

Water and Sewer Design Manual V3.0 Changes

The Water and Sewer Design Manual version 3.0 is the first electronic version of the manual. Its goal is to provide more accessibility to Design's protocols and requirements in a digital format and ultimately be more efficient.

Many links have been imbedded to help navigate the document. The blue number links move to the referenced point and the corresponding red number links are used to return. Links have also been added on the Table of Contents to every section and appendix, including appendix subsections. There are also "Return to Table of Contents" links on the bottom of each page.

The webpage also has many features:

- Quick links to each section and each appendix.
- Under Working Sheets & Forms, there are downloadable Excel files for calculating quantities, the Final Design Package Checklist, the Contract Summary Sheet, and the Project Status Summary Sheet.
- KML Google Earth files for all reference plans.

You can register with your e-mail address to be automatically notified on the release of a new version. There is also an additional form for comments on the contact page.

When compared to the 2011 edition of the Design Manual (available by clicking on the publishing history), in addition to all of the advantages of being electronic, version 3.0 has been reorganized. The 8 technical sections have some content change but the section titles have remained the same. The section titles are:

1. Project Initiation
2. Water Contract Drawings
3. Sewer Contract Drawings
4. Water Technical Design Information
5. Sewer Technical Design Information
6. Contract Review
7. Contract Finalization
8. Consultant Billing

The appendices have been updated and reorganized with titles for each appendix. The appendix titles are:

- I. Procedures
- II. Drawing Standards
- III. Forms and Calculations
- IV. External Organization's Requirements
- V. Reference Plans and Information
- VI. Contact Information
- VII. D. I. Fittings
- VIII. Flows & Velocities
- IX. Sample Plans

In general, the water and sewer plans will look the same but there are many small changes and clarifications from the requirements in the 2011 edition. These changes are too numerous to reiterate but some of the more major changes are as follows:

- The word “Proposed” is limited to water mains in [Section 2 C.2.e](#) and sewers in [Section 3 C.2.d](#).
- Flow arrows have been added on water plans to indicate direction of gutter flow in [Section 2 D.3.g](#).
- 64 items are in the Sewer Legend in [Appendix IIj](#).
- Preferred inlet locations are different in [Appendix Va](#).
- Clarified how water sheet title blocks shall read in [Section 2 D.2.g](#) and how sewer sheet title blocks shall read in [Section 3 D.2.h](#).
- Sheathing and shoring formula added to [Section 5 J.1.d](#).
- References to GSI design manual added in [Section 5 K](#).
- Instructions for consultants writing specifications have been added in [Section 7 C.5](#).
- The North Arrow always points towards the top of the page as seen in [Section 2 C.5.a](#) and [Section 3 C.5.a](#).
- Existing sewers less than 24” shall be drawn with a single line as shown in [Section 3 D.5.k](#).
- Benchmarks must be obtained from district surveyor as shown in [Section 3 D.1.c](#).

Other notable changes in the manual include:

- [Section 6](#) (Review Process) is completely revised. Some reviewers will require electronic submittals.
- [Section 7](#) (Contract Finalization) has added the required submittals for GSI design.
- [Section 8](#) (Consultant Billing) is reorganized and there are some modifications.
- Line weights have been clarified in [Appendix IIe](#).
- Green Stormwater Infrastructure symbols added in [Appendix II n](#).
- Project Summary Sheet added with 75% Utility Review in [Appendix IIIi](#).
- Upper end vent pipe picture added in [Appendix Vc](#).
- Pictures of various existing inlets in [Appendix Vb](#).
- PWD Contact information added to [Appendix VIb](#).
- Survey District map and contact information added to [Appendix VIc](#).
- Sample plans have been revised to reflect required changes in [Appendix IX](#).
- Sewer sample plan with match lines has been added to [Appendix IXc](#).
- A sample Roadway Grading Plan has been added to [Appendix IXe](#).
- Removed R.C. Box Sewer sample plan and Sewer Lining sample plan.