



Utilizing End Condition Exceptions in Roadway Designer

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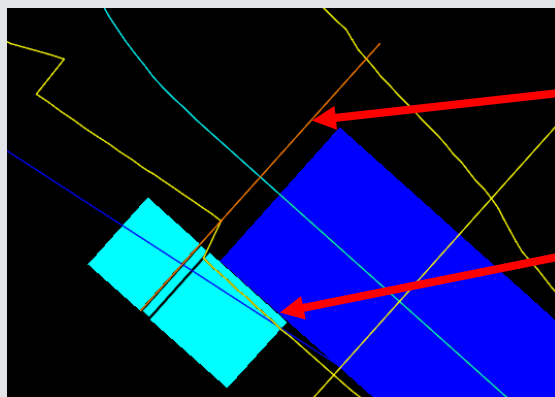
Overview

- What is an End Condition Exception?
- What is the difference between an override and a transition?
- When should an End Condition Exception be used?
- Examples of Overrides.
- Examples of Transitions.



What is an End Condition Exception?

- A user defined override of the template's end condition solution on the left or right of the template.
- Defined by a station range which can cross over template drop locations (changes in template).



Template Drop

Exception



What is the difference between an override and a transition?

- An override is used to replace the end condition over a specified station range.
- A transition is used to perform a linear transition from the end condition at the start of the exception to the end condition at the end of the exception.



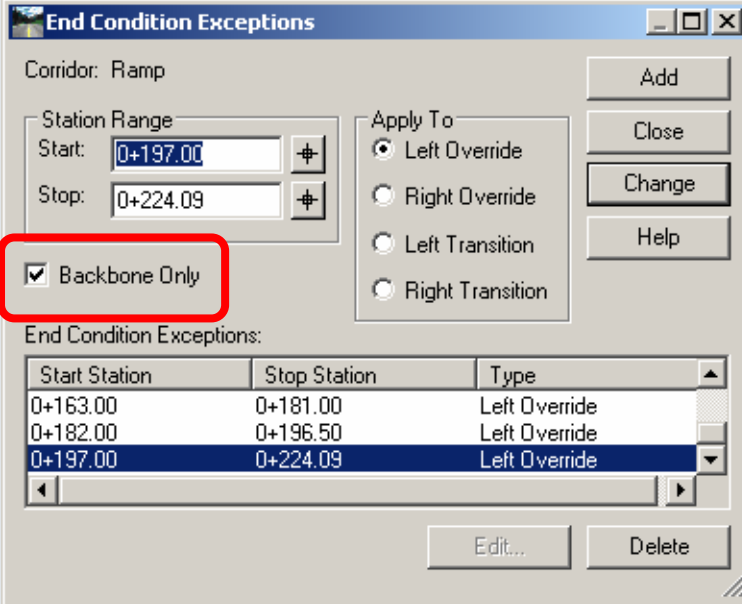
When should an End Condition Exception be used?

- Whenever the normal template end conditions do not provide a desired solution
- If many end condition exceptions are needed, then a better solution might be to modify the template(s) such that the special circumstance is handled within the normal end conditions.
- To minimize rework, do not apply exceptions until all other design decisions are complete.



Special Case – backbone only

- The backbone only option can be used on either exception type
- Will remove all end condition components from the specified side over the length of the transition.



End Condition Exceptions

Corridor: Ramp

Station Range

Start: 0+197.00

Stop: 0+224.09

Apply To

Left Override

Right Override

Left Transition

Right Transition

Backbone Only

End Condition Exceptions:

Start Station	Stop Station	Type
0+163.00	0+181.00	Left Override
0+182.00	0+196.50	Left Override
0+197.00	0+224.09	Left Override

Edit... Delete

End Condition Override Examples



- Ramp transition and gore area
- Overpass
- Culvert

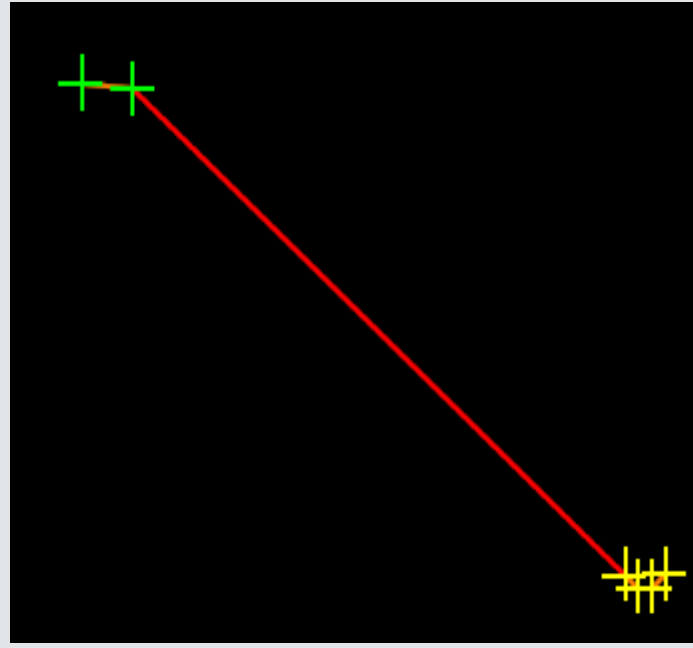
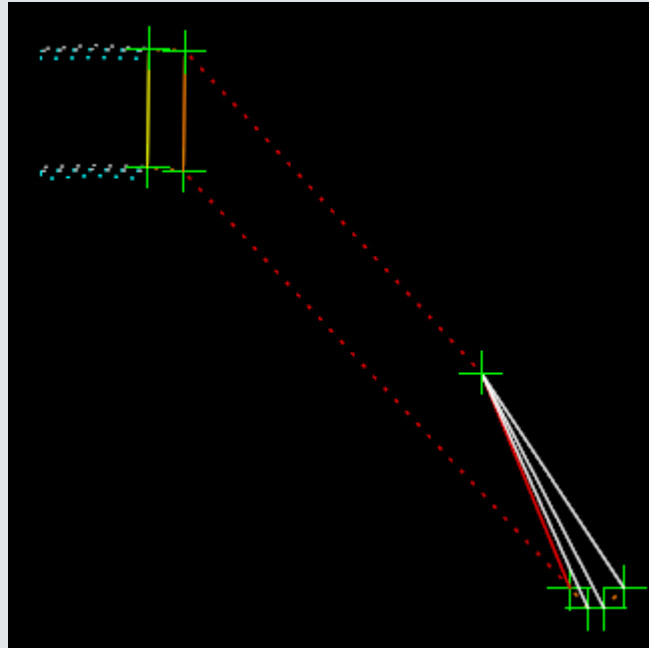


Override Gotchas

- Mirror – make sure mirror is turned off!!
- Overrides replace all end conditions on the specified side.
- Test, Test, TEST!



End Condition Transition Examples



- Ending/Starting Ditch
- Change in slope



Transition Gotchas

- Non-constructed end conditions
- Transitions are linear between connection points. Not tied to horizontal, vertical, or slope changes.
- Edit station at beginning and end of transition to change transition behavior.



Summary

- Exceptions can be used to solve a variety of situations without redesigning the base template end conditions.
- The user should always review the results of an exception application to ensure the design is correct.
- End Condition Exceptions are a powerful tool that allow flexibility in design.



Questions?

