COLLIER COUNTY UTILITIES STANDARDS MANUAL
TABLE OF REVISIONS
COLLIER COUNTY PUBLIC UTILITIES PLANNING AND PROJECT MANAGEMENT DEPARTMENT
AS OF 09/2013

CHANGES TO UTILITIES STANDARDS MANUAL						
Item	**Section**	**Sub-Section/ Detail #**	**Revision Summary**	**Comments/Notes**	**Fiscal Impact**	**Page**
1	1	Part 1 Introduction	Add requirement to conform to Reduction of Lead in Drinking Water Act (Required to be in place by January 2014).	This is a federal mandate going into effect January of 2014.	25% to 40% increase in material impacted by requirement (2" and smaller brass fittings that contact Potable Water).	2
	4	Appendix F	Update "County Approved Product List" to conform to Reduction in Lead in Drinking Water Act. Add model clarity and additional manufacturer options. Sort by systems.			3 to 14
2	1	1.2.1	Update required fire flow language and chloramine dissipation calculation requirements.	The revised dissipation calculations will minimize pipeline over sizing.	Potential savings due to pipe size.	15 to 16
3	1	1.2.4	Add requirement for pre-cast concrete slab under 30" or larger valves.	This will impact mostly County capital projects and is intended to reduce point load settling of pipe.	Nominal.	17
	2	331200, 2.3.A	Add requirement for pre-cast concrete slab under 30" or larger valves.			18 to 19
4	1	1.5	Update jumper connection language.	Rewording to ensure construction water is accounted for.	None.	20
5	1	1.8	Remove requirement for rebar in valve pads.	Removing the requirement for rebar in valve pads will reduce installation costs and County maintenance costs. Showing the meter box in detail W-2 is consistent with note 4.	Nominal savings to contractor and County.	21
	2	330518, 3.2.N.2.	Remove requirement for rebar in valve pads.			22
	3	G-7	Remove requirement for rebar in valve pads.			23
	3	W-1	Remove requirement for rebar in valve pads.			24
	3	W-2	Remove requirement for rebar in valve pads and add requirement for meter box.			25
	3	WW-2	Remove requirement for rebar in valve pads.			26
	3	WW-12	Remove requirement for rebar in valve pads.			27
6	1	1.10	Extend passing bac-t result validity from 30 to 45 days.	FDEP allows 60 days but County has seen issues beyond 45 days.	Potential savings due to not having to re-sample every 30 days.	28
7	1	2.1.4	Edit lateral installation notes and requirements.	Removes the requirement for ductile iron laterals in special cases.	Nominal savings to contractor and County.	29
8	1	2.1.5	Edit manhole text.	Simple clarification.	None.	30
9	2	020500 1.3.F.	Add reference to State Statute 556.	Simple clarification.	None.	31
10	2	330502, 2.1.B	Specify casing requirements.	Reduces the size of casing required for HDPE installations.	Cost savings due to reduced casing size.	32
	2	330523.16, 2.1.A	Specify casing requirements.			33
11	2	330523.16, 3.1.A.6	Update minimum depth under State and County roads.	State and County road requirement.	None.	34
12	2	330523.16, 3.1.B	Remove product specifics.	Simple clarification.	None.	35 to 36
13	2	331200, 2.3.F	Add allowance of MJ tapping sleeves.	Simple clarification to add options.	None.	37
14	2	331619, 2.1.B	Update language to allow fire district to determine if chains are required. Add lead free requirement for paint.	Meets fire district requirements.	None.	38
15	2	331619, 3.1.B	Increase allowable separation of hydrant and valve.	This change will remove a valve from long side hydrants.	Potential savings due a valve only required at pipe tap.	39
16	2	333913, 2.1.A	Update spelling.	Simple clarification	None.	40
17	4	Appendix A	Combine Water and Wastewater Deviation Forms into one. Edit contact mailing address.	Clerical correction to minimize number of forms and adds ability to submit via email.	None.	41 to 42

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 1, text revisions in Part 1

PART 1 POTABLE WATER AND NON-POTABLE IRRIGATION WATER SYSTEMS

All potable water, non-potable irrigation (including reclaimed or reuse) water and raw water pipe, material, equipment and appurtenances shall be new, and shall conform to Section 2, Technical Specifications and Section 3, Utilities Detail Drawings.

All material and equipment designed or used in connection with a potable (drinking) water system shall conform to the requirements of the National Sanitation Foundation (NSF) Standard 61, "Drinking Water System Components – Health Effects~~.~~" **and the Reduction of Lead in Drinking Water Act amending the Safe Drinking Water Act.**

Collier County Public Utilities Division
County Approved Product List

Substitutions for any item listed below shall be submitted using the "Vendor and Manufacturer Approval Application Form," Appendix E, and reviewed to be considered an equal.

Item	Manufacturer	Model	System/s	Location in Standards Manual
Casing Spacer End Seals	**Powerseal**	**PENDSEAL**	**All**	**Section 330523.16, Page 4, B.1**
Casing Spacer End Seals	Cascade Waterworks MFG Co.	CCES	All	Section 330523.16, Page 4, B.1
Casing Spacers Stainless Steel	**Powerseal**	**Model 4810**	**All**	**Section 330523.16, Page 4, B.1/ G-5**
Casing Spacers Stainless Steel	Cascade Waterworks MFG Co.	CCS	All	Section 330523.16, Page 4, B.1/ G-5
Electronic Markers	**3M Electronic Ball Marker**	**1423 & 1424**	All	Section 1; 1.6.1, 2.1.4, 2.2.1/WW-10/WW-12/WW-16
Electronic Markers	**OMNI MARKER**	**Omni Marker Model 161 or 162**	All	Section 330518, Page 9, O.2
Fences	Chain Link Fence Co. of Pennsylvania		All	Section 323113, Page 2, 2.1.A
Fences	U.S. Steel-Cyclone		All	Section 323113, Page 2, 2.1.A
Joint Restraint Devices	EBAA Iron Sales		All	Section 1: 1.3/Section 330503, Page 5, L./Section 330504, Page 7, F.
Joint Restraint Devices	Romac Industries		All	Section 1: 1.3/Section 330503, Page 5, L./Section 330504, Page 7, F.
Joint Restraint Devices	Sigma		All	Section 330503, Page 5, L.1./Section 330504, Page 7, F.
Joint Restraint Devices	Star Restraint		All	Section 1: 1.3/Section 330503, Page 5, L./Section 330504, Page 7, F.
Joint Restraint Devices	Uniflange		All	Section 330503, Page 5, L.1./Section 330504, Page 7, F.
Joint Restraint Devices, Push-On joints for push joint pipe	American Cast Iron Pipe Company		All	Section 330504, Page 7, F.3.
Joint Restraint Devices, Push-On joints for push joint pipe	Flex-Ring		All	Section 330504, Page 7, F.3.
Joint Restraint Devices, Push-On joints for push joint pipe	Lok-Ring		All	Section 330504, Page 7, F.3.
Joint Restraint Devices, Push-On joints for push joint pipe	McWane Inc.		All	Section 330504, Page 7, F.3.
Joint Restraint Devices, Push-On joints for push joint pipe	Super-Lock		All	Section 330504, Page 7, F.3.

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Joint Restraint Devices, Push-On joints for push joint pipe	TR Flex		All	Section 330504, Page 7, F.3.
Joint Restraint Devices, Push-On joints for push joint pipe	U.S. Pipe & Foundry		All	Section 330504, Page 7, F.3.
Metalized Tape	Reef Industries, Inc. Houston, TX	Terra Tape D	All	Section 330518, Page 9, O.1
Metalized Tape	**Proline Safety Products**	**Detectable Tape**	**All**	**Section 330518, Page 9, O.1**
Rubber Gasket pipe	Clow "Long-Span Pipe"		All	Section 330518, Page 10, Q.1.
Rubber Gasket pipe	Flanged American Pipe		All	Section 330518, Page 10, Q.1.
Rubber Gasket pipe	Flanged US Pipe		All	Section 330518, Page 10, Q.1.
Single Sealed Gasket Push-on type joint	Alltite		All	Section 330504, Page 10, 3.3.C
Single Sealed Gasket Push-on type joint	Fastite		All	Section 330504, Page 10, 3.3.C
Single Sealed Gasket Push-on type joint	Superbelltite		All	Section 330504, Page 10, 3.3.C
Single Sealed Gasket Push-on type joint	Tyton		All	Section 330504, Page 10, 3.3.C
Two-part Coal tar Epoxy	Madewell Products Corp.	Madewell 1104	All	Section 330518, Page 6, 4

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Item	Manufacturer	Model	System/s	Location in Standards Manual
120VAC Surge Suppressor	Edco	HSP121	IQ	NP-E3
12VDC Power Supply	Allen Bradley	1606 Series	IQ	NP-E3
24VDC Power Supply	Allen Bradley	1606 Series	IQ	NP-E3
Access Hatch, Aluminum	Bilco	J-AL H20 (5-1/2" depth)	IQ	NP-3
Access Hatch, Aluminum	Halliday	H1W (3-1/2" depth)	IQ	NP-3
Access Hatch, Aluminum	U.S. Foundry	AHS (5" depth)	IQ	NP-3
Antenna Subsystem	Data Flow Systems, Inc.	RTA209 Yagi Antenna	IQ	NP-E9
Back Pressure Sustaining Valve	Ames	No. 920	IQ	NP-1/NP-E2
Basket Strainer, Top Access	Hayward	No. 72	IQ	NP-1/NP-E2
Coax Surge Supressor	Polyphaser	ISB56LN, Bulkhead Mount Series	IQ	NP-E3
Corporation Stops	Ford	**FB 1100-6NL/ FB 1100-6**	IQ	NP-2
Corporation Stops	A.Y. McDonald	**74704B-22**	IQ	NP-2
Corporation Stops	A.Y. McDonald	**4104NL/ 4104**	IQ	NP-3/NP-4
Corporation Stops	A.Y. McDonald	**4101 BF NL/ 4101 BF**	IQ	G-9A/NP-4
Corporation Stops	Mueller	H-10046**N/ H-10046**	IQ	G-9A/NP-3/NP-4
Curb Stop	Ford	**FB43342WNL comp x meter/ FB43342W**	IQ	NP-2
Data Radio	Integra	TR	IQ	NP-E3
Data Signal Line Surge Processor	Edco	PC642 Series	IQ	NP-E3

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County Approved Product List

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Geomembrane	GSE Lining Technology, Inc.		IQ	Section 334713, Page 4, 1.a
Level Transducer	Wika		IQ	NP-E6
Meter Box, AMR	**DFW**	**12" D1200 AMR Series**	**IQ**	**NP-2**
Meter Box, AMR	Alliance	12" 16AMR Series	IQ	NP-2
Meter, Non-Potable Electromagnetic	**ABB**	**Magmaster**	**IQ**	**NP-1/NP-E2**
Meter, Non-Potable Electromagnetic	**Endress+Hauser**	**Promag 53**	**IQ**	**NP-1/NP-E2**
Meter, Non-Potable Propeller	Water Specialties	No. ML-04-X with 4-20 MA Output Transmitter, TR-16	IQ	NP-1/NP-E2
Pedestal Housing	Channel	CCWD Signature Series P/N SPH 12122C10000W (Dark Green Color)	IQ	NP-4
Rain Gauge	ISCO	674	IQ	NP-E5
Service Wye	Ford	**FY44264NL/ FY44264**	IQ	NP-2
Surge Suppression	Edco	SS65	IQ	NP-E6/NP-E7
Surge Suppression, Main Service	Lea	USP-M Series	IQ	NP-E5
Tapping Saddle/ Hot taps	**Powerseal**	**P3490MJ Series**	IQ	NP-2
Valve, Air Release	ARI	D-040	IQ	NP-4
Valve, Air Release	GA Industries	Figure 945	IQ	Section 1 1.7/NP-1/NP-3/NP-4/NP-E2
Valve, Rising Stem Gate/ OS&Y	**American Flow Control**	**AFC-2500 SERIES**	IQ	NP-1/NP-E2
Valve, V-Port Ball	**DeZurik**	**VPB - flanged, type 317 stainless, and Teflon seat and**	**IQ**	**NP-1**

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County Approved Product List

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Valve, V-Port Ball - Motor (Actuator)	Rotork	IQTM	IQ	NP-E2

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Access Frame (Pump Station)	U.S. Foundry	AHD	Wastewater	WW-7/WW-8
Access Hatch, Aluminum	Bilco	J-AL H20 (5-1/2" depth)	Wastewater	WW-13
Access Hatch, Aluminum	Halliday	H1W (3-1/2" depth)	Wastewater	WW-13
Access Hatch, Aluminum	U.S. Foundry	AHS (5" depth)	Wastewater	WW-13
Access Hatch, Cast Iron	U.S. Foundry	7644-KA	Wastewater	WW-14
Antenna Subsystem	Data Flow Systems, Inc.	RTA209 Yagi Antenna	Wastewater	Section 333200, Page 4, J./WW-17
Biofiltration Odor Control System	Zabocs (pre-engineered)		Wastewater	Section 333200, Page 6, P.
Ceramic Epoxy Lining	Vulcan Painters	Protecto 401 Coating	Wastewater	Section 330504, Page 3, 2.1.B
Chimney Seal	Cretex		Wastewater	Section 333913, Page 4, K/WW-3/WW-4/WW-5
Chimney Seal	NPC		Wastewater	Section 333913, Page 4, K/WW-3/WW-4/WW-5
Coaxial Cable	Data Flow Systems, Inc.	RTC 400	Wastewater	Section 333200, Page 5, First Paragraph/WW-17
Corporation Stops	A.Y. McDonald	**4104NL/ 4104**	Wastewater	WW-13/WW-14
Corporation Stops	A.Y. McDonald	**4101 BF NL/ 4101 BF**	Wastewater	G-9A
Corporation Stops	Mueller	H-10046**N/ H-10046**	Wastewater	G-9A/WW-13/WW-14
Diaphragm Seals	Ashcroft		Wastewater	Section 333313, Page 8, G.2.
Diaphragm Seals	Mansfield and Green	Type SB	Wastewater	Section 333313, Page 8, G.2.
Diaphragm Seals	Trerice	No. 877	Wastewater	Section 333313, Page 8, G.2.
Flanged Adapter Connections	Gustin-Bacon Group, Division of Certain-Teed Products, Kansas City, Kansas		Wastewater	Section 333313, Page 7, F.1.c.

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Flanged Adapter Connections	**EBAA Iron Sales**	**E2100 SERIES**	**Wastewater**	**Section 333313, Page 7, F.1.c.**
Flanged Adapter Connections	Victaulic	Vic Flange Style 741	Wastewater	Section 333313, Page 7, F.1.c.
Generator Receptacle and Angle Adapter	Russell and Stoll	200 Ampere JRS-2044	Wastewater	WW-7/WW-9
Inflow Protector, Stainless Steel	Sewer Shield, Inc. Maitland, FL		Wastewater	Section 333913, Page 4, J.
Internal Protection	Integrated Environmental Technologies - Santa Barbara, CA	IET Coating System	Wastewater	Section 333913, Page 5, 3.1.F/Section 099723/WW-3/WW-4/WW-5/WW-7/WW-8
Internal Protection	Lafarge Calcium Aluminates - Chesapeake, VA	Sewpercoat Lining System	Wastewater	Section 333913, Page 5, 3.1.F/Section 099723/WW-3/WW-4/WW-5/WW-7/WW-9
Junction Box	Hoffman	A12106NFSS	Wastewater	WW-9
Lightning Arrestor	Square D	SDSA-1175 for 1-phase	Wastewater	Section 333200, Page 6, O./WW-9
Lightning Arrestor	Square D	SDSA-3650 for 3-phase	Wastewater	Section 333200, Page 6, O./WW-9
Liquid Level Regulators	Roto-Float	S 40 N 0	Wastewater	WW-7/WW-8
Mix-Flush system (Flush valve)	Flygt	4901 Flush Valve	Wastewater	Section 333200, Page 3, First Paragraph
Plastic Joint Sealing Compound	Hamilton Kent, Toronto/Ontario, Canada	Kent-Seal	Wastewater	Section 333913, Pages 3 & 5
Plastic Joint Sealing Compound	K.T. Snyder Company, Inc. Houston, TX	Ram-Nek	Wastewater	Section 333913, Pages 3 & 5/NP-3/WW-3/WW-4/WW-5/WW-6/WW-7/WW-13/WW-14/WW-18
Polyethylene Lining	American Cast Iron Pipe	Polybond Plus (60 mils minimum thickness)	Wastewater	Section 330504, Page 3, 2.1.B
Pump Control Panel	Quality Control, Inc.	1825 for 1-phase	Wastewater	Section 3, Page 4, H./WW-7/WW-9
Pump Control Panel	Quality Control, Inc.	3825 for 3-phase	Wastewater	Section 333200, Page 4, H./WW-7/WW-9

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Pump Controller/RTU	Data Flow Systems, Inc.	TAC Pack TCU	Wastewater	Section 333200, Page 4, I.
Sealing Element	Thunderline Corp. Inkster Michigan	Link-Seal LS-300-C	Wastewater	Section 333313, Page 8, I.1./WW-18
Sewage Pump	Flygt		Wastewater	Section 333200, Page 2, C
Sewer Clean-Out Rim and Cover	U.S. Foundry	7621	Wastewater	WW-11
Sewer Manhole Frame and Covers	Pamrex		Wastewater	WW-5
Sewer Manhole Frame and Covers	U.S. Foundry	105M	Wastewater	WW-2
Sewer Manhole Frame and Covers	U.S. Foundry	420-C-ORS	Wastewater	Section 333913, Page 2, 2.1.A.2/G-9A/WW-3/WW-4/WW-5/WW-6/WW-18
Sleeve Type Couplings	**Powerseal**	**STYLE 3501**	**Wastewater**	**Section 333313, Page 8, d.**
Sleeve Type Couplings	Baker Allsteel		Wastewater	Section 333313, Page 8, d.
Sleeve Type Couplings	Dresser	Style 38	Wastewater	Section 333313, Page 8, d.
Sleeve Type Couplings	Smith Blair	Style 413	Wastewater	Section 333313, Page 8, d.
Tower Section	Rohn	20G	Wastewater	WW-17
Valve Box	Brooks		Wastewater	WW-9
Valve, 3-Way Plug	Milliken Valve Co.	**Modle M604**	Wastewater	WW-7/WW-8
Valve, 3-Way Plug	**Dezurik**	**Model D202**	**Wastewater**	**WW-7/WW-8**
Valve, Air Release	**HTECH**	**2" SS MODEL # 8889860041**	**Wastewater**	**WW-13/WW-14/Section 333313, Page 7, 6.**
Valve, Check	Kennedy Valve Manufacturing Co.	**MODEL 106LW**	Wastewater	WW-7/WW-8
Valve, Check	Red Valve Co., Inc. Longwood, FL	"Tideflex"	Wastewater	Section 333200, Page 2, B

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Item	**Manufacturer**	**Model**	**System/s**	**Location in Standards Manual**
Valve, Check	Val-Matic	**Swing Flex MODEL V500 SERIES**	Wastewater	WW-2
Valve, Duckbill	Red Valve Co., Inc. Longwood, FL	"Tideflex"	Wastewater	WW-7
Valve, Plug	Homestead Valve Co.		Wastewater	WW-7
Valves (Plug Valves)	DeZurik	**Model PEC & PEF (mj & flange)**	Wastewater	Section 333200, Page 4, F.
Valves (Plug Valves)	Milliken Valve Co.	**Model M600 & M601 (mj & flange)**	Wastewater	Section 333200, Page 4, F.

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Automatic Flushing Device	Hydro-Guard	HG1BS0200030NF00	Water	W-2
Automatic Flushing Device	Kupferle Foundry Company	9400-WC Eclipse	Water	W-2
Backflow Preventer Assembly	See Approved Backflow Devices List, Appendix G		Water	
Bushing	Ford	C18-33NL	Water	W-6
Corporation Stops	Ford	F1100NL SERIES	Water	W-6
Corporation Stops	Ford	FB1100NL SERIES	Water	W-6
Corporation Stops	Ford	FB 1100-6NL	Water	W-12
Corporation Stops	A.Y. McDonald	4104NL	Water	W-5
Corporation Stops	A.Y. McDonald	4101 BF NL	Water	G-9A/W-5
Corporation Stops	Mueller	H10045N, H15008N	Water	Section 331200, Page 3, First Paragraph
Corporation Stops	Mueller	H-10046N/ H-10046	Water	G-9A/W-5
Coupling	Ford	FC44NL SERIES	Water	W-6
Curb Stop	Ford	FB43342WNL comp x meter	Water	W-12
Curb Stop	Mueller	Mark II Oriseal N	Water	Section 331200, Page 3, First Paragraph
HDPE Stab Fitting	Elster	Hydrosert	Water	
Hydrant	American Darling	6-inch B-84-B	Water	Section 331619, Page 2, G
Hydrant	Clow	Medallion	Water	Section 331619, Page 2, G
Hydrant	Mueller	Centurion A-423	Water	Section 331619, Page 2, G

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Meter Box, AMR	**DFW**	**12" D1200 AMR Series**	**Water**	**W-12**
Meter Box, AMR	Alliance	12" 16AMR Series	Water	W-12
Meter, Fire Protection (3", 4", 6", 8")	Elster AMCO	evoQ4 Electromagnetic Meter	Water	W-9/W-10/W-14/W-15
Meter, Fire Protection (3", 4", 6", 8", 10")	Neptune	HP Fire Service Turbine Meter	Water	W-9/W-10/W-14/W-15
Meter, Fire Protection (3/4", 1", 1-1/2", 2")	Hersey-Meters	Residential Fire Meter	Water	W-9/W-10/W-14/W-15
Meter, Fire Protection (4", 6", 8")	Master Meter	FSC	Water	W-9/W-10/W-14/W-15
Meter, Fire Protection (4", 6", 8", 10")	Neptune	HP Protectus III Fire Service Meter	Water	W-9/W-10/W-14/W-15
Meter, Potable Water	Master Meter	Dual Body Compound (DBC)	Water	W-13
Meter, Potable Water	Neptune	Tru/Flo	Water	W-13
Pedestal Housing	Channel	CCWD Signature Series P/N SPH 121215000288 (Light	Water	W-5
Sampling Station	Kupferle Foundry Company	Eclipse No. 88	Water	W-6
Service Saddles (Ductile Iron)	Ford	F202 SERIES	Water	Section 331200, Page 7, c.
Service Saddles (Ductile Iron)	**Powerseal**	**P3413 SERIES**	**Water**	**Section 331200, Page 7, c.**
Service Saddles (Ductile Iron)	**JCM**	**J402 SERIES**	**Water**	**Section 331200, Page 7, c.**
Service Saddles (PVC) Perm Bact Sample Point	**Powerseal**	**P3401 SERIES**	**Water**	**Section 331200, Page 7, c./W-6**
Service Saddles (PVC) Perm Bact Sample Point	Ford	**FS 90 SERIES**	Water	Section 331200, Page 7, c./W-6
Service Wye	Ford	**FY44264NL**	Water	W-12
Strainer, Flanged	Ames	7001	Water	W-13

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Item	Manufacturer	Model	System/s	Location in Standards Manual
Tapping Saddle/ Hot taps	**Powerseal**	**P3490MJ Series**	Water	W-12
Valve Box	Tyler/Union	461	Water	Section 331200, Page 4, First Paragraph
Valve Box, Locking Cover	**AMPro USA**	**LL562**	**Water**	**Section 331200, Page 3, B.2.**
Valve Setter	Wilkins	**WMJS**	Water	W-9A/W-10A/W-11A
Valve, Air	Val-Matic	**Model V22G**	Water	W-11/W-14/W-16
Valve, Air Release	ARI	D-040	Water	W-5/W-10
Valve, Air Release	GA Industries	Figure 945	Water	Section 1 1.7/W-5/W-10
Valve, Air Release	Mueller	Mark II Oriseal	Water	Section 331200, Page 3, First Paragraph
Valve, Bacterial Sampling Station Line	Mueller	Mark II Oriseal	Water	Section 331200, Page 3, First Paragraph
Valve, Ball	Ford		Water	Section 331200, Page 3, First Paragraph
Valves and Appurtenances	American Darling		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	A.Y. McDonald		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	Clow		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	Ford		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	Kennedy		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	Mueller		Water	Section 331200, Page 2, 2.2.A
Valves and Appurtenances	U.S. Pipe		Water	Section 331200, Page 2, 2.2.A

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 4, text revisions in 1.2.1

1.2 Design of Pipeline Size and Location

1.2.1 Water Pipeline Sizing Criteria

All water mains to be maintained by the COUNTY shall be a minimum of six inches (6") in diameter. For dead end mains on short (300' or less) single family residential cul-de-sacs, hydraulic calculations shall show the capability of maintaining ~~750 gpm~~ **required** fire flow **(according to NFPA 1)** plus potable demand.

Water systems shall be designed to maintain adequate flows and pressures and water quality standards as established by Florida Department of Environmental Protection (FDEP), using the following criteria:

A. Designs shall assume a minimum COUNTY source pressure under peak hourly flow conditions of 50 psi and a minimum COUNTY source pressure with fire flow under maximum day conditions of 40 psi, delivered from the closest COUNTY transmission main to the project. Minimum residual node pressure within a proposed project system shall be 20 psi under peak hourly flow and maximum day with fire flow conditions.

B. The design Engineer shall model the proposed system, including all dead ends, for chlorine dissipation assuming a chloramine residual of 2.0 mg/l at the entrance point to the project.

The following criteria shall be used to analyze model chloramine dissipation unless otherwise approved by the Public Utilities Water Director upon the submittal of specific case data:

~~a) Occupancy of fifty percent (50%) to account for seasonal variations with the load evenly distributed throughout the project.~~
a~~b~~) Average occupancy per dwelling of **2.0** ~~1.81 for single family and 1.42 for multi-family as established by the Water Master Plan as amended~~ and adjusted for peak with a factor ~~of 1.2~~ **in accordance with the 10 State Standards** shall be used when modeling system performance.
b~~c~~) Consumption rate of 170 gallons per capita per day shall be used when establishing loading rates for system performance models.
~~d) Systems that are proposed to use or will use alternate irrigation sources shall use fifty percent (50%) of the loading rates for modeling chlorine/chloramine dissipation.~~
c~~e~~) The standard decay rate is - 0.012 ppm per hour. The analysis assumes a static chlorine level of 2.0 ppm at the tapping point in front of a project. Using the decay rate and solving for the elapsed time from the initial chlorine level to the minimum chlorine level residual of 0.6 ppm in the following: 0.6 ppm = 2.0 ppm x e(-1=0.012 ppm x #hours) => time = 100.33 hours.

The Project Engineer shall submit an analysis letter to~~ Community Development and Environmental Services~~ **the Growth Management Division** as part of the review package, certifying that all points within the proposed system shall maintain a minimum level of 0.6 mg/l chlorine/chloramine residual under the conditions listed above.

Systems unable to meet minimum design requirements or maintain minimum chlorine residual levels shall not be eligible for ownership and maintenance by the COUNTY.

Water mains not designed to carry fire flows shall not have fire hydrants connected to them.

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 4, text revisions in 1.2.4

1.2 Design of Pipeline Size and Location

1.2.4 Valve Locations

Valves shall be provided at all intersections and branches in sufficient numbers as to allow for zone isolation of distribution areas in order to limit impacts of line breaks and service disruptions to customers. In-line gate valves shall be provided in accordance with AWWA requirements and at no greater than one thousand foot (1000') intervals when no other valves exist within internal distribution systems. All gate valves twenty inches (20") and smaller shall be of the resilient-seated wedge type, conforming to AWWA C509 or C515, or latest revisions thereof. **All gate valves or plug valves thirty inches (30") or larger shall have a concrete slab placed under the valve to help distribute the total weight of the valve and reduce line sagging. See Technical Specifications 331200 2.3.A.** All valves shall be furnished with valve boxes extending to finished grade as shown in the Utilities Detail Drawings **(G-7)**.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 331200 “Water Valves and Appurtenances”, Pages 2-3, text revisions in 2.3.A.

2.3 DESIGN

A. Resilient, Wedge or Gate Valves and Boxes

1. Valves for pipe less than 2 inches in diameter shall conform to the requirements of AWWA C509 or C515 (latest revisions) and shall be cast iron, single wedge, non-rising stem, screwed bonnet, 125 pounds S.P., 200 pounds W.O.G with stuffing box repackable under pressure and all parts renewable. Ends shall be as shown or indicated on the drawings. For approved air release line valves, bacterial sampling station line valves, curb stops, corporation stops, and ball valves see County Approved Product List, Appendix F.

2. Resilient, wedge or gate valves 2 inches in diameter and larger shall be cast or ductile iron body, non-rising stem, bronze mounted gate valves, mechanical joint conforming to requirements of the AWWA Standard C509 or C515 and shall be provided with a 2 inch square operating nut with the word “open” and an arrow cast in the metal to indicate direction. Valves shall be **vertical** resilient, wedge, or gate type and shall turn to the left (counter clockwise) to open. The wedge or gate shall be cast iron or ductile iron per ASTM A536, minimum 65,000-psi strength and, completely encapsulated with urethane rubber, permanently bonded to the wedge or gate to meet ASTM test for rubber metal bond, ASTM D429. The valve stems for non-rising stem assemblies shall be cast bronze with integral collars in full compliance with AWWA. OS & Y stems shall be on bronze bar stock. The NRS stem stuffing box shall be the O-ring seal type with two rings located above thrust collar; the two rings shall be replaceable with valve fully open and subjected to full rated working pressure. The minimum safe working pressure shall be 200 psi. **All gate valves or plug valves thirty inches (30”) or larger shall have a concrete slab placed under the valve to help distribute the total weight of the valve and reduce line sagging. The concrete slab shall have 6”x 6” 10/10 welded wire mesh, have lifting eyes, constructed using 3,000 psi concrete, be six inches (6”) thick, and sized according to the following table:**

VALVE SIZE	LENGTH	WIDTH
30”	42”	30”
36”	48”	36”
42”	54”	42”
48” – 54”	60”	48”
60” – 66”	78”	60”

3. There shall be two low torque thrust bearings located above and below the stem collar. The stem nut shall be independent of wedge and shall be made of solid bronze. There shall be a smooth unobstructed waterway free of all pockets, cavities and depressions in the seat area. The body and bonnet shall be coated with fusion-bonded epoxy both interior and exterior. Each valve shall have the manufacturers name, pressure rating and year manufactured cast on body. The valve shall be designed and tested to be opened and closed under a differential pressure of at least twice the working pressure.

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 7, text revisions in 1.5

1.5 Connections to Collier County Facilities

Connections to existing COUNTY water mains shall be constructed as described in Section 2, Technical Specifications and shown in Section 3, Utilities Detail Drawings. These details shall apply to all connections to existing systems including, but not limited to, hot taps and extensions from existing dead end systems. A section of pipe shall be inserted into the gap to connect the new construction to the existing systems for the purpose of accomplishing line flushing. Immediately upon completion of the flush, the connection shall be removed. ~~The~~**A** jumper shall be ~~replaced~~**installed (see detail W-4)** until final connection is authorized by the County Manager or designee and approved by the FDEP at the completion of construction and after satisfactory completion of all test procedures, and bacterial clearance of the new water system or portion(s) thereof.

Steam condensate, cooling water from engine jackets, or water used in conjunction with heat exchangers shall not be returned to potable water mains.

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 8, text revisions in 1.8

1.8 Concrete Collars

All gate valve boxes, air release assembly and permanent sample points outside paved surfaces shall be provided with a concrete collar set to finish grade. Such collar(s) shall have a minimum thickness of six inches (6") and the outside dimension of the pad ~~and the reinforcement~~ shall be as shown in the Utilities Detail Drawings. Concrete shall have minimum compression strength of 3000 psi at twenty eight (28) days.

Proposed Revision to Section 2, Technical Specifications

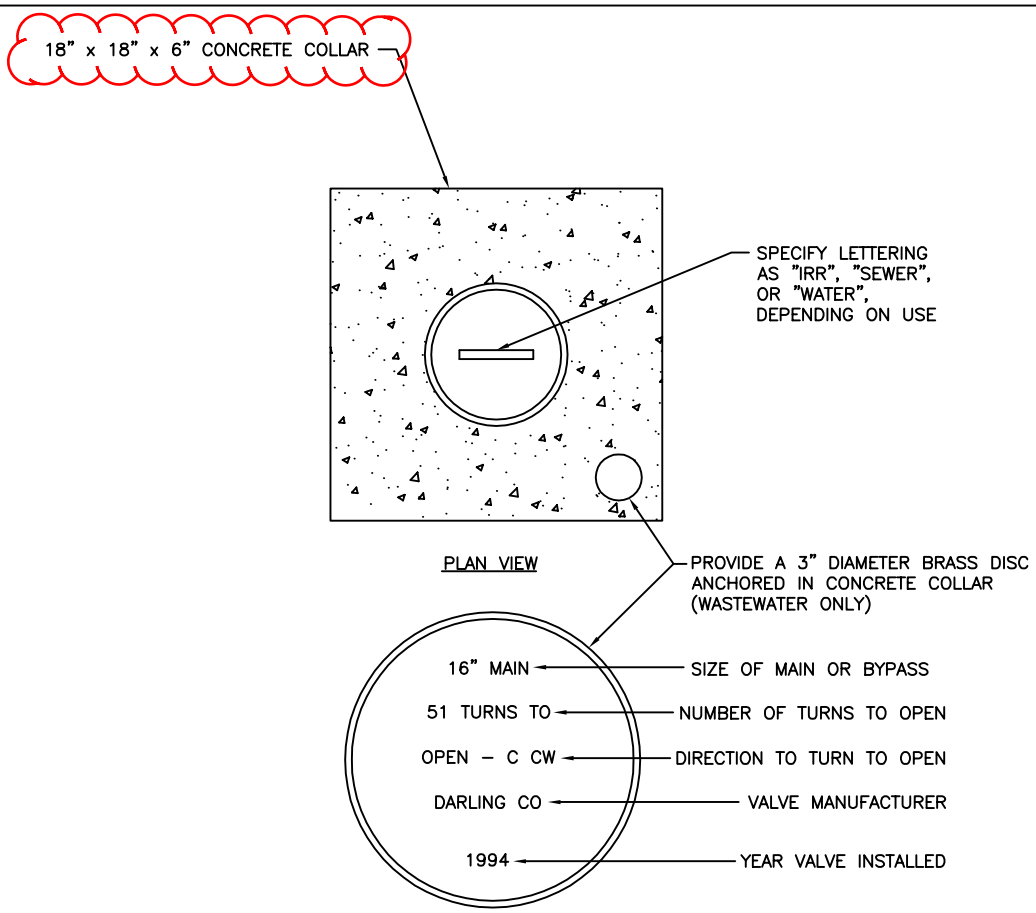
Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

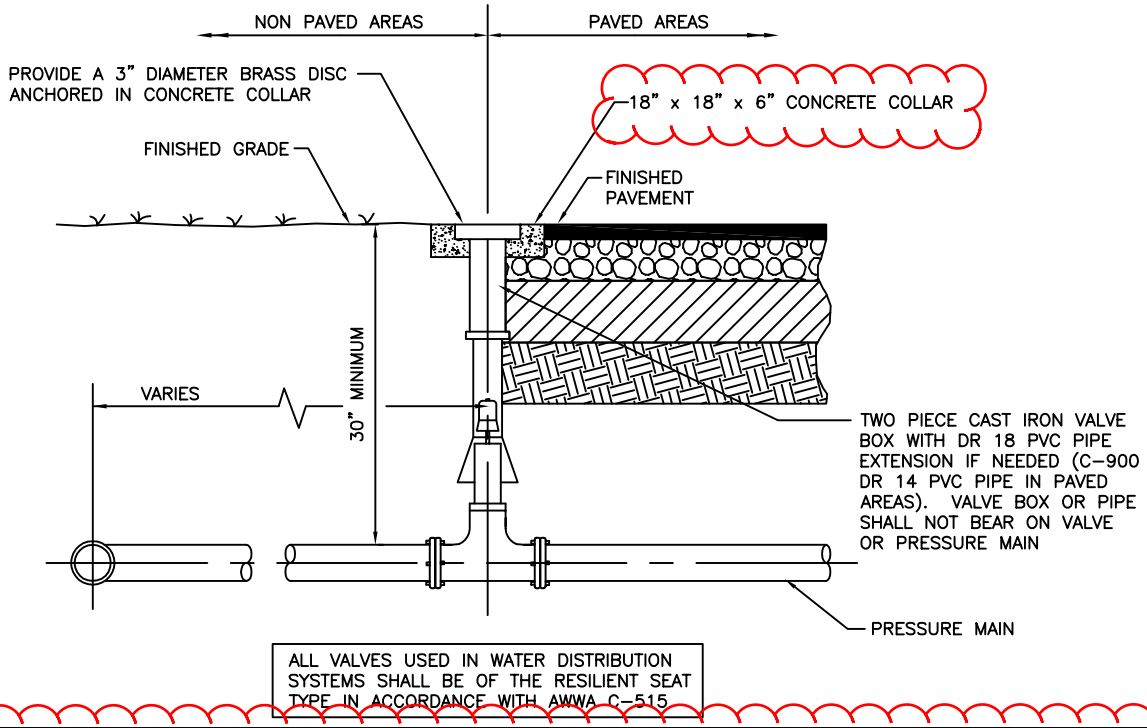
Section 2, Technical Specifications, 330518 “Laying and Jointing Buried Pipe”, Page 9, text revisions in 3.2.N.2.

3.2 INSTALLATION

N. Valve Box Setting: Install valve boxes vertical and concentric with the valve stem.

2. Build a ~~reinforced~~ collar, as shown in the standard details, 18 inches by 18 inches by 6 inches **or 24 inch diameter round by 6 inches** ~~with 2, #4 reinforcing bars around the valve box head in pavement,~~ flush to grade of top of box. Similar collar shall be poured flush with grade and top of unpaved areas.





ALL VALVES USED IN WATER DISTRIBUTION SYSTEMS SHALL BE OF THE RESILIENT SEAT TYPE IN ACCORDANCE WITH AWWA C-515

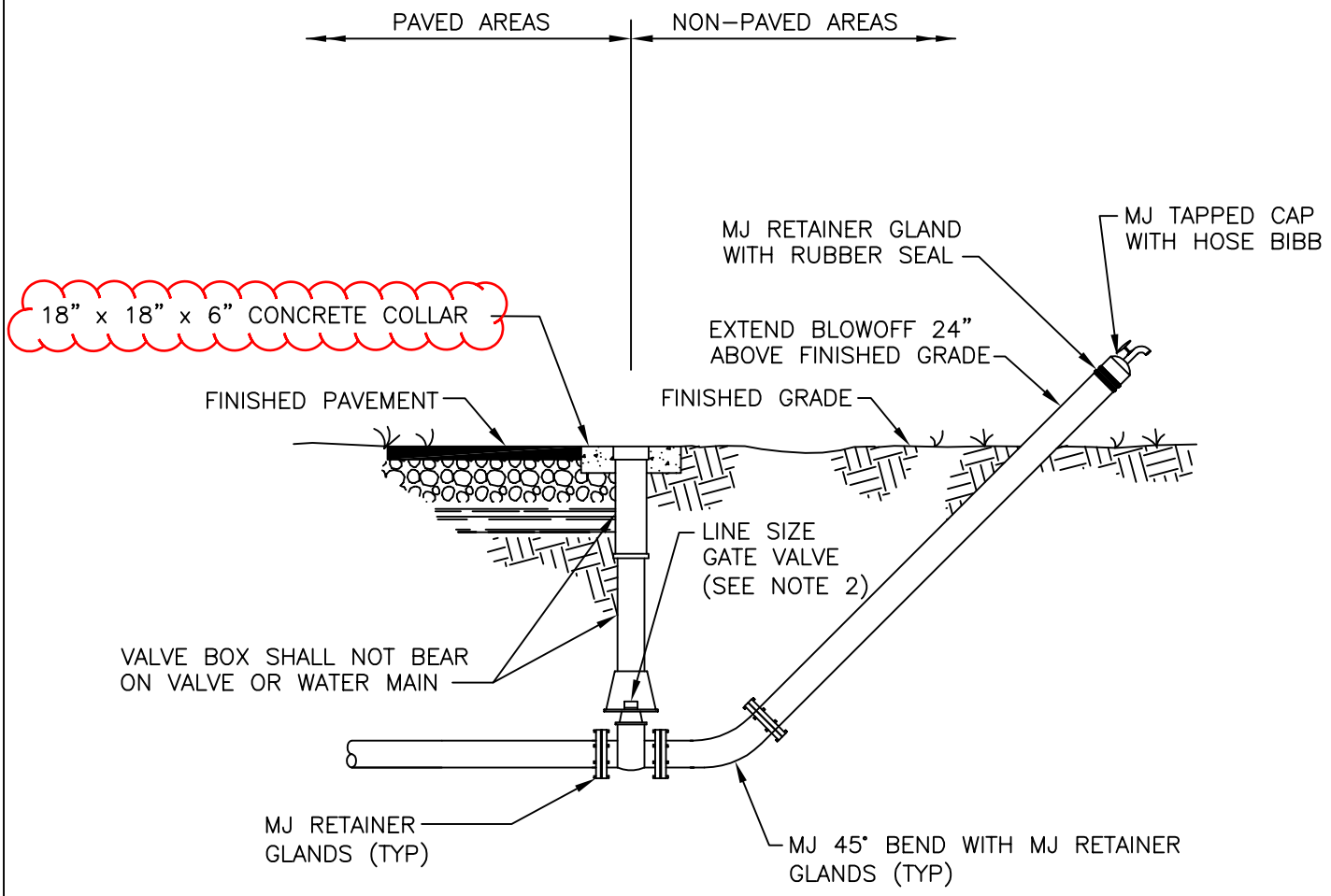
TYPICAL VALVE SETTING DETAIL

NTS NTS

REVISION DATE: JUNE 2013

Collier County Public Utilities Division

SHEET NO. G-7

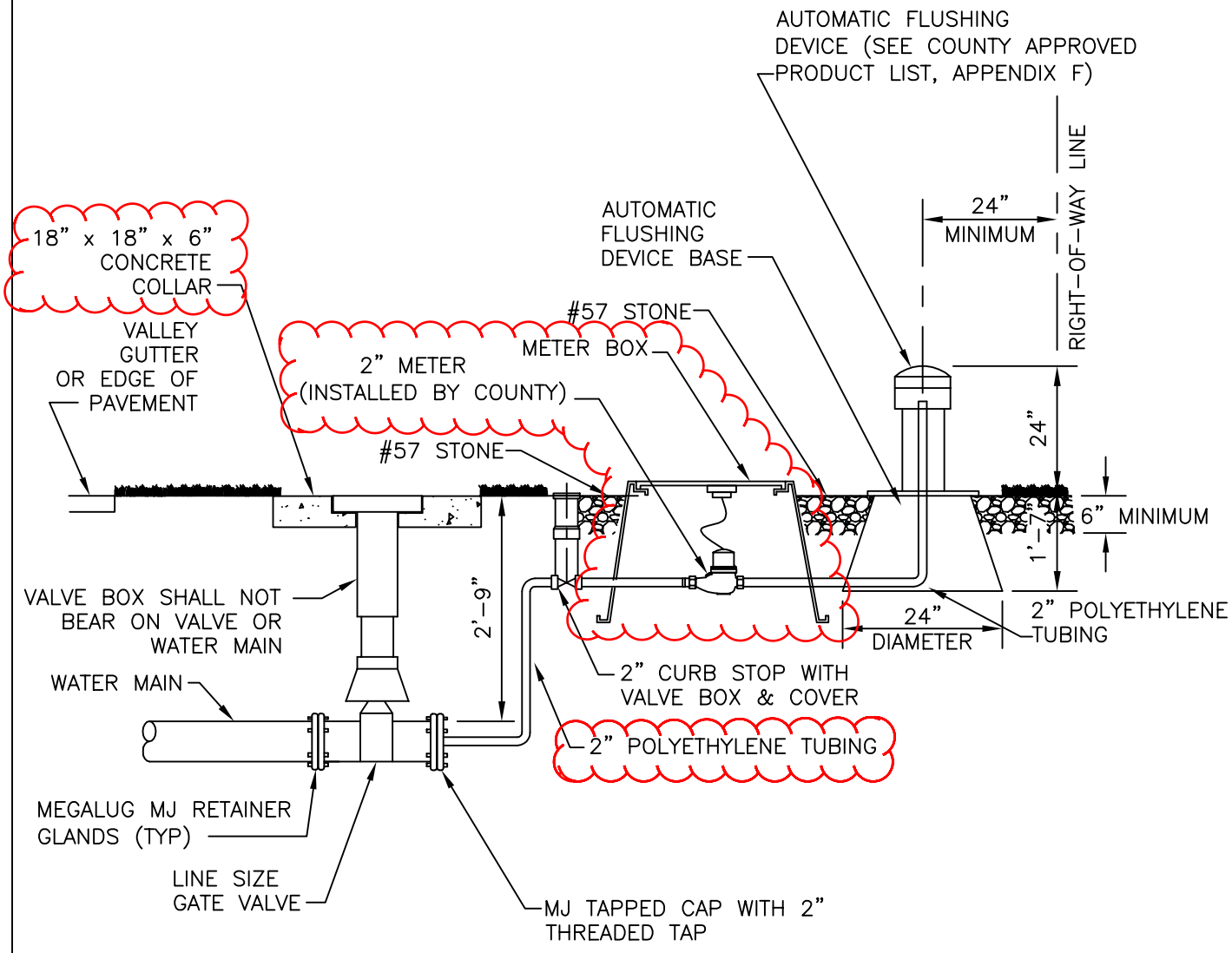


SIDE VIEW

NOTES:

1. MJ TAPPED CAP WITH HOSE BIBB IS TO BE REMOVED AFTER INITIAL BACTERIOLOGICAL CLEARANCE AND PRIOR TO WATER MAIN ACCEPTANCE.
2. SEE TECHNICAL SPECIFICATIONS SECTION 331200 FOR GATE VALVE AND VALVE BOX REQUIREMENTS.
3. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

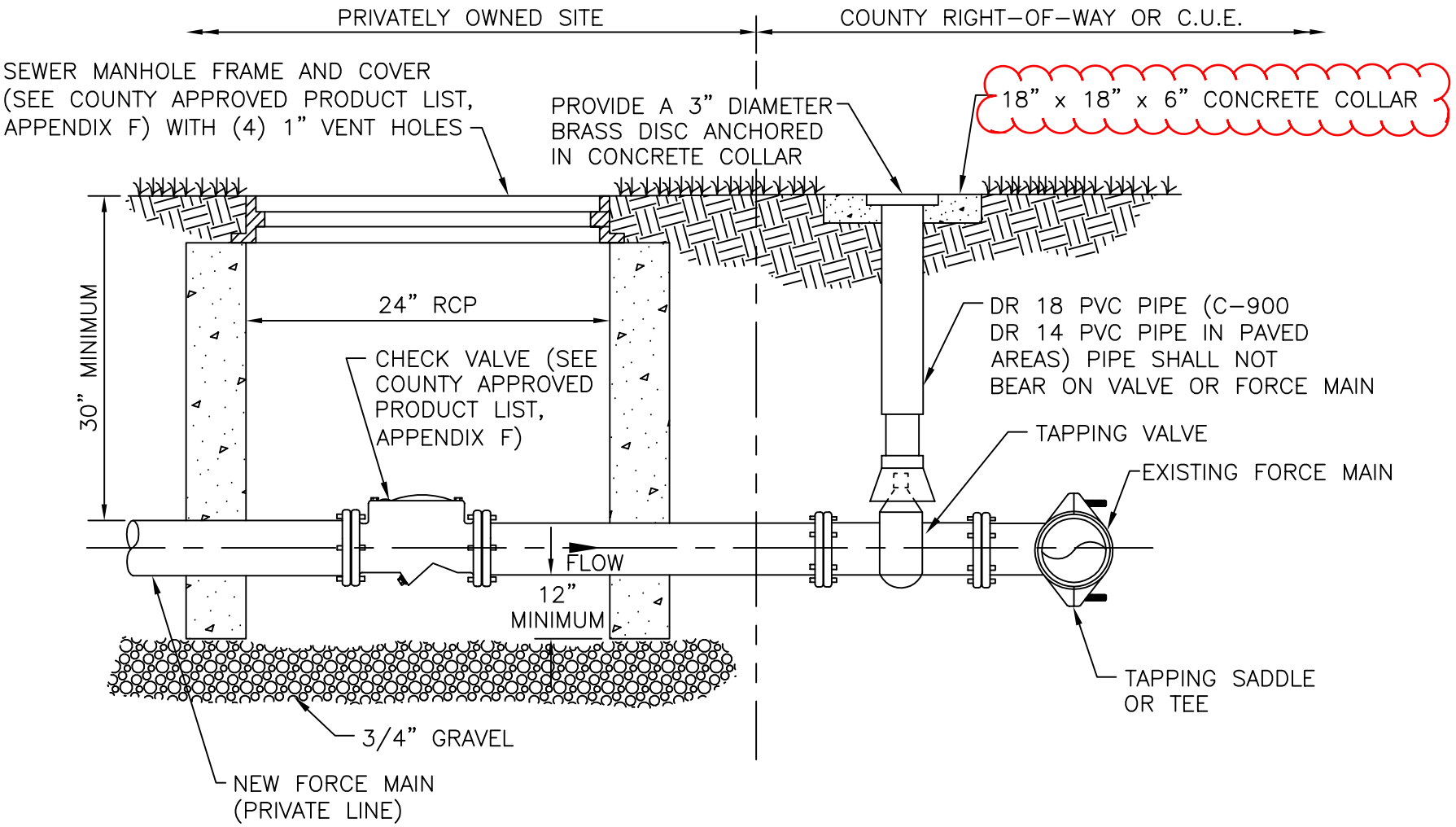
TEMPORARY BLOWOFF ASSEMBLY WITH BACTERIAL SAMPLING POINT DETAIL NTS	REVISION DATE: JUNE 2013	Collier County Public Utilities Division	SHEET NO. W–1



NOTES:

1. PIPING SHALL BE INSTALLED UP TO 2" CURB STOP WITH VALVE BOX AND COVER AT TIME OF MAIN INSTALLATION.
2. AUTOMATIC FLUSHING DEVICE SHALL BE SHUT OFF UNTIL MAIN LINE HAS BEEN BACTERIOLOGICALLY TESTED.
3. SEE TECHNICAL SPECIFICATIONS SECTION 331200 FOR GATE VALVE AND VALVE BOX REQUIREMENTS.
4. AT TIME OF ACCEPTANCE, WATER DEPARTMENT WILL INSTALL 2" METER.
5. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

AUTOMATIC WATER MAIN FLUSHING DEVICE DETAIL NTS	REVISION DATE: JUNE 2013	Collier County Public Utilities Division	SHEET NO. W-2



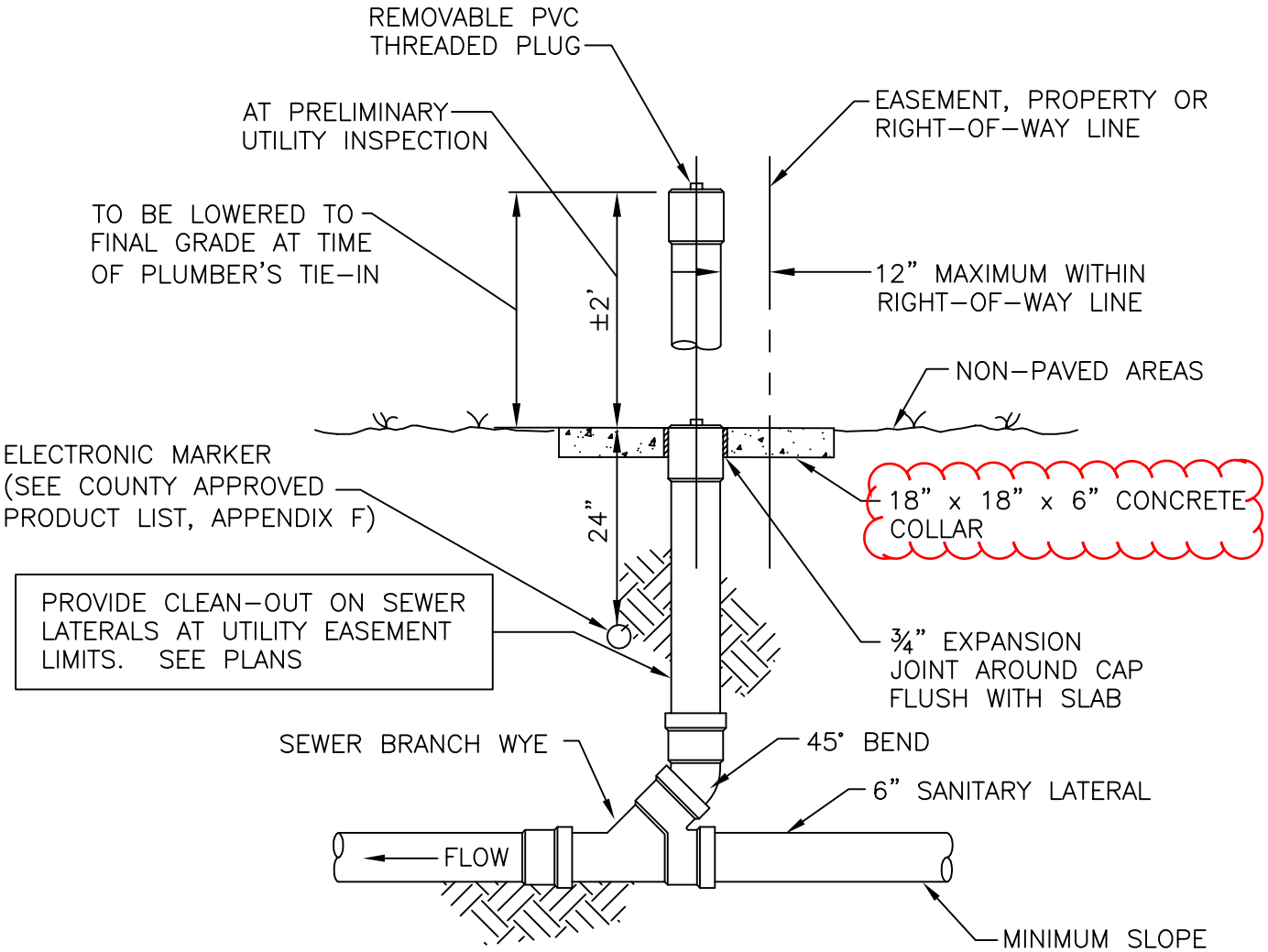
PRIVATE FORCE MAIN CONNECTION TO COUNTY FORCE MAIN DETAIL

NTS NTS

REVISION DATE:
JUNE 2013

Collier County
Public Utilities Division

SHEET NO.
WW-2



ELEVATION

SEWER CLEAN-OUT DETAIL NON PAVED AREAS NTS	REVISION DATE: JUNE 2013	Collier County Public Utilities Division	SHEET NO. WW-12

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Pages 10, update sub-section 1.10

1.10 Laboratory Testing and Sample Collection

All new potable and raw water systems shall be subject to bacteriological sample collection and testing. Sample collection and laboratory analyses shall be performed by COUNTY certified laboratory technicians only. The Contractor or his agent shall provide the equipment required in Section 2, Technical Specifications, to supply a continuous sample at the points indicated on the engineer's construction drawings. Sample points having a one (1) day total of two hundred (200) non-coliform bacteria or greater shall be considered as failed samples. Samples containing one (1) coliform bacteria or greater shall be considered as a failed sample. All potable water systems shall pass bacteriological tests within ~~thirty (30)~~ **forty-five (45)** days of being placed in service.

Sample collection and sample laboratory analyses costs shall be borne by the developer. For Utilities Capital Projects that are run by the COUNTY for the COUNTY, one set of tests (including water costs) are provided by the COUNTY free of charge and the contractor shall pay for any additional tests.

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 12, text revisions in 2.1.4

2.1 Gravity Sewer Systems

2.1.4 Gravity Sewer Laterals

Laterals shall be extended to the property line or easement limit for all installations.

Laterals shall be a minimum of six inches (6") in diameter. Lateral shall have a minimum depth of thirty inches (30") and a maximum depth of forty-eight inches (48") below finished grade. In locations where a minimum depth of thirty inches (30") cannot be provided, ~~laterals shall be ductile iron pipe unless the length of lateral is thirty feet (30') or less. In such cases the~~ lateral**s** shall be C900, DR 14 PVC pipe. At no time shall the depth of a lateral be less than twenty-four inches (24"). At no time shall a lateral be core bored into manholes. Upon installation, all lateral ends shall be plugged. A cleanout shall be provided at the end of each lateral prior to the end plug. Typical lateral and cleanout standards are shown in the Utilities Detail Drawings. The cleanout riser and cap shall be set twenty-four inches (24") above finished grade. All sewer lateral ends shall be provided with an electronic marker (see County Approved Product List, Appendix F). Electronic markers shall be placed twenty-four inches (24") below final grade at the cleanout, for COUNTY inspector to see during final plumbing tie-in inspection. At no time shall the connection to the lateral be made to the cleanout riser or any part of the vertical assembly. Either a single six inch (6") diameter or larger lateral to each property or a single six inch (6") or larger lateral with a double wye shall be provided.

Proposed Revision to Section 1, Design Criteria

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 1, Design Criteria, Page 12, text revisions in 2.1.5

2.1 Gravity Sewer Systems

2.1.5 Manholes

Precast concrete m~~M~~anholes shall be installed at the end of each wastewater main, at all changes in grade, size, or horizontal alignment, and at all main pipe intersections, shall be spaced at distances not greater than four hundred feet (400') and shall be placed in roads. For sanitary sewers with a diameter greater than fifteen inches (15"), the recommended maximum distance between manholes is four hundred fifty feet (450'). All gravity collection mains shall terminate in a precast **concrete** manhole.

Minimum inside diameter of all manholes shall be four feet (4'). A drop pipe shall be provided for a sewer entering a manhole at an elevation of twenty-four inches (24") or more above the manhole invert. Drop manholes shall be constructed with an outside drop connection encased in concrete, as shown in the Utilities Detail Drawings. See FDEP Wastewater Checklist Form 62-604.300(8)(a), "Manholes" section, for further design requirements, as well as Specification Section 333913 and the Detail Drawings.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in *italics and underlined*.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 020500 “Connections to Existing Systems”, Page 2, text revisions in 1.3.F.

1.3 GENERAL REQUIREMENTS

F. Collier County Damage Prevention Policy:

1. This policy has been put in place to avoid damage to Collier County underground utilities. A minimum distance of five feet (5’) horizontally and eighteen inches (18”) vertically must be maintained away from Collier County Utilities *(in accordance with pipe separation criteria located in the Design Criteria section)*. Any and all variations from this order must be approved by the Water or Wastewater Department.

2. **Before commencement of any excavation, the existing underground utilities in the area affected by the work must be marked by Sunshine One Call***, in accordance with State Statute Chapter 556 “Underground Facility Damage Prevention and Safety”,* **after proper notification to them by either calling 811 in Florida or toll free at 1-800-432-4770. Visit www.callsunshine.com for more information. Before commencing excavation for the work, potholing of all potential conflicts must be performed.**

3. All lines in conflict must be physically located by the contractor and verified by Collier County Locate Department personnel before performing work. Utilities under concrete or pavement may require soft dig vacuum locates which also is the contractor’s responsibility to perform. All utilities will be field marked per Sunshine State One Call’s statutes and guidelines. For line verification or any other information concerning locates, please call the Locate Department at 239-252-5922 during normal business hours. For line verification or emergency locates after hours, call emergency numeric pager at 239-890-0809. **In the event the potholing and/or vacuum soft dig does not locate the marked utility, work must be stopped and the affected utility owner contacted.** Failure to comply with this policy and obtain required signature(s) may result in delay or denial of permit.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 330502 "High Density Polyethylene (HDPE) Pipe and Fittings", Pages 2-3, text revisions in 2.1.B.

2.1 POLYETHYLENE PIPE AND FITTINGS

B. The diameter of DR11 HDPE~~, and Fusible PVC,~~ casing pipe provided for roadway crossings or other purposes shall conform to the following ~~table~~:

For HDPE ~~or Fusible PVC~~ pressure carrier pipes, casing spacers are not required when HDPE DR11 (or DR17 for 42" to 54" or DR21 for 63") casing is used. The casing inside diameter shall be a minimum of two inches larger than the carrier pipe's outside diameter.

~~1) For PVC DIP, or HDPE Pressure Carrier Pipes:~~

~~Carrier Pipe's Nominal Diameter (Inches)~~	~~Casing Pipe's Minimum Nominal Diameter (Inches)~~
~~2~~	~~10~~
~~4~~	~~14~~
~~6~~	~~16~~
~~8~~	~~18~~
~~10~~	~~20~~
~~12~~	~~24~~
~~14~~	~~28~~
~~16~~	~~30~~
~~18~~	~~34~~
~~20~~	~~36~~
~~24~~	~~42~~

~~2) For Gravity Sewer Carrier Pipes:~~

~~Carrier Pipe's Nominal Diameter (Inches)~~	~~Casing Pipe's Minimum Nominal Diameter (Inches)~~
~~8~~	~~14~~
~~10~~	~~16~~
~~12~~	~~20~~
~~15~~	~~24~~
~~18~~	~~26~~
~~21~~	~~30~~
~~24~~	~~32~~
~~27~~	~~36~~

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 330523.16 "Jacking, Augering, and Mining", Page 2, text revisions in 2.1.A.

2.1 MATERIALS

A. General: Use ~~one of~~ the following for casing pipe.

~~1)~~ Spiral Weld or smooth wall steel pipe, meeting the requirements of ASTM A 139, Grade B. The minimum casing pipe size **shall be determined by maintaining a minimum of a four inch (4") difference between the carrier pipe's largest outside diameter (including restraints) and the casing pipe's inside diameter. The** ~~and~~ wall thickness shall be **a minimum of .25 inches for up to twenty inch casings, .312 inches for twenty-four to thirty-six inch casings, and .50 inches for forty-two inch and larger casings.** ~~as shown in the following table, for the carrier pipe size indicated.~~ For ~~sizes not included therein, or for~~ special design considerations, obtain approval from Collier County Utilities.

~~For PVC and HDPE Pressure Carrier Pipes~~

~~Carrier Pipe's Nominal Diameter (Inches)~~	~~Casing Pipe's Minimum Nominal Diameter (Inches)~~	~~Casing Pipe's Wall Thickness (Inches)~~
~~2~~	~~10~~	~~0.250~~
~~4~~	~~14~~	~~0.250~~
~~6~~	~~16~~	~~0.250~~
~~8~~	~~18~~	~~0.250~~
~~10~~	~~20~~	~~0.250~~
~~12~~	~~24~~	~~0.312~~
~~14~~	~~28~~	~~0.312~~
~~16~~	~~30~~	~~0.312~~
~~18~~	~~34~~	~~0.375~~
~~20~~	~~36~~	~~0.375~~
~~24~~	~~42~~	~~0.500~~

~~2) For Gravity Sewer Carrier Pipes:~~

~~Carrier Pipe's Nominal Diameter (Inches)~~	~~Casing Pipe's Minimum Nominal Diameter (Inches)~~
~~8~~	~~14~~
~~10~~	~~16~~
~~12~~	~~20~~
~~15~~	~~24~~
~~18~~	~~26~~
~~21~~	~~30~~
~~24~~	~~32~~
~~27~~	~~36~~

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 330523.16 “Jacking, Augering and Mining”, Pages 2-3, text revisions in 3.1.A.6.

3.1 INSTALLATION

A. Casing Pipe:

6. Locate casing pipes crossing under **State and** County roadways at suitable approved alignments in order to eliminate possible conflict with existing or future utilities and structures with a minimum ~~30~~ **36** inches depth of cover between the top of the casing pipe and the surface of the roadway. Conduct boring operations in such a manner as not to create hazardous conditions or impede traffic flow.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 330523.16 “Jacking, Augering, and Mining”, Pages 4 to 5, text revisions in 3.1.B.

3.1 MATERIALS

B. Casing Spacers:

~~1.~~ Use Stainless Steel Casing Spacers (see County Approved Product List, Appendix F) being on center and restrained as the preferred method for installing the carrier pipe. Use skids installed with 6 ft to 10 ft spacing as recommended by the manufacturer. After the carrier pipe has been tested for leakage, block the casing ends with either an 8" wall of brick masonry with a weep hole installed near the bottom of each wall or casing spacer end seals (see County Approved Product List, Appendix F) with stainless steel bands. ~~Upsizing casings may be required for PVC push on pipe with EBAA restrained bells. No extra payment will be made for this upsizing.~~

~~2. The minimum casing pipe inside diameters needed for restrained carrier pipe are as follows:~~

~~MINIMUM CASING PIPE INSIDE DIAMETER NEEDED FOR RESTRAINED CARRIER PIPE~~			
~~DUCTILE IRON MECHANICAL JOINT WITH MEGALUG RESTRAINT~~			
~~EBAA Product~~	~~Nominal Carrier Pipe Size (in.)~~	~~Diameter (in.)~~	~~Min. Steel Casing ID (in.)~~
~~1104~~	~~4~~	~~9.90~~	~~13~~
~~1106~~	~~6~~	~~12.00~~	~~15~~
~~1108~~	~~8~~	~~14.15~~	~~17~~
~~1110~~	~~10~~	~~16.20~~	~~19~~
~~1112~~	~~12~~	~~18.30~~	~~21.5~~
~~1114~~	~~14~~	~~20.94~~	~~23.5~~
~~1116~~	~~16~~	~~22.90~~	~~25.5~~
~~1118~~	~~18~~	~~25.00~~	~~28~~
~~1120~~	~~20~~	~~27.10~~	~~30~~
~~1124~~	~~24~~	~~32.64~~	~~35~~
~~1130~~	~~30~~	~~38.87~~	~~41~~
~~1136~~	~~36~~	~~45.17~~	~~48~~
~~1142~~	~~42~~	~~55.57~~	~~58~~
~~1148~~	~~48~~	~~61.87~~	~~64~~
~~PVC PUSH ON PIPE WITH EBAA RESTRAINED BELLS~~			
~~EBAA Product~~	~~Nominal Carrier Pipe Size (in.)~~	~~Diameter (in.)~~	~~Min. Steel Casing ID (in.)~~
~~1504~~	~~4~~	~~10.13~~	~~12.5~~
~~1506~~	~~6~~	~~12.63~~	~~15~~
~~1508~~	~~8~~	~~15.50~~	~~18~~

~~1510~~	~~10~~	~~17.73~~	~~20~~
~~1512~~	~~12~~	~~21.25~~	~~24~~
~~1114HV~~	~~14~~	~~24.25~~	~~26.5~~
~~1116HV~~	~~16~~	~~26.50~~	~~28.5~~
~~1120HV~~	~~20~~	~~31.00~~	~~34~~
~~1124HV~~	~~24~~	~~35.50~~	~~38~~
~~1130HV~~	~~30~~	~~42.38~~	~~45~~

Proposed Revision to Technical Specification
Section 331200 Water Valves and Appurtenances

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Edit text in Part 2 F. on page 6 as noted below:

2.3 Design

F. Tapping Valves and Sleeves

1. All tapping sleeve and valve assemblies shall meet the requirements of AWWA Standard C500, latest revision. Cast iron tapping sleeves or stainless steel wrap-around sleeves, and cast iron valves shall be used to make live taps into the existing water mains where shown on the drawings. ~~Sleeve bodies must be of stainless steel. The f~~**F**langes must conform to AWWA C207 Class D ANSI 150# drilling. **Mechanical Joint (MJ) tapping sleeves are also acceptable.** All bolts and nuts shall be as specified.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 331619 “Hydrants”, Page 2, text revisions in 2.1.B.

2.1 FIRE HYDRANTS

B. Hydrant shall have break away upper sections capable of ready replacement without loss in the event of traffic damage. Each hydrant shall have a 6" bottom inlet connection and valve opening at least 5-1/4 inches in diameter. Hydrants shall have a national standard pentagon 1.5 inch, point to flat operating nut and turn to the left (counter clockwise) to open. Each hydrant shall be fitted with one 4-1/2-inch pumper connection and two 2-1/2 inch hose connections, both having threads that conform to the Fire Division Standard for the area. Hose caps shall be chained **(unless specified without by appropriate fire control district)** to the hydrant barrel and fitted with nuts similar to the hydrant operating nuts. Each hydrant shall have a barrel of sufficient length to bring the bottom of the 6" pipe connection 3 feet below the surface of the finished ground. Each hydrant shall have breakaway flanges and be made in at least two sections bolted together. All interior working parts of the hydrant shall be removable from the top of the hydrant to allow repairs without removing the hydrant barrel after it has been installed. Hydrants shall have renewable O-ring stem seals. Hydrant barrels shall be painted AWWA Safety Yellow **(lead free)** or as specified by appropriate fire control district. They shall be designed for a working pressure of 150 psi.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 331619 “Hydrants”, Page 3, text revisions in 3.1.B.

3.1 INSTALLATION

B. Hydrants shall be located a minimum of 4 feet from the curb in urban areas, and a minimum of 14 feet from the edge of pavement in rural areas, and in accordance with local Fire Department requirements. A gate valve shall be provided ~~within five (5) feet of the hydrant~~ **at the connection to the main** as shown in the Standard Detail.

Proposed Revision to Section 2, Technical Specifications

Proposed additions in text are noted in **bold**.
Proposed deletions in text are noted in ~~strike-through~~.

Section 2, Technical Specifications, 333913 “Sewer Manholes”, Page 2, text revisions in 2.1.A.

2.1 MANUFACTURERS

A. See County Approved Product List, Appendix F, for acceptable manufacturers of plastic joint sealing compound and sewer manhole ~~from~~ **frames** and covers.

COLLIER COUNTY PUBLIC UTILITIES DIVISION
PLANNING AND PROJECT MANAGEMENT DEPARTMENT
3339 East Tamiami Trail
Suite 303
Naples, FL 34112
Phone (239)252-2583
Fax (239)252-5378

DEVIATION INFORMATION SHEET

Any request for a deviation from an established Wastewater or Water Department procedure must be submitted on the Utility Deviation Form and include all the required information for a faster and more efficient process. Please deliver *or email* your request to Nathan Beals *(nathanbeals@colliergov.net)* at the Planning and Project Management Department Offices listed above, business hours are 8:00 am – 5:00 pm, M-F.

Please maintain one deviation per form and select the appropriate type of deviation (Wastewater, Water, or IQ Water). Ensure to select whether the deviation is on a Privately Owned or County Owned system. Multiple forms may be attached to the ~~two~~ set~~s~~ of required ~~blue print or~~ drawings that has the area(s) of interest highlighted for quick referencing.

Provide as much information as possible along with the required Site Development Plan Number *(obtained from the Engineer of the Developer)*. Please include any and all equipment specification information, pressures and velocities of flows, or other pertinent documentation and a cover letter to give additional information that may not be addressed on the form.

For Grease Trap Deviations, please include a cover letter giving any relevant information regarding the kitchen and its use, a copy of the Menu of what is to be cooked and served, and a blue print of the floor plan for the kitchen and seating area.

Upon receipt of you deviation request the processing procedure begins with a date stamp and routing form. The first review is with the Locates Department for verification that the deviation request is located within the Collier County Water or Wastewater Service Areas. Next, depending on the topic of your request, the routing will either be to the Wastewater Pretreatment Inspector, Wastewater Collection Staff, or Water Distribution Staff and Public Utilities Planning and Project Management Staff for review. At any time there may be a site visit. The director of the Water or Wastewater Department performs the final review and you will thereafter be notified by email or phone of the outcome of your deviation request. If the deviation is denied, a meeting may be requested with the appropriate Director and staff to discuss.

If you have any question regarding this procedure, please call (239) 252-2583.

UTILITY DEVIATION FORM

Petitioners Request

Date: _____ ☐ **Wastewater** ☐ **Water** ☐ **IQ Water**

REQUIRED **- Site Development Plan # (SDP#)** _____ ***- or -*** **Subdivision Improvement #(PPL#)** _____

Project Name: _____ ☐ **Privately Owned** ☐ **County Owned**

Project Address: _____

Petitioners Name & Business Name: _____

Business Address: _____

Phone # _____ **Fax #** _____ **Email** _____

Reason for request? _____

REQUIRED FORMS
For all Deviation Request unless specified.

- ☐ Cover Letter w/ Pertinent Information
- ☐ Blue Prints / Site Drawings
- ☐ Detail Specifications (include MFR Maint. Procedures for Grease Trap Deviations)
- ☐ Menu & Seating only for Grease Trap Deviations

How does this request differ from Ordinance? _____

Impact of this request on affected area? _____

Impact of this request on the maintenance of the system? _____

Explain benefits this request will have to the operation/maintenance of the Collier County Utility system:

Additional Comments: _____

COUNTY STAFF ONLY

Routing for Review:	**(Initials)**	**Staff Comments:**
Stake & Locates	Approve: ____ Disapprove: ____	_____
WW Pretreatment Inspector	Approve: ____ Disapprove: ____	_____
WW Envtl. Compliance Mgr.	Approve: ____ Disapprove: ____	_____
WW Collections Manager	Approve: ____ Disapprove: ____	_____
Water Distribution Manager	Approve: ____ Disapprove: ____	_____
IQ Water Manager	Approve: ____ Disapprove: ____	_____
Planning & Project Mgmt. Dept.	Approve: ____ Disapprove: ____	_____

Authorizing Signature: _____ **Date:** _____

Collier County Utility Director

Copy to: Engineering Review