

UTILITY DESIGN INFORMATION

Note: These instructions are based on the assumption that the drafter has had some Microstation training. It is recommended that the drafter read through the documentation first before attempting any of the procedures. These directions are just one way of accomplishing these tasks and are not necessarily the only way to represent our final product.

TITLE SHEET – titleU.dgn

Using Windows Explorer in U:\rd\prj\COUNPCN#\, copy and paste titleB.dgn and save as the following naming convention; titleU.dgn. Edit the file as needed to include Section U: Existing Utility Information heading, Index of Sheets, and a list of the utility providers. Request a list of providers from the Utility Coordinator.

A title sheet can also be created by following the directions to “Creating a Title Sheet” in <http://www.sddot.com/business/design/docs/cadd/CADD-Drafting.pdf>

CREATE NOTES AND TABLES

Section notes and the table containing utility locations will be created by downloading the files from SDDOT’s downloadable page. <http://www.sddot.com/business/design/files/Default.aspx>

- **Notes (Section U – Utility Notes)**

1. Save the word document in COUNPCN# subfolder \Documents.
 - Section_U-Utility_Notes.docx
2. Remove/delete the border.
3. **PRINT** as a Bluebeam PDF to COUNPCN# subfolder \Documents.
 - Section_U-Utility_Notes.pdf
4. In MicroStation, create a new file using NotesSeed.dgn in the COUNPCN# folder.
 - NotesSectionU.dgn
5. Place “Name” cell on the sheets required.
 - Cell placement order controls sheet order

- **Tables (Subsurface Utility Locations)**

1. Save the word document in COUNPCN# subfolder \Documents.
 - Subsurface_Utility_Locations.docx
2. Remove/delete the border.
3. Request Clearance Report from the Road Design Engineer and enter data.
4. **PRINT** as a Bluebeam PDF to COUNPCN# subfolder \Documents.
 - Subsurface_Utility_Locations.pdf
5. In MicroStation, create a new file using DataSeed.dgn in the COUNPCN# folder.
 - DataSubsurface.dgn
6. Place “Name” cell on the sheets required.
 - Cell placement order controls sheet order.

CREATE PLAN SHEETS

In U:\rd\prj\COUNPCN#\, copy and paste the first Plan/Profile Sheet (Ex. 010.dgn) of the project, and save as a Utility Plan Sheet (Ex. 010u.dgn).

- **In MicroStation**

1. Open the Utility Plan Sheet and set Active Level to "L1".
2. Turn on/off required levels in the Level Display box.
 - In the active .dgn, turn off all notes pertaining to Section D.
 - Turn off in the tPCN# reference file: L1, L2, L10, L12, and L13.
 - Everything except utility related features or features directly impacted by the utilities.
 - L4 will be turned off after the information is used.
 - Turn off in the dPCN# reference file all levels except L1, L2, L30, L31 and L32.
 - Turn off in the cgPCN# reference file all levels except L19.
 - Turn off in the rPCN# reference file all levels except L21-L29.
 - If there is a uPCN# reference file, turn off all levels except for the utility features.
 - If there is a PCN#testholes reference file, turn off all levels except L4 and L60.
 - L4 will be turned off after the information is used.
 - Drop down menu: File → Save Settings (Ctrl+F).
3. Open the Attributes box: Settings → View Attributes (Ctrl+B).
 - Select "Level Overrides".
 - This will turn everything color=0, line-style=0, and line-weight=0.
4. Open the Level Manager box: Settings → Levels → Manager.
 - Change Symbology drop down to Overrides.
 - Select the active .dgn and all the reference files (Ctrl+mouse1).
 - Right click over any of the color and number combinations (□ 0).
 - Select "All Overrides Off".
 - Right click over any of the line-style and number combinations (—0).
 - Select "All Overrides Off".
 - Right click over any of the line-weight and number combinations (—0).
 - Select "All Overrides Off".
 - Select the cgPCN# reference file.
 - Select level L19.
 - Click in the color column. When the dialog box appears, select color 12 and "Override On".
 - Drop down menu: File → Save Settings (Ctrl+F).
5. Label Test-Holes and street names.
 - Street names will be color 5 (blue), Arial font, style 0, weight 1 and text size 3.6.
 - The test-hole numbers will be the same except using color 1 and placed within a rectangle of the same style.
 - Use a line of the same style as a leader to the test-hole.
6. Cut the remaining sheets manually to save time from having to repeat overrides.
7. When finished, create a .pset of all your sheets.

MICROSTATION PRINT ORGANIZER

- **In MicroStation**

1. File → Print Organizer
2. File → Add Files to Set
 - Select Add
 - Add desired files. (You can also drag and drop design files into the Print Set hierarchical view from Windows Explorer.)
 - From Print definition creation options
 - Browse (Magnify Glass)
 - Select desired Print Style (11 x 17 Sheets)
 - OK
3. File → Print
 - Select the desired Print Range.
 - Select the desired Destination. (Following documentation naming convention)
 - OK

Note: An error message in the Message Center may indicate the PDF is read-only, or another user may have it open.

NUMBERING PDF PAGES USING HEADER AND FOOTER

- **Plan Sheets:**

1. Choose Document Tab → Header & Footer → Add
2. From the “Saved Settings:” drop down box select “Title Block (Plans 11x17)”
3. Under “Right Header Text”
 - Change the first “B” to the appropriate section. (DO NOT change <<1>>)
 - Change the second “B” and “99” to the appropriate section and the total number of pages
4. Confirm setting utilizing the “Preview”
5. Select OK

This applies page numbers and total pages to all the pages in the PDF. You can update the Header & Footer and apply it only to a few of the pages selected in “Page Range Options...”, you will also need to adjust the “Start Page Number” under “Page Number and Date Format...”

Once page numbers have been added, you will need to add **Not For Construction** to the pdf.

1. Choose Document Tab → Script → SDDOT Not For Construction
 - Save the document using the proper naming convention.

When plans are sent to Bid Letting; Not For Construction is to be removed by deleting the Not For Construction layer under the Layers Tab.