

Cul-de-sac Example

This example explains how to use reference features to create a Cul-de-sac. Similar techniques can be used to create turning lanes, widenings, landing, parking lots. etc.

Reference Features

Reference features can be used to control the cross section template and display *intersected and projected features* (<http://support.softree.com/knowledge-base/terrain-module/profiles-and-draped-features/intersected-and-projected-features>) in section and profile.

Prior to this example, a terrain file with features running along the right and left shoulders has been created as shown in Figure 1 below.

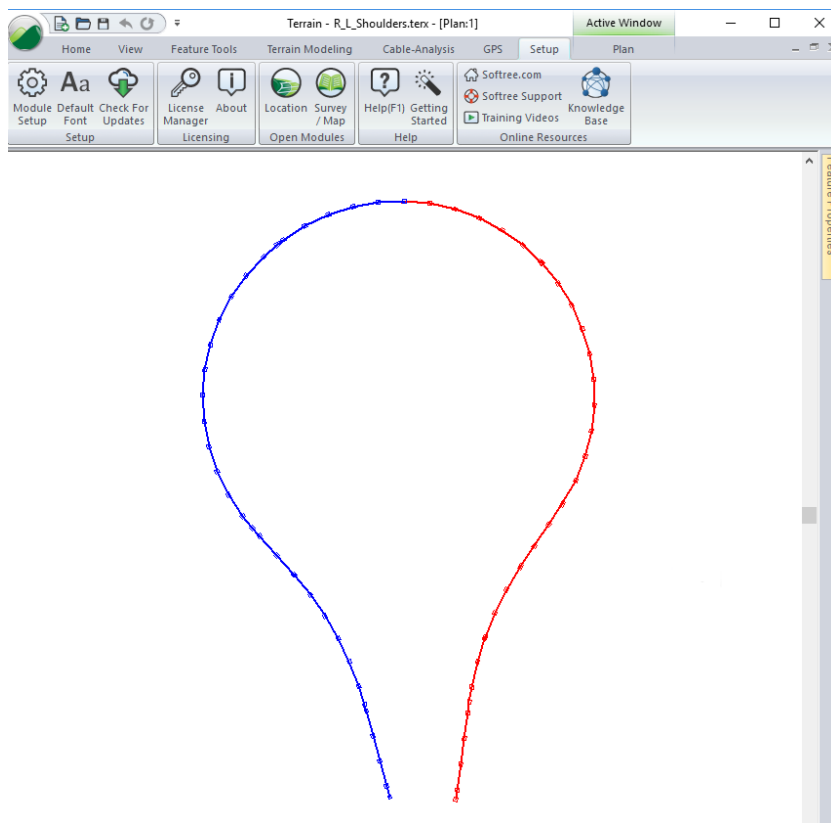


Figure 1: Left and Right Road Shoulders

Note: creation of the road edge features can be done in Terrain or using multiple horizontal alignments in Location.

Creating Reference Features - Lane and Shoulder

1. Open the Location module. Open *CulDeSacExample.dsnx* (included with this example). The screen should display a cross section and a plan view as shown in Figure 2.

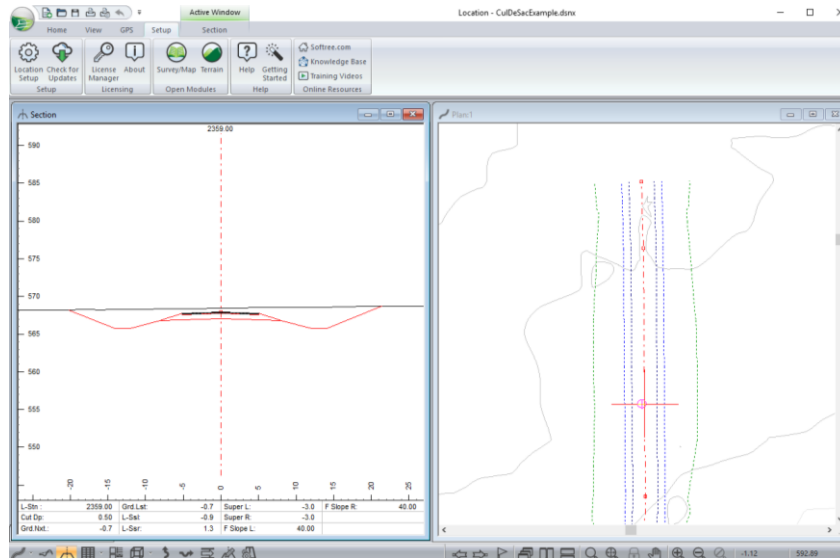


Figure 2: Left and Right Road Shoulders

2. Choose menu Setup | Location Setup | Alignment | Reference Terrains. Set *Reference terrain 1* to be **R_L_Shoulders.terx**. Press OK.
3. Choose menu Features. Setup Reference Features *RF 1* and *RF 2* as shown in Figure 2 below:

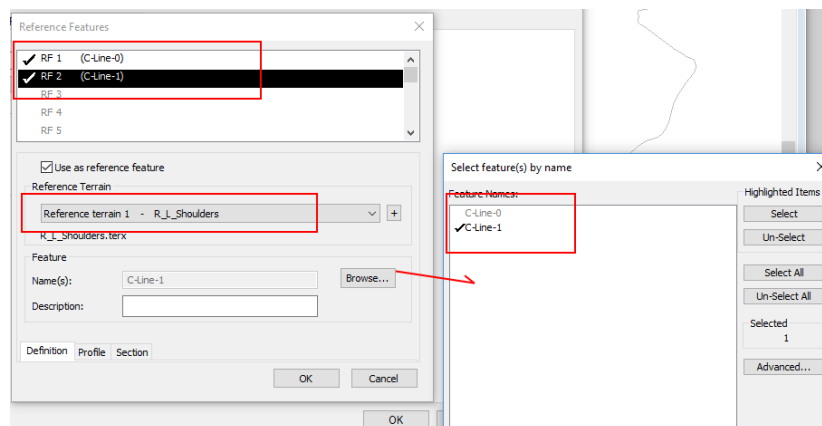


Figure 3: Setting up Lane and Shoulder Reference Features.

4. For both the reference features, set the Section tab settings to Intersection and select an appropriate symbol (see Figure 4 and 5 below):

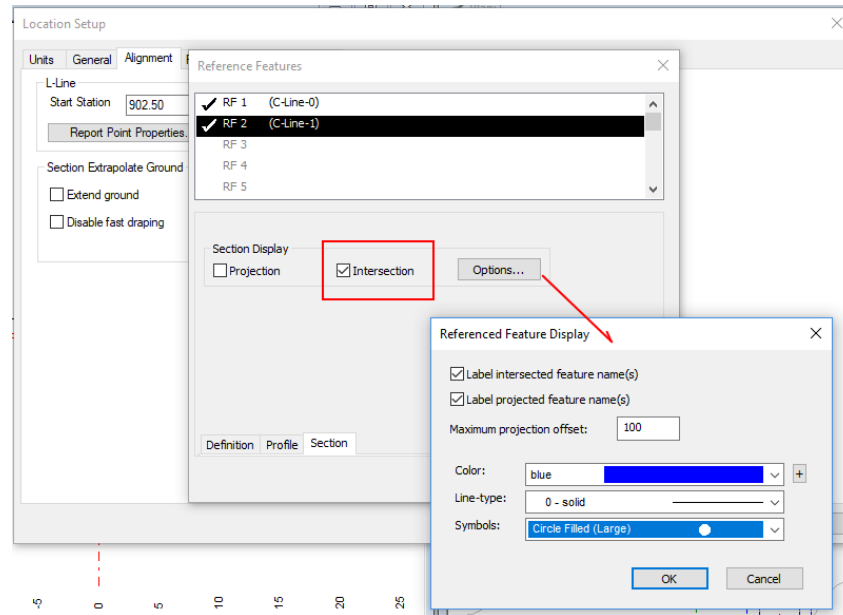


Figure 4 – Setting up Cross Section Display of Reference Features

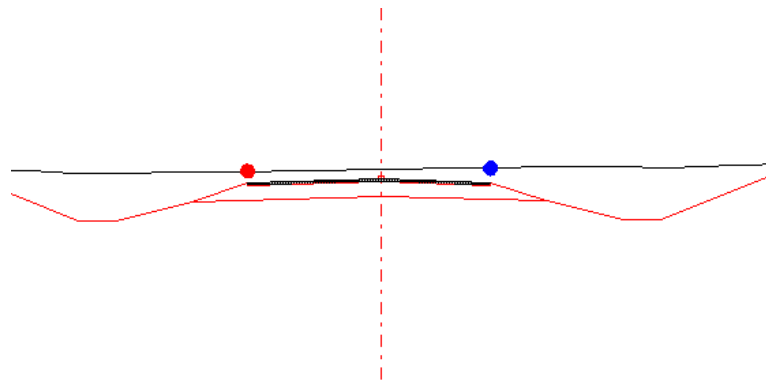


Figure 5 - Cross Section Display of Reference Features

Attaching the Reference Features to the Template

- Choose menu Home | Templates. Right click on *Rural I – left* component and change the AcpWidth to attach to Reference Feature 2 (C-Line-1) as shown in the figure below. Similarly, attach *Rural I – right* to Reference Feature 1 (C-Line-0). Press OK.

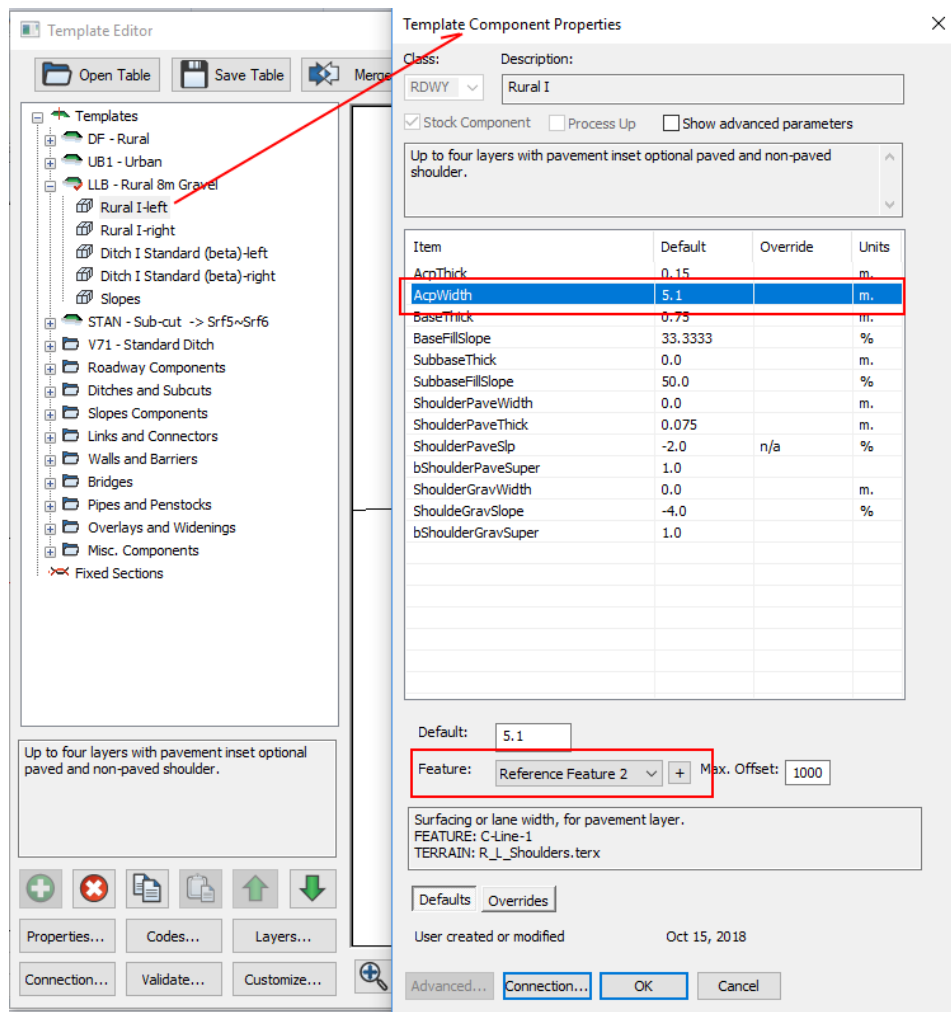


Figure 6 – Template Reference Features

- Your template should now follow the shoulders of the 2 reference features as shown in Figure 7 below.

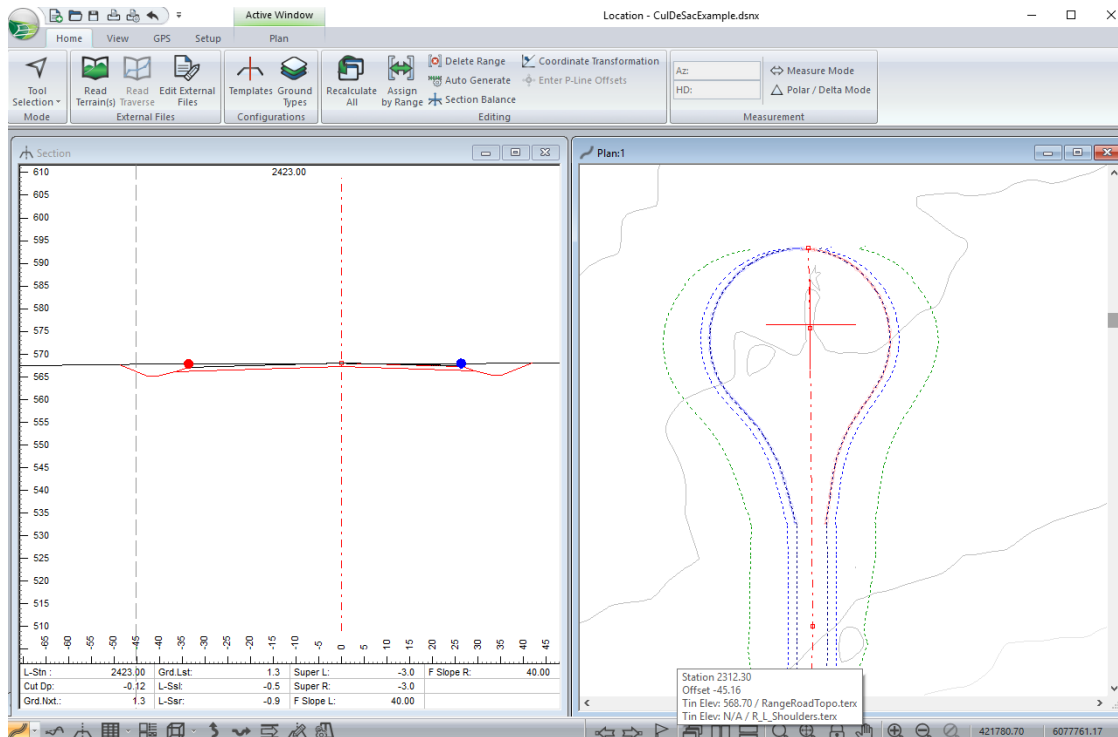


Figure 7 – Template Attached to Reference Features.

7. Close Location, don't save the changes.