Importing Design, As-Builts, and SUE from a File in RULIS

A RULIS Job Aid

Roles Impacted

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Introduction

This job aid will review the different file types for importing vector files into your utility design.

Topics

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Importing Vectors :

RULIS for Utility Permits provides features for importing vectors from external file sources. The import functionality is divided into **two** major groups: importing utility vectors without attributes and importing utility vectors with attributes. Importing vectors without attributes will only import the geospatial coordinates of items on the map; attributes must be entered manually.

- **Vector** – A line or point on a map.

- **Attributes:** the alphanumeric data that describes the utility (e.g.. material, height, width, etc).

Importing Vectors without Attributes:

To import vectors without attributes, RULIS supports **three** major file formats:

- Comma separated values (.csv)

- Keyhole Markup Language Zipped (.kmz)

- ESRI Shape (.shp)

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Comma Separated Values (.csv)

The **.csv** file must be arranged with the following header columns:

- Point ID

- Latitude

- Longitude

- Elevation

The "Point ID" column is used by the system to chain the points into a line. This means that if there are multiple points with the same Point ID the system will combine them into a line. On the other hand, records that have a unique Point ID will be uploaded to the system as a single point.

When uploading a **.csv** for design it is not required to have the Elevation column.

ESRI Shape File (.zip)

The file must be a **.zip** containing the files that make up the SHAPE file, the files within the .zip should be:

- filename.shp

- filename.dbf

- filename.shx

- the .prj and any other file that make up the SHAPE are optional.

KMZ File (.kmz)

The file must be a **.kmz** file format. KMZ is one of the formats that can be exported from google earth.

⚠️ **NOTE:** KMZ is a format that contains a **.kml** (Keyhole Markup Language) within **.zip** (compression file type).

- KMZ files can have lines and points.

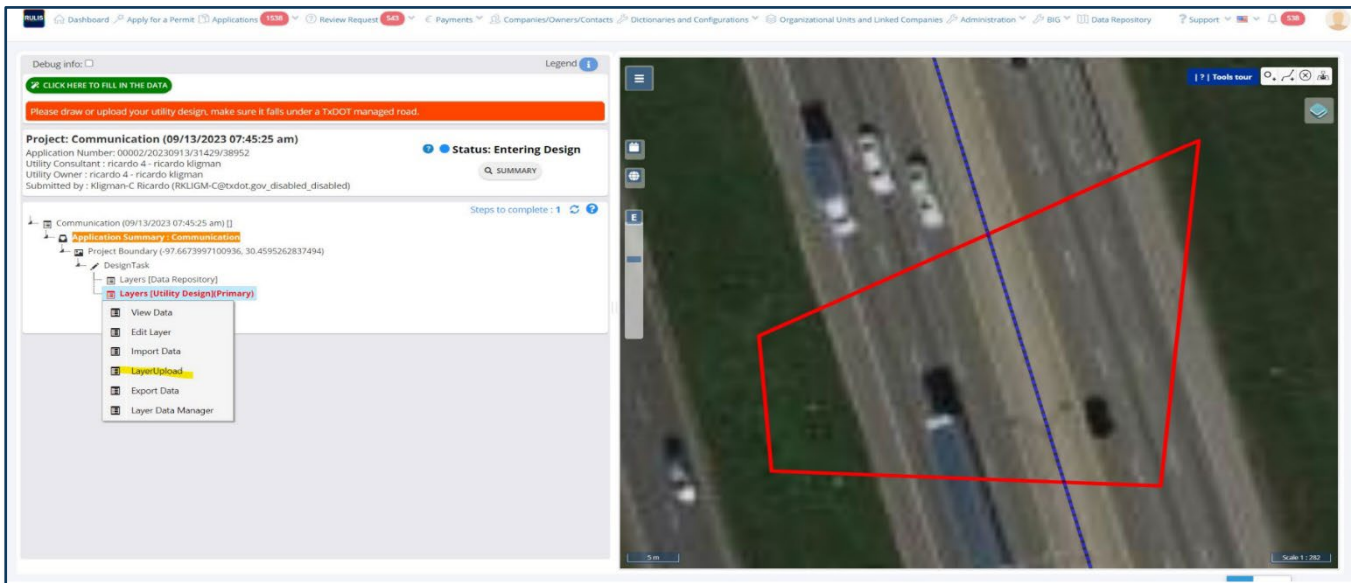- The coordinates must be in EPSG:4326.
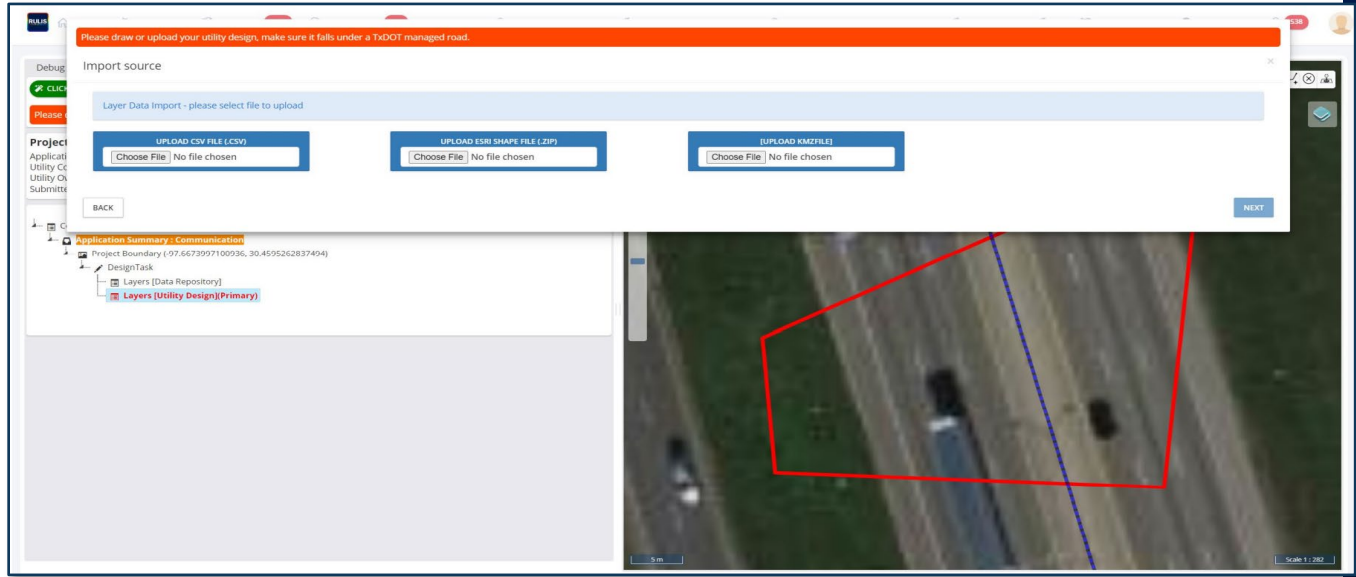
Uploading Files

To upload a project that contains both lines and points (e.g., electric cable and poles), users should create **two** files:

1. Upload the file for the electric line, set up the attributes, and save.
2. Upload the file for the pole points, set up the attributes, and save.

To upload a file

1. Go to the Detail View.
2. Right click the **Utility Design** or **Utility As-Built** node (depending on where you are in the workflow).
3. Select Layer upload.
4. The Upload file window appears.
5. Select your file.

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Draw utility design, then start Permit Investigation Workflow

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- The file projection must be in **EPSG:4326**.

- RULIS Utility Permit accepts ESRI shape files with geometries that can handle the Z (elevation) attribute.

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Importing Geometries with Attributes

For importing geometries with attributes RULIS for Utility Permits supports **two** major file formats:

- Comma Separated Values (.csv)

- ESRI Shape (.shp).

Comma Separated Values (.csv)

There are **three** options which may be used in this case: only points, only lines.

- The "POINT ID" column is used by the system to chain the points into a line.

- If the CSV file contains multiple points with same "POINT ID," the system will concatenate them into a line.

- On the other hand, records that have a unique value for "Point ID" will be uploaded to the system as a single point.