

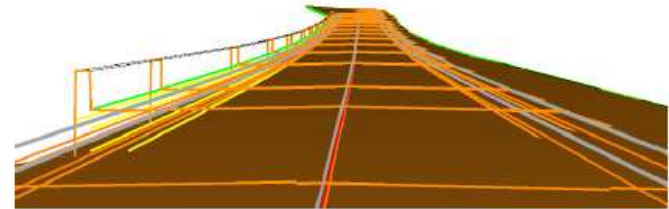


## Roadway Designer – Keep It Simple but Thorough

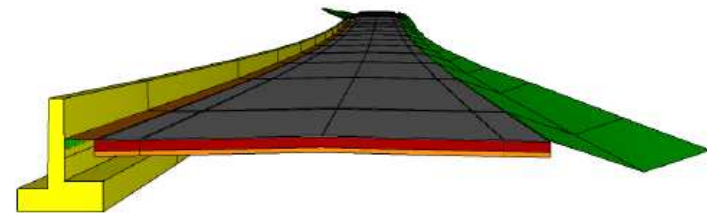
Kevin Jackson, Bentley Systems

# Roadway Design –Typical Sections

- Create COMPONENTS
  - Create the base components
    - Courses
    - Naming
    - Parametric Labels
  - Create Base End Conditions
    - Set Priorities
    - Naming
    - Overrides



- Assemble components into Typical Sections
  - Graphical drag and drop
  - Precision placement



# Template Tips

- Templates are the real power behind the Roadway Designer, so we are going to start with Template Tips.
- The “smarter” a template, the less work that needs to be done in Roadway Designer.
- Even complex templates can be elegant and simple to use.

But BEWARE of the....

***FRANKEN-TEMPLATE!!!***

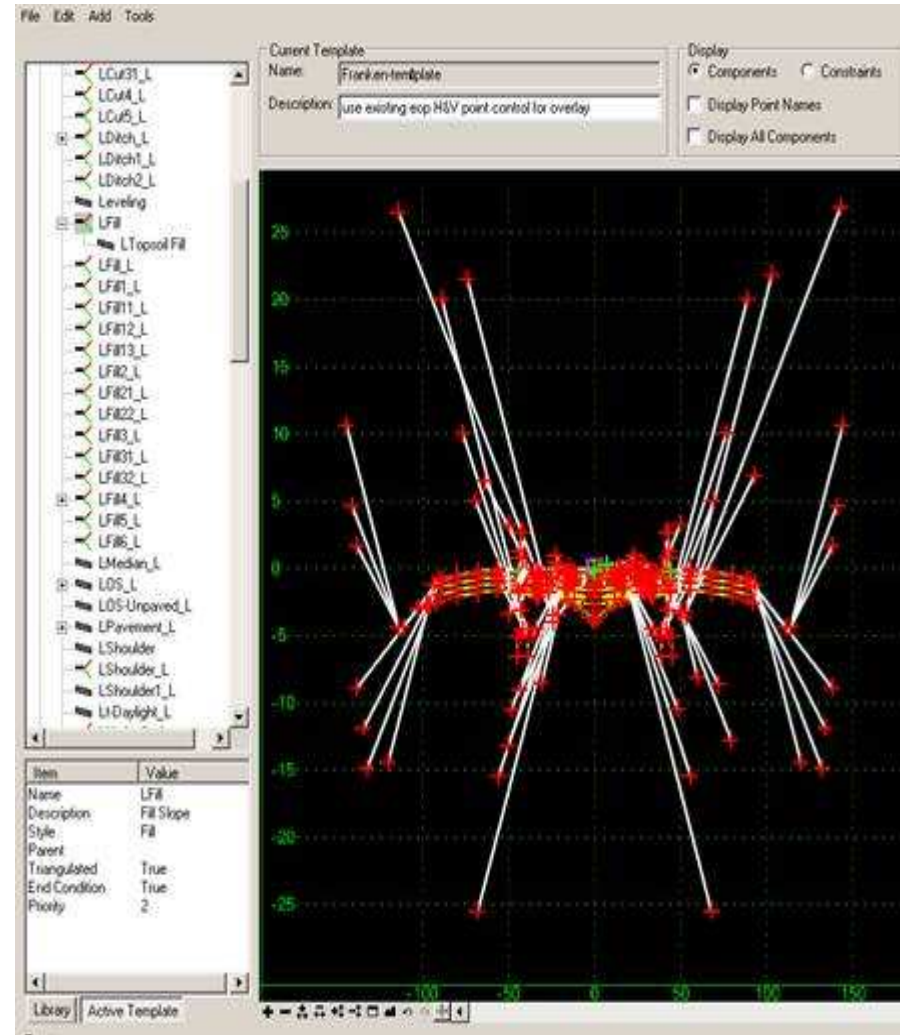
# Franken-tem - plate

-noun

/ Spelled Pronunciation [**Frank**-in **tem**-plit]

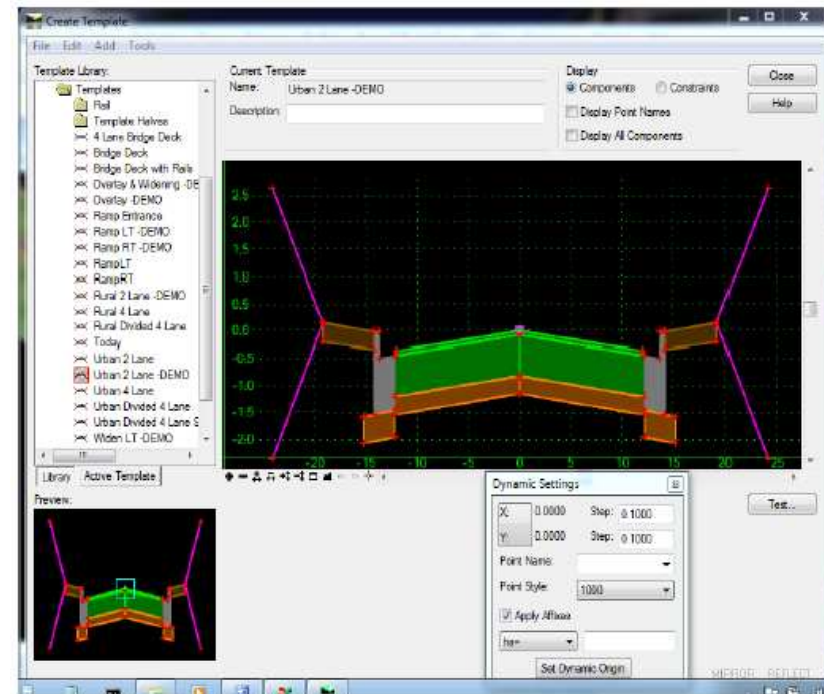
A typical roadway section consisting of an unheard of number of components, null points and end conditions as well as unnecessary display rules including double negative display rules and rules that exist only because the template was copied multiple times. Be aware of this type of template as opening such a template will oftentimes literally eat the individual alive.

Sentence: Bob sent me this Franken-template to look at, but I can't understand what exactly he was trying to do so I just rebuilt it for him from scratch.



# Roadway Design –Typical Sections

- Preview and testing module
- Attach document guides
  - Instructions, diagram, training
  - PDF, Word, TIF, .....
- Intelligent components

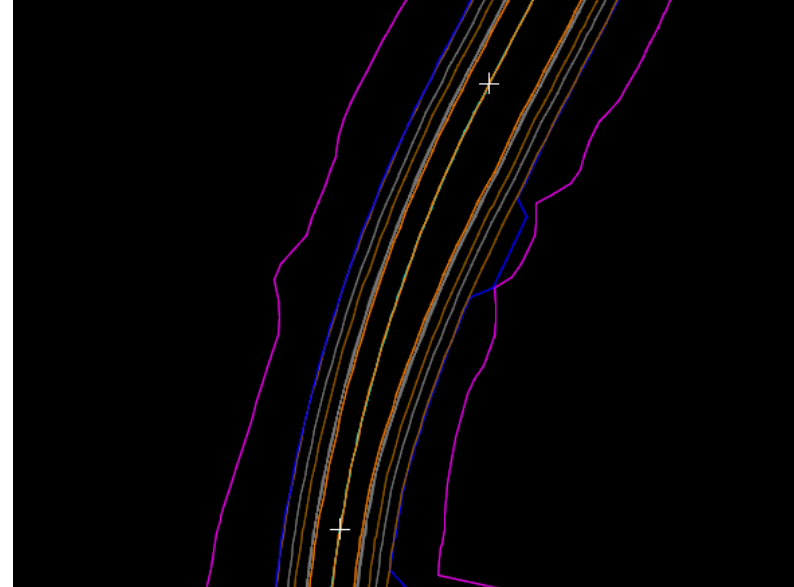


# The Roadway Designer

- Creating Design
  - Parametric
  - Point Controls
- Making Changes to Templates
  - Copying
  - Modifying
- Exceptions
  - End Conditions

# Point Controls

- Controls template points
  - Stretches Components
  - Changes slopes
  - Etc.
- Can assign to any template point.
- Cautions you when you have conflicting controls



X	1	L_ES	0+00.00	25+14.11	Vertical	Superelevation	Section1 L_ES:L_E...
X	1	R_ES	0+00.00	25+14.11	Vertical	Superelevation	Section1 R_ES:R_E...
X	1	R_EP	18+70.00	20+70.00	Horizontal	Alignment	Super Example
X	1	R_EP	20+70.00	25+14.11	Horizontal	Alignment	Super Example

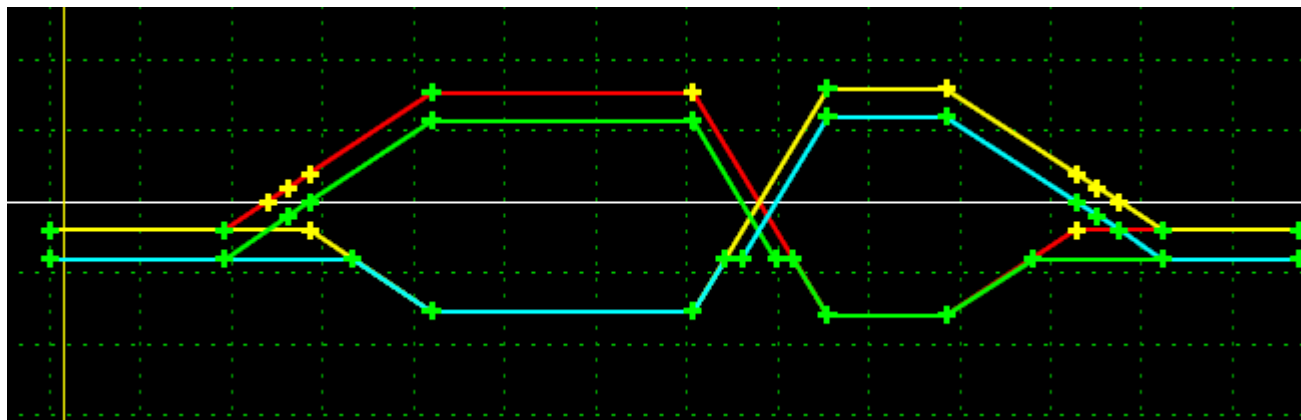
# Types of Point Controls

- Alignment
  - Horizontal
  - Vertical
  - Horizontal and Vertical
  - Honors gaps
- Feature
  - Horizontal
  - Vertical
  - Horizontal and Vertical
  - Honors gaps
- Style
  - Horizontal
  - Vertical
  - Horizontal and Vertical
  - Finds Closest
  - Honors gaps



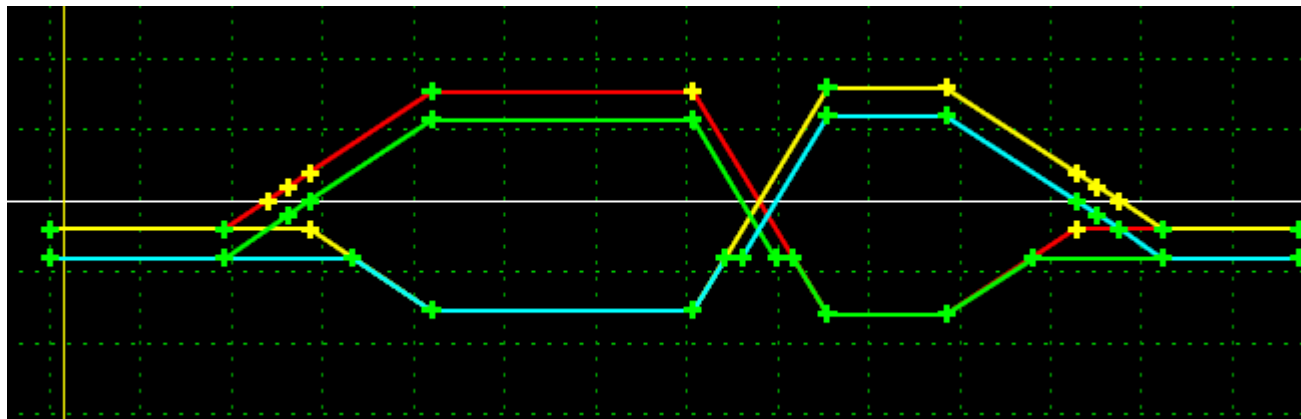
# Types of Point Controls

- Corridor Point
  - Horizontal
  - Vertical
  - Horizontal and Vertical
- Superelevation
  - Vertical



# Superelevation

- Nothing but a point control.
- Automatically generated and set through a wizard.
- Can be created manually
- Editable by several methods.
- Can turn on and off and edit.



# Demonstration