

**TABLE OF CONTENTS**  
**COLUMBIA COUNTY WATER UTILITY**  
**CONSTRUCTION STANDARDS AND SPECIFICATIONS**

<b>SECTION 11.0</b>	<b>SANITARY SEWER AND WATER DISTRIBUTION</b>	<b>11-1 thru 11-17</b>
	<b>DESIGN CRITERIA</b>	
11.1	Plan submittal, extensions, standard details, standard notes, As built submittal, Final plat submittal, and final package submittal.	11-1 thru 11-6
11.2	GADOT Utility Encroachment Permits	11-6 thru 11-7
11.3	Sanitary Sewer Design	11-7 thru 11-11
11.4	Lift Station Design	11-11 thru 11-14
11.5	Water Distribution System Design	11-14 thru 11-17
	Sanitary Sewer extension Forms	Appendix A
	Water Line Extension Form	Appendix B
	Water Meter Flow & Head Loss Design information	Appendix C
	Project Construction Cost Form	Appendix D
	Sewer Flow Test Request Form	Appendix E
	Water Flow Test Request Form	Appendix F
	GDOT Encroachment Permit Checklist	Appendix G
<b>SECTION 12.0</b>	<b>SANITARY SEWER SYSTEM CONSTRUCTION</b>	<b>12-1 thru 12-27</b>
12.1	Construction of Gravity Sewers	12-1 thru 12-2
12.2	Protection of Existing Utilities and Restoration of Property	12-2
12.3	Work Site Safety	12-2
12.4	Warranty of Work	12-3
12.5	Materials	12-3 thru 12-8
12.6	Gravity Sewer Line Installation	12-8 thru 12-9
12.7	Dewatering and Drainage of Excavated Areas	12-9
12.8	Protection Against Flotation	12-9
12.9	Shoring and Protection of Excavation	12-9 thru 12-10
12.10	Blasting	12-10
12.11	Trench Excavation	12-10 thru 12-12
12.12	Pipe Laying	12-12 thru 12-13
12.13	Testing of Gravity Sanitary Sewer Lines	12-13 thru 12-14
12.14	Standard Manholes	12-14 thru 12-19
12.15	Air Release Manholes (ARV)	12-19 thru 12-20
12.16	Service Laterals	12-20
12.17	Bore and Jack Crossings / Creek crossings	12-20 thru 12-22
12.18	Aerial Crossings	12-22
12.19	Force Main	12-22 thru 12-23
12.20	Valves	12-23 thru 12-25
12.21	Miscellaneous Equipment	12-25
12.22	Final Inspections	12-25
	Sanitary Sewer Line Air Testing Data Sheet	12-26
	Manhole Vacuum Testing Data Sheet	12-27

**TABLE OF CONTENTS**  
**COLUMBIA COUNTY WATER UTILITY**  
**CONSTRUCTION STANDARDS AND SPECIFICATIONS**

<b>SECTION 13.0</b>	<b>LIFT STATION CONSTRUCTION</b>	<b>13-1 thru 13-20</b>
13.1	Construction of Lift Station	13-1 thru 13-2
13.2	Precast Wet Well and Valve Vault	13-3 thru 13-6
13.3	Pumps Design/Construction	13-6 thru 13-9
13.4	Motor Design/Construction	13-9
13.5	Lift Station Control Center	13-10 thru 13-13
13.6	Primary Control System	13-13 thru 13-14
13.7	Primary Level Sensor	13-14 thru 13-15
13.8	backup Level Sensor	13-15 thru 13-16
13.9	As built Drawings and Diagrams	13-16
13.10	Instrumentation and Control	13-17 thru 3-18
13.11	Lift Station Control Center Framework and Miscellaneous Equipment	13-18 thru 13-19
13.12	Lift Station Access Road	13-19
13.13	Lift Station Site	13-19
13.14	Fencing	13-20
13.15	Miscellaneous Equipment	13-20
<b>SECTION 14.0</b>	<b>WATER DISTRIBUTION SYSTEM CONSTRUCTION</b>	<b>14-1 thru 14-29</b>
14.1	Construction of Water Lines	14-1 thru 14-3
14.2	Materials	14-3
14.3	Pipe Specifications	14-3 thru 14-8
14.4	Water Line Installation	14-8 thru 14-11
14.5	Pipe Laying	14-11 thru 14-13
14.6	Fittings	14-13
14.7	Fitting Installation	14-14
14.8	Valves	14-14 thru 14-15
14.9	Valve Installation	14-15
14.10	Service Line and Appurtenances	14-16 thru 14-18
14.11	Service Line Installation	14-18
14.12	Meter Boxes / Meter Vaults	14-18
14.13	Meter Box / Meter Vault Installation	14-18 thru 14-19
14.14	Hydrants	14-19 thru 14-20
14.15	Hydrant Installation	14-20 thru 14-21
14.16	Tapping Sleeves / Service Saddles	14-21
14.17	Tapping Sleeve / Service Saddle Installation	14-21 thru 14-23
14.18	Bore and Jack Crossings	14-23 thru 14-24
14.19	Creek Crossings	14-24
14.20	Hydrostatic Testing (Pressure and Leakage)	14-24 thru 14-25
14.21	Chlorination / Disinfection	14-25 thru 14-28
14.22	Connections or Repairs to Existing Water System	14-28 thru 14-29
14.23	Final Inspection	14-29

**TABLE OF CONTENTS**  
**COLUMBIA COUNTY WATER UTILITY**  
**CONSTRUCTION STANDARDS AND SPECIFICATIONS**

DEVELOPMENT PLAN REVIEW CHECKLIST	DPRC-1
FINAL PLAT OR EASEMENT PLAT REVIEW CHECKLIST	PRC-1
AS BUILT REVIEW CHECKLIST	ARC-1
TABLE OF CONTENTS STANDARD DETAILS LIST	TCSD-1 thru TCSD-2
STANDARD DETAILS	
REVISIONS	