

## 7\_2 MEDIAN DITCH SLOPE STANDARDS

### Question:

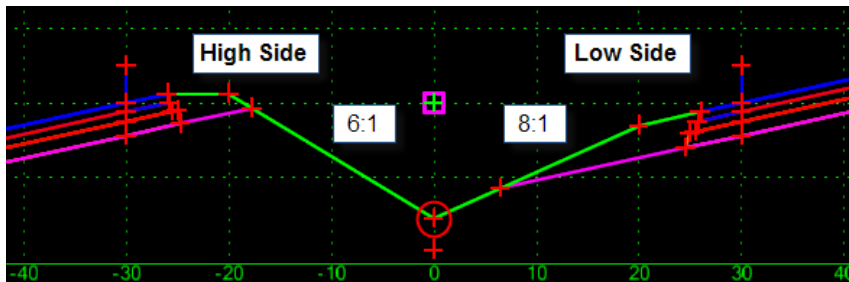
How are divided facility templates configured to control median ditch slopes?

### Answer:

Corridor modeling templates employ two methods of controlling median ditch slopes and they are mostly dependent on the condition (high side or low side) of the median.

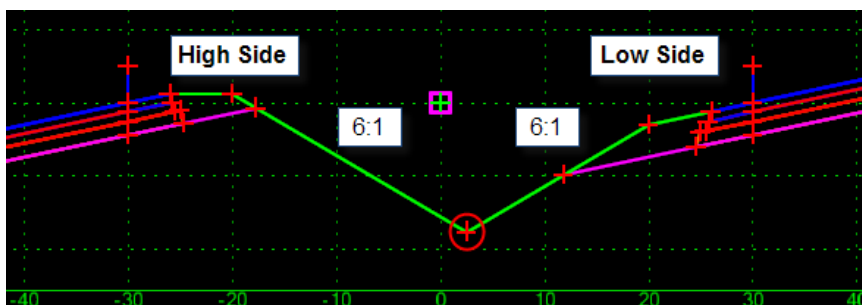
#### 1) Type 1 Median Ditch - Max Slope/Ditch Point at CL (Default)

A parametric constraint label **MD\_Ditch Max Slope** is used to initially set the default median ditch slope to 6:1. When not in normal crown (transitioning or at full super), a condition referred to as "high side" or "low side" of the median is formed. To maintain the median ditch point location at the centerline horizontal position, the low side of the median must be variable while the high side is fixed at the maximum slope. On either side of the median, the slopes should not be steeper than the set maximum slope.



#### 2) Type 2 Median Ditch - Fixed Slope/Ditch Point Floats

A parametric constraint label **MD\_Ditch Slope** is used to initially set the default median ditch slope to 6:1. When not in normal crown (transitioning or at full super), a condition referred to as "high side" or "low side" of the median is formed. To maintain a constant fixed slope on both sides of the median, the median ditch point must "float" left or right of the centerline. The ditch point will always shift toward the median low side.



As noted, Type 1 is used by default. To facilitate faster template customization, the two methods for controlling median ditch slopes are built into the backbone only (BBO) folder. Simply add the desired side slope (end condition) standards to complete the custom template.

- Department Standards
  - Components
  - End Conditions
  - Templates
    - Backbone Only
      - Divided Shld BBO - 1
      - Overlay BBO - 1
      - Shld Section Divided Facility Type 1 - Max/Var Slope Median BBO-1
      - Shld Section Divided Facility Type 2 - Fixed Slope Median BBO-1
    - Bridge
    - Culvert
    - Right Side Only
    - Road