

HOW TO SIGNAL AHEAD OF A LIFT BRIDGE, Step by Step

There are a great many lift bridges available on DLS (bendorsey made a whole bunch). They are really nifty. They are default "up" and will go down when a train approaches. Unfortunately, putting a signal at either end of such a bridge presents a small problem. Since the bridge is made with an invisible track, that is always connected, the line is always open, and the signals will be green, no matter if the bridge is up or down. Not ideal. But there's an easy fix for this:

The trigger and "trigger check rule" needed for this are built-in content in TRS2006, but if you do not have it already, you will need to download the "[set signal rule](#)" from DLS.

Note: This works for a 2-track bridge only, with one set of signals/triggers for each track/direction.

(I made this for main Europe/US, so this example is right-hand-side-driving)

In Surveyor, put in a bridge, then add a length of tracks to each bridge-track in both directions.

Put a train on the track. Save and go to Driver mode. Start a ways back, and slowly approach the bridge. Make a mental note of where on the track the trains will prompt the bridge to go down (in either direction).

Back in Surveyor, you find the trigger here:



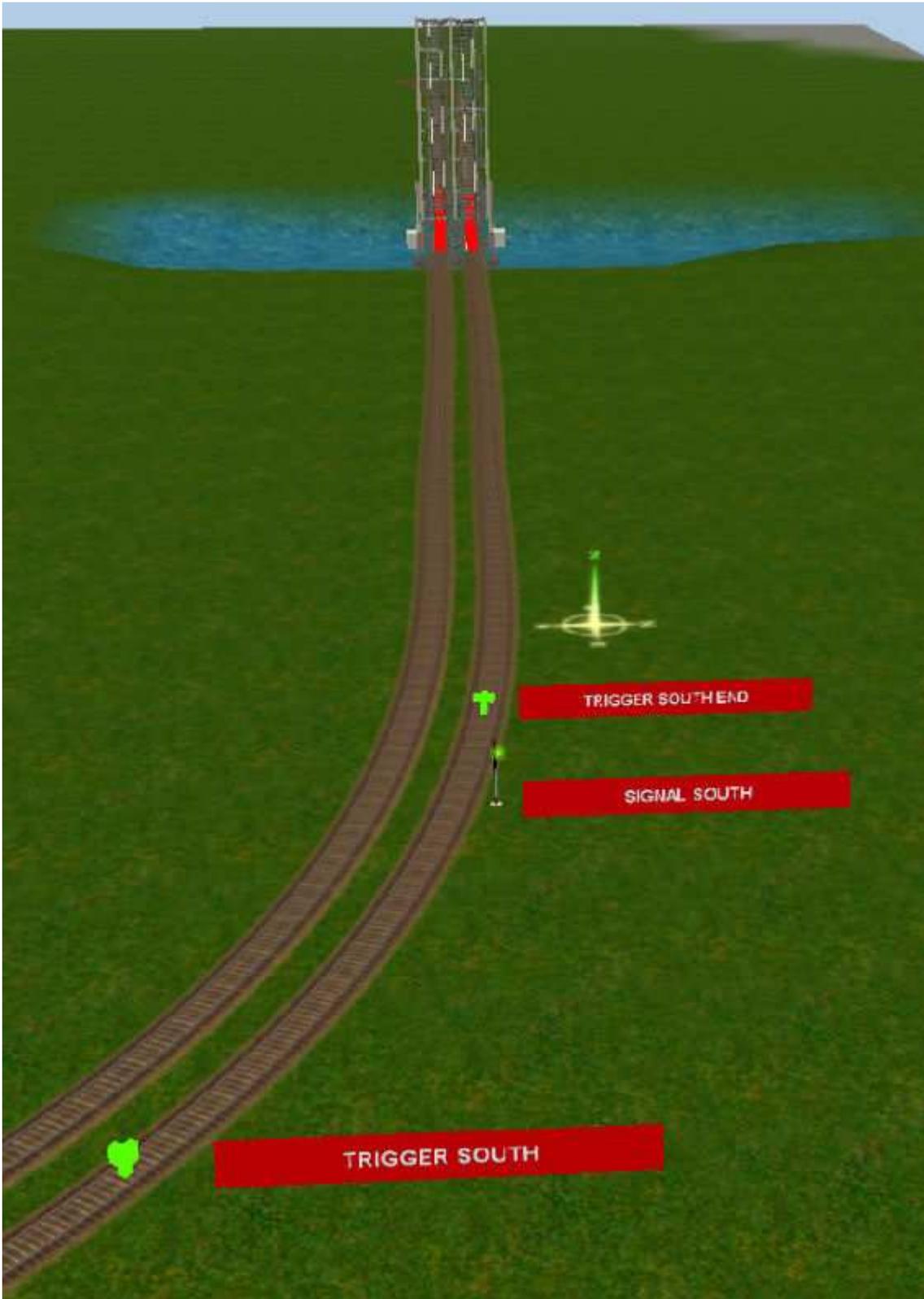
Place a trigger on the track where you just noted the train will prompt the bridge. Then place the signal of your choice a little distance in front of the train. Then add another trigger just behind the signal.

The triggers automatically ask for a name when you put them on. They have to be named, and each name has to be unique for that trigger. You'd do well naming them for the bridge (if you have more than one) and for the direction they run, for example "xbridge trigger south" for the first one, and "xbridge trigger south end" for the second one. This enables you to keep track of them and know which trigger you are addressing in the rules. Trust me, you will need that.

Note: In some instances you may have converging tracks close to the bridge, in which case you can add another set of triggers and a signal on that track as well. In this case you'd name your triggers like "xbridge trigger south left" "xbridge trigger south right" and so on.

The signal needs to be named as well. Use the little ? button, and click on the signal, and name it in the same fashion as the trigger, for example "xbridge signal south".

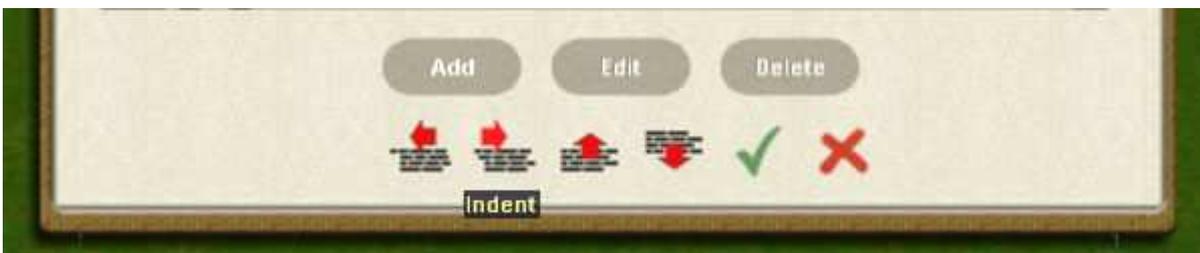
this is what it might look like (I just added the signs for this tutorial):



Go into "edit session rules"



A word on the "edit session", in case you haven't used it before. To add a rule, you click the "Add" button, and pick the rule you want from a drop-down list. To make a "child rule" (a rule triggered by the rule right above it) it needs to be indented, use the red "right arrow" button for that. If a rule lands in the wrong spot, you can move them up and down with these buttons as well. Once you have made your changes, remember to hit the green check button to save.



Now, first of all you need to add a "set signal rule" for each of the signals (in this case two).



Then you go to "edit" for each rule. You pick the signal from a drop list, and set it to "Danger". This will cause that signal to default to "always red" when the session starts (you will not be able to see this in surveyor), which is as it should be, since the bridge will be default "always up". Notice the Name: Set signal rule. I didn't change that when I was doing this example, but I do now, and you'd be well advised to do so as well. Just add the name of the signal behind the "set signal rule". It will make it a lot easier for you to keep track of your rules, and edit them later as need be.



Next add a "trigger check" with underlying "set signal rule" for each of the triggers (in this case 4):



Then edit the "trigger check". This would be the first one (south).

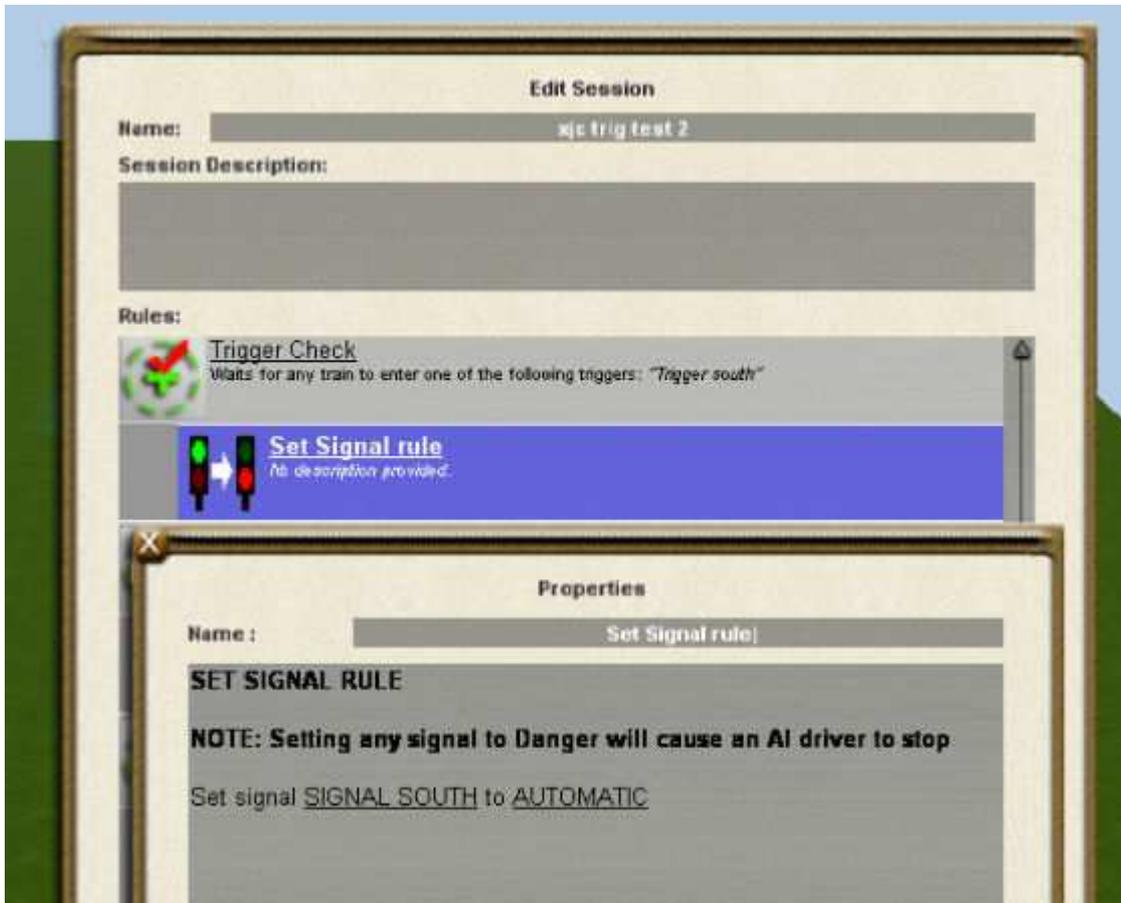
Since this rule automatically adds a description that tells you which trigger it's for, there's no need to name the rule here.

Just pick the trigger you want, then check the "accept all trains" and the "only activate....." if you so wish (depending on how you want it to work for your layout).



Then edit the underlying (child) "set signal rule". No need to rename.

Pick the signal, and set it to "automatic". This will cause the signal to go to automatic mode (and give you a green light if the line is clear), when the train hits the trigger, and the bridge is coming down.



Next is the "...end" trigger for that set. Again pick the trigger, and check as needed.



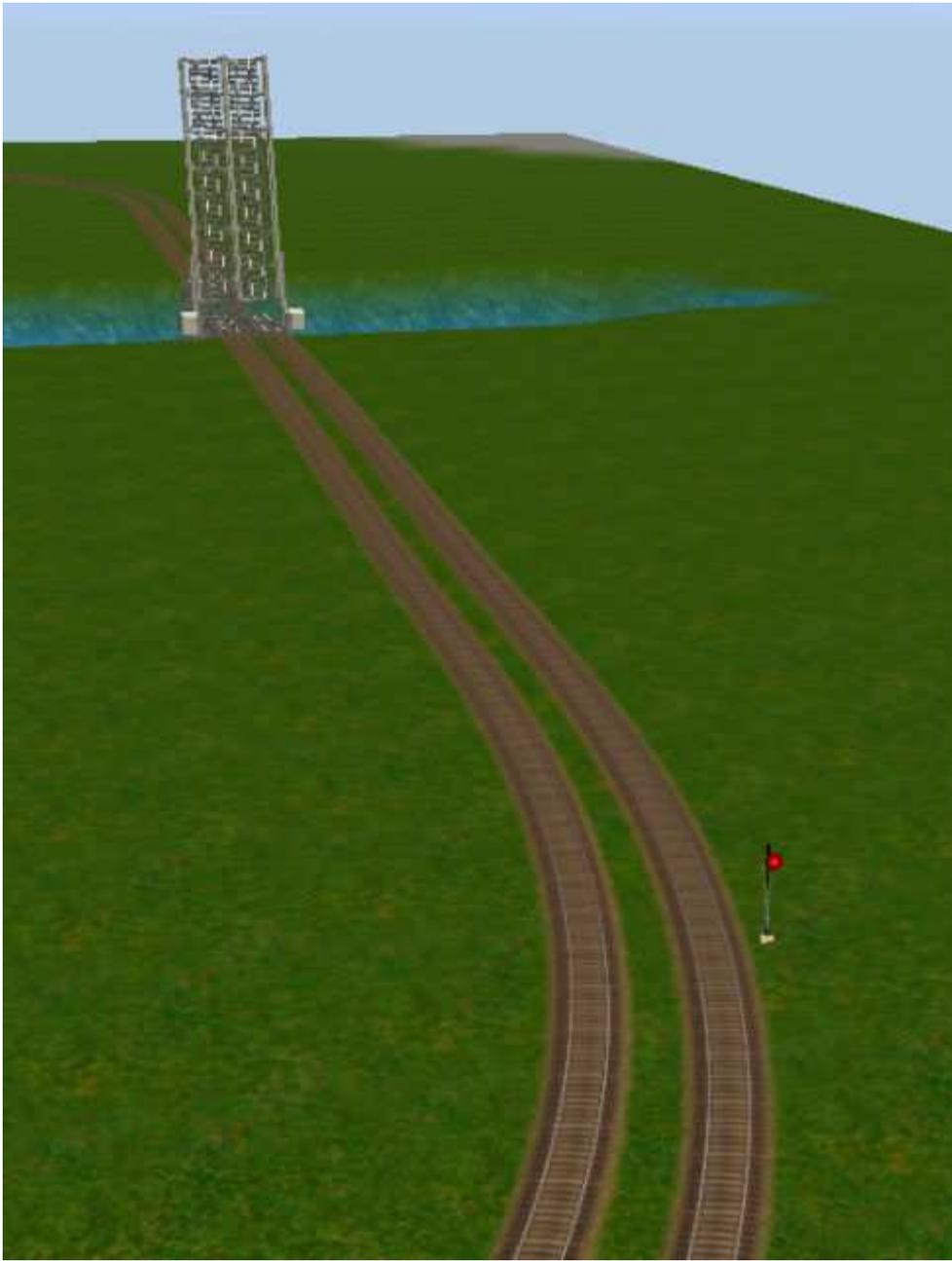
and in the underlying "set signal rule" you pick the same signal, this time setting it to "danger". This will revert the signal back to "always red" state after you passed the signal.

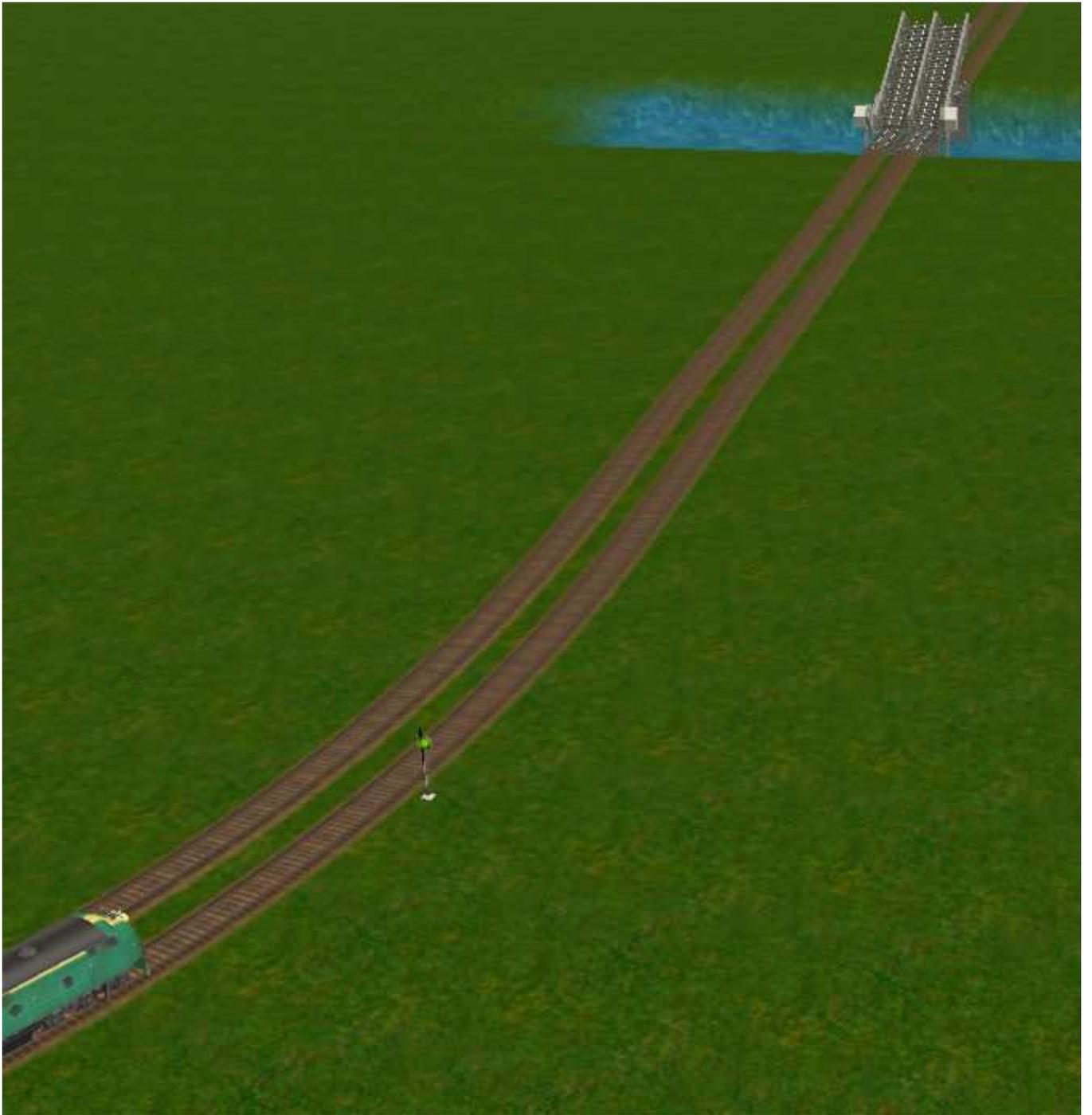


Now repeat the procedure for the 2 northbound sets of rules.

Save the session and go into Driver (you will not be able to see this work in Surveyor).

Your signals are now red when the bridge is up and no trains are nearby, and will give you a green light when a train approaches and the bridge is going down.





Happy signaling!