

Applying Superelevation Shoulder Rollover in FDOTSS4 OpenRoads

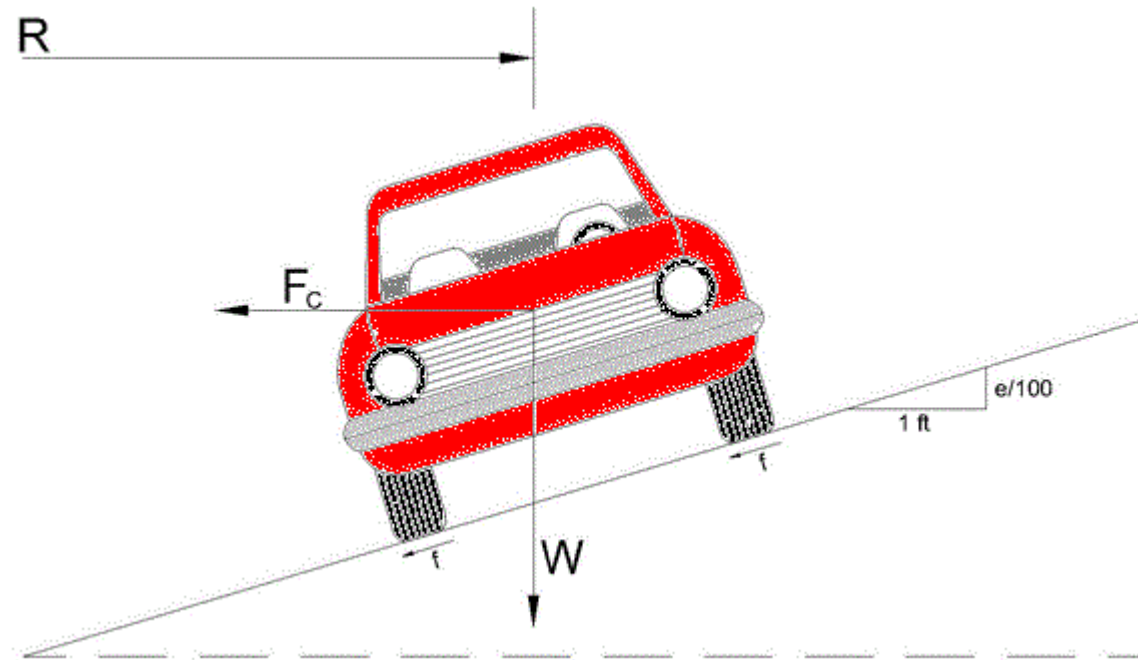


Production Support Office | CADD



Vern Danforth

Superelevation Design



Superelevation Design

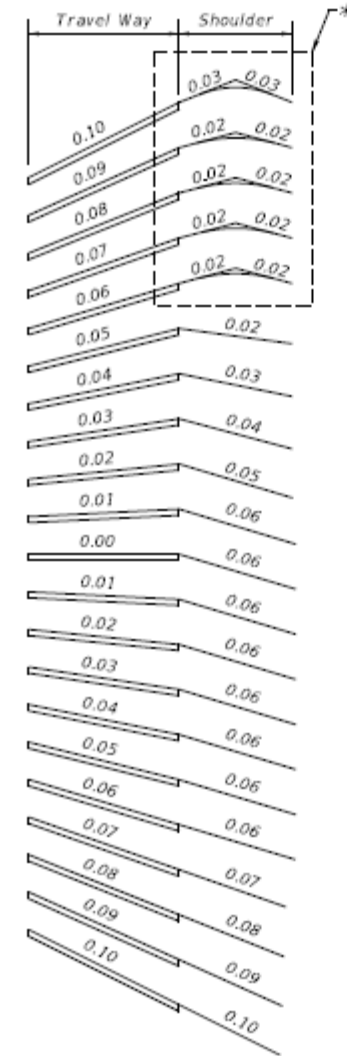
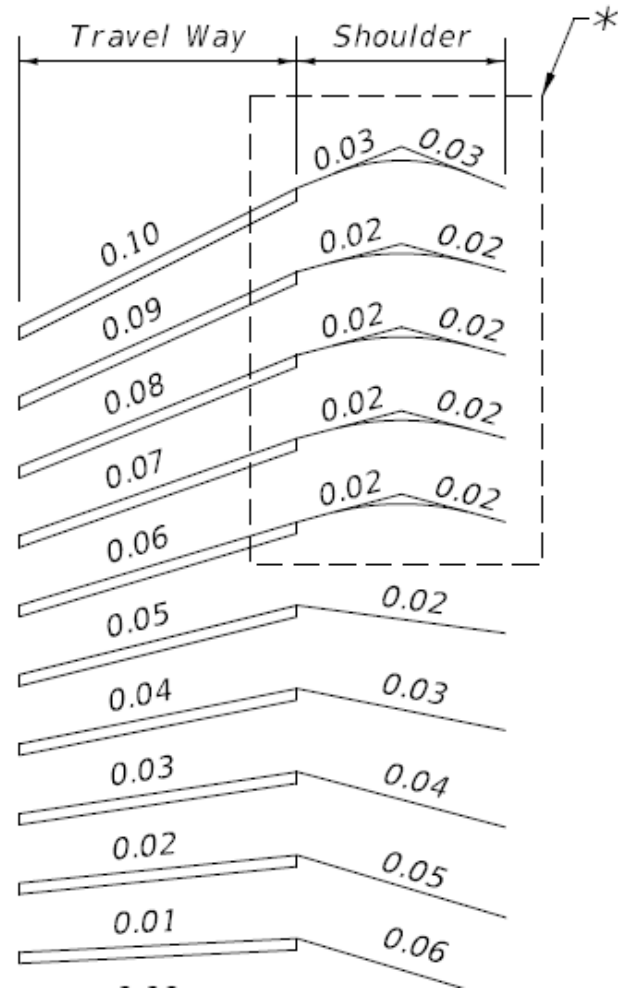


Superelevation Design



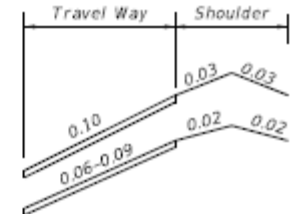
Superelevation Design

♦ FDOT Design Standard Index 510



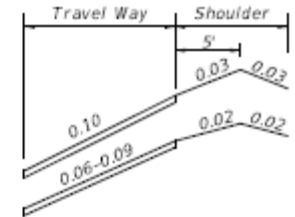
SLOPES OF TRAVELED WAY
AND ABUTTING SHOULDERS

SHOULDER SLOPES ON SUPERELEVATION SECTIONS

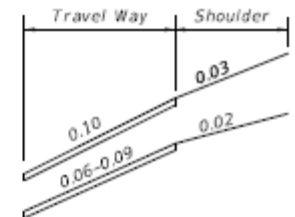


a) 12' AND 10' FULL WIDTH
SHOULDERS WITH 5' OR
LESS PAVED WIDTHS,

b) 8' FULL WIDTH SHOULDERS
WITH 4' OR LESS PAVED
WIDTHS,



8' FULL WIDTH SHOULDER
WITH 5' PAVED WIDTH

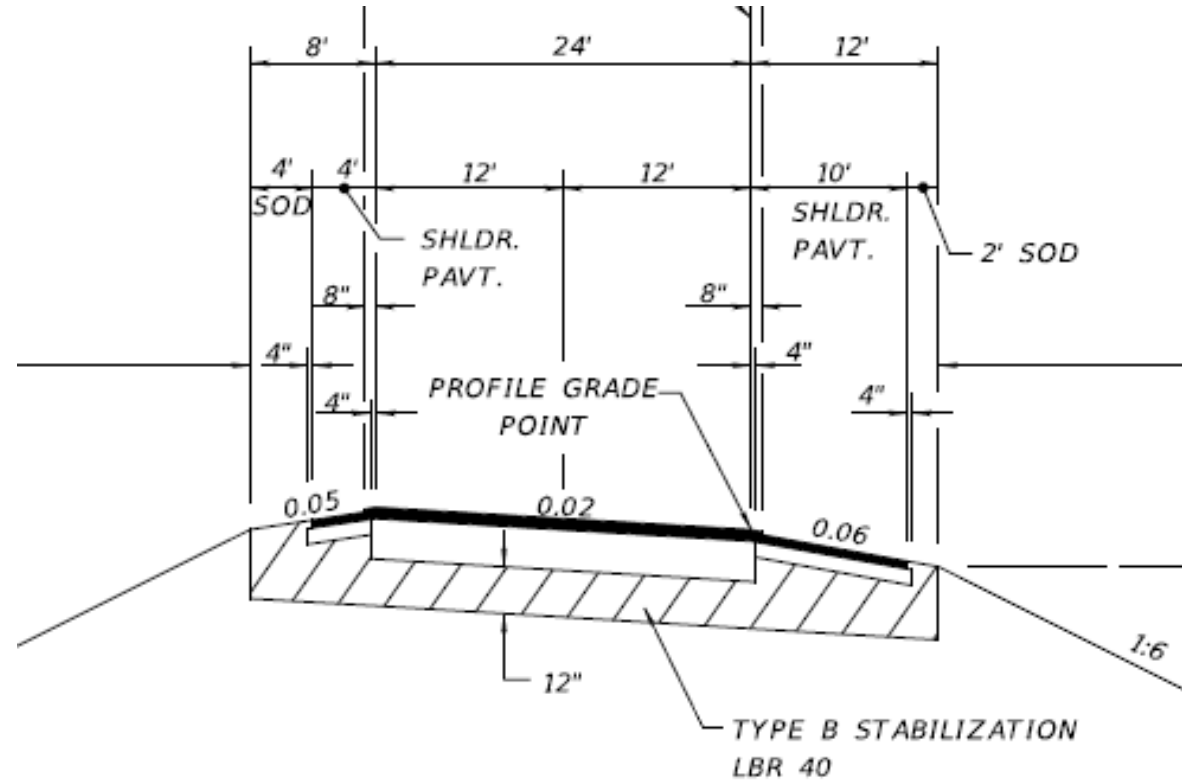


6' FULL WIDTH SHOULDER
WITH 5' OR LESS PAVED WIDTH

SPECIAL SHOULDER BREAK OVER DETAILS

Example Typical Section

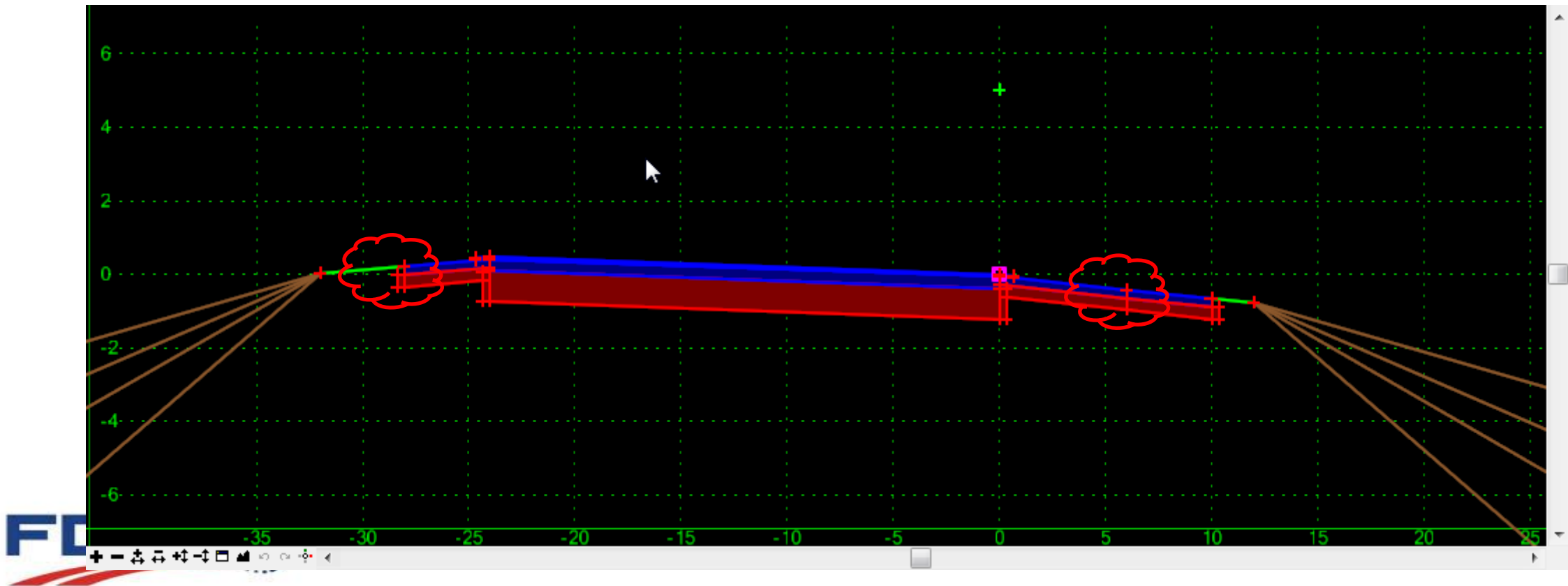
◆ Two Lane Ramp



TYPICAL SECTION
RAMP "C"

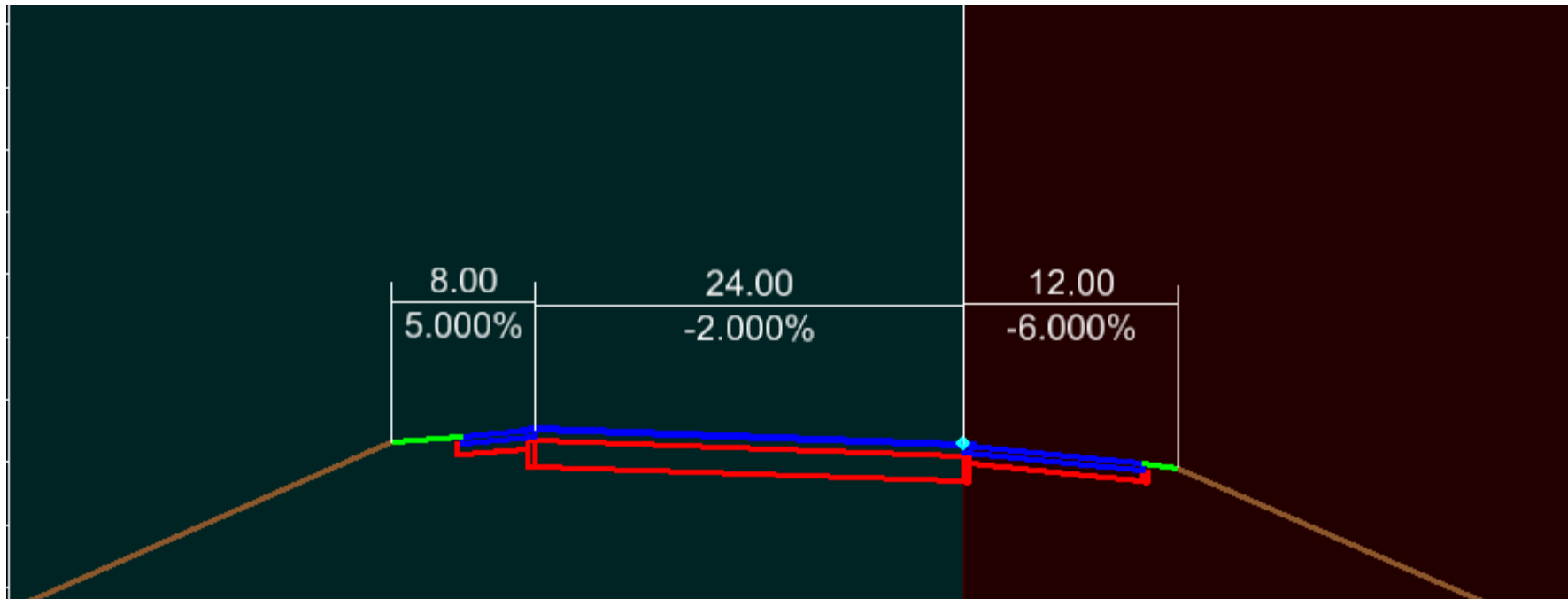
Example Template

◆ Two Lane Ramp Template



Example Template

◆ Two Lane Ramp Corridor Cross Section



Example Template

- ◆ Use Rollover Option for Superelevation $< (+/-)$ (6%)

Point Properties

Name:

☐ Use Feature Name Override:

Feature Definition:

☐ Superelevation Flag

Alternate Surface:

Member of:

- RT_RampShoulderPavedOutside
- RT_RampShoulderUnpavedOutside

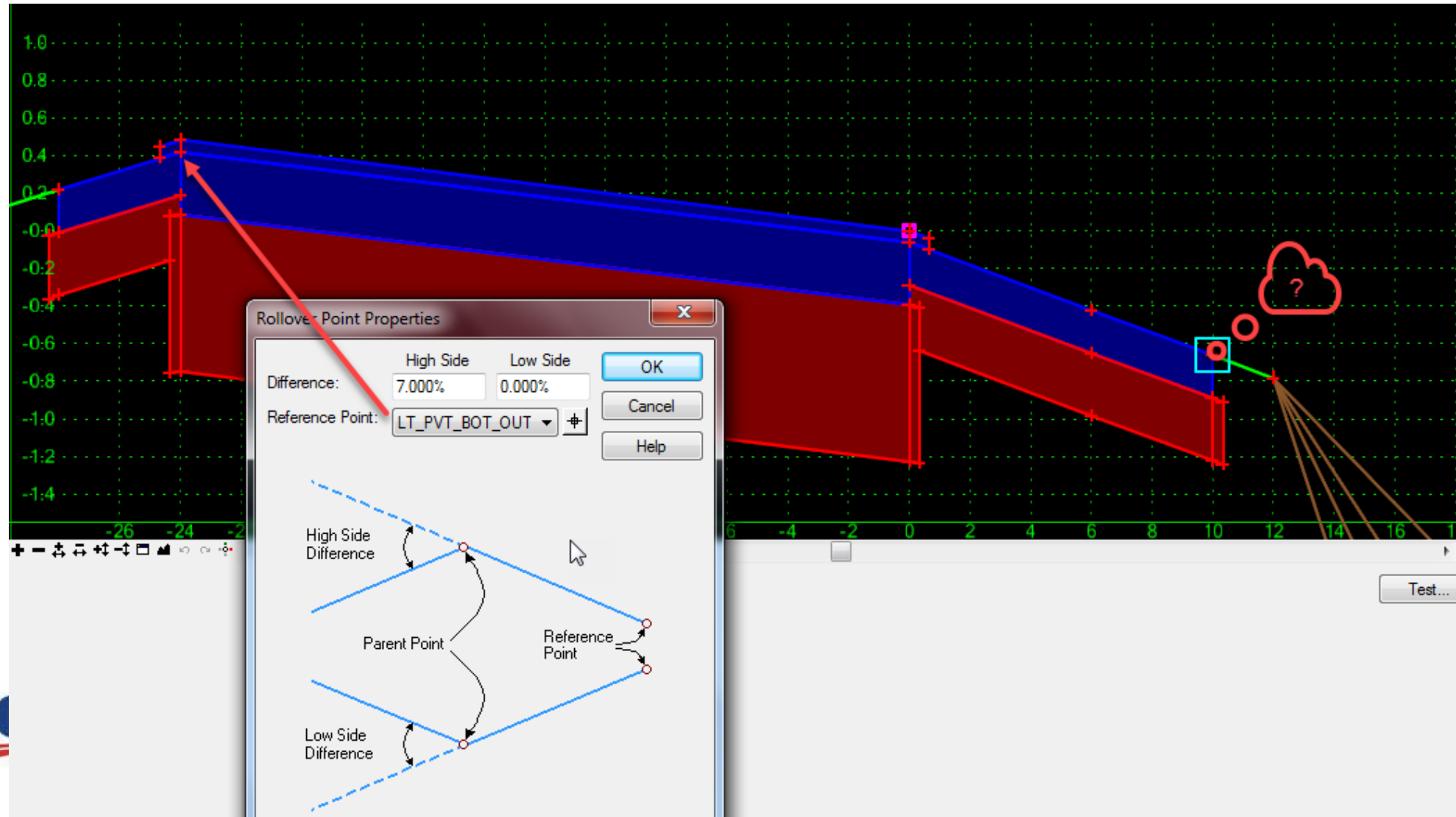
Constraints

Constraint 1		Constraint 2	
Type:	Horizontal	Type:	Slope
Parent 1:	PVT_BOT_CNTR Apply	Parent 2:	PVT_BOT_CNTR Apply
Value:	10.00 =	Value:	☒ Rollover Values... -6.000% =
Label:	PSHLDR_RampWidthOu	Label:	
☒ Horizontal Feature Constraint:	ShoulderPaved(PSHLDR)		
Range:	15.00		



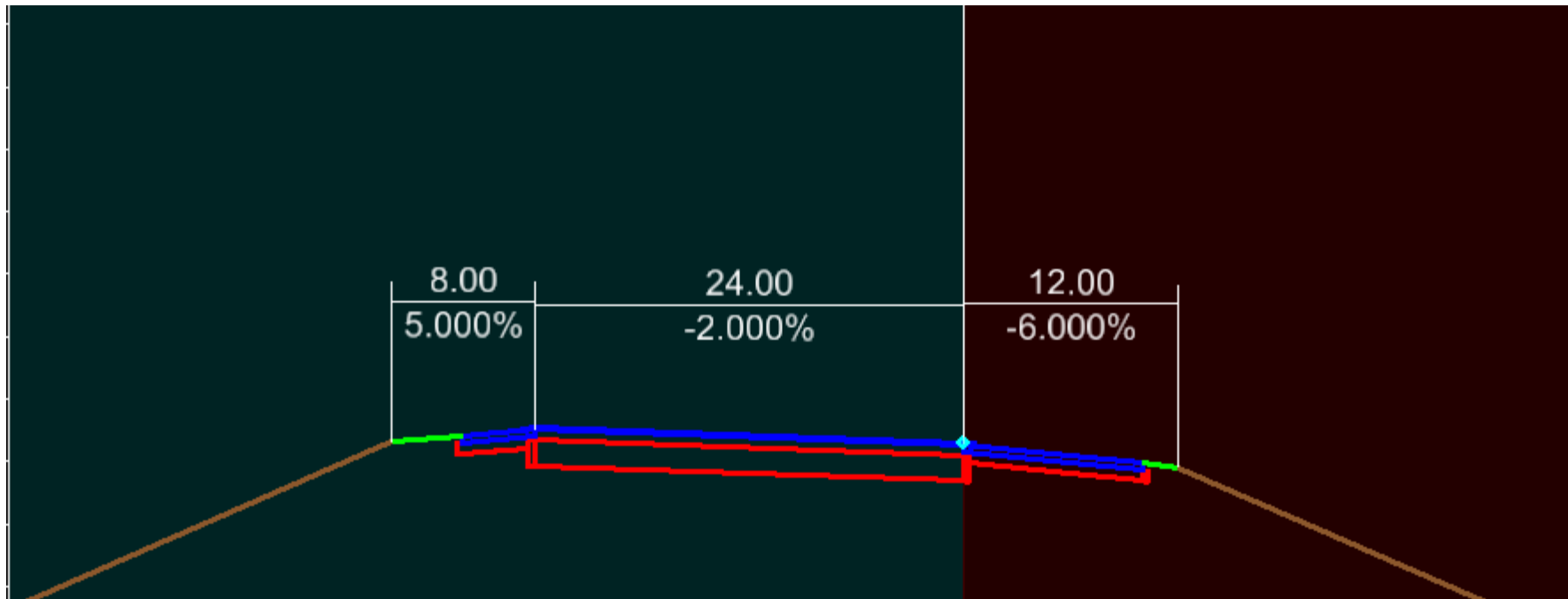
Example Template

- ◆ Use Rollover Option for Superelevation $< (+/-)$ (6%)



Example Template

◆ Two Lane Ramp Corridor Cross Section



Superelevation Setup Steps

1. Create Superelevation Shapes Design Model
2. Create Superelevation Sections
3. Create Superelevation Lanes
4. Calculate/Import Superelevation
5. Editing Superelevation Shapes (graphics and Project Explorer)
6. Template Superelevation Controls (flags and rollover)
7. Assign Superelevation Sections to Corridors
8. Open Cross Section Viewer
9. Superelevation Reports and Diagram Editing

Contact Information

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QUESTIONS AND COMMENTS?

Thank you for attending !