# Table of Contents

## Division 1 - General

1010 General Scope and Special Provision  
1100 Clearing and Grubbing  
1110 Traffic Control and Maintenance  
1120 Grading and Seeding  
1130 Blasting  
1140 Concrete  
1150 Replacement of Existing Mail Boxes, Culverts, Clothes Lines & Posts, Fences, Drain Tile, and Other Such Facilities  
1155 Concrete Curb and Gutter Replacement  
1160 Existing Utilities and Structures  
1165 Pavement Replacement  
1170 Streambank and Streambed Stabilization and Protection  
1180 Granular Backfill Material  
1210 Steel Casing Pipe Bored and Jacked Under Roadways  
1220 Steel Casing Pipe Bored and Jacked Under Railroads and Other Railroad Crossings  
1230 Stream and Creek Crossings  
1240 Free Bores Under Roadways, Driveways and Roadway Culvert Pipes  
1310 Erosion Control  
1410 Clean Up  
1510 Pipe Insulation  
1520 Linear Low Density Polyethylene Encasement  
1530 Linear Low Density Polyethylene Encasement Installation  
1610 Existing Storm Sewer Removal and Replacement

## Division 2 - Detailed Specifications for Water Main Installation

2110 Ductile Iron Water Main  
2130 Restrained Joint Ductile Iron Water Main  
2210 Butterfly Valves  
2220 Gate Valves  
2225 Valve Boxes  
2230 Air Release, Air/Vacuum Release, and Combination Air Valves  
2235 Valve in an Accessible Manhole - At River or Creek Crossing  
2237 Manholes  
2240 Fire Hydrants  
2250 Tapping Sleeve and Valve  
2260 Fire Protection & Pressure Reducing Valve Pits  
2270 Lab Sampling Stations and Purity Test Stations  
2410 Service Pipe, Fittings, and Meter Setting Components  
2420 Corporation Stops  
2440 Meter Boxes  
2450 Curb Stops and Boxes  
2460 Tapping Saddles  
2470 Pressure Reducing Valves

Revised: March 20, 2012
DIVISION 2 - DETAILED SPECIFICATIONS FOR WATER MAIN INSTALLATION (Cont’d.)

2510 Ductile Iron Water Main Installation
2550 Trench Excavation
2560 Bedding and Backfilling
2610 Water Main Testing
2620 Water Main Disinfection

DIVISION 3 - DETAILED SPECIFICATIONS FOR GRAVITY SEWER AND SEWER FORCE MAIN INSTALLATION

3110 Solid Wall PVC Gravity Sewer Pipe
3115 Profile Wall PVC Gravity Sewer Pipe
3120 Ductile Iron Gravity Sewer Pipe
3130 Reinforced Concrete Sewer Pipe
3140 ABS or PVC Composite Wall Gravity Sewer Pipe
3145 High Density Polyethylene Gravity Sewer Pipe
3150 Polypropylene Gravity Sewer
3210 Ductile Iron Sewer Force Main
3230 Restrained Joint Ductile Iron Sewer Force Main
3240 Ductile Iron Gravity Sewer and Force Main Lining
3320 Eccentric Plug Valves
3325 Valve Boxes
3330 Automatic Air Release and Vacuum Break Valves
3410 Manholes
3420 Manhole Protective Coating (Lining Interior of Manhole)
3510 Sewer Service Connections, Wyes, and Risers
3610 PVC Sewer Pipe Installation
3620 Ductile Iron Sewer Pipe Installation
3630 Concrete Sewer Pipe Installation
3640 ABS or PVC Composite Wall Sewer Pipe Installation
3710 Ductile Iron Sewer Force Main Installation
3720 Trench Excavation for Gravity Sewers
3725 Trench Excavation for Sewer Force Mains
3730 Bedding and Backfill for Gravity Sewers
3735 Bedding and Backfill for Sewer Force Mains
3810 Gravity Sewer Leakage Tests
3820 Gravity Sewer Deflection Tests
3840 Manhole Vacuum Testing
3842 Manhole Water Exfiltration Testing
3850 Gravity Sewer Television Inspection
3860 Sewer Force Main Leakage Test
3910 Compression Couplings
3920 Connection to Existing Manholes
3930 Pumping and Bypassing
DIVISION 4 - GENERAL DETAILS

4010  Sidewalk Restoration Detail
4020  Concrete Roadway Restoration Detail
4025  Yard Restoration Detail
4030  Asphalt Concrete Roadway Pavement Replacement Detail
4100  Typical Trench Driveway Pavement Replacement Detail
4120  Pavement Replacement Details
4130  Local Street Detail
4160  Streambank Stabilization with Dormant Posts and Stakes
4170  Typical Creek Crossing & Trench Detail for Water & Sewer Force Mains
4180  Mechanical Seal Wall Penetration
4190  Sleeve Floor Penetration
4210  Ductile Iron Pipe Wall Penetration
4220  MJ x PE Pipe Wall Penetration
4230  FL x PE Pipe Wall Penetration
4250  MJ x FL Pipe Wall Penetration
4360  Concrete Encasement Detail
4370  Sewer Force Main & Water Main Encasement Detail

DIVISION 5 – WATER DETAILS

5110  Typical Fire Hydrant Installation
5120  Setting for Hydrant Adjacent to Main
5130  Dead End Detail with Permanent Fire Hydrant
5140  Dead End Detail with Temporary Fire Hydrant
5150  Standard Installation for ¾” and 1” Water Meter Settings
5170  Standard Installation for 11/2” and 2” Water Meter Settings
5180  Meter Lid Raising Detail
5190  Standard Installation for 3” and Larger Water Meters
5200  Dual Service Setting with Backflow Device
5210  Fire Service Setting w/ Backflow Device
5220  Portable Deduct Meter
5230  Outside Deduct Meter
5240  Inside Deduct Meter
5250  Inside Deduct Meter Detail
5260  Purity Test Station
5270  Permanent Lab Sampling Station
5280  Typical Trench Detail Water Main Installation
5290  Air Release Valve Detail
5300  Water Service Detail for Panhandle Lots

Revised:  March 20, 2012
DIVISION 6 – SEWER DETAILS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6110</td>
<td>Standard Control Manhole</td>
</tr>
<tr>
<td>6120</td>
<td>Standard Sampling &amp; Gauging Manhole Detail (for use in Non-Traffic Areas)</td>
</tr>
<tr>
<td>6130</td>
<td>Standard Cast in-Place Manhole</td>
</tr>
<tr>
<td>6140</td>
<td>Outside Drop Manhole Detail</td>
</tr>
<tr>
<td>6150</td>
<td>Connection to Existing Manhole</td>
</tr>
<tr>
<td>6160</td>
<td>Force Main Drop Connection to Manhole Detail</td>
</tr>
<tr>
<td>6165</td>
<td>Inside Drop Manhole Detail For Gravity Sewers</td>
</tr>
<tr>
<td>6170</td>
<td>Elevated Manhole Detail</td>
</tr>
<tr>
<td>6180</td>
<td>Precast Drop Manhole Detail</td>
</tr>
<tr>
<td>6190</td>
<td>Dead End Manhole Detail</td>
</tr>
<tr>
<td>6200</td>
<td>Standard Manhole</td>
</tr>
<tr>
<td>6210</td>
<td>Manhole with Slab Top</td>
</tr>
<tr>
<td>6240</td>
<td>Concrete Encasement Detail</td>
</tr>
<tr>
<td>6250</td>
<td>Air Release Valve Chamber</td>
</tr>
<tr>
<td>6260</td>
<td>Typical Creek Crossing &amp; Trench Detail for Gravity Sewers</td>
</tr>
<tr>
<td>6270</td>
<td>Typical Trench Detail Sewer Installation</td>
</tr>
<tr>
<td>6280</td>
<td>House Connection for Deep Sewer</td>
</tr>
<tr>
<td>6290</td>
<td>House Connection for Shallow Sewer</td>
</tr>
<tr>
<td>6310</td>
<td>Grease Interceptor 1,000 Gallon Capacity with Optional Inspection Box</td>
</tr>
<tr>
<td>6320</td>
<td>3” Parshall Flume Packaged Metering Manhole</td>
</tr>
<tr>
<td>6330</td>
<td>6” Parshall Flume Packaged Metering Manhole</td>
</tr>
<tr>
<td>6340</td>
<td>Metering Manhole Requirements</td>
</tr>
</tbody>
</table>

*********************