

# Creating 3D Model Assets for InfraWorks

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# Class summary

InfraWorks software ships with a basic selection of 3D assets for populating your models. In this class we will learn effective ways of preparing your own 3D models using applications such as 3ds Max software and Trimble's SketchUp modeling program. From here we will dive into InfraWorks software and learn how to import your custom assets, arrange them into libraries, and export them for use by other user. We will also demonstrate some effective techniques for using roadways and 3D models to create custom road and rail corridors in InfraWorks software.

# Key learning objectives

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

- Learn how to prepare a 3D model for import into InfraWorks with the correct materials and scaling
- Learn how to prepare animated 3D models for import into InfraWorks
- Learn how to create and organize custom model libraries in InfraWorks as well as export them for sharing with other users
- Learn how to build roadway assemblies using custom road and rail sections

# Ground Rules

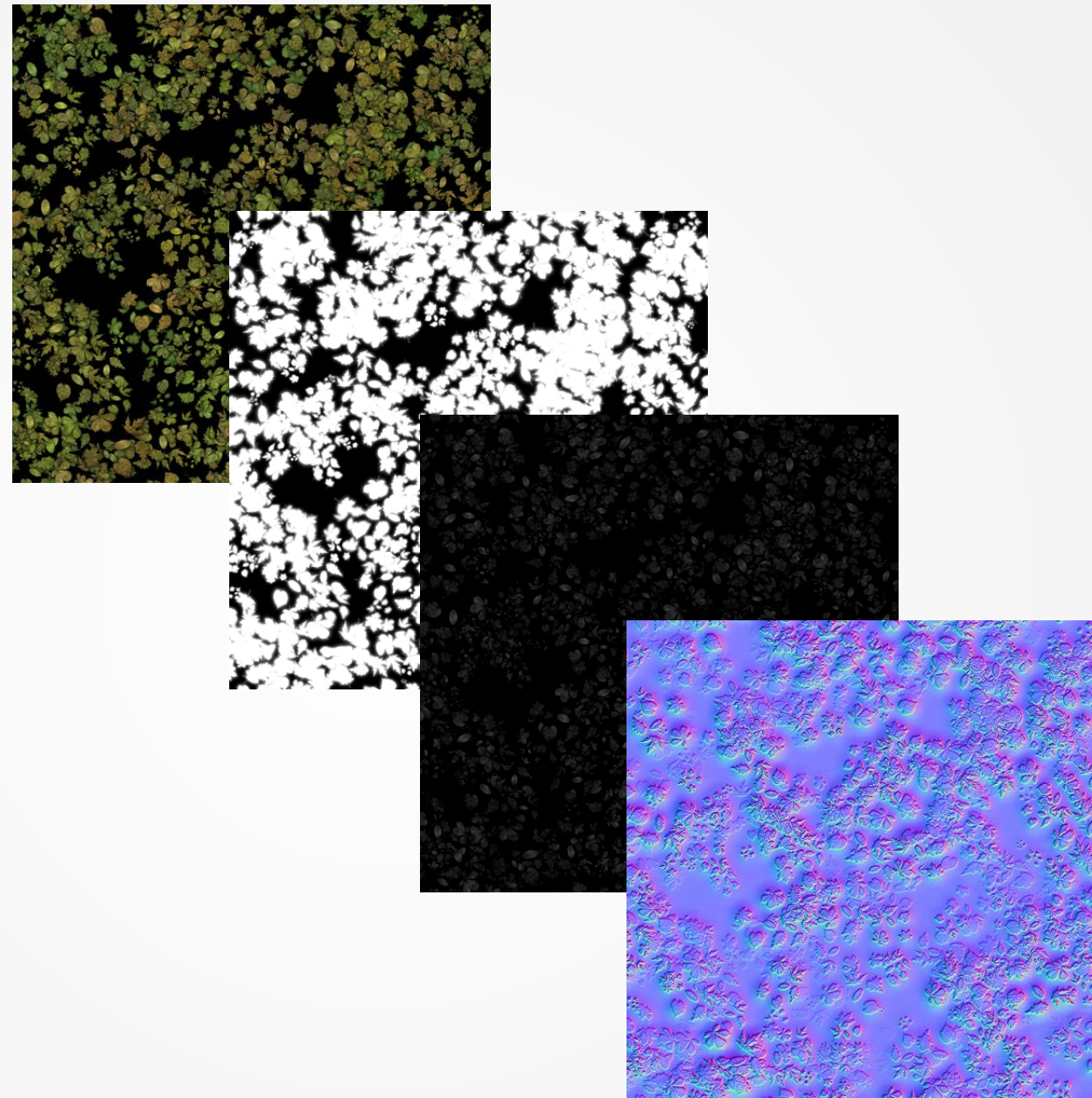
- Scale – Work in Meters
- No 3rd party materials
- Bitmap Types
  - TGA
  - JPG
  - BMP
  - TIF
  - PNG

- Export Formats
  - OBJ
  - FBX
  - DAE
- Animation
  - DAE Only



# Material Channels

- Diffuse
- Opacity
- Specular
- Bump/Normal



# Bitmap Channel Support

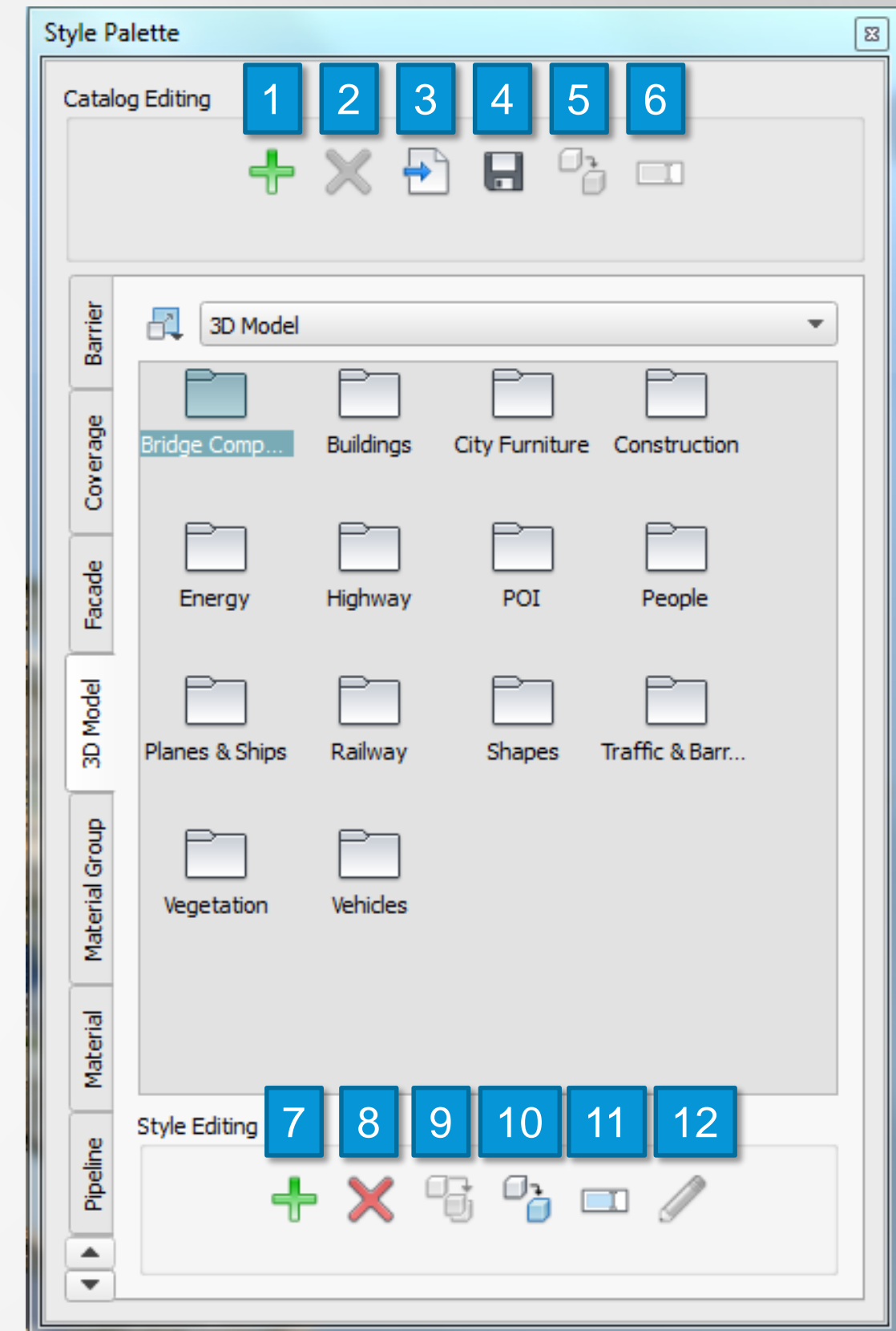
	RGB	Alpha	Transparency
TGA	YES	YES	NO
PNG	YES	YES	YES
TIFF	YES	YES	YES
JPG	YES	NO	NO
BMP	YES	NO	NO

# File Exchange Format

<b><i>Material Settings (No Textures)</i></b>	<b>OBJ</b>	<b>FBX</b>	<b>DAE (Collada)</b>
<b>Diffuse Color</b>	Supports	Supports	Supports
<b>Specular Color</b>	Supports	Supports	Supports
<b>Specular Level</b>	Supports	Supports	Supports
<b>Gloss Level</b>	Does Not Support	Supports	Does Not Support
<b>Self-Illumination</b>	Does Not Support	Does Not Support	Does Not Support
<b>Self-Illumination Color</b>	Does Not Support	Does Not Support	Does Not Support
<b><i>Texture Types</i></b>			
<b>Diffuse</b>	Supports	Supports	Supports
<b>Specular Level</b>	Does Not Support	Does Not Support	Does Not Support
<b>Specular Color</b>	Acts as Specular level	Does Not Support	Does Not Support
<b>Gloss</b>	Does Not Support	Does Not Support	Does Not Support
<b>Opacity</b>	Supports	Supports	Supports
<b>Bump/Normal</b>	Supports	Supports	Does Not Support

# 3D Model Catalogs

1. Create new style catalog
2. Delete an existing catalog
3. Import style catalog
4. Export style catalog
5. Duplicate style catalog
6. Rename style catalog
7. Create new style in current catalog
8. Delete style from the current catalog
9. Copy currently highlighted style from one catalog to another
10. Create a duplicate style
11. Rename style
12. Edit style





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