

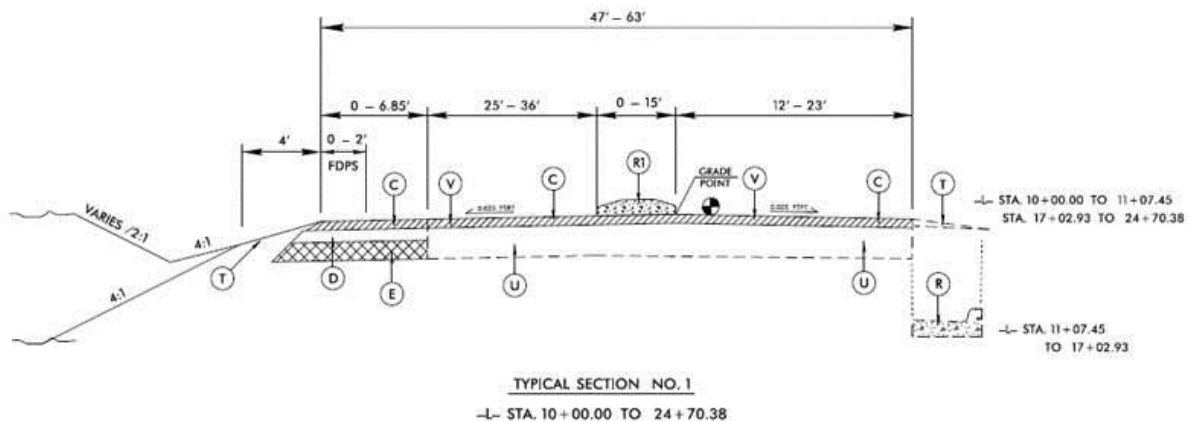
2_43 MERGING TWO TEMPLATES

Question:

I have a situation where I may want to merge 2 templates unless you can recommend another template. The scope of the work consists of an undivided primary road, correcting the crown to a 0.025 cross slope (with wedging). The right side involves milling & filling while tying to the existing EOP horizontally & vertically (half of which is 2'6" C&G) and the left side has 2-5' widening in addition to proposed 2' FDPS (plus mill & fill). I started with the V-10 template and was wondering if I could use the Typical template for the right side where there's no widening. Can you merge 2 half templates?

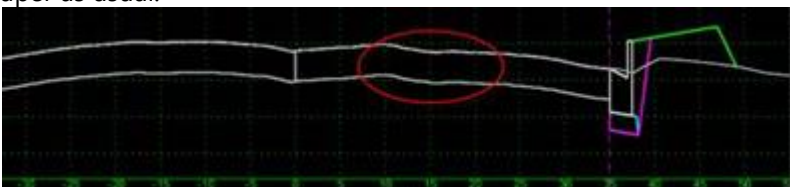
Answer:

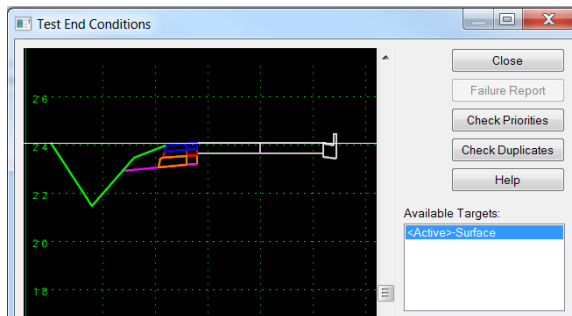
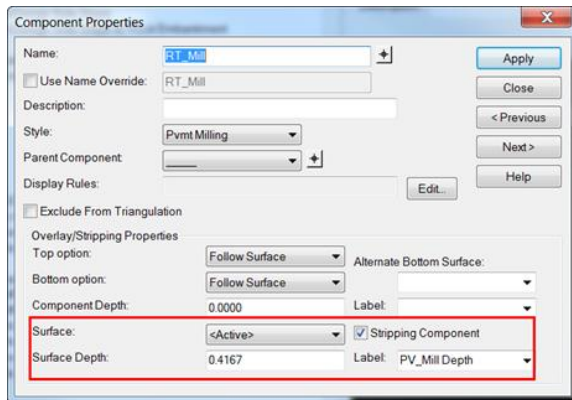
A little clarification is needed. First, traditionally Roadway Design does not show milling in the XSC (for a very good reason). As mentioned in our delta training trying to show milling in the XSC is dangerous, while modeling it can be beneficial in the areas of traffic phasing, Gantt charts, and time lapse construction. Because of the cross slope of the existing pavement cut from the existing ground TIN is not absolute, compared to real-world conditions, the effect of using the overlay/stripping component in your template may not necessary achieve what the Roadway Engineer wants. Your typical section shows a proposed grade (GP) and a proposed super (0.025 for project east of I-95).



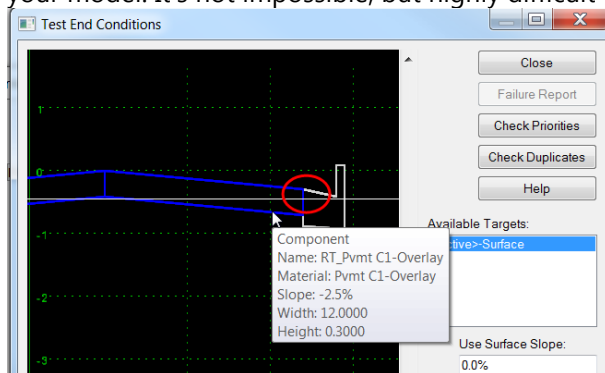
From these two criteria alone, you cannot use the overlay/stripping component to show milling, unless your profile consists of VPINC at every 25'-50' sections. It would be highly difficult show exactly say 5" of milling and put back 5" of overlay of the surface course AND with the proposed super and proposed profile because the contour of the existing pavement (existing cross slope TIN not absolute).

The attached ITL I have customized for you contains three templates, "No Profile", "Proposed Grade", and "Show Both Milling and Overlay". The **No Profile** template have the overlay/stripping components to show milling. Please be aware you cannot use your proposed super and grade because the overlay/stripping components will mill/strip according to the slope/contour of the existing pavement. On the left side where you have new pavement, you can use the Geopak AutoShape input file to control your super as usual.

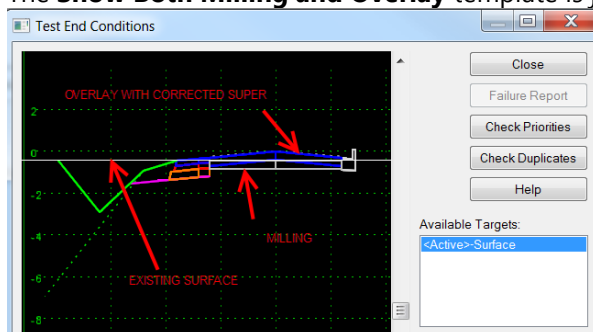




The **Proposed Grade** Template contains regular components to show milling. Since the regular component does not automatically trace the existing ground contour, you can use the proposed grade and super. However the compromise is your ability to tie to existing ground at the EOP everywhere in your model. It's not impossible, but highly difficult with these two constraints, proposed grade and super.



The **Show Both Milling and Overlay** template is just a combination of both in the milling areas.



Hopefully from this little exercise demonstrates the power and flexibility of programming your templates to do whatever you want. As Roadway Engineers, the only question to ask ourselves is, "Is this my design intent?" Constructability should also be considered as we are experimenting with delivering the grading models to the contractors.

There was a good reason why Ross never wanted to show milling in his Criteria files. I've created the [overlay capabilities in our Criteria files](#) just to confuse folks more. 50+ years of combined experience from both of our work tells me to avoid this confusion by steering clear of the stripping components for milling and stick to the overlay components for pavement wedging/leveling (a NCWedge/NCCrash replacement) as we are about to embark into the OpenRoads Technology platform.

Again we do not need to dumb down the templates. It will dumb down our Engineers in the process. As evident in similar situations like this one, the solution is to learn as much as you can from the templates. Then apply that knowledge to your daily production work/tasks. This is how we will become a smarter and efficient workforce of the future.

Delete the C&G components from a copied template in the areas where you don't have them. Use points left and right "ALG_C&G Origin-CTL" as point controls to set the horizontal limits of your milling. Use the new process to model the [monolith islands](#). I know, the left side is a shoulder section. Naming was just for consistency.