

An aerial view of a city skyline at dusk. In the foreground, a multi-lane highway interchange with several overpasses is visible, with a few cars driving on it. The highway runs parallel to a body of water. In the background, a dense urban skyline is visible, featuring numerous skyscrapers of varying heights. The sky is a deep blue, and the city lights are beginning to glow.

CI 3940: AIM to Please with Your Transportation Project - Part 2

Wes Newman & Alan Gilbert PE, LSI
Autodesk Transportation Technical Specialists

Class Summary

Learn how Autodesk® Infrastructure Modeler (AIM) software can enhance your transportation workflows during the design execution phase. In Part 1 of this series, we focused on the classic ability of Autodesk Infrastructure Modeler in the conceptual design space, but what about later in the design? This class will show how a well-established AutoCAD® Civil 3D software model can be fed into Autodesk Infrastructure Modeler to communicate the design visually. In addition, we will discuss interoperability options between Autodesk Infrastructure Modeler and other products within Autodesk Infrastructure Design Suite, such as Autodesk® 3ds Max® Design software.

Learning Objectives

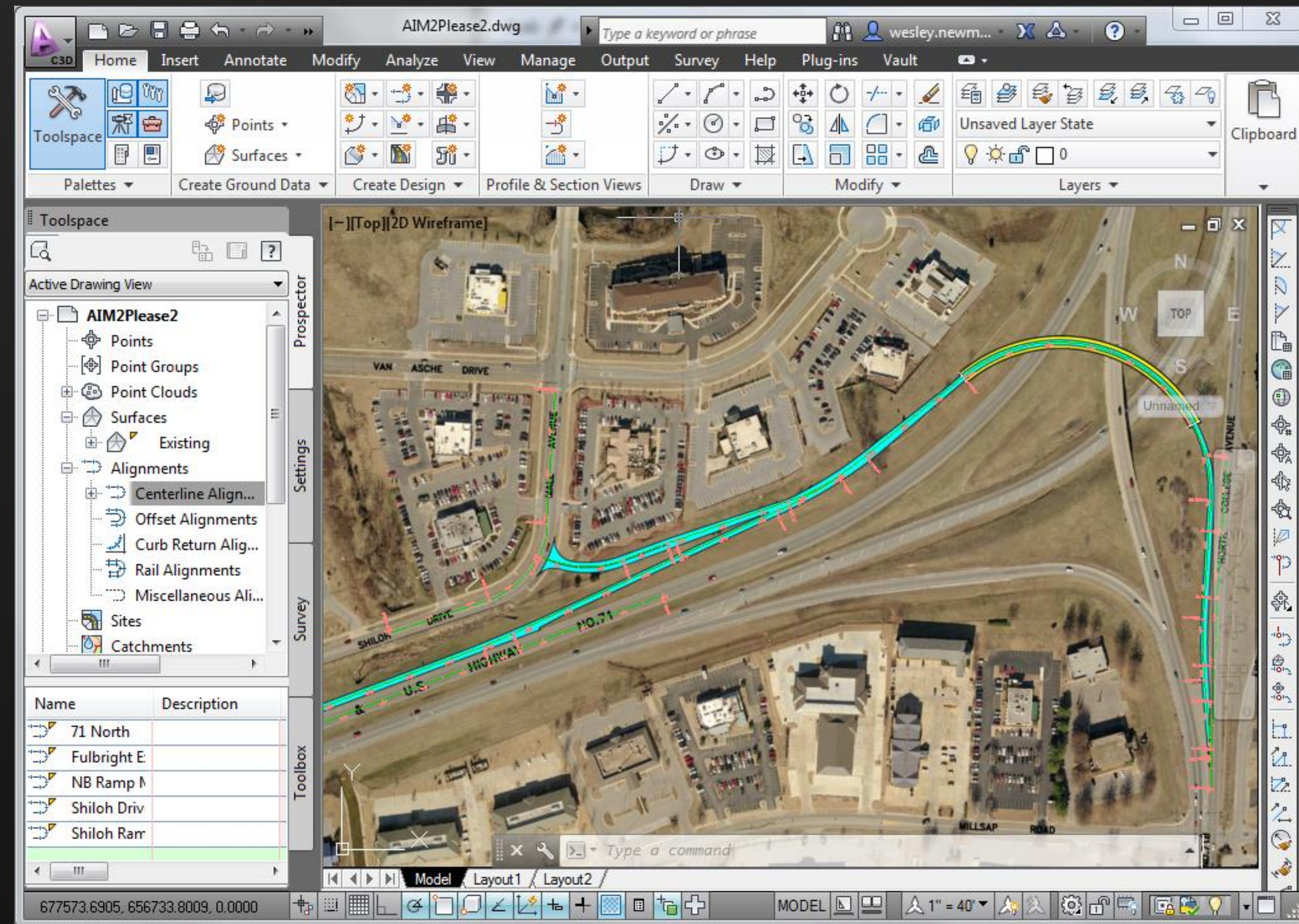
At the end of this class, you will be able to:

- Prepare Civil 3D data for transfer to AIM
- Create an AIM project from multiple data types
- Import and configure Civil 3D data in AIM
- Create visualizations with ease(still and animated)
- Understand how AIM can work with other products in the Infrastructure Design Suite



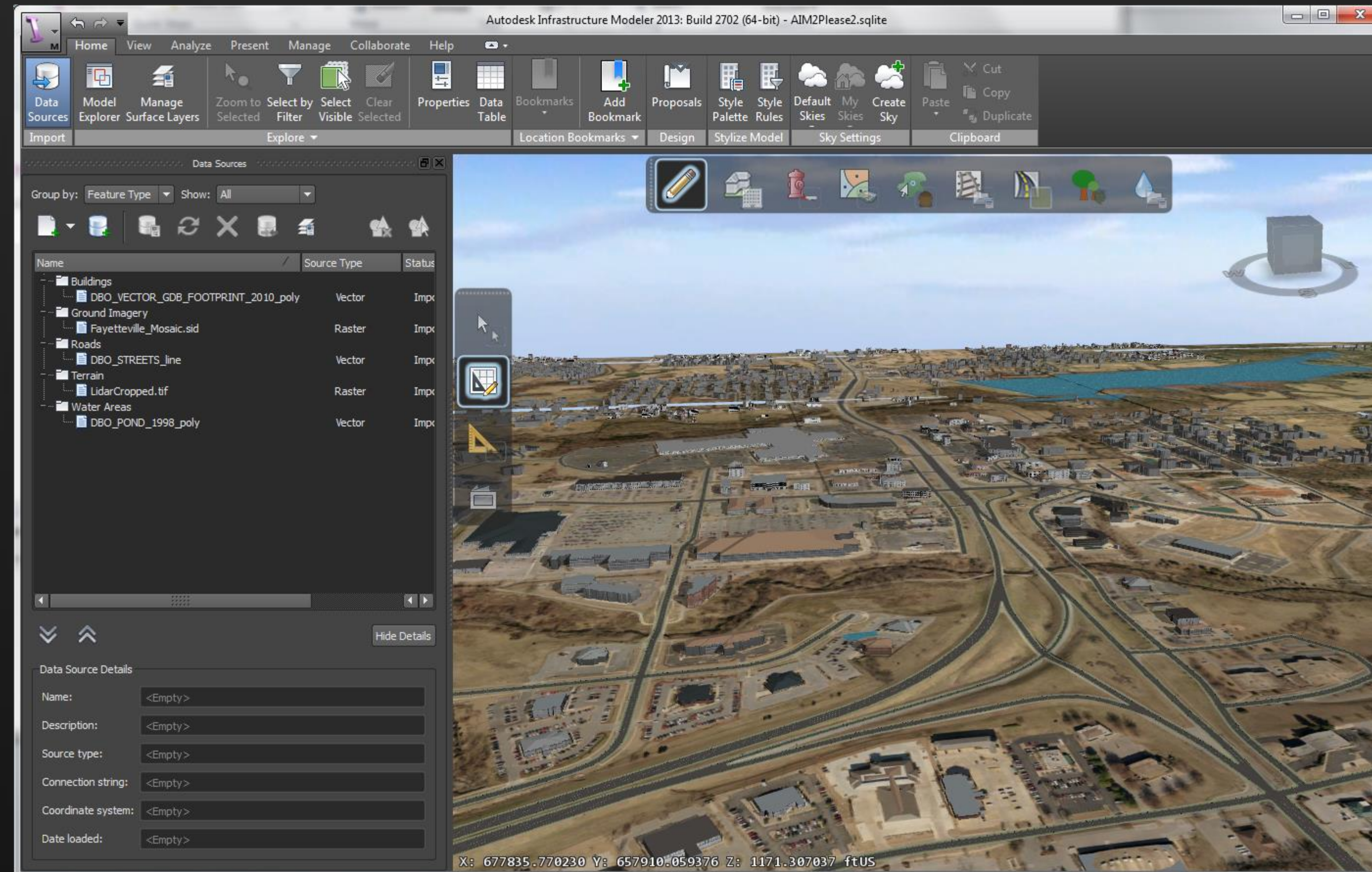
Exporting Civil 3D data for AIM

- Autodesk SDF & ESRI SHP
- LandXML
 - Alignments
 - Terrain
- Autodesk IMX
 - Corridors
 - Pipes
 - Terrain



AIM Datatypes – Commonly used Transportation

- Raster
 - Aerial Imagery
 - Terrain
- Roads
- Rail
- Water
- Buildings
- Pipes



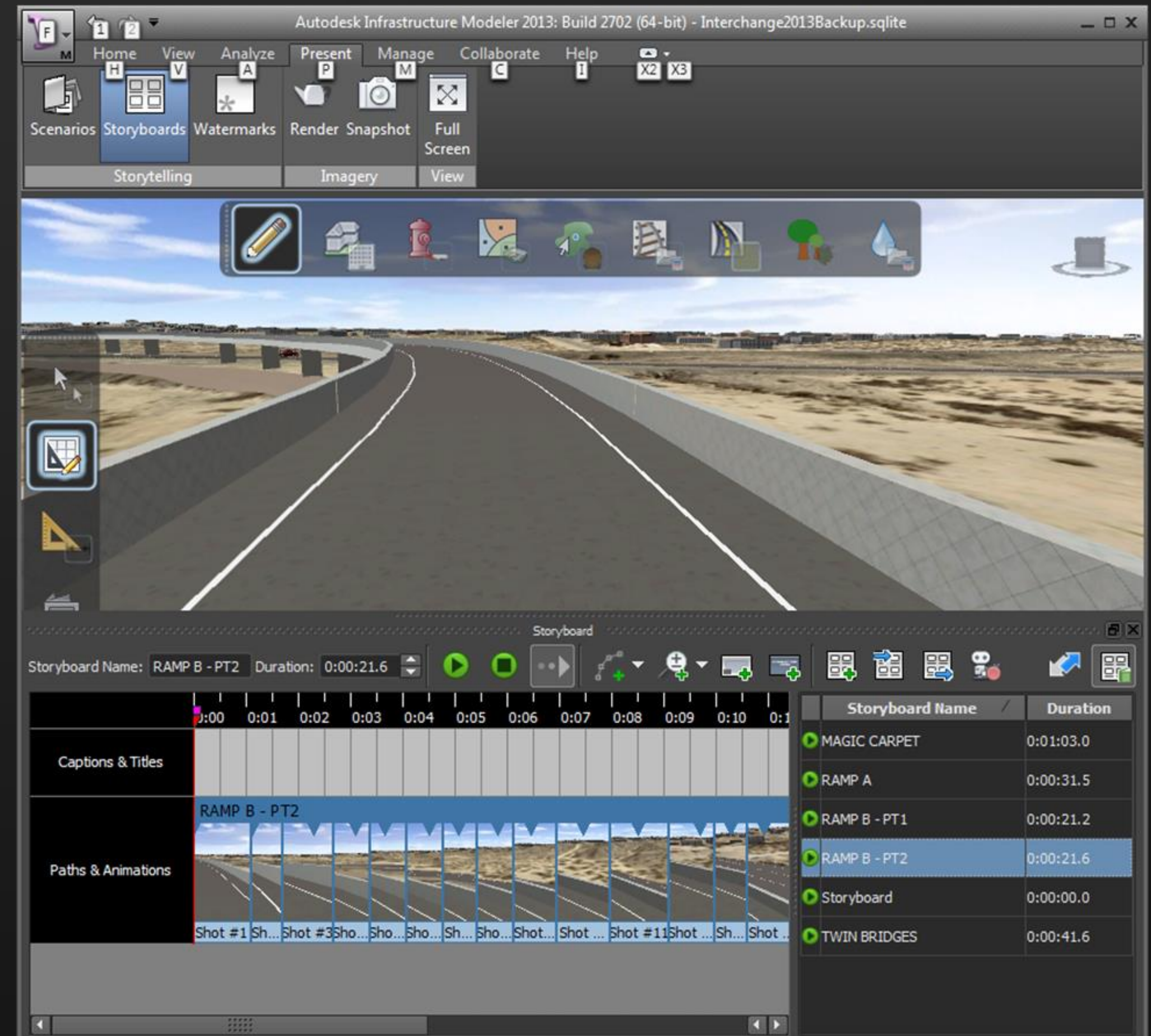
Configuring Civil 3D data in AIM

- ESRI SHP
 - Export Areas, Lines, Points
- Autodesk SDF
 - Export Areas, Lines, Points, & Civil Data
- LandXML
 - Export Alignments, and Surfaces
- Autodesk IMX
 - Export Corridors, Terrain, Pipes

The screenshot shows the 'Data Source Configuration' dialog box. At the top, the 'Name' field is set to 'Alignments' and the 'Source' is 'Vector'. The 'Description' is empty, and the 'Type' is 'Roads'. Below this are tabs for 'Common', 'Geo Location', 'Source', 'Tooltip', 'Table', and 'Script'. The 'Common' tab is active, showing a 'General' section with fields for 'Name' (empty), 'External ID' (set to 'enerated_SDF_ID'), and 'Description' (empty). To the right is a 'Lifespan' section with 'Creation Date' and 'Termination Date' (both empty). Below these are 'Lanes Forward' and 'Lanes Backward' (both empty). To the right is a 'Style' section with 'Rule Style' (empty). At the bottom is an 'Elevation' section with 'Elevation Offset' (empty), 'Elevation Offset From' (empty), and 'Elevation Offset To' (empty). All empty fields have a small icon to their right. At the bottom right are buttons for 'Close & Refresh', 'OK', and 'Cancel'.

Visualizations

- Snapshot
 - Still shot of current view
- Render
 - Rendered image of current view
- Storyboard/Camera Path
 - Dynamic drive/fly-thru
 - Add custom Titles and Captions



IDS Interoperability

- Autodesk IMX
 - Import into Civil 3D
- Autodesk FBX
 - Import into 3DS Max, AutoCAD*
- Send to 3DS Max
- Attach SQLite
 - AutoCAD Map 3D
 - AutoCAD Civil 3D
- Autodesk 360 Infrastructure Modeler
 - For Web
 - For Mobile

