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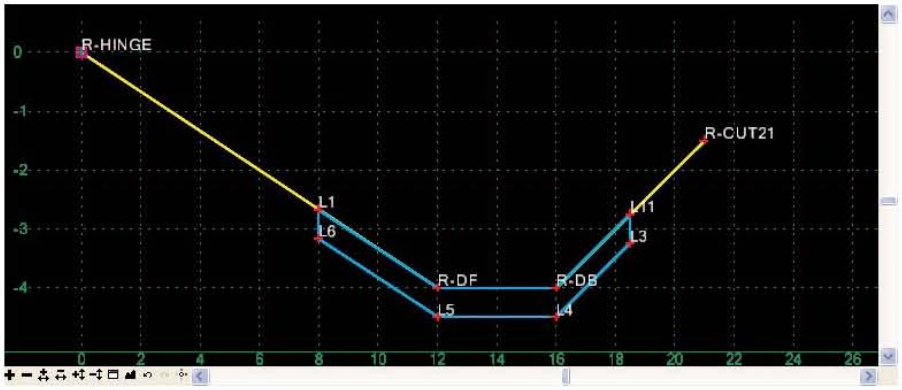
Express-TIP

Parent/Child Relationships

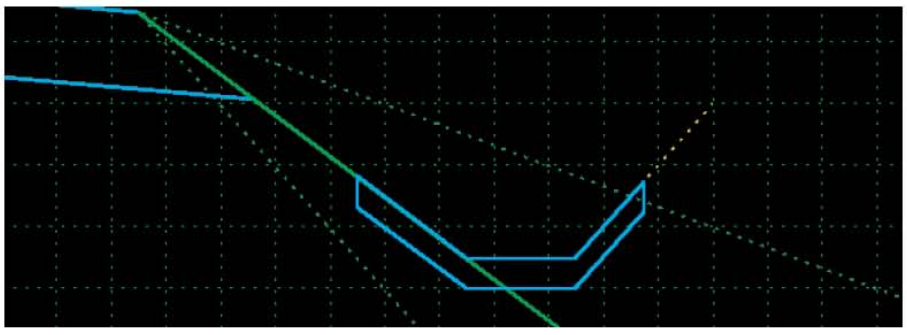
Using Components Efficiently

Do you ever need to predicate the use of one component on the presence of another? For example, do you ever want a concrete liner component, but only when you have a ditch? Or a barrier component, but only in a 2:1 fill situation? This is very easy to accomplish with the Parent / Child relationship.

1 Develop the components you need. In this case, we've developed a ditch end condition component with a closed concrete liner component.



2 Here, the ditch has been added to a template. Notice when the template is tested, a liner is present even when the template is in fill.



On the Side

Q: When is a closed shape not a closed shape?

A: When you close a component by connecting it back on itself instead of using the '**Close**' option. If you don't use **Close**, the component won't be recognized for volumes. However, you can edit the component and toggle on **Close Shape** after the fact if necessary.

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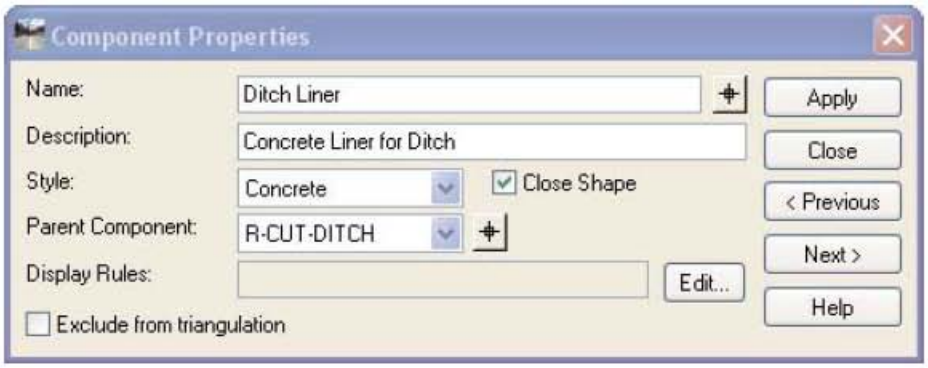
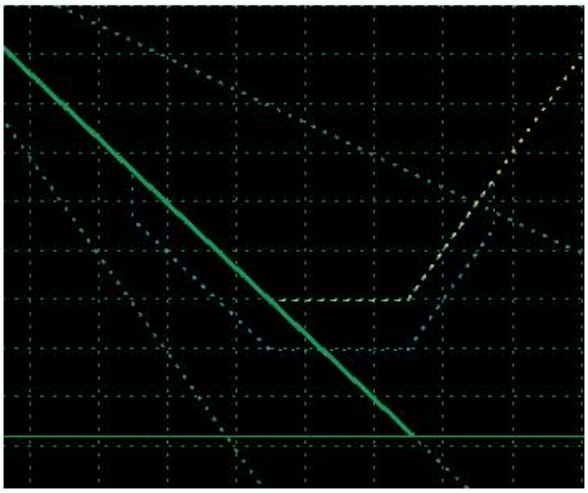
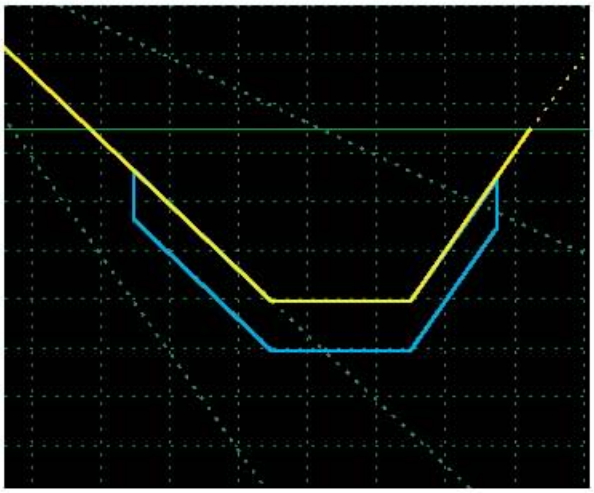
3 Right-click on the liner component and choose **Edit Components** to go to **Component Properties**.



- Use either the target button or the drop down list to identify the **Parent Component** as the ditch.
- **Apply** to save the change.
- **Close** the **Component Properties** dialog.

4 **Test** the template again and note that the liner is only present when its parent, the ditch, is present.





While you could use the more complex **Display Rules** for these situations, **Parent / Child** relationships easily accomplish such tasks without going to the extra effort of setting a rule.

Next time:

What to do when the ditch is shallower than the liner due to existing ground elevations. We'll look at two options, eliminating the ditch and modifying the liner.