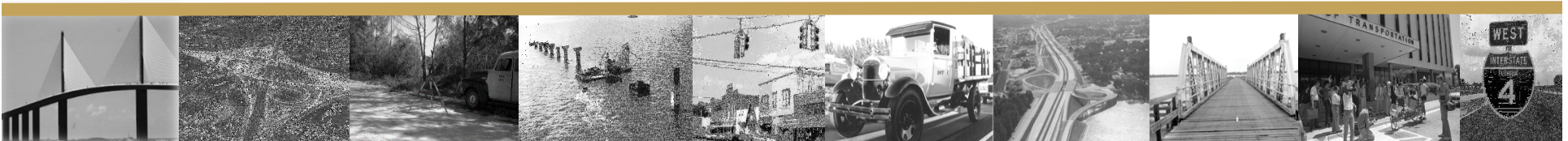# Detail Modeling Tools in FDOTSS4

Vern Danforth

Wednesday, June 10, 2014 1:25pm

*Innovative Solutions for tomorrow's transportation needs*
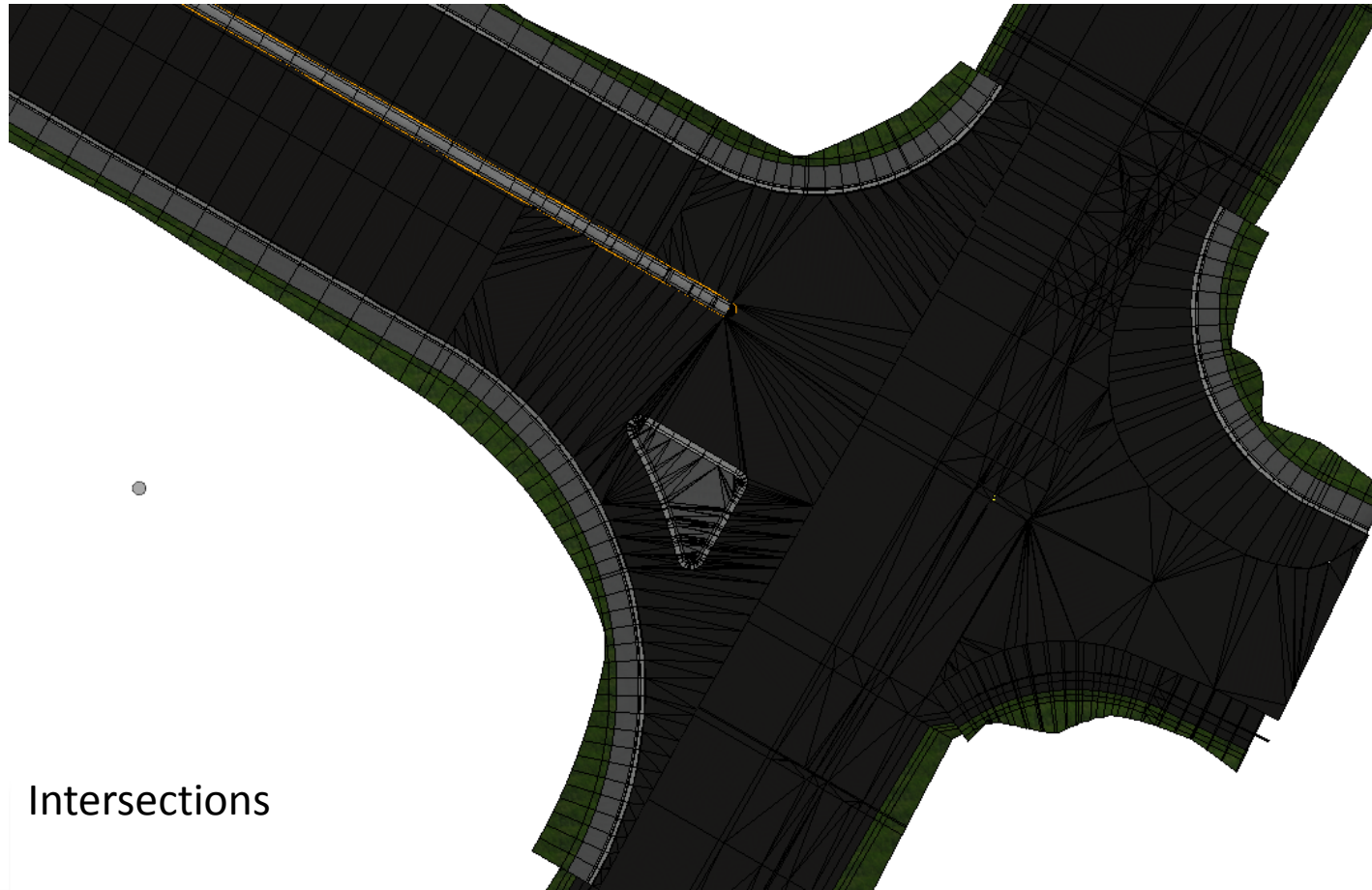
# Detailing the Corridor Design

- Intersections
- Driveway and Side Roads
- Traffic separator Nose
- Turning Islands
- Curb Transitions
- Roundabouts

- MES Slope Transitions
- Median Crown Crossover
- Retention Pond Design
- Gore Areas
- Restricted Left Turn Islands
- Sidewalk Ramps

# Detailing the Corridor Design



Intersections

# Detailing the Corridor Design



Traffic Separator Nose

# Detailing the Corridor Design



Traffic Refuge Islands

# Detailing the Corridor Design



Side Roads/ Rural Driveways

# Detailing the Corridor Design



Intersection Crossover Pavement

# Detail(site) Modeling

Plan ahead – where to use templates, where to use detail modeling

- Linear Templates
- Terrains and Surface Templates
- Integrating with Corridor Clipping
- Leverage 3D Civil Cells(advanced)

Create corridor end condition gaps (optional)

- Template triggers
- Template switches
- End condition exceptions

# Detail(site) Modeling

**GENERAL WORKFLOW STEPS**

1. Develop Corridors Models

2. Build 3D lines by Plan(2D) and profiles – This is the Key Concept!

3. Create Terrain from Elements

4. Apply a Surface Template to Terrain for depth

5. Apply a Linear Template on edges

6. Add Corridor Clipping References (as necessary)

# Detail(site) Modeling

**Vertical Geometry TOOLS** - <span style="color:red">These are the Key Tools!</span>

- Profile by 3D Element

- Quick Profile Transition

- Profile Intersection Point

- Quick Profile from Surface

- Profile Complex by Elements
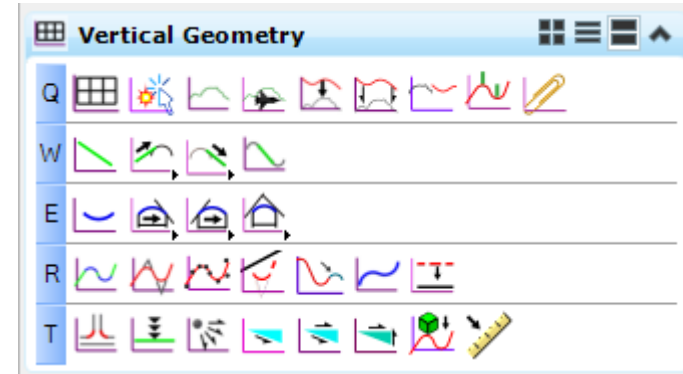
- Profile By Slope from Element

# Detail Modeling Tools

- Vertical Profile Constructs
    - Profile by 3D Element
    - Profile from Surface
    - Profile Intersection Point
    - Project Profile to Element
    - Profile by Slope from Element

- Terrain Model
    - Create from Elements
    - Add Features to Terrain
    - Export To File

- 3D Geometry
    - Apply Linear Template
    - Apply Surface Template
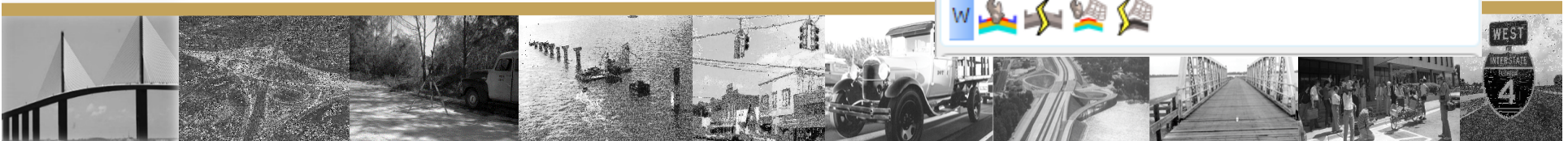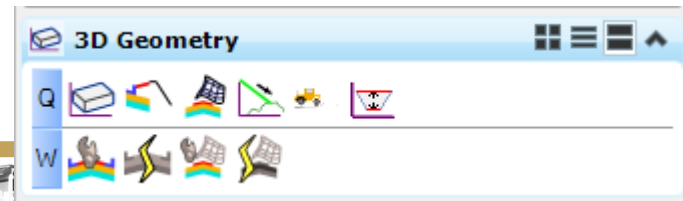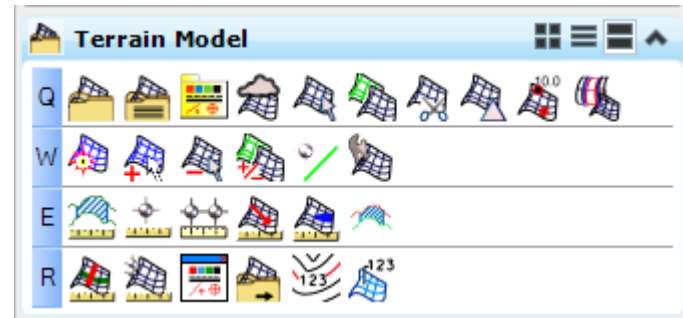
# Example FDOTSS4 Project Model

- [Detail Model](#)

# Example FDOTSS4 Project Model

- [Detail Model](Detail Model)

# Example FDOTSS4 Project Model

- [Detail Model](#)



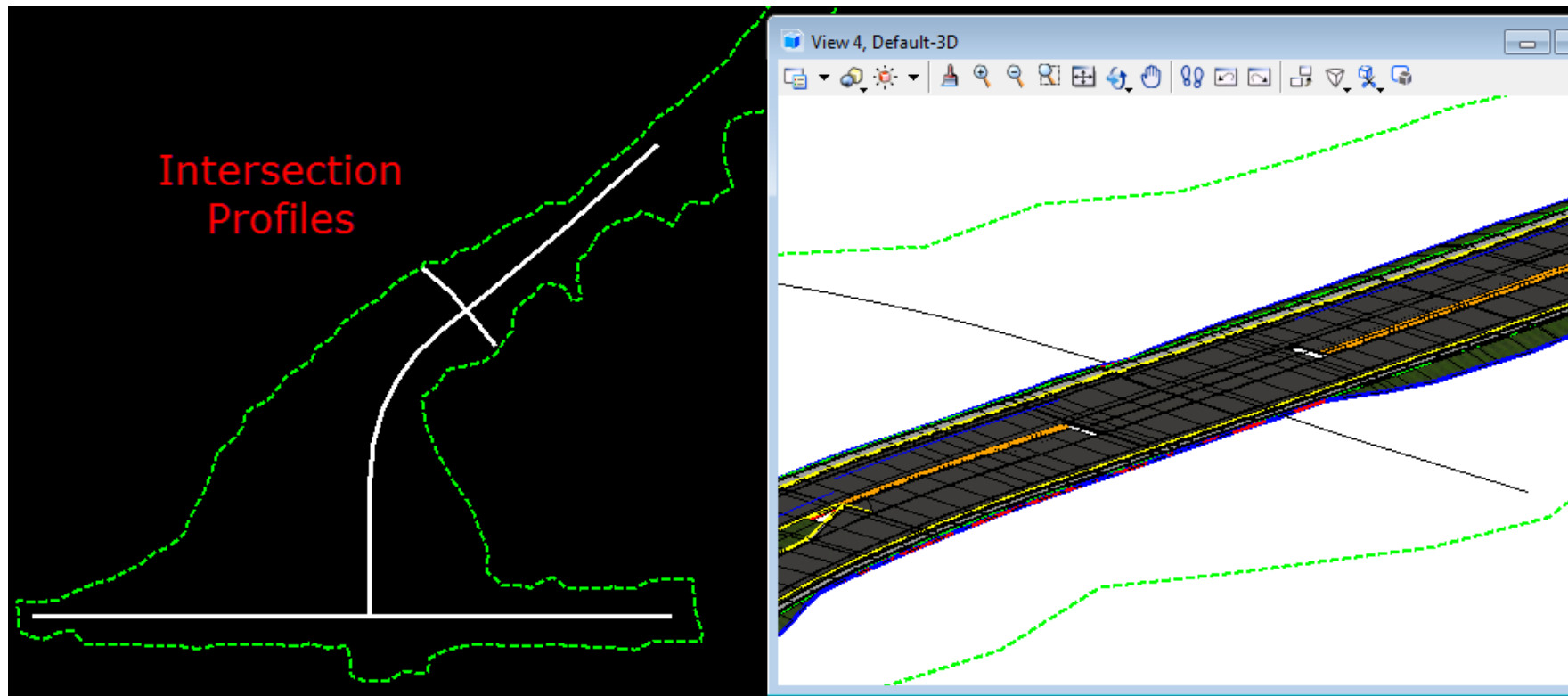DTMTemp Surface Template
Level: Default
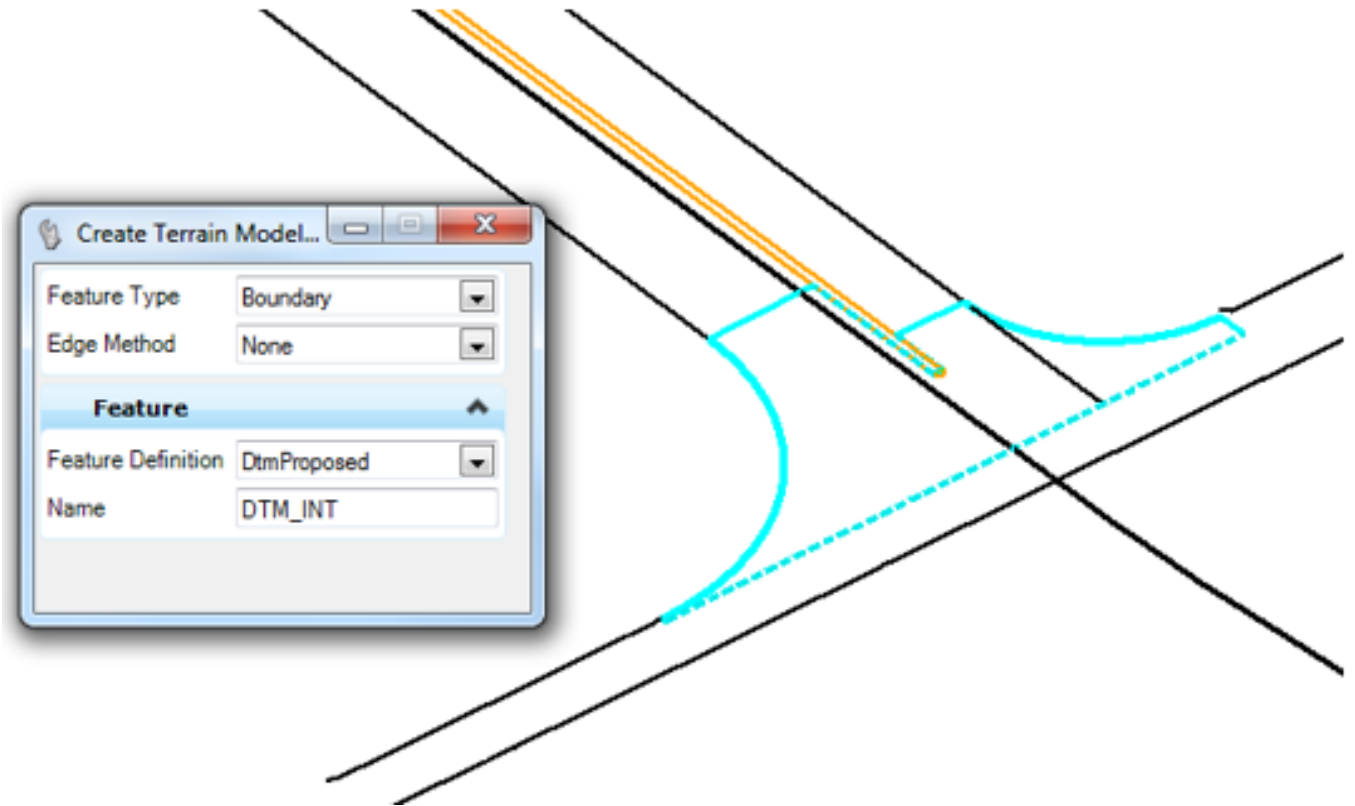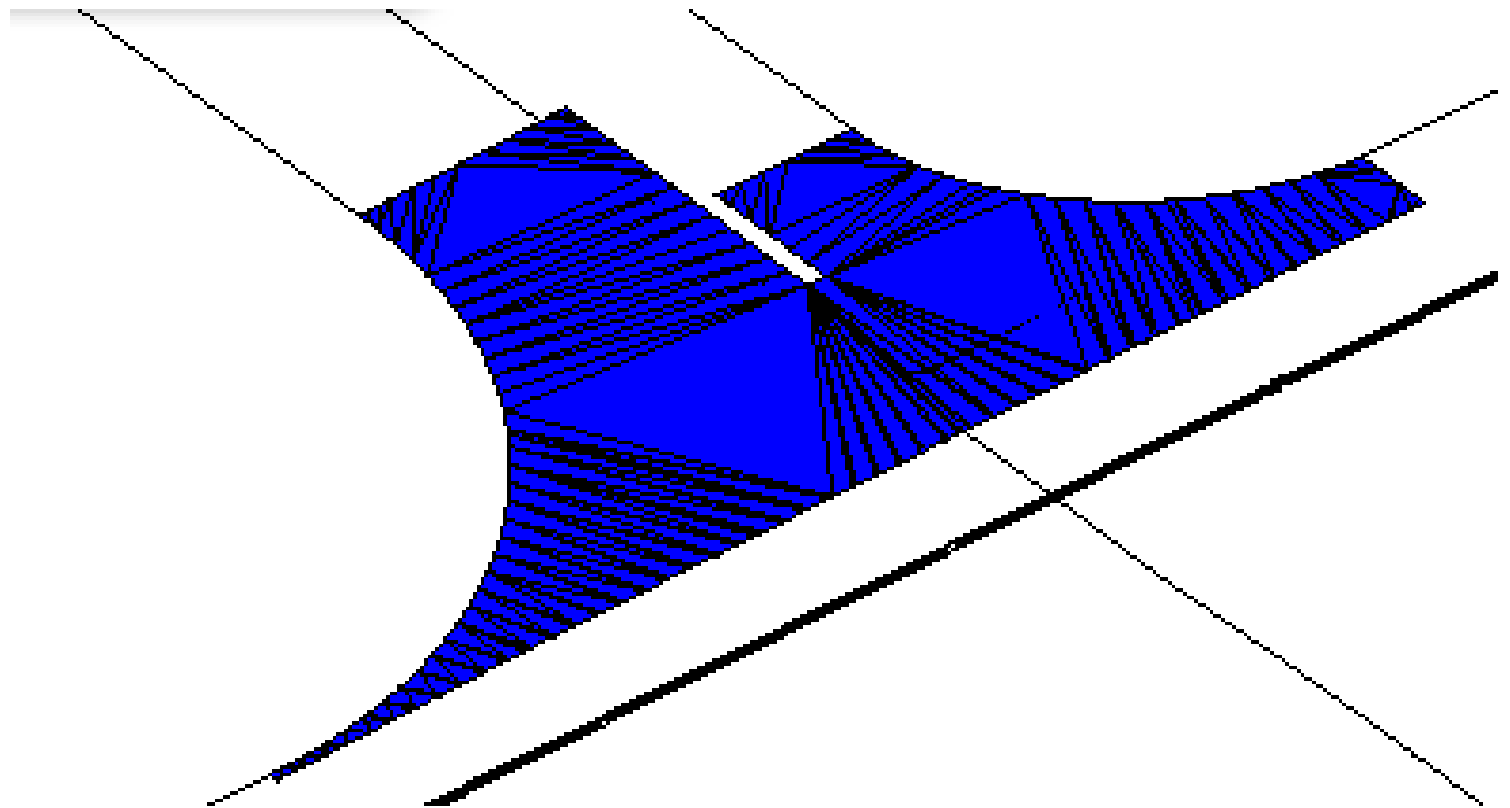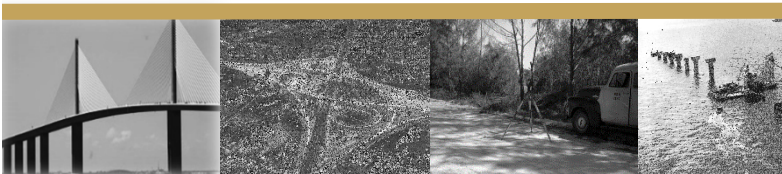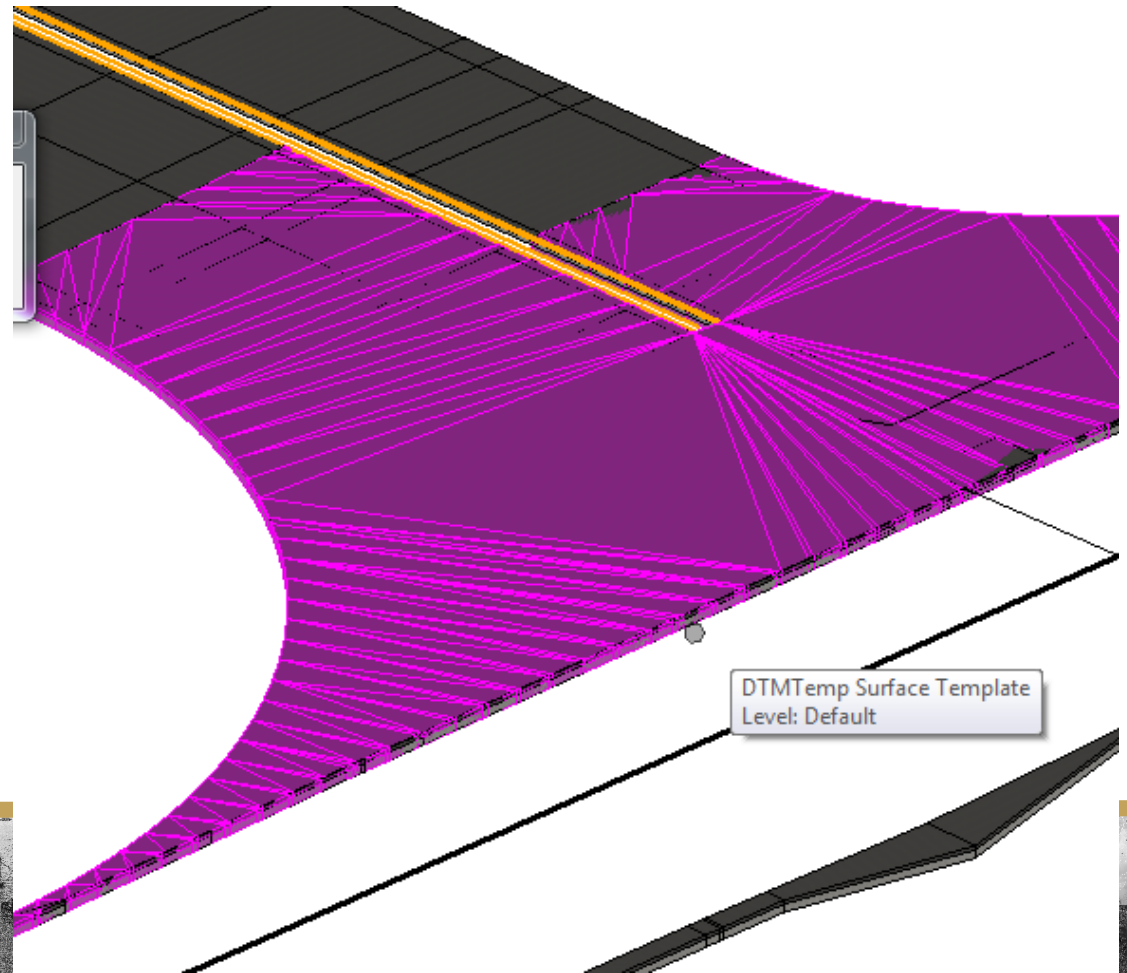
# Example FDOTSS4 Project Model

- [Detail Model](#)
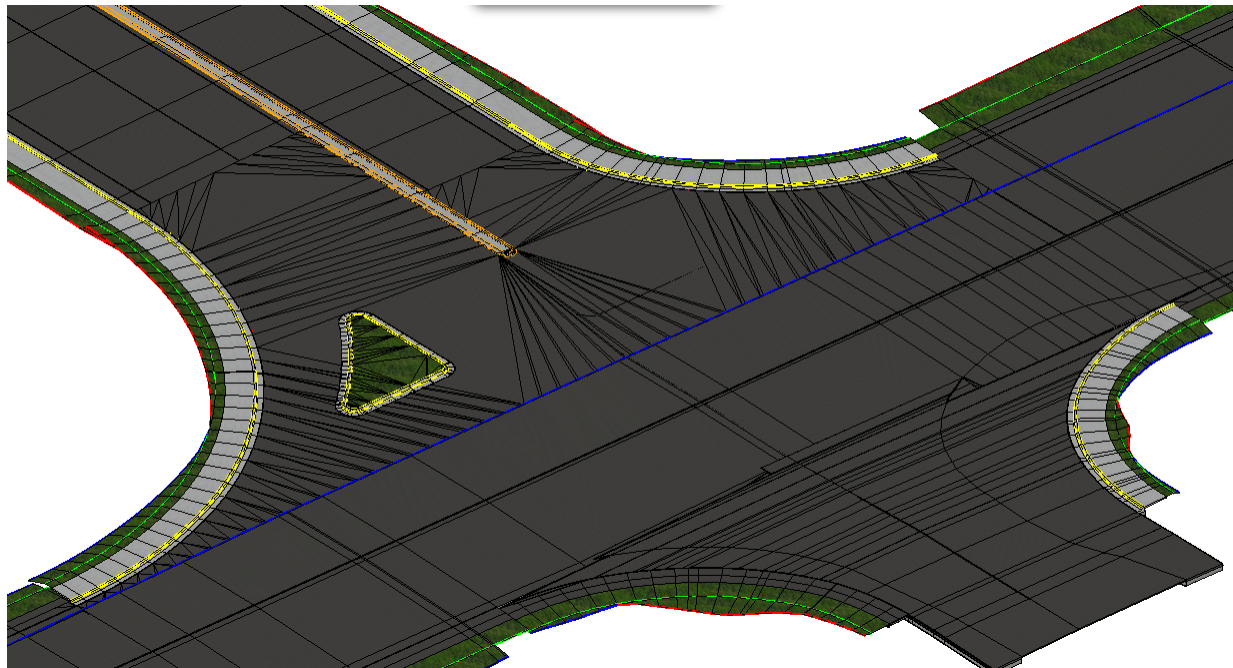
# Construct Profiles

# Intersecting Profiles
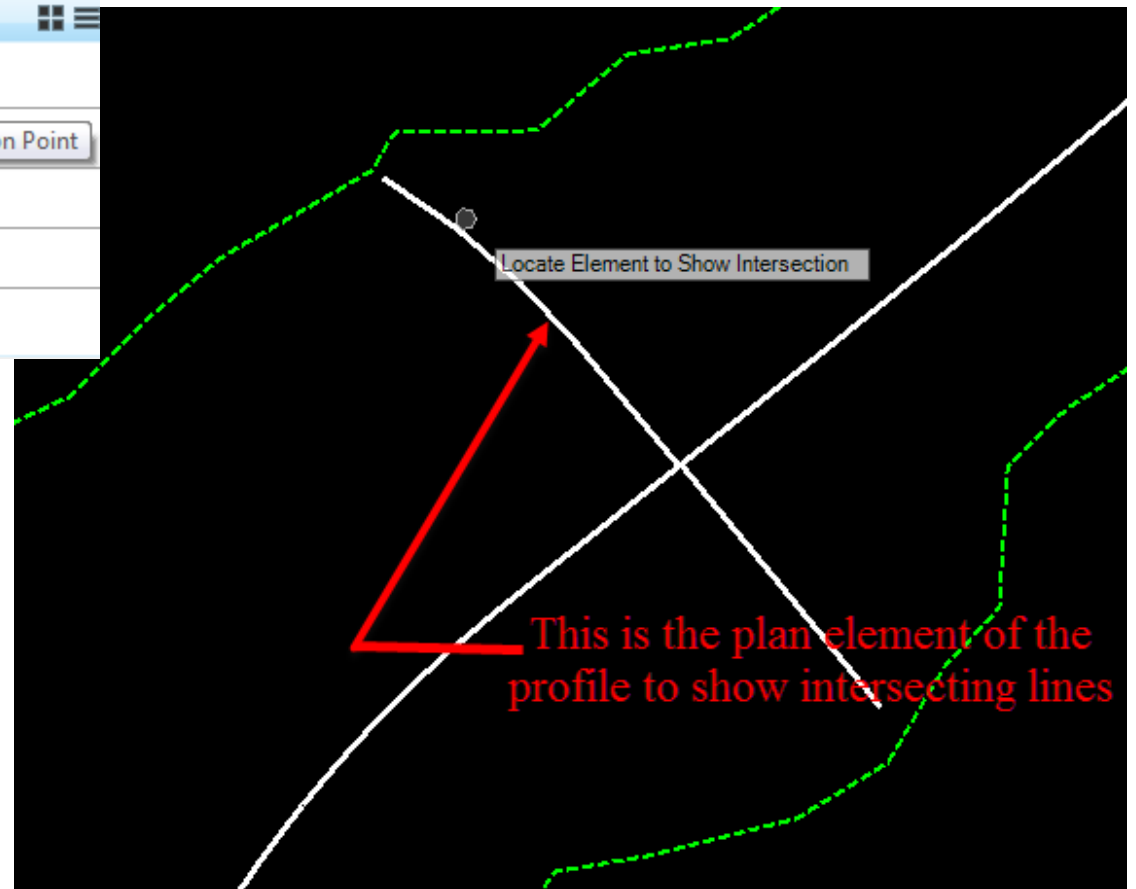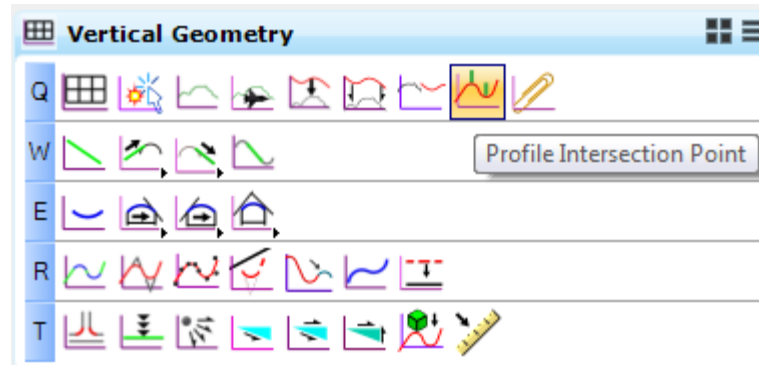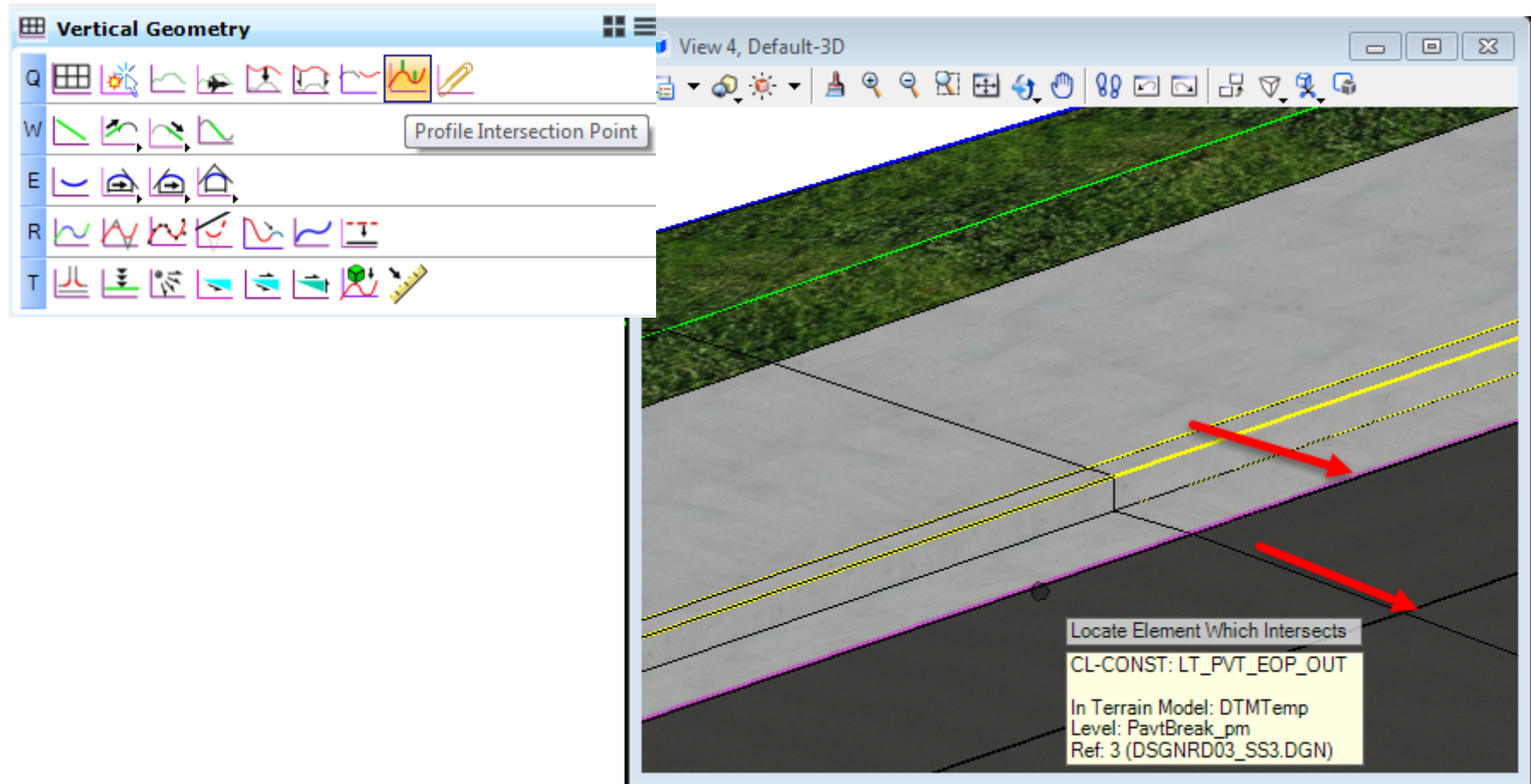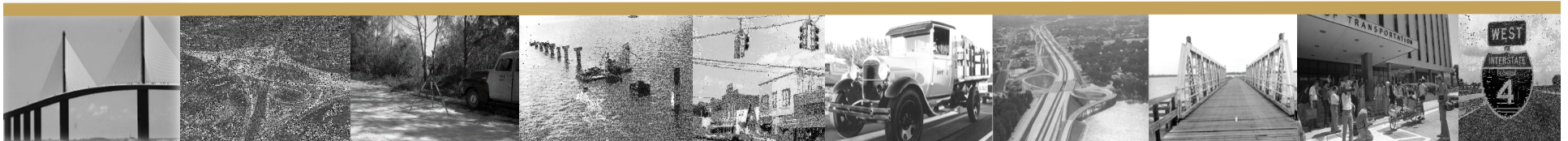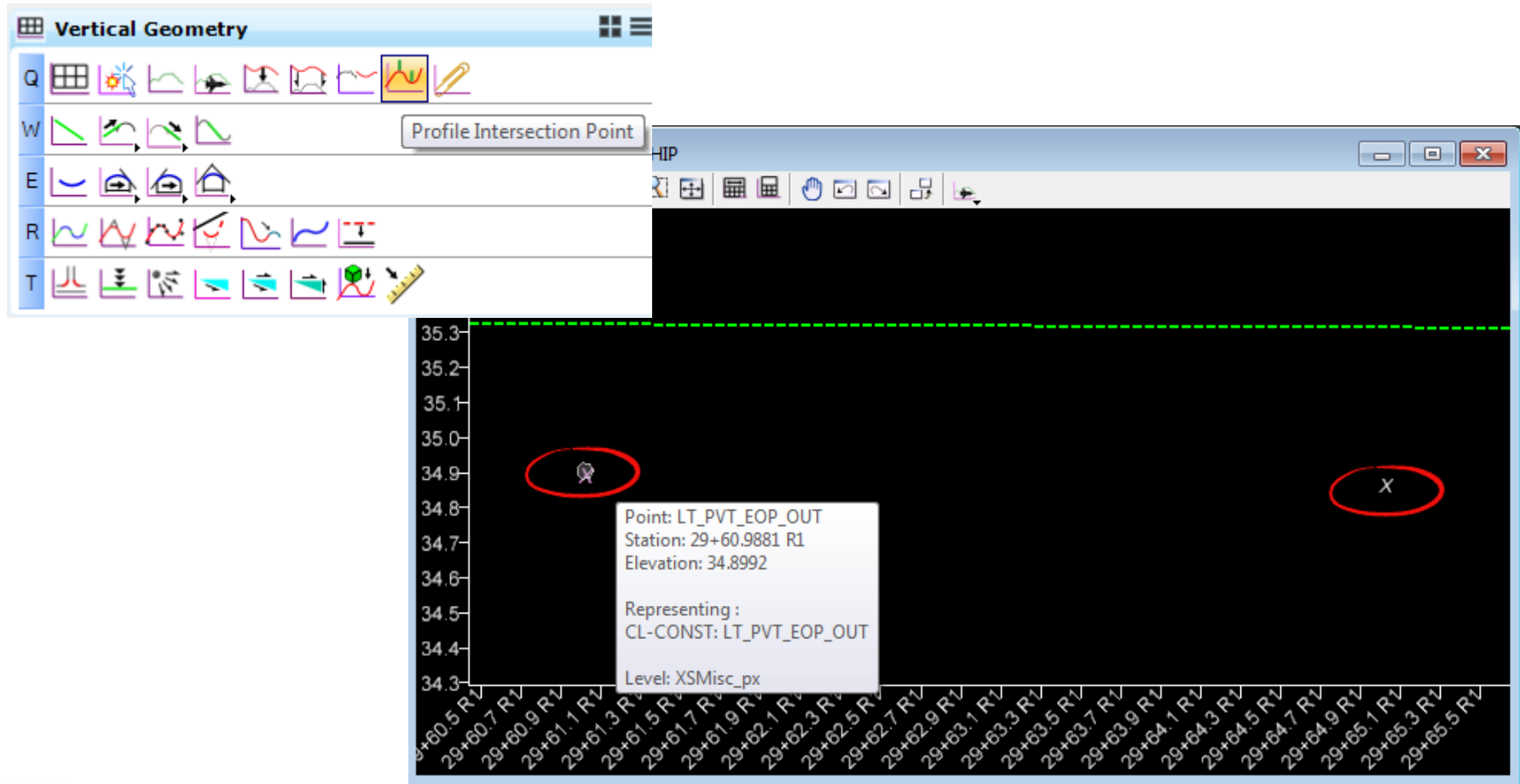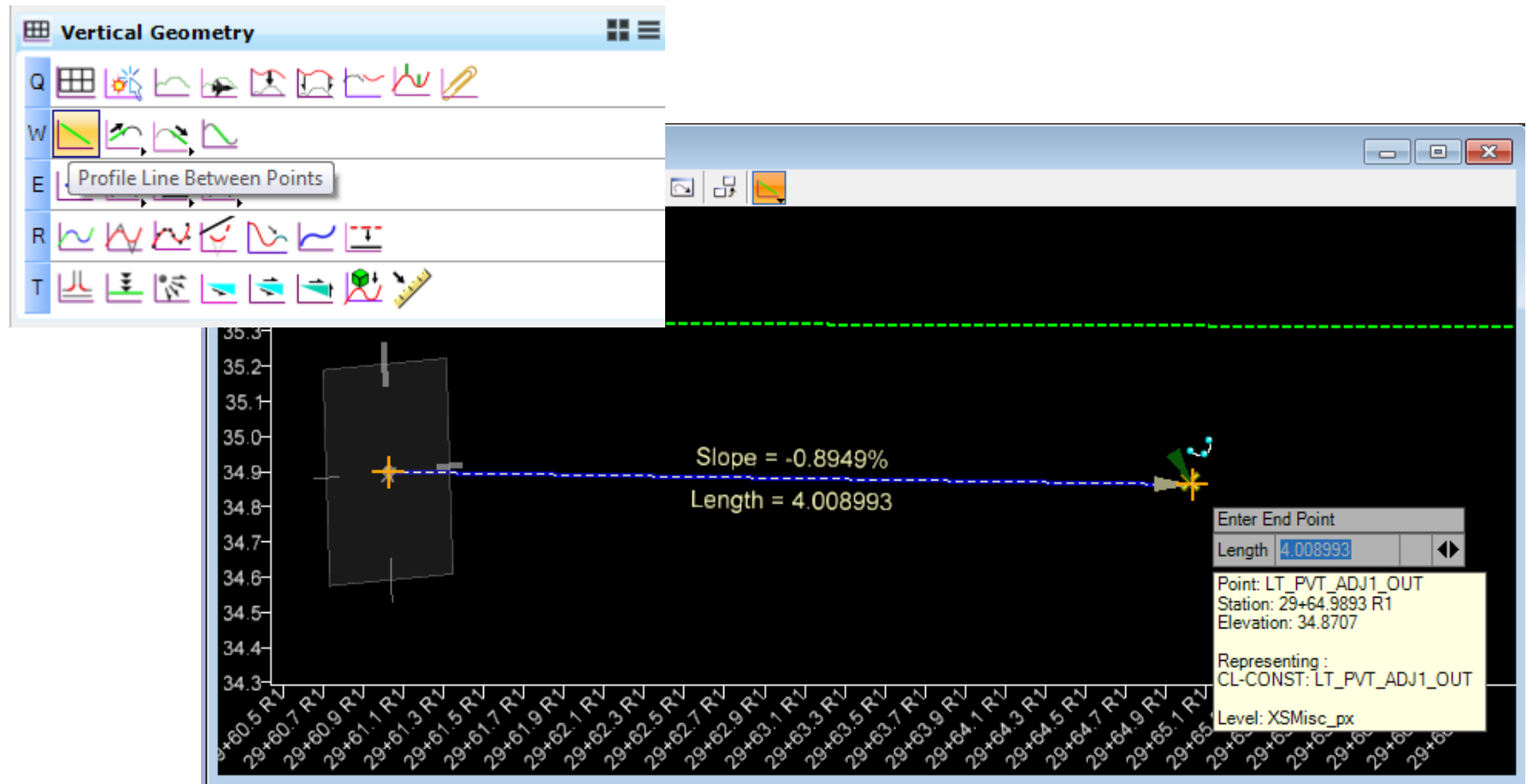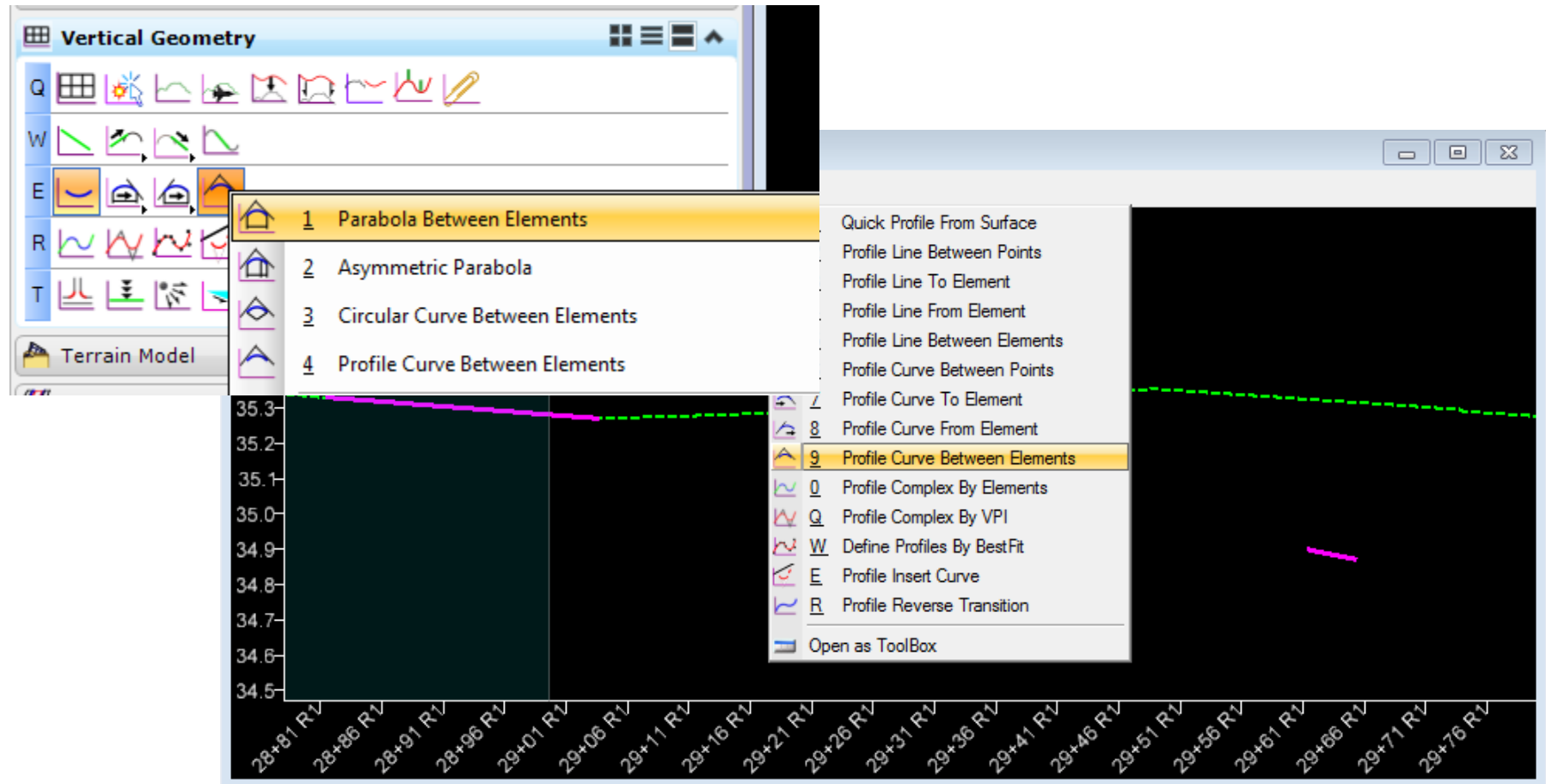
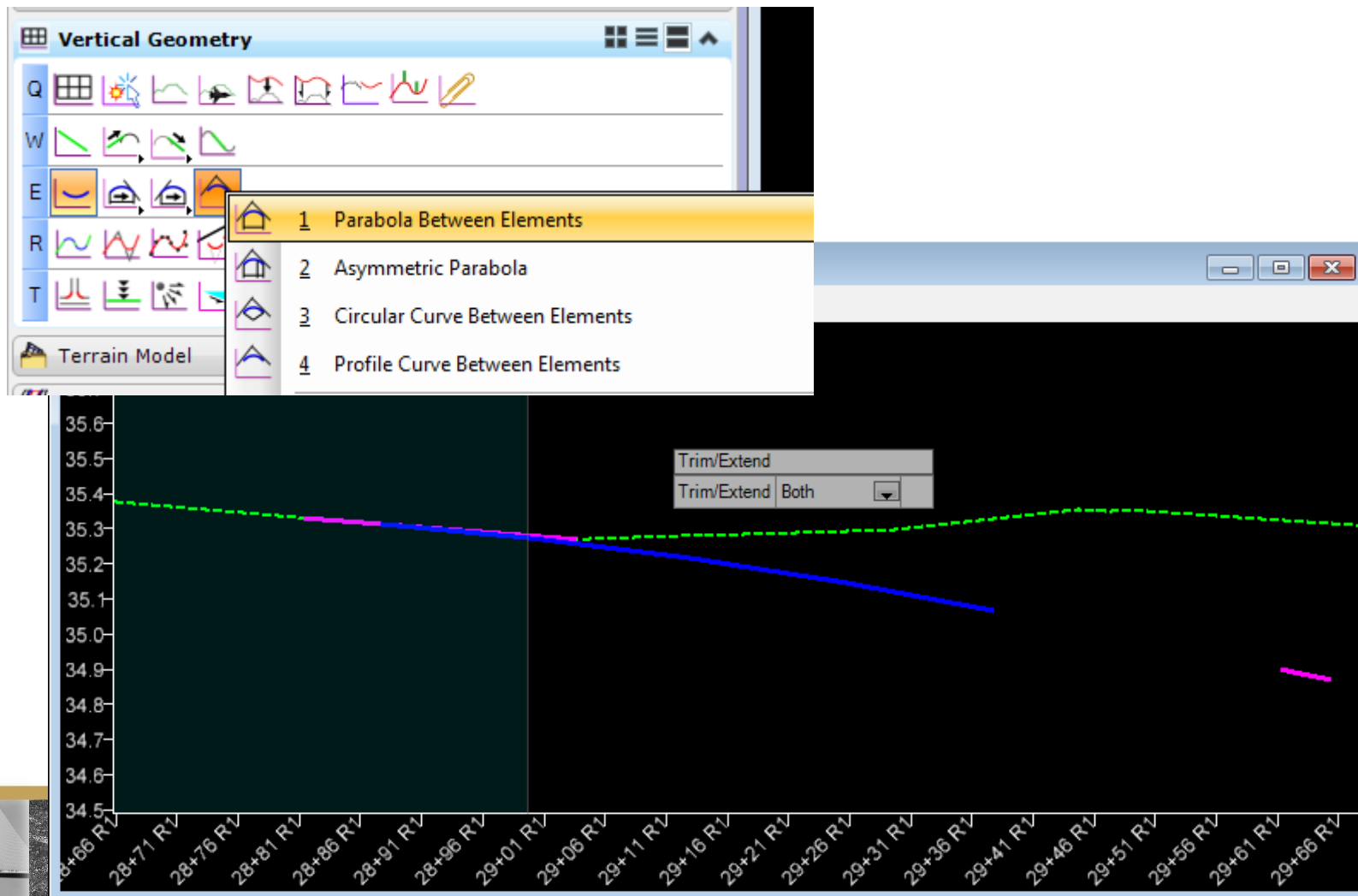# Intersecting Profiles

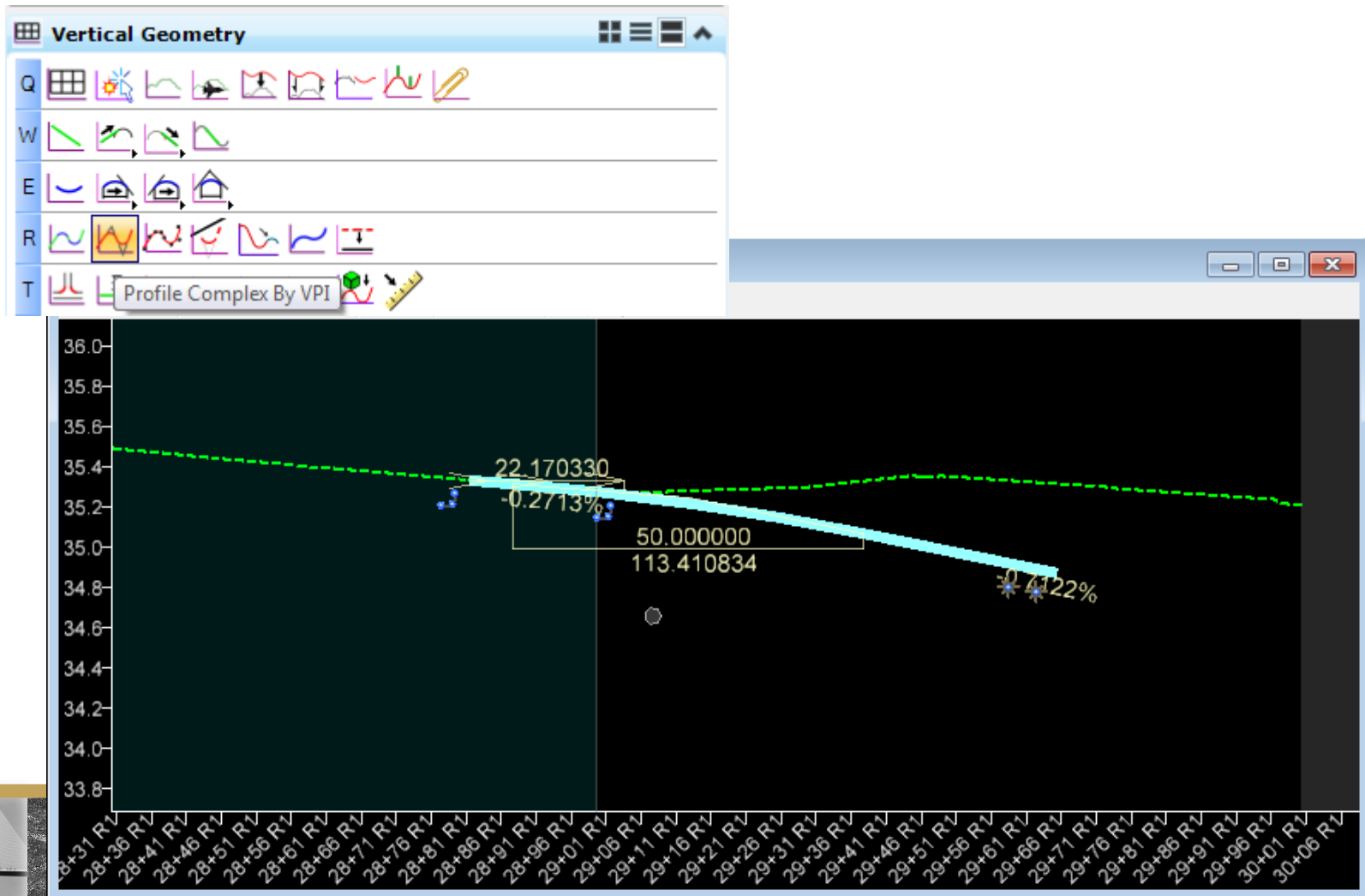# Intersecting Profiles
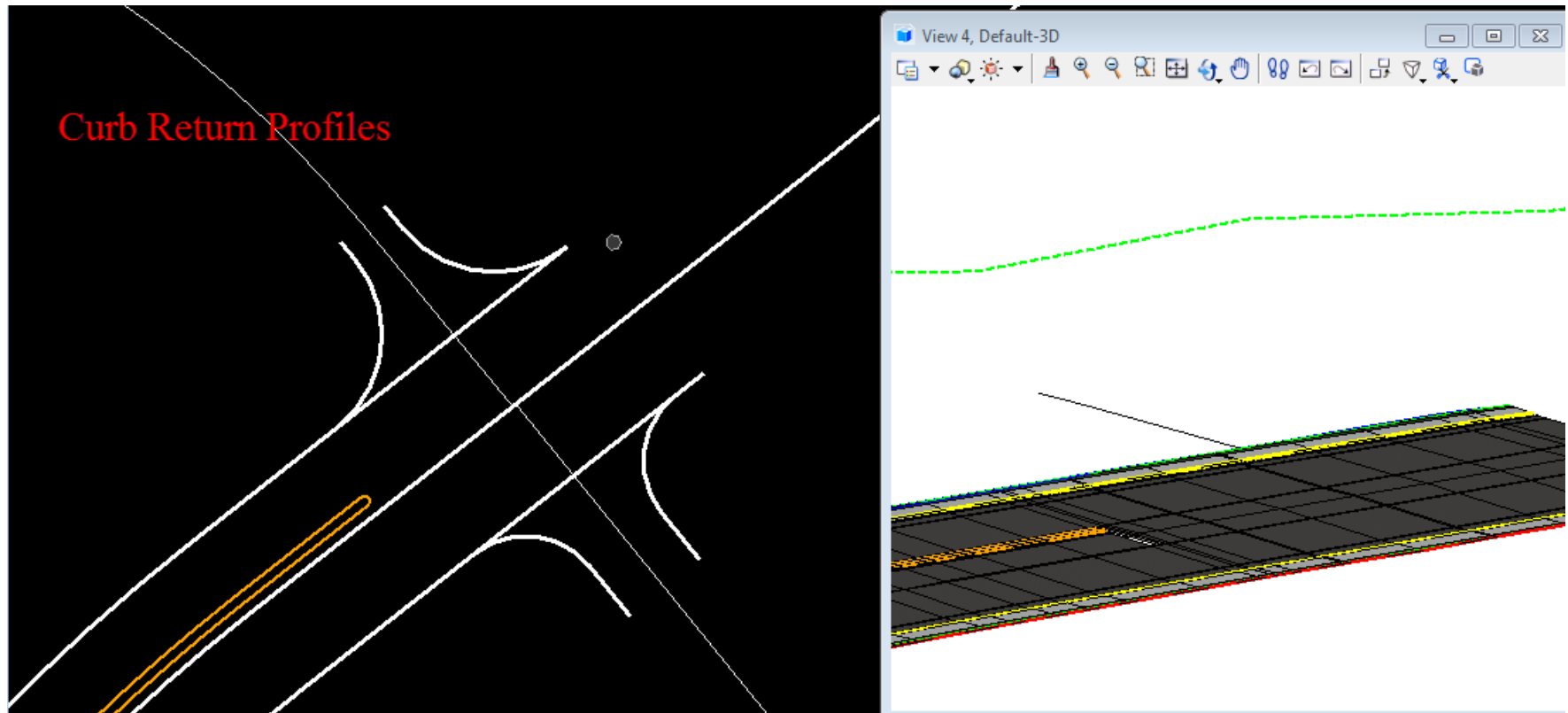
# Intersecting Profiles

# Intersecting Profiles
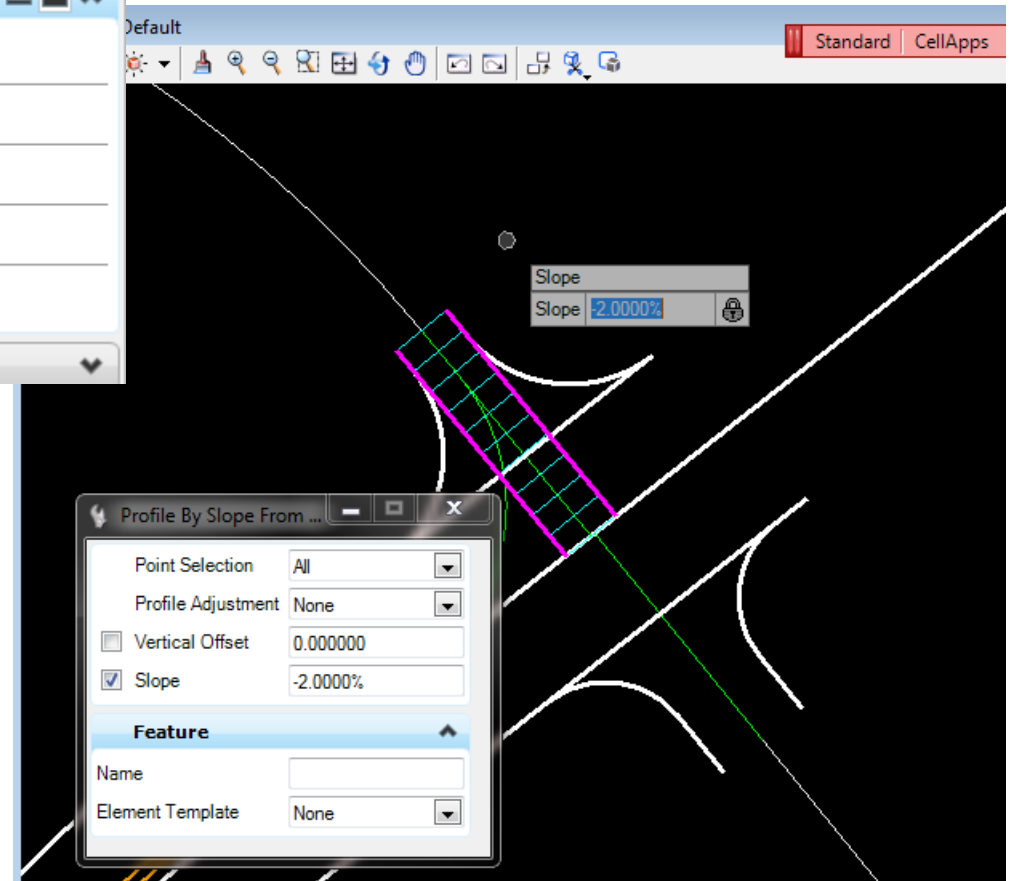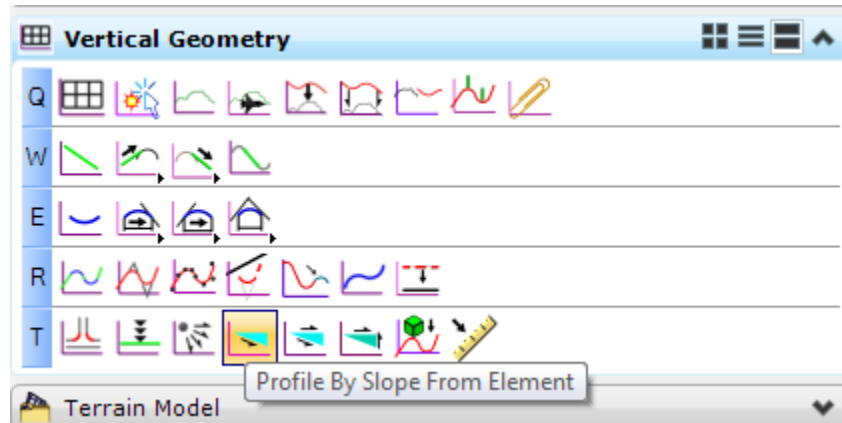
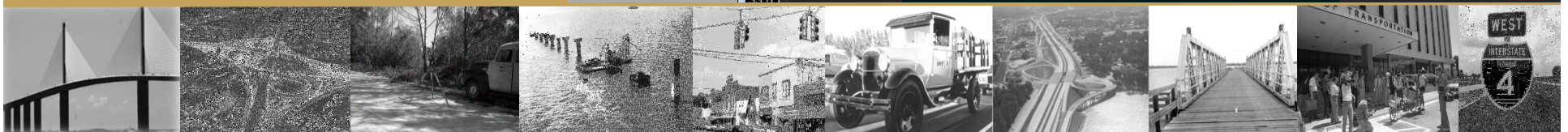# Intersecting Profiles

# Intersecting Profiles

# Construct Profiles



Curb Return Profiles

View 4, Default-3D

# Construct Profiles
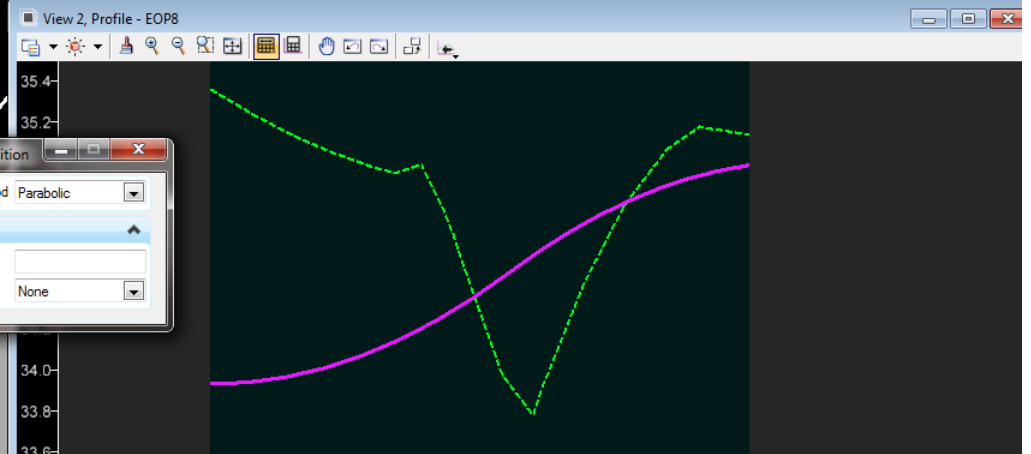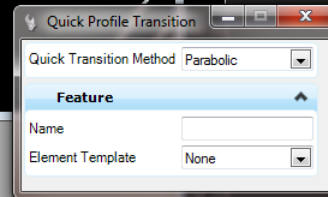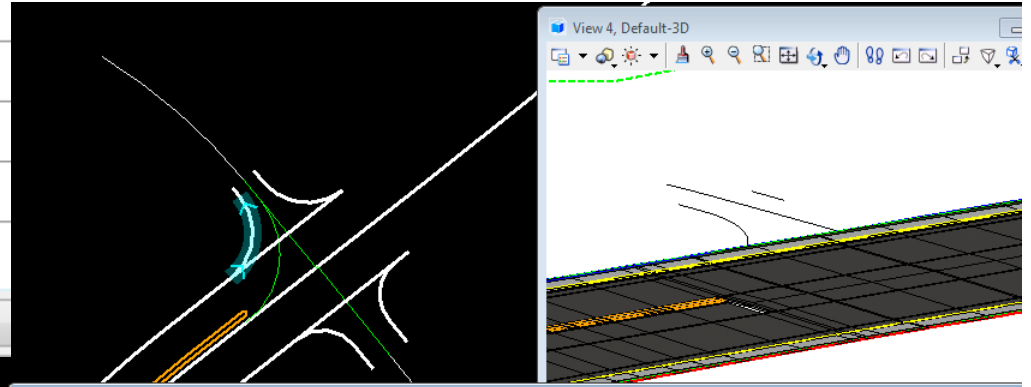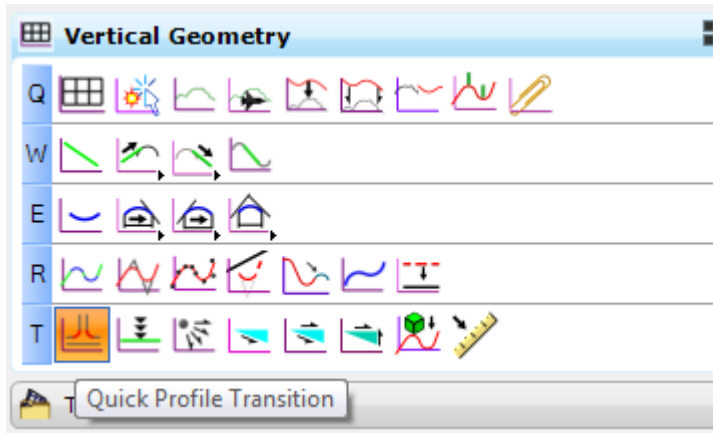
# Construct Profiles

# Example FDOTSS3 Project Model

- [Model](#) to PDF

# Contact Information

Vern Danforth, P.E.
CADD Applications Engineer
Phone no: (850) 414-4897
Toll Free no: (866) 374-3368 extension 4897

Florida Department of Transportation
Engineering / CADD Systems Office
605 Suwannee Street, Mail Station 69
Tallahassee, Florida 32399-0450

email       vern.danforth@dot.state.fl.us
web:        http://www.dot.state.fl.us/ecso

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