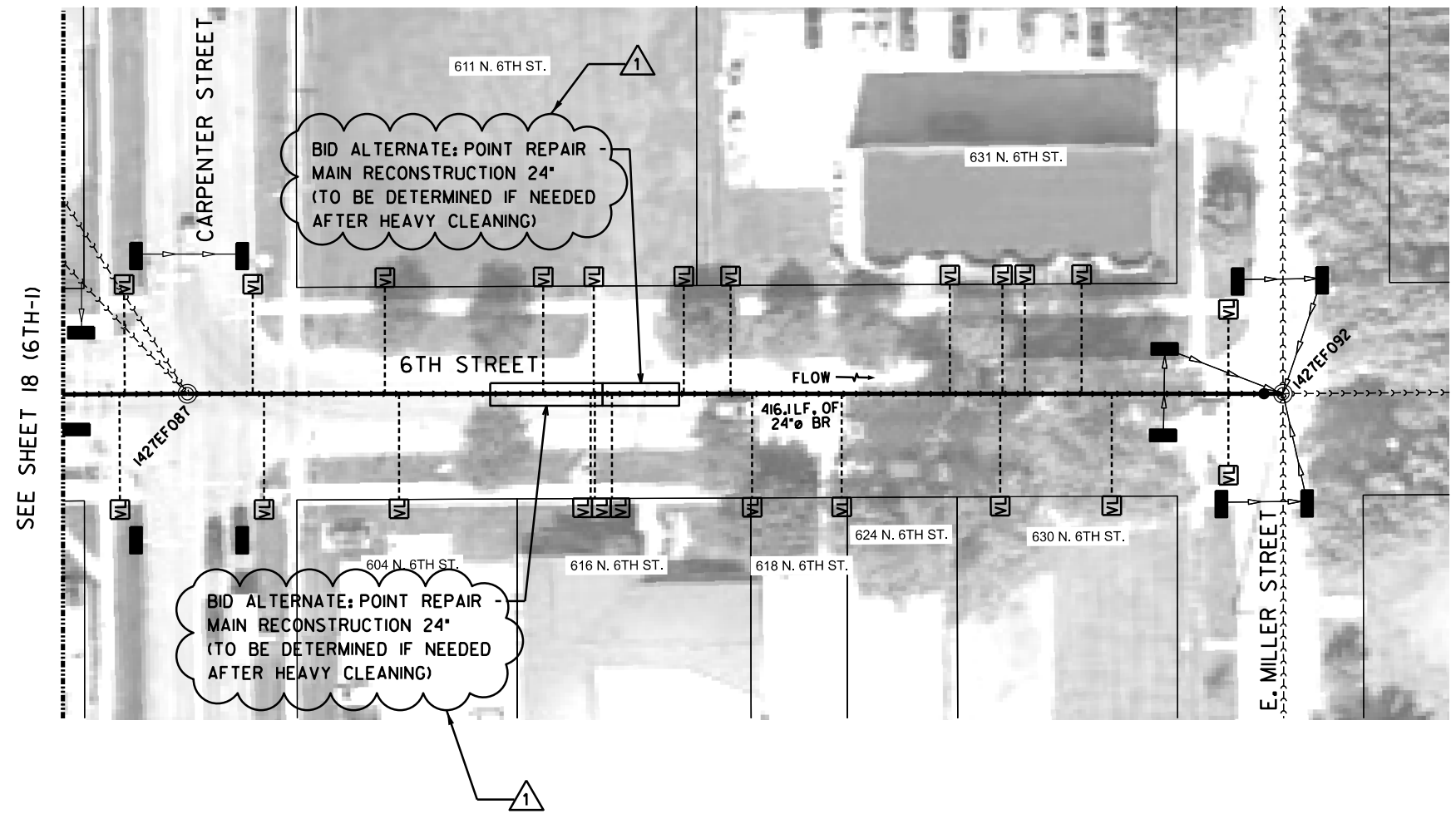
CIPP LEGEND

- STORM SEWER
- COMBINED SEWER
- LINED CIPP SEWER
- LATERAL
- TAP NOT TO BE REINSTATED (GUIDE)
- CAPPED LATERAL
- POINT REPAIR
- LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
- TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
- LATERAL TO BE VERIFIED
- STORM STRUCTURE - TO BE VERIFIED
- STORM STRUCTURE - NOT TO BE VERIFIED
- STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE

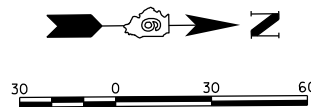
PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET		SIXTH STREET	
INVERT						
PIPE DIAMETER	24"					
PIPE MATERIAL	BR					
NUMBER OF TAPS TO REINSTATE	19					
	DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION		REMARKS
				AT/FROM	TO	
START - 1427EF087	0.0	AMH				CONCRETE MANHOLE OVER BRICK MAIN WITH OPEN PICK HOLE IN LID
	0.0	MWL	15%			
	0.0	SO1	MML			MISSING MORTAR
	0.0	SO2	DSZ	15%		REMOVE SILT AND BRICKS
	11.2	SO3	DR			PIPE IS OUT OF ROUND
	11.2	SO4	SWM	7	5	BRICKS ARE SIGNIFICANTLY ERODED BELOW THE SPRINGLINE
	13.0	FO2	DSZ	15%		REMOVE SILT AND BRICKS
	23.6	TB	8"	2		TAP BREAK IN - VCP
	25.6	TBI	12"	9		TAP BREAK IN - VCP - INTRUDING 3" - OPEN AROUND CONNECTION - ACTIVE - TRIM FLUSH TO MAIN
	53.7	TBI	6"	2		TAP BREAK IN - CP - INTRUDING 1" - ACTIVE
	57.1	TBI	8"	9		TAP BREAK IN - VCP - INTRUDING 3" - OPEN AROUND CONNECTION - TRIM FLUSH TO MAIN
	94.1	TB	6"	2		TAP BREAK IN - VCP - OPEN AROUND CONNECTION
	98.0	TB	6"	2		TAP BREAK IN - PVC - ACTIVE
	127.6	TB	6"	2		TAP BREAK IN - VCP
	127.6	HSV		3		SMALL HOLE UNDER TAP CONNECTION
	135.2	TB	6"	9		TAP BREAK IN - VCP
	137.9	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)
	162.8	MWL	5%			
	169.4	TB	6"	9		TAP BREAK IN - VCP - OPEN AROUND CONNECTION - DEBRIS IN LATERAL (~25%)
	190.2	TB	6"	10		TAP BREAK IN - VCP
	204.4	TB	6"	2		TAP BREAK IN - VCP - OPEN AROUND CONNECTION
	217.2	TB	8"	9		TAP BREAK IN - VCP
	217.3	SO5	DSZ	15%		REMOVE SILT AND BRICKS
	235.5	TBI	6"	10		TAP BREAK IN - PVC - INTRUDING 3" - ACTIVE - TRIM FLUSH TO MAIN
	242.0	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)
	265.5	FO5	DSZ	15%		REMOVE SILT AND BRICKS
	267.7	TB	6"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)
	294.4	TBI	12"	9		TAP BREAK IN - PVC - INTRUDING 8" - ACTIVE - TRIM FLUSH TO MAIN
	317.7	TB	6"	10		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)
	333.5	TBI	6"	3		TAP BREAK IN - VCP - INTRUDING 4" - OPEN AROUND CONNECTION. TAP IS BLOCKED BY A BROKEN PIECE OF VCP AT FLOW LINE. REMOVE PORTION OF VCP BLOCKING FLOW LINE OF LATERAL. TRIM FLUSH TO MAIN.
	334.0	MMC				BR TO RCP
	343.0	SO1	MML			MISSING MORTAR
	343.0	SO3	DR			PIPE IS OUT OF ROUND
	343.0	SO4	SWM	7	5	BRICKS ARE SIGNIFICANTLY ERODED
END - 1427EF080	343.0	AMH				MANHOLE 1427EF080 BRICK MANHOLE

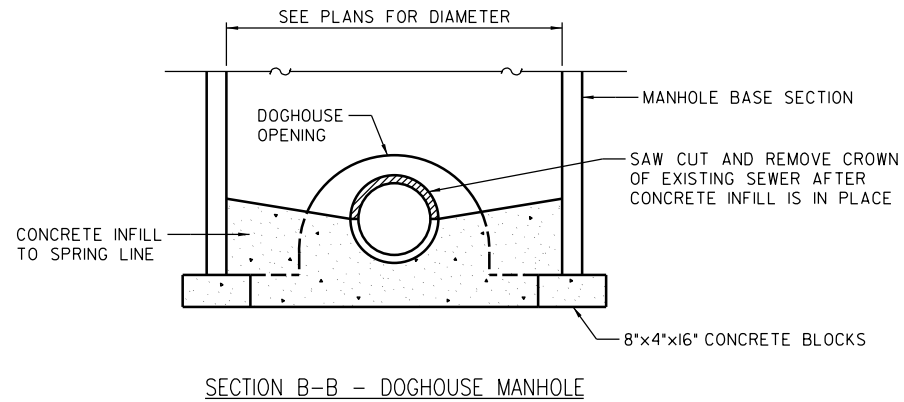
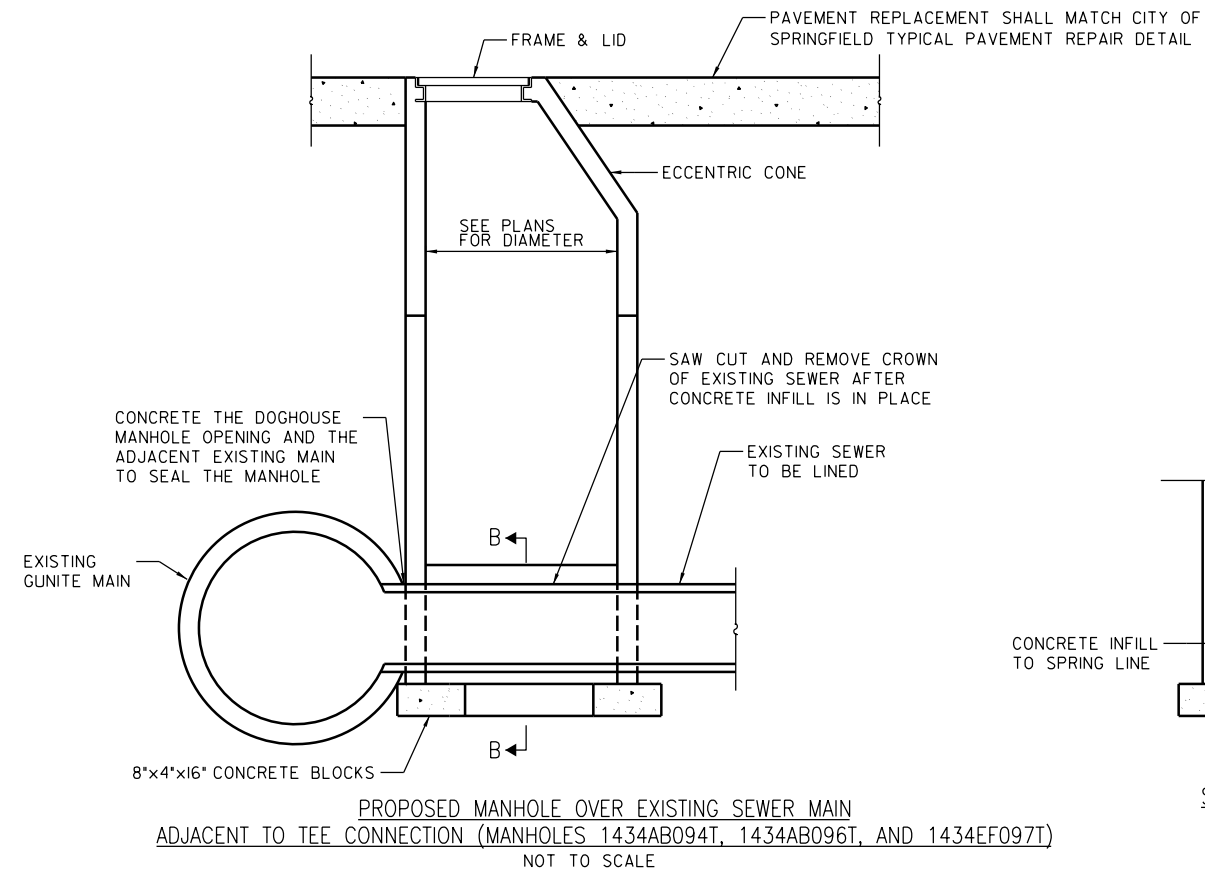


PIPE SEGMENT	U.S. MANHOLE	D.S. MANHOLE	STREET OR CLOSEST STREET	SIXTH STREET	
INVERT	1427EF087	1427EF092			
PIPE DIAMETER	24"				
PIPE MATERIAL	BR				
NUMBER OF TAPS TO REINSTATE	22				
DISTANCE (FT)	DESCRIPTOR	LATERAL SIZE/PERCENT FULL	CIRCUMFERENTIAL LOCATION AT/FROM M TO	REMARKS	
START - 1427EF087	AMH			CONCRETE MANHOLE A LATERAL INTRUDES ~12" INTO THE MANHOLE AND SHALL BE TRIM FLUSH TO THE MANHOLE.	
0.0	MWL	10%			
0.0	S01	MML		MISSING MORTAR	
0.0	S02	SWM	7	5	BRICKS ARE SIGNIFICANTLY ERODED
0.0	S03	DR			PIPE IS OUT OF ROUND NEAR FLOW LINE OF PIPE. A DEFINED TROUGH IS PRESENT.
0.0	MGO				CONTRACTOR SHALL COMPLETE A NEW CCTV FOR THIS MAIN.
18.7	F03	DR			PIPE IS OUT OF ROUND NEAR FLOW LINE OF PIPE. A DEFINED TROUGH IS PRESENT.
24.6	TB	12"	10		TAP BREAK IN - VCP
28.8	TB	12"	3		TAP BREAK IN - VCP
74.3	TBD	6"	10		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%). TAP BROKEN AT CONNECTION. PIECE OF PIPE BLOCKING CROWN OF LATERAL AT CONNECTION (~20%).
79.6	TBI	8"	2		TAP BREAK IN - VCP - INTRUDING 2"
133.9	TF	12"	9		TAP FACTORY - BR - DEBRIS IN LATERAL (~25%)
151.7	S04	HSV	10	4	HOLE IN CROWN TO SIDE WALL BETWEEN TAP CONNECTIONS. TAP ROOTS PRESENT IN HOLE.
151.7 - 154.6	MGO		10	4	HOLE IN CROWN TO SIDE WALL BETWEEN TAP CONNECTIONS. TAP ROOTS PRESENT IN HOLE. CONTRACTOR TO VERIFY NOT AN ISSUE TO LINE OVER. IF CANNOT BE LINED AS IS, CONTRACTOR SHALL DISCUSS WITH OWNER AND ENGINEER ABOUT A POINT REPAIR - MAIN RECONSTRUCTION 24" AN ALTERNATE BID ITEM.
151.7	TB	6"	4		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~75%)
152.9	TBI	6"	10		TAP BREAK IN - RPM - INTRUDING 2" - ACTIVE
153.3	TB	6"	5		TAP BREAK IN - VCP
154.6	F04	HSV	10	4	PRETTY SIGNIFICANT HOLE FROM TAP CONNECTIONS TO TAP CONNECTION. TAP ROOTS PRESENT IN HOLE.
158.7	HSV		2	5	PRETTY SIGNIFICANT HOLE WITH ROOTS
158.7	MGO		10	4	HOLE CONTRACTOR TO VERIFY NOT AN ISSUE TO LINE OVER. IF CANNOT BE LINED AS IS, CONTRACTOR SHALL DISCUSS WITH OWNER AND ENGINEER ABOUT A POINT REPAIR - MAIN RECONSTRUCTION 24" AN ALTERNATE BID ITEM.
159.7	TBI	6"	2		TAP BREAK IN - PVC - INTRUDING 2" - ACTIVE
186.8	TB	6"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~15%)
204.4	TBD	6"	10		TAP BREAK IN - VCP - BRICK IN THE LATERAL IN 2002 CCTV. CONTRACTOR SHALL COMPLETE NEW CCTV AND SHALL DISCUSS WITH OWNER AND ENGINEER IF LATERAL IS STILL BLOCKED.
212.5	TBI	6"	3		TAP BREAK IN - VCP - INTRUDING 1"
246.2	TB	8"	3		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~15%)
286.9	TB	6"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)
305.8	TBI	8"	3		TAP BREAK IN - CP - INTRUDING 1" - DEBRIS IN LATERAL (~15%)
306.7	TBI	6"	11		TAP BREAK IN - PVC - INTRUDING 6" - ACTIVE - TRIM FLUSH TO MAIN
315.1	TB	12"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)
331.6	DR				WALLS PUSHED OUT NEAR LATERAL CONNECTION
336.5	TB	8"	9		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~50%)
347.8	TB	8"	2		TAP BREAK IN - VCP - DEBRIS IN LATERAL (~25%)
391.7	TB	8"	10		TAP BREAK IN - VCP
391.7	TB	8"	2		TAP BREAK IN - VCP - LATERAL PIPE HAS CRACKS
403.6	F01	MML			MISSING MORTAR
403.6	F02	SWM	7	5	BRICKS ARE SIGNIFICANTLY ERODED
403.6	MMC				BR TO PVC
410.4	TF	12"	6		TAP FACTORY - PVC - OUTSIDE DROP TO MANHOLE
412.2	DSC	25%	4	8	REMOVE DEBRIS AT CONNECTION TO MANHOLE.
END - 1427EF092	AMH				MANHOLE 1427EF092 CONCRETE MANHOLE WITH FLAT TOP LID



- ### CIPP LEGEND
- STORM SEWER
 - COMBINED SEWER
 - LINED CIPP SEWER
 - LATERAL
 - TAP NOT TO BE REINSTATED (GUIDE)
 - CAPPED LATERAL
 - POINT REPAIR
 - LATERAL AT NOON WITH ASSUMED DIRECTION (GUIDE)
 - TAP AT 6 O'CLOCK THAT IS OUTSIDE DROP TO MANHOLE
 - LATERAL TO BE VERIFIED
 - STORM STRUCTURE - TO BE VERIFIED
 - STORM STRUCTURE - NOT TO BE VERIFIED
 - STORM LATERAL TO BE VERIFIED WITH UNKNOWN STRUCTURE

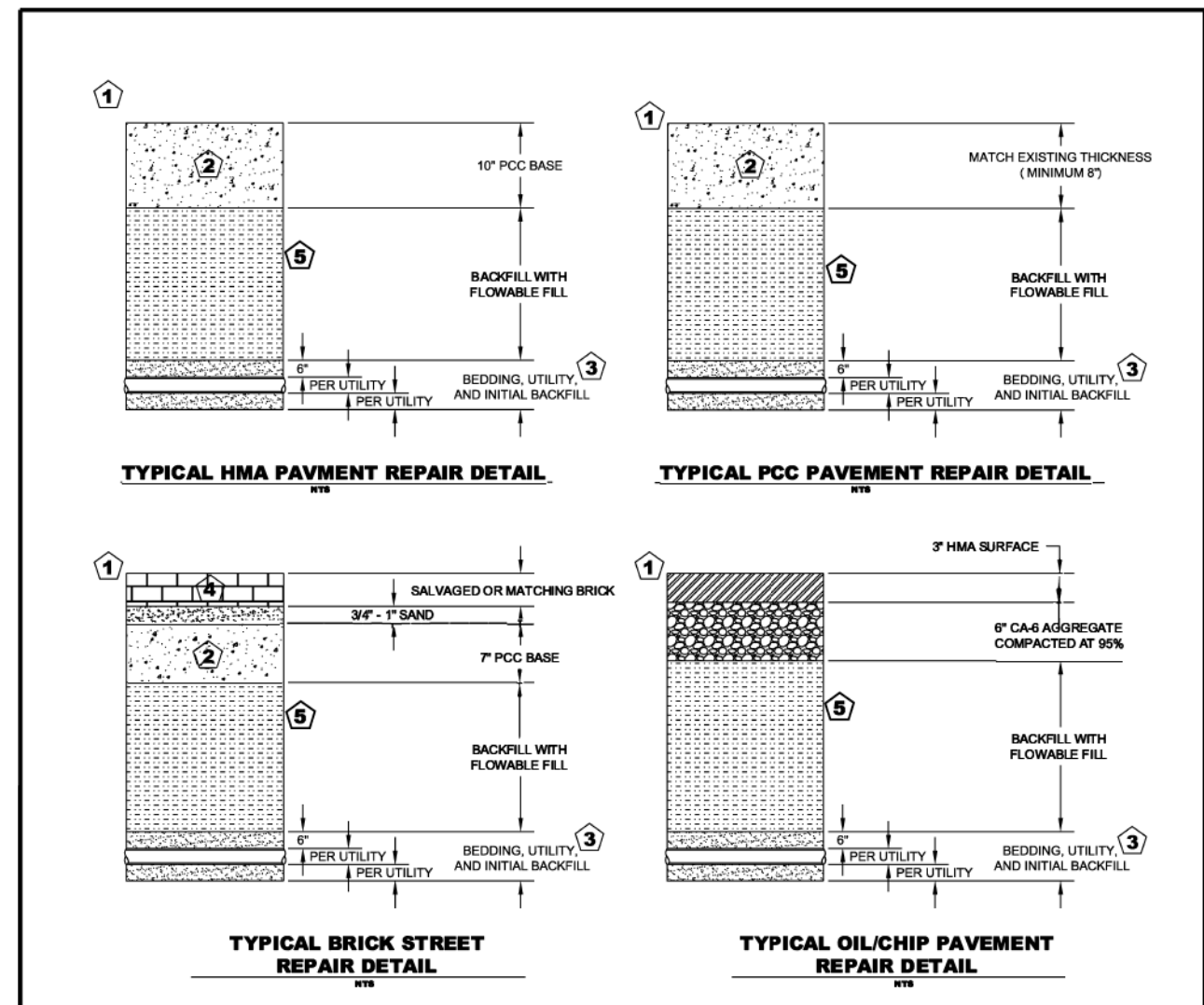
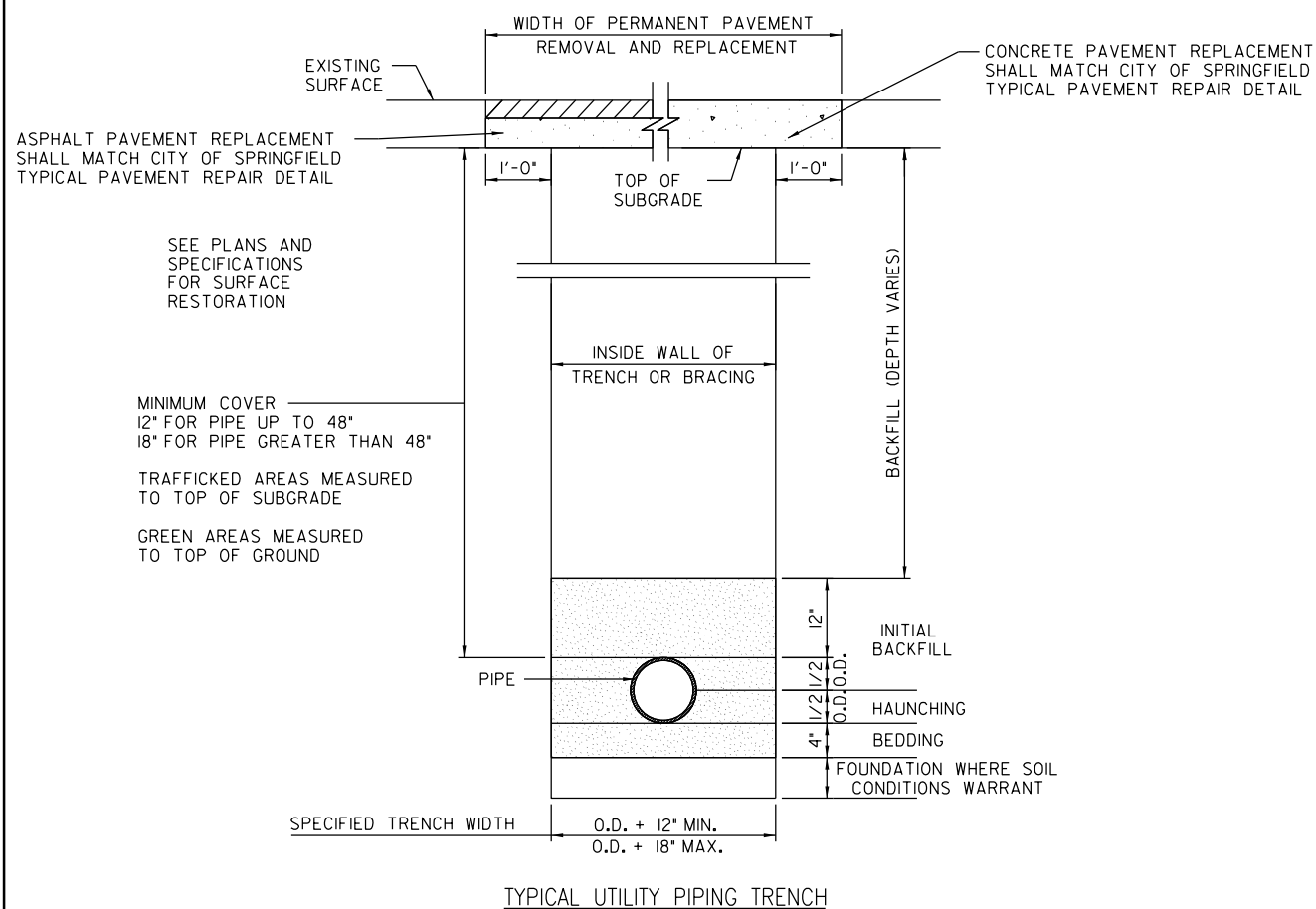
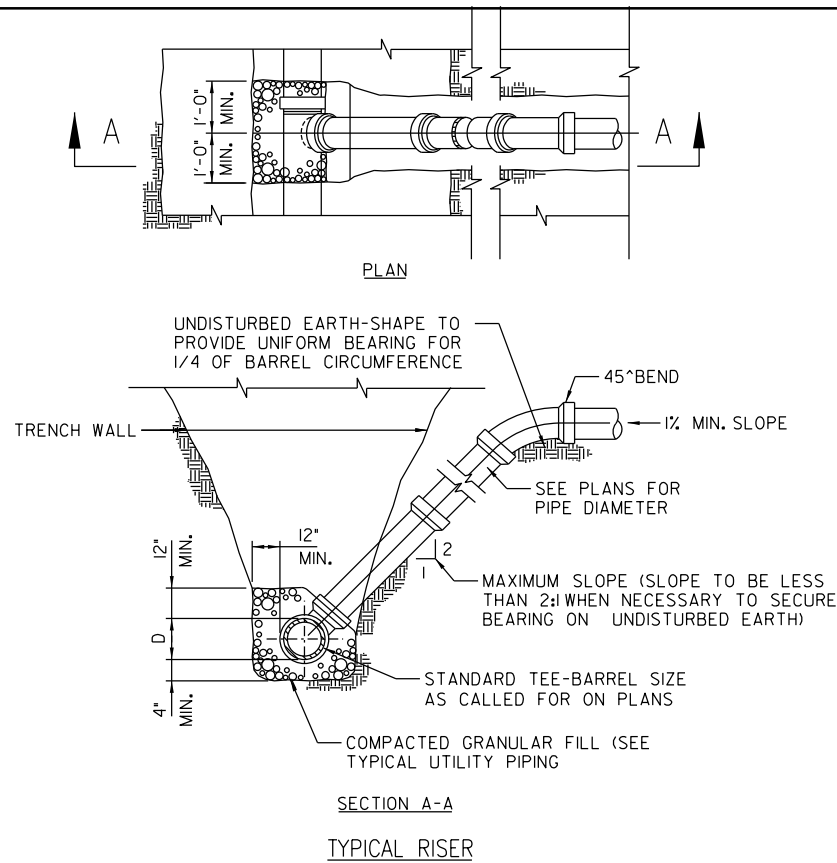




DOGHOUSE MANHOLE NOTES:

1. CONTRACTOR SHALL EXCAVATE THE EXISTING SEWER PER THE PLAN DETAILS AND TEMPORARILY SUPPORT THE PIPE.
2. THE BASE MANHOLE SECTION WITH DOGHOUSE CUTOUTS SHALL BE SET OVER THE EXISTING SEWER AND SHALL BE TEMPORARILY SUPPORTED BY SIX 8"x4"x16" BLOCKS.
3. IDOT CLASS SI CONCRETE SHALL THEN BE POURED AROUND THE PIPE AND IN THE INTERIOR OF THE MANHOLE TO THE SPRINGLINE OF THE PIPE AND FINISHED WITH A SLOPE TO THE PIPE FORMING THE BENCH. AT THIS TIME, THE REMAINING OPEN AREA IN THE DOGHOUSE OPENINGS SHALL BE CONCRETED SHUT WITH CONCRETE POURED AROUND THE PIPE ON THE EXTERIOR OF THE MANHOLE AND FORMED UP ON THE INSIDE OF THE MANHOLE.
4. ONCE THE BENCH IS FORMED AND SET, SAW CUT THE CROWN OUT OF THE SEWER AND REMOVE THE MATERIAL. THE OPENING IN THE SEWER SHALL BE FROM SPRING LINE TO SPRING LINE AND AS CLOSE TO THE INTERIOR OF THE MANHOLE AS POSSIBLE TO ALLOW FOR MAINTENANCE OF THE SEWER IN THE FUTURE.
5. THE REMAINING SECTIONS OF THE MANHOLE CAN THEN BE INSTALLED.
6. THE RIM AND INVERT ELEVATIONS FOR THE SANITARY SEWERS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE ORDERING OF DOGHOUSE MANHOLE STRUCTURES.

FILE NAME =	USER NAME = brons00939	DESIGNED - LJU	REVISED -	 Hanson Professional Services Inc. 1925 South Sixth Street Springfield, Illinois 62703-2886 Offices Nationwide	CITY OF SPRINGFIELD SPRINGFIELD, ILLINOIS	CITY OF SPRINGFIELD SEWER REHABILITATION, SRF MANHOLE DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I:\21jobs\21L0199\CAD\Site\Sheet\20-MH-DETAILS.dgn	DRAWN - SKB	REVISED -								SANGAMON	22	20	
PLOT SCALE =	CHECKED - CWW	REVISED -	CONTRACT NO.										
PLOT DATE = 2/25/2025	DATE - 2/25/2025	REVISED -	SCALE:						SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		



- LEGEND**
- PROPOSED HMA PAVEMENT
 - PROPOSED PCC PAVEMENT
 - PROPOSED BRICK
 - PROPOSED CA-6 AGGREGATE
 - PROPOSED FLOWABLE FILL
 - PROPOSED SELECT BACKFILL
- KEYED NOTES**
- 1 SAWCUT ALL SIDES OF EXISTING PAVEMENT PRIOR TO REMOVAL. FACES SHALL BE SAWCUT AGAIN PRIOR TO REPAIR IF THE EXPOSED FACES ARE DAMAGED.
 - 2 PCC SHALL BE IDOT CLASS PP-1.
 - 3 BACKFILL SHALL BE PLACED AND MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS.
 - 4 BRICK SHALL EITHER BE THE SALVAGED BRICK FROM THE REMOVAL PROCESS OR SHALL BE MATCHING BRICK. MATCHING BRICK SHALL MATCH IN EACH DIMENSIONS, COLOR AND TEXTURE. CONCRETE PAVING BLOCKS ARE NOT ACCEPTABLE.
 - 5 FLOWABLE FILL SHALL BE IDOT MIX 1 OR MIX 3.
- GENERAL NOTES**
1. ALL PAVEMENT OPENINGS SHALL BE IDENTIFIED AND COORDINATED WITH THE OFFICE OF PUBLIC WORKS *PRIOR* TO CONDUCTING THE WORK.
 2. TYPICAL UTILITY LOCATES SHALL BE CONDUCTED BY USE OF CORE DRILL AND A VACUUM TRUCK KEEPING PAVEMENT OPENINGS TO A MAXIMUM OF 1 SF OR LESS. BRICK STREETS SHALL HAVE THE BRICKS REMOVED, IN LIEU OF USING A CORE DRILL.
 3. PAVEMENT OPENINGS WITHIN NEWLY OVERLAID OR REPAIRED STREETS SAID TO BE IN EXCELLENT CONDITION ARE NOT ALLOWED. A FEE WILL BE ASSESSED FOR EACH INDIVIDUAL OPENINGS SHOULD THEY BE CONDUCTED WITHIN NEW PAVEMENTS.
 4. EXCESSIVE OPENINGS, DEFINED BY THE CITY CODE AS SIX UTILITY CUTS WITHIN 350 LF OR AS OTHERWISE DETERMINED BY THE CITY ENGINEER, SHALL REQUIRE THE UTILITY TO REPAIR THE ENTIRE BLOCK AFFECTED BY MEANS OF OVERLAY OR OTHER METHOD APPROVED BY THE CITY ENGINEER. THE REPAIR SHALL BE SCHEDULED AND COORDINATED

DATE: 1/12/2026
 DETAIL
 PLOT SCALE: 0.5:1
 PLOT DATE: 2/25/2025
 NCS US Standard.sfb

TYPICAL PAVEMENT REPAIR DETAIL
 CITY OF SPRINGFIELD DETAIL

NUMERICAL INDEX OF MAINS		
PIPE SEGEMENT	ID	SHEET NO.
1427EF025-1427EF109	2ND-1	10
1427EF073-1427EF025	2ND-2	11
1427EF074-1427EF111	2ND-3	12
1427EF080-1427EF087	6TH-1	18
1427EF087-1427EF092	6TH-2	19
1427EF100-1427EF099	2ND-5	14
1427EF101-1427EF100	2ND-4	13
1427EF102-1427EF074	2ND-3	12
1427EF111-1427EF073	2ND-3	11
1434AB026-1434AB029	5TH-1	15
1434AB027-1434AB030	5TH-2	16
1434AB028-1434AB031	5TH-3	17
1434AB029-1434AB094T	5TH-1	15
1434AB030-1434AB096T	5TH-2	16
1434AB031-1434AB097T	5TH-3	17
1434AB057-1434AB055	2ND-1	10