

## Table of Contents

<u>SECTION</u>	<u>PAGE</u>	
<b><u>PART G – GENERAL REQUIREMENTS</u></b>		
G1	General Conditions	1
G2	Jurisdiction	5
G3	General Project Requirements	6
G4	General Design Considerations	10
G5	Plans and Specifications	14
G6	Responsibilities, Inspection, and Layout	17
G7	Existing Utilities	19
G8	Easements	21
G9	Rules, Regulations, and Permits	22
G10	Not Used	24
G11	Testing and Certifications	25
G12	Use of Explosives	26
G13	Storage and Handling of Materials	27
G14	Submittals	28
G15	Operation and Maintenance Manuals	29
G16	Service Connections	31
G17	Final Inspection and Acceptance	32
G18	Abandonment of Water and Sewer Lines	34
<b><u>PART T – TECHNICAL REQUIREMENTS</u></b>		
T1	Introduction	1
T2	Site Preparation, Excavation, and Fill	2
T3	Clearing and Protection of Right-Of-Way	7
T4	Surface Removal	9
T5	Pipe Backfill Material and Aggregate Base Course	11
T6	Stone Riprap and Filter Fabric	13
T7	Cutting and Rebuilding/Repairing Fences	15
T8	Steel Encasement Pipe and Appurtenances	16
T9	Pipeline Crossings at Streams and Creeks	18
T10	Street and Country Road Crossings	21
T11	Arkansas State Highway Crossings and Railroad Crossings	23
T12	Concrete and Reinforcing Steel	26
T13	Pavement Repair	32
T14	Polyethylene Encasement	33
T15	Ductile Iron Pipe and Fittings for Water Lines	34
T16	Tapping	45
T17	Water Meters, Service Lines, and Appurtenances	47
T18	Fire Hydrants	53
T19	Cast-In-Place Manholes	57
T20	Protective Coating for Manholes and Other Structures	64
T21	Prefabricated Underground Sewage Pumping Facilities	67
T22	SCADA Instrumentation and Control System	77
T23	Ductile Iron Pipe and Fittings for Gravity Sewer Lines and Force Mains	83
T24	High Density Polyethylene (HDPE) Pipe for Force Mains	95
T25	Polyvinyl Chloride (PVC) Pipe for Gravity Sewer Lines and Force Mains	104
T26	Butterfly Valves	114

## Table of Contents

---

T27	Gate Valves	119
T28	Plug Valves	124
T29	Air Release and Vacuum Valve Assembly, Blowoff Valves, Pressure Reducers, Backflow Preventers, and Check Valves	129
T30	Cleanup, Seeding, and Sod	132
T31	Density Testing	139
T32	Mandrel Testing of PVC Sewer Lines	141
T33	Low Pressure Air Testing of Gravity Sewer Lines	142
T34	Hydrostatic Testing of Water Lines, Sewer Force Mains, and Appurtenances	145
T35	Disinfection of Water Lines	148
T36	Vacuum Testing of Manholes	151
T37	Private Fire Protection System Connections	153
T38	Polyvinyl Chloride (PVC) Pipe for Water Lines in Corrosive Soils	155

### STANDARD FORMS

Certificate and Affidavit  
Payment Bond  
Performance Bond  
Water and Sewer Maintenance Bond  
Standard Water/Sewer Main Easement-Individual  
Standard Water/Sewer Main Easement-Company  
Standard Meter Service Easement-Individual  
Standard Meter Service Easement-Company

### STANDARD DETAILS

S-1	Fire Hydrant and Gate Valve
S-2	Fire Hydrant with Guard Posts
S-3	Reaction Backing
S-4	Vertical Tie-Down Blocking
S-5	Tapping Saddle and Valve
S-6	Water and Sewer Crossing
S-7	Manhole Frame and Cover
S-8	Manhole Frame and Cover
S-9	Watertight Manhole Frame and Cover
S-10	Watertight Manhole Frame and Cover
S-11	Manhole Bottom
S-12	Drop Manhole
S-13	Manhole and Main Abandonment
S-14	Manhole Height Increase
S-15	Manhole Height Decrease
S-16	Sewer Service Connections
S-17	Typical Pipe Trench
S-18	Pressure Pipe Trench
S-19	Sewer Pipe Trench
S-20	Concrete Cap and Encasement
S-21	Pavement Removal and Replacement
S-22	Standard Meter Box
S-23	Standard Meter Box Installation
S-24	1" Meter Setting

## **Table of Contents**

---

S-25	Double Meter Setting
S-26	2" Meter Setting
S-27	2" Meter Lid Assembly
S-28	Residential Pressure Reducing Valve
S-29	Local Street Section/Layout
S-30	Local Street Plan View
S-31	Encasement Details
S-32	Highway Boring
S-33	Air/Vacuum Release Valve and Vault
S-34	Swing Connection
S-35	Bypass Manhole and Quick Connect
S-36	Fire System Connection
S-37	Water & Sanitary Sewer Service Trench Repair
S-38	Sanitary Sewer Main Trench Repair
S-39	Water Main Trench Repair
S-40	Sanitary Sewer Service Trench Repair
S-41	Water Service Trench Repair
S-42	Fire Hydrant Placement
S-43	Manhole Bottom Non Shear Coupling
S-44	Cut and Cap
S-45	Asphalt Street Repair Valve Raise
S-46	MH Extension Restraining Collar
S-47	Standard Cleanout
S-48	Food Truck Sewer Connection
S-49	PVC Pressure Water Pipe Trench
S-50	Anchor Collar Detail
S-51	Thrust Collar Detail

### **MISCELLANEOUS DETAILS**

PS-1	Pump Station Site Plan – Profile View
PS-2	Pump Station Site Plan – Plan View
PS-3	Pump Station Site Plan – Site Plan
PS-4	Communication Tower
PS-5	SCADA Subpanel Layout
PS-6	Onsite Split Face CMU Building
PS-7	Control Panel Schematic
PS-8	Control Panel Layout
PS-9	Sump Pump Details
PS-10	ARV Installation
PS-11	Pump Disconnect Support Detail
PS-12	Riser Support Detail
M-1	Tracing Wire Connection Port
M-2	Frost Proof Yard Hydrant Assembly
M-3	Chain Link Fencing
M-4	Chain Link Fence Hardware
M-5	Steel Frame Wood Privacy Fence
M-6	Barbed Wire Fencing
M-7	Utility Marker
M-8	Meter Array Arrangement #1
M-9	Meter Array Arrangement #2