

PDF #	Number or Reference Label	Version Date / Approval Date	Original Number or Reference Label (1994 or updated)	Description
				Water - Chapter 10
				<i>Subsection 1 - Valve Box</i>
1	10.1.1	04/2024	FF	CAST IRON VALVE BOX (12" AND SMALLER VALVES - ONLY)
2	10.1.2	04/2024	GG	VERTICAL VALVE BOX ADJUSTMENT FOR PAVEMENT RESURFACING
3	10.1.3	04/2024	HH	VALVE BOX ASSEMBLY INSTALLATION - 12" AND SMALLER VALVES
4	10.1.4	04/2024	II	VALVE BOX ASSEMBLY INSTALLATION DIRECT BURY BUTTERFLY VALVES 36-INCH AND LARGER MAINS
5	10.1.5	04/2024	MM	VALVE BOX - CONCRETE GRADE RINGS (12" AND SMALLER VALVES - ONLY) (2" AIR RELEASES AND BLOW OFFS)
6	10.1.6	04/2024	NEW	DIRECT BURY VALVE EXTENSION STEM ASSEMBLY
				<i>Subsection 2 - Air Release</i>
7	10.2.1	04/2024	HD15	2" AND 6" AIR RELEASE VALVES FOR HDPE PIPE
8	10.2.2	04/2024	3	MANUAL 2" AND 6" AIR RELEASE FOR 6-INCH THROUGH 30-INCH DIAMETER MAINS
9	10.2.3	04/2024	NEW	8-INCH MANUAL AIR RELEASE AND FH FOR 30-INCH THROUGH 64-INCH DIAMETER MAINS
				<i>Subsection 3 - Hydrant</i>
10	10.3.1	04/2024	A	AUTOMATIC FLUSHER-HYDRANT
11	10.3.2	04/2024	VV	FIRE HYDRANT PAINT / COLOR SCHEMES CLTW/CHARLOTTE FIRE DEPT. STANDARDS PUBLIC AND PRIVATE HYDRANTS
12	10.3.3	04/2024	5	FIRE HYDRANT DETAIL
13	10.3.4	04/2024	HD07	HYDRANT CONNECTION FOR HDPE PIPE
14	10.3.5	04/2024	NEW	STANDARD HYDRANT CONNECTION
15	10.3.6	04/2024	5A	FIRE HYDRANT IN NCDOT R/W
				<i>Subsection 4 - Dead End</i>
16	10.4.1	04/2024	DD	DEAD END THRUST - WALL BLOCKING AND 2-INCH BLOW-OFF ASSEMBLY 6-INCH THROUGH 12-INCH MAINS
17	10.4.2	04/2024	HD04	CONCRETE WALL BLOCKING FOR HDPE PIPE (4-INCH TO 12-INCH)
18	10.4.3	04/2024	HD05	CONCRETE WALL BLOCKING FOR HDPE PIPE (14-INCH TO 32-INCH)
19	10.4.4	04/2024	HD17	DEAD END WALL BLOCKING FOR HDPE PIPE
20	10.4.5	04/2024	LL	DEAD END THRUST - WALL BLOCKING AND 2-INCH BLOW-OFF ASSEMBLY 14-INCH THROUGH 30-INCH MAINS
				<i>Subsection 5 - Blow Off Assembly</i>
21	10.5.1	04/2024	B	AUTOMATIC FLUSHER - 2" BLOW-OFF
22	10.5.2	04/2024	EE	12" BLOW-OFF ASSEMBLY (30"-48" MAINS) MANUAL STAND PIPE WITH FIRE HYDRANT
23	10.5.3	04/2024	HD16	BLOW OFF ASSEMBLIES FOR HDPE PIPE
24	10.5.4	04/2024	NN	2-INCH BLOW OFF ASSEMBLY (DEAD END OF MAIN) WITH 2-INCH GATE VALVE 2-INCH THROUGH 12-INCH MAINS
25	10.5.5	04/2024	NEW	4-INCH BLOWOFF ASSEMBLY FOR 16-INCH THROUGH 24-INCH DIAMETER MAINS
26	10.5.6	04/2024	NEW	BLOW-OFF ASSEMBLY WITH FIRE HYDRANT FOR 30-INCH THROUGH 48-INCH MAINS
				<i>Subsection 6 - Valve</i>
27	10.6.1	04/2024	HD11	GATE VALVE FOR HDPE PIPE (1.5-INCH TO 32-INCH)
28	10.6.2	04/2024	HD12	HORIZONTAL INSTALLATION OF GATE VALVES FOR HDPE PIPE (16-INCH TO 30-INCH)
29	10.6.3	04/2024	HD13	VERTICAL INSTALLATION OF GATE VALVES FOR HDPE PIPE (16-INCH TO 30-INCH)
30	10.6.4	04/2024	NEW	HORIZONTAL INSTALLATION OF GATE VALVES FOR NON-HDPE PIPE (16-INCH TO 30-INCH)
31	10.6.5	04/2024	NEW	GATE VALVE FOR NON-HDPE PIPE (1.5-INCH TO 30-INCH)
				NEW DETAIL FOR 36-INCH AND LARGER BUTTERFLY VALVES IN VAULTS
				<i>Subsection 7 - Manhole</i>
32	10.7.1	04/2024	SS	TYPE 7 MANHOLE COVER
33	10.7.2	04/2024	NEW	TYPE 8 MANHOLE COVER
34	10.7.3	04/2024	TT	TYPE F MANHOLE FRAME
35	10.7.4	04/2024	UU	TYPE G MANHOLE FRAME
				<i>Subsection 8 - Connection</i>
36	10.8.1	04/2024	C	BACK SIDE TAP 16" AND SMALLER MAINS
37	10.8.2	04/2024	HD08	TAPPING SLEEVE AND VALVE FOR HDPE PIPE (4-INCH TO 32-INCH)
38	10.8.3	04/2024	HD09	CUT-IN TEE FOR EXISTING HDPE PIPE (4-INCH TO 32-INCH)
39	10.8.4	04/2024	NEW	4-INCH PRESSURE REDUCER VALVE
40	10.8.5	04/2024	NEW	6-INCH PRESSURE REDUCER VALVE
				<i>Subsection 9 - Lowering</i>
41	10.9.1	04/2024	HD10	LOWERING OF 6-INCH TO 16-INCH WATER MAIN USING HDPE
42	10.9.2	04/2024	?	LOWERING OF 6-INCH TO 12-INCH WATER MAIN
43	10.9.3	04/2024	NEW	CONCRETE CRADLE DETAIL
				<i>Subsection 10 - Encasement</i>
44	10.10.1	04/2024	HD06	CONCRETE ENCASEMENT FOR HDPE PIPE
45	10.10.2	04/2024	HD18	STEEL CASING FOR HDPE PIPE
46	10.10.3	04/2024	JJ1	WATER MAIN LOCATIONS AT CULVERTS USING CONCRETE ENCASEMENT 6-INCH THROUGH 24-INCH MAINS
47	10.10.4	04/2024	KK	CONCRETE ENCASEMENT 6-INCH THROUGH 64-INCH MAINS
48	10.10.5	04/2024	WW	WATER MAIN LOCATIONS AT CULVERTS USING STEEL CASING PIPE 6-INCH THROUGH 24-INCH MAINS
				<i>Subsection 11 - Transition</i>
49	10.11.1	04/2024	HD01	TRANSITION FROM HDPE TO OTHER MATERIAL (4-INCH TO 32-INCH)
50	10.11.2	04/2024	HD02	TRANSITION FROM HDPE TO AC PIPE (4-INCH TO 12-INCH)
				<i>Subsection 12 - Sampling</i>
51	10.12.1	04/2024	XX1	WATER QUALITY SAMPLING STATION (1 OF 2)
52	10.12.2	04/2024	XX2	WATER QUALITY SAMPLING STATION (2 OF 2)
				STANDPIPE SAMPLING POINTS STANDARD DETAIL
				<i>Subsection 13 - Miscellaneous</i>
53	10.13.1	04/2024	G	NEW WATER MAIN JUMPER SCHEMATIC FOR 2" - 24" MAINS
54	10.13.2	04/2024	12B	JUMPER CONNECTION DETAIL FOR 12-INCH AND SMALLER WATER MAINS
55	10.13.3	04/2024	12A	JUMPER CONNECTION DETAIL FOR 16-INCH AND LARGER WATER MAINS
56	10.13.4	04/2024	HD03	EMBEDMENT AND BACKFILL FOR HDPE PIPE
57	10.13.5	04/2024	HD24	EXISTING HDPE PIPE REPAIR (MAINTENANCE REPAIRS ONLY)
58	10.13.6	04/2024	HD25	HDPE CREEK CROSSING
				<i>Subsection 14 - Restrained Joint</i>
59	10.14.1	04/2024	?	RESTRAINT LENGTH - TEE
60	10.14.2	04/2024	?	RESTRAINT LENGTH - DEAD END, PLUG, CAP, IN-LINE VALVE, END OF LINE VALVE, AND REDUCER
61	10.14.3	04/2024	?	RESTRAINT LENGTH - HORIZONTAL OFFSET AND COMBINED HORIZONTAL OFFSET
62	10.14.4	04/2024	?	RESTRAINT LENGTH - VERTICAL BEND DOWN AND VERTICAL BEND UP
63	10.14.5	04/2024	?	RESTRAINT LENGTH - VERTICAL OFFSET AND COMBINED VERTICAL OFFSET (UNDER OBJECT)
64	10.14.6	04/2024	?	RESTRAINT LENGTH - COMBINED VERTICAL OFFSET (OVER OBJECT) AND HORIZONTAL BEND
				<i>Subsection 15 - Tracer Wire</i>
65	10.15.1	04/2024	TW1	TRACER WIRE - WATER MAIN
66	10.15.2	04/2024	TW2	TRACER WIRE - WATER MAIN
67	10.15.3	04/2024	TW3	TRACER WIRE - WATER MAIN - SPLICE
				<i>Subsection 16 - AutoFlusher</i>
68	10.16.1	04/2024	AAA	WATER QUALITY AUTOMATIC FLUSHER - 1-INCH AUTOFLUSHER - (MAX. FLOW RATE - 25 GPM)
69	10.16.2	04/2024	BBB	WATER QUALITY AUTOMATIC FLUSHER - 2-INCH AUTOFLUSHER - (MAX. FLOW RATE - 80 GPM)