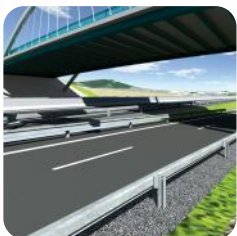
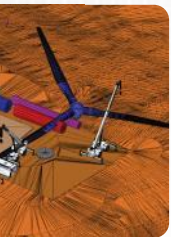




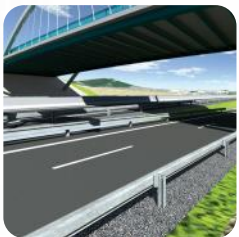
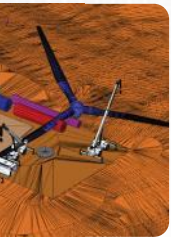
Civil Product Update

Ian Rosam – Director, Product Management, Civil Design



Agenda

- Civil Update
- OpenRoads Brand



Civil Update

Where are we today

Bentley Civil Releases

SELECTseries2 – Rail products

- Bentley RailTrack (BRT)
- Power RailTrack (PRT)
- Power Overhead Line (PROL)

Synchronised Road and Rail product release

- “OpenRail” adoption of dynamic modeling technology
- SUE / SUDA
- Incremental enhancements

SELECTseries4 – MR1



SELECTseries4 – MR2
with CONNECT Services

Synchronised Road and Rail product release

- CONNECTION Client
- Windows 10
- Incremental enhancements

Bentley Product Stream

OpenRoads V8i Product Lines

Common Modelling Solution

SELECTseries3

SELECTseries3 – MR1

Incremental enhancements and improvements
Sub Surface Utility Engineering

SELECTseries3 – MR2

Incremental enhancements and improvements
Model Interoperability improvements

SELECTseries4

Q3/4 2013

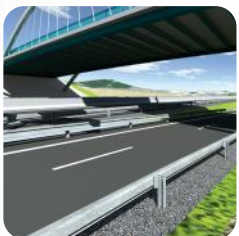
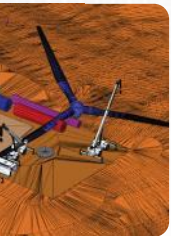
Q1/Q2 2014

Q3/4 2014

Q1/Q2 2015

Q3/4 2015

Q1/2 2016

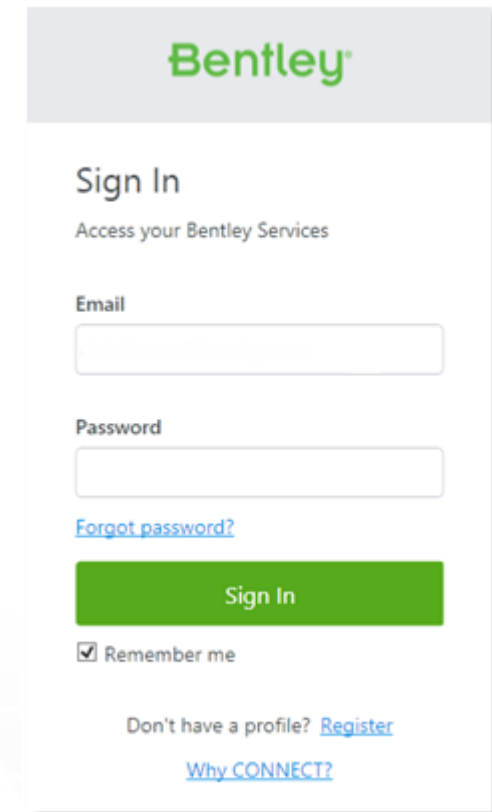


SELECTseries 4 Maintenance Release 2

General Product Enhancements

SELECTSeries 4 Maintenance Release 2

- General Enhancements
 - Delivery of Bentley CONNECTION Client.



The screenshot shows the Bentley Sign In page. At the top, the Bentley logo is displayed in green. Below the logo, the text "Sign In" is followed by "Access your Bentley Services". There are two input fields: "Email" and "Password". Below the password field is a link for "Forgot password?". A green "Sign In" button is positioned below the links. At the bottom, there is a checked checkbox for "Remember me" and two links: "Don't have a profile? Register" and "Why CONNECT?".

Personal Portal

The screenshot shows the Bentley Personal Portal interface. At the top left is the Bentley Systems Inc. logo. The main content area is divided into several sections: 'Learning' on the left, 'Recent Projects' at the top right, 'Personal Share' in the middle right, and 'My Support' at the bottom. The 'Learning' section includes links for Bentley Cloud Services, Learn Now, Learning Certificates, Learning Paths, and Active Learning. The 'Recent Projects' section lists three projects: '002 - Substation', '15-7249', and '002 - Substation Contractor A'. The 'Personal Share' section lists three i-models: 'Hanger.iModel', 'Piping.iModel', and 'MainTunnel.iModel'. The 'My Support' section contains five tiles: Bentley Communities, Software Downloads, License Management, My Service Requests, and New Service Request. A 'My Activity' tile is also visible between 'Personal Share' and 'My Support'. Green callout boxes with white text point to various features: 'Access Learning' points to the Learning section; 'Direct access to your projects' points to the Recent Projects list; 'Share i-models and pdf's with other CONNECTED users' points to the Personal Share list; 'Monitor your application usage and activity' points to the My Activity tile; and 'Access to Service Requests' points to the My Service Requests tile. A large callout box at the bottom left points to the Bentley Communities, Software Downloads, License Management, and Service Requests tiles.

Access Learning

Direct access to your projects

Share i-models and pdf's with other CONNECTED users

Monitor your application usage and activity

Access to Service Requests

Direct access to Bentley Communities, Software Downloads, License Management, and Service Requests

Direct Access to LEARN



BENTLEY EVENTS WEBINARS SEMINARS INDUSTRY EVENTS LEARNING

Course Type

OnDemand Courses

Course

- Bentley Cloud Services - CONNECTION client Sign-In
- Bentley Cloud Services - CONNECTION client options
- Bentley Cloud Services - Personal portal
- Bentley Cloud Services - Project portal
- Bentley Cloud Services - My Activity tile

Product

- Bentley Cloud Services
- All
- AECosim Building Designer
- AutoPIPE
- Bentley Cloud Services**
- Bentley Navigator
- Bentley Raceway and Cable Management
- Bentley Substation
- InRoads
- MicroStation
- OpenPlant Support Engineering
- Power InRoads
- ProStructures
- ProjectWise Design Integration Server
- ProjectWise Explorer Client
- ProjectWise InterPlot Organizer
- ProjectWise Project Performance Dashboards
- ProjectWise Project Sharing
- SITEOPS viewer
- STAAD Foundation Advanced
- STAAD.Pro

Version

Version	Language
CONNECT Edition Base Release	English
CONNECT Edition Base Release	English
CONNECT Edition Base Release	English
CONNECT Edition Base Release	English
CONNECT Edition Base Release	English

Language

www.bentley.com Hello, Chris Help Profile Sign Out

LEARNserver

Home Find Training My Learning Paths

Home » Find Training » View Learning Path » View Course

Site Cost Options Report (SCOR)

Description: This video includes a walkthrough of how to generate a Site Cost Options (Optimization) Report (SCOR) in order to compare various revisions side by side.

1 Views [Send to the LEARN app](#)

Course Details [Learn more](#)

Related Videos

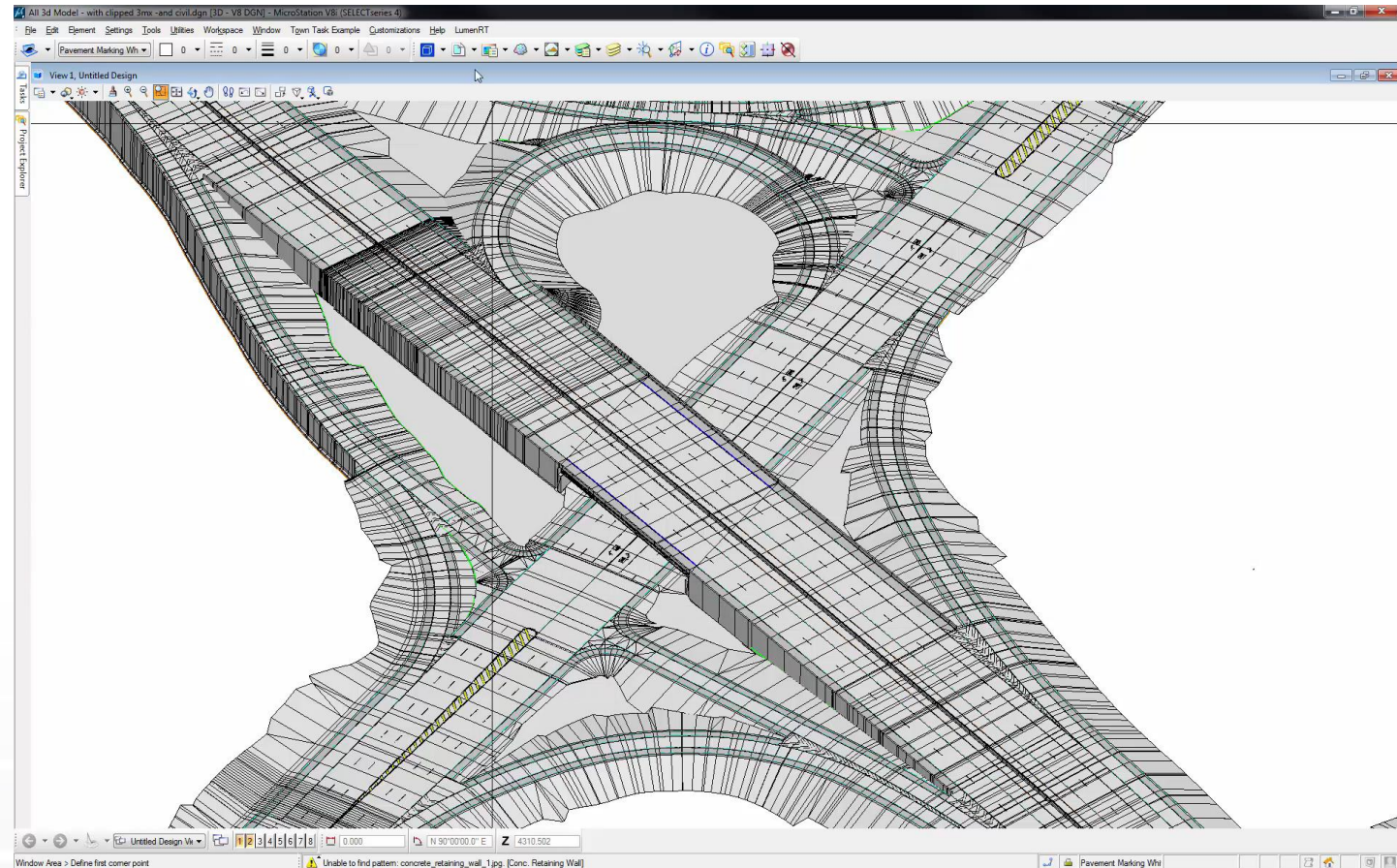
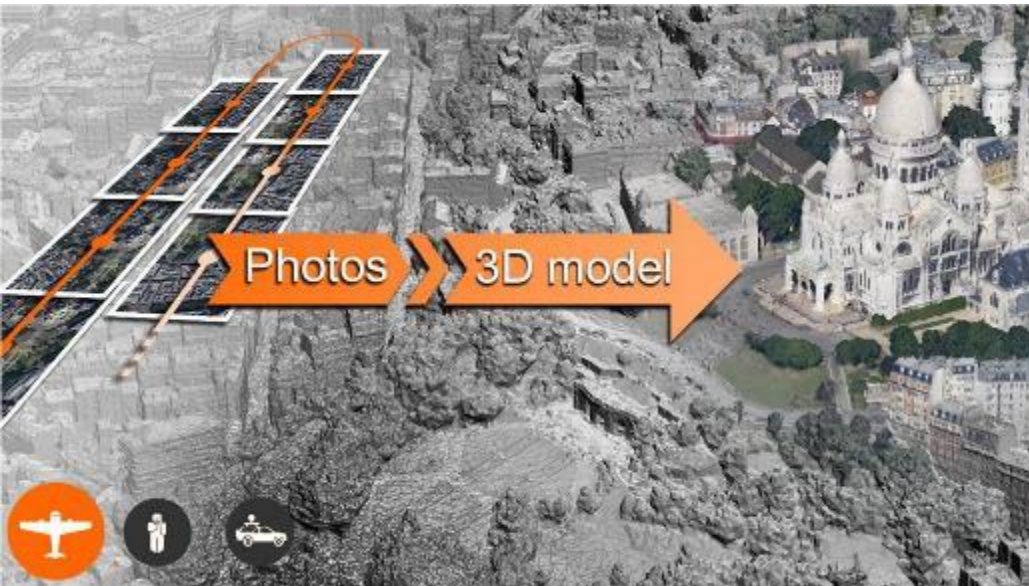
Title	Language	Generation	Release Detail	Type	Duration	Status	Launch
▶ 2015-06 (June) SITEOPS SIG - CAD File Import	English	Other	Base Release		47m		
▶ 2015-06 (June) SITEOPS SIG - SITEOPS Geolocation	English	Other	Base Release		29m		

SELECTSeries 4 Maintenance Release 2

- General Enhancements
 - Support for Windows 10.
 - Updated product versions of
 - Subsurface Utilities Design and Analysis.
 - Subsurface Utility Engineering.
 - Bentley Descartes.
 - Bentley Map.

SELECTSeries 4 Maintenance Release 2

- General Enhancements
 - Support for Reality Mesh – 3mx file



SELECT Series 4 Maintenance Release 2

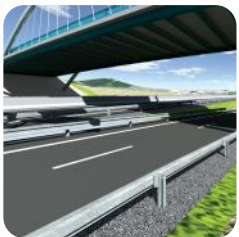
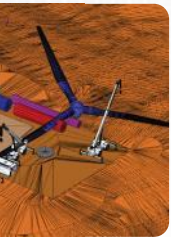
- Modeling Enhancements
 - Ability to reclassify Components in End Area Volume tool to Unsuitable Material(s).
 - Added Import/Export capabilities for the values assigned for the End Area Volume tool.
 - Added ability to delete Dynamic Cross Sections by right mouse button clicking in Dynamic section and selecting Delete Dynamic Cross Section View.
 - Increased the amount of vertices that can be included in complex shape for clipping.
- Survey Enhancements
 - The copy command no longer creates a survey linear feature or point by default. The graphic created would be just a MicroStation graphic. To enable the <Copy> tool to create a survey linear feature or point set the following configuration variable:
CIVIL_SURVEY_RETAIN_SURVEY_ON_COPY=1

SELECTSeries 4 Maintenance Release 2

- Modeling Enhancements

- Enhanced support capability to deal with ‘static’ corridors
- From MR2 a ‘copy’ of the geometry is retained with the Corridor file – benefit if the geom file is detached or swapped out the corridor can still be updated

http://communities.bentley.com/products/road___site_design/w/road_and_site_design___wiki/28223.video-corridor-reattach



Civil Futures

Beyond SELECTseries 4





OpenRoads



Digital Construction

Detailed Design

Conceptual Design



Digital Construction

Detailed Design

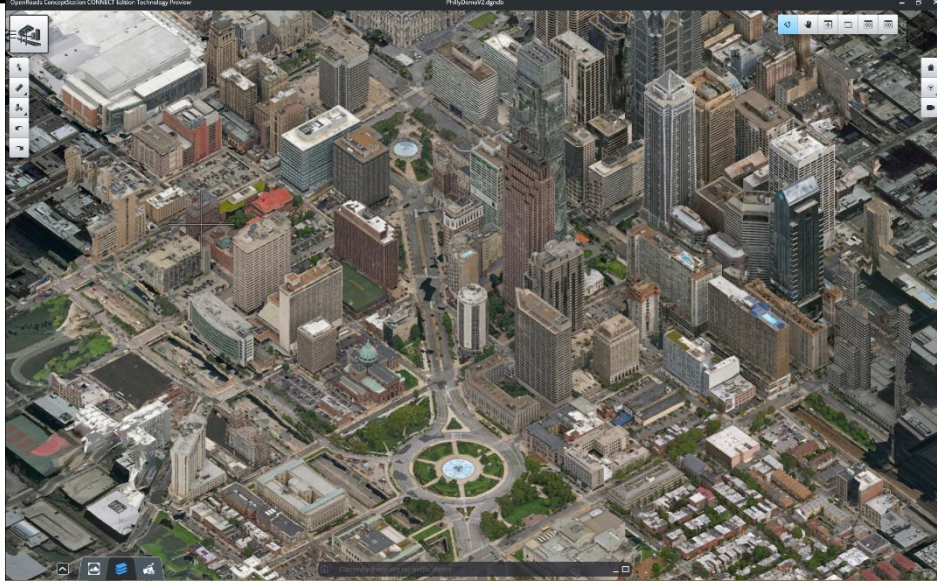
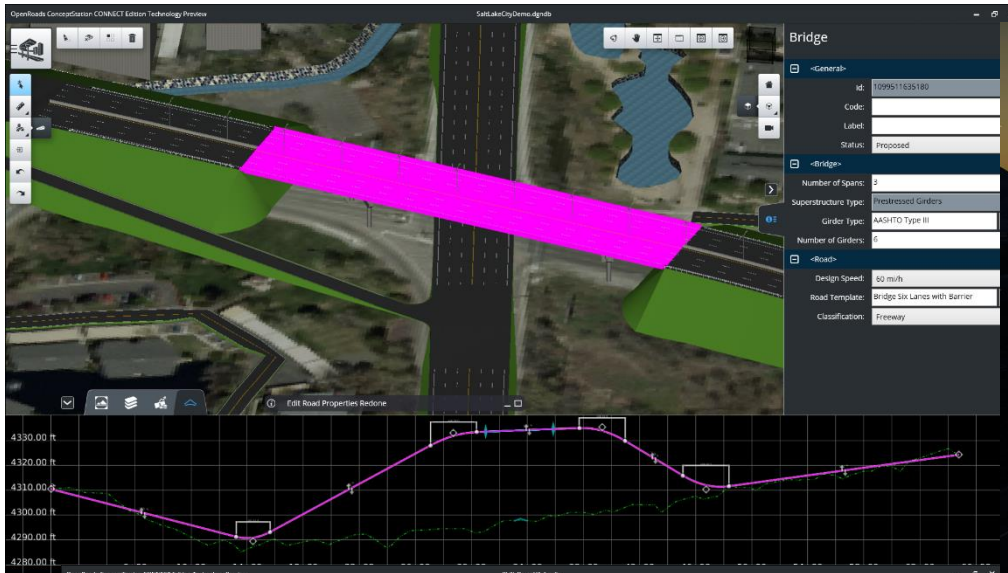
Conceptual Design





OpenRoads ConceptStation

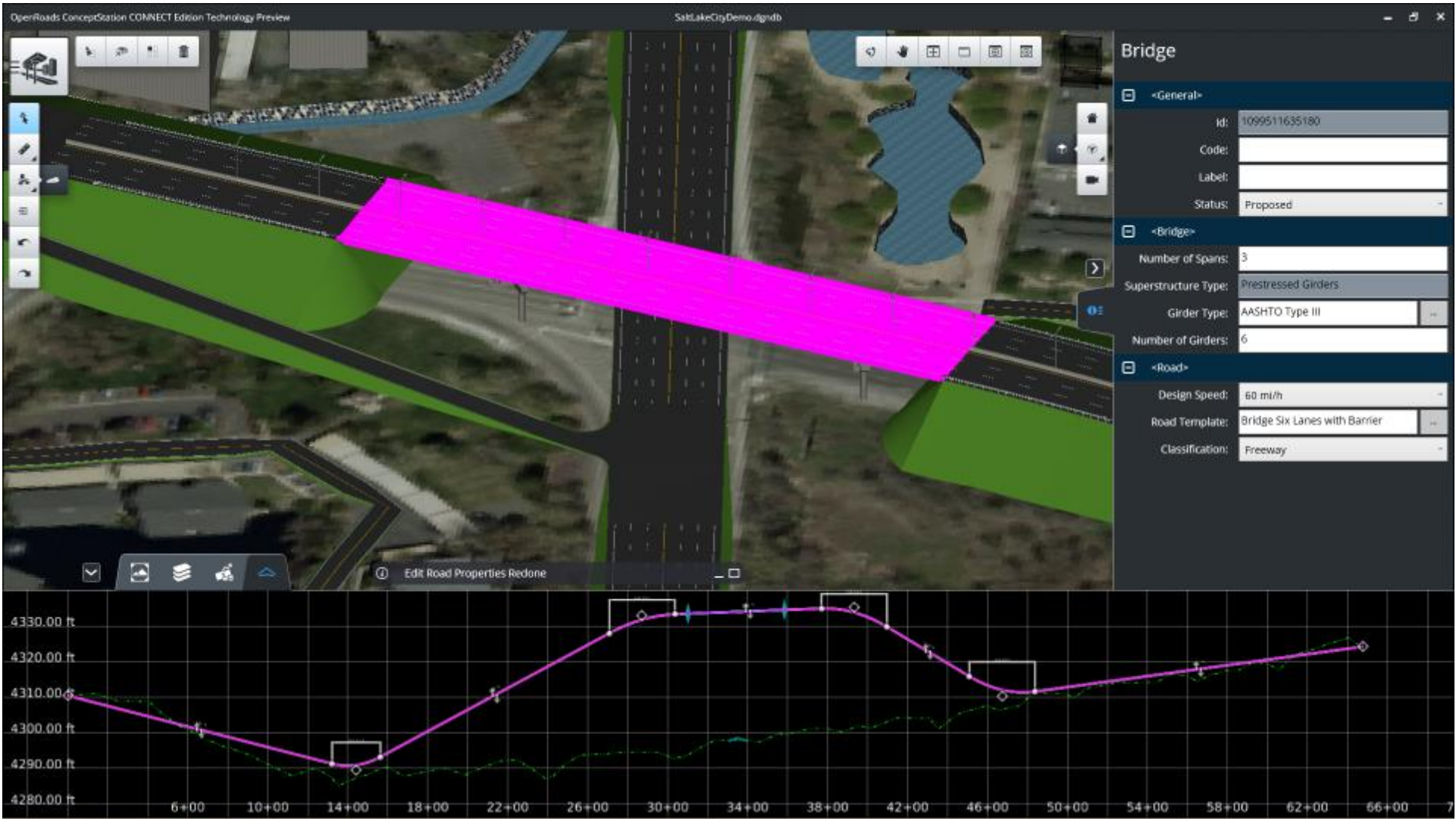




Innovative and inspiring



Better communication



More efficient prototyping

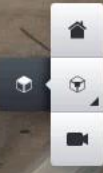
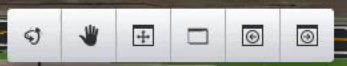
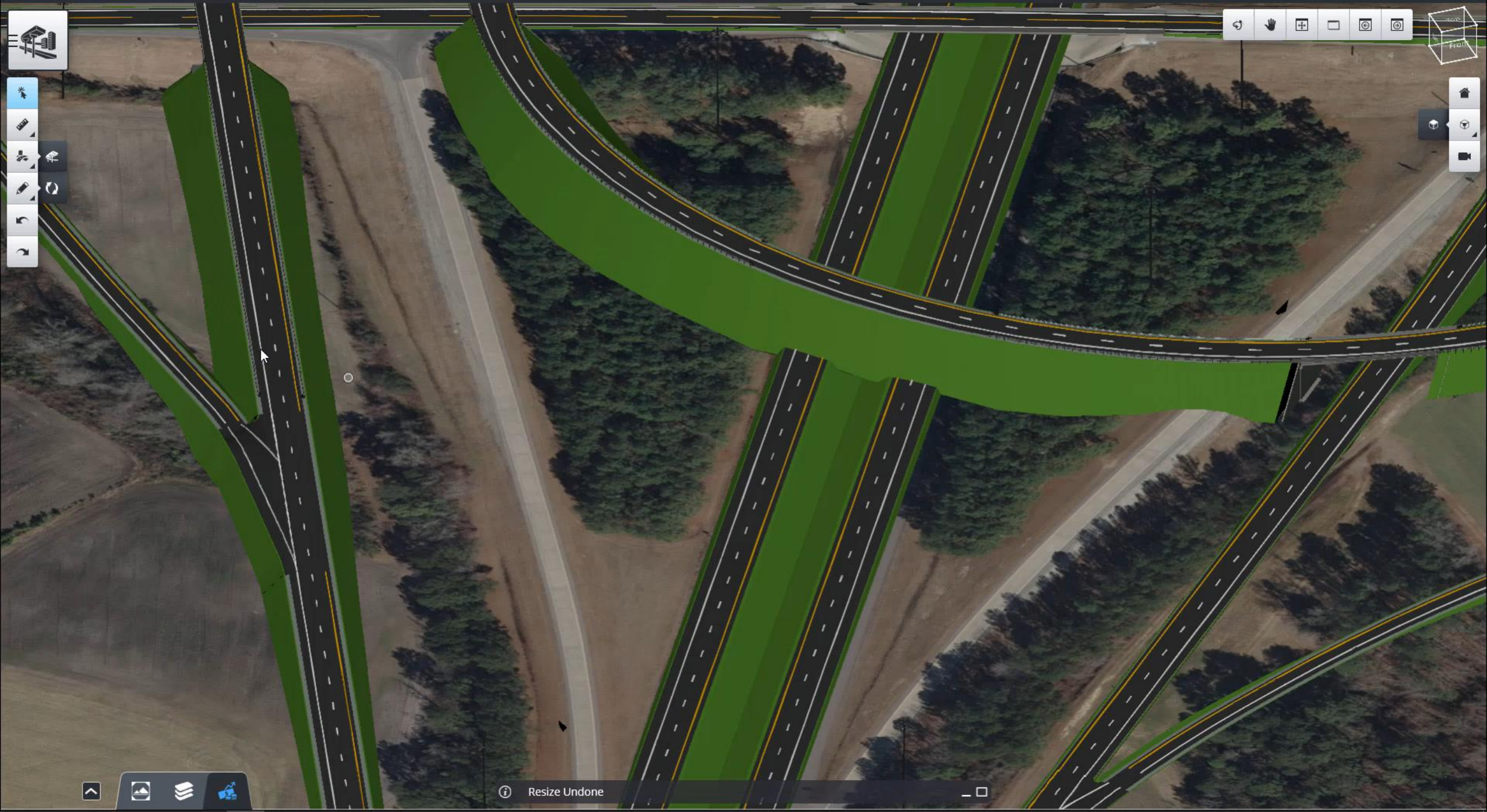
OpenRoads ConceptStation CONNECT Edition Technology Preview

SaktLakeCityDemo.dgn/db

Concept estimated cost: \$15,929,169

Category	Cost	Source
Earthwork	\$8,431,880	Design
Pavement	\$885,668	Design
Structure	\$2,721,544	Design
Drainage	\$755,653	Allowance
Electrical	\$93,175	Allowance
Incidental Items	\$1,910,097	Allowance

Smarter trade-offs



Resize Undone



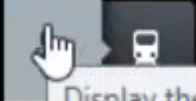


Top



No new notifications





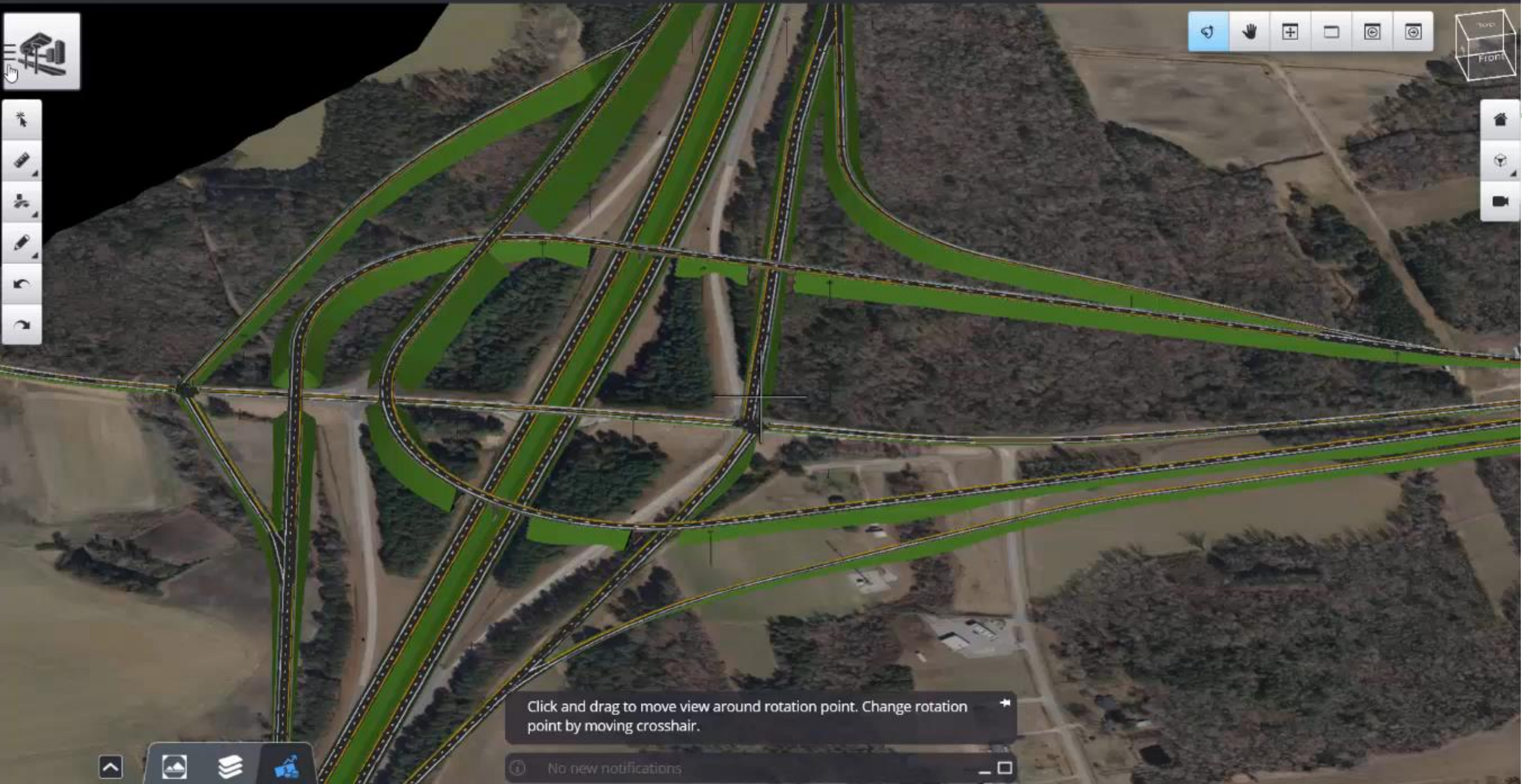
Display the placement tools.



Announcement – Bentley and PTV VISSIM

- Bentley and PTV are proud to announce the shortly available integration between OpenRoads ConceptStation and PTV VISSIM

“PTV **Vissim** is recognized in the **US market as the industry standard software for microscopic traffic simulation**. We are constantly working on evolving our solution to ensure we pre-empt market requirements. By collaborating closely with Bentley on OpenRoads ConceptStation, we are making sure users of both companies benefit. Bentley and PTV Group now offer clients a **smooth and convenient workflow process** that integrates two of the top design and traffic engineering software platforms worldwide,” said **Miller Crockart, Vice President Traffic Global Sales & Marketing at PTV Group**



Click and drag to move view around rotation point. Change rotation point by moving crosshair.

No new notifications



Digital Construction

Detailed Design

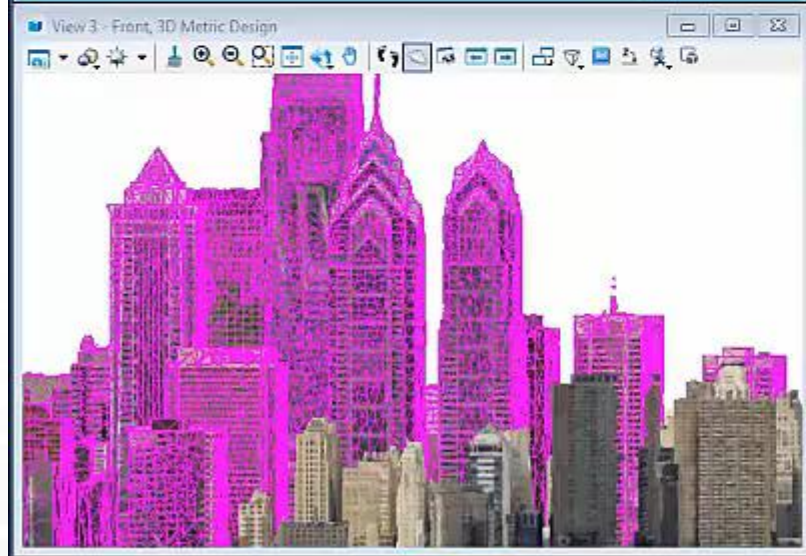
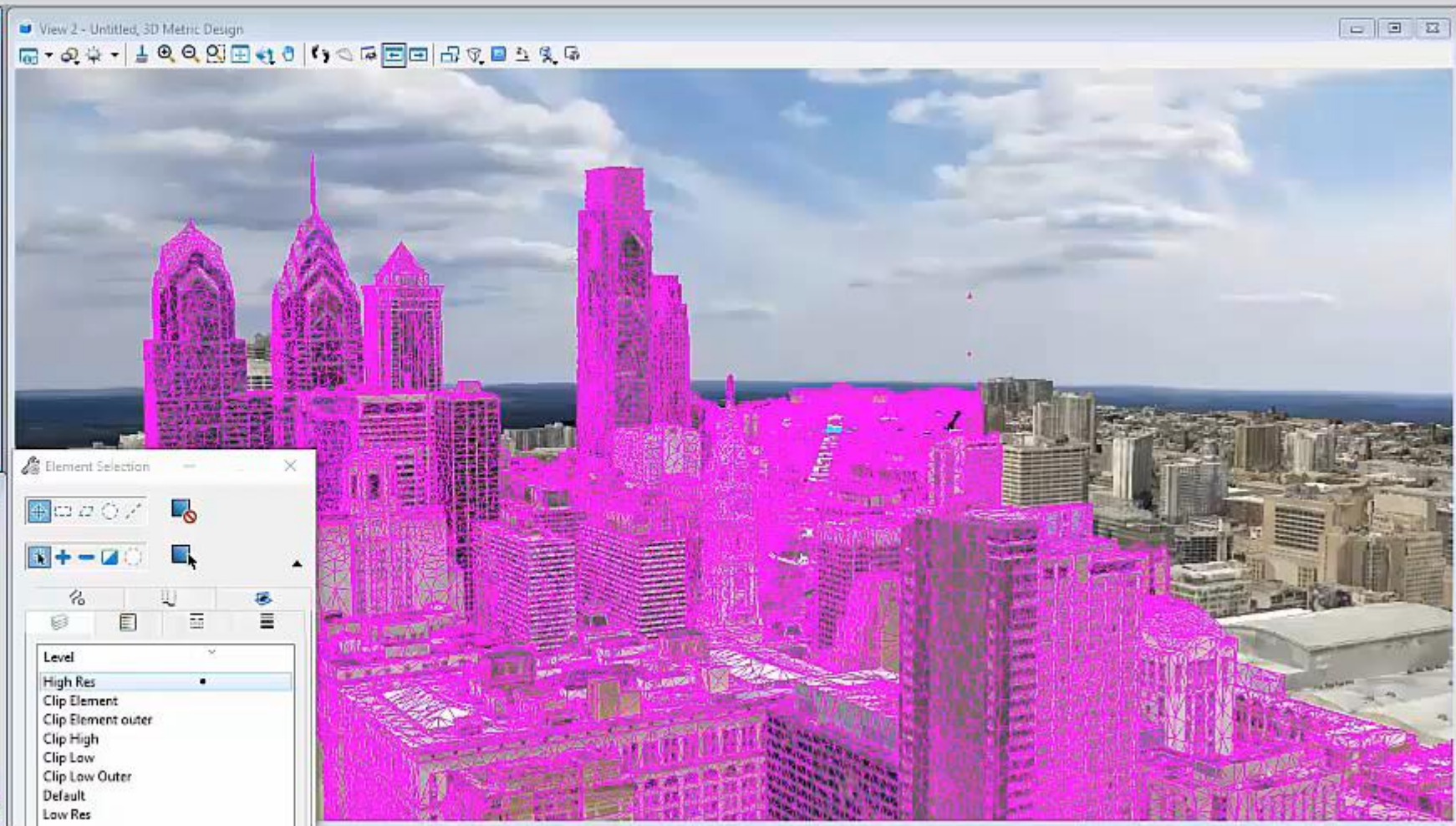
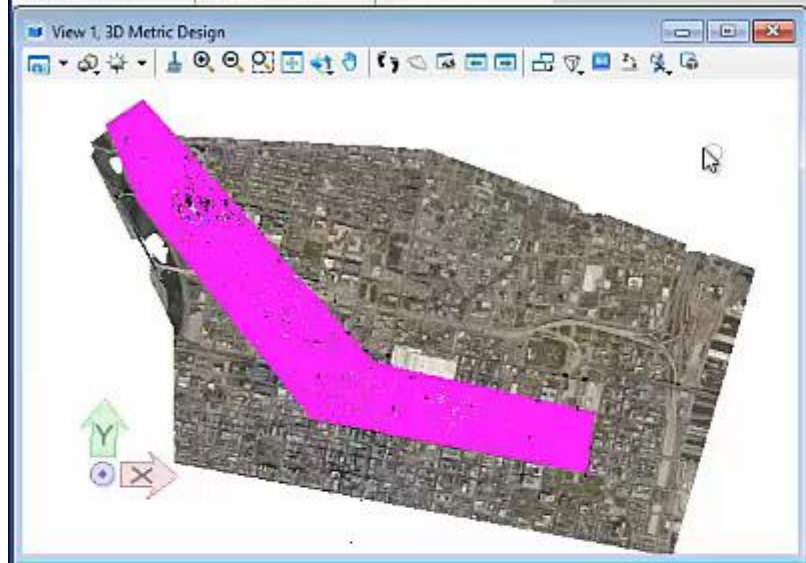
Conceptual Design







X 1902250.482 Y 14514788.990 Z 533.276



Element Selection

Level

- High Res
- Clip Element
- Clip Element outer
- Clip High
- Clip Low
- Clip Low Outer
- Default
- Low Res



Digital Construction

Detailed Design

Conceptual Design





OpenRoads



What is OpenRoads ?

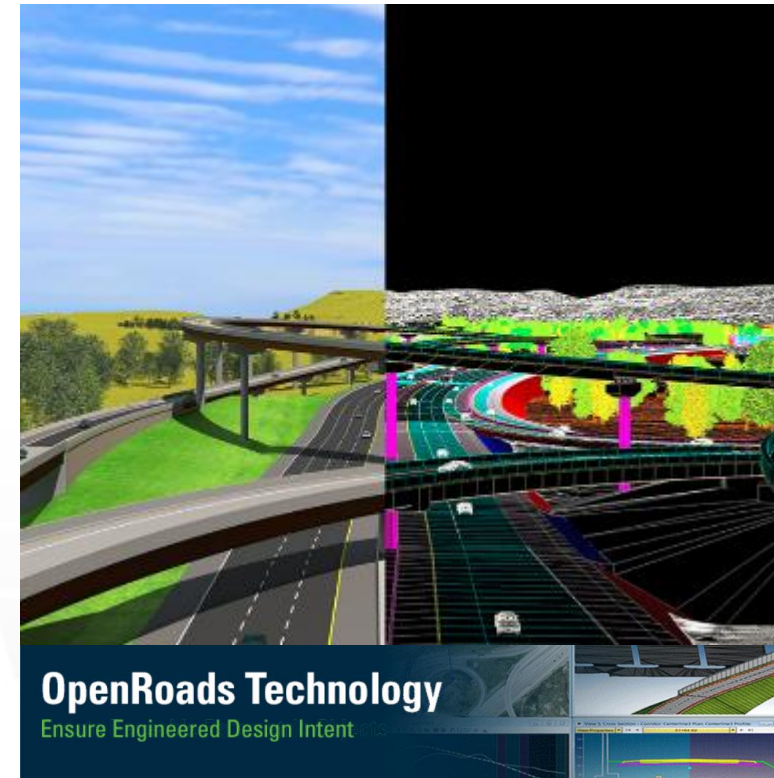


OpenRoads provides a common dynamic modeling **technology** for GEOPAK, InRoads, MXROAD and PowerCivil for “Country”.



OpenRoads technology offers immersive interaction of

- Survey
- Terrain modeling
- Geometry
- Corridor modeling
- Dynamic cross sections
- Civil cells
- Design intent
- Design-time visualization
- Subsurface Utilities



Bentley Civil Evolution

GEOPAK

- Quantities
- Plan Preparation
- Drainage
- Earthworks
- Road Design
- Alignment
- Survey
- Terrains

InRoads

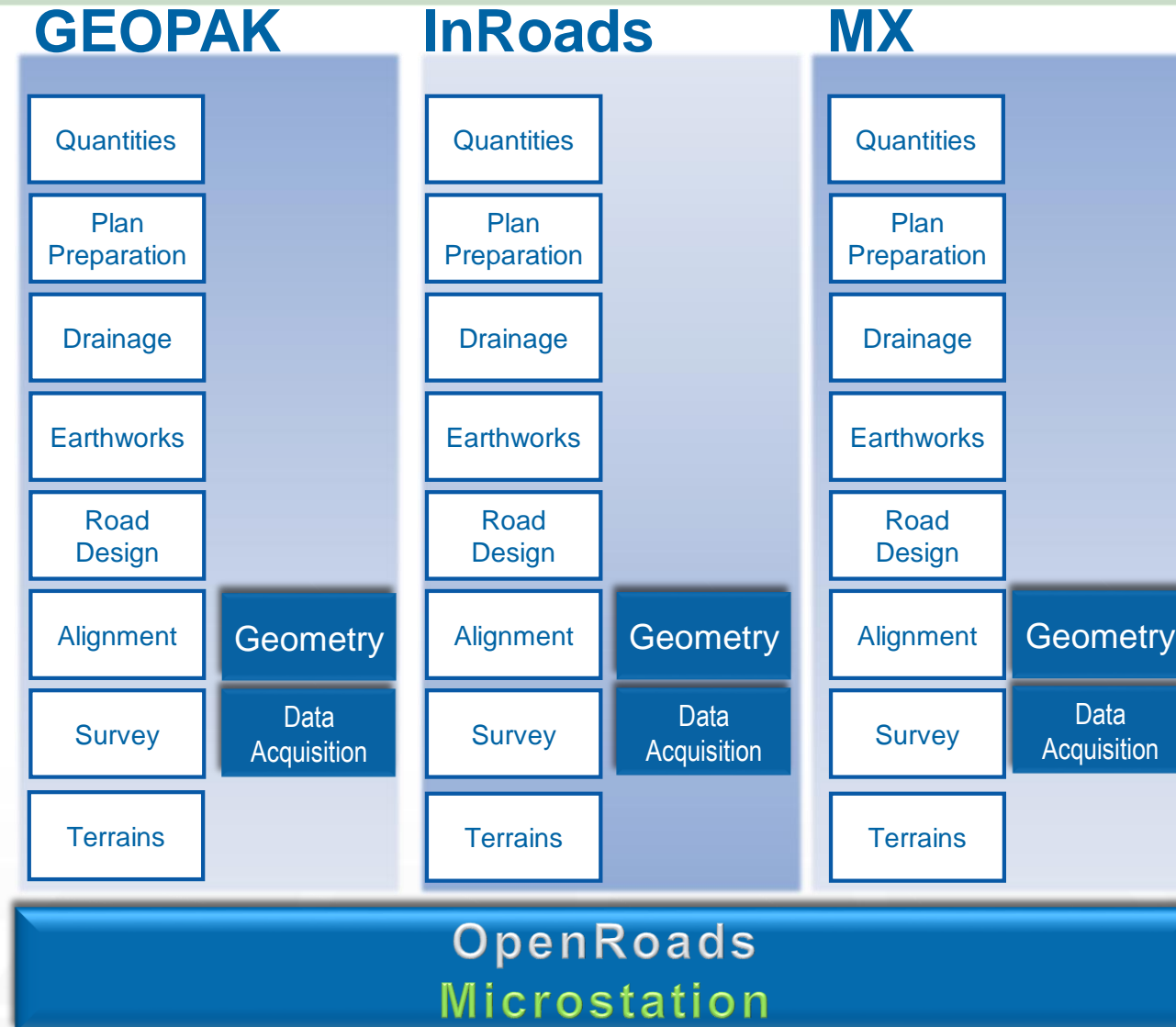
- Quantities
- Plan Preparation
- Drainage
- Earthworks
- Road Design
- Alignment
- Survey
- Terrains

MX

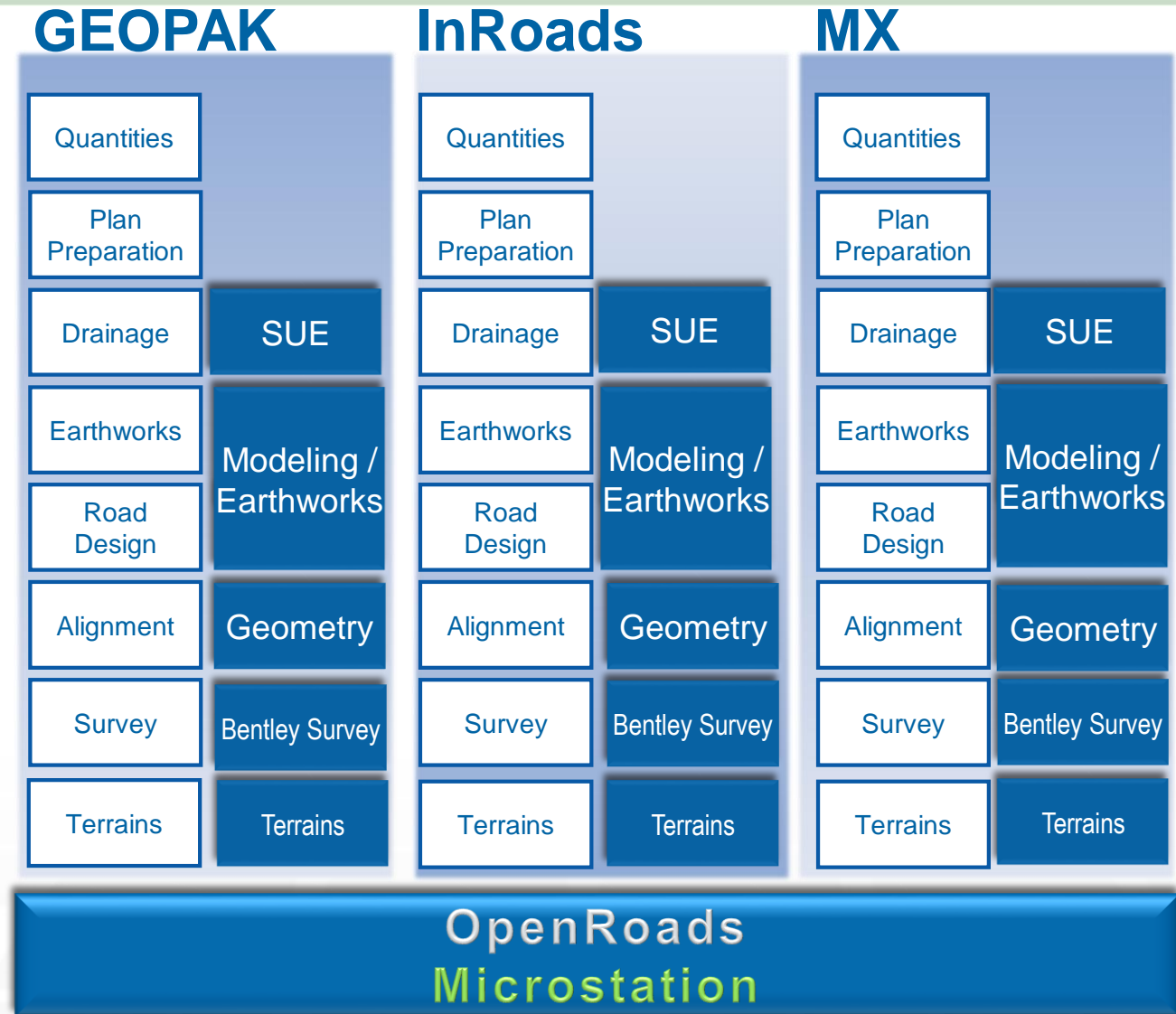
- Quantities
- Plan Preparation
- Drainage
- Earthworks
- Road Design
- Alignment
- Survey
- Terrains

MicroStation

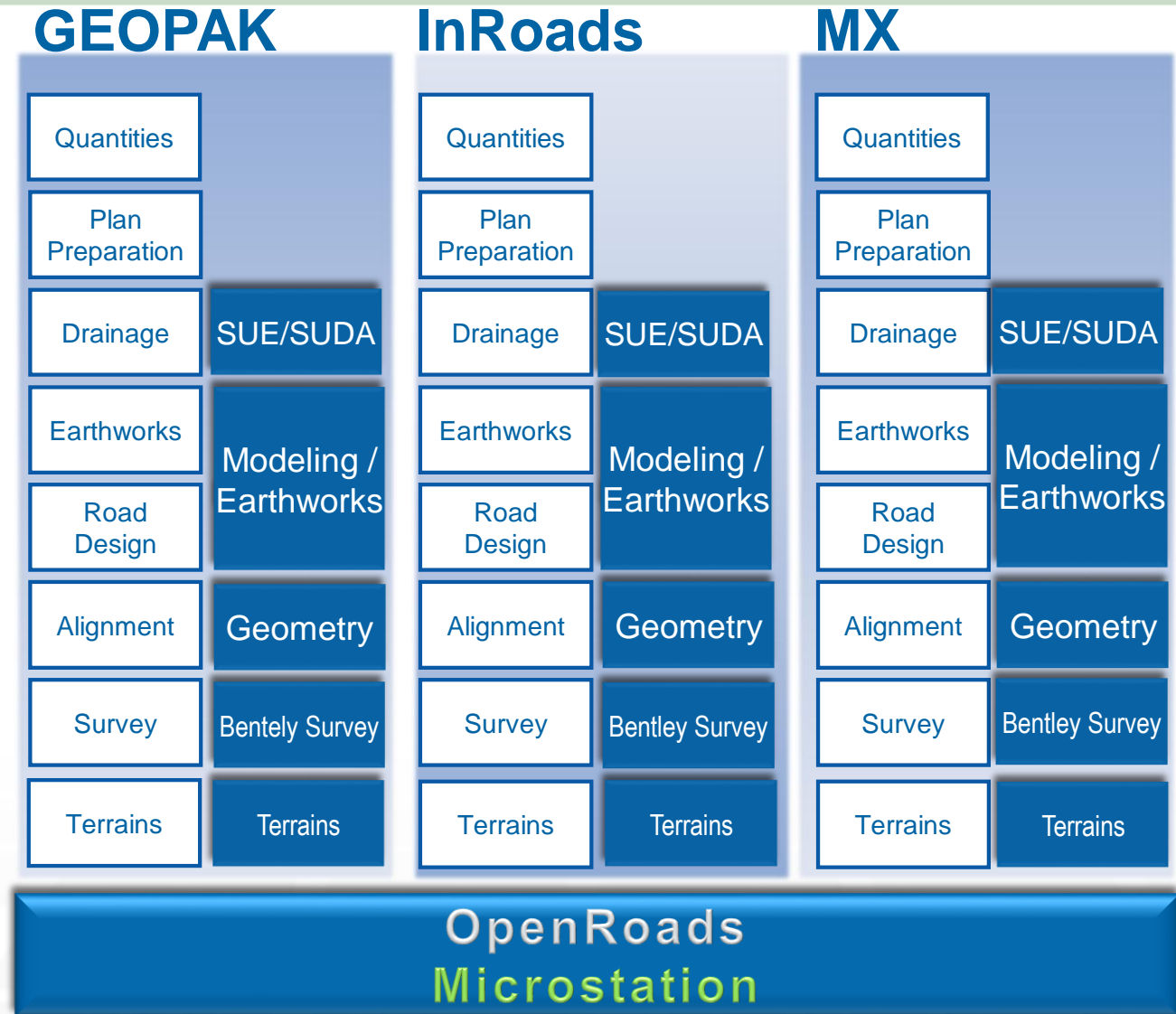
Bentley Civil Evolution (SELECTseries 2)



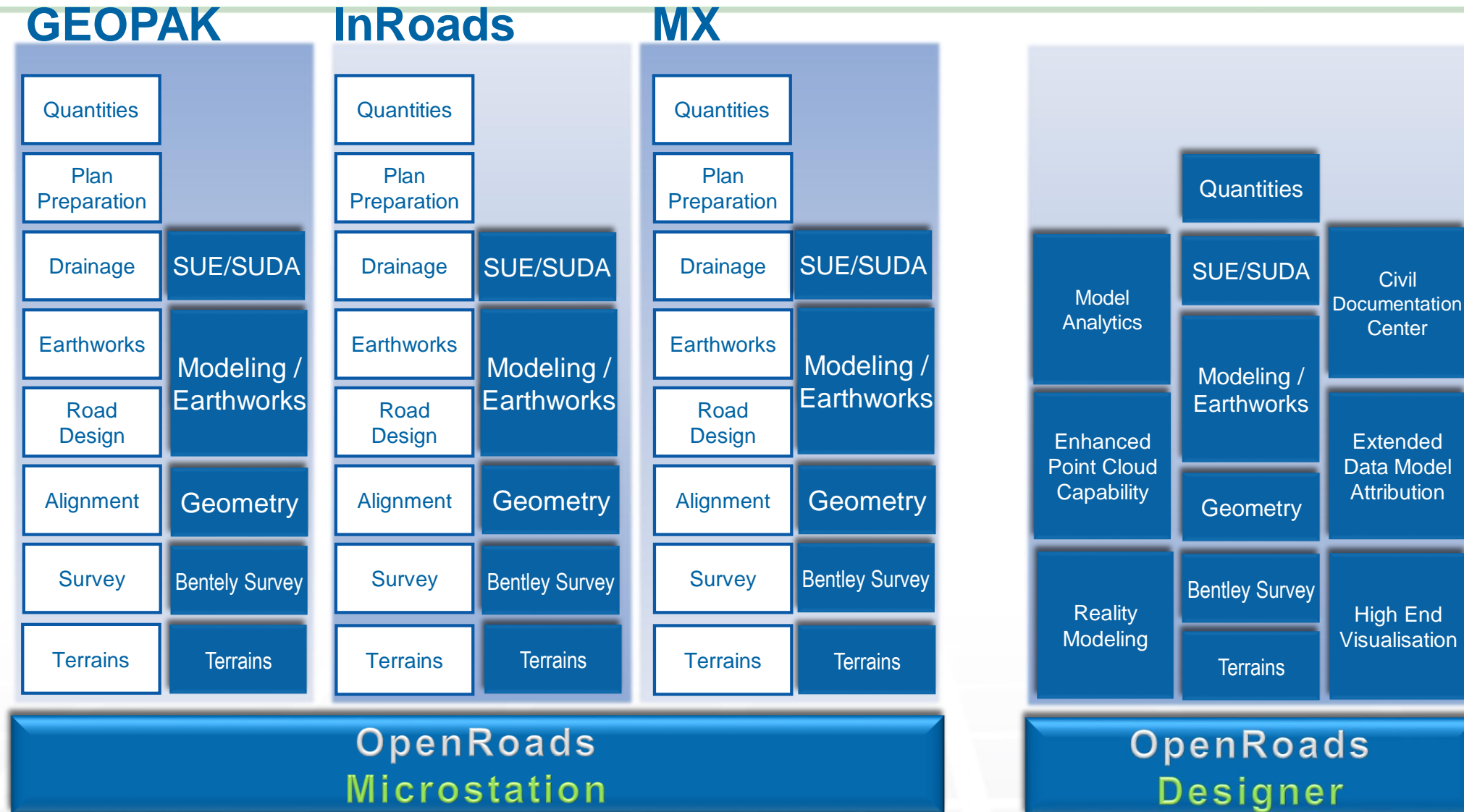
Bentley Civil Evolution (SELECTseries 3)



Bentley Civil Evolution (SELECTseries 4)



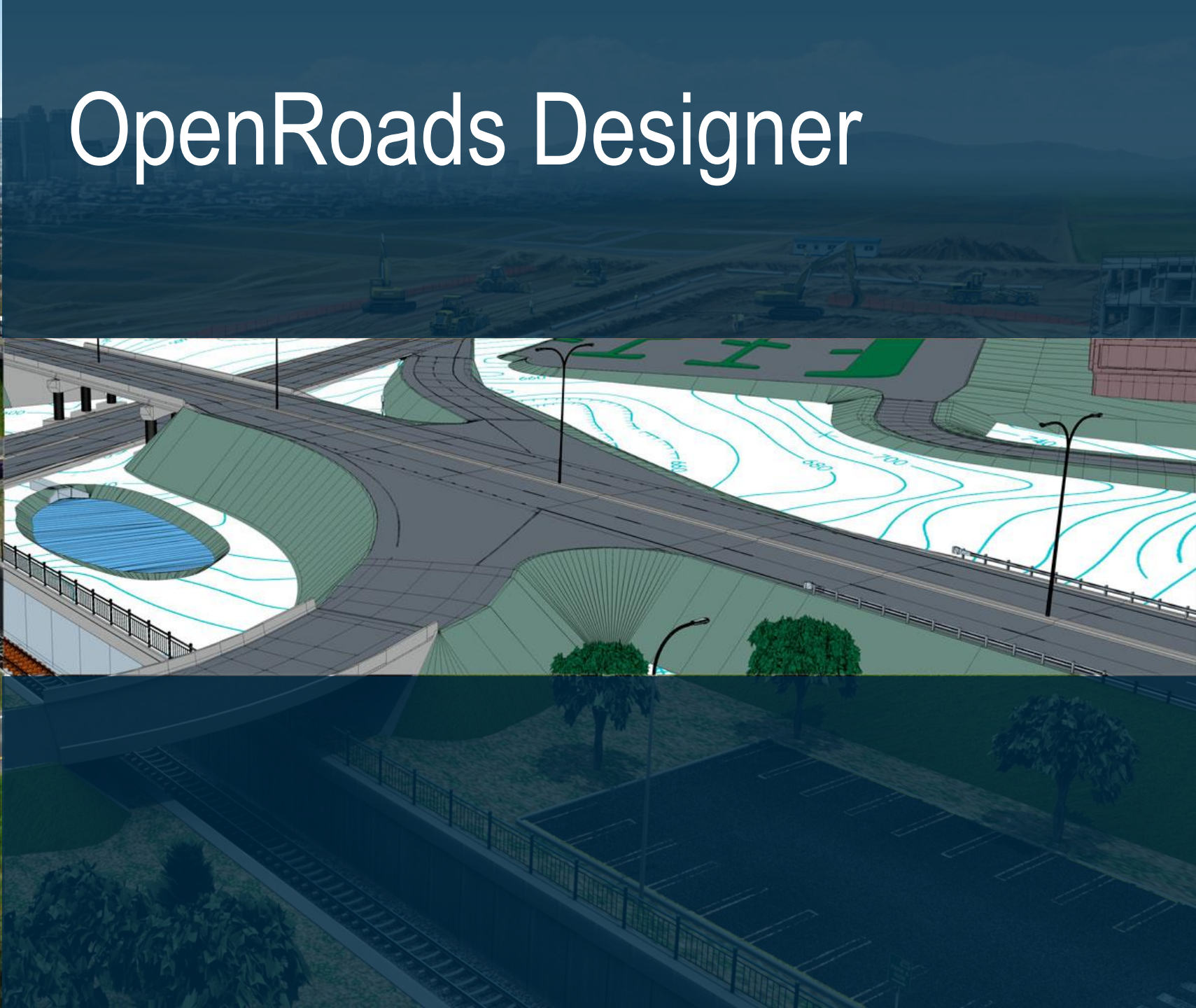
Bentley Civil Evolution



OpenRoads Designer is Here!



OpenRoads Designer



OpenRoads Designer CONNECT Edition

Introductory videos

Welcome to Bentley OpenRoads Designer

VIEW EXAMPLES

Functional Components (4:53)

Acute3D Integration (2:20)

Item Types (4:20)

LEARNING

Courses	Experience Level
5Using Context Menus (7:46) In this video, you will learn about...	● ● ●
4Controlling Tool Settings (5:11) In this video, you will learn how...	● ● ●
1Working with DGNLib Files (5:11) In this video, you will learn about...	● ● ●
2Creating Tools and Toolboxes (11:34) In this video, you will learn how to create tools and toolboxes.	● ● ●
Design, Drawing, and Sheet Models (6:59) In this first part of the lecture series, discover the characteristics of Design, Drawing and Sheet Models available in the MicroStati...	● ● ●
Design-to-Sheet - Manual Workflow (9:34) Next in this lecture series, you will learn about the basic, Design-to-Sheet workflow in a both a 2D civil demonstration as well as...	● ● ●
Design-to-Sheet - Named Boundaries (11:49) In this lecture, you learn how Dynamic Views allows for rapid creation of models. New to the MicroStation CONNECT Edition is t...	● ● ●
Design-to-Drawing-to-Sheet - Place Plan Callout (14:59) In this lecture, you will start to learn about the Detailing tools which is part of the many technologies that makes up Dynamic Vie...	● ● ●
Design-to-Drawing-to-Sheet - Place Elevation, Section and Detail Callouts (12:55) In this lecture, you will continue to learn about the Detailing tools which is part of the many technologies that makes up Dynami...	● ● ●
Drawing Boundaries (10:28) In this lecture, you will see how to designate areas using the drawing boundary feature. A drawing boundary is a predefined are...	● ● ●
HyperModels (3:46) In this lecture, you will see how Dynamic Views and Hypermodeling technologies allow you to view the 2d annotation that is pla...	● ● ●
Workspace Configuration for Dynamic Views (4:49) In this lecture, discover how workspace configuration is directly responsible for the automation of the Dynamic Views process - f...	● ● ●

NEWS AND ANNOUNCEMENTS

- [Forum Post: RE: \[IR Ss2\] Plan and Profile Generator - Sheet Index Tab - Show Sheet button grayed out. Why?](#)
- [Wiki Page: How can you delete Horizontal Geometry from OpenRoads?](#)
- [Forum Post: RE: Profile by Variable Slope does not work for variable slope](#)
- [Forum Post: RE: No Power GEOPAK V8 \(3\) ?](#)
- [Forum Post: RE: No Power GEOPAK V8 \(3\) ?](#)
- [Forum Post: RE: \[IR Ss2\] Plan and Profile Generator - Station Lock Issues](#)
- [Wiki Page: Horizontal Geometry \(OpenRoads\)](#)
- [Wiki Page: Video: Replace Reference](#)
- [Forum Post: RE: Lidar import](#)
- [Forum Post: RE: \[IR Ss2\] Plan and Profile Generator - Station Lock Issues](#)
- [Forum Post: RE: \[IR Ss2\] Plan and Profile Generator - Station Lock Issues](#)

[Read more...](#)

[More Training...](#)

f t in u y

Direct access to LEARNING titles for each application

News and Announcements

OpenRoads Designer CONNECT Edition

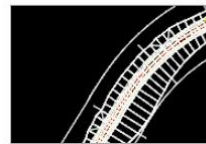
Direct access
to your
CONNECTED
Projects

Directly
access your
Personal
Portal

Bentley OpenRoads Designer CONNECT Edition

YII OpenRoads Designer ▾ Highway Design ▾

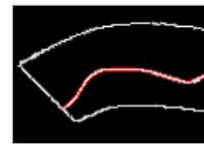
Recent Files



Design Corridor.dgn
2D Metric Design ▾



Terrain.dgn
3D Metric Design ▾



Geometry - mainline...
2D Metric Design ▾



Browse



New File



Properties ▾

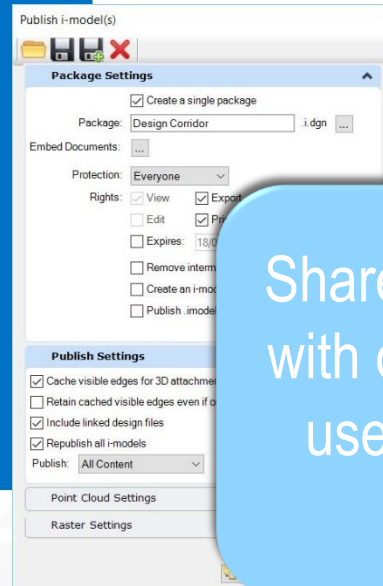
Name Highway Design
Description
WorkSpace YII OpenRoads Designer

CONNECTED Project Properties

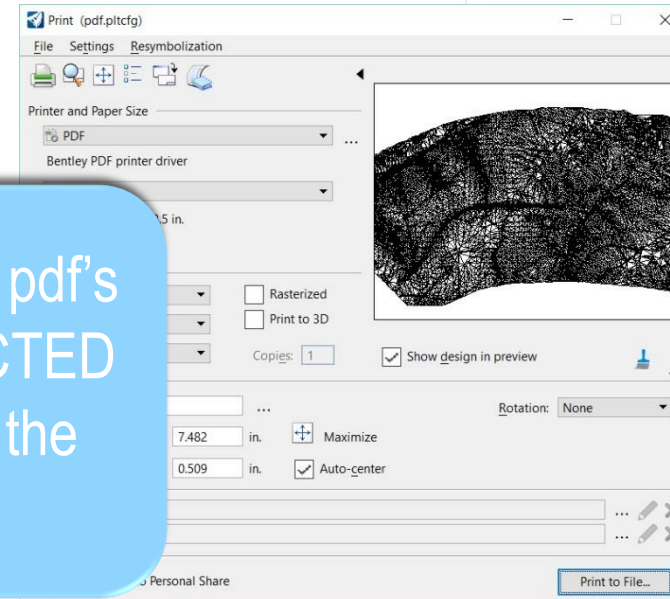
Number 112015
Name YII Demonstration Project
Asset Industry Rail and Transit
Asset Type Other
Location London
Status Active

[Project Portal](#)

[Show All Properties](#)



Share i-models and pdf's
with other CONNECTED
users from within the
application



File Home Terrain Geometry Corridors Model Detailing Drawing Production Drawing View

Attributes: None, Default, 0, 0, 0, 0, 0

Primary: Explorer, Attach Tools, Models, Level Display

Selection: Element Selection

Model Analysis and Reporting: Reports, Civil Analysis, Corridor Reports

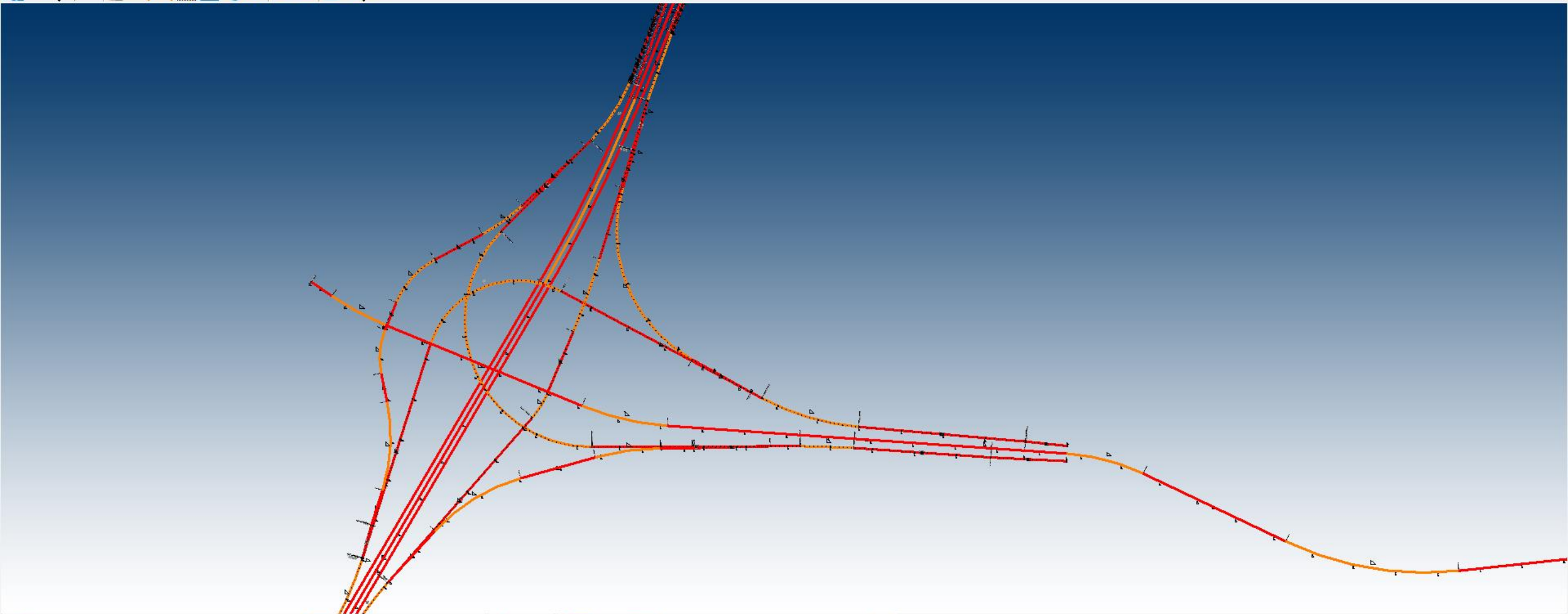
Model Import/Export: Terrain Import, Import Geometry, Import IRD

OpenRoads Help: OpenRoads Help, Open RSS Reader

Search Ribbon (F4) Sign in

View 1, Default

Navigation icons: Pan, Zoom, Rotate, etc.



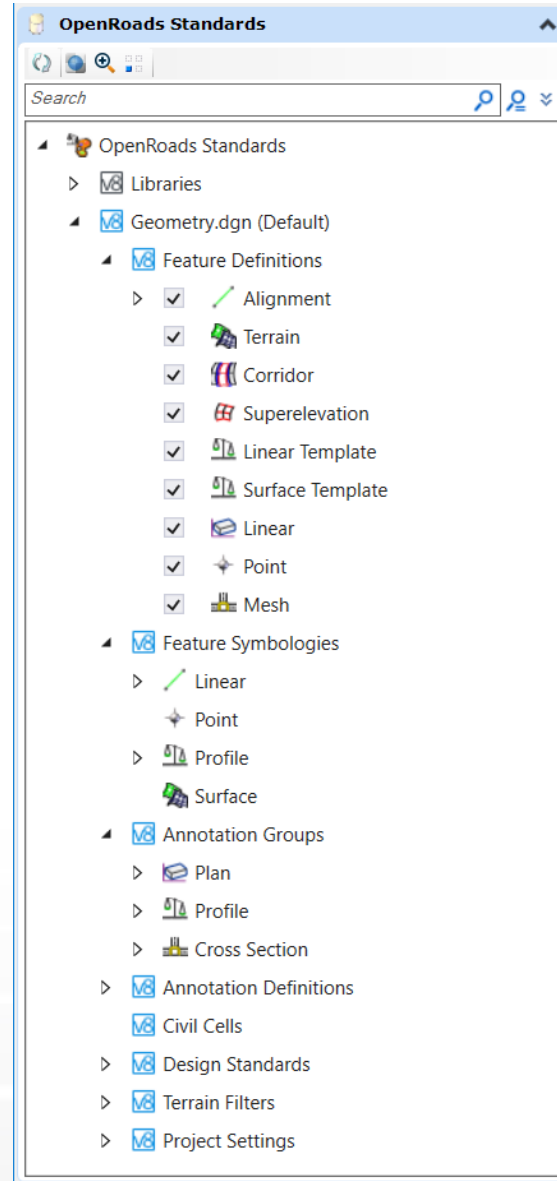
Multi-Model Views: 1, 2, 3, 4, 5, 6, 7, 8

Default

Save, Undo, Redo, Print icons

OpenRoads Designer CONNECT Edition

Enhanced Civil Model Presentation



Improved Civil Model object

- sorting
- naming
- search
- Navigation

Greater categorization and enhancing on previous feature definitions with new types for

- Alignments
- Corridors
- Linear Templates
- Area Templates

Improved sorting, search and navigation

OpenRoads Designer CONNECT Edition

Enhanced Superelevation Engine

Create Superelevation XML

General

Rate Calculations
Transition Calculations
Transition Options
Custom Key Stations
User Variables

Log File:

Units
Length:

Default Settings (optional)

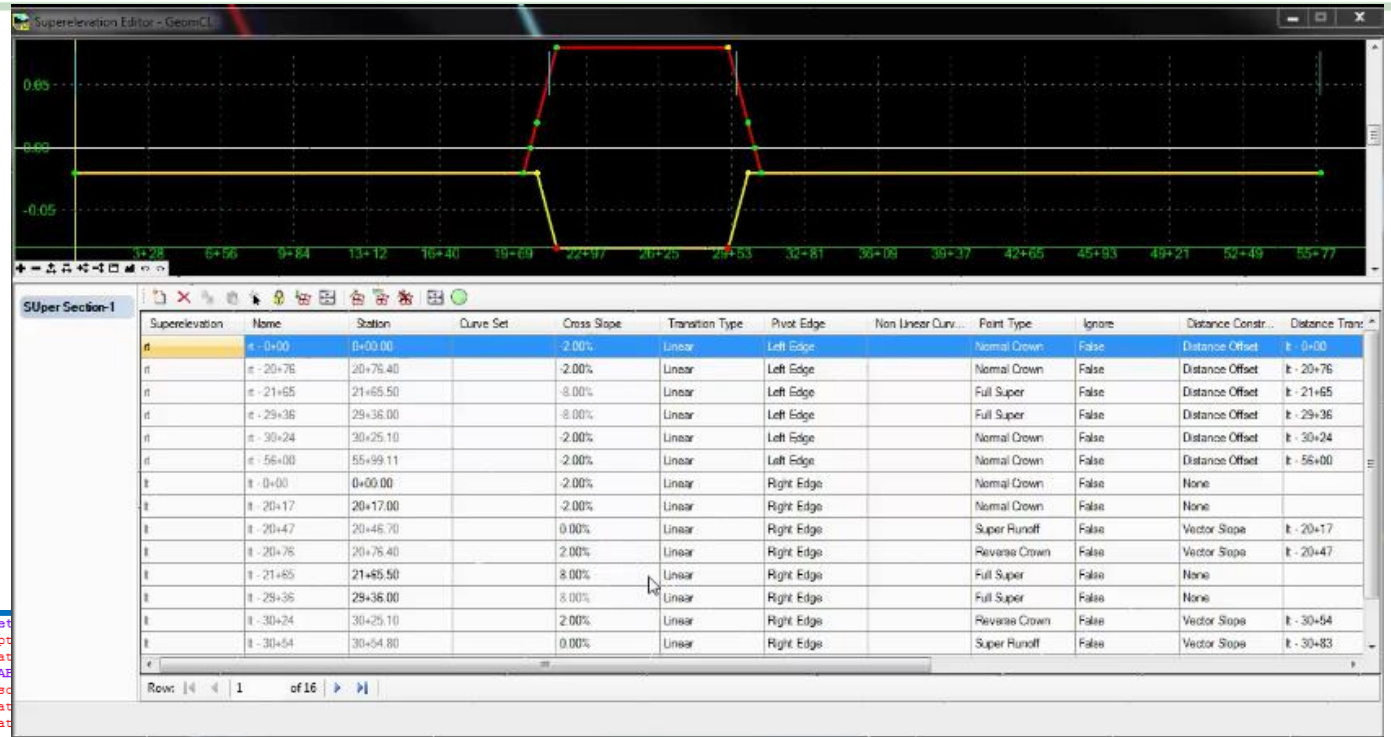
e Selection:

L Selection:

Pivot Method:

Design Speed:

Save Cancel



```

PTO Met
escript
equat
on="AF
s" desc
equat
equat
!" equation="80.0"/>
ion="(HPI * rPI) / 5729.58"/>
ion="(frictionFactor - hPI) / (5729.58*((1/MinRadius) - (1/rPI)))"/>
ation="(runningSpeed * runningSpeed) / (0.15 * (100 * MaxERate))"/>
ation="(MaxERate * Speed * Speed) / (runningSpeed * runningSpeed) - MaxERate"/>
ion="(5729.58/rPI) * ((1/MinRadius) - (1/rPI)) * ((s2 - s1)/2) * MinRadius"/>
ation="Speed*Speed/(15*R)"/>
on="if(1/R &lt;t;= 1/rPI) ? (MO * ((rPI/R)^2) + ((5729.58*s1) / R)) : (MO * (((1/MinRadius - 1/R) / (1/MinRadius
description="normal crown radius base on design speed")
ame="Speed" interpolationType="useLowerBound">
<TableEntry inputValue="15" outputValue="796"/>
<TableEntry inputValue="20" outputValue="1410"/>
<TableEntry inputValue="25" outputValue="2050"/>
<TableEntry inputValue="30" outputValue="2830"/>
<TableEntry inputValue="35" outputValue="3730"/>
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<TableEntry inputValue="55" outputValue="8650"/>
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<TableEntry inputValue="65" outputValue="12600"/>
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</Variable>

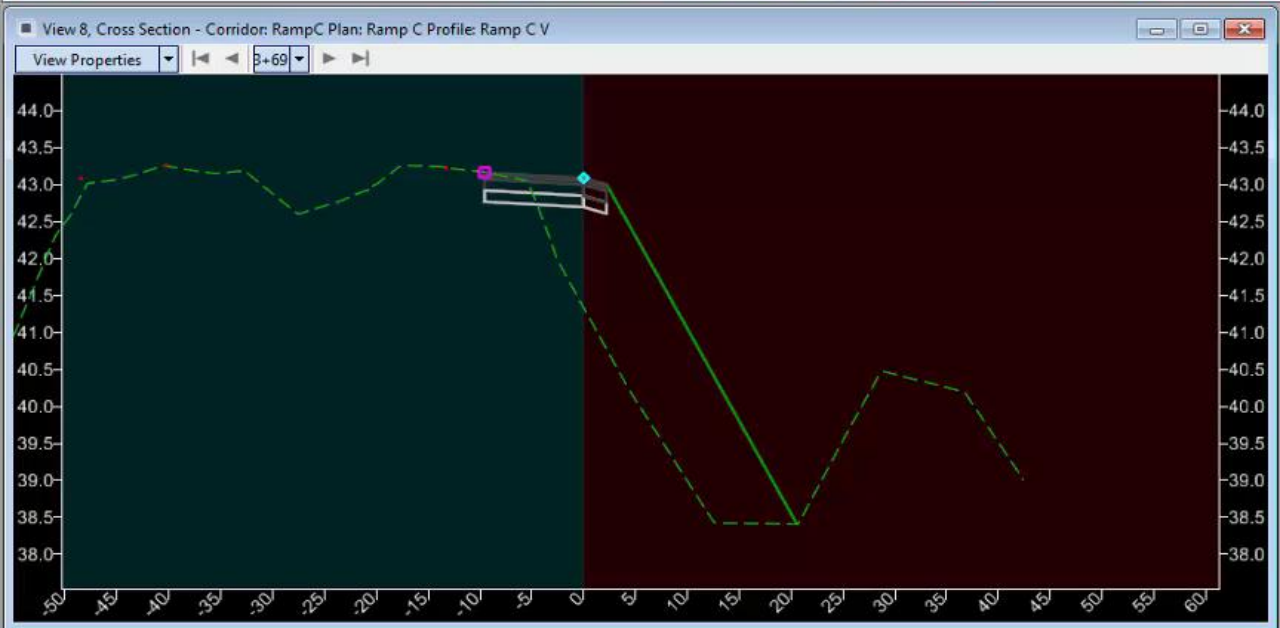
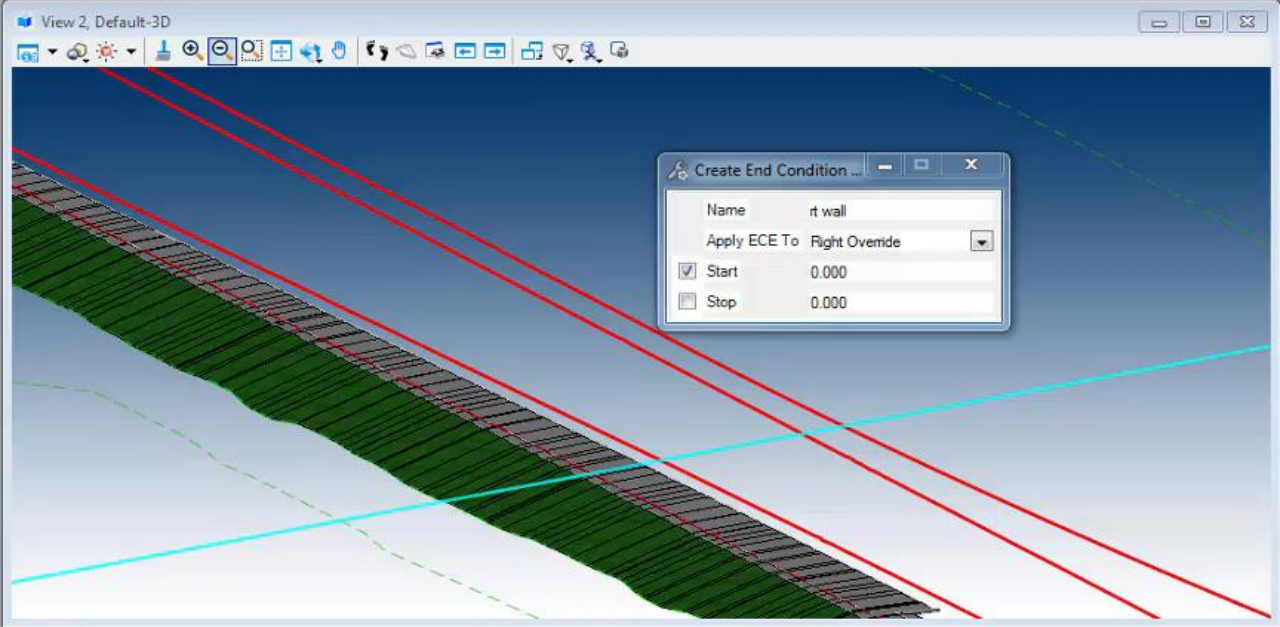
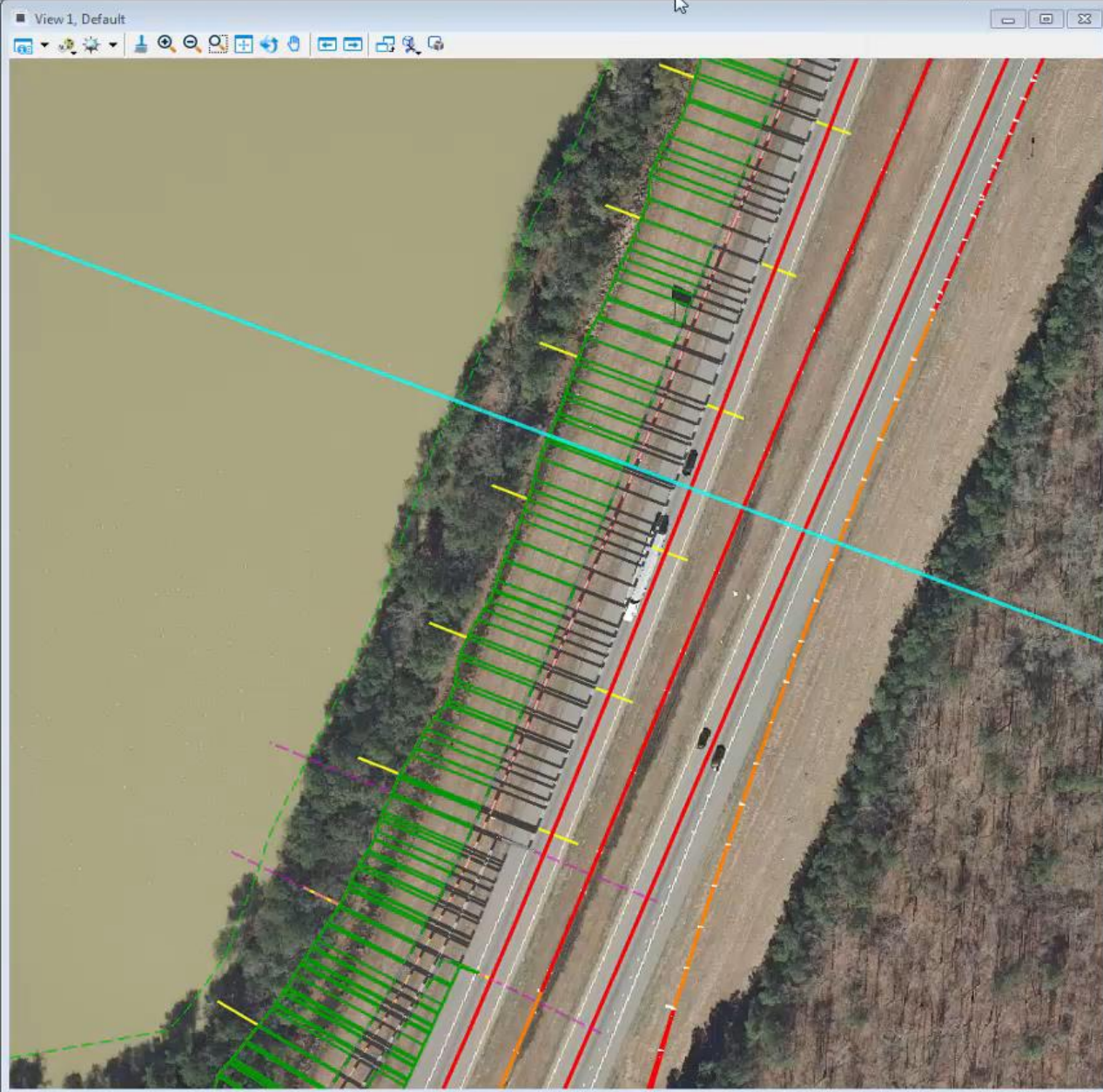
```

File Home Terrain Geometry Corridors Model Detailing Drawing Production Drawing View

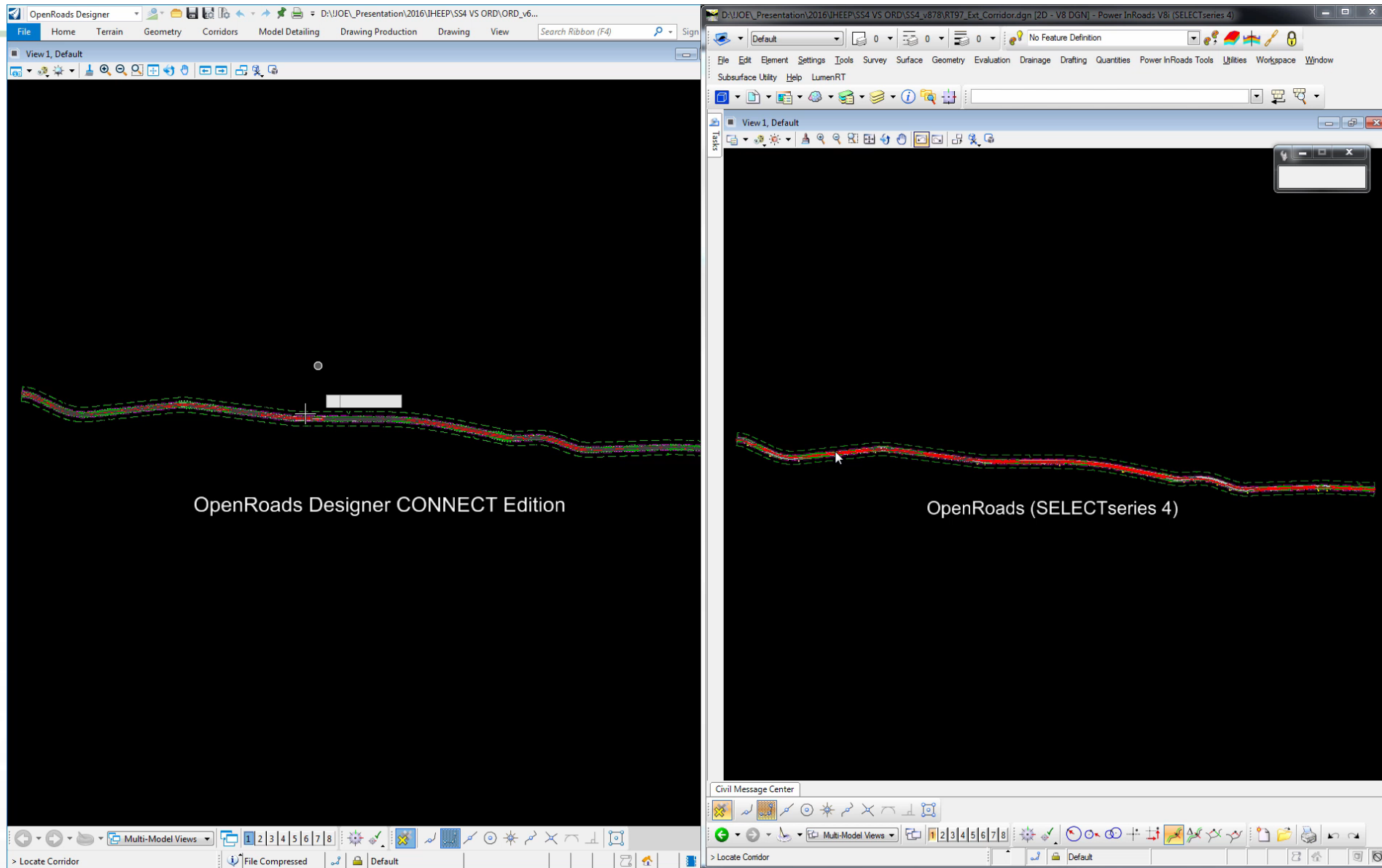
Search Ribbon (F4) Sign in

Element Selection New Corridor New Template Drop Copy Template Drop Import IRD Transitions Template Edit Template Drop Edits Define Target Aliasing Corridor References Corridor Clipping Create Calculate Dynamic Sections 3D Drive Through Corridor Reports

Selection Create Edit Miscellaneous Superelevation Review

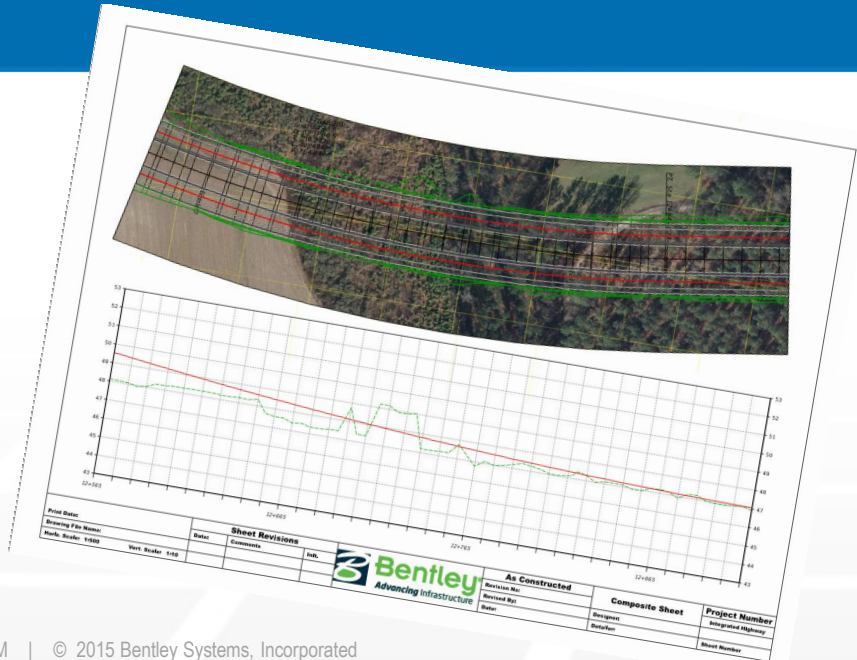


Modeling Performance Gains - Side by Side comparison



Drawing Production

- Based on CONNECT Documentation Centre
- Sheet indexing
- Batch plotting / publishing
- Drawing Annotation Scale Aware
- Display Rules

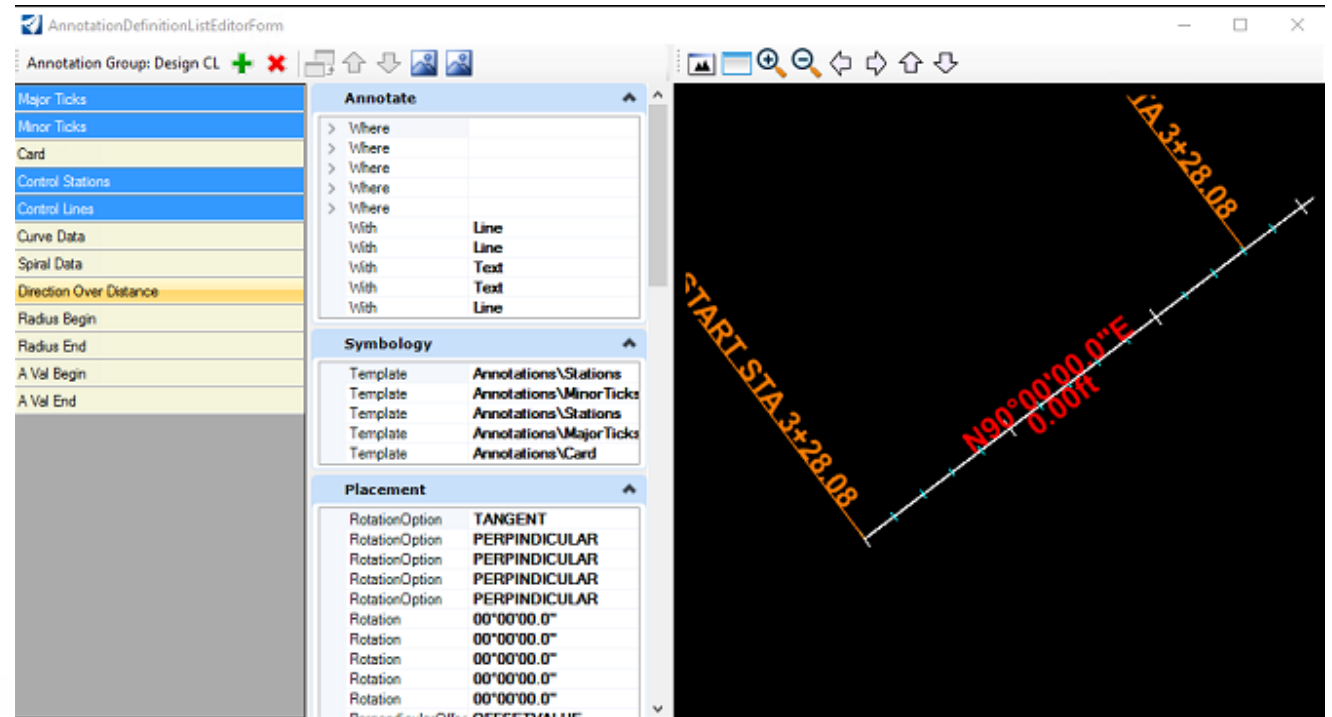


Enhanced to provide Civil Context

- New sheeting capability for Plan / Profile / Cross Section annotation methods.
- Automatic bulk annotation for design and sheet models
- Annotation definition editor / manager
- Associative annotation for automatic updates

Civil Annotation

- Plan / Profile / Cross Section annotation methods.
- Automatic bulk annotation for design and sheet models
- Annotation definition editor / manager
- Associative annotation for automatic updates
- Built from Text Styles / Text Favorites



File Home Terrain Geometry Corridors Model Detailing Drawing Production Drawing View Search Ribbon (F4)

Attributes: None, Default, 0, 0, 0, 0, 0

Primary: Explorer, Attach Tools, Models, Level Display

Selection: Element Selection

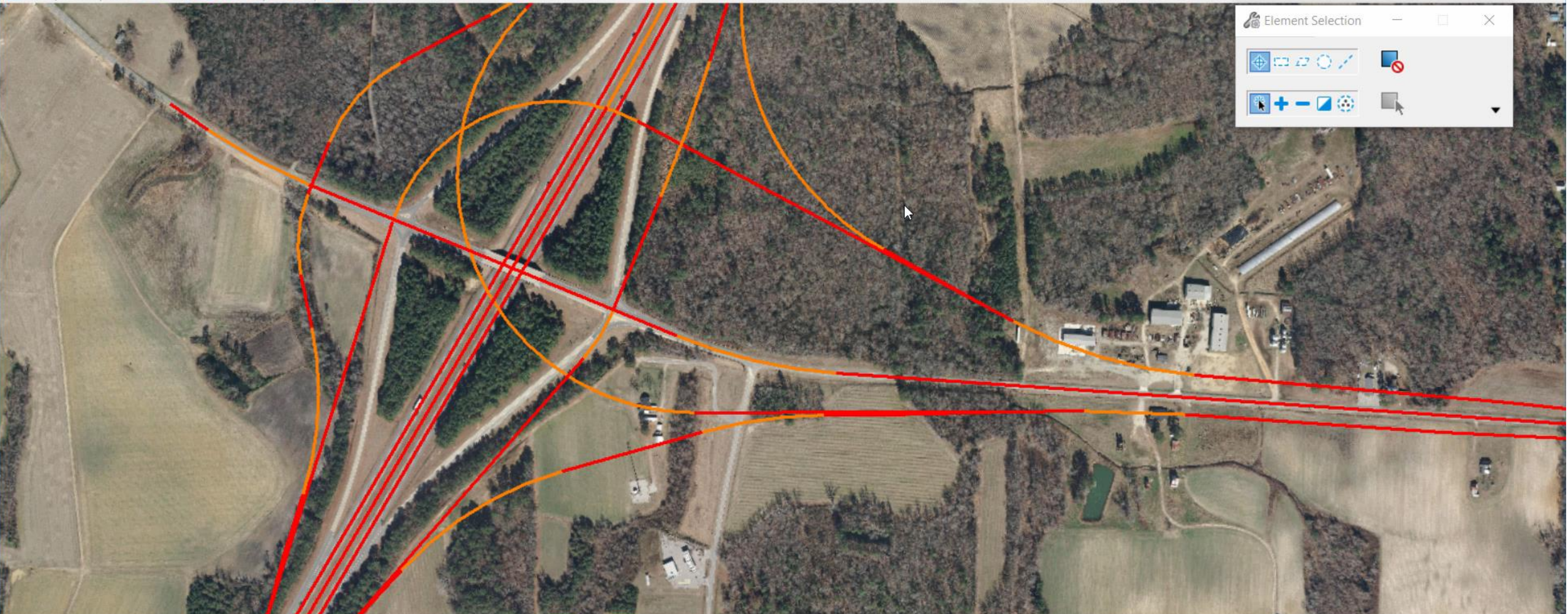
Model Analysis and Reporting: Reports, Civil Analysis, Corridor Reports

Model Import/Export: Terrain Import, Import Geometry, Import IRD

OpenRoads Help: OpenRoads Help, Open RSS Reader

View 1, Default

Navigation icons: Home, Previous, Next, Zoom In, Zoom Out, Pan, Rotate, etc.



Element Selection

Navigation icons: Home, Previous, Next, Zoom In, Zoom Out, Pan, Rotate, etc.

Selection icons: Select, Lasso, Window, etc.

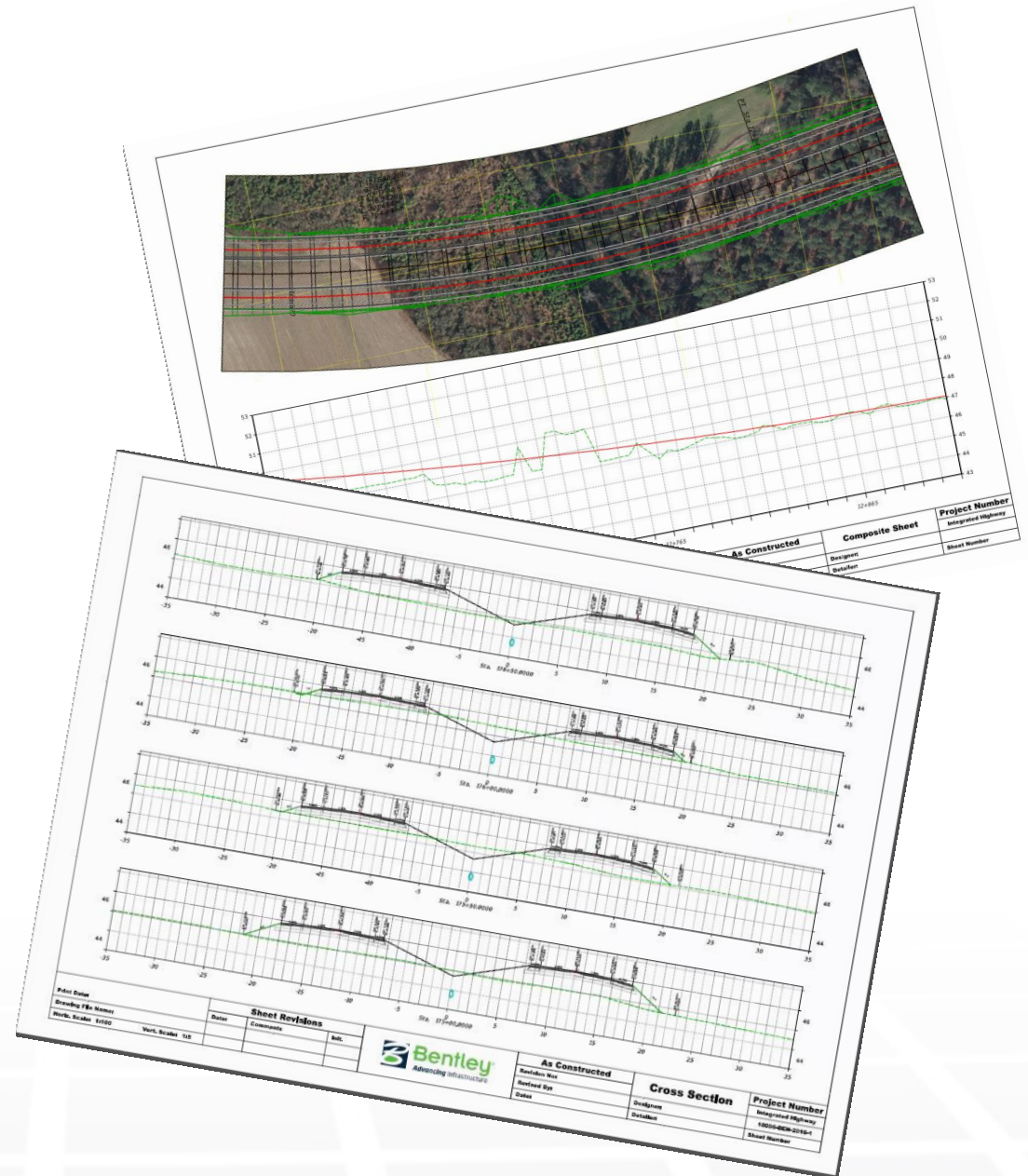
Multi-Model Views: 1, 2, 3, 4, 5, 6, 7, 8

Element Selection > Identify element to add to set

Default

Civil Sheeting

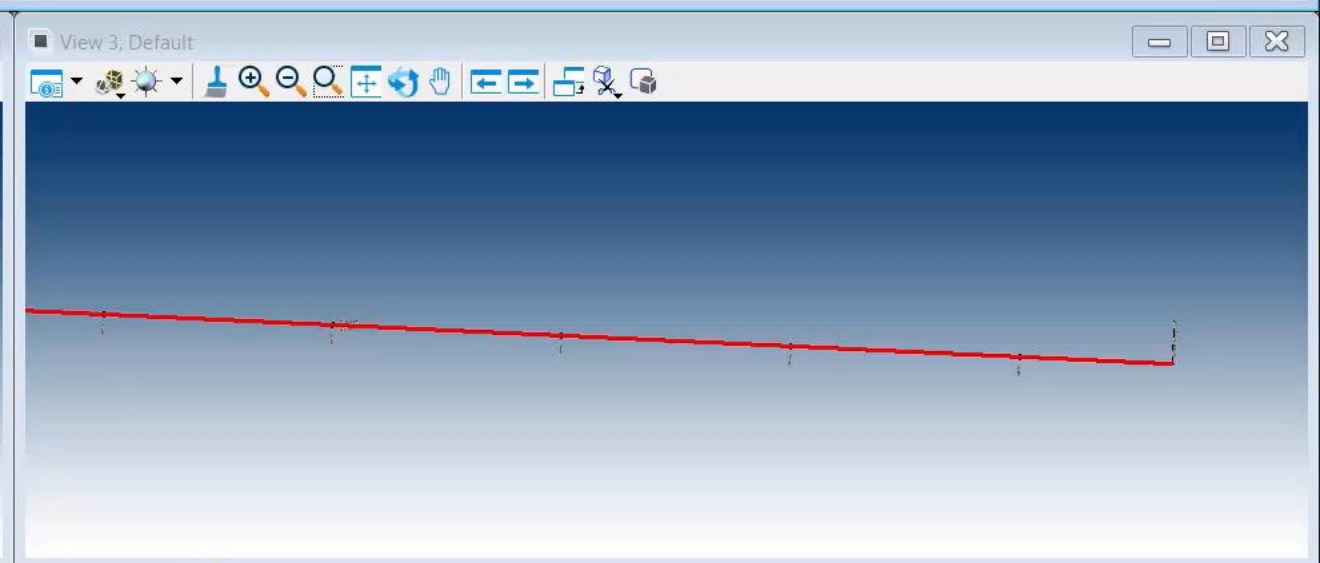
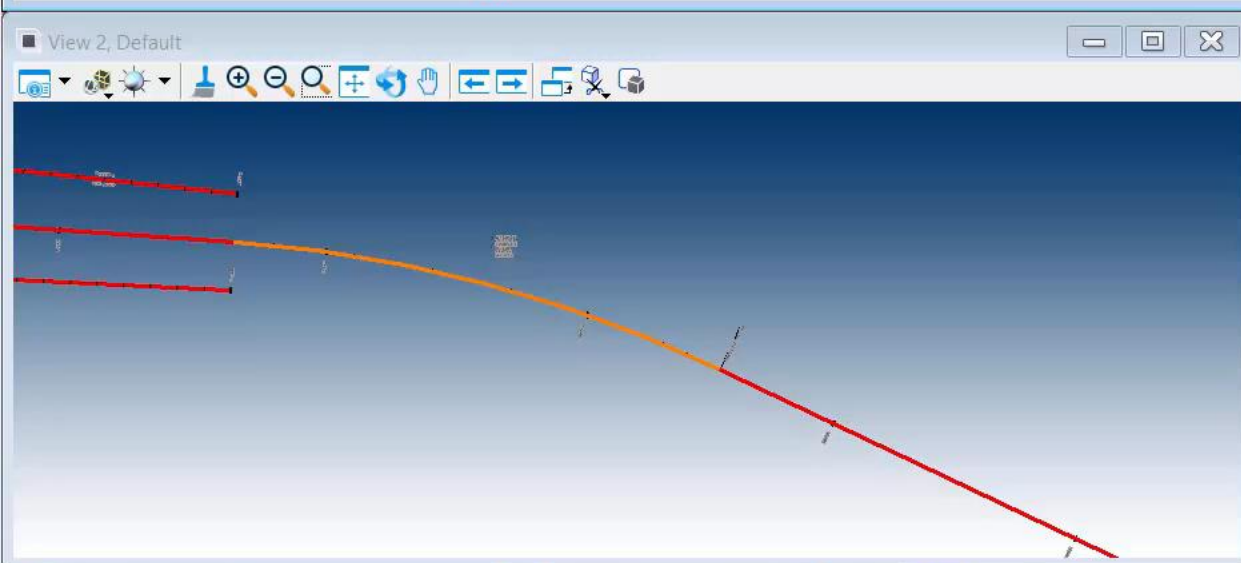
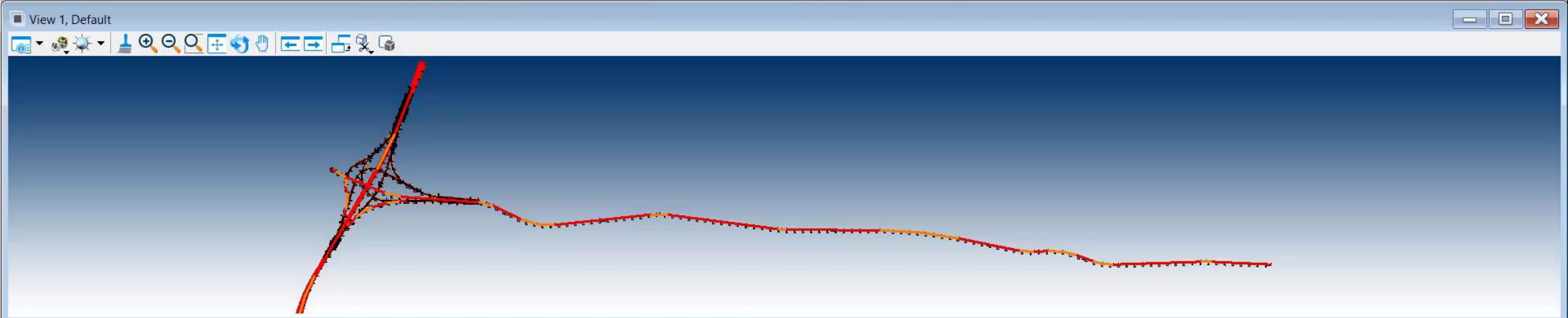
- Civil context aware drawing production methods for Plan / Profile / Cross Section drawings.
- Sheet scale aware annotation
- Dynamic profile and cross section through the 3D model
- Automatic bulk annotation for Plan / Profile / Cross Sections
- Associative annotation for automatic updates



File Home Terrain Geometry Corridors Model Detailing Drawing Production Drawing View

Search Ribbon (F4) Sign in

Element Selection Selection Clip Volume Clip Create Saved View Update Saved View Settings Saved Views Apply Saved View Tables Place Table Place Note Place Label Notes Place Text Edit Text Change Text Attributes Text Annotation Annotations Place Named Boundary Named Boundaries

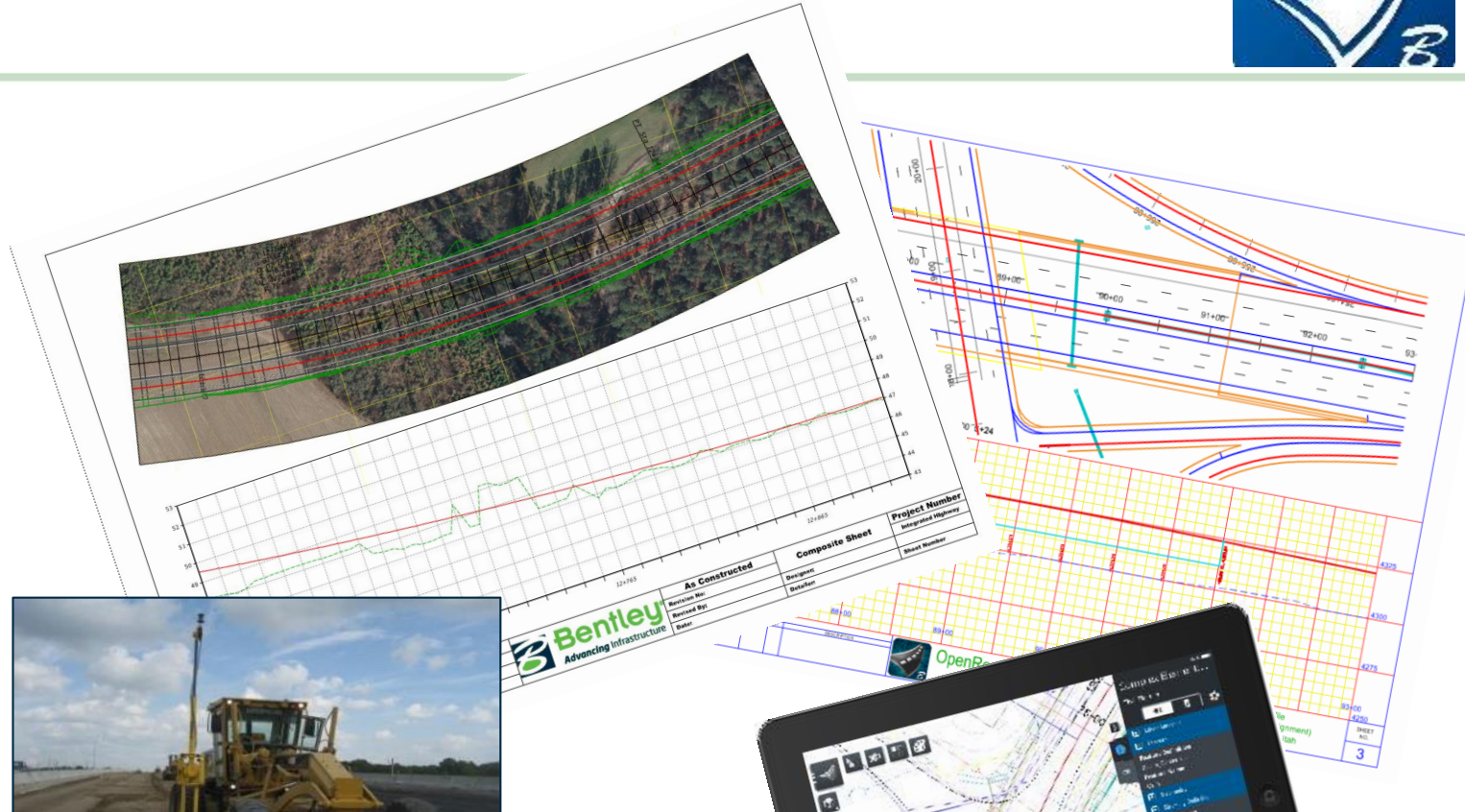


Multi-Model Views 1 2 3 4 5 6 7 8

OpenRoads Designer CONNECT Edition



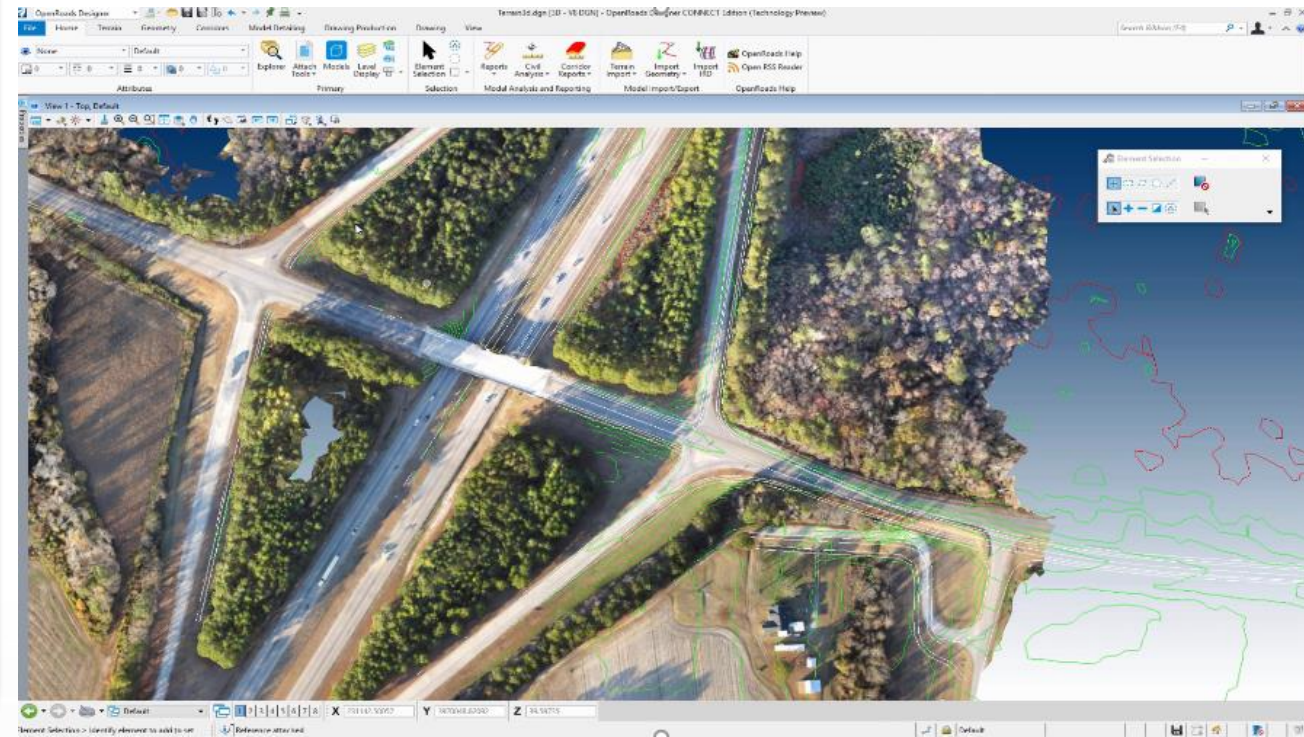
- Publishing capable of meeting the challenging and changing deliverables requirements of models and drawings for
Submittals
Construction
Mobile
Scheduling simulation



OpenRoads Designer - Integrated Capability

Integrated Capability – Reality Modeling

- Advanced Point Cloud Capability
- Linear / breakline extraction from surfaces
- Reality Mesh consumption
- High resolution raster image draping



File Home Terrain Geometry Corridors Model Detailing Drawing Production Drawing View Search Ribbon (F4)

Attributes: None, Default, 0, 0, 0, 0

Primary: Explorer, Attach Tools, Models, Level Display

Selection: Element Selection

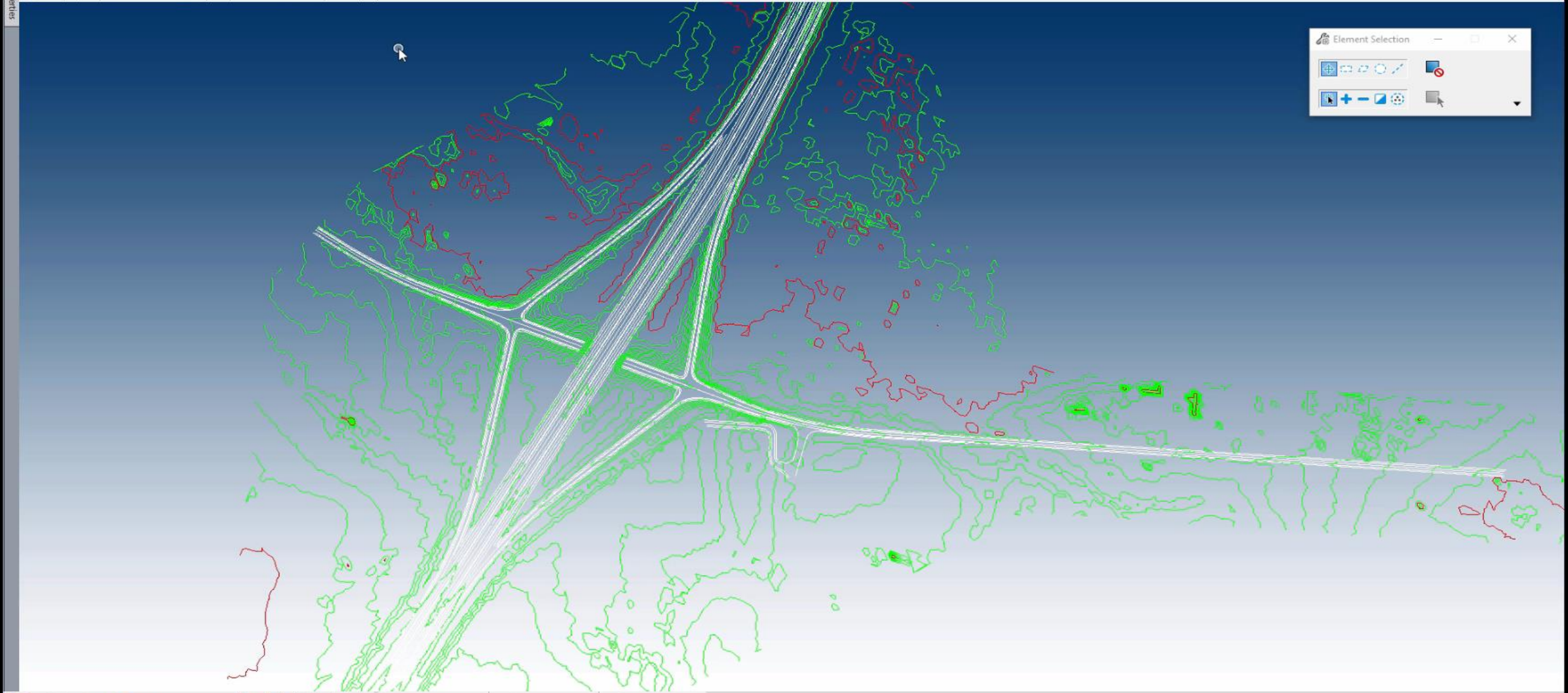
Model Analysis and Reporting: Reports, Civil Analysis, Corridor Reports

Model Import/Export: Terrain Import, Import Geometry, Import IRD

OpenRoads Help: OpenRoads Help, Open RSS Reader

View 1 - Top, Default

Properties: [Navigation and View Control Icons]



Element Selection

[Selection Tools: Box, Circle, Polygon, Lasso, etc.]

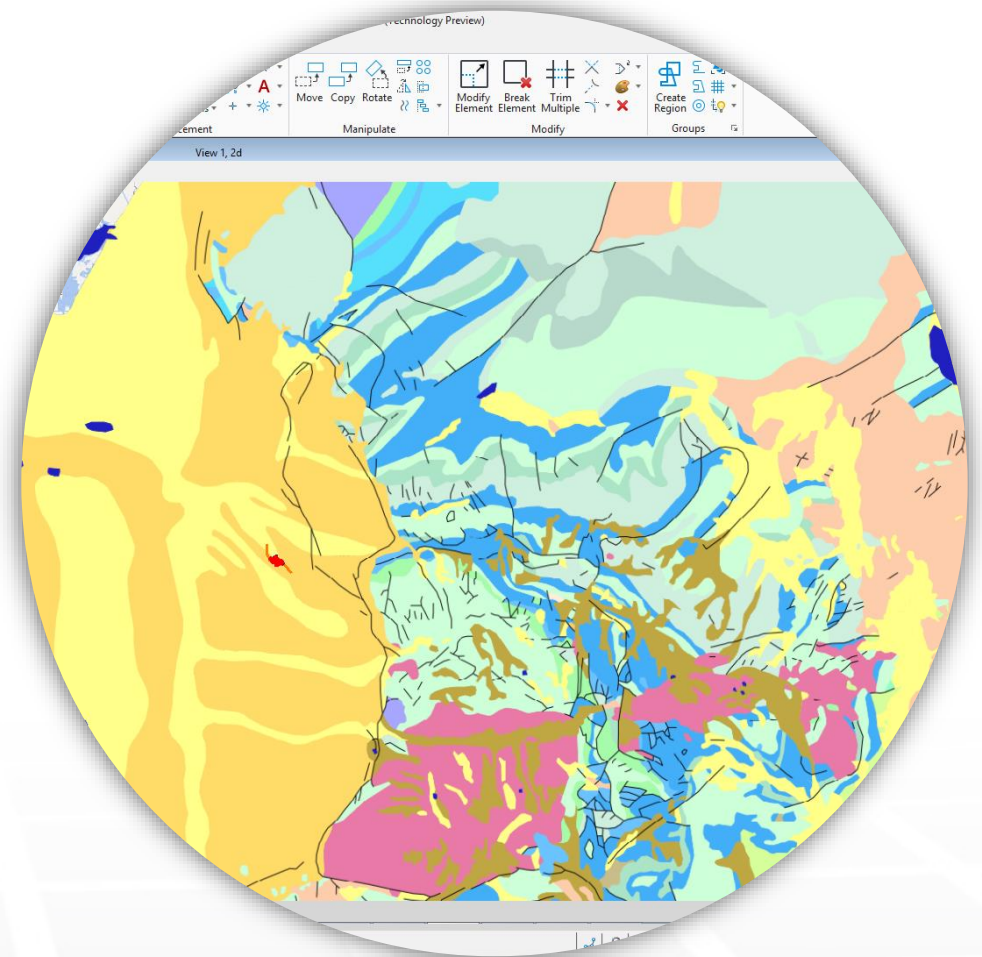
Element Selection > Identify element to add to set

Coordinates: X 230861.33728, Y 3970516.75231, Z 39.59735

Default [Navigation and View Control Icons]

Integrated Capability - Geotechnical

- Direct Link to gINT Data base
- Preliminary Investigation
 - Locate and review data for proposed site
 - Develop drilling plan
- Go / No Go decision
 - Clearance on environmental
 - Site access and archeological review



File Home gINT Projects Site Map 3D Modeling

None Default

Attributes

Explorer Attach Tools Models Level Display

Primary

Element Selection Fence Tools

Selection

Element Selection

+

-

+

-

+

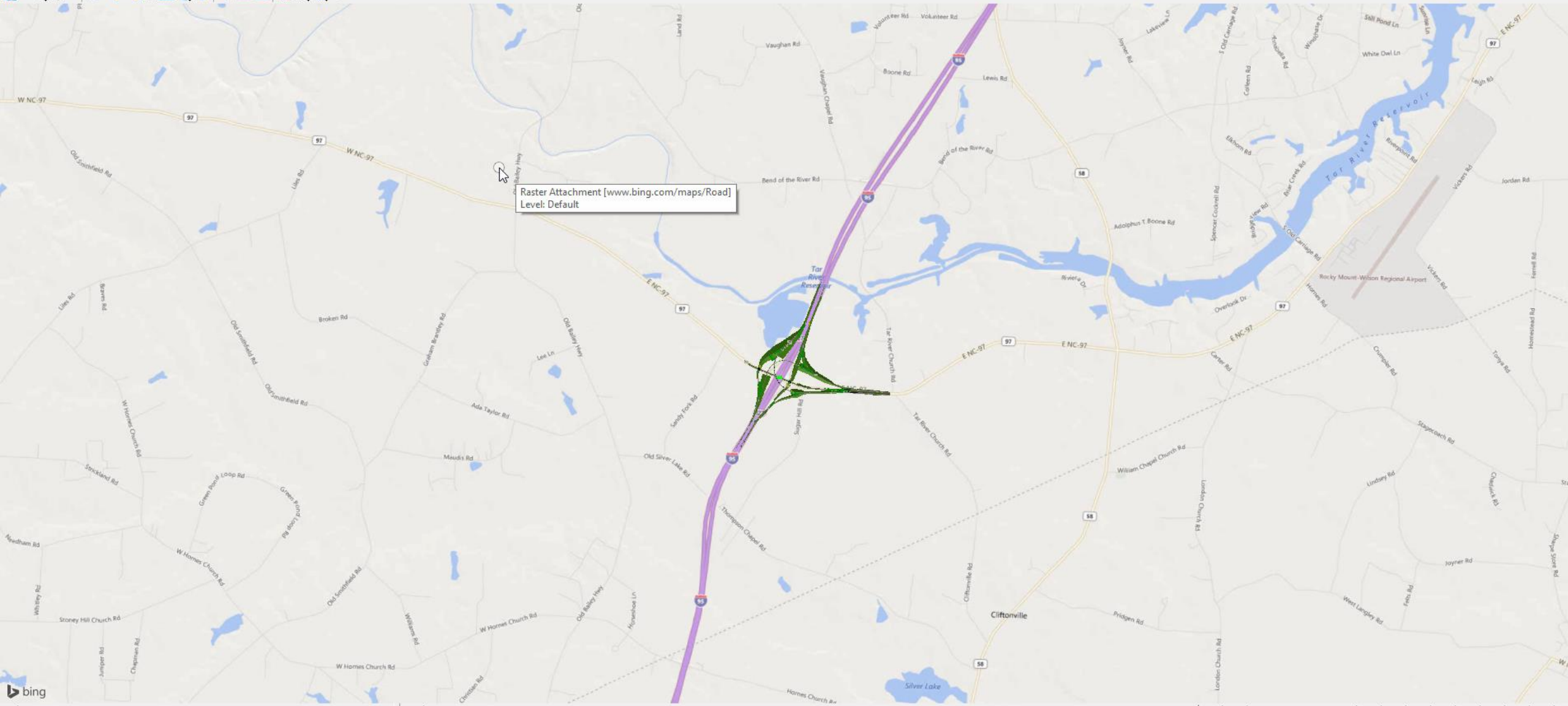
-

+

-

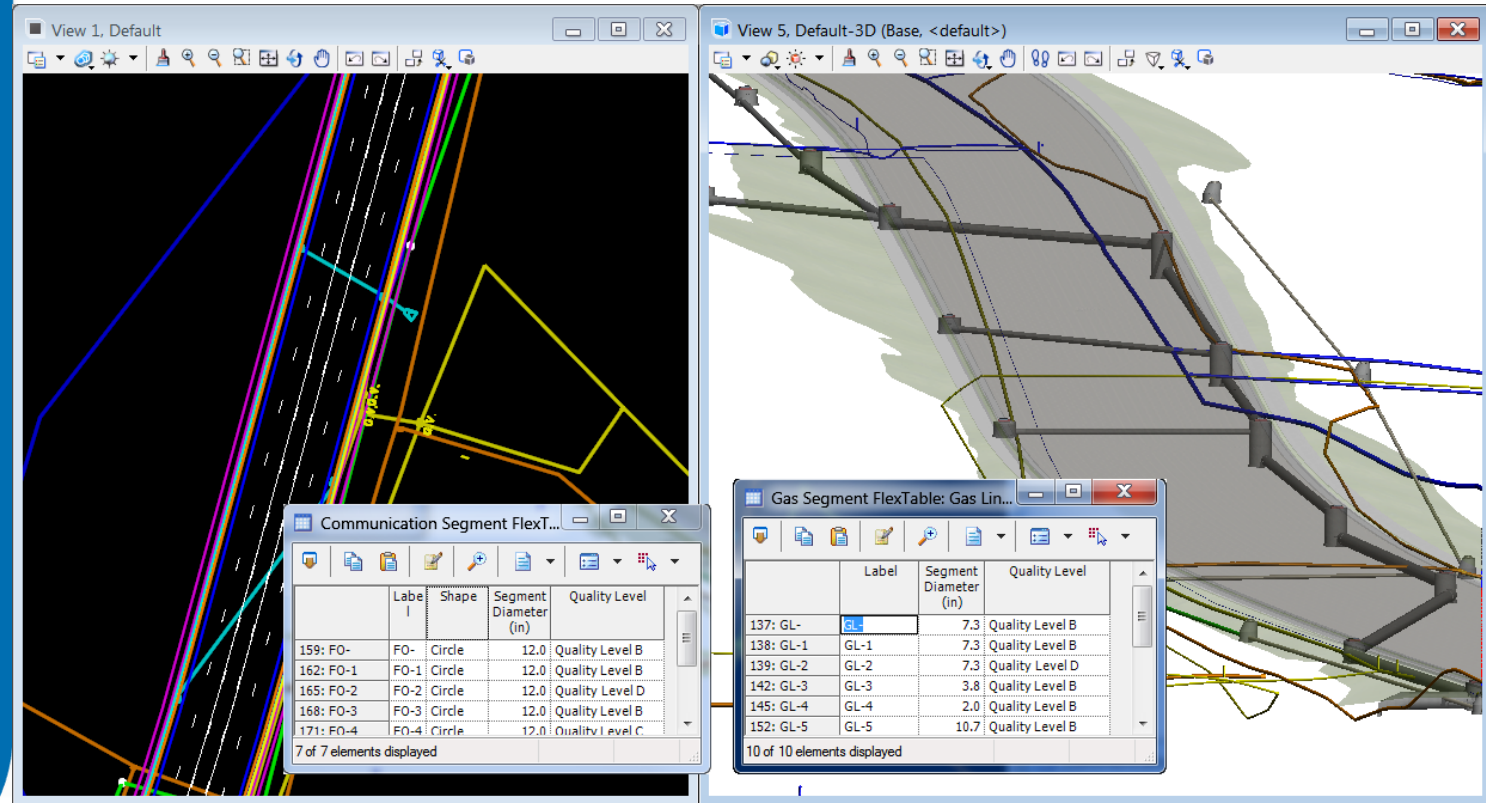
View 1 - Top, Default

Navigation icons: pan, zoom, rotate, etc.



Subsurface Utility Capabilities

- Based on OpenRoads Modelling
- 3D modeling of all underground assets, existing or proposed.
- Hydraulic Design of Storm and Sanitary Utilities.
- Advanced Conflict Detection / Conflict Management.



Element Selection
Selection

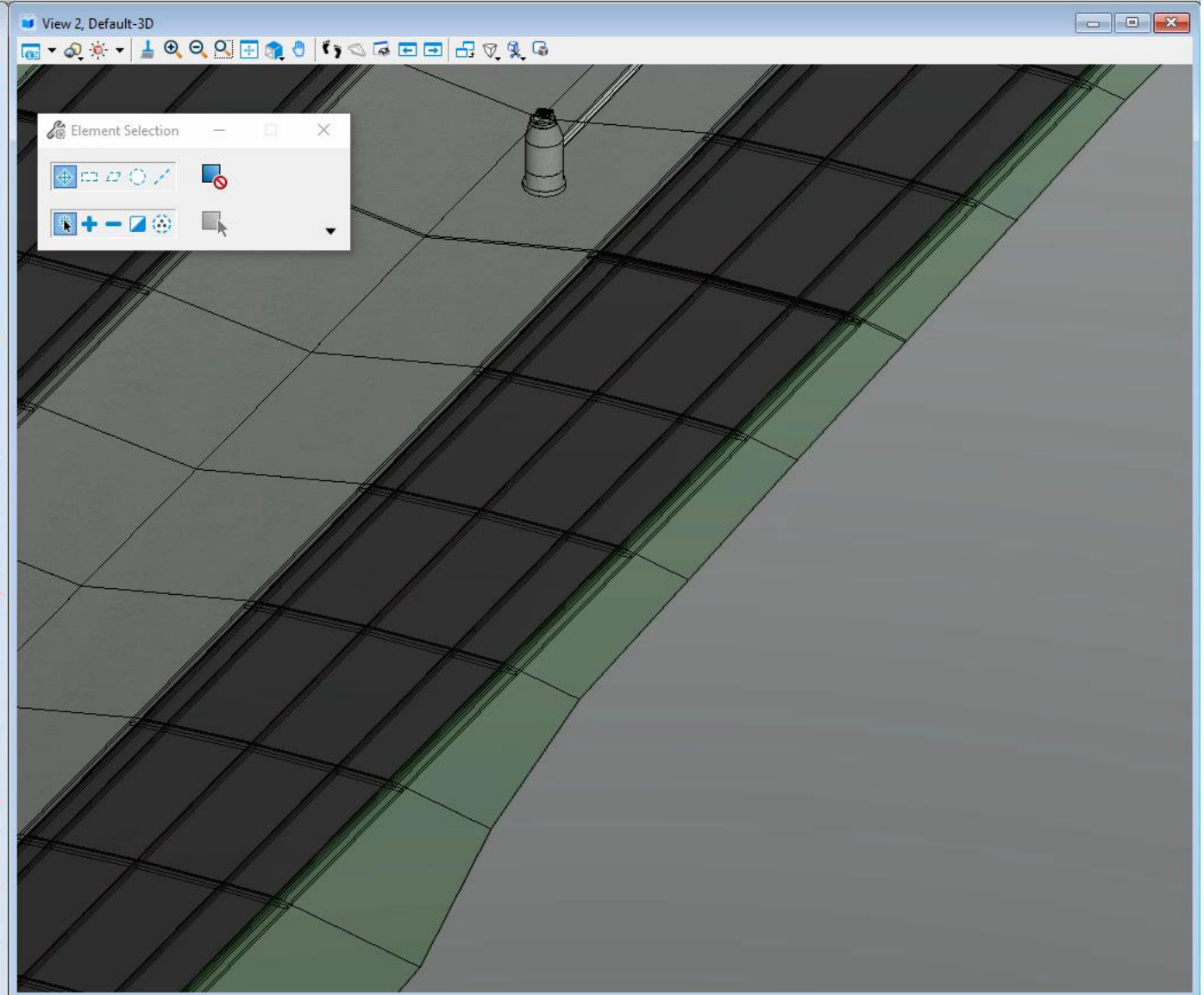
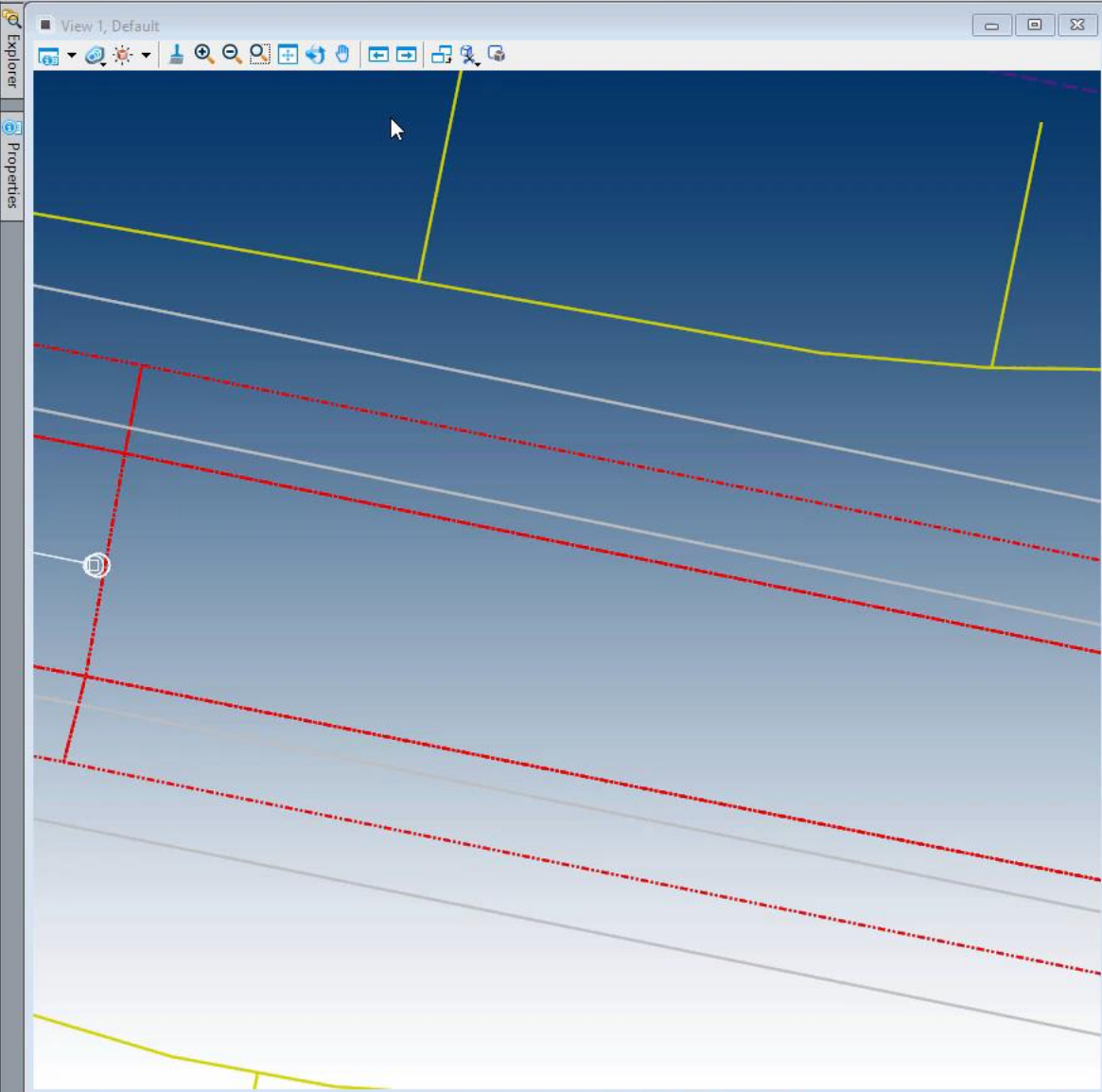
Place Node | Place Conduit | Place Polygon

Place Lateral | Place Gutter

Extract From Graphic | Filter Manager | Default Design Constraints

Project Properties | Prototypes

Layout | Properties



OpenRoads Designer CONNECT Edition



Limited Access

A pre-release made available for feedback, evaluation and planning, **by invitation only.**



Early Access

A pre-release is made available for feedback, evaluation, and planning, open to all **Users.**

A release of all capabilities of a product or service, and made available to all **Users.**



General Access



Regular Updates

What happens next ?

Bentley Community will host Early Access program

Learn Content made available

SIG meeting will introduce OpenRoads Designer

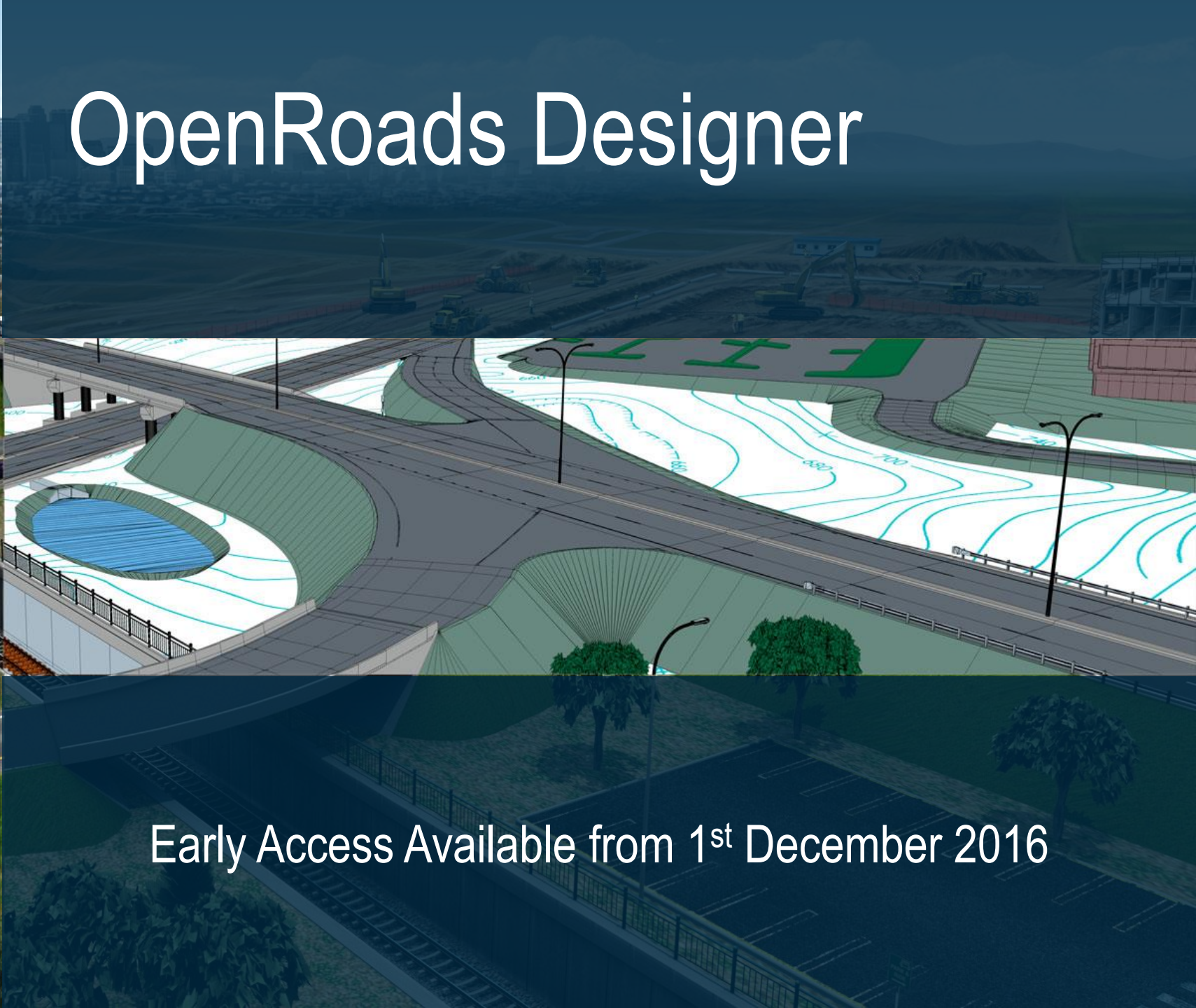


OpenRoads V8i Product Lines
SELECTseries4 – MR2
with CONNECT Services

Q116 Q216 Q316 Q416 Q117 Q217



OpenRoads Designer



Early Access Available from 1st December 2016

[AUTOMATED MESSAGE; do not reply -- please follow the links below if you wish to act on this Communities message.]

Ian Rosam invited you to join [Openroads Designer Early Access](#):

IMPORTANT: Please make sure you complete the following steps (in order):

1. Have a Bentley User Profile (described [here](#))
2. Are signed in to Bentley Communities (click [here](#) to sign in)

After the above steps are completed, then you can [Accept this invitation online](#).

Digital Construction

Detailed Design

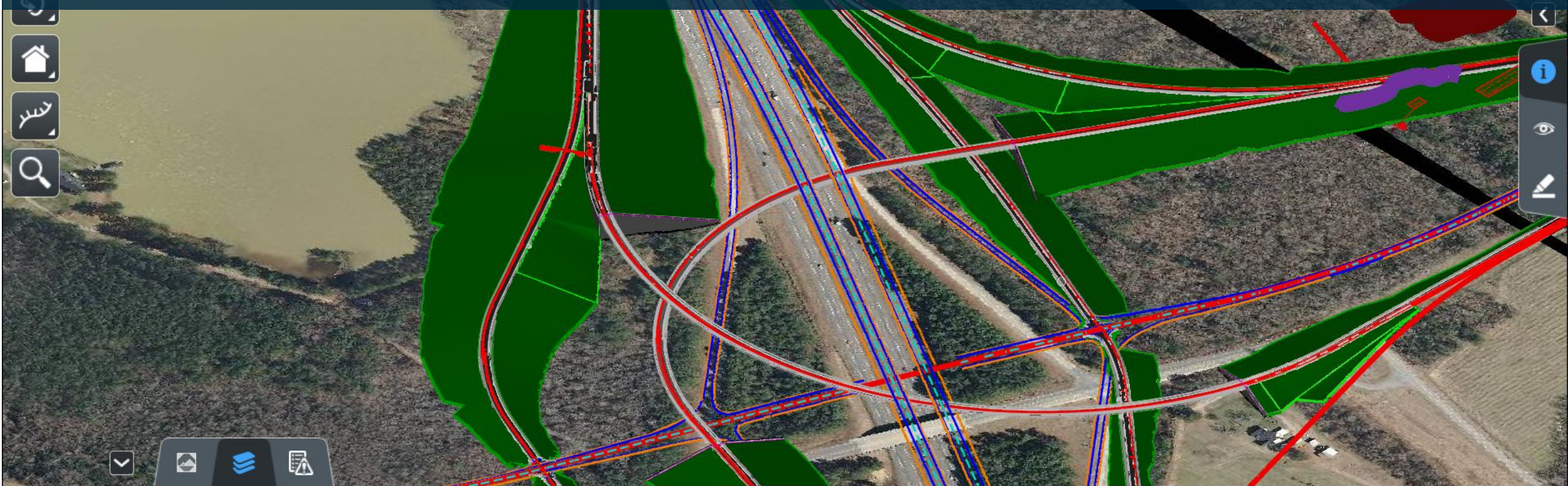
Conceptual Design





OpenRoads Navigator

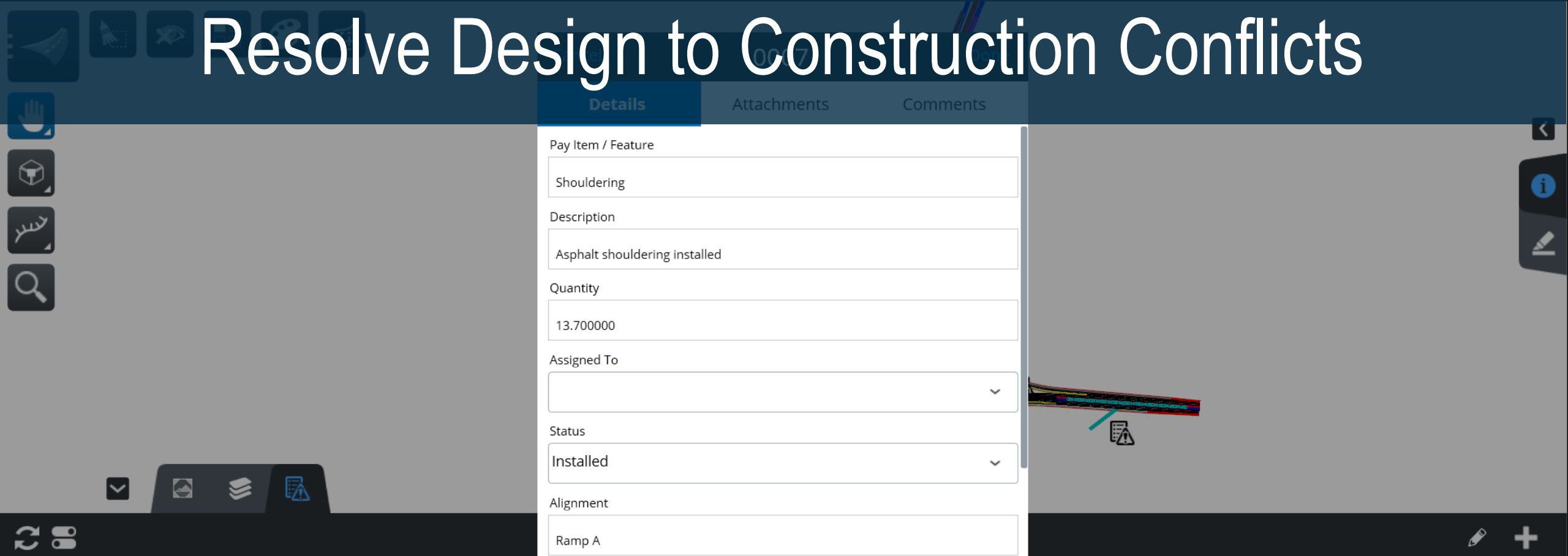
Improve Project Visibility



Levels Models Features Redlines Search

- Existing_Boundary
- Grade_Fixed_Tie
- Headwall A

Resolve Design to Construction Conflicts



Details | Attachments | Comments

Pay Item / Feature
Shouldering

Description
Asphalt shouldering installed

Quantity
13.700000

Assigned To
[Dropdown]

Status
Installed

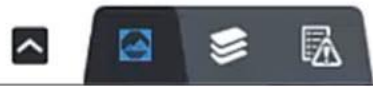
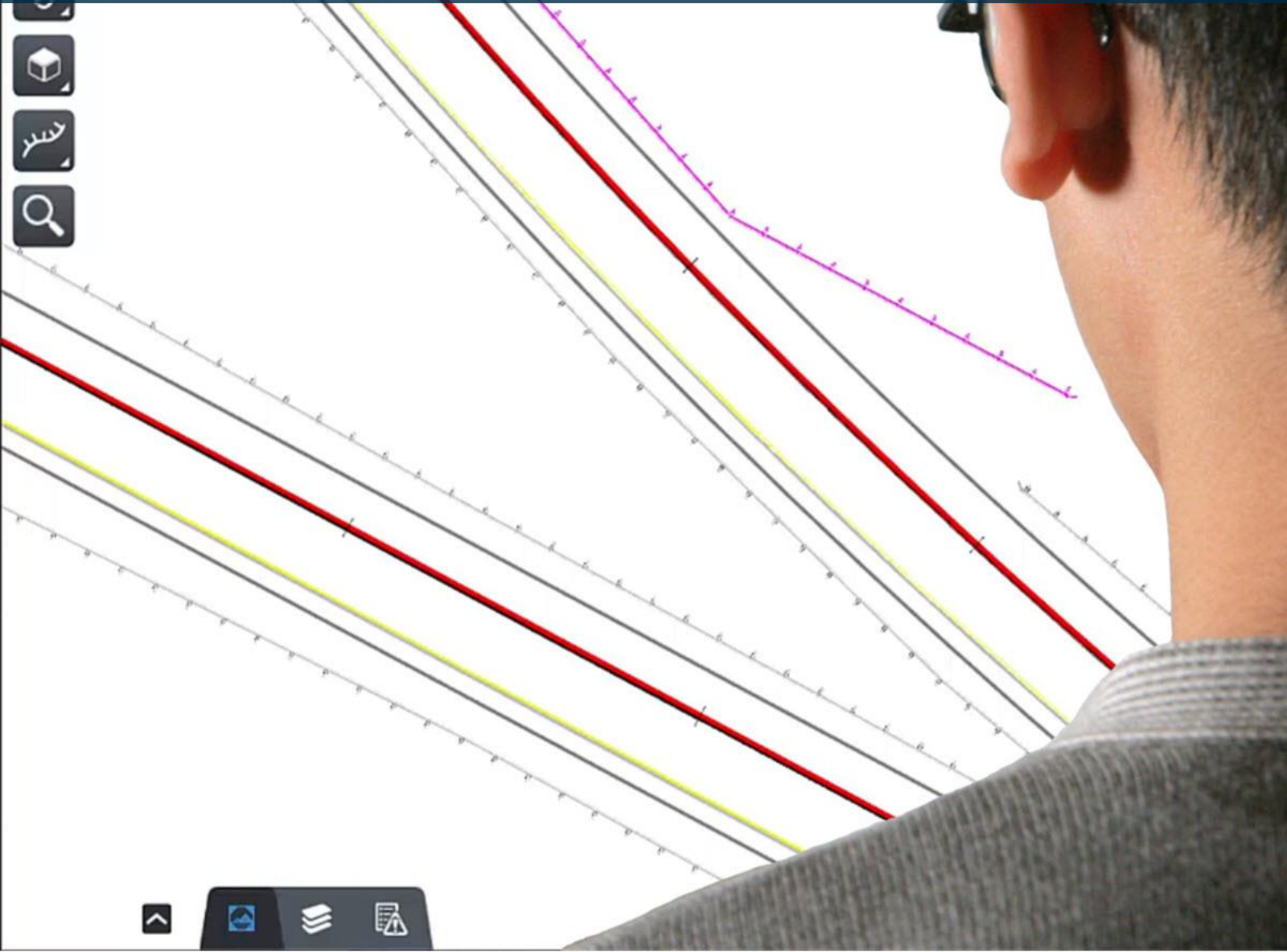
Alignment
Ramp A

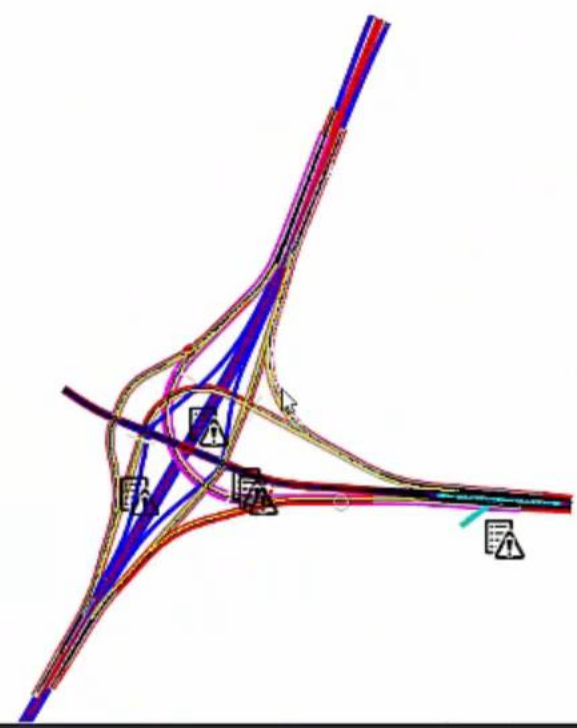
Begin Station
12+200

Begin Offset

ID	Pay Item / Feature	Closed		
0008	Guard Rail	No		
0007	Shouldering	Yes	Louise Barrett	9/10/2016
0006	Guard rail issue	Yes	Louise Barrett	9/10/2016
0005	Overgrown vegetation	No	Carl Hinkle	9/9/2016
0004	Severe Potholes	No	Carl Hinkle	9/9/2016

Improve Office to Field Collaboration

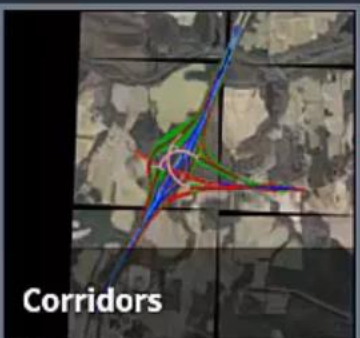




☰ Search 🔍



Alignments



Corridors



Drainage



Existing Roadways



Pave Markings



Rendered CM



Roadways_Shoulder
s



OpenRoads





Thank You

Have a great conference!

