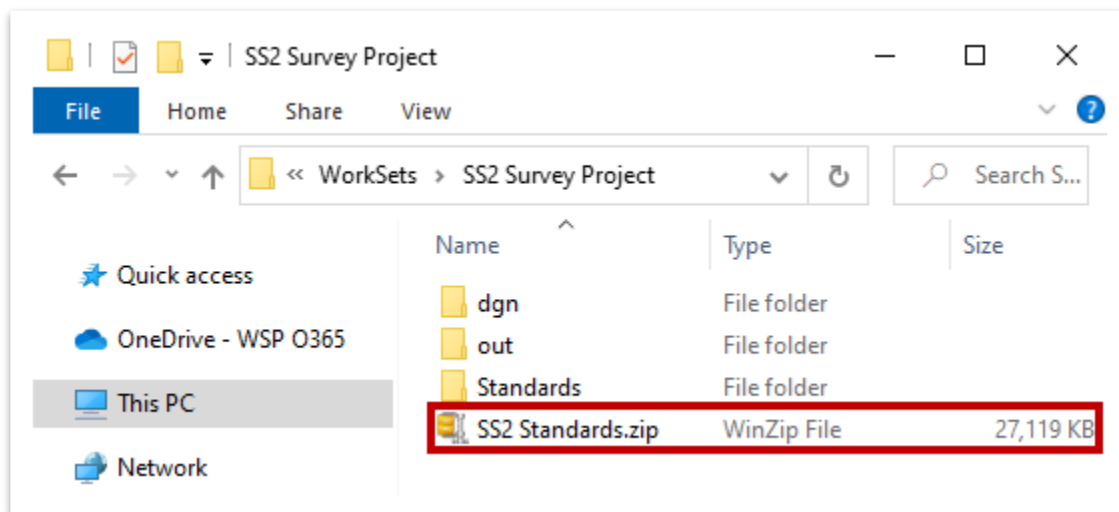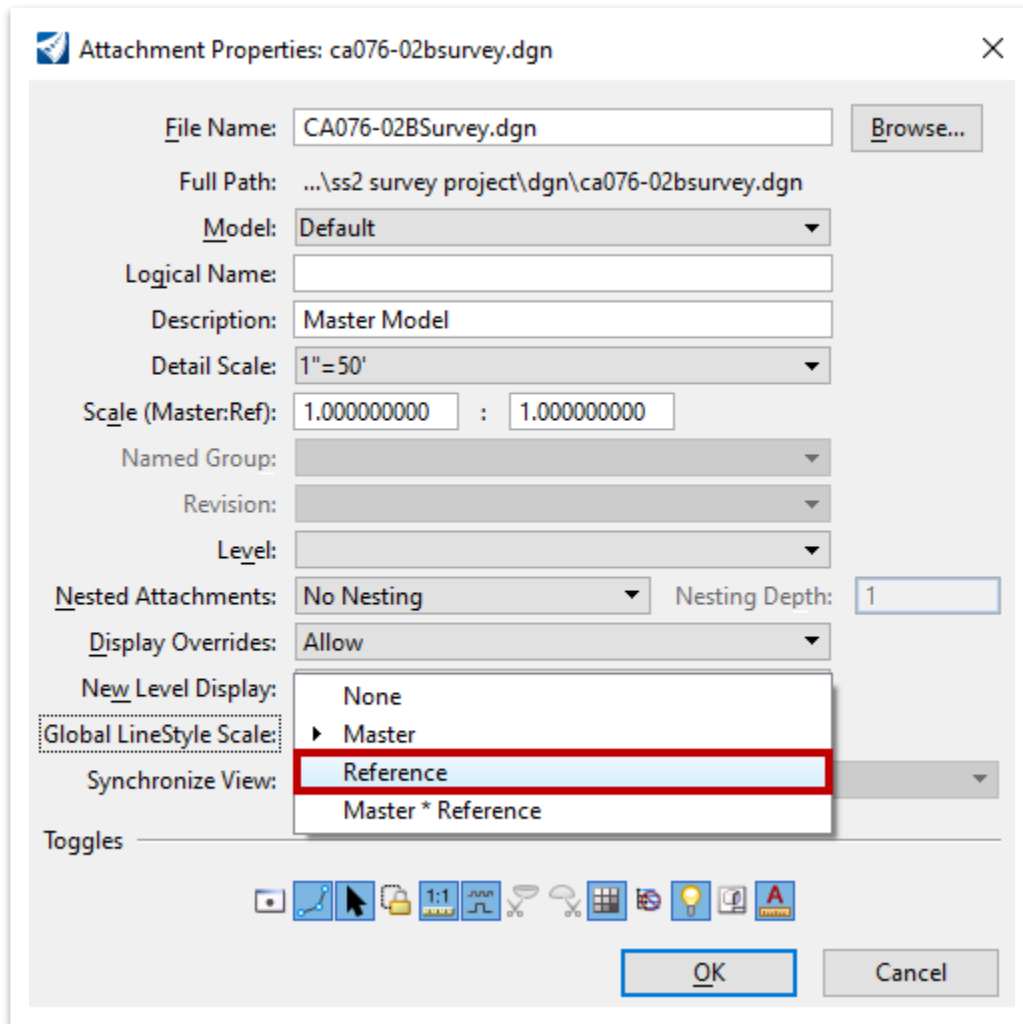# SS2 Survey Implementation into ORD

If utilizing a SS2 survey in an ORD project, you will need to incorporate the **SS2 Standards.zip** file into your project **workset**. This will allow the correct visualization of all 2D SS2 survey graphics and annotation. Once incorporated, you will see the applicable TDOT SS2 custom linestyles and be able to utilize the SS2 filters. The example workset created in this document is called **SS2 Survey Project**.

1. Within **File Explorer**, open your project workset and paste the **SS2 Standards.zip** file into the main folder: **C:\ProgramData\Bentley\OpenRoads Designer CE\ Configuration\WorkSpaces\TDOT_Standards\WorkSets\SS2 Survey Project**.
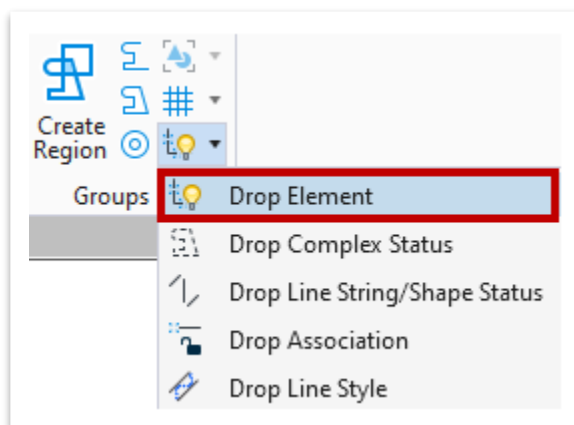


2. Right click on the zip file and select **WinZip >> Unzip to Here**. **Note:** If you don't have **WinZip**, use any zip extractor but make sure to unzip to the main workset folder. Once extracted, go ahead and delete the zip file.

3. The extraction will place the SS2 **dgnlib** (levels and filters) and three **.rsc** files (custom linestyles) into the applicable subfolders within the **Standards** folder. Any file opened or created under this **SS2 Survey Project** workset will now contain the necessary workspace elements to display the 2D SS2 survey elements properly.

4. Within your ORD design file (e.g. Alignment), attach the SS2 **survey.dgn** file as a reference. If you examine the utility linestyles, for example, they will still show a solid linestyle and look incorrect. You need to apply some additional updates, which will be covered in the next steps.
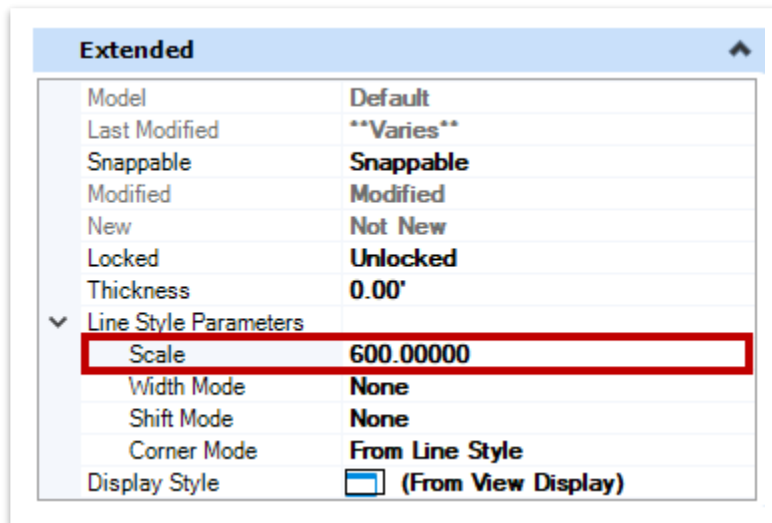
5. Within the **References** window, right click on the survey reference file and select **Settings**. Within the **Attachment Properties**, change the **Global LineStyle Scale** from Master to **Reference** and then click **OK**.

6. Notice that the majority of the SS2 linestyles update and now look correct. One of the caveats between SS2 and ORD is if the custom linestyle is not unique on both platforms, the ORD version and scale will override the SS2 version. There are currently **twelve** SS2 survey linestyles that share the same name in ORD. While the correct linestyles appear in the referenced SS2 survey file, the scale is incorrect. **Note:** The twelve linestyles might get renamed in ORD, pending further investigation. For now, apply the scaling as shown in Steps 7-9.

   - Brush Line
   - City Line
   - County Line
   - Forest Line
   - Hedge
   - Property

   - Railroad
   - ROW Fence Ex
   - State Line
   - SUE Gas Line
   - SUE Water Line
   - Swamp Line

7. Within the **References** window, right click on the survey reference file and select **Activate**. Turn off all survey elements other than the linestyle(s) that you want to scale. In order to apply a mass scale, there cannot be any **complex elements** or else you won't see the applicable field in the **Properties**. Line strings are also problematic, but you can still utilize them. However, you'd have to scale all line strings separately from the lines. The simplest thing to do is select all and open the **Drop Element** tool (**Survey >> Drawing >> Groups**) and left click anywhere within the drawing window.

8. With the applicable lines still selected, open the **Properties** window (if not already open) and scroll down to **Extended >> Line Style Parameters >> Scale**. Change the scale to the desired value, based on your design scale. This example utilizes a 50 scale design, so a scale of **600** would be used. **Note:** A 20 scale design would use 240 and a 200 scale design would use 2400.



9. Within the **References** window, right click on the survey reference file once again and select **Deactivate**. If you want to apply a **Filter** to the survey reference file, open the **Level Display** and highlight the reference file. Select **Filters** and notice that the applicable SS2 filters appear at the top of the list with an underscore. All ORD filters are listed further below.