InRoads - CAiCE Geometry LandXML Transfer

Overview

This process will transfer CAiCE points, horizontal alignments and vertical alignments to InRoads via a LandXML file.

LandXML is a non-proprietary standard for exchanging engineering data. LandXML uses a web-ASCII format that allows different engineering software vendors the ability to export and import geometry and surface data.

Workflow

CAiCE – Create LandXML file:

Use the **WSDOT XML Export** utility in CAiCE to write the geometry chains and Cogo points to a LandXML file.

1. Select the *Window* > *Explorer Center/Snap Bar* command.
2. Select the *Toolbox Explorer* tab.
3. Double-click on the **WSDOTMacroToolbox** to open it.
4. Click the **+** to expand the *Utilities* category, and click **XML Export** to view the macro's description.
5. Right click on *XML Export* a select **Insert** to run the application.
6. In the XML Export dialog, enter the path and name of the new XML file.
7. Click the **Geometry Chains** button to select which chains will be exported, and click the **Points** button to select which points will be exported.
8. Click **Export** to generate the XML file.

InRoads - Import LandXML and Verify Geometry Data

Create and activate geometry project, use LandXML translator to import geometry chains and Cogo points, and then verify data.

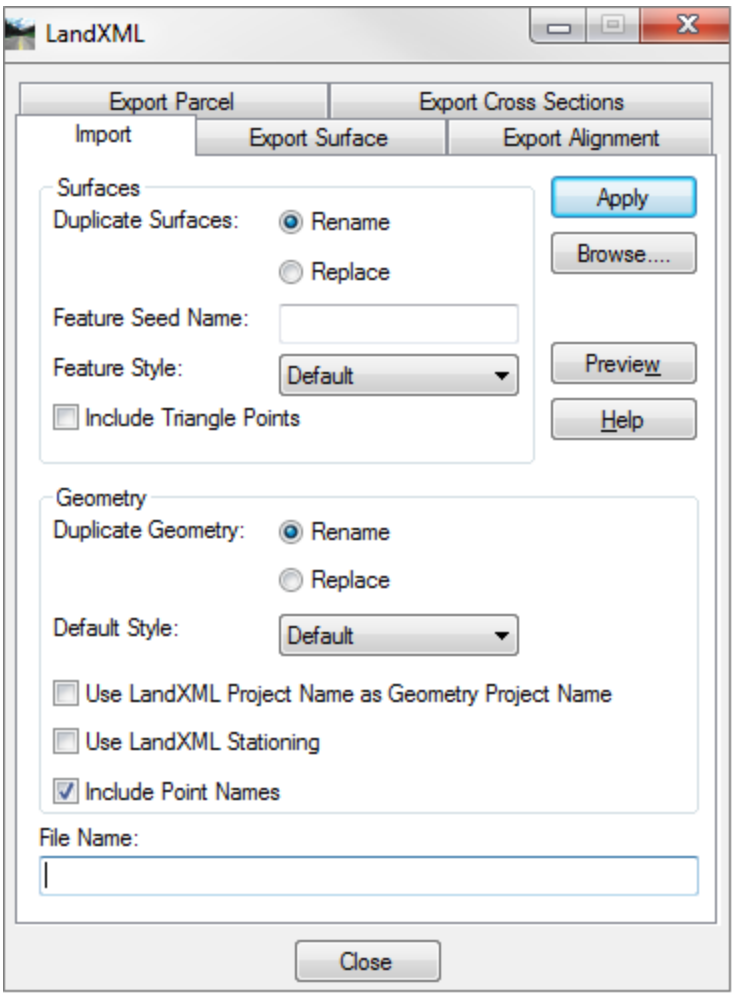
Create and activate geometry file:

1. Select the *File* > *New* command.
2. Select the **Geometry** tab.
3. Set *Type:* to **Geometry Project**.
4. Enter *Name* and *Description.*
5. Click **Apply** and close the dialog.

   The geometry project is created and set active.

Import LandXML File:

1. Select the *File* > *Translators* > *LandXML Translator* command.
2. Select the **Import** tab.
3. In the *Geometry* section of the dialog, toggle on the **Include Point Name** and use the following settings:



4. Click in the *File Name* field and then click the **Browse** button to navigate to the CAiCE LandXML file.
5. Click **Apply**.

   The active geometry project is populated with the Cogo points, horizontal and vertical alignment data that was contained in the LandXML file.

Verify Data

Verifying the data is a critical step of this process, alignment and point names along with coordinates and curve definitions all need to be verified.

1. Select *Tools* > *XML Reports* > *Geometry*.
2. Include all alignments and Cogo points and click **Apply**.

   The **Bentley Civil Report Browser** opens with the XML data loaded.

1. Use the various geometry reports to verify alignment and Cogo point data is the same as it was in CAiCE.

For questions or comments on this tech note, contact your regional CAE Support Coordinator or the WSDOT CAE Help Desk at (360) 709-**8013**.