Civil Geometry Tools in FDOTSS3

2014 Design Training Expo

Jimmie Prow

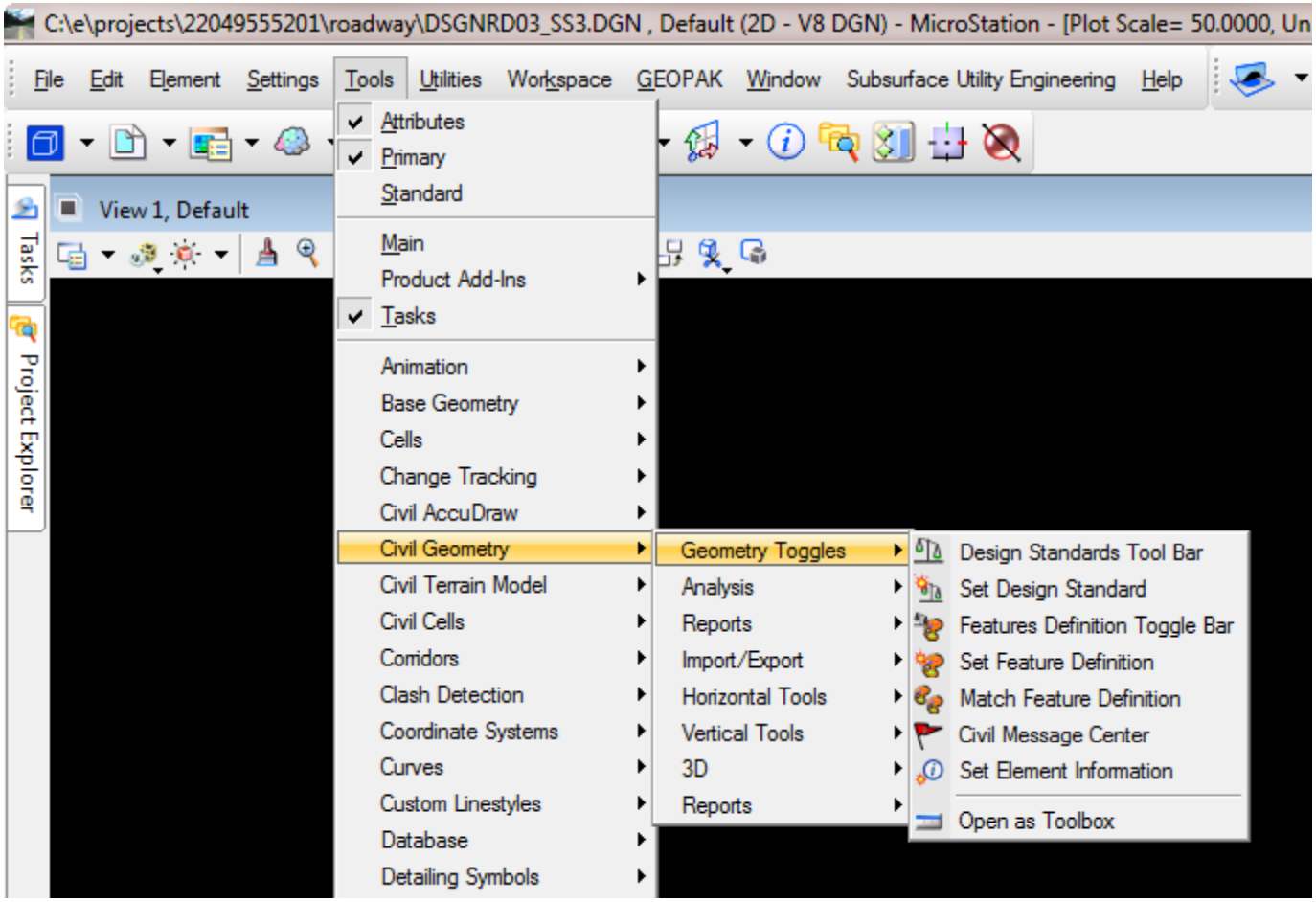
Wednesday, June 11, 2014 9am

Session Topics

Bentley Civil SS3 Tools in FDOTSS3

- Analysis and Reporting
- General Geometry
- Horizontal Geometry
- Civil Cells

Tools – Civil Geometry



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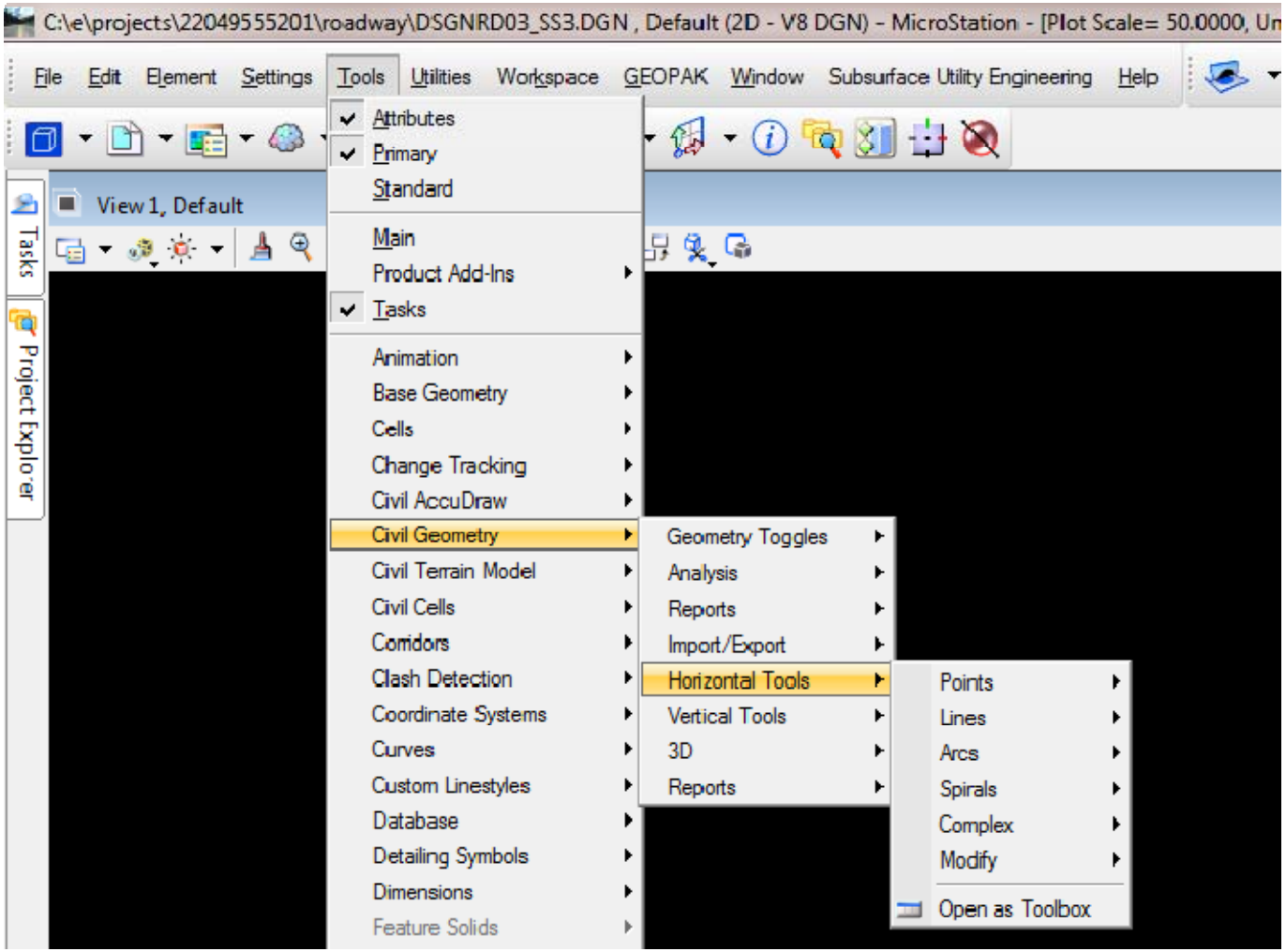
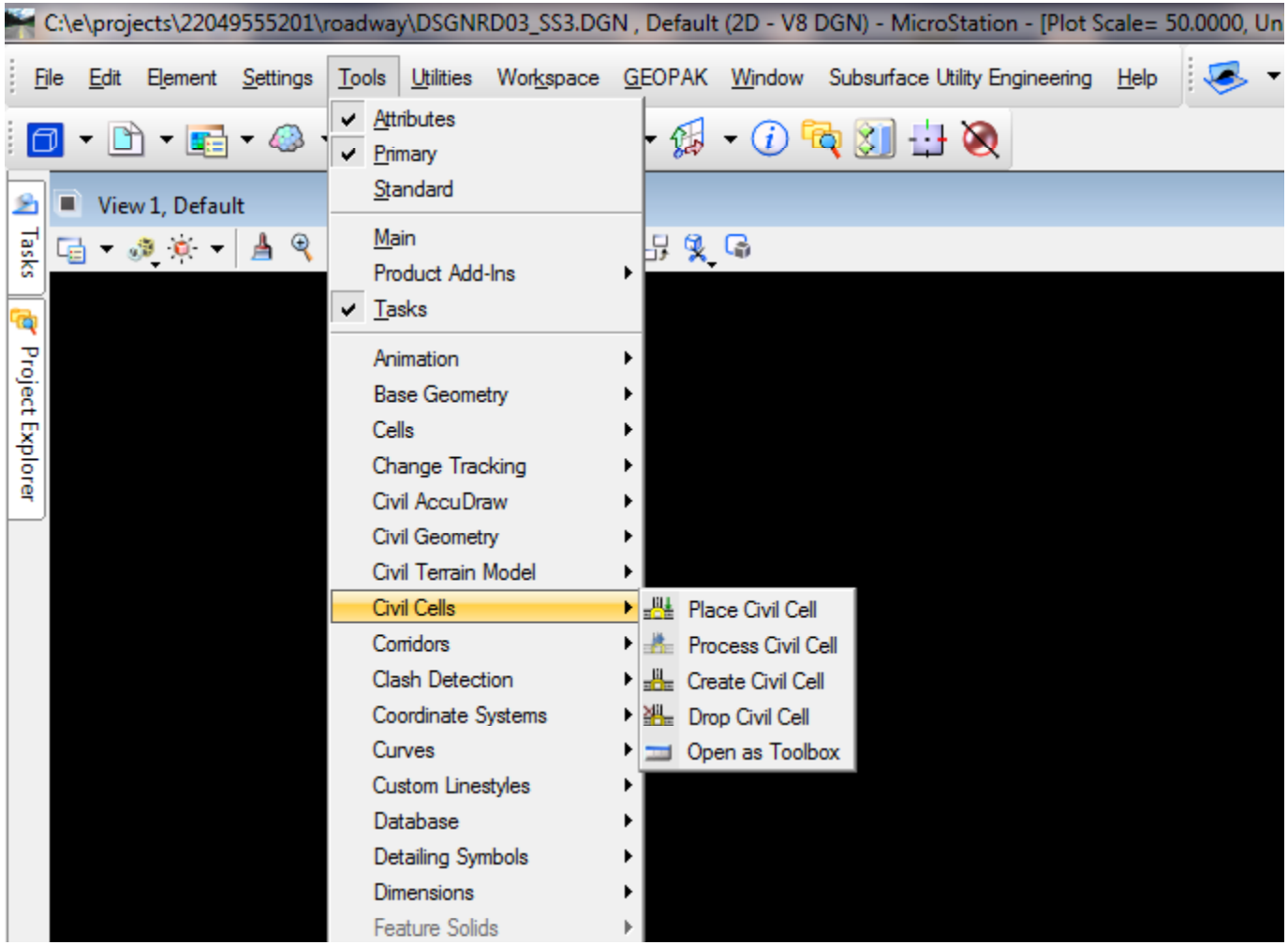
Tools – Civil Geometry



Tools – Civil Cells



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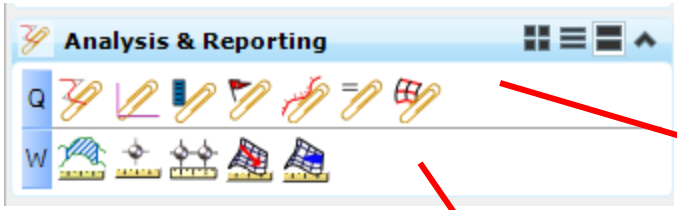
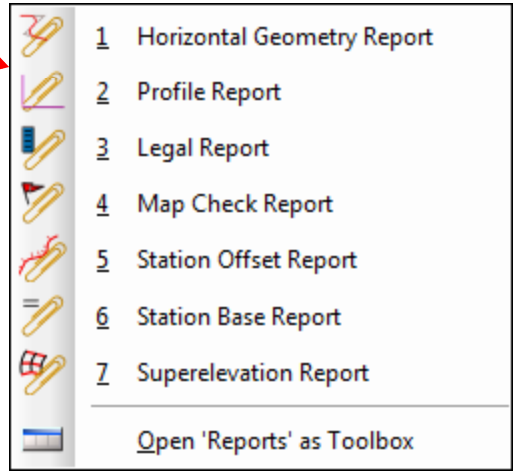
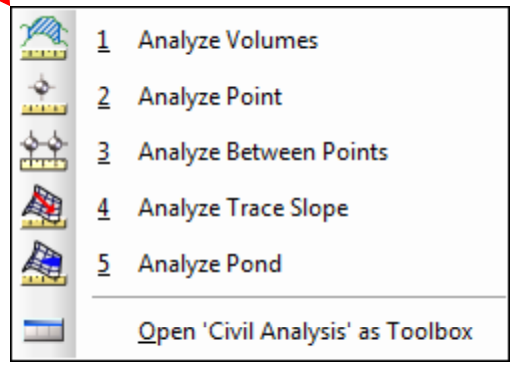
Civil Tools – Analysis and Reporting:



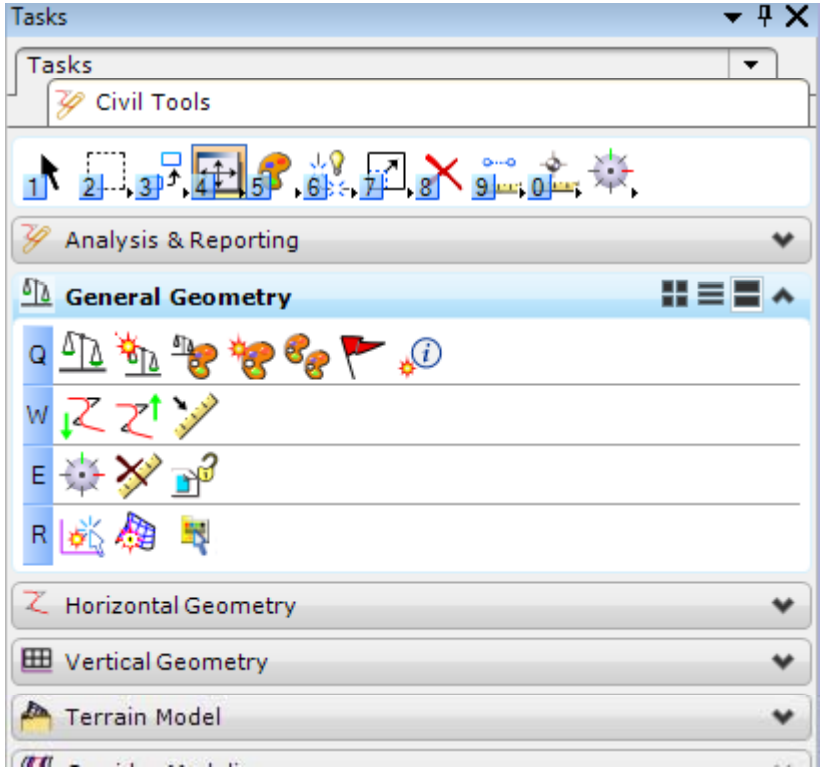
- Horizontal Reports





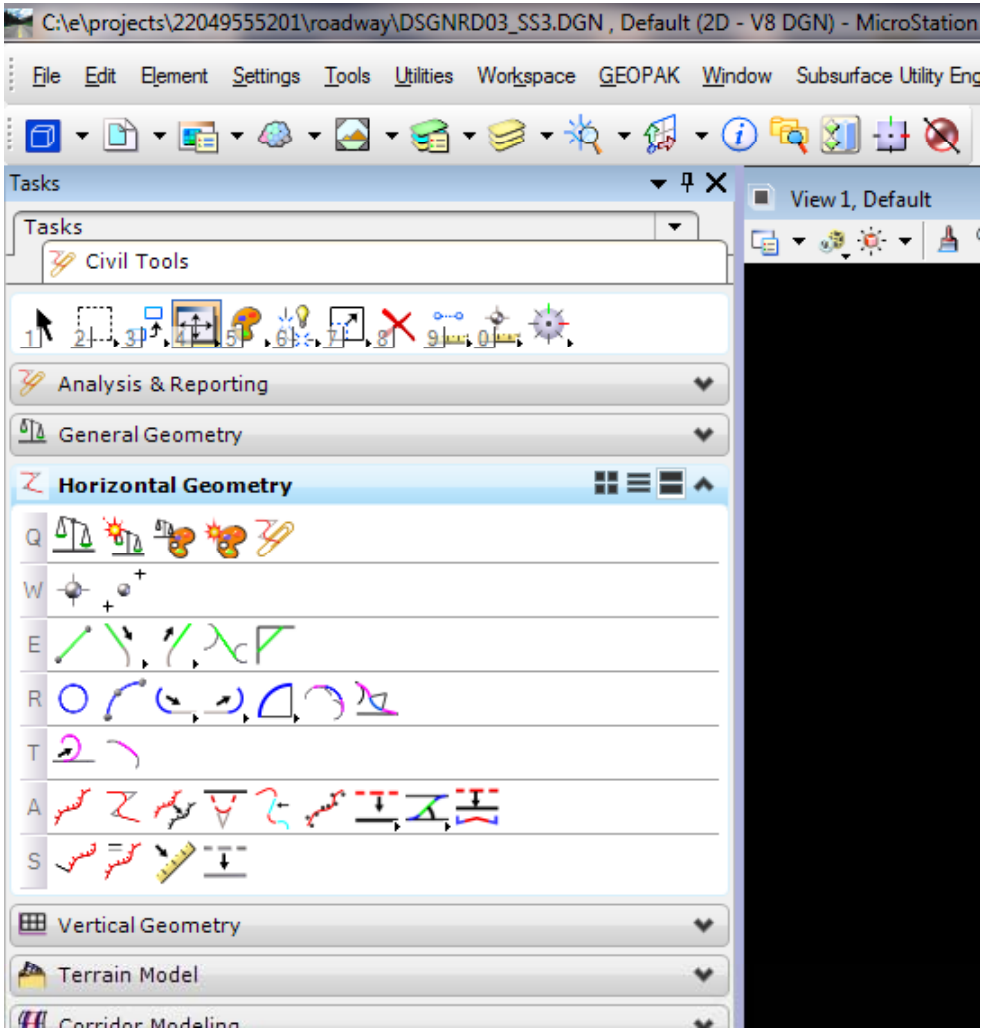
Civil Tools - General Geometry:

- Geometry Toggles
  - Feature Definitions
  - Design Standards
  - Civil Message Center
- Import/Export
- Create Civil Rule
- Civil Accudraw
- Set Active Profile/Terrain



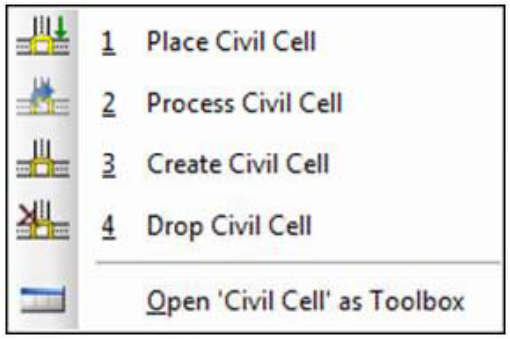
Civil Tools – Horizontal Geometry:

- Points
- Lines; Simple, To, From
- Arcs Between Elements
- Offsets and Tapers
- Complex by Elements
- Modify Civil Elements



Civil Tools – Civil Cells

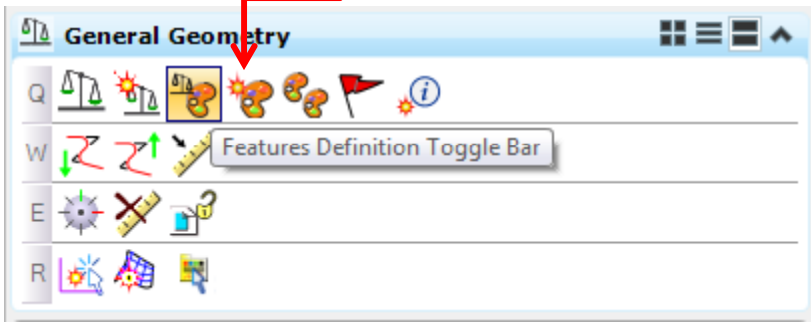
- Place Civil Cells
  - Draw 2D Template Lines
  - Left Turn with TS
  - Right Turn
  - Rural Sideroad
  - Urban Driveway



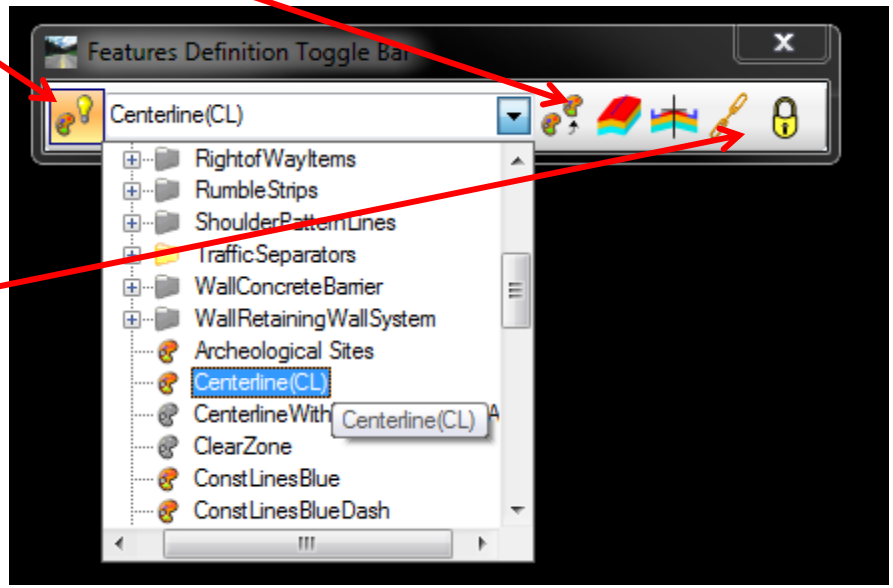
Geometry Toggles

Feature Definition Toggle Bar

Set Feature



- Match
- Use Active
- Chain Feature



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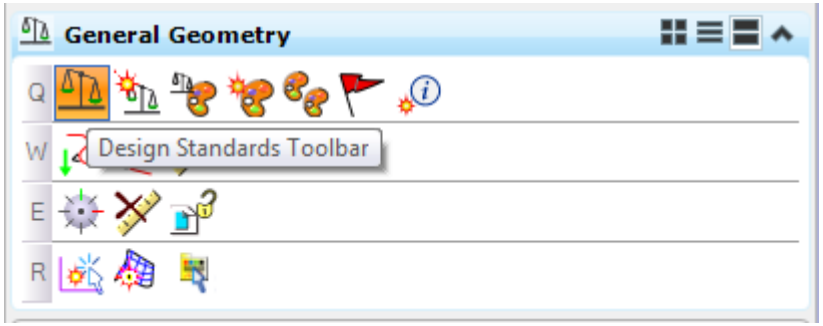
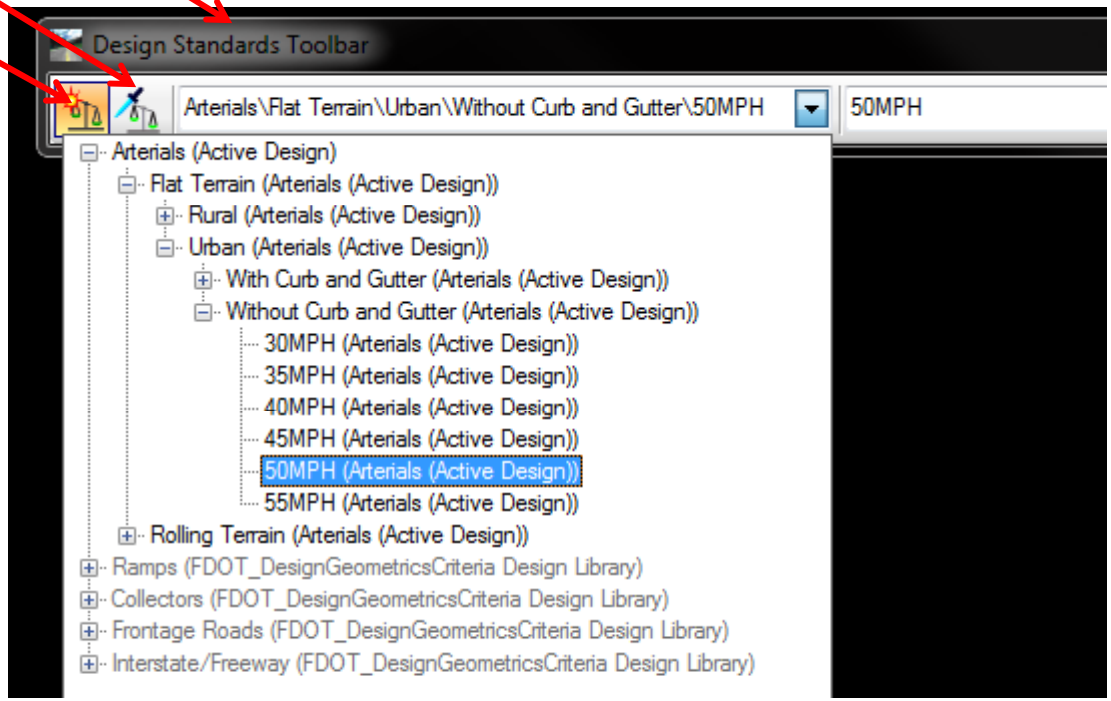
Geometry Toggles

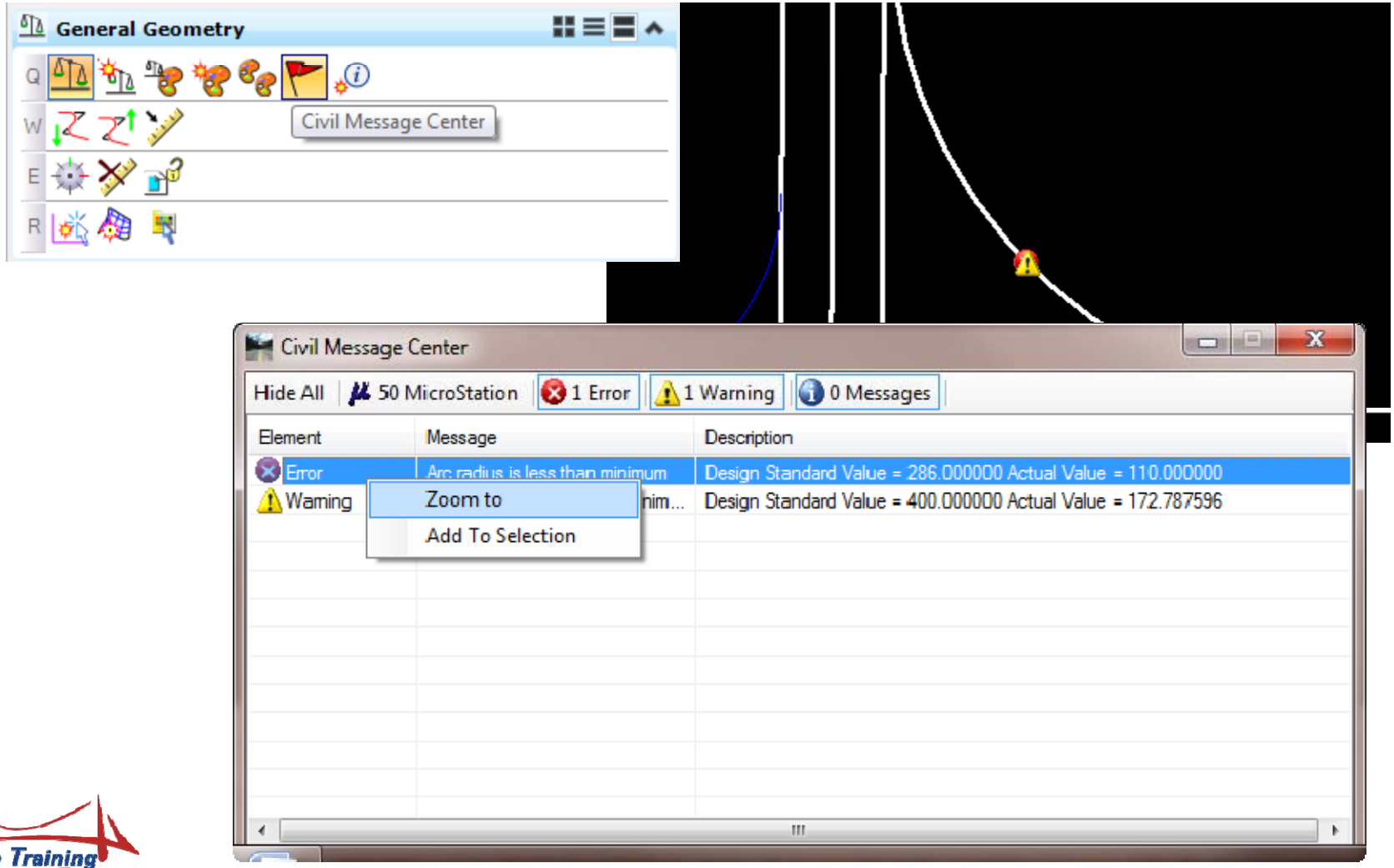
Design Standards

- Toolbar
- Match
- Set Active





Civil Message Center



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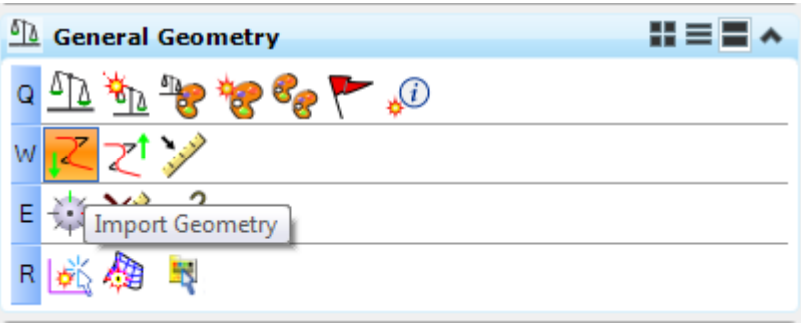
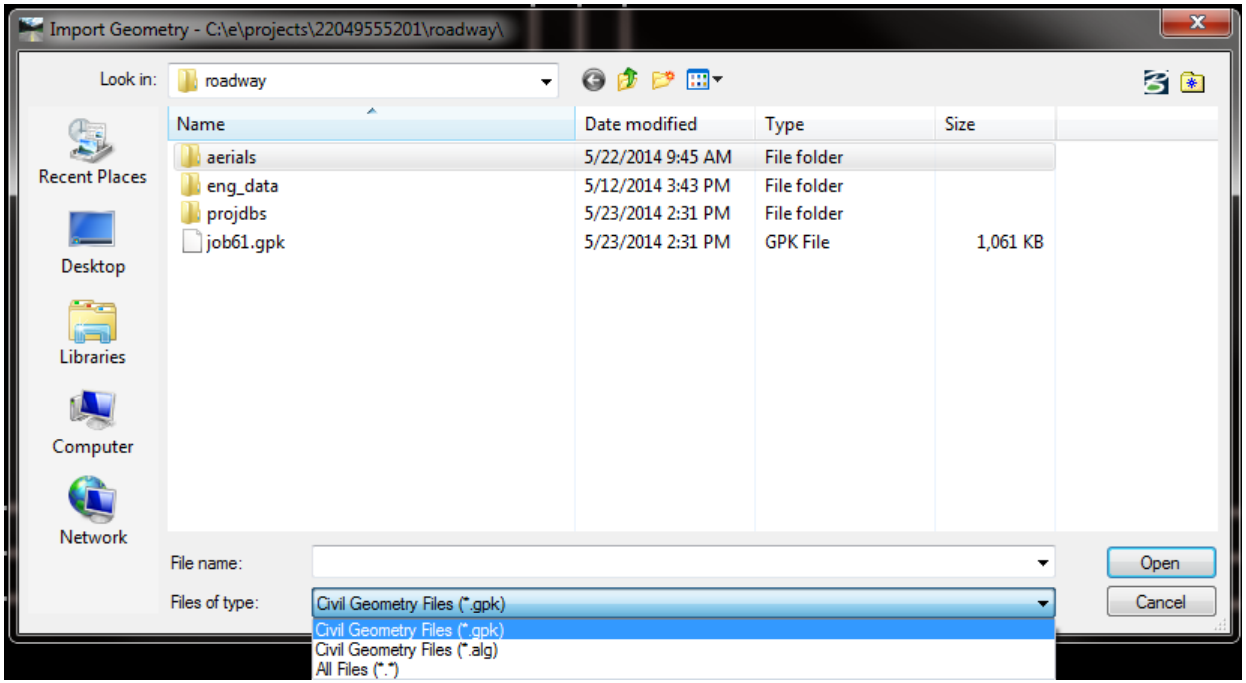
Import/Export





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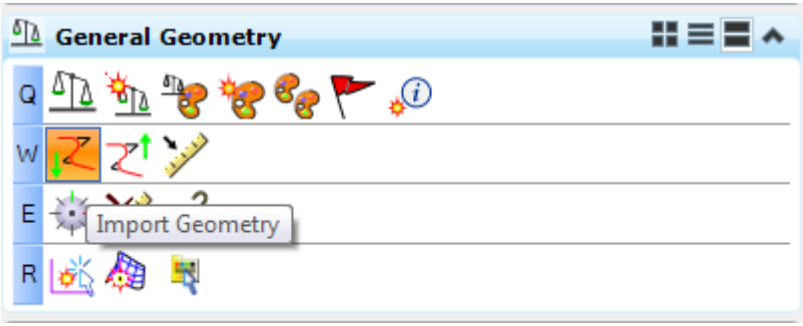
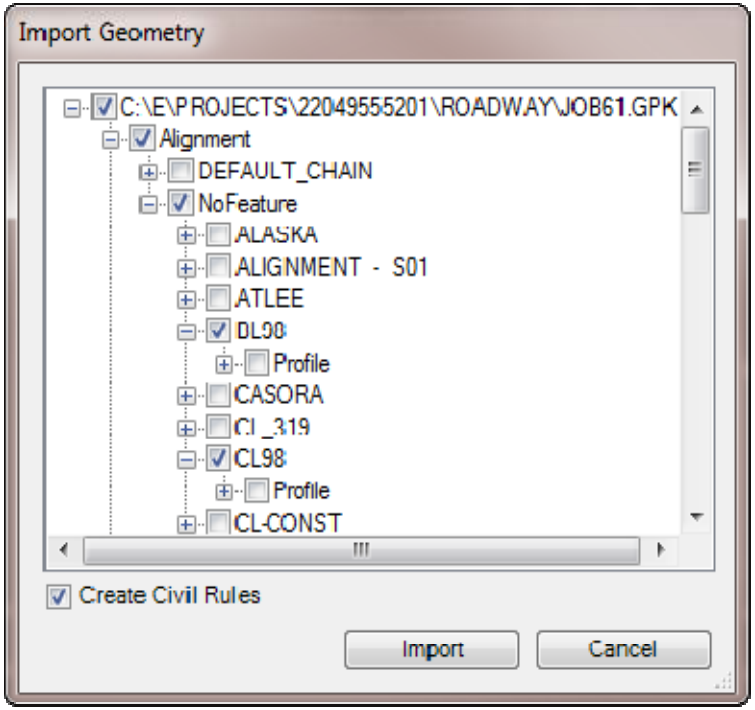
Import/Export





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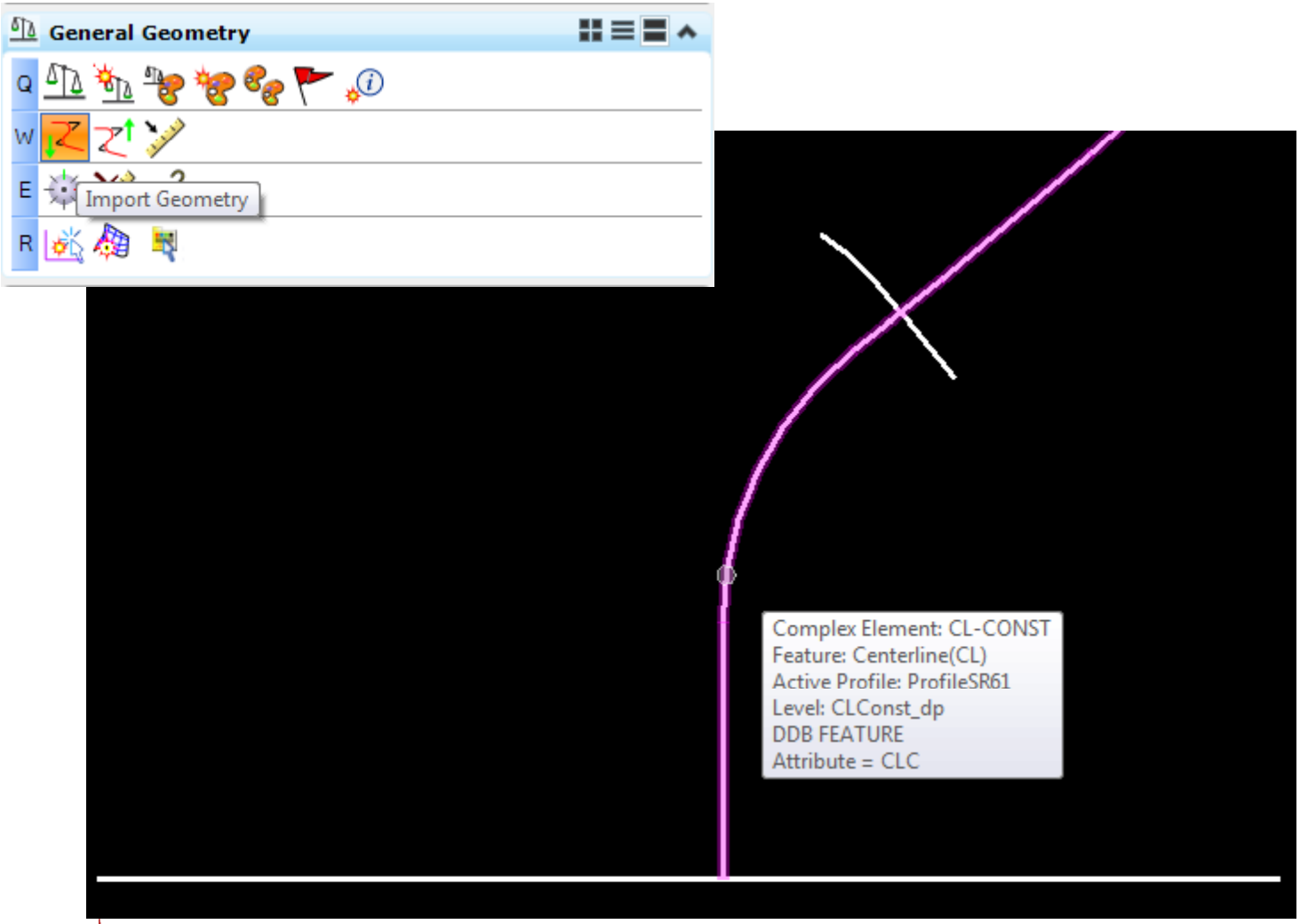
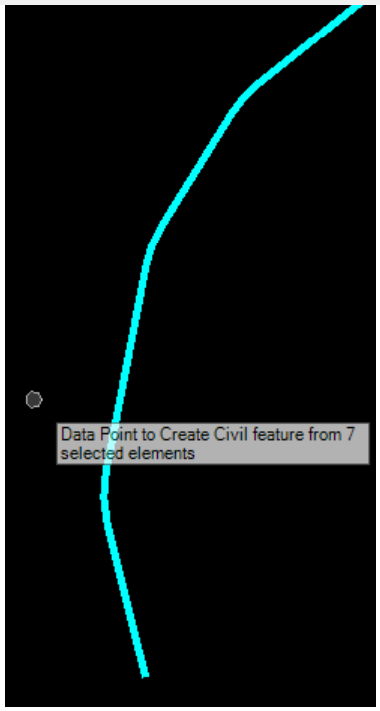
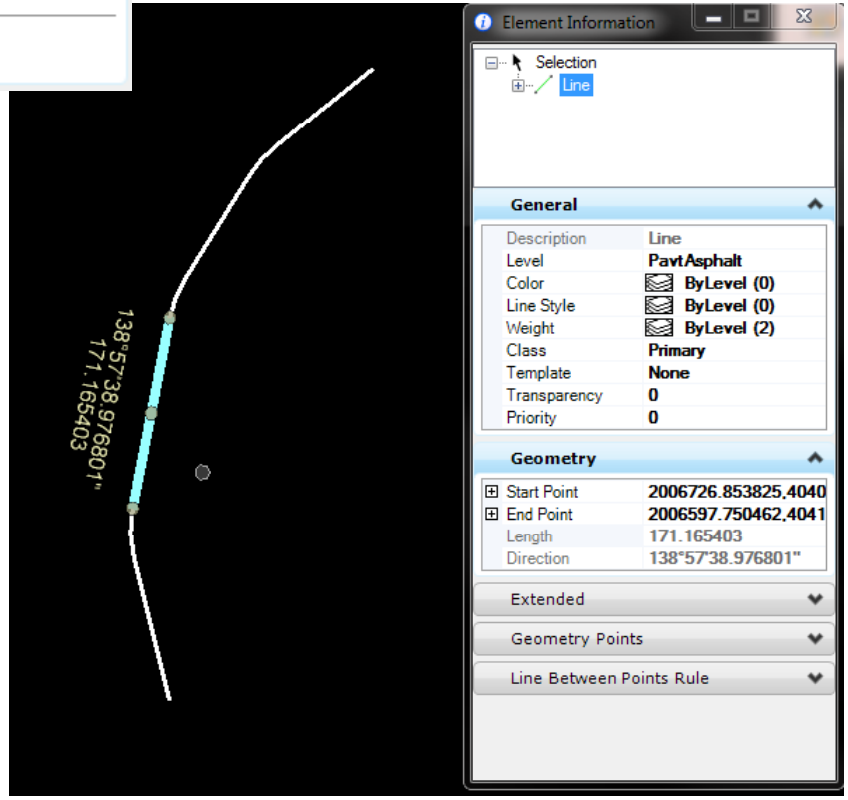
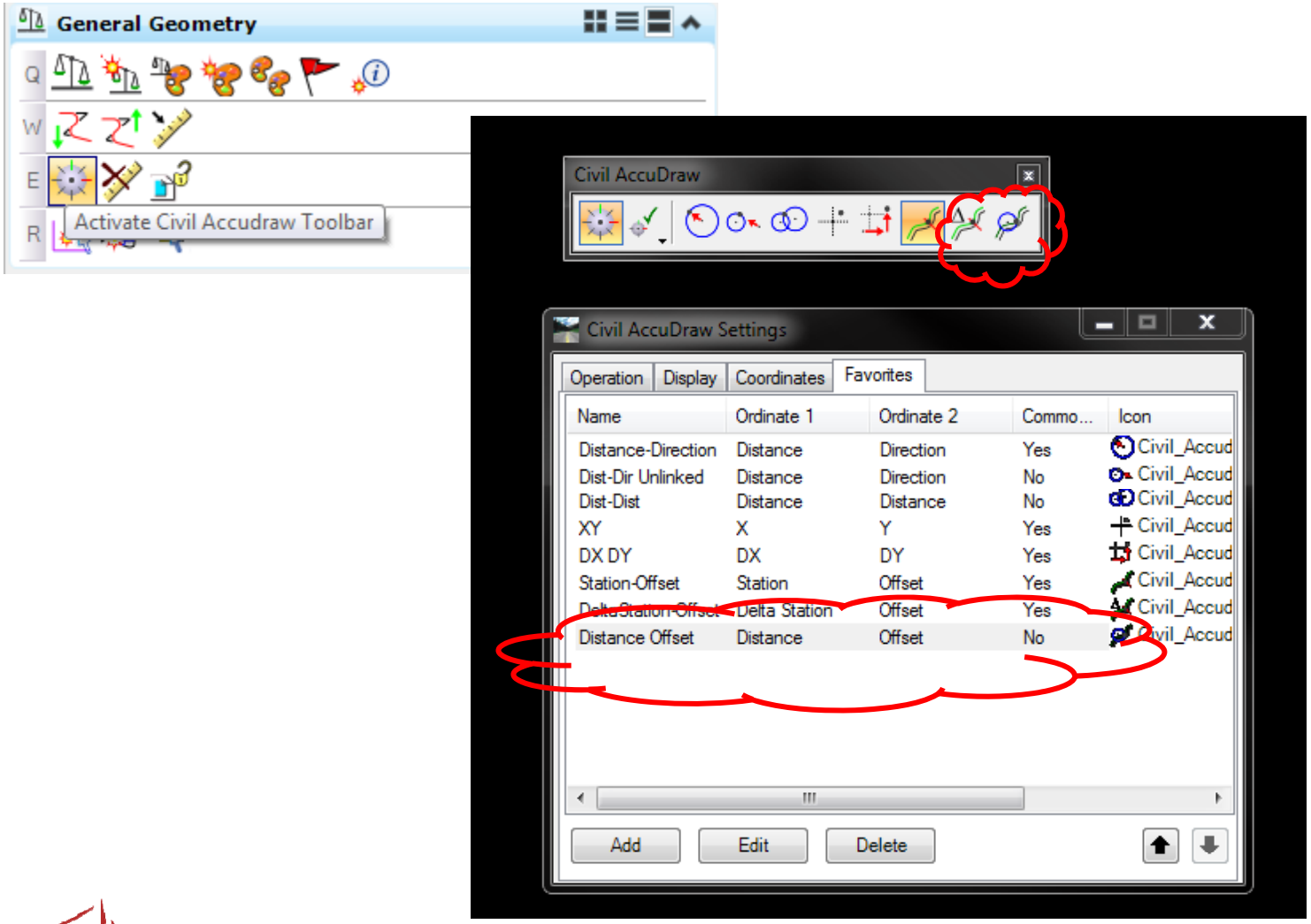


Create Civil Rule





Civil Accudraw



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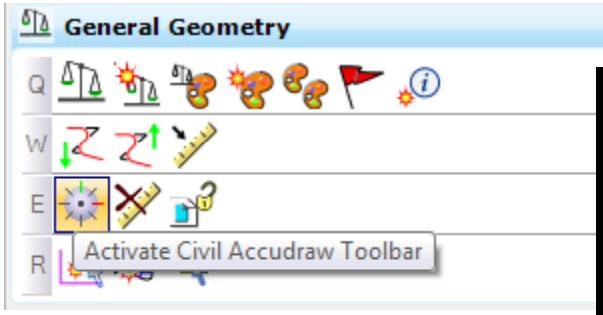
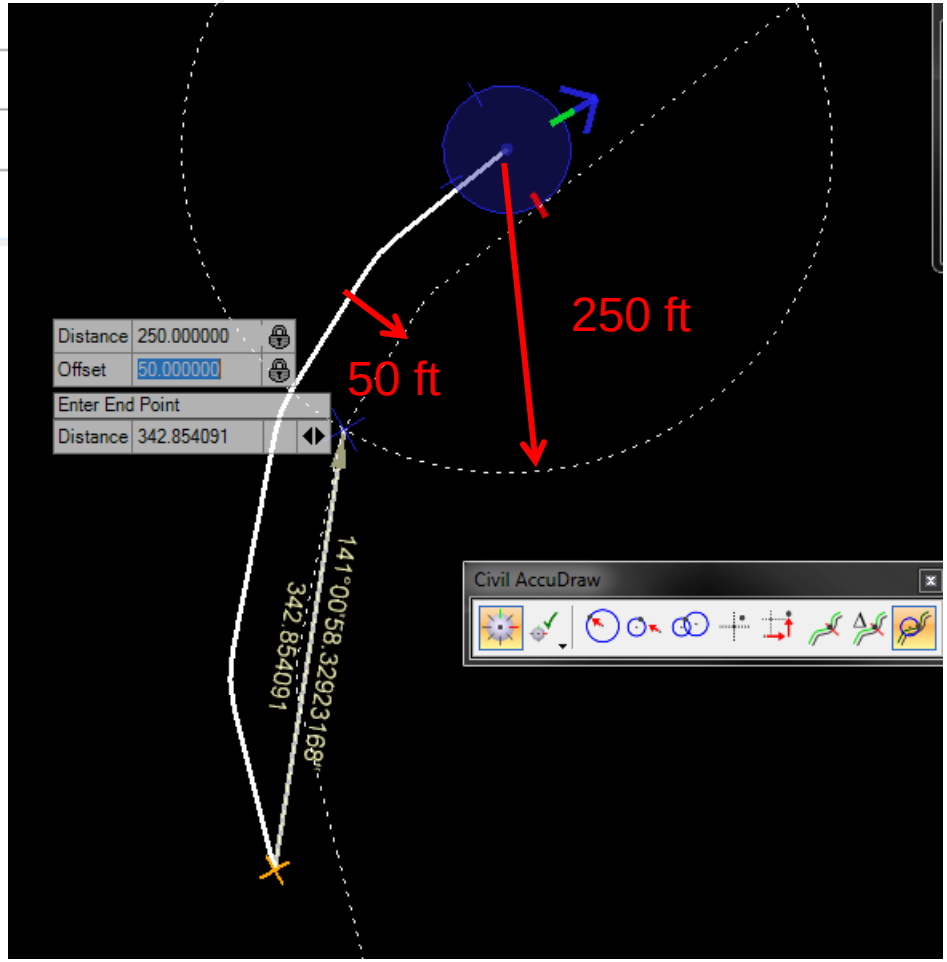
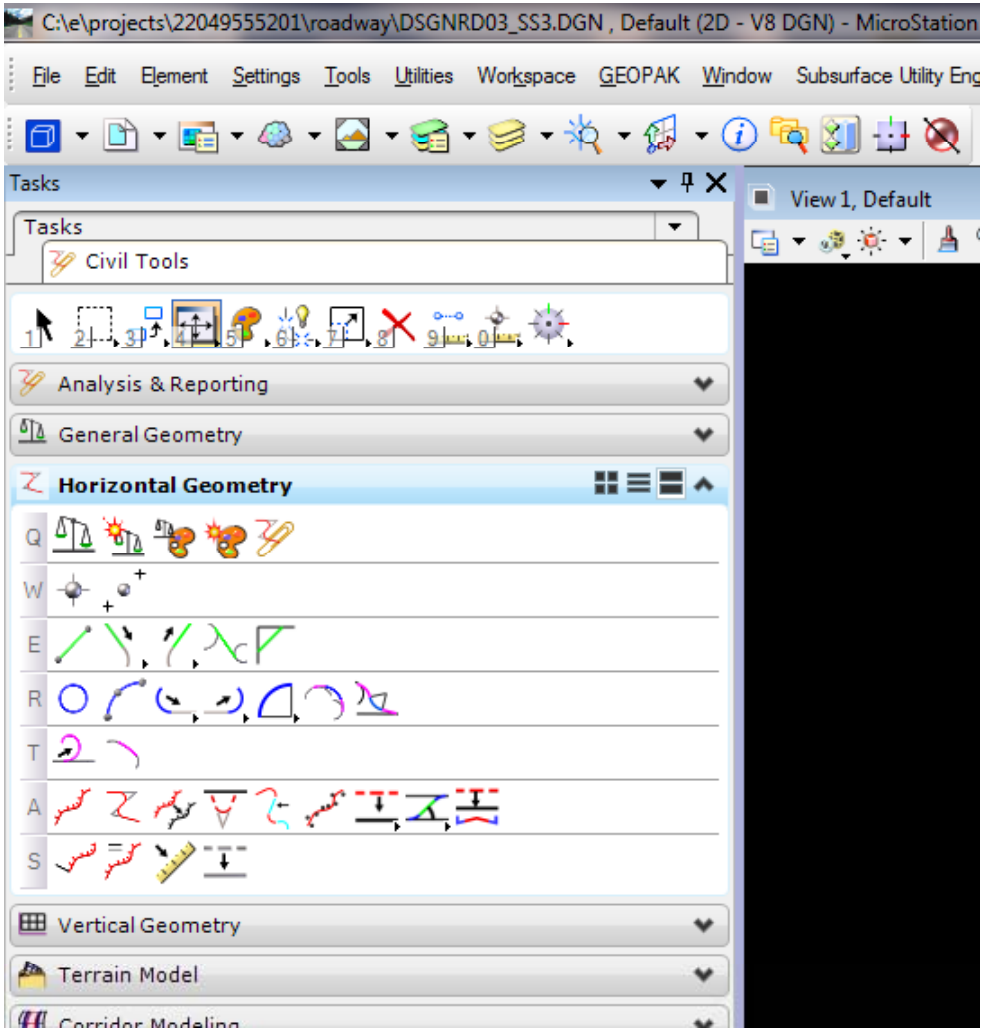
Civil Accudraw



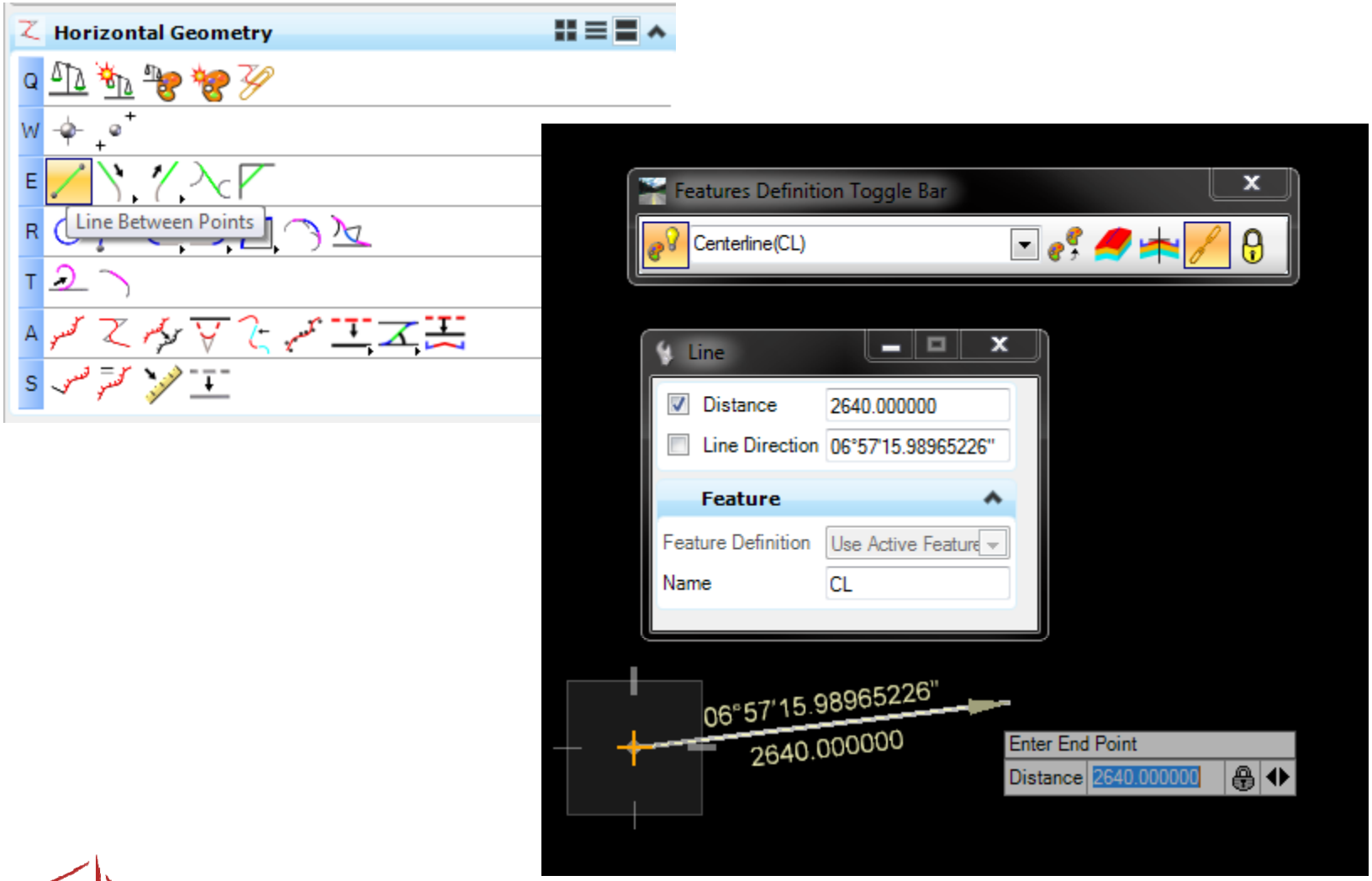


Civil Tools – Horizontal Geometry:

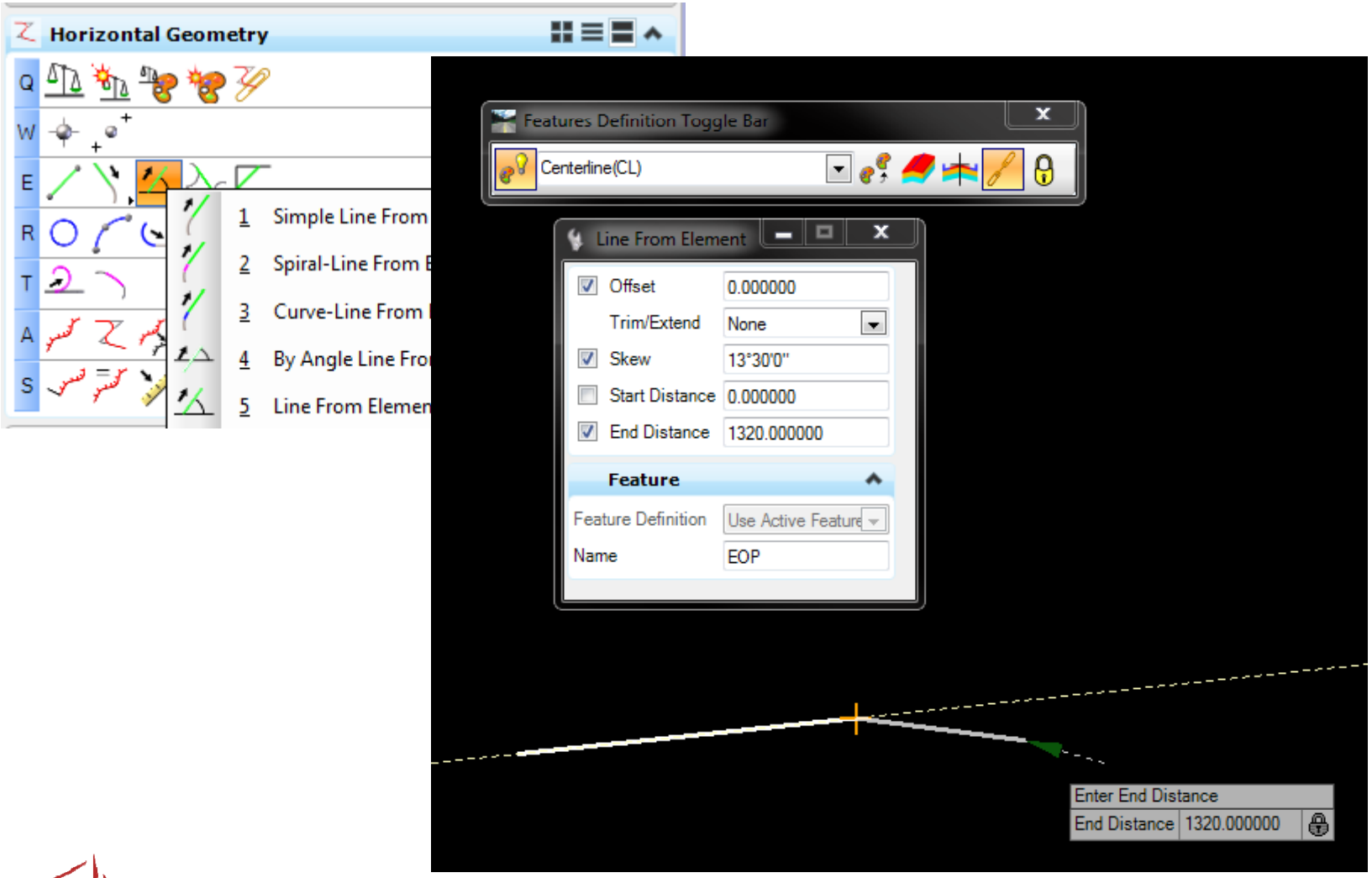
- Points
- Lines; Simple, To, From
- Arcs Between Elements
- Offsets and Tapers
- Complex by Elements
- Modify Civil Elements



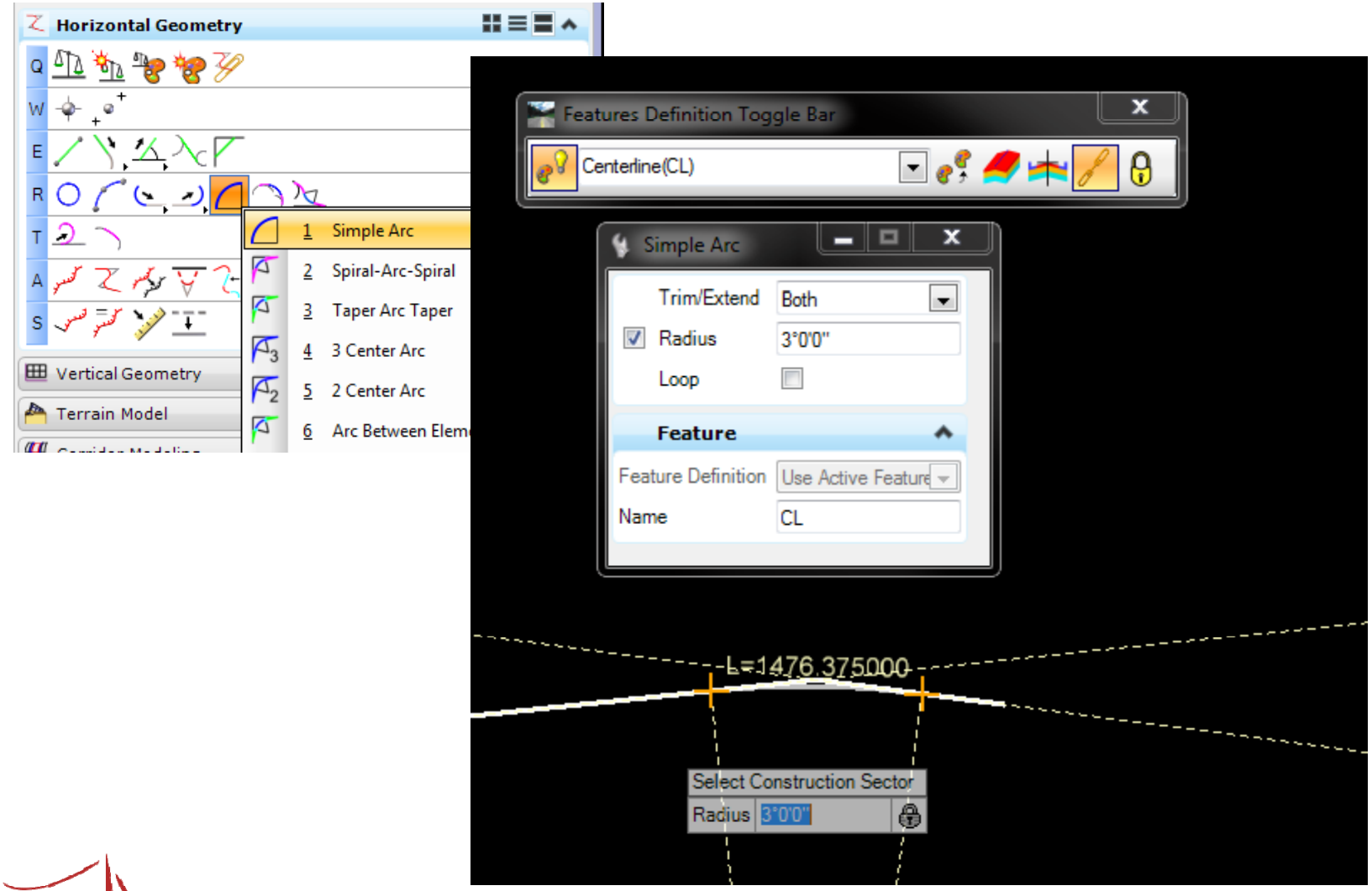
Lines; Simple, To, From



Lines; Simple, To, From



Arcs Between Elements



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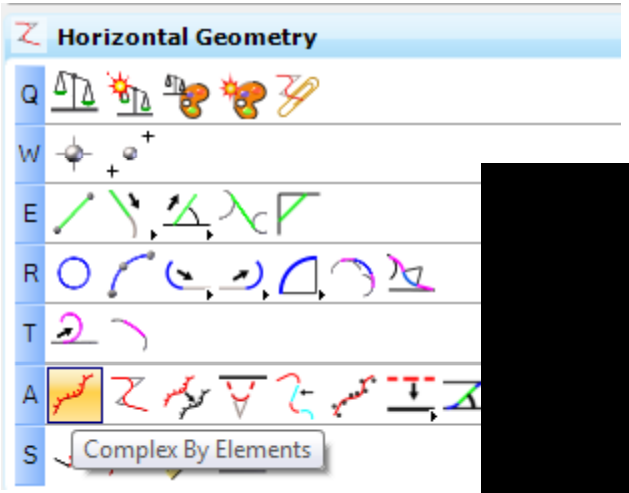
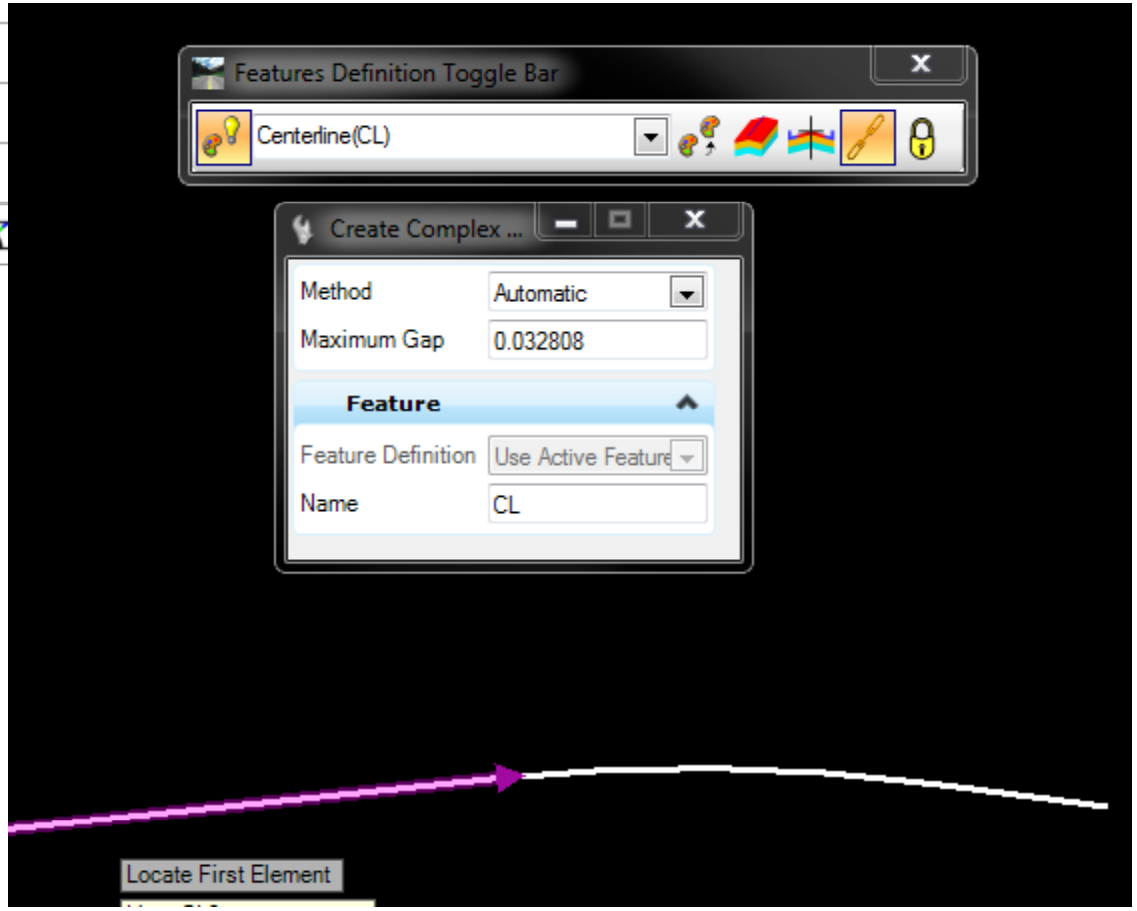
Complex by Elements





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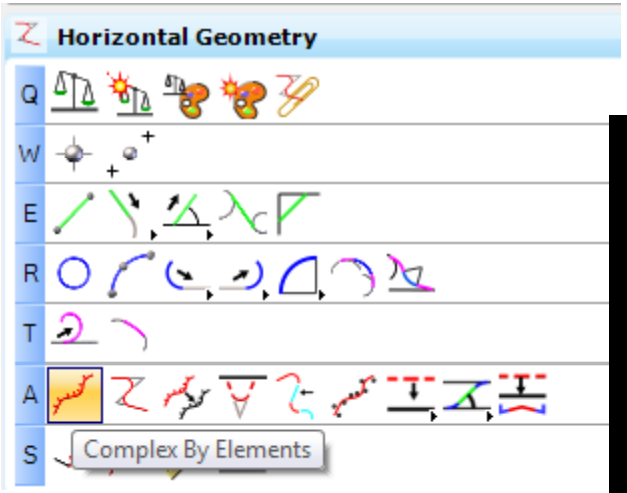
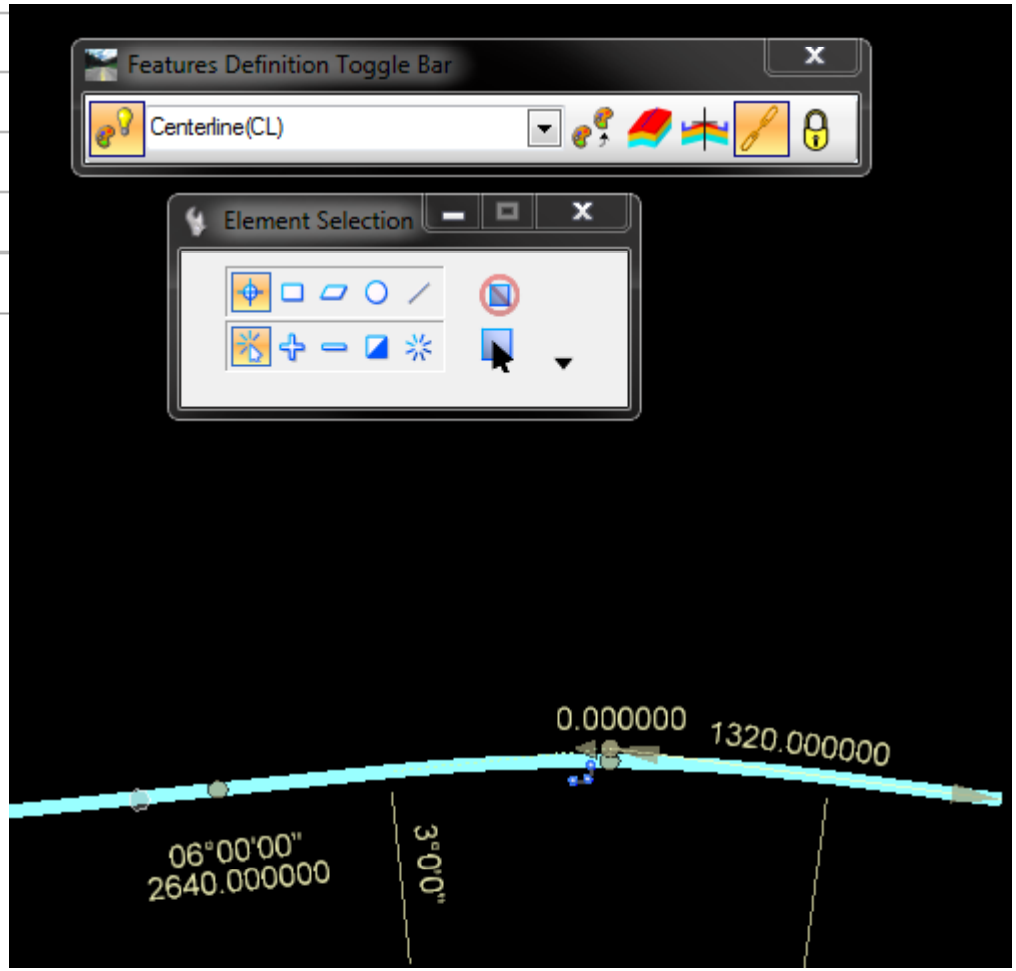
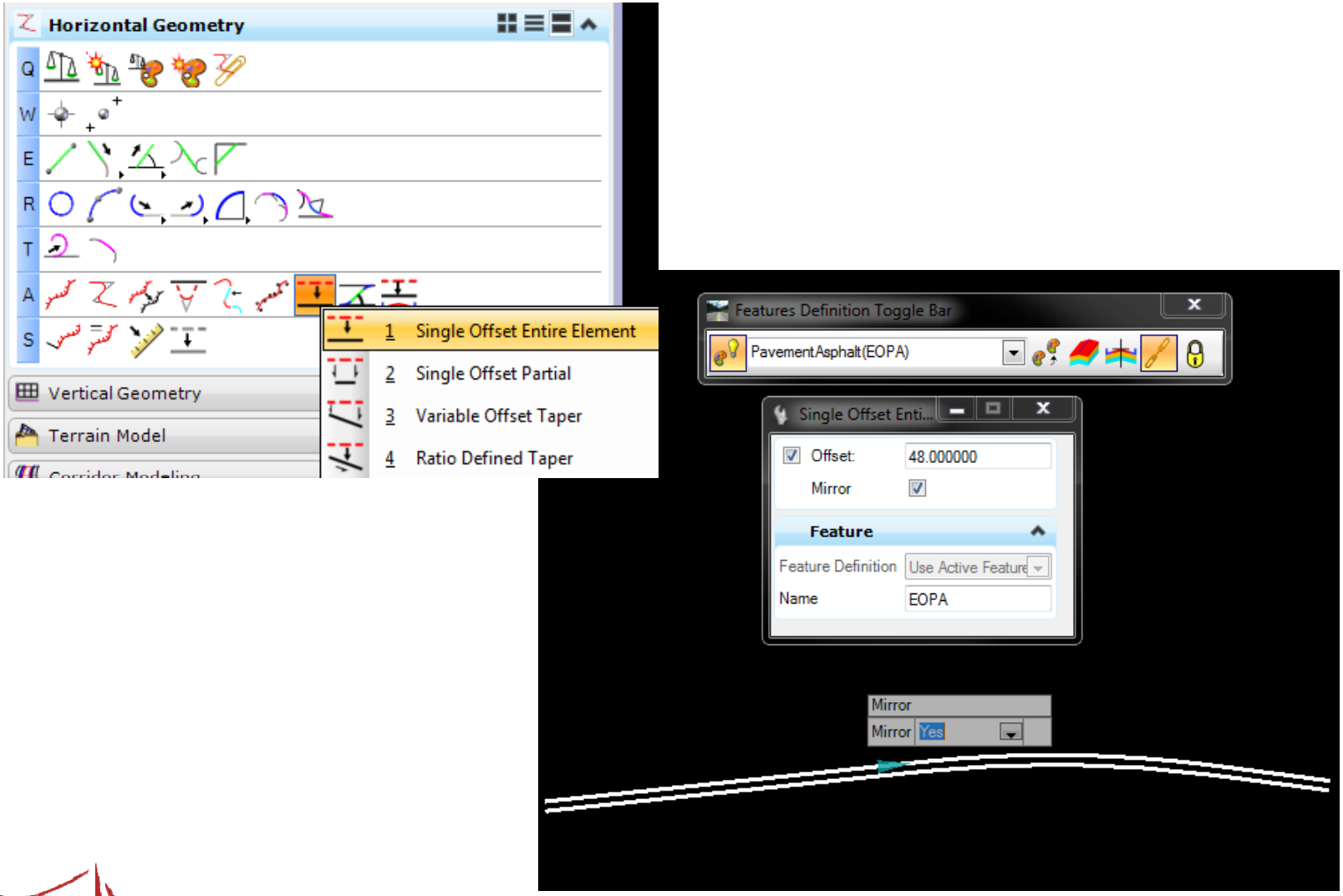
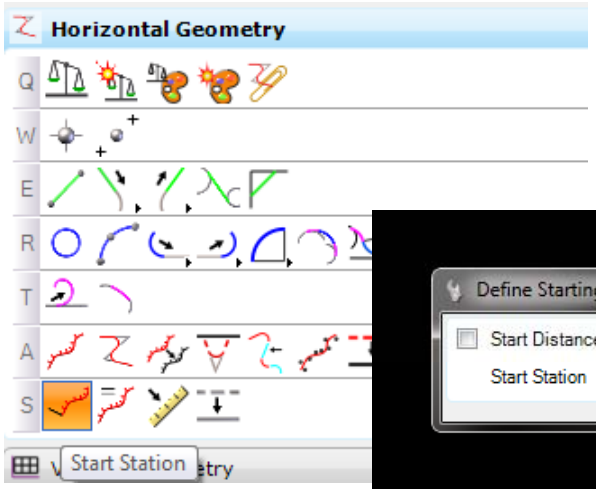


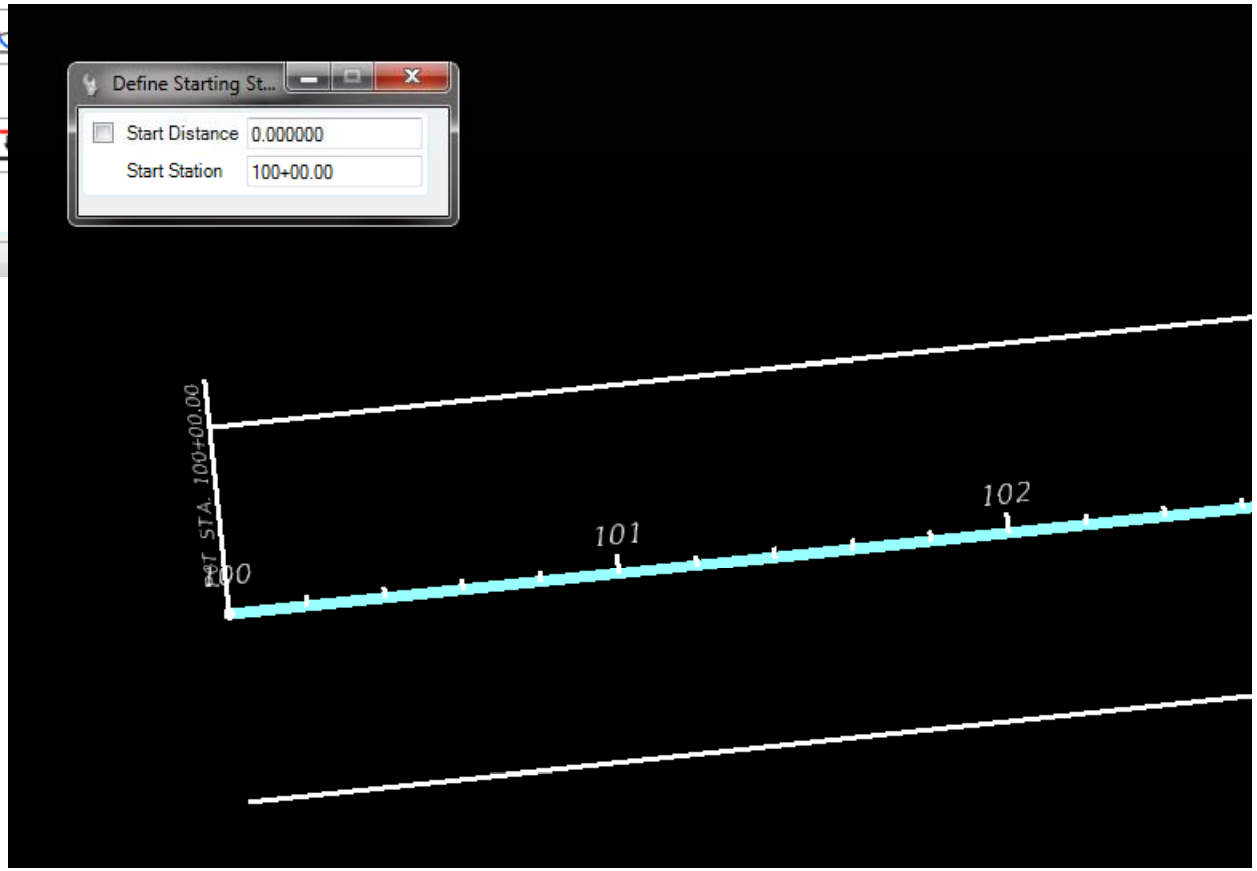


Offsets and Tapers



Modify Civil Elements





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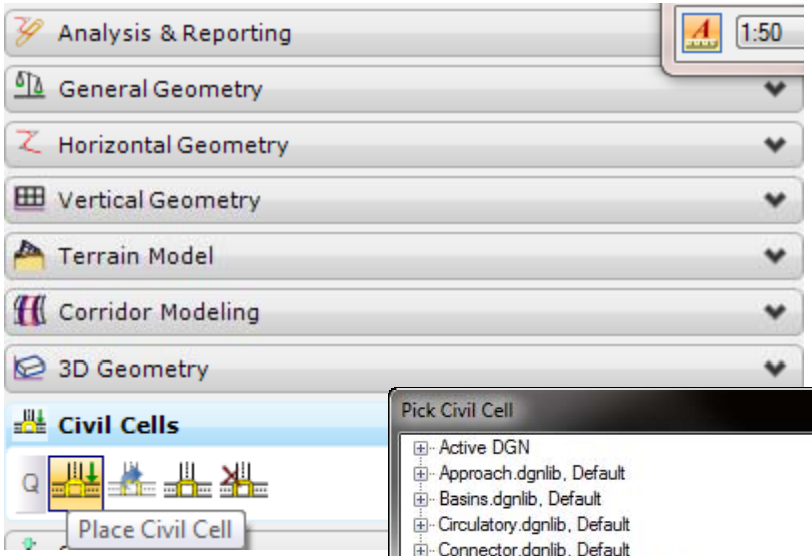
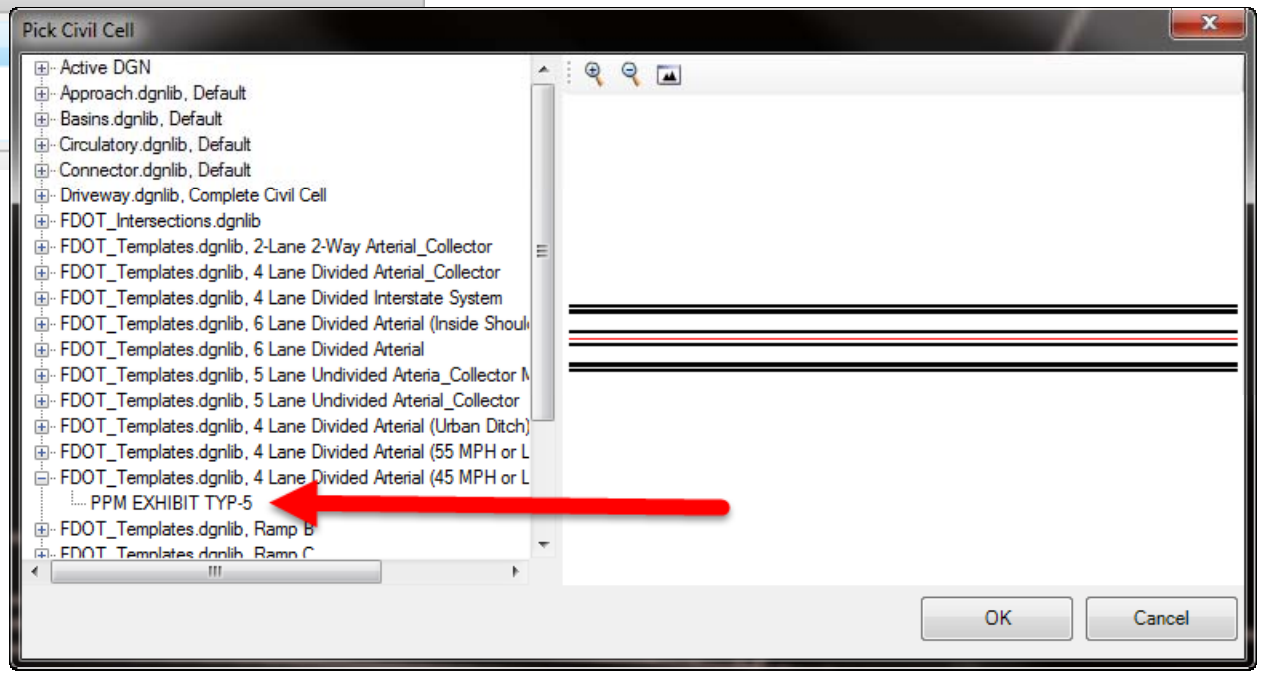
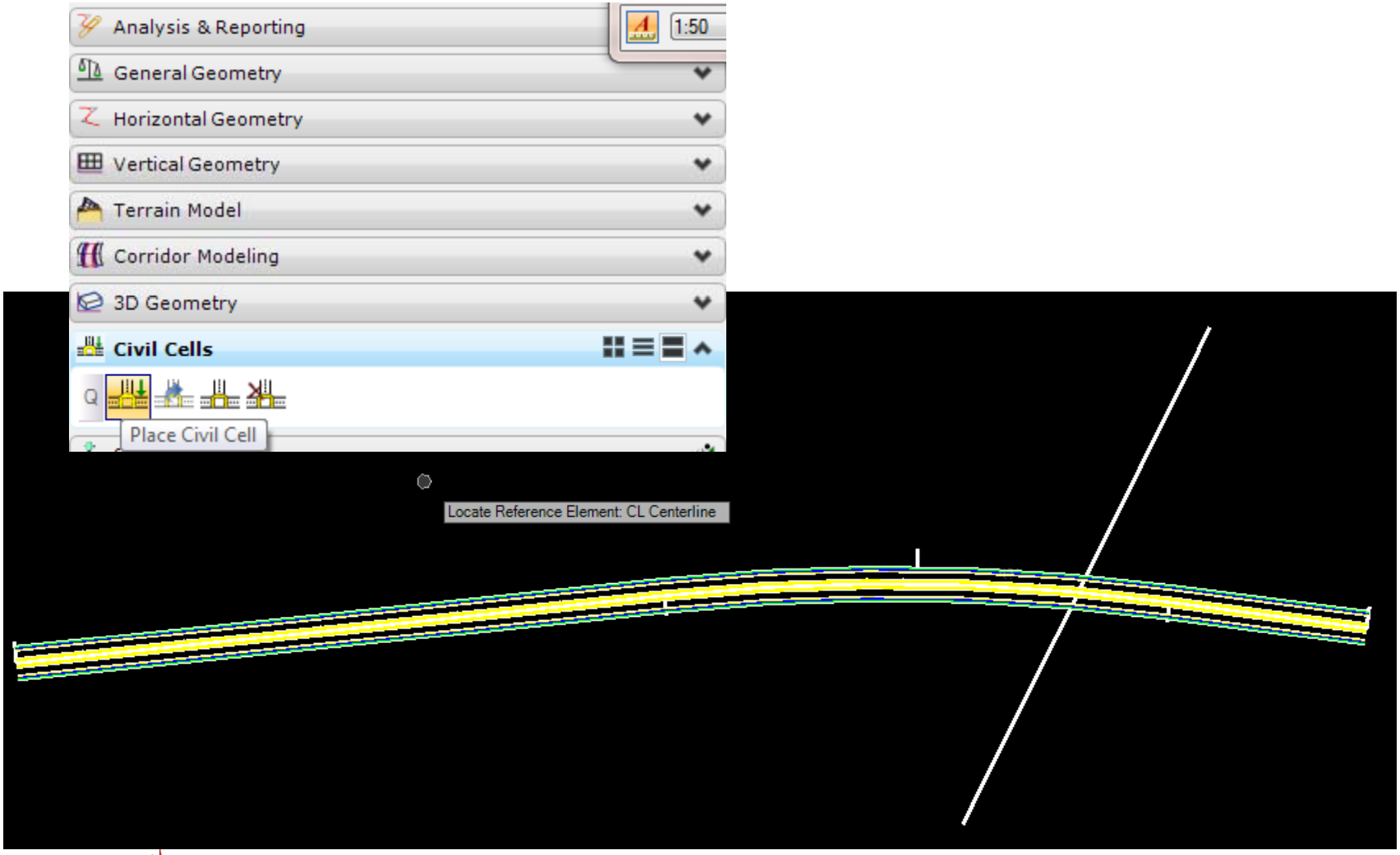
Place Civil Cells



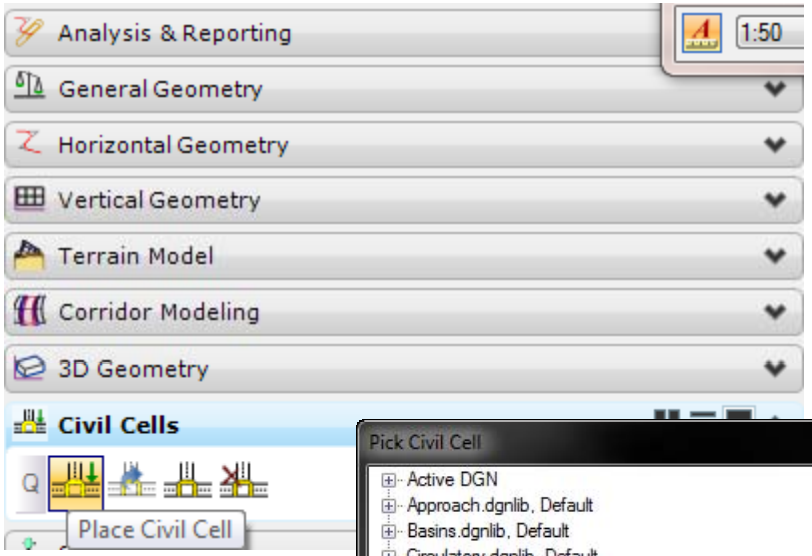


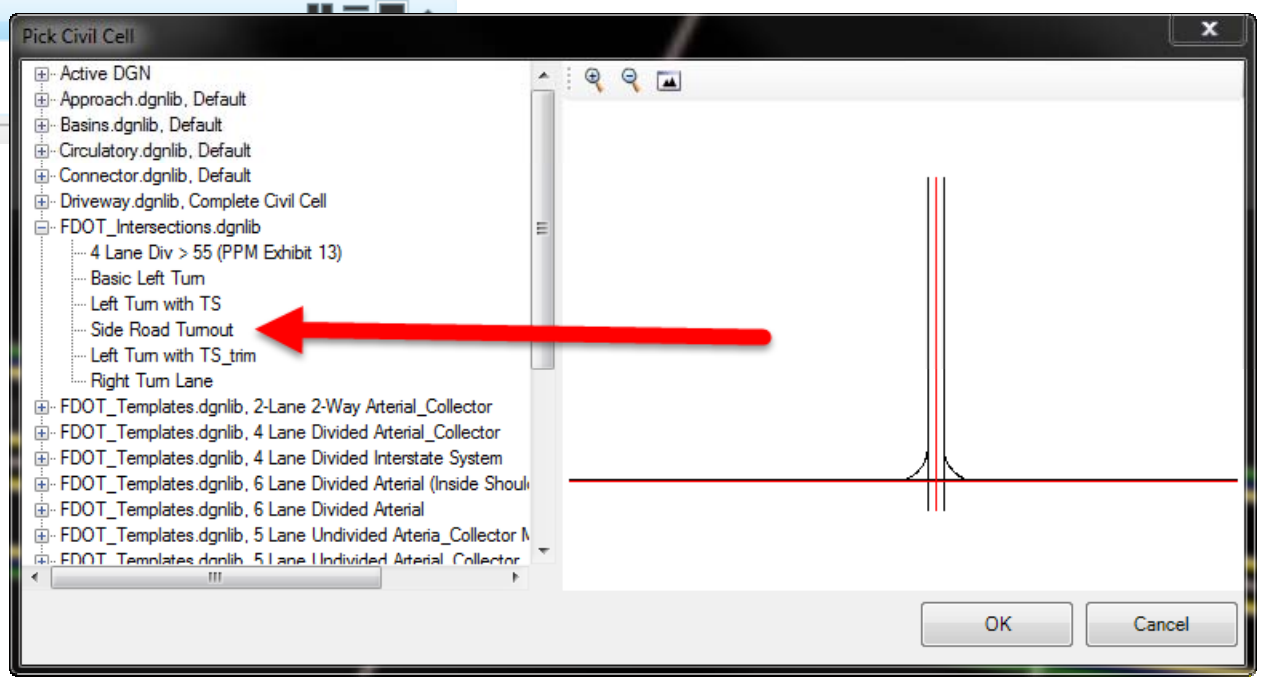
2D Template Lines

Place Civil Cells



Place Civil Cells





Side Road

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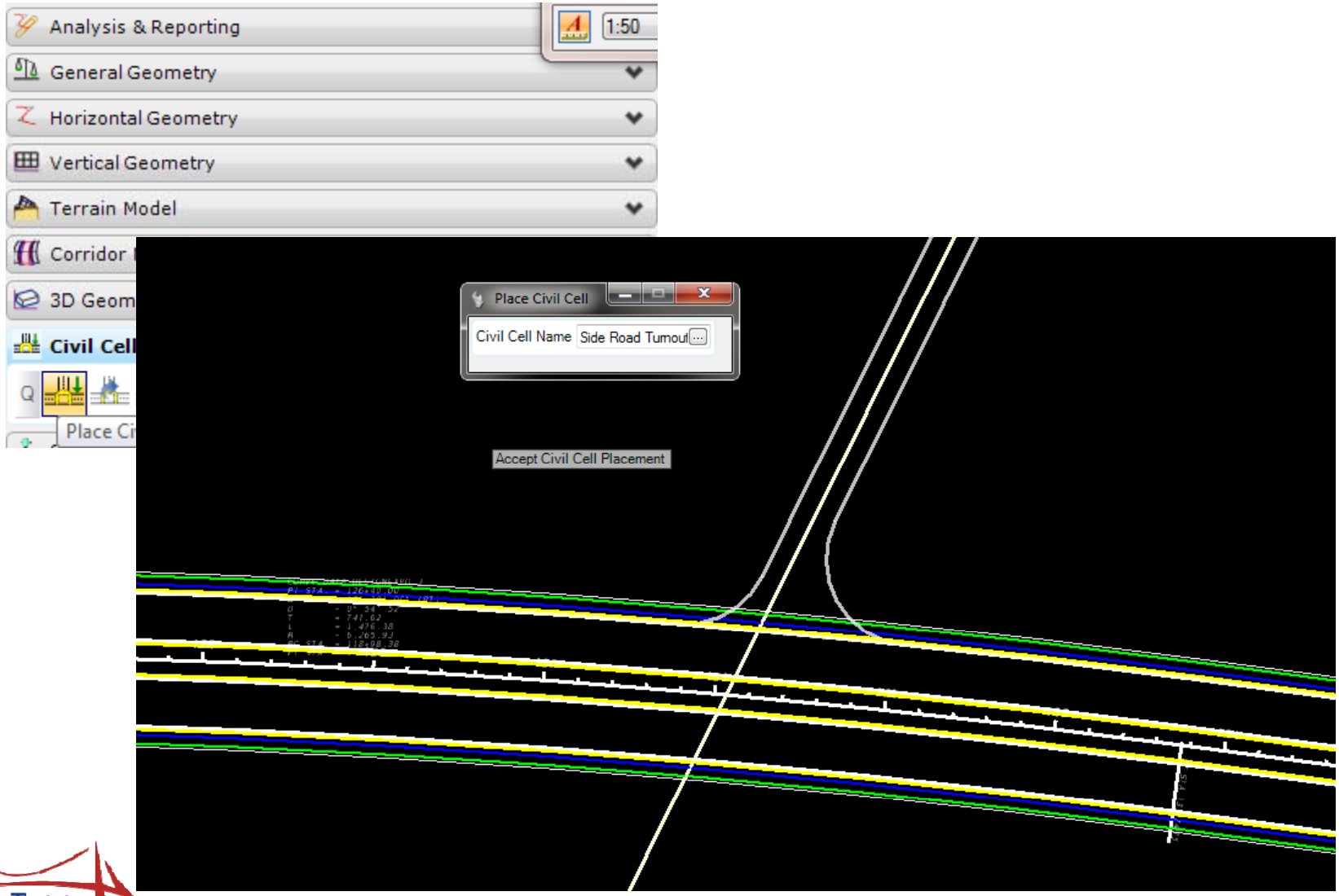
Place Civil Cells



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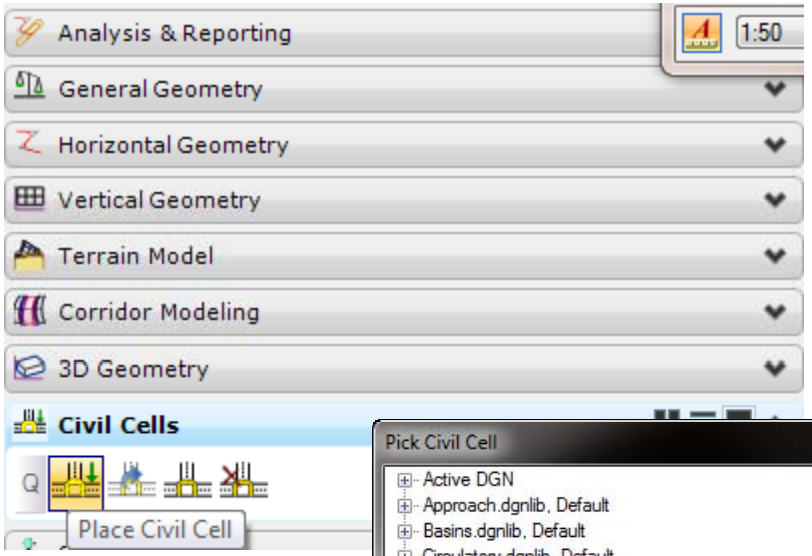
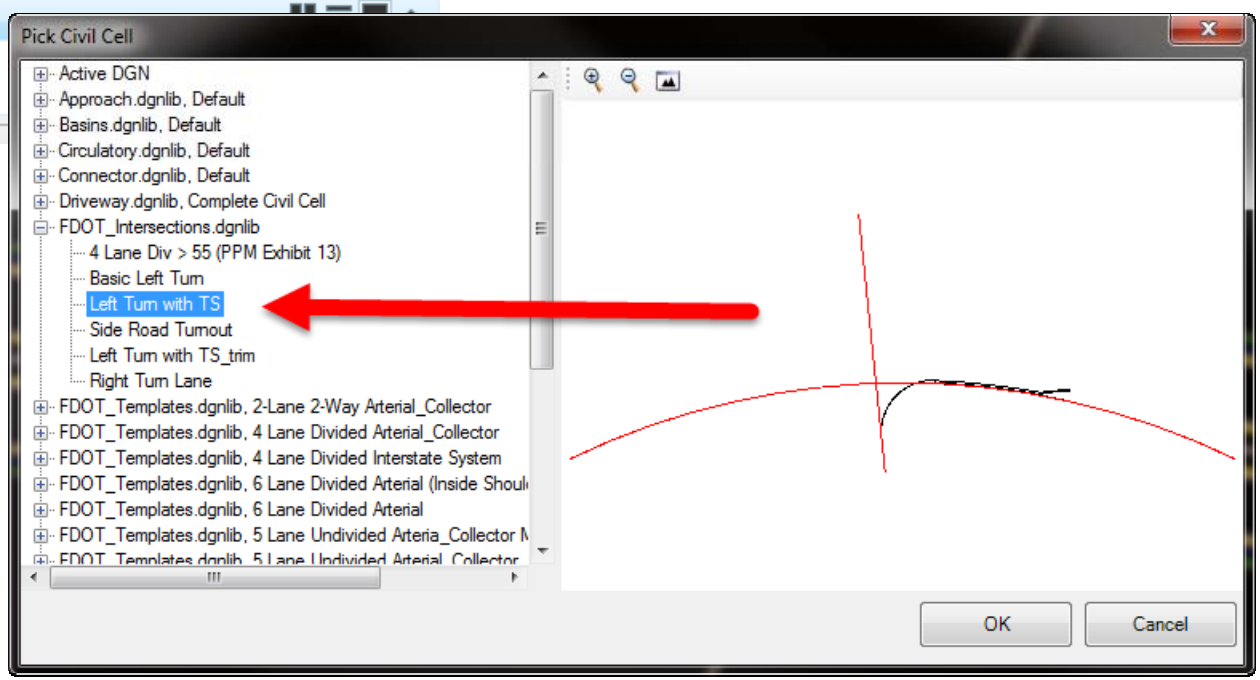
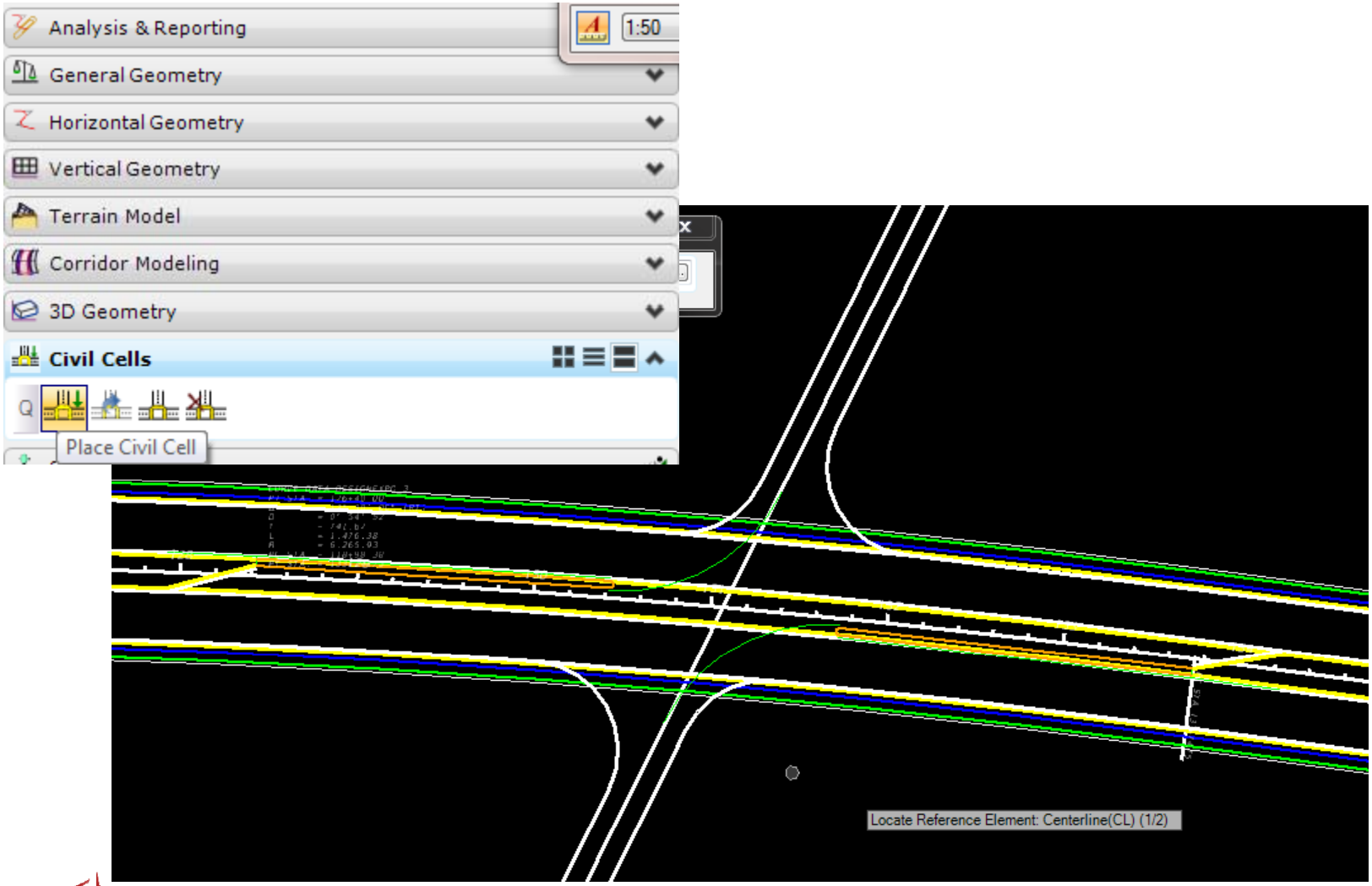
Place Civil Cells





Left Turn w/ TS

Place Civil Cells



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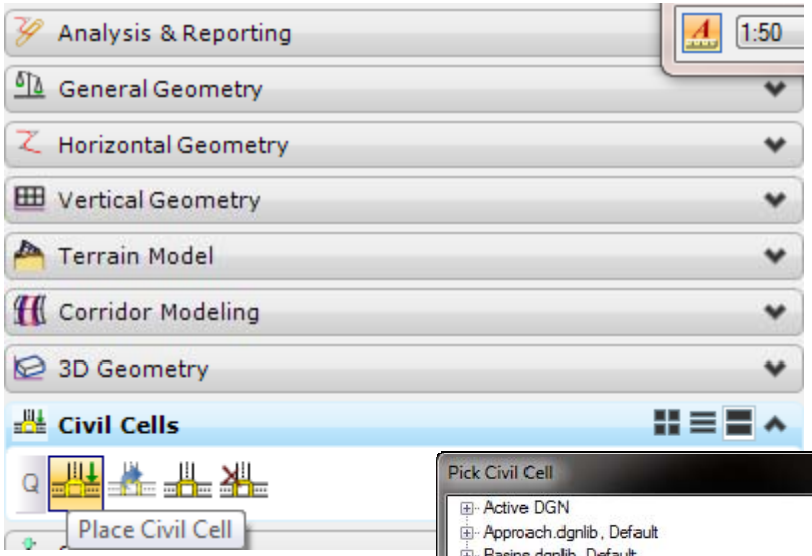
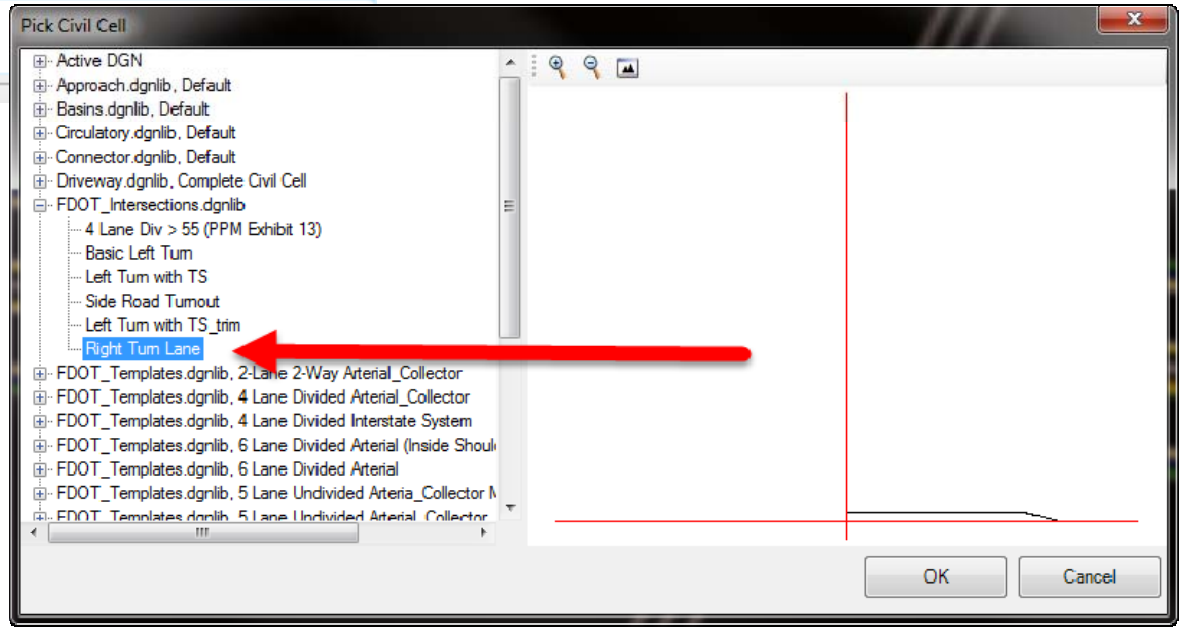
Place Civil Cells





Right Turn Lane

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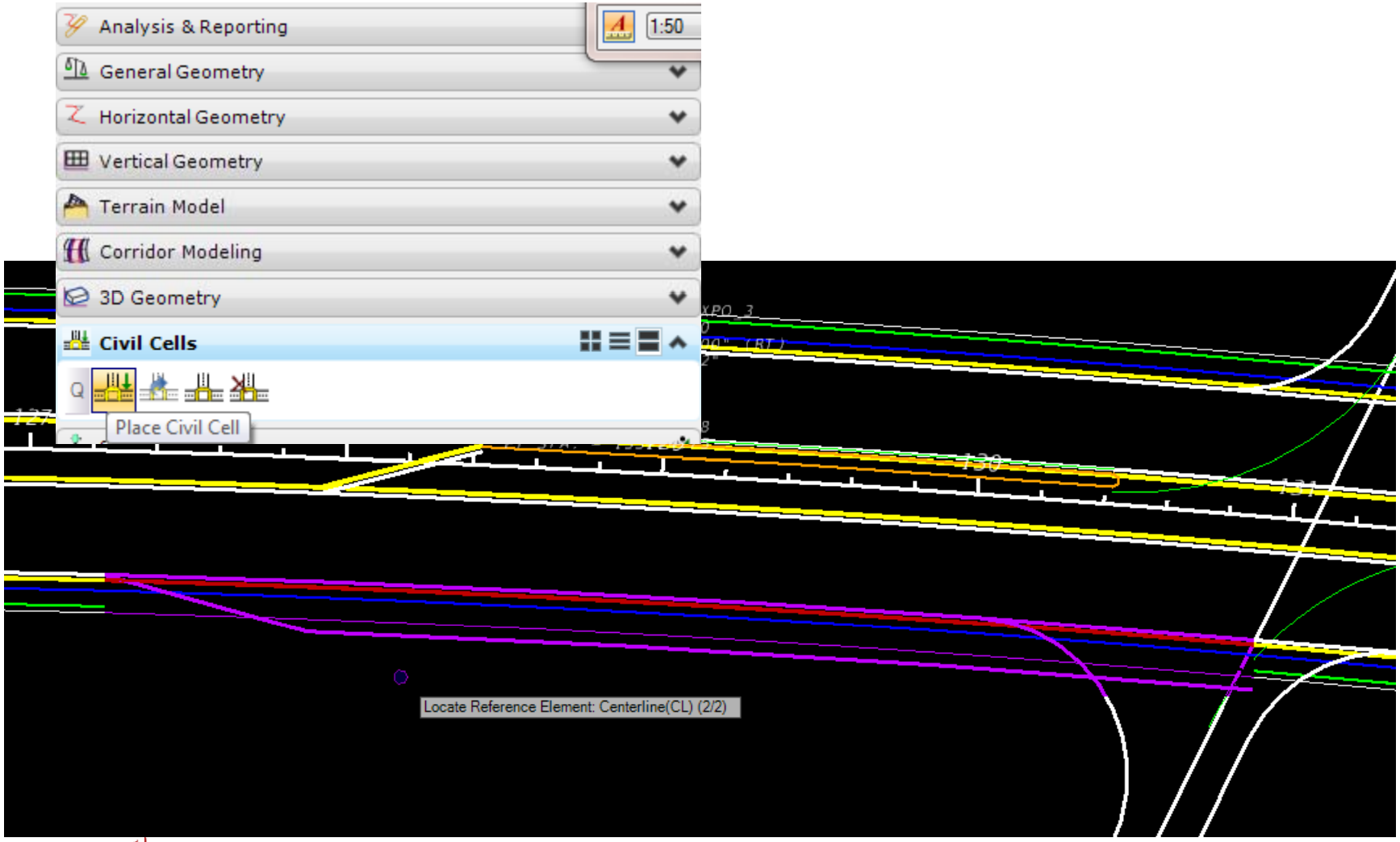
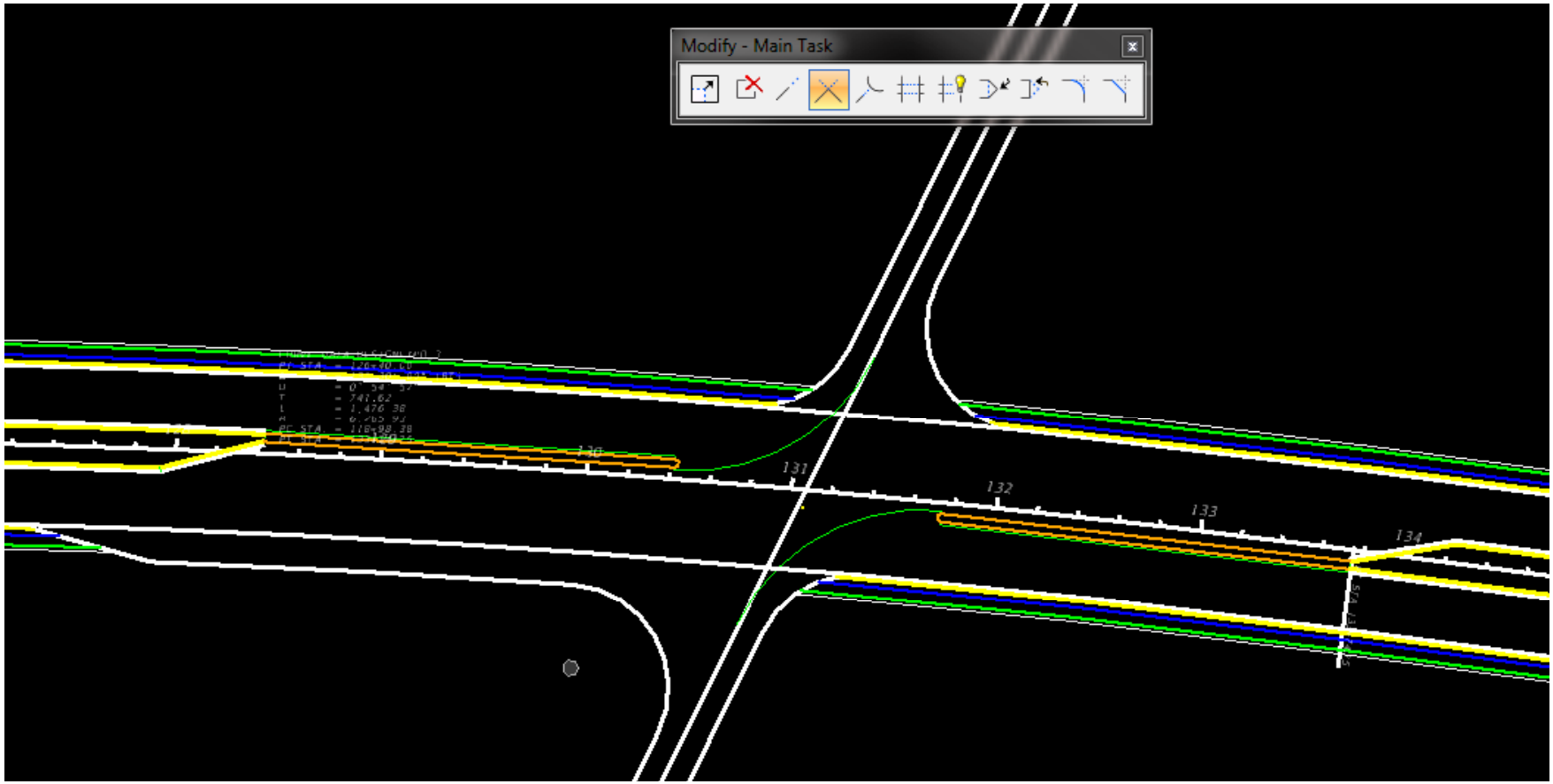
Place Civil Cells



Modify Civil Elements



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Horizontal Reports

Bentley Civil Report Browser - C:\Users\rd964vd\AppData\Local\Temp\RPTr40j3ztc.xml

File Tools Help

C:\ProgramData\Bentley\Civil\ReportBrowser\8.11.9\en\

- CivilGeometry
  - AlignmentsToLandXML.xsl
  - HorizontalAlignmentArea.xsl
  - HorizontalAlignmentCheckIntegrity.xsl
  - HorizontalAlignmentControlLineDataTable.xsl
  - HorizontalAlignmentCurveDataTable.xsl
  - HorizontalAlignmentIntervalXYZ.xsl
  - HorizontalAlignmentLength.xsl
  - HorizontalAlignmentReview.xsl
  - HorizontalAlignmentReviewASCII.xsl
  - HorizontalAlignmentReviewWithPI.xsl
  - HorizontalAlignmentStationEquations.xsl
  - HorizontalAndVerticalAlignmentReview.xsl
  - HorizontalElementsTable.xsl
  - HorizontalElementsTableSimplified.xsl
  - HorizontalElementsXYZ.xsl
  - SettingOutTable.xsl
  - SettingOutTableDeflection.xsl
  - Traverse.xsl
  - TraverseCurveASCII.xsl
  - TraverseCurveASCII2.xsl
  - TraverseCurveASCII3.xsl
  - TraverseEditASCII.xsl
  - TraversePoints.xsl
  - VerticalAlignmentCheckIntegrity.xsl
  - VerticalAlignmentIntervalStationElevationGrade.xsl
  - VerticalAlignmentIntervalStationElevationGradeASCII.xsl
  - VerticalAlignmentPointsXY.xsl
  - VerticalAlignmentReview.xsl
  - VerticalAlignmentReviewASCII.xsl
  - VerticalAlignmentReviewXY.xsl
- CivilSurvey
- Clearance
- CorridorModeling
- Custom
- DataCollection
- Evaluation
- Geometry
- ICS
- Images
- IntersectingAlignmentStations
- LandXML
- Legacy-RoadwayDesign
- LegalDescription
- MapCheck
- Milling
- Obsolete
- Schemas
- SightVisibility
- Stakeout
- StationOffset

Horizontal Alignment Review Report

Report Created: 6/4/2014
Time: 9:05am

Project: Default
Description:
File Name: C:\e\projects\22049555201\roadway\DSGNRD03_SS3.DGN
Last Revised: 6/4/2014 09:03:14

Note: All units in this report are in feet unless specified otherwise.

Alignment Name: DesignExpo
Alignment Description:
Alignment Style: CenterlineWithStationing(CLSTA)

		Station	Northing	Easting
Element: Linear				
POB	( )	R1 100+00	401954	1997365
PC	( )	R1 118+98	402153	1999253
Tangential Direction:		N 84°00'00" E		
Tangential Length:		1898		
Element: Circular				
PC	( )	R1 118+98	402153	1999253
PI	( )	R1 126+40	402230	1999991
CC	( )		395921	1999908
PT	( )	R1 133+75	402134	2000726
Radius:		6266		
Delta:		13°30'00" Right		
Degree of Curvature (Arc):		3°00'00"		
Length:		1476		
Tangent:		742		
Chord:		1473		
Middle Ordinate:		43		
External:		44		
Tangent Direction:		N 84°00'00" E		
Radial Direction:		S 6°00'00" E		
Chord Direction:		S 89°15'00" E		
Radial Direction:		S 7°30'00" W		
Tangent Direction:		S 82°30'00" E		

Contact Information

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Toll Free no: (866) 374-3368 extension 4863

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