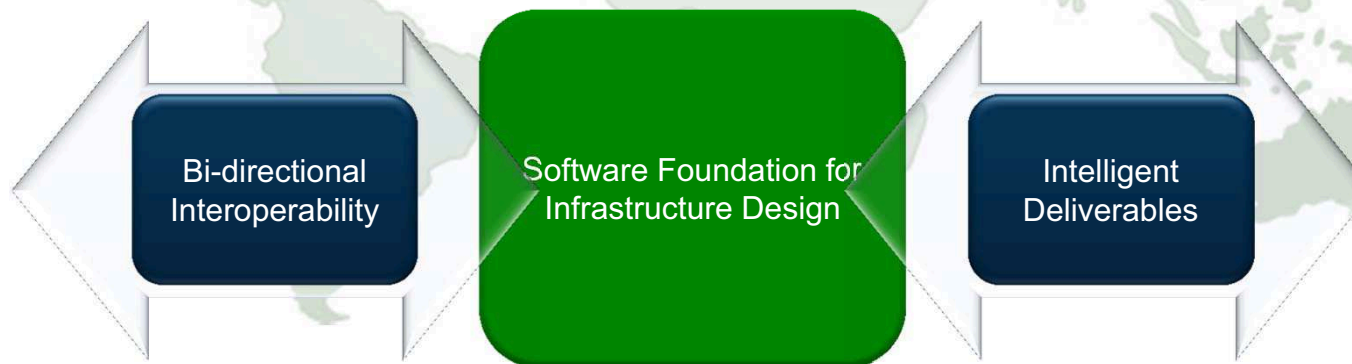




# Discover the Value in MicroStation V8i (SELECTseries 2)

# MicroStation V8i Core Capabilities

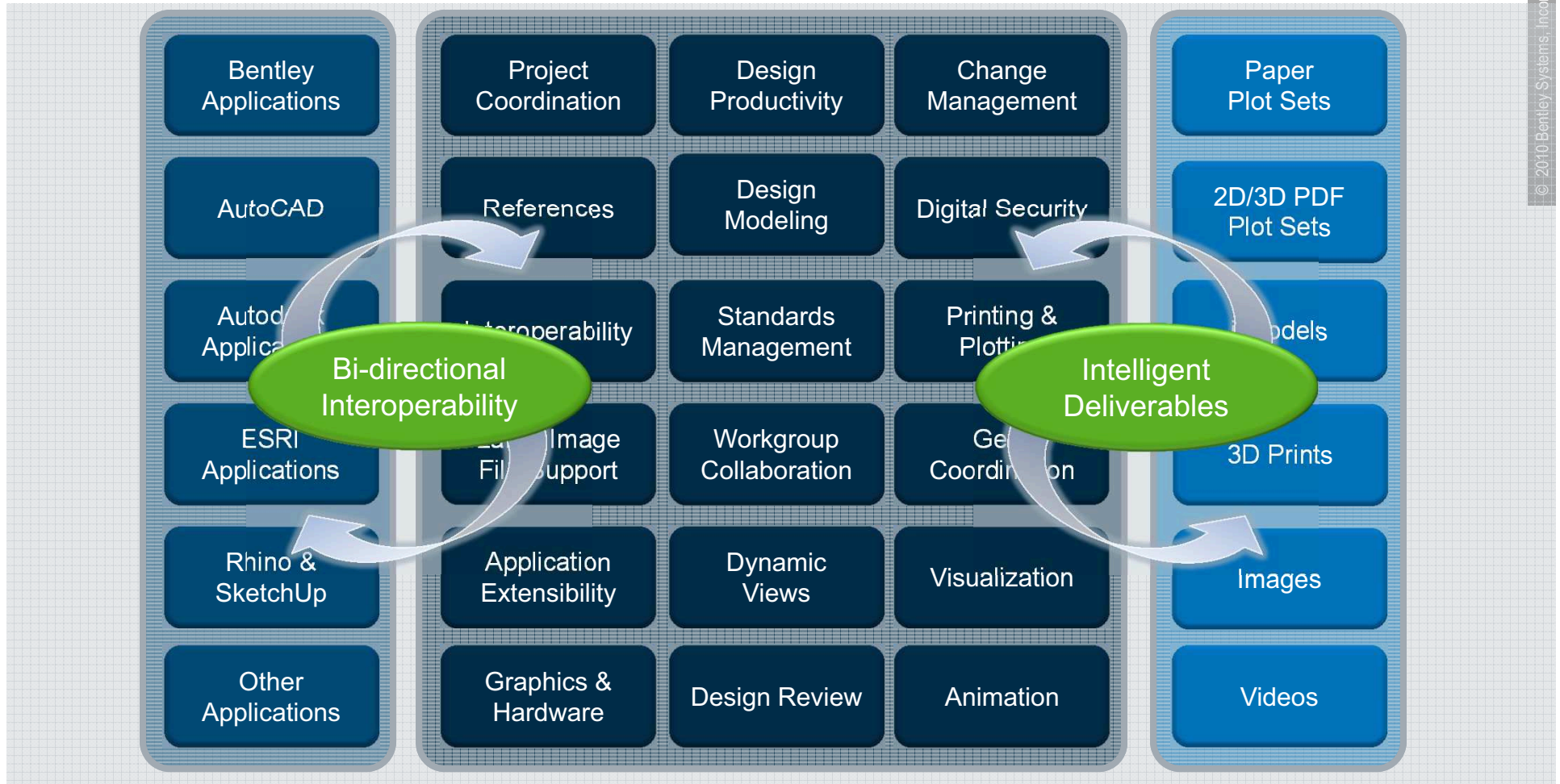
- Core capabilities enable infrastructure practitioners to...
  - **Interoperate** using information from multiple sources
  - **Design** intuitively based on common standards and processes
  - **Publish** high quality interactive deliverables and work packages



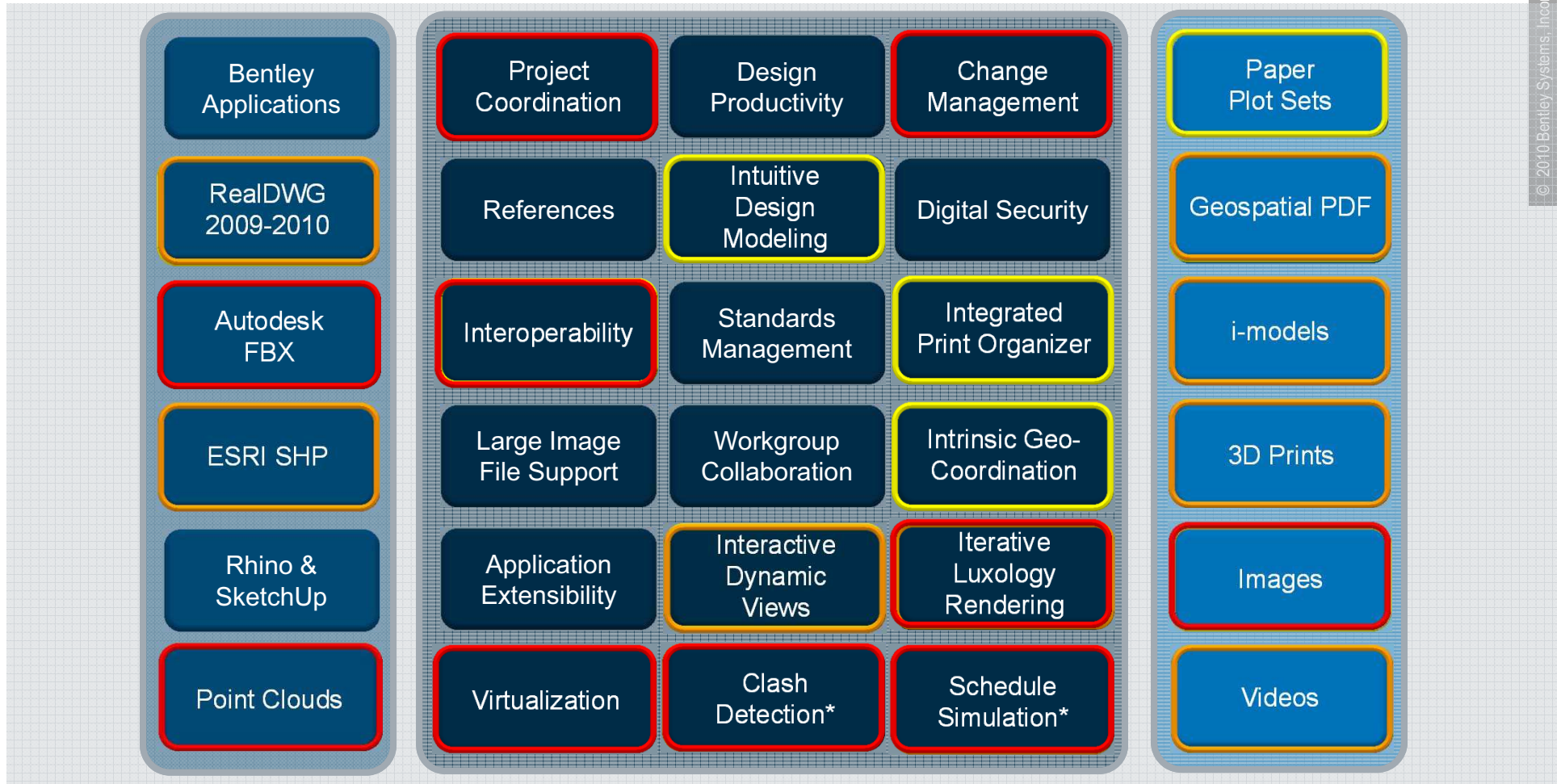
# MicroStation V8i Extending Your Value



# MicroStation V8i Extending Your Value



# MicroStation V8i Extending Your Value



MicroStation V8i

(SELECTseries 1)

(SELECTseries 2)

\* Requires ProjectWise Visa

# MicroStation V8i

## November, 2008 – (V8.11.0)

- **Interoperable Software**
  - AutoCAD 2009
  - Import 3DM (Rhino)
  - Export OBJ
- **Integrated Print Organizer**
  - Print Styles
  - Multi sheet, hierarchal PDF Support
  - Print Organizer Client
- **Intuitive Design Modeling**
  - Intuitive New Modeling tools
  - Precise Freeform Modeling tools
  - GenerativeComponents Extension
- **Intrinsic Geo-Coordination**
  - Geospatial Referencing
  - Web Map Server Support
  - GPS Device Support
- **Interactive Dynamic Views**
  - Annotation and Detailing tools
  - Linked Sections
  - 3D Model Visualization
  - Display Styles
- **Iterative Luxology Rendering**
  - Physically Correct Materials
  - Light Manager
  - Render Setups
  - Distributed Rendering

# MicroStation V8i (SELECTseries 1)

November, 2009 – (V8.11.7)

- **Interoperable Software**
  - Autodesk ® RealDWG 2009
  - Autodesk ® Object Enablers
  - ESRI SHP Files
  - Item Browser Dialog
- **Intuitive Design Modeling**
  - 3D Printing
  - GenerativeComponents Extension
- **Interactive Dynamic Views**
  - Drawing Automation
  - Drawing Model
- **Intrinsic Geo-Coordination**
  - Geospatial PDF
- **Iterative Luxology Rendering**
  - Complete integration
  - Camera Speed Control
  - Animation Tone Mapping
- **Insightful Design Review**
  - Overlay files
  - Mark up Manager
  - i-models

# MicroStation V8i (SELECTseries 2)

July, 2010 – (V8.11.7)

- **Interoperable Software**
  - Point Clouds
  - Autodesk ® RealDWG 2010
  - Autodesk ® FBX
- **Intuitive Design Modeling**
  - GenerativeComponents Extension
- **Intrinsic Geo-Coordination**
  - Define Placemark Monuments
- **Iterative Luxology Rendering**
  - Render Output Channels
  - User Interface Optimization
  - Animation improvements
- **Insightful Design Review**
  - ProjectWise Clash Detection
  - ProjectWise Schedule Simulation
- **Improved Deployments**
  - Citrix Ready Verification
  - Update Installs



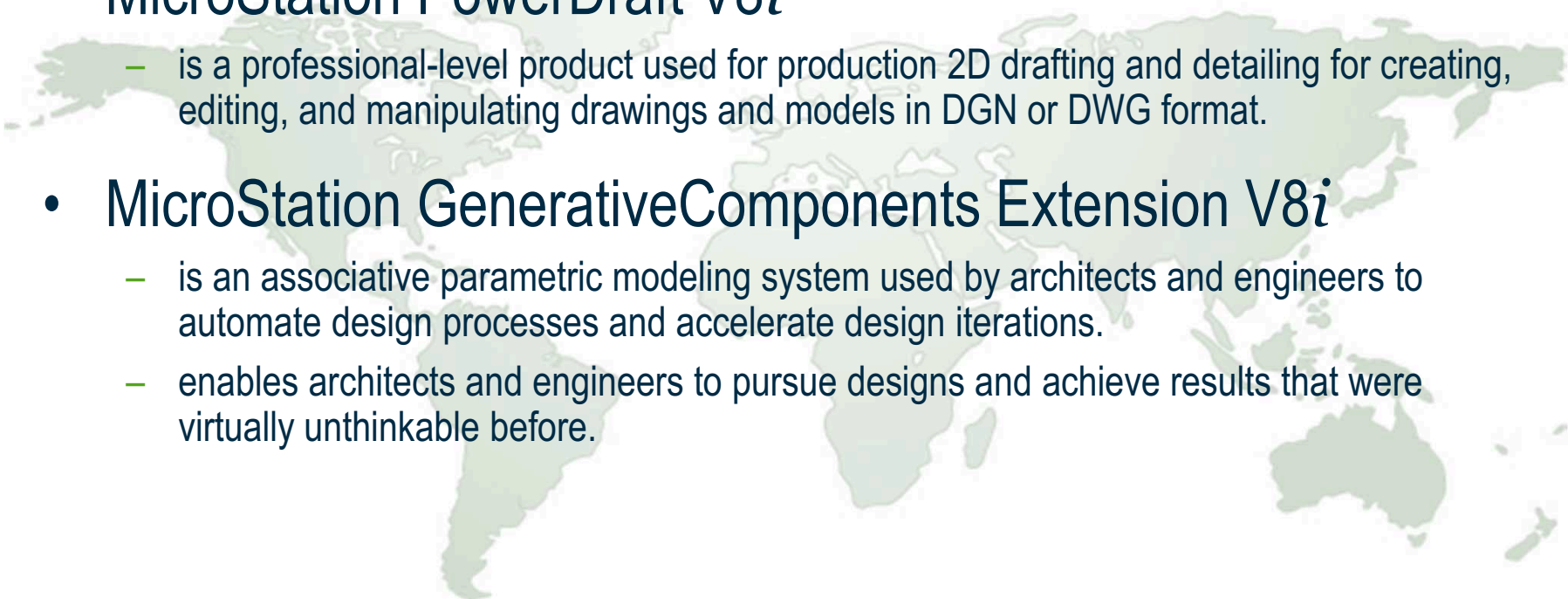
# MicroStation V8i (SELECTseries 2)

- **Increased Productivity**

- View Different Models
- Reference Activation
- Raster References as Elements
- Edit Text in Cells
- Coordinate Cell
- ALT+DATA to Match Settings
- Display Sets
- Display Styles
- Change Reference Presentation
- Color Preferences
- New Color Books
- Drag and Drop to Attribute Pickers
- Drag selection support during manipulate commands
- Selection Overlap mode is right to left
- Quick Info
- Pin and Roll Tabs
- Transparent Toolboxes
- Dialog Docking
- Right click context menu
- Eye Dropper
- On The Fly Links
- Reference View Flags
- Remap Elements in Level Manager
- Snapmode as preference
- Jump to Active Level
- Element Selection Tabs
- Named Groups (Quicksets) for References
- Save As Image with Display Styles



# MicroStation V8i Product Line

- **MicroStation PowerDraft V8i**
    - is a professional-level product used for production 2D drafting and detailing for creating, editing, and manipulating drawings and models in DGN or DWG format.
  - **MicroStation GenerativeComponents Extension V8i**
    - is an associative parametric modeling system used by architects and engineers to automate design processes and accelerate design iterations.
    - enables architects and engineers to pursue designs and achieve results that were virtually unthinkable before.
- 

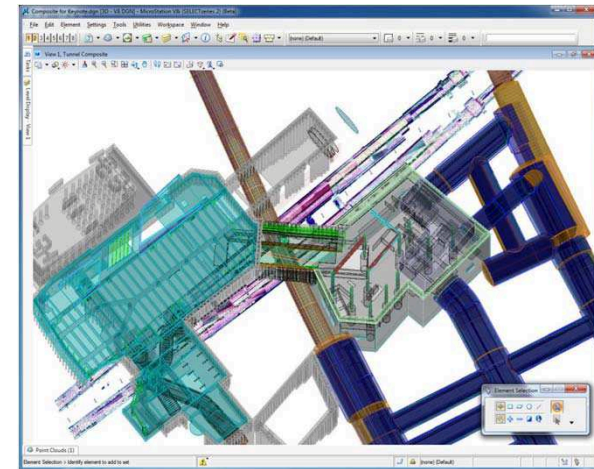


# MicroStation V8i (SELECTseries 2)

Interoperable Software

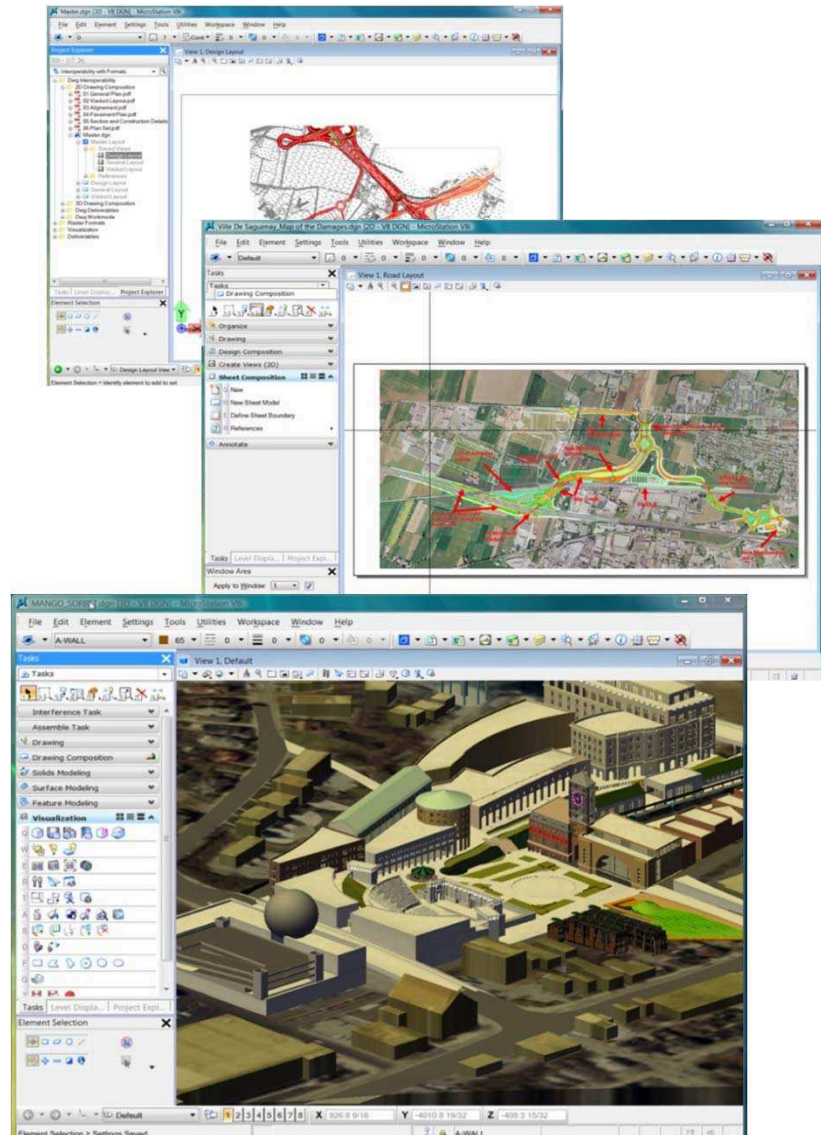
# MicroStation V8i (SELECTseries 2)

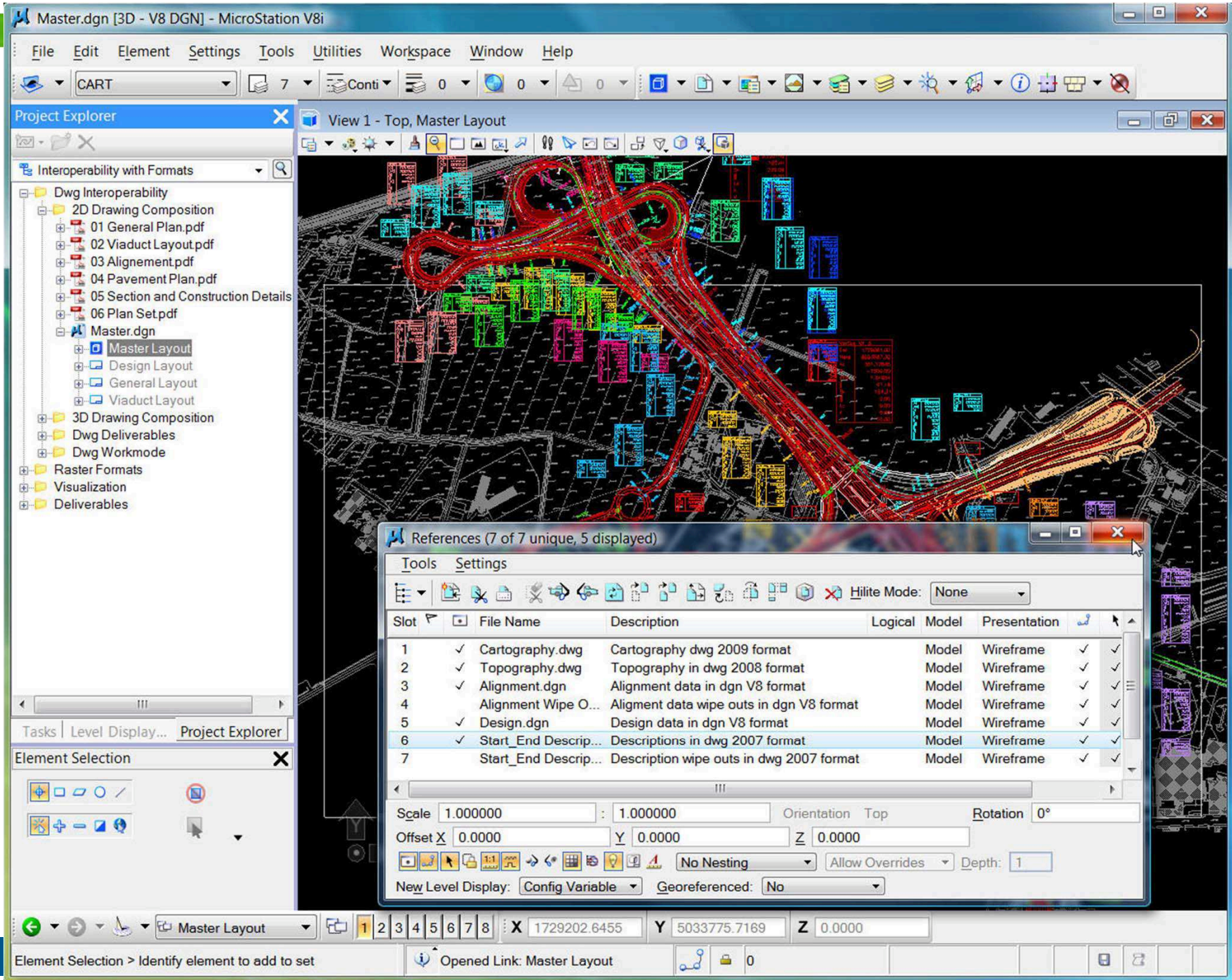
- Interoperable Software
  - Autodesk® RealDWG Libraries
  - Autodesk® Object Enablers
  - ESRI SHP Files
  - Item Browser Dialog
  - Import 3DM (Rhino)
  - Export OBJ
- New in MicroStation V8i (SELECTseries 2)
  - Point Clouds
  - Autodesk® RealDWG Libraries
    - 2010 Delivered with product as default for (SELECTseries 2)
    - 2009 Delivered with product as option for (SELECTseries 2)
    - 2011 Will be available as an update for (SELECTseries 2) following the release
  - Autodesk® FBX file support

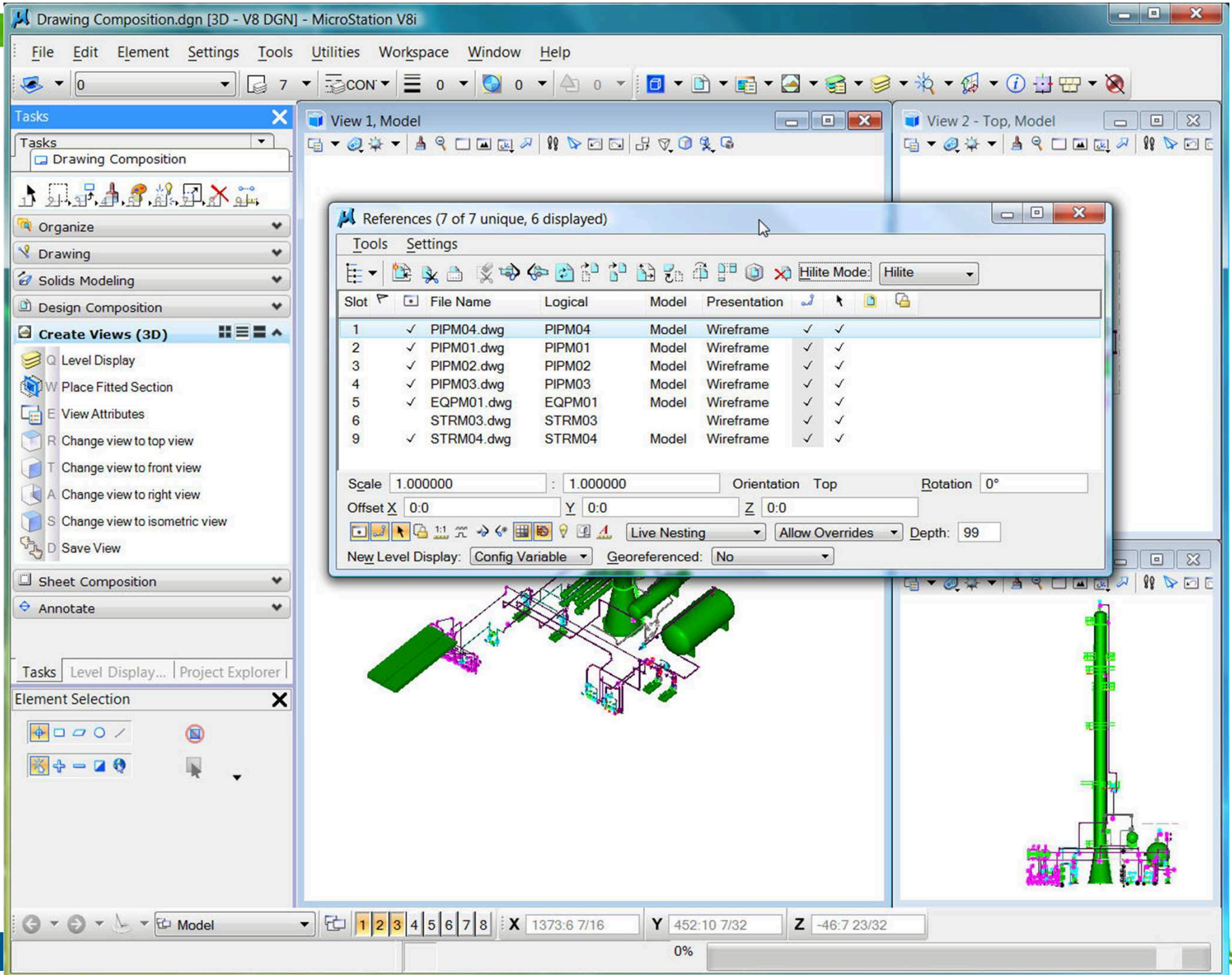


# Why Interoperate?

- Share work efficiently across a multi-discipline team that has diverse project needs
- Develop designs accurately in full project context without unnecessary rework
- Maintain project intelligence and avoid lossy translations as information is transferred between applications







Drawing Composition.dgn [3D - V8 DGN] - MicroStation V8i

File Edit Element Settings Tools Utilities Workspace Window Help

Tasks

- Tasks
  - Drawing Composition
- Organize
- Drawing
- Solids Modeling
- Design Composition
- Create Views (3D)
- Sheet Composition
- Annotate
  - Q
  - W
  - E
  - R
  - T
  - A
  - S

View 1, Tank Plan

The drawing shows a tank plan with a vertical tank on the left and a horizontal tank on the right. Dimension lines are present along the top and bottom edges, labeled 1, 2, 3, and 4. A grid system is visible with labels A and B on the vertical axis. A title block is located in the bottom right corner of the drawing area.

PROJECT NO.	DATE	PREP
0111 2	9-20-90	
PROJECT	TankPlan.dwg	
DATE		
DESIGN APPROVAL		

Linear Dimensioning

STANDARD

Alignment: View

Location: Automatic

Dim Offset: 0:0

Tasks Level Display... Project Explorer

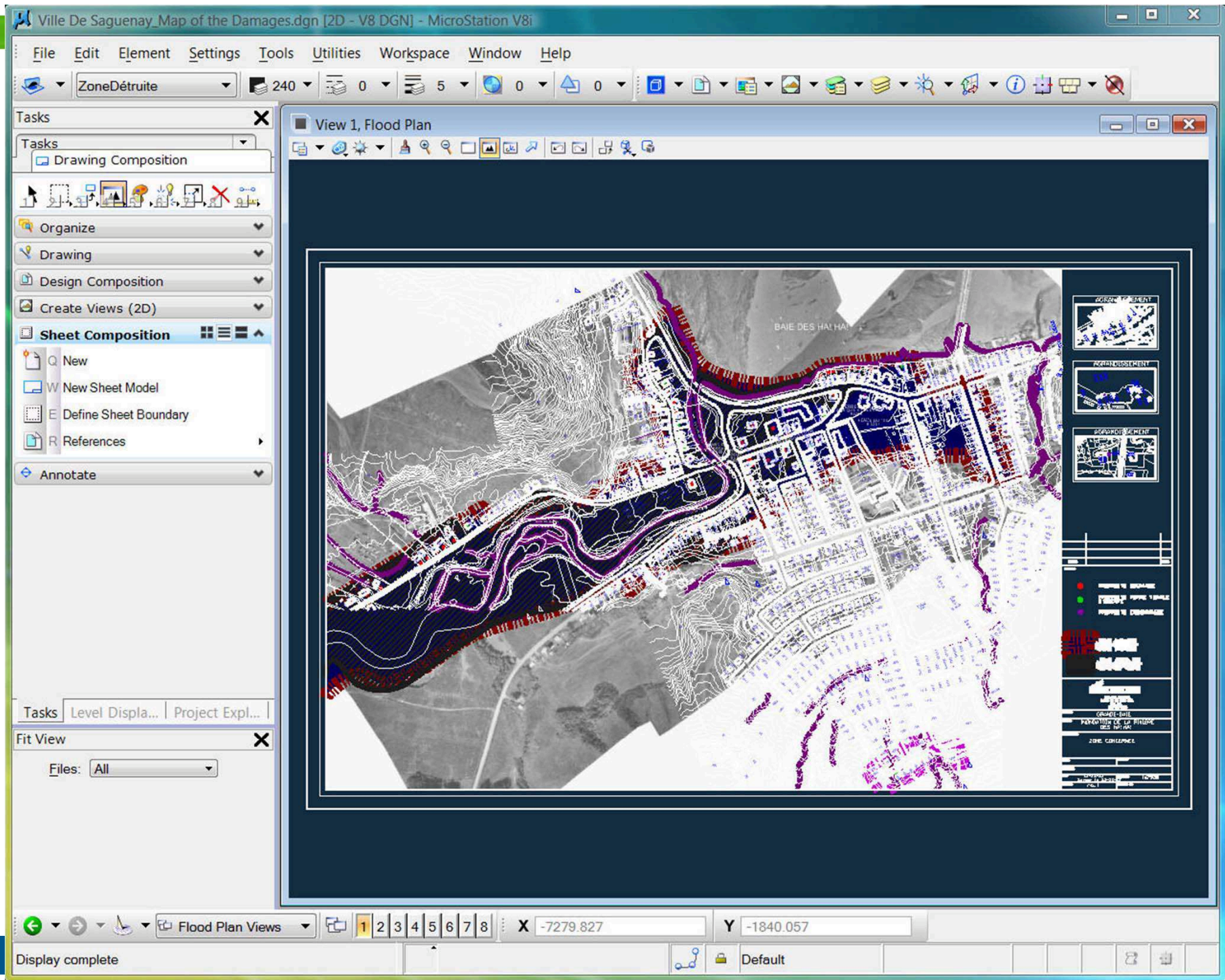
Tank Plan Views

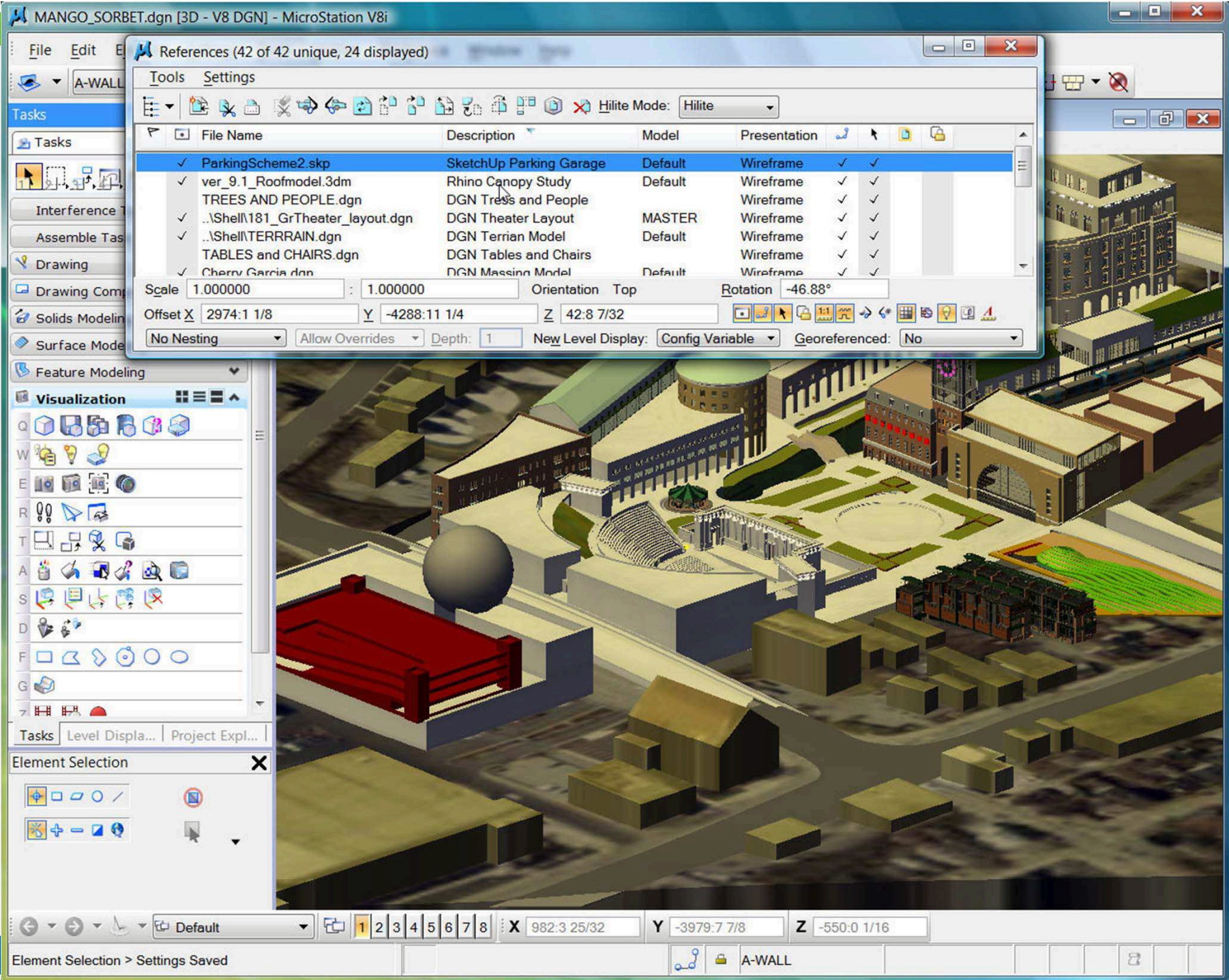
X 22:0 9/32 Y 98:0 15/16 Z 0:0

Dimension Linear Size > Select start of dimension

Copy this cell to the master file if attached as a reference and fill out the TitleBlock tag. Turn off level TitleCell to not display this message.







0712.2 A3-3.dgn [2D - V8 DGN] - MicroStation V8i (SELECT series 1)

File Edit Element Settings Tools Utilities Workspace Window Help

Tasks

- Drawing Composition
- Organize
- Drawing
- Design Composition
- Create Views (2D)
- Sheet Composition
- Annotate
  - Place Smartline
  - Measure Distance
  - Hatch Area
  - Dimension Element
  - Place Section Callout
  - Place Text
  - Project Explorer

Tasks

- Project Expr...
- Level Displ...

Element Selection

24X36 Views

Validated 1 links, found 0 missing targets

0712.2 CVR.dgn [2D - V8 DGN] - MicroStation V8i

File Edit Element Settings Tools Utilities Workspace Window Help

Tasks

- Interoperability with Formats
  - 2D Drawing Composition
  - 3D Drawing Composition
  - Dep Deliverables
- Project Explorer
  - 0712.2 A1-1.dgn, 24X36
  - 0712.2 A1-2.dgn, 24X36
  - 0712.2 A1-3.dgn, 24X36
  - 0712.2 A1-4.dgn, 24X36
  - 0712.2 A2-1.dgn, 24X36
  - 0712.2 A2-2.dgn, 24X36
  - 0712.2 A3-1.dgn, 24X36
  - 0712.2 A3-2.dgn, 24X36
  - 0712.2 A3-3.dgn, 24X36
  - 0712.2 A3-4.dgn, 24X36
  - 0712.2 A4-1.dgn, 24X36
  - 0712.2 A4-2.dgn, 24X36
  - 0712.2 A4-3.dgn, 24X36
  - 24X36
  - DGN Sheet/Sheet-Section
  - 0712.2 CVR
  - 0712.2 A1-1
  - 0712.2 A1-2
  - 0712.2 A1-3
  - 0712.2 A1-4
  - 0712.2 A2-1
  - 0712.2 A2-2
  - 0712.2 A3-1
  - 0712.2 A3-2

Tasks

- Level Display...
- Project Explorer

Element Selection

24X36 Views

Validated 1 links, found 0 missing targets

GENERAL NOTES

CODE REVISION DATA

ARCHITECT

OWNER

GENERAL EVENTS

UNIT PRICE MAP

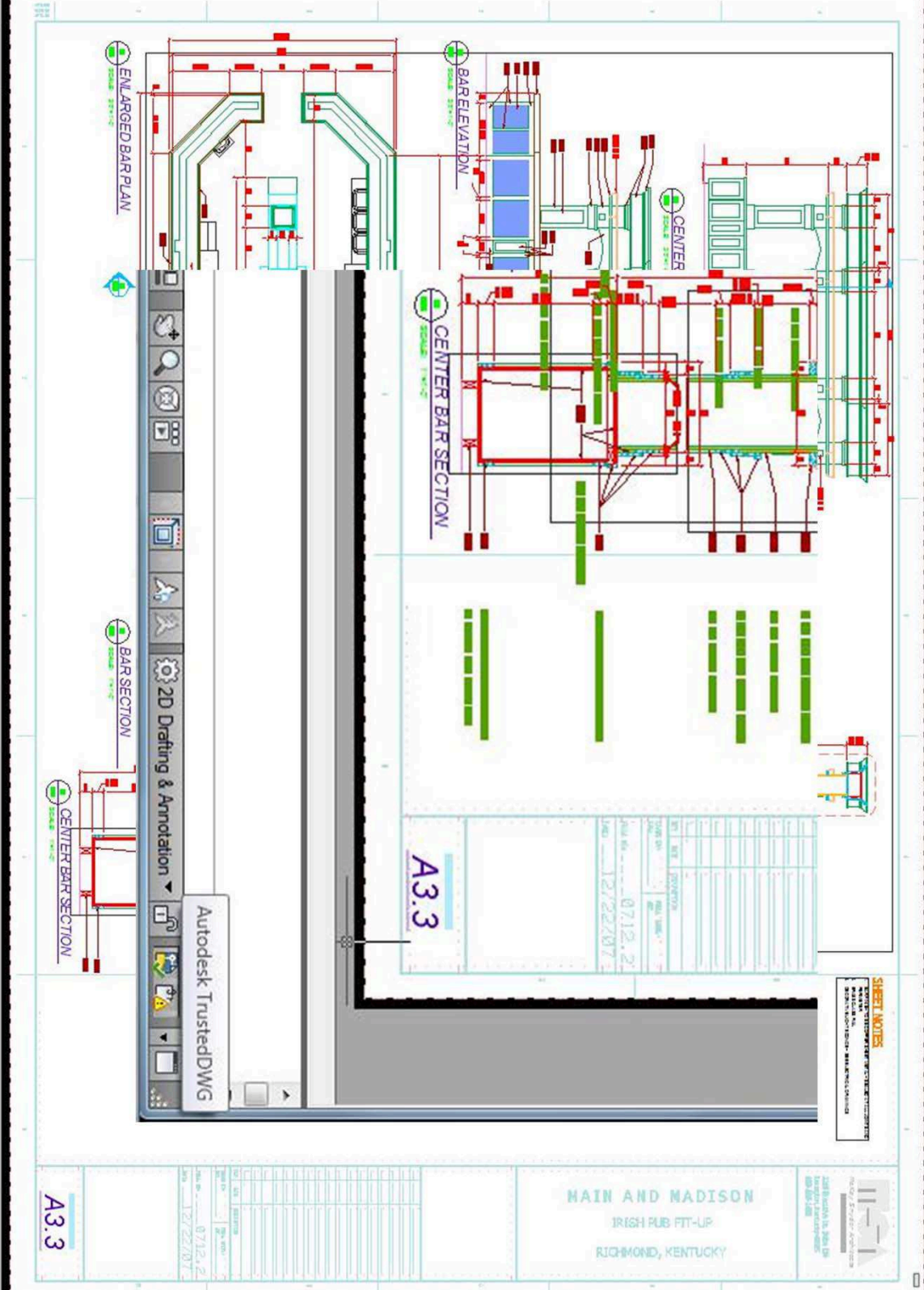
MAIN AND MADISON INTERIOR RENOVATION PADDY WAGON IRISH PUB RICHMOND, KENTUCKY

CVR

2018

MAIN AND MADISON INTERIOR RENOVATION PADDY WAGON IRISH PUB RICHMOND, KENTUCKY

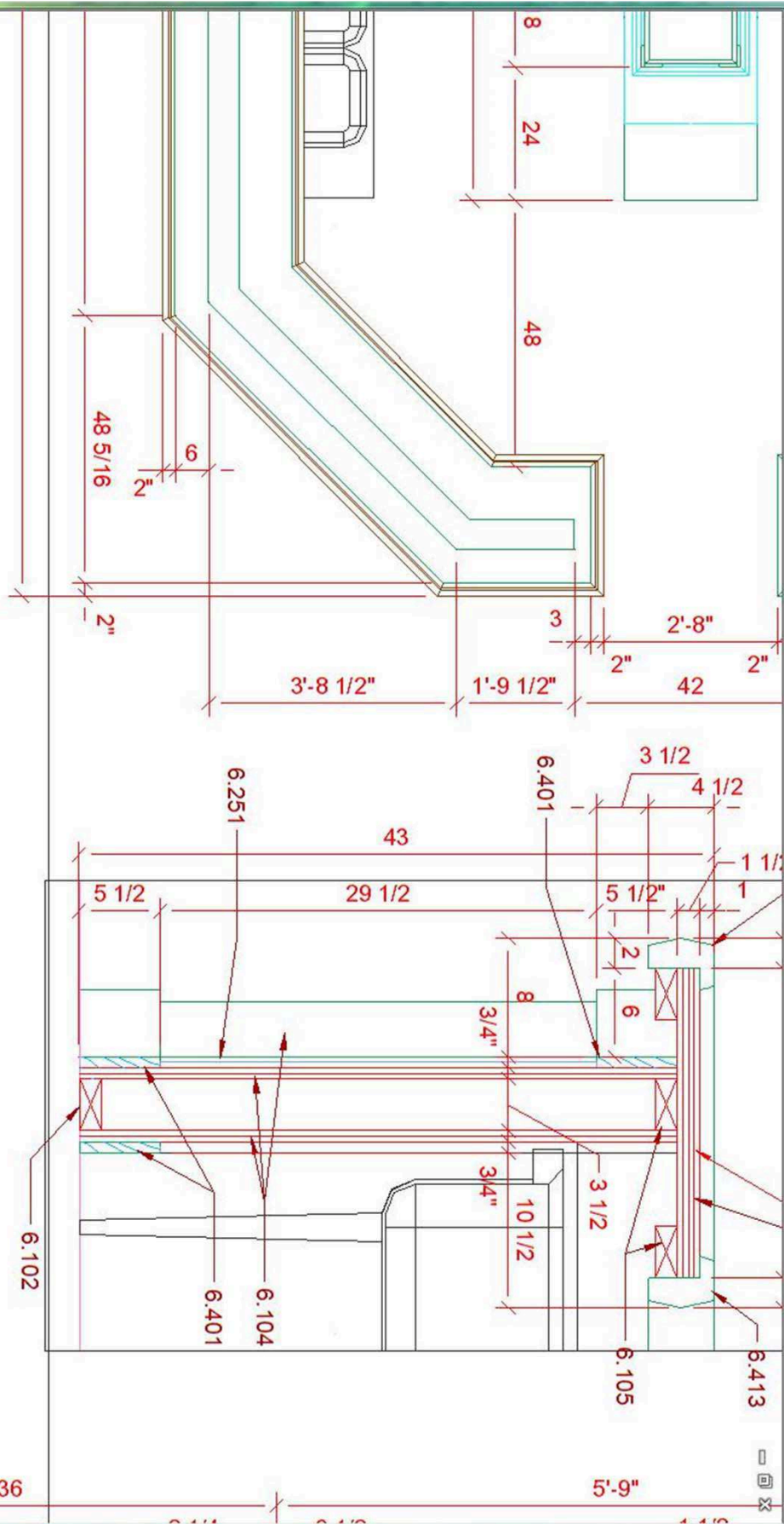
© 2010 Bentley Systems, Incorporated



Model 24X36  
Specify corner of window, enter a scale factor (nX or nXP), or  
[All/Center/Dynamic/Extents/Previous/Scale/Window/Object] <real time>: \_w  
Specify first corner: Specify opposite corner:  
Command:

0:3 1/8" 2:0 1/4" 0:0"

PAPER  
Autodesk TrustedDWG  
2D Drafting & Annotation



**E3**  
**A3.3** **BAR SECTION**  
**SCALE: 1"=1'-0"**

Model 24X36  
Specify first corner: Specify opposite corner:

Command: '\_pan  
Press ESC or ENTER to exit, or right-click to display shortcut menu.  
Command:

- Element Information
- Cell: AeccDbAlignment
    - Line String
    - Shape
    - Line String
    - Line String
    - Shape
    - Line String
    - Line String
    - Shape
    - Line String
    - Line String
    - Shape
    - Line String
    - Line String
    - Shape
    - Line String
    - Line String
    - Shape

**General**

Description	Cell: AeccDbAlignment
Cell Name	AeccDbAlignment
Cell Type	Graphic
Number of elements	18
Template	None
Annotation Purpose	False

**Geometry**

Origin	0.0000,0.0000,0.0000
Angle	0°
Orientation	Top
Scale X	1.00000
Scale Y	1.00000
Scale Z	1.00000

**Extended**

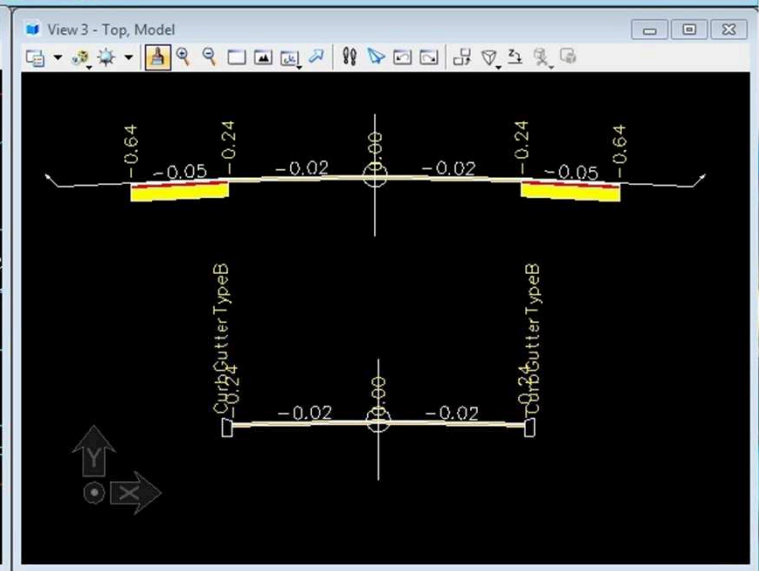
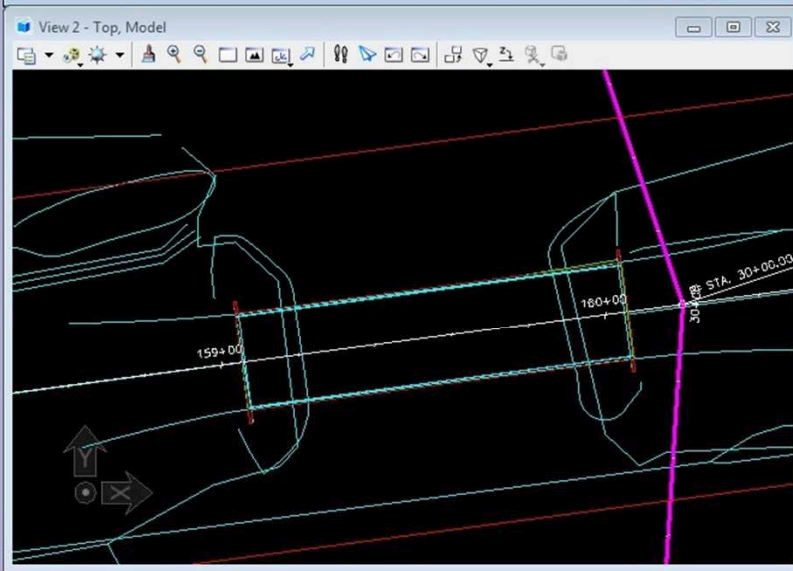
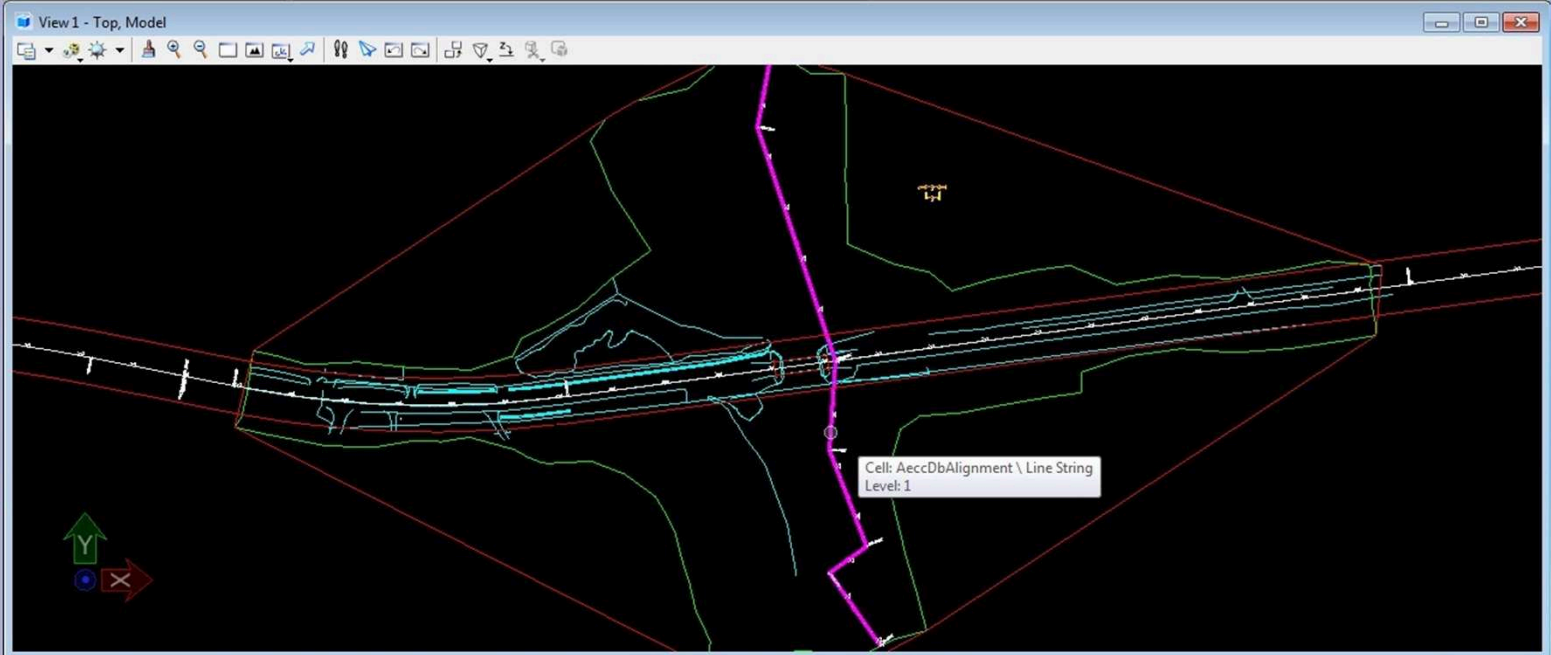
Model	Model
Last Modified	3/3/2010 7:16 AM
Modified	Not Modified
New	Not New

**Raw Data**

Element ID	59204
Size	144
File Position	4001890
Linkages	1

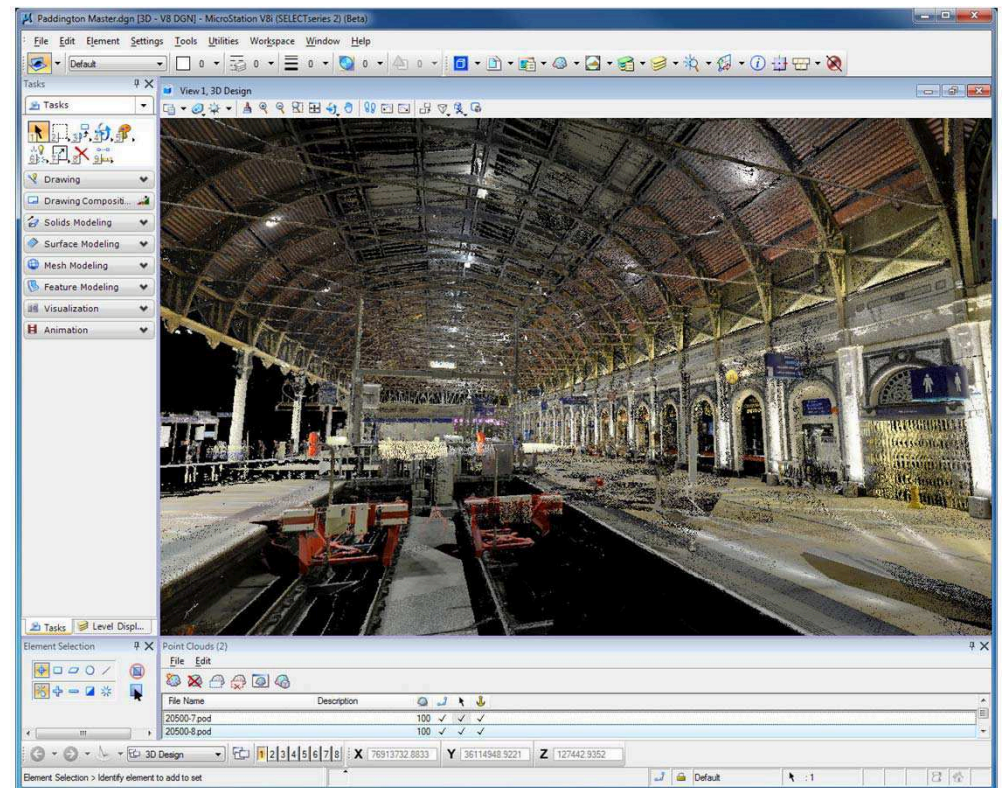
**Material**

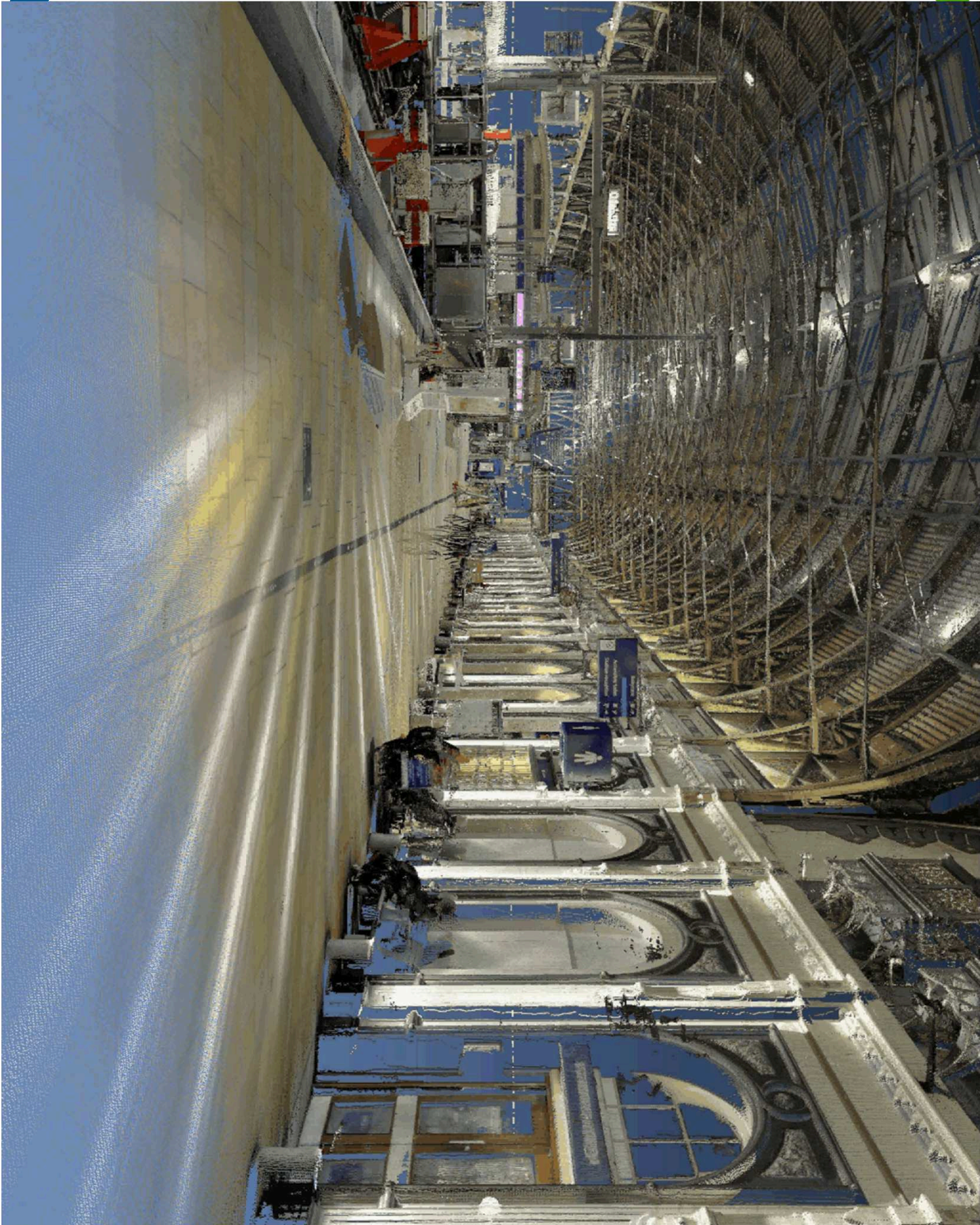
Assigned Materials	(None)
--------------------	--------



# MicroStation V8i (SELECTseries 2)

- Point Clouds
  - Leverage LIDAR data in MicroStation
  - Easy to use, high performance visualization
  - Provide access to all project team members







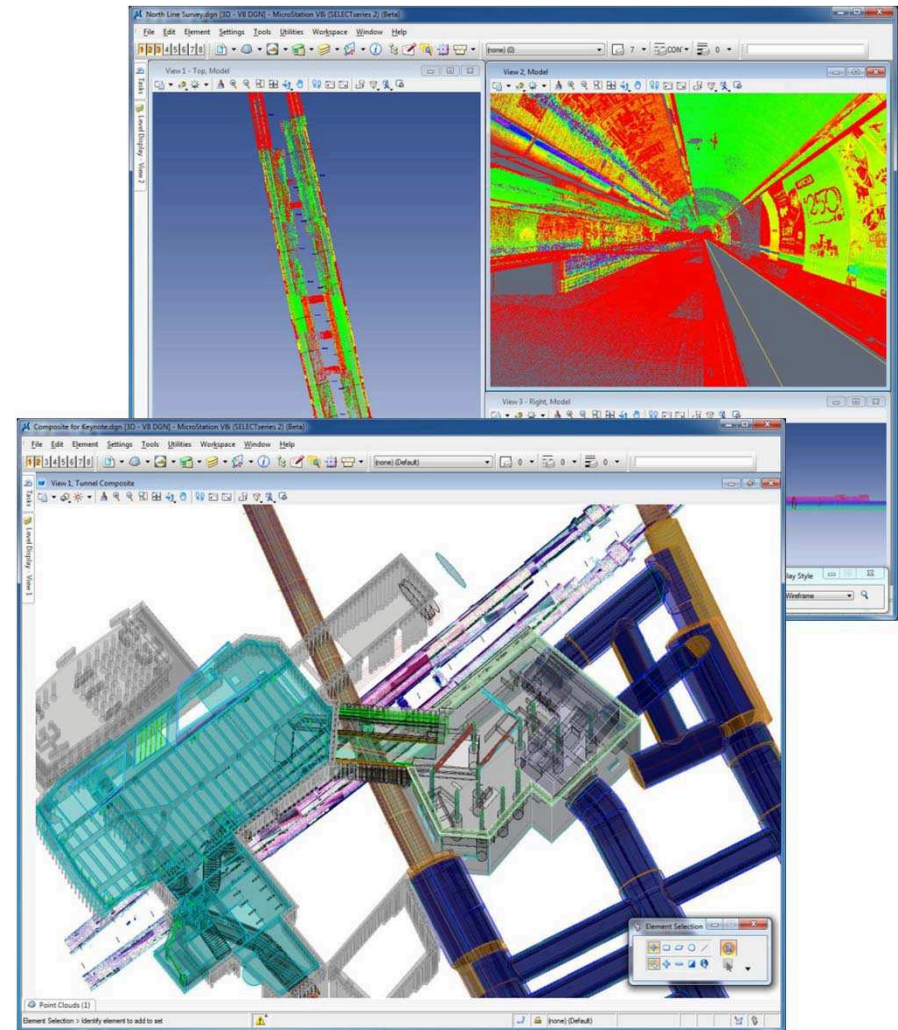
# MicroStation V8i (SELECTseries 2)

## Point Cloud Tools

- Standard Viewing tools
- Similar to a reference file attachment
- Snap and Locate
- Measure, move, scale, etc.
- Level on/off

## Point Cloud Presentation

- RGB
- Classification
- Elevation
- Intensity



Blank 5 2

CON

2

Window

Help

Drawing

Q

W

E

R

T

A

S

D

F

Drawing Composition

Solids Modeling

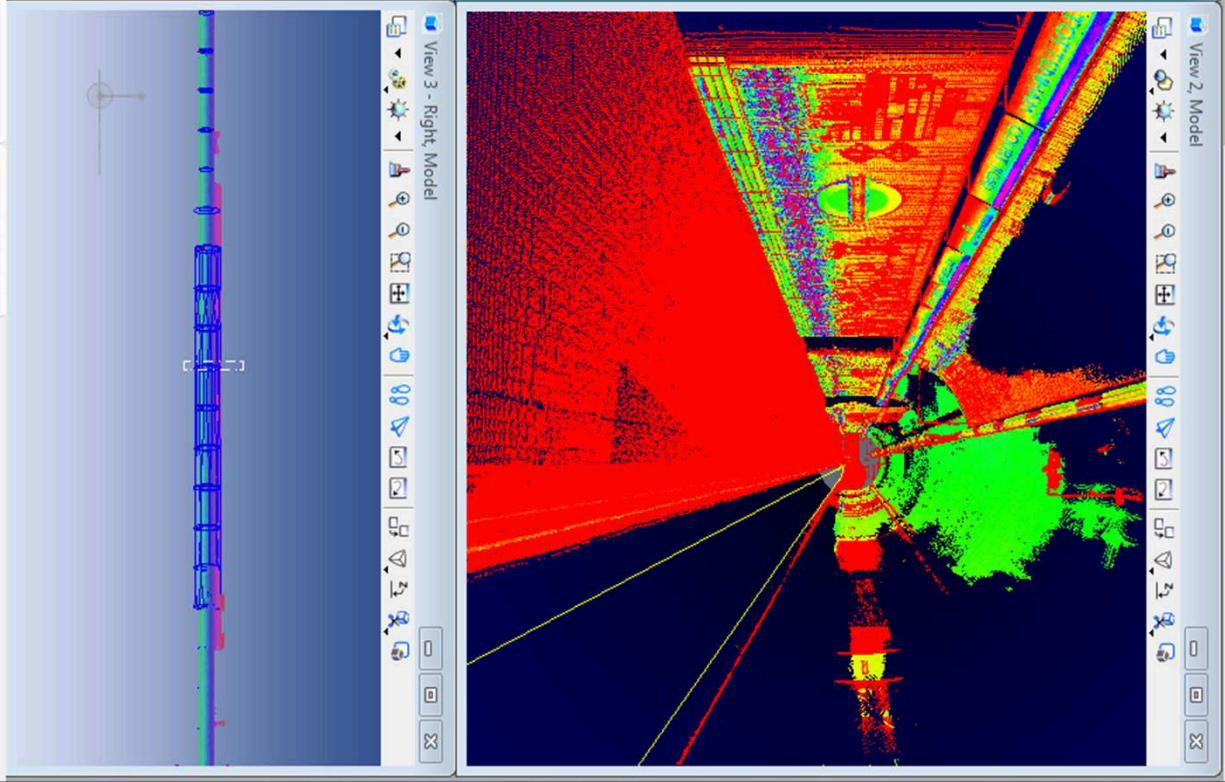
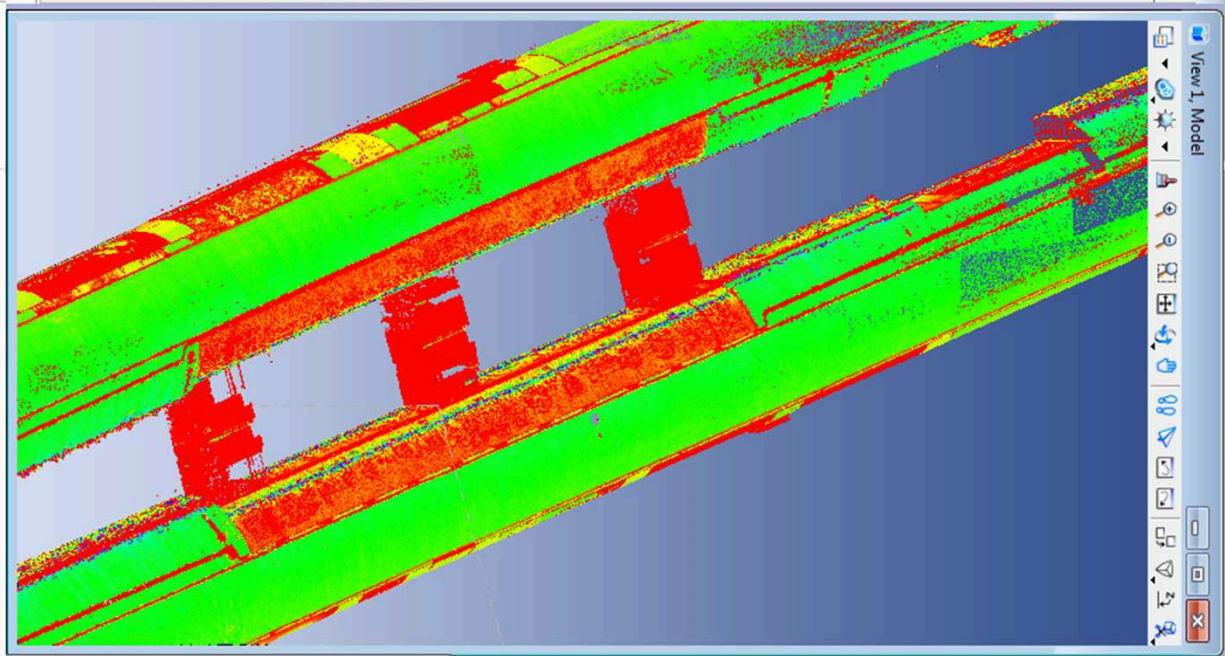
Surface Modeling

Mesh Modeling

Feature Modeling

Visualization

Animation



Tasks

Level Display - View 1

X -0.1457

Y -3.0209

Z -1.3001

Place Circle By Edge > Identify first point on circle

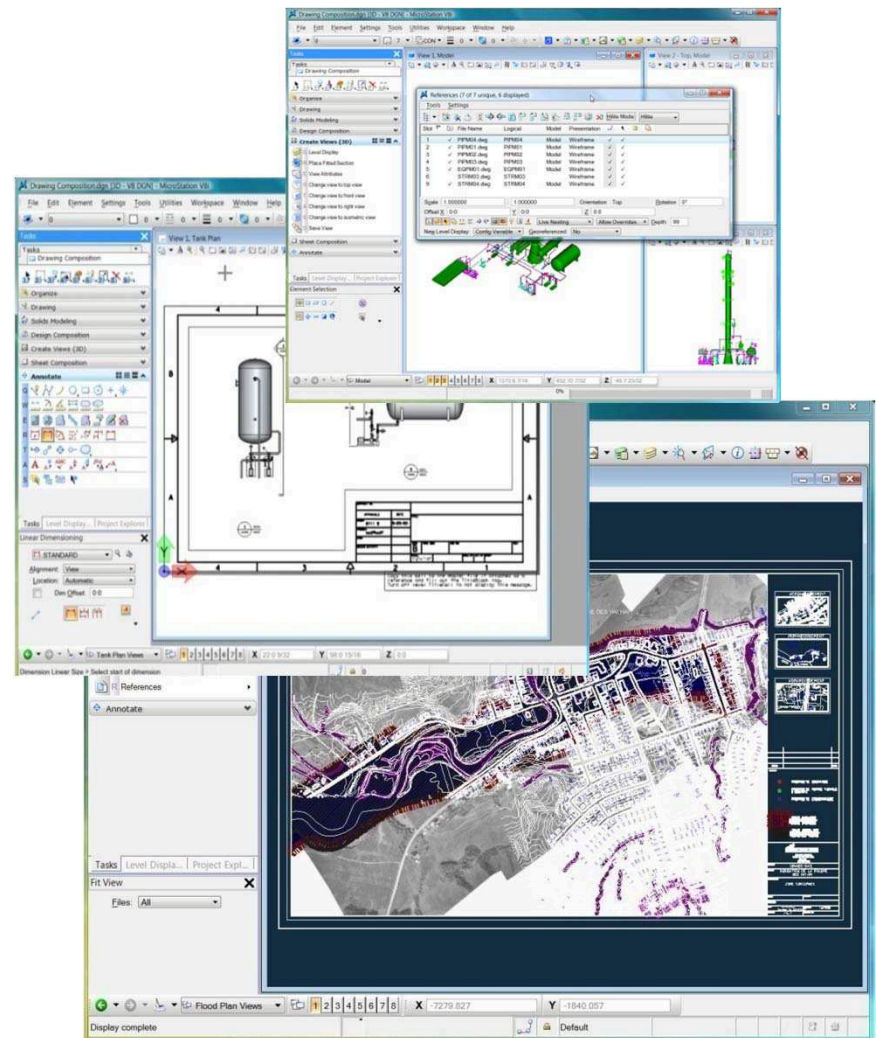
1 2 3 4 5 6 7 8

Blank



# The Interoperability Advantage

- Improve Efficiency
  - Assemble information easily from multiple sources
  - Reuse assembled information
- Increase Quality
  - Read and write RealDWG files
  - Create better performing assets
- Save Money
  - Consolidate software
  - Reduce data translation cost
  - Eliminate need for re-work

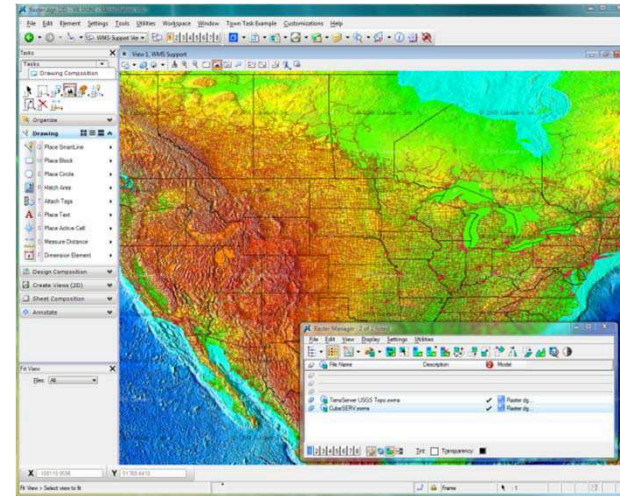


# MicroStation V8i (SELECTseries 2)

Intrinsic GeoCoordination

# MicroStation V8i (SELECTseries 2)

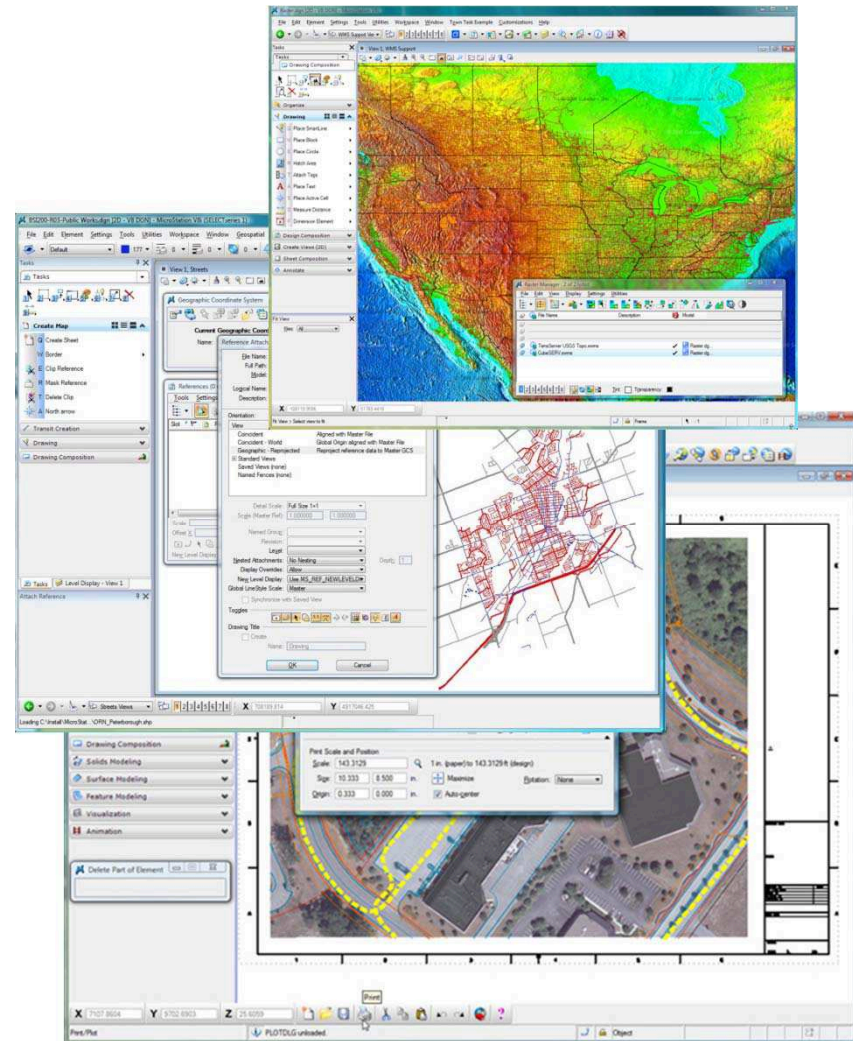
- Intrinsic GeoCoordination
  - Geospatial Referencing
  - Web Map Server Support
  - GPS Device Support
  - Geospatial PDF

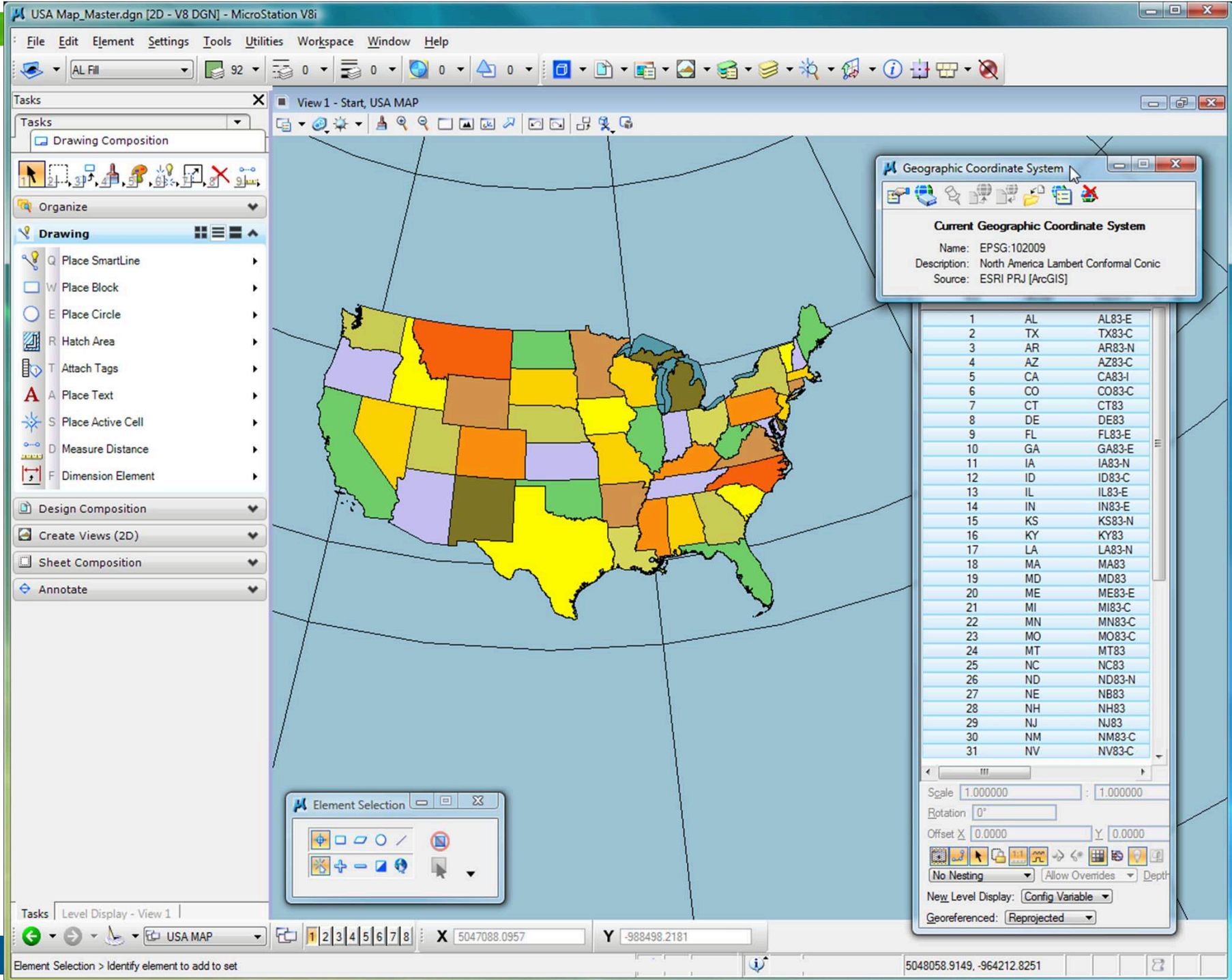


- New in MicroStation V8i (SELECTseries 2)
  - Define Placemark Monuments
    - Longitude and Latitude
    - Cartesian Coordinates
    - Global Positioning System
    - Reference with Geographic Coordinate System

# Why Geo-Coordinate Anything?

- Assemble information with multiple coordinate systems from multiple sources
- Align work accurately to create a reliable view of the design project in real-world context
- Avoid on-site coordination errors as project is constructed
- Create data-rich design and construction deliverables





Import-Export.dgn [2D - V8 DGN] - MicroStation V8i

File Edit Element Settings Tools Utilities Workspace Window Town Task Example Customizations Help

GPS Tracking View

Tasks View 1, GPS Tracking [Displayset]

Tasks

- Drawing Composition
- Organize
- Drawing
  - Q Place SmartLine
  - W Place Block
  - E Place Circle
  - R Hatch Area
  - T Attach Tags
  - A Place Text
  - S Place Active Cell
  - D Measure Distance
  - F Dimension Element
- Design Composition
- Create Views (2D)
- Sheet Composition
- Annotate

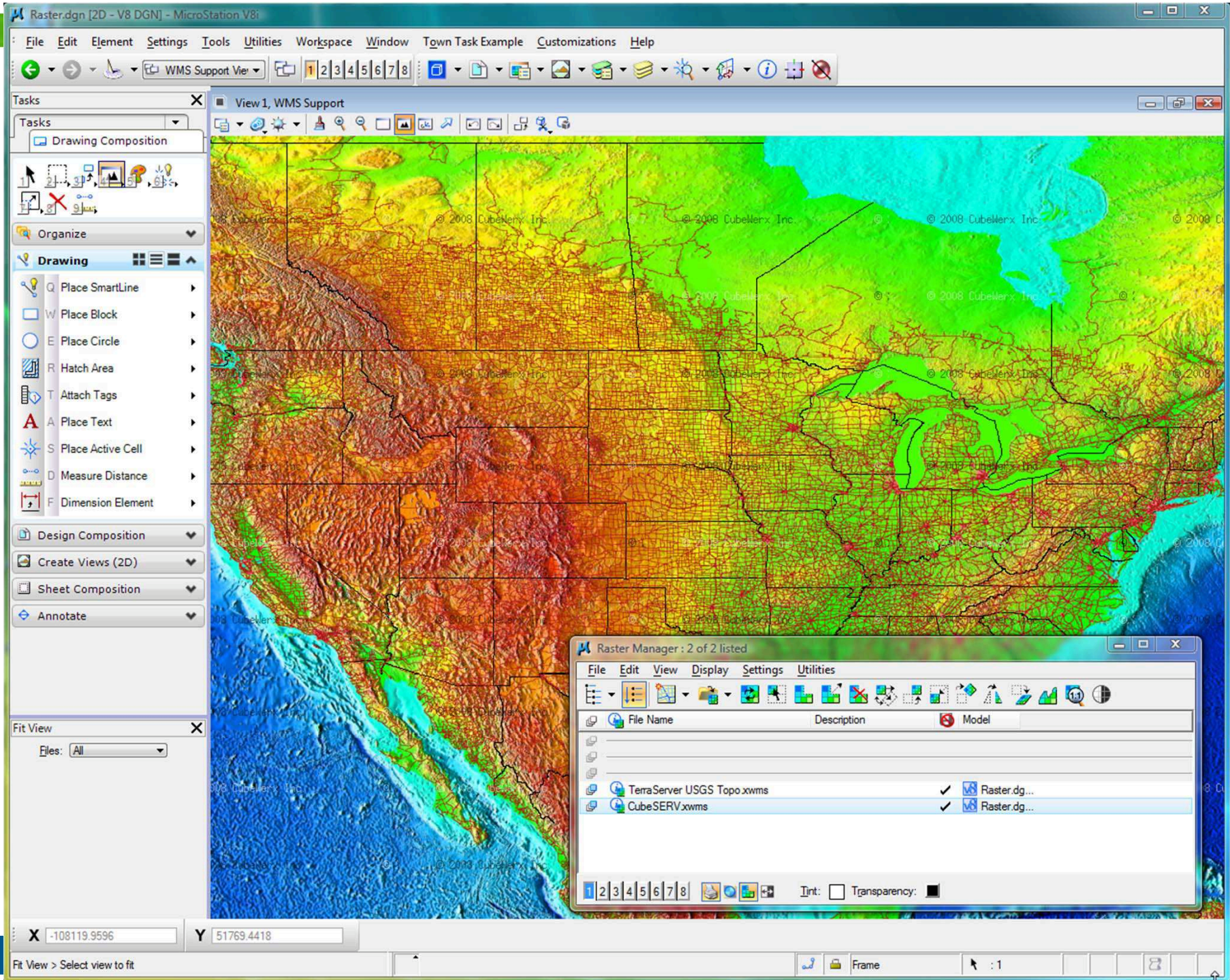
Element Selection

X 6867.0292 Y 9103.1589

Element Selection > Identify element to add to set Reference attached Object









### Geographic Coordinate System

**Current Geographic Coordinate System**

Name: Azimuthal Equal Area  
Description:  
Source: From Geographic Placemarks

### Global Positioning System

Settings Status Position

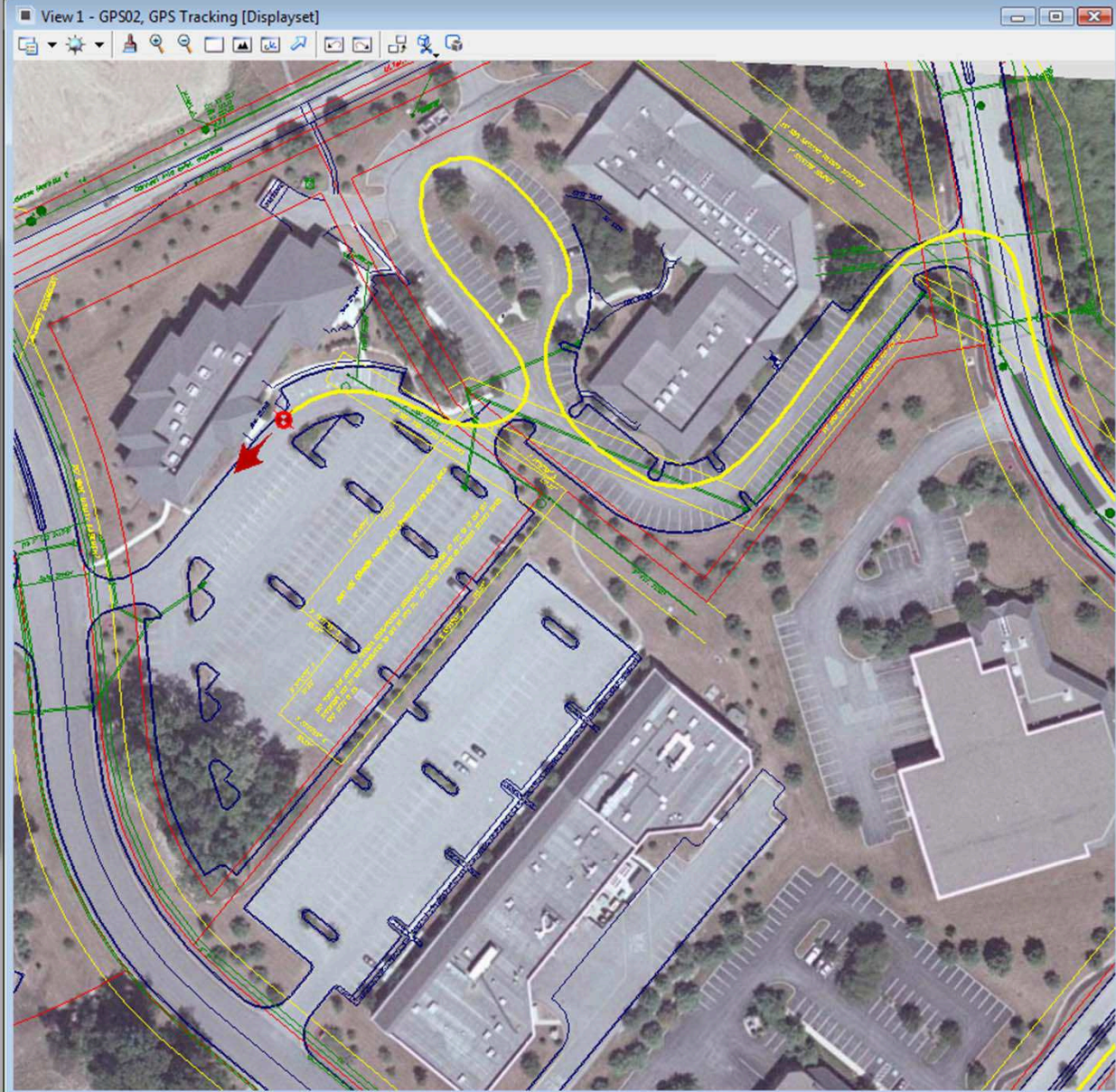
Sky Plot

Satellites	Signal
22	44
14	41
18	39
30	37
12	36
31	41
9	28
11	
32	14

Raw Data

```
SGPRMC,112053.000,A,4003.9241,N,07541.2572,W,6.57,21  
SGPGGA,112054.000,4003.9233,N,07541.2580,W,1.07,1.2,1  
SGPGSA,A,3,30,22,18,14,12,09,31,,,,,2.2,1.2,1.9*3E  
SGPGSV,3,1,09,22.80,153.43,14.62,318.41,18.38,136.39,30  
SGPGSV,3,2,09,12.32,077.38,31,24,222.41,09,22,046.26,11  
SGPGSV,3,3,09,32.00,312.14*44  
SGPRMC,112054.000,A,4003.9233,N,07541.2580,W,2.50,21
```

### Element Selection



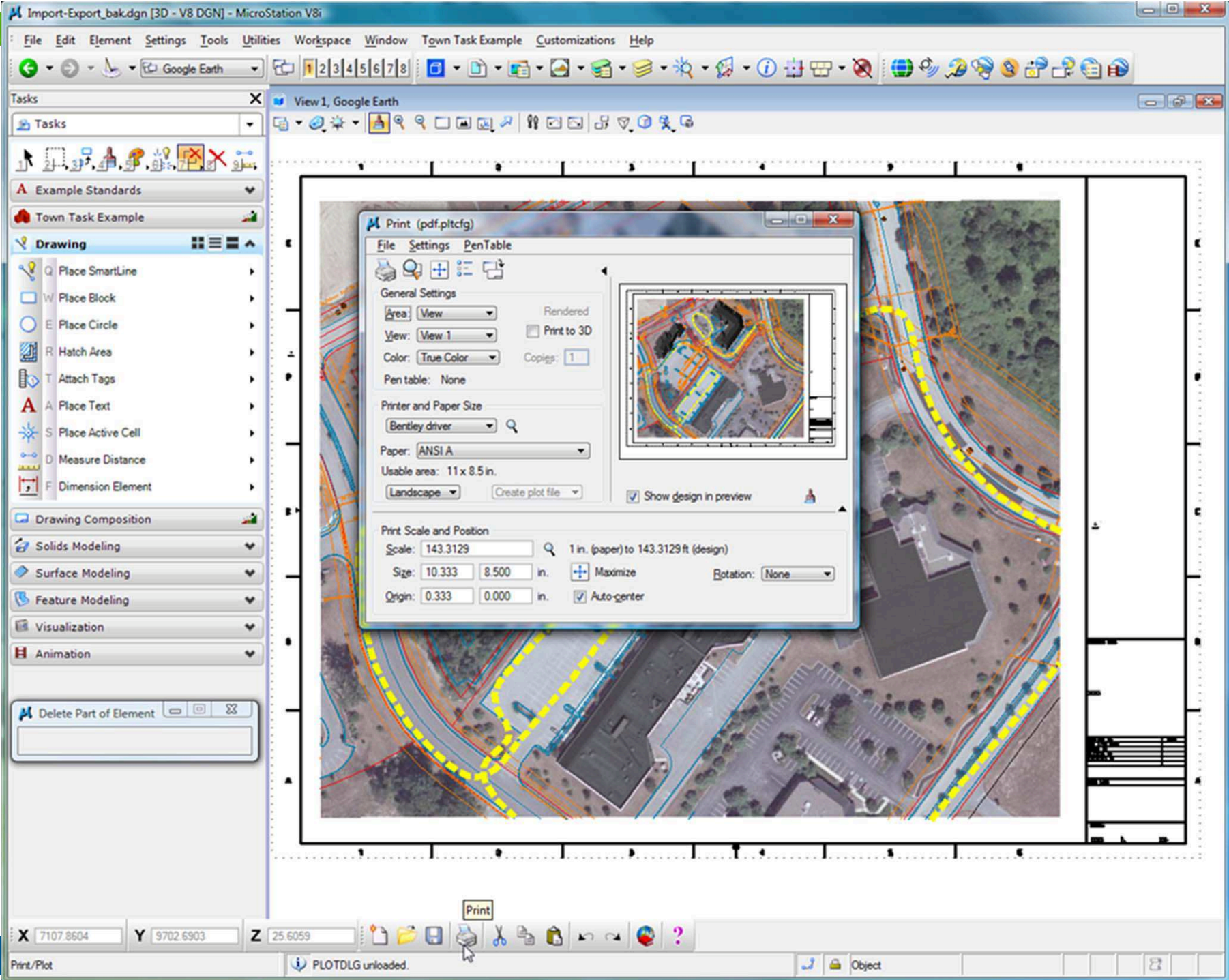
X 7474.8914 Y 8903.3808

Display complete

Saved point 286 based on area

Misc Data





- My Places
- Temporary Places
- Logistics
- Levels
- Raster References
- Reference Files
- 2D Site Data
- GPS Tracking
- Metadata
- Saved Views

- Primary Database
- Geographic Web
- Roads
- 3D Buildings
- Street View
- Borders and Labels
- Traffic
- Weather
- Gallery
- Global Awareness
- Places of Interest
- More
- Terrain



40°03'54.51" N 75°41'14.86" W

© 2008 Tele Atlas

Jun 6, 2004

Google

Eye alt 325 ft

Tasks

View 1, Streets

Geographic Coordinate System

Current Geographic Coordinate System

Name: EPSG:2029  
NAD27(76) / UTM zone 17N  
EPSG

References (1 of 1 unique, 1 displayed)

Slot	File Name	Model	Description	Lo
1	ORN_Peterborough.shp		Geographically Rep...	

Scale: 1.0000000 : 1.0000000 Rotation: 0°

Offset X: 858993.459 Y: 4858993.459

New Level Display: [Config Variable] Georeferenced: [Reprojected] Allow O...

Tasks

Element Selection

Level Display - View 1

Transit Creation

Drawing

Drawing Composition

Create Map

Create Sheet

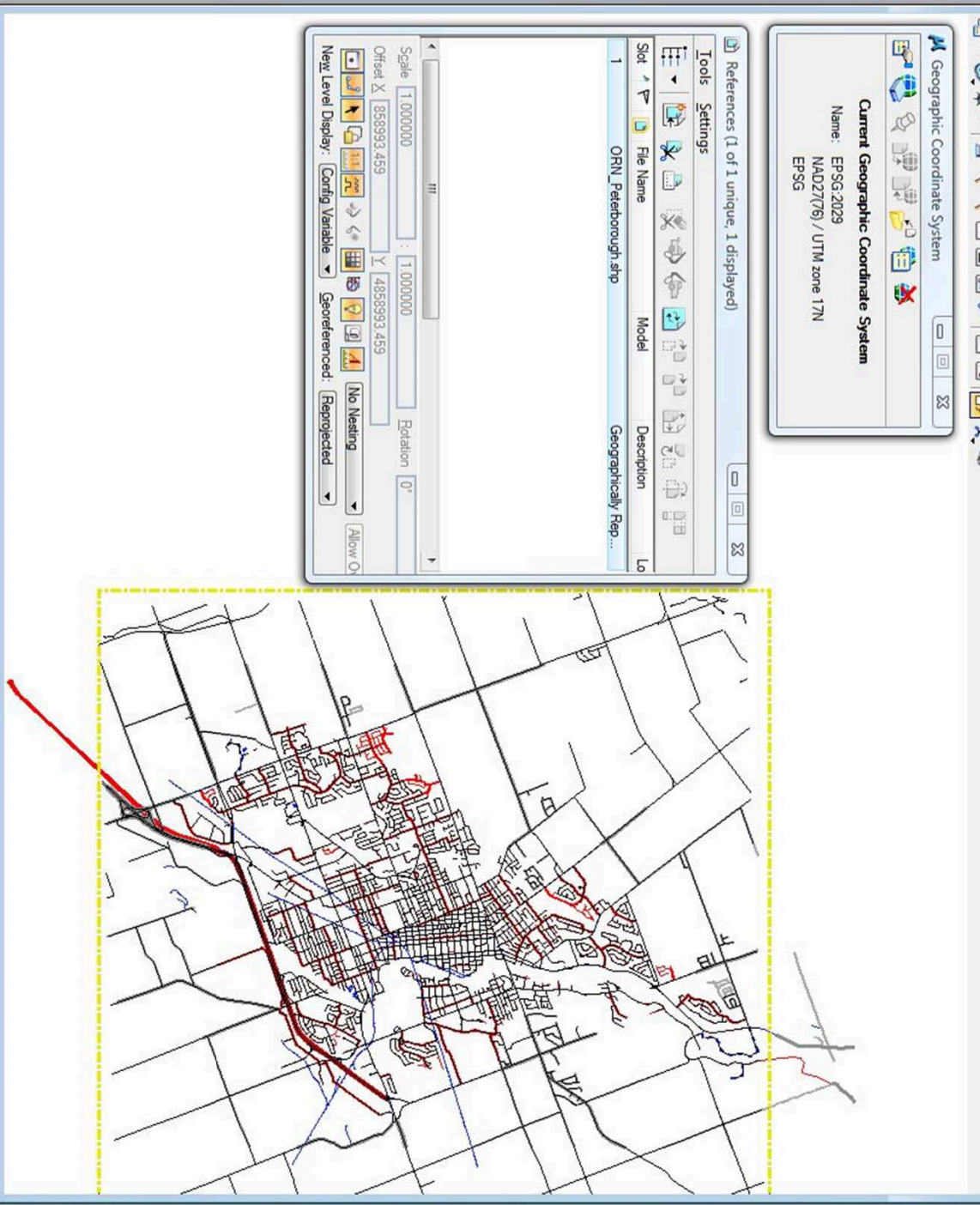
Border

Clip Reference

Mask Reference

Delete Clip

North arrow



Element Selection > Identify element to add to set

Streets Views

1 2 3 4 5 6 7 8

X 700050.635 Y 4905086.136

Default

Items

Active

View 1, Hydrography

Fit View

Tasks

Level Display

Items

Files: All

Item	ABBRSTREET	DIRPREFIX	DIRSUFFIX	DIRTRAFFIC	EFFDATE	EXPDATE	FID	FMF_OBJECT	FULLSTREET	GEODB_OID	GEOMETRY
ORN_Peterborou...	LINDSAY RD			Positive	11/15/2005		331	194405463	LINDSAY ROAD	52791	
ORN_Peterborou...	DIVISION RD			Both	11/15/2005		587	194408796	DIVISION ROAD	88092	
ORN_Peterborou...	SHERBROOKE ST			Both	11/15/2005		1099	194417428	SHERBROOKE ...	174430	
ORN_Peterborou...	CHEMONG RD			Both	11/15/2005		1865	194430313	CHEMONG ROAD	303253	
ORN_Peterborou...	AIRPORT RD			Both	11/15/2005		2633	194443055	AIRPORT ROAD	429611	
ORN_Peterborou...	THE PARKWAY			Both	11/15/2005		76	194401283	THE PARKWAY	13080	
ORN_Peterborou...				Both	11/15/2005		1100	194417429		174436	
ORN_Peterborou...				Positive	11/15/2005		1866	194430327		303400	
ORN_Peterborou...				Both	11/15/2005		7674	194443055		13080	

Details

Row: 1 of 919

Hydrography View

701055.0006

4909296.6085

C:\Install\MicroStation\_08110787\WorkSpace\Project

Default

Project Explorer

- Default
- Geospatial.pset
  - BS1200-M01-City
  - BS1200-M02-City Small
  - BS1200-M03-Bikeway
  - BS1200-M04-Trails
  - BS1200-M05-Zoning
  - BS1200-M06-Wards
- Drawing Views
  - Drawings
    - Bikeway Labels [C:/Install/MicroSt/...
    - City Drawing [C:/Install/MicroSt/...
    - Hydrography Labels [C:/Inst...
    - Landmarks [C:/Install/Micro...
    - Park Labels [C:/Install/Micro...
    - Street Names [C:/Install/Mik...
    - Wards Labels [C:/Install/Mik...
  - Designs
  - Sheets
    - Bikeways [C:/Install/MicroSt...
    - City Map [C:/Install/MicroSt...
    - City Small [C:/Install/MicroS...
    - Trails [C:/Install/MicroStatio...
    - Wards [C:/Install/MicroStatio...
    - Zoning [C:/Install/MicroStati...

View 1, Streets

Print (pdf;ptg)

File Settings Printable

General Settings

View: View 1

Color: True Color

Copies: 1

Printer and Paper Size

Printer driver: ANSIA

Paper: ANSIA

Usable area: 11 x 8.5 in.

Print Scale and Position

Scale: 1916.794

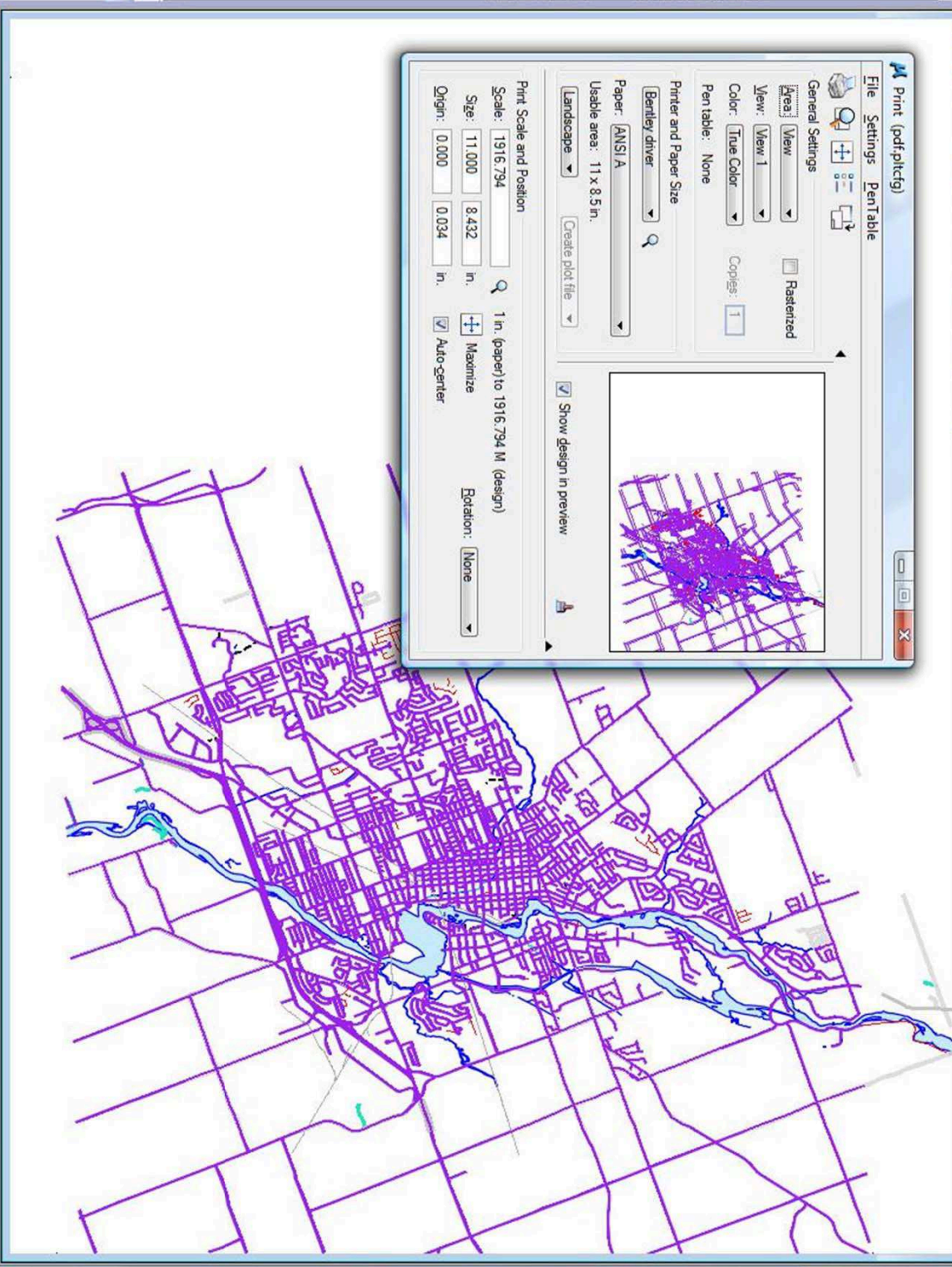

Size: 11.000 in. 8.432 in.

Origin: 0.000 in. 0.034 in.

1 in. (paper) to 1916.794 M (design)

Rotation: None

Show design in preview



Element Selection

Tasks

Streets Views

699221.115

4913603.950

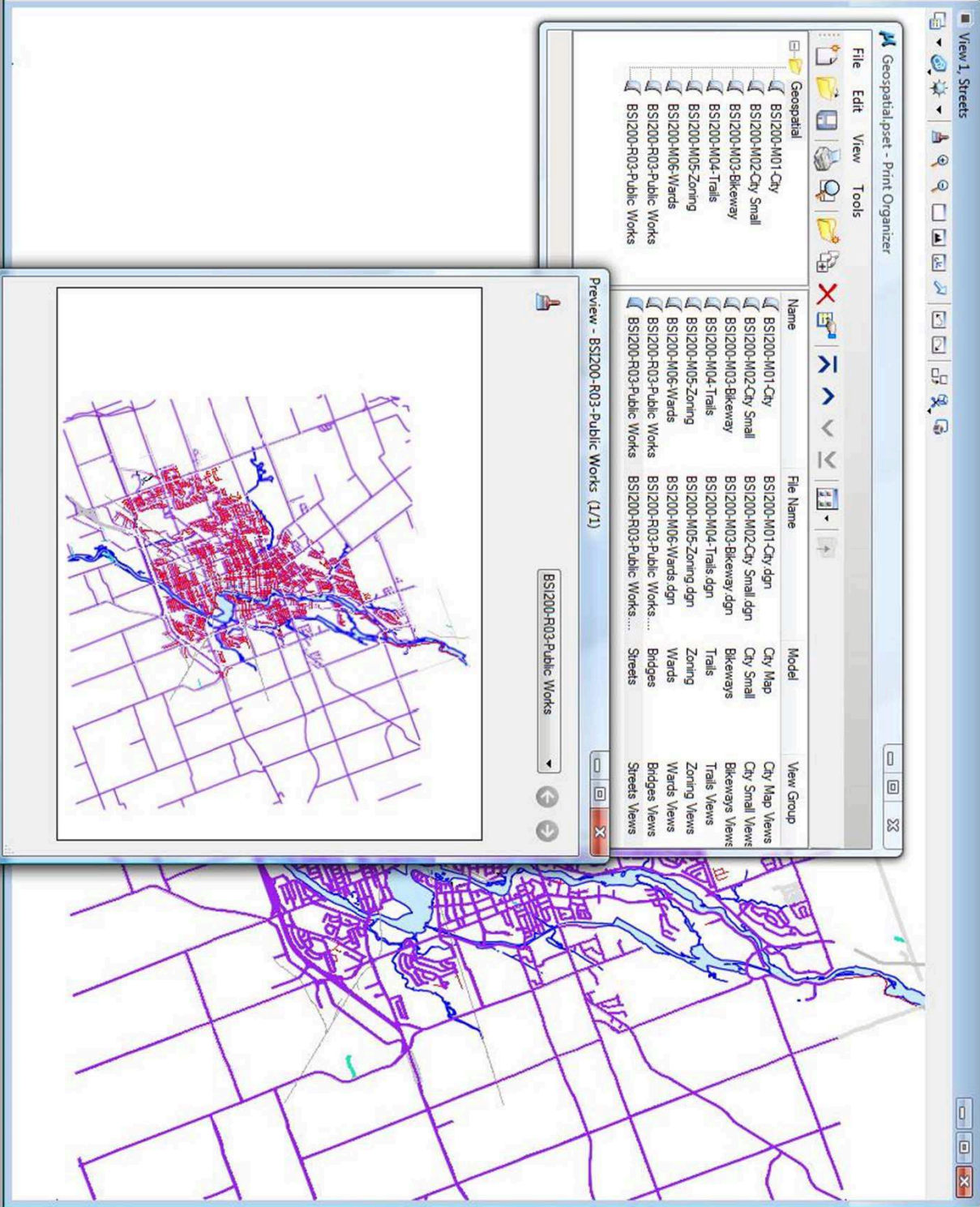
Default

- Geospatial.pset
  - BS1200-M01-City
  - BS1200-M02-City Small
  - BS1200-M03-Bikeway
  - BS1200-M04-Trails
  - BS1200-M05-Zoning
  - BS1200-M06-Wards
- Drawing Views
  - Bikeway Labels [C:/install/MicroS...]
  - City Drawing [C:/install/MicroS...]
  - Hydrography Labels [C:/inst...]
  - Landmarks [C:/install/MicroS...]
  - Park Labels [C:/install/MicroS...]
  - Street Names [C:/install/MicroS...]
  - Wards Labels [C:/install/MicroS...]
- Designs
  - Bikeways [C:/install/MicroS...]
  - City Map [C:/install/MicroS...]
  - City Small [C:/install/MicroS...]
  - Trails [C:/install/MicroStatio...]
  - Wards [C:/install/MicroStatio...]
  - Zoning [C:/install/MicroStatio...]
- Sheets

- Geospatial
  - BS1200-M01-City
  - BS1200-M02-City Small
  - BS1200-M03-Bikeway
  - BS1200-M04-Trails
  - BS1200-M05-Zoning
  - BS1200-M06-Wards
  - BS1200-R03-Public Works
  - BS1200-R03-Public Works

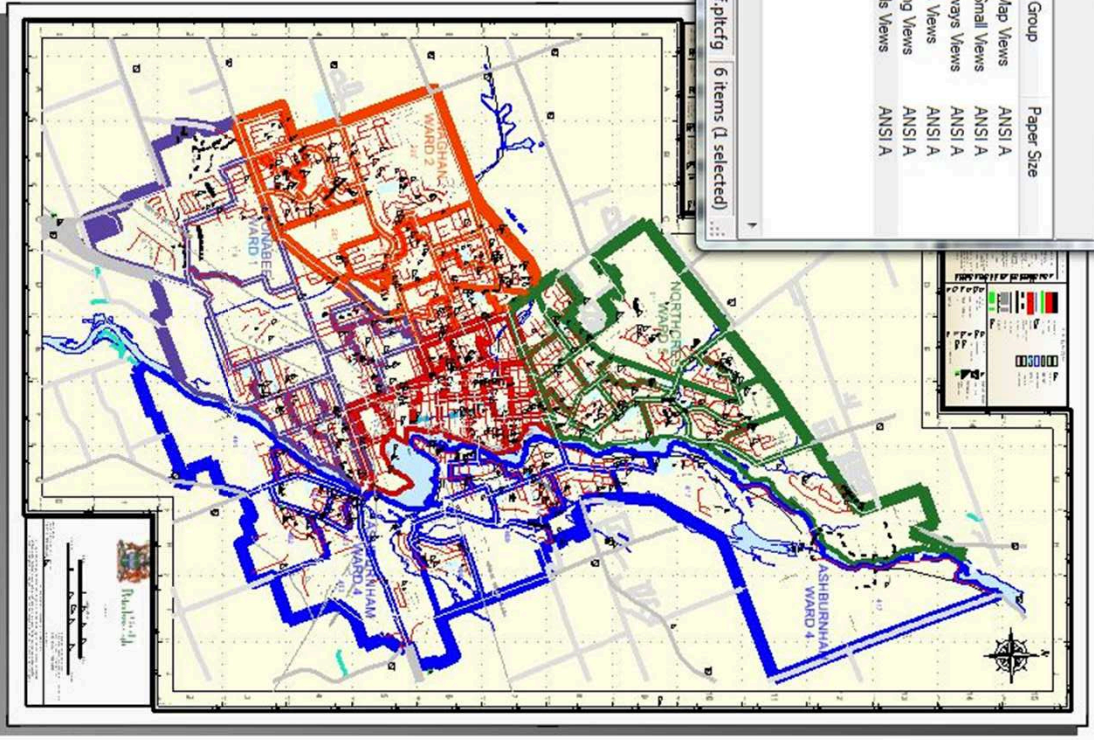
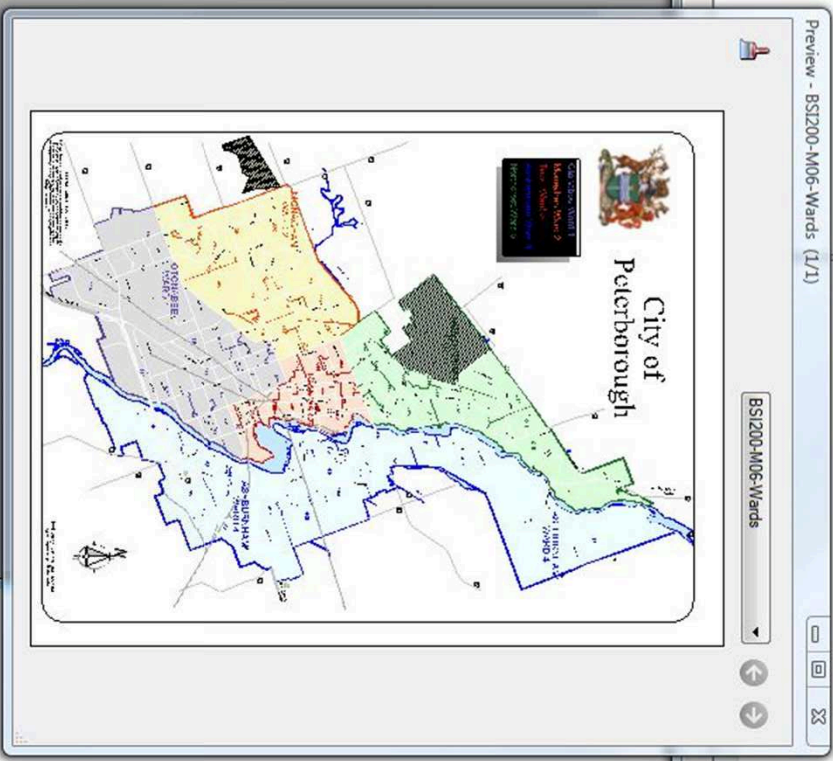
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BS1200-M01-City	BS1200-M01-City.dgn	City Map	City Map Views
BS1200-M02-City Small	BS1200-M02-City Small.dgn	City Small	City Small Views
BS1200-M03-Bikeway	BS1200-M03-Bikeway.dgn	Bikeways	Bikeways Views
BS1200-M04-Trails	BS1200-M04-Trails.dgn	Trails	Trails Views
BS1200-M05-Zoning	BS1200-M05-Zoning.dgn	Zoning	Zoning Views
BS1200-M06-Wards	BS1200-M06-Wards.dgn	Wards	Wards Views
BS1200-R03-Public Works	BS1200-R03-Public Works.dgn	Bridges	Bridges Views
BS1200-R03-Public Works	BS1200-R03-Public Works.dgn	Streets	Streets Views

Preview - BS1200-R03-Public Works (1/1)





Name	File Name	Model	View Group	Paper Size
BS1200-M01-City	BS1200-M01-City.dgn	City Map	City Map Views	ANSI A
BS1200-M02-City Small	BS1200-M02-City Small.dgn	City Small	City Small Views	ANSI A
BS1200-M03-Bikeway	BS1200-M03-Bikeway.dgn	Bikeways	Bikeways Views	ANSI A
BS1200-M04-Trails	BS1200-M04-Trails.dgn	Trails	Trails Views	ANSI A
BS1200-M05-Zoning	BS1200-M05-Zoning.dgn	Zoning	Zoning Views	ANSI A
BS1200-M06-Wards	BS1200-M06-Wards.dgn	Wards	Wards Views	ANSI A



File Edit View Document Comments Forms Tools Advanced Window Help

Create Combine Collaborate Secure Sign Forms Multimedia Comment

3 / 6 71.7% Find

Pages

1 2 3 4 5 6

**City of Peterborough**

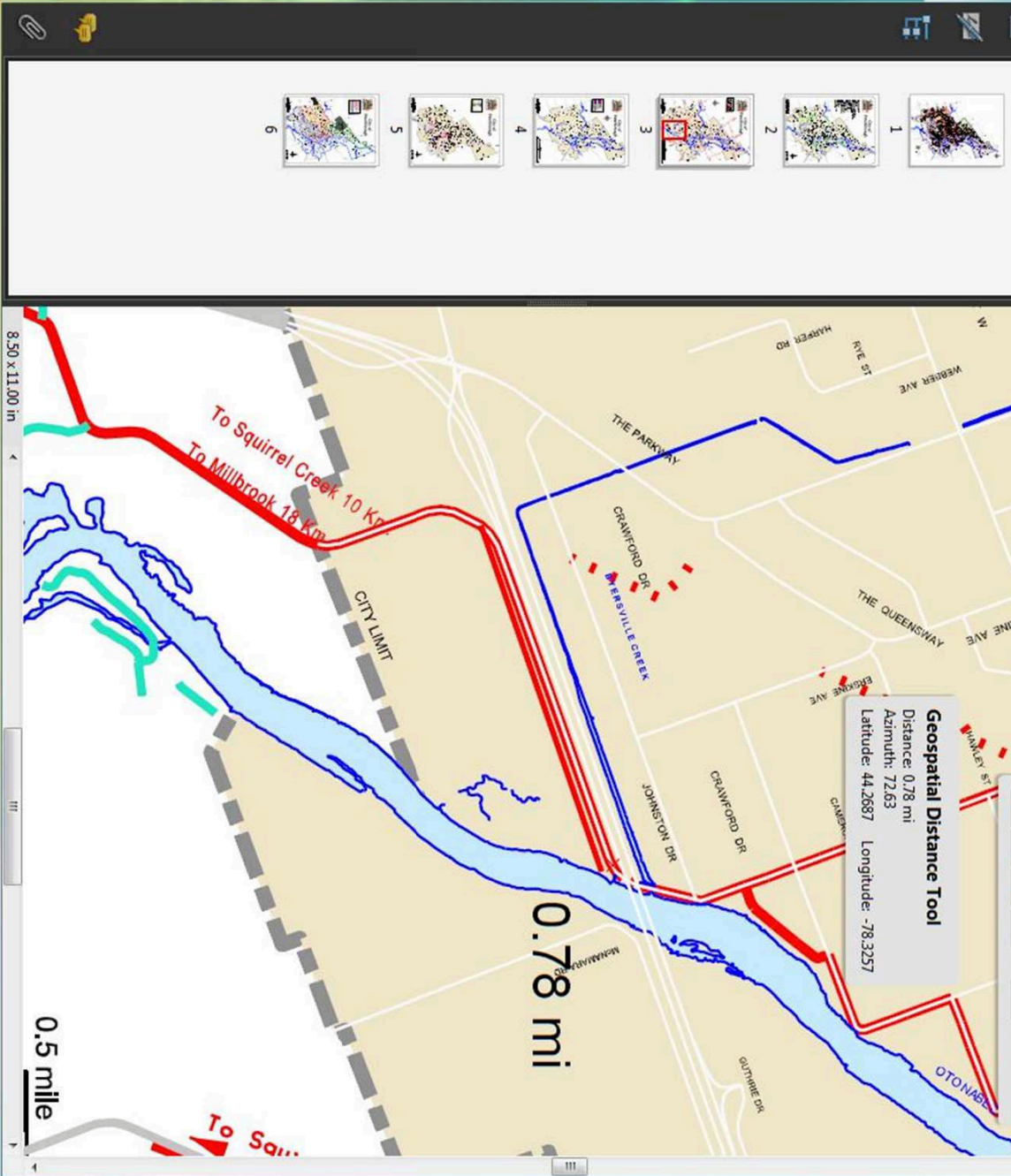
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Legend:

- PROPOSED WATERWAYS
- EXISTING WATERWAYS
- EXISTING WATERWAYS WITH PROPOSED CHANGES
- EXISTING WATERWAYS WITH PROPOSED DELETIONS
- EXISTING WATERWAYS WITH PROPOSED ADDITIONS
- EXISTING WATERWAYS WITH PROPOSED MODIFICATIONS
- EXISTING WATERWAYS WITH PROPOSED DELETIONS AND ADDITIONS
- EXISTING WATERWAYS WITH PROPOSED MODIFICATIONS AND DELETIONS
- EXISTING WATERWAYS WITH PROPOSED MODIFICATIONS AND ADDITIONS
- EXISTING WATERWAYS WITH PROPOSED MODIFICATIONS, DELETIONS AND ADDITIONS

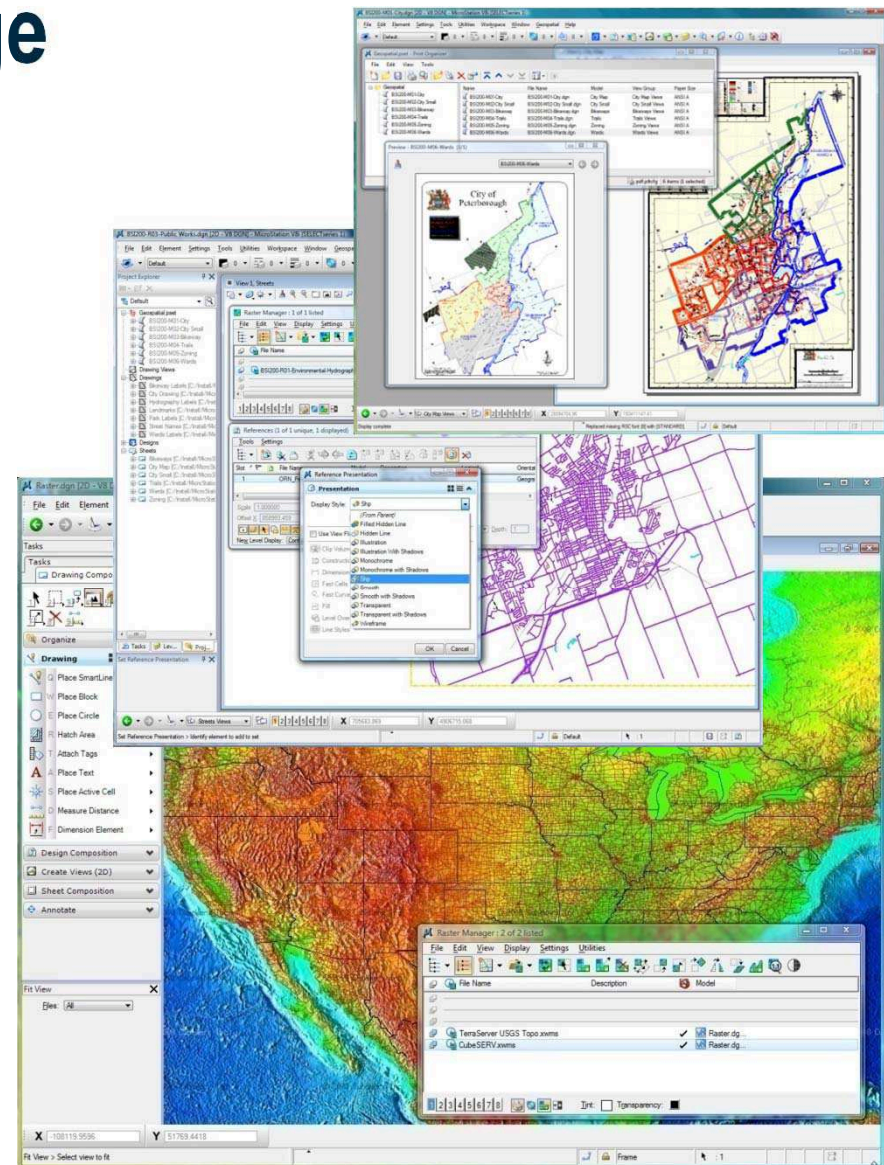
Scale: 0 0.5 1.0 1.5 2.0 Miles

Scale: 0 0.5 1.0 1.5 2.0 Kilometers



# The Intrinsic Advantage

- Save Time
  - Streamline process
  - Reuse native data
  - Avoid doing things twice
- Improve Quality
  - Add Geo-Context to PDF's
  - Enhance data richness
- Reduce Risk
  - Eliminate mistakes on site

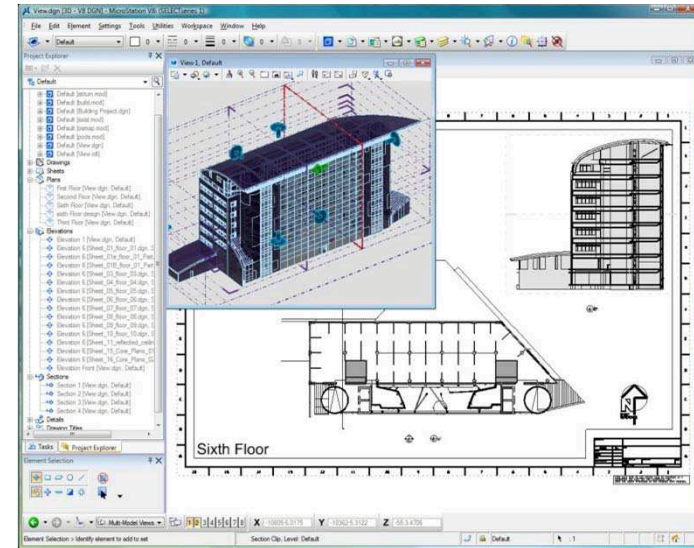


# MicroStation V8i (SELECTseries 2)

Interactive Dynamic Views

# MicroStation V8i (SELECTseries 2)

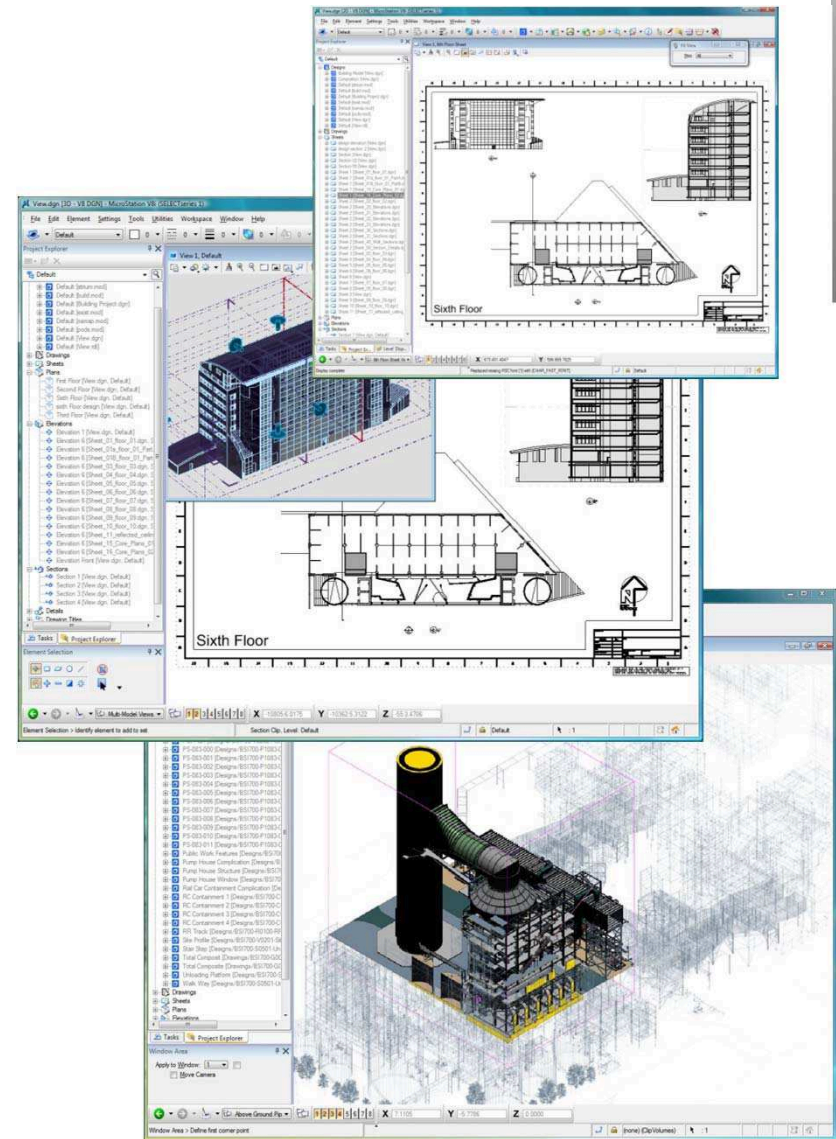
- Interactive Dynamic Views
  - 3D Model Visualization
  - Drawing Automation
  - Linked Sections and Drawings
  - Annotation and Detailing
  - Drawing Model



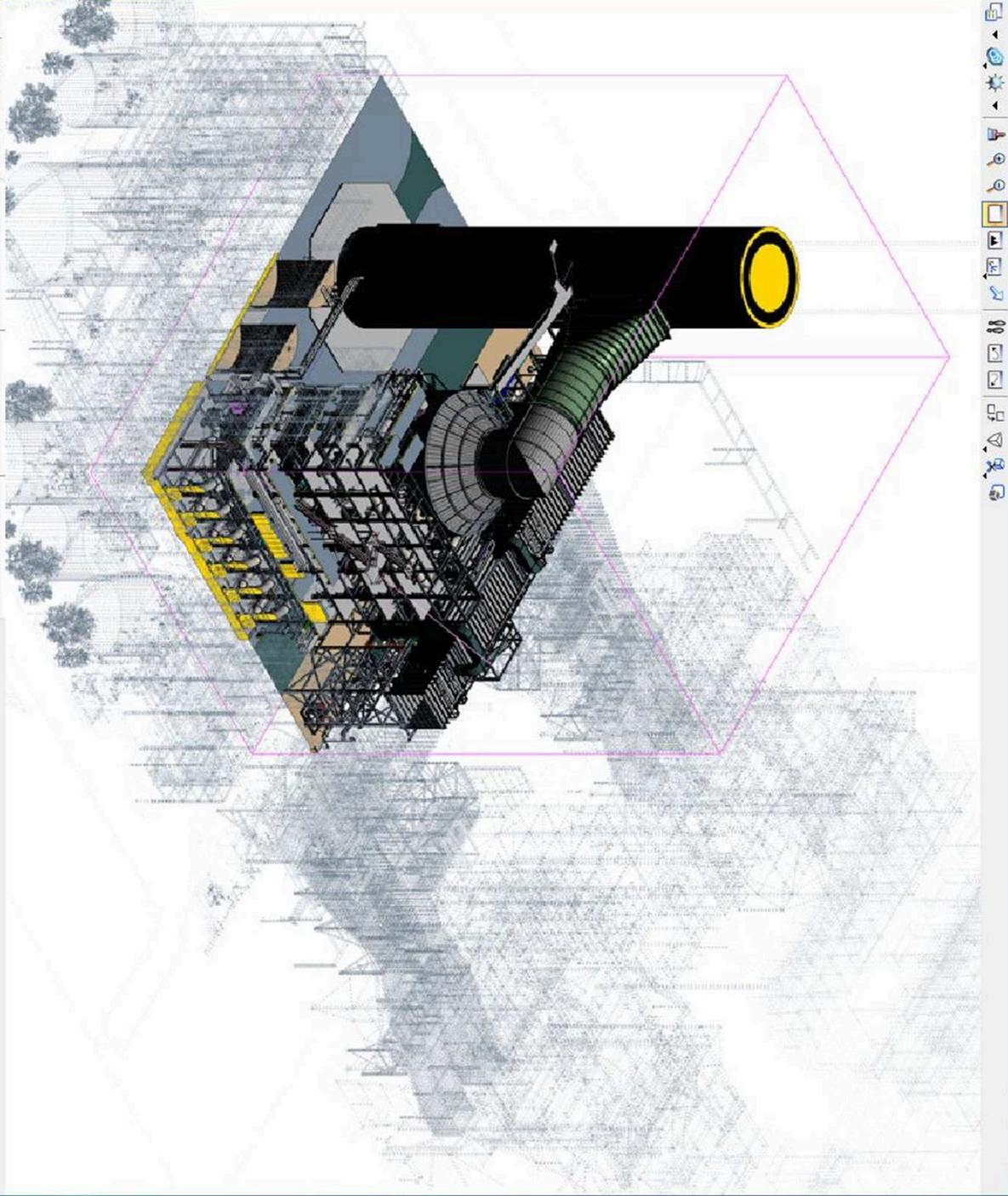
- Major Innovations Coming In MicroStation V8i (SELECTseries 3)

# Why Use Dynamic Views?

- Synchronize models and drawings to coordinate deliverables
- Simplify and automate the drawing composition process
- Improve drawing package production efficiencies
- Make project information reliable across all design and drawing files
- Slice and filter 3D models to remove clutter and simplify view

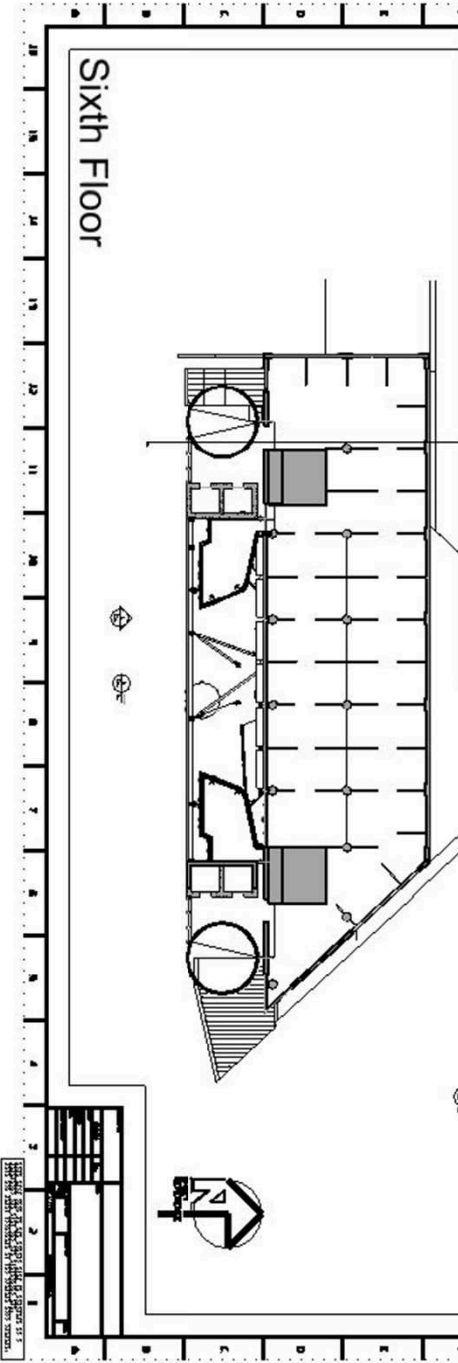
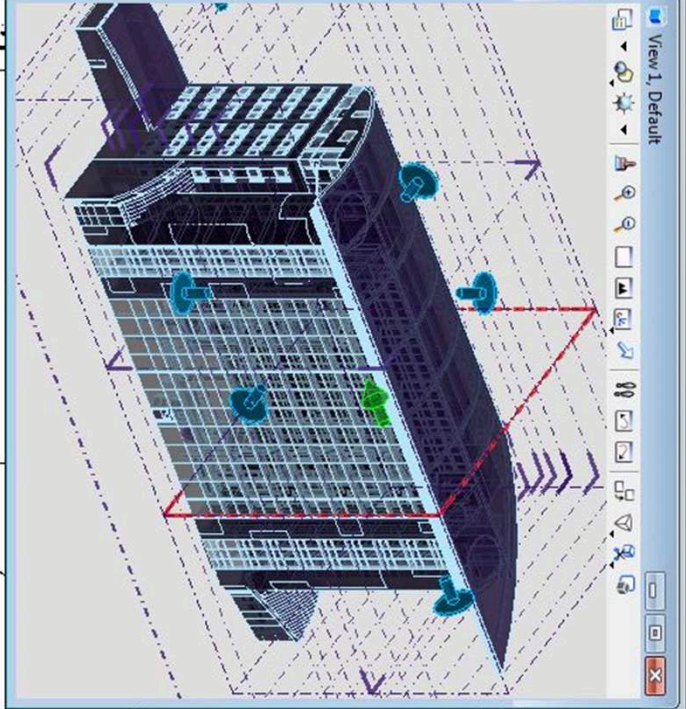


- Designs
  - 3 Inch Boom Arm [Designs/BS1700-P1]
  - Above Ground Piping [Designs/BS1700-P1001-AGP]
  - Bulk Storage Tank [Designs/BS1700-P1001-BST]
  - Default [Designs/Visualization\_Master]
  - Horizontal Storage Tank [Designs/BS1700-P1001-HST]
  - Pilot Plant [Designs/BS1700-V0202-PP]
  - PS-083-000 [Designs/BS1700-P1083-C]
  - PS-083-001 [Designs/BS1700-P1083-C]
  - PS-083-002 [Designs/BS1700-P1083-C]
  - PS-083-003 [Designs/BS1700-P1083-C]
  - PS-083-004 [Designs/BS1700-P1083-C]
  - PS-083-005 [Designs/BS1700-P1083-C]
  - PS-083-006 [Designs/BS1700-P1083-C]
  - PS-083-007 [Designs/BS1700-P1083-C]
  - PS-083-008 [Designs/BS1700-P1083-C]
  - PS-083-009 [Designs/BS1700-P1083-C]
  - PS-083-010 [Designs/BS1700-P1083-C]
  - PS-083-011 [Designs/BS1700-P1083-C]
  - Public Work Features [Designs/BS1700-P1083-PWF]
  - Pump House Structure [Designs/BS1700-P1083-PHS]
  - Pump House Window [Designs/BS1700-P1083-PHW]
  - Rail Car Containment Complication [Designs/BS1700-P1083-PC]
  - RC Containment 1 [Designs/BS1700-C1]
  - RC Containment 2 [Designs/BS1700-C2]
  - RC Containment 3 [Designs/BS1700-C3]
  - RC Containment 4 [Designs/BS1700-C4]
  - RR Track [Designs/BS1700-RR100-RT]
  - Site Profile [Designs/BS1700-V0201-SP]
  - Stair Step [Designs/BS1700-S0501-SS]
  - Total Composite [Drawings/BS1700-GTC]
  - Total Composite [Drawings/BS1700-GTC]
  - Unloading Platform [Designs/BS1700-S0501-UP]
  - Walk Way [Designs/BS1700-S0501-WW]
- Drawings
- Sheets
- Plans
- Flavorings





- Default
  - Default (extrum mod)
  - Default (build mod)
  - Default (Building Project.dgn)
  - Default (text mod)
  - Default (osnap mod)
  - Default (foods mod)
  - Default (View.dgn)
  - Default (View.rdl)
- Drawings
  - First Floor (View.dgn, Default)
  - Second Floor (View.dgn, Default)
  - Sixth Floor (View.dgn, Default)
  - Sixth Floor design (View.dgn, Default)
  - Third Floor (View.dgn, Default)
- Plans
  - Elevations
    - Elevation 1 (View.dgn, Default)
    - Elevation 6 (Sheet\_01\_floor\_01.dgn, S
    - Elevation 6 (Sheet\_01a\_floor\_01\_Part
    - Elevation 6 (Sheet\_01B\_floor\_01\_Part
    - Elevation 6 (Sheet\_03\_floor\_03.dgn, S
    - Elevation 6 (Sheet\_04\_floor\_04.dgn, S
    - Elevation 6 (Sheet\_05\_floor\_05.dgn, S
    - Elevation 6 (Sheet\_06\_floor\_06.dgn, S
    - Elevation 6 (Sheet\_07\_floor\_07.dgn, S
    - Elevation 6 (Sheet\_08\_floor\_08.dgn, S
    - Elevation 6 (Sheet\_09\_floor\_09.dgn, S
    - Elevation 6 (Sheet\_10\_floor\_10.dgn, S
    - Elevation 6 (Sheet\_11\_reflected\_cedlin
    - Elevation 6 (Sheet\_15\_Core\_Plans\_01
    - Elevation 6 (Sheet\_16\_Core\_Plans\_02
    - Elevation Front (View.dgn, Default)
  - Sections
    - Section 1 (View.dgn, Default)
    - Section 2 (View.dgn, Default)
    - Section 3 (View.dgn, Default)
    - Section 4 (View.dgn, Default)
  - Details
    - Drawings Titles



Element Selection > Identify element to add to set

Multi-Model Views

Project Explorer

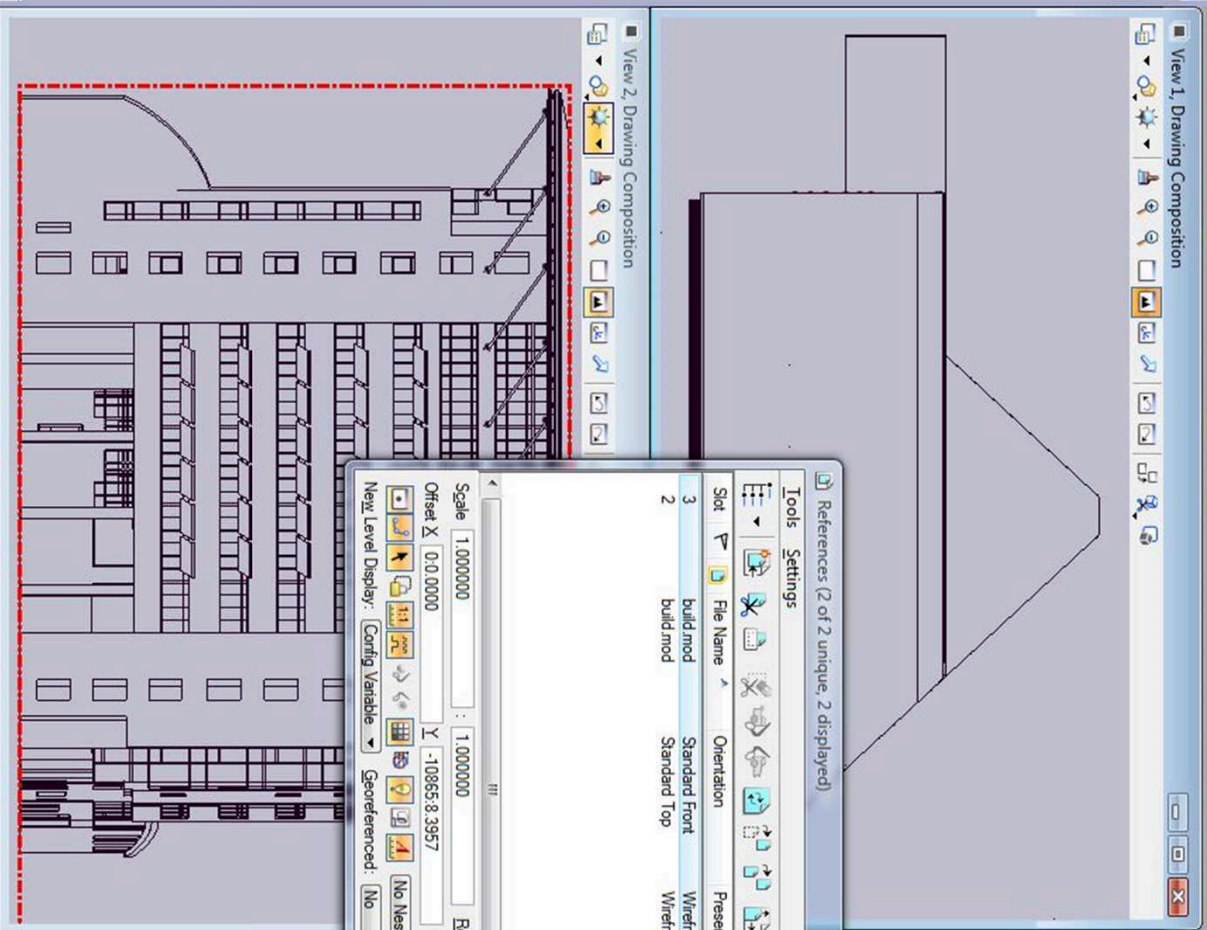
Section Clip, Level: Default

X -10805.6 0175 Y -10362.5 3122 Z -55.3 4706

1 2 3 4 5 6 7 8

1

- Default
- Designs
  - Building Model [View.dgn]
  - Composition [View.dgn]
  - Default [aluminum.mod]
  - Default [build.mod]
  - Default [Building Project.dgn]
  - Default [east.mod]
  - Default [osmap.mod]
  - Default [poods.mod]
  - Default [View.dgn]
  - Default [View.rdl]
- Drawings
- Sheets
- Plans
  - First Floor [View.dgn, Default]
  - Second Floor [View.dgn, Default]
  - Second Floor-2 [View.dgn, Default]
  - Sixth Floor [View.dgn, Default]
  - Sixth Floor design [View.dgn, Default]
  - sixth Floor design-2 [View.dgn, Default]
  - Sixth Floor-2 [View.dgn, Default]
  - Third Floor [View.dgn, Default]
  - Third Floor-2 [View.dgn, Default]
- Elevations
  - Elevation 1 [View.dgn, Default]
  - Elevation 2 [View.dgn, Default]
  - Elevation 6 [Sheet\_01\_floor\_01.dgn, Sheet]
  - Elevation 6 [Sheet\_01a\_floor\_01\_ParAdi]
  - Elevation 6 [Sheet\_018\_floor\_01\_ParAdi]
  - Elevation 6 [Sheet\_03\_floor\_03.dgn, Sheet]
  - Elevation 6 [Sheet\_04\_floor\_04.dgn, Sheet]
  - Elevation 6 [Sheet\_05\_floor\_05.dgn, Sheet]
  - Elevation 6 [Sheet\_06\_floor\_06.dgn, Sheet]
  - Elevation 6 [Sheet\_07\_floor\_07.dgn, Sheet]
  - Elevation 6 [Sheet\_08\_floor\_08.dgn, Sheet]
  - Elevation 6 [Sheet\_09\_floor\_09.dgn, Sheet]
  - Elevation 6 [Sheet\_10\_floor\_10.dgn, Sheet]
  - Elevation 6 [Sheet\_11\_reflected\_ceiling\_1]
  - Elevation 6 [Sheet\_15\_Core\_Plans\_01.dg]
  - Elevation 6 [Sheet\_16\_Core\_Plans\_02.dg]
  - Elevation Front [View.dgn, Default]



References (2 of 2 unique, 2 displayed)

Slot	File Name	Orientation	Presentation	Model	Description	Log
3	build.mod	Standard Front	Default	Default	Aligned with Master...	Ref.
2	build.mod	Standard Top	Default	Default	Aligned with Master...	Ref.

Scale: 1.0000000      Offset X: 0.0.0000      Rotation: -180°

Offset Y: -108658.3957

New Level Display:       Coring Variable:       Georeferenced:  No

Allow Overrides:       Depth:

Tasks: Drawing Composition

View 1, Drawing Composition

View 2, Drawing Composition

Place Section Callout

Detailing Style: Default

- Rip Arrows
- Preserve Up
- Create Dynamic View

Create Dynamic View

Name: Section-22

Create Saved View

View Type: Section View

Create Drawing

Seed Model: (Active File)

Filename: CUSTOM 1

Create Sheet

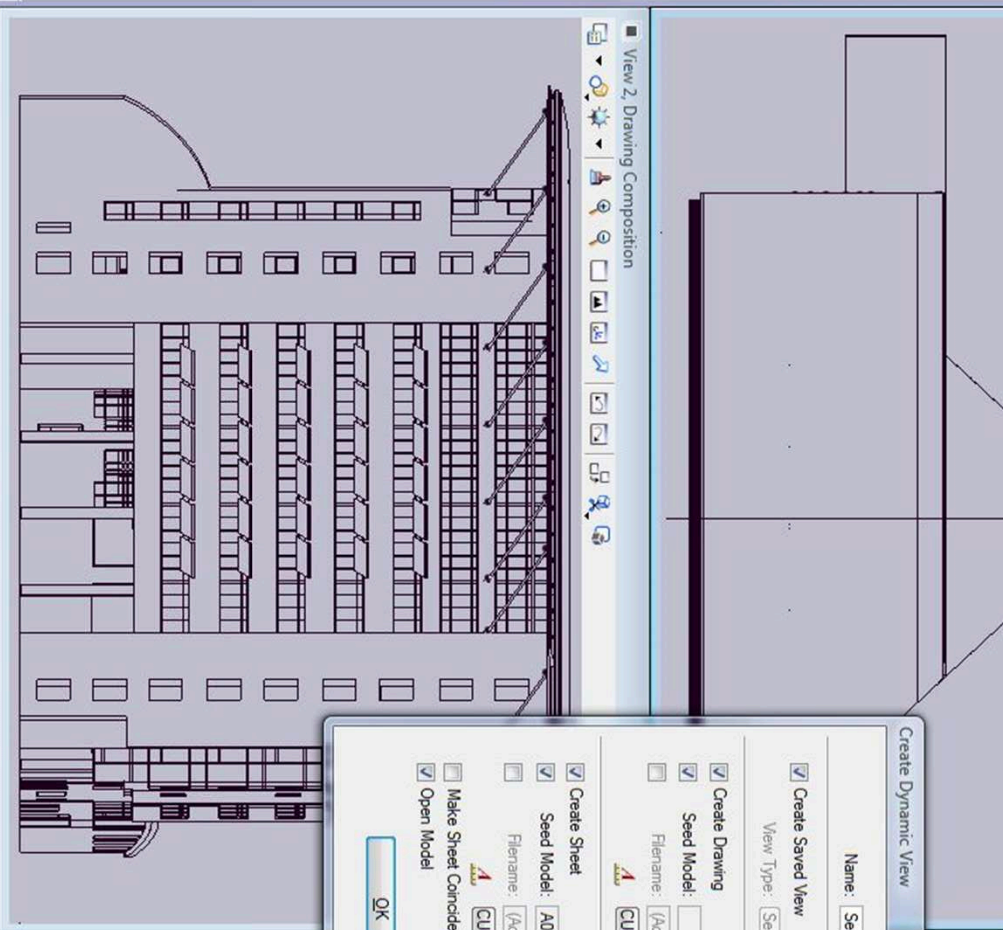
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Filename: (Active File)

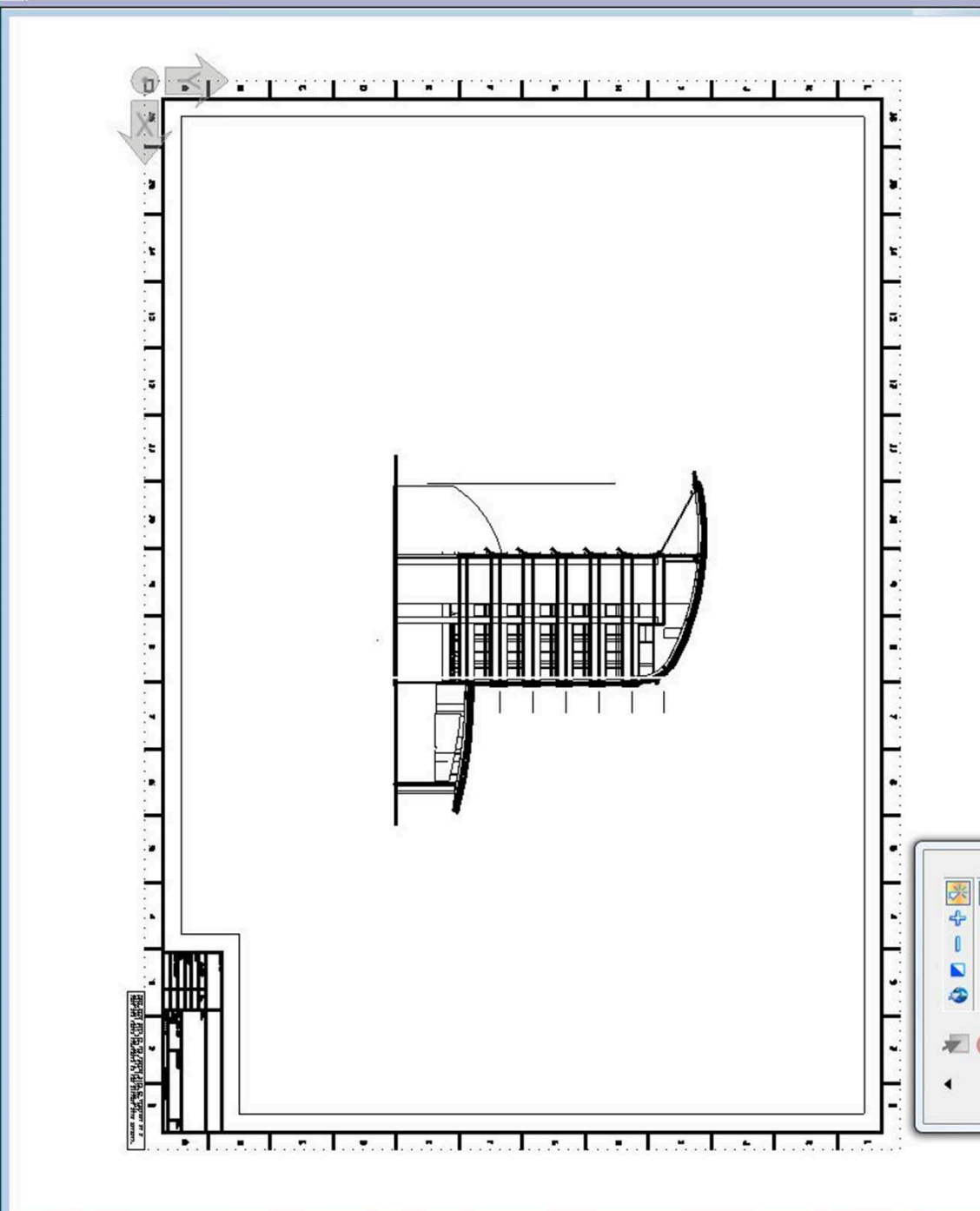
Make Sheet Coincident

Open Model

OK Cancel



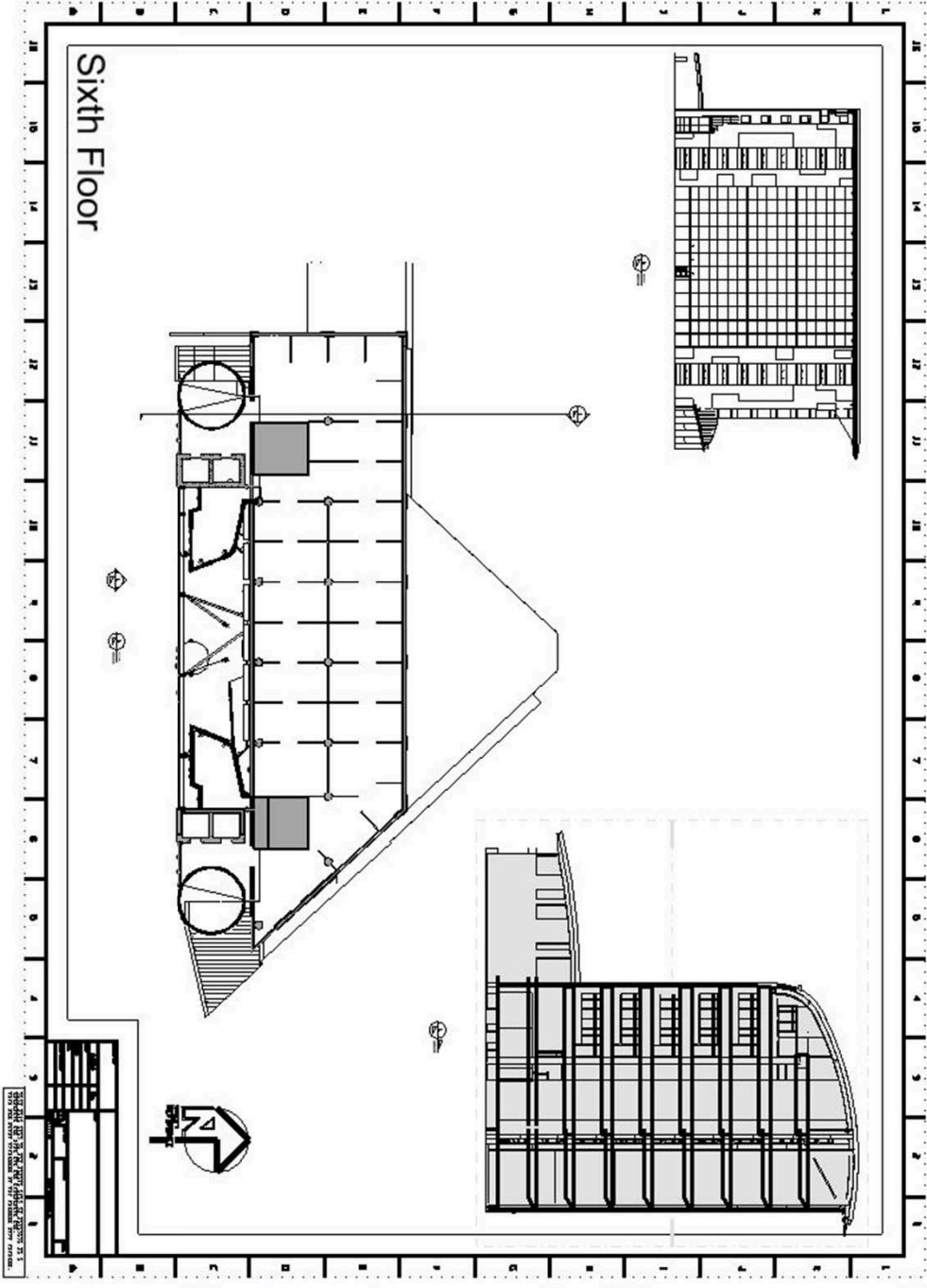
- Default
  - design elevation [View.dgn]
  - design section 2 [View.dgn]
  - Section [View.dgn]
  - Section-22 [View.dgn]
  - Section-55 [View.dgn]
- Plans
  - Sheet 1 [Sheet\_01\_floor\_01.dgn]
  - Sheet 1 [Sheet\_01a\_floor\_01\_PartA.d
  - Sheet 1 [Sheet\_01B\_floor\_01\_PartB.d
  - Sheet 1 [Sheet\_15\_Core\_Plans\_01.dg
  - Sheet 1 [Sheet\_16\_Core\_Plans\_02.dg
  - Sheet 2 [Sheet\_02\_floor\_02.dgn]
  - Sheet 2 [Sheet\_20\_Elevations.dgn]
  - Sheet 2 [Sheet\_21\_Elevations.dgn]
  - Sheet 2 [Sheet\_22\_Elevations.dgn]
  - Sheet 2 [Sheet\_23\_Elevations.dgn]
  - Sheet 2 [Sheet\_30\_Sections.dgn]
  - Sheet 2 [Sheet\_31\_Sections.dgn]
  - Sheet 2 [Sheet\_40\_Wall\_Sections.dgr
  - Sheet 2 [Sheet\_50\_Section\_Details.dg
  - Sheet 3 [Sheet\_03\_floor\_03.dgn]
  - Sheet 4 [Sheet\_04\_floor\_04.dgn]
  - Sheet 5 [Sheet\_05\_floor\_05.dgn]
  - Sheet 6 [Sheet\_06\_floor\_06.dgn]
  - Sheet 6 [View.dgn]
  - Sheet 7 [Sheet\_07\_floor\_07.dgn]
  - Sheet 8 [Sheet\_08\_floor\_08.dgn]
  - Sheet 8 [View.dgn]
  - Sheet 9 [Sheet\_09\_floor\_09.dgn]
  - Sheet 10 [Sheet\_10\_floor\_10.dgn]
  - Sheet 11 [Sheet\_11\_reflected\_ceiling.
- Elevations
  - Section 1 [View.dgn, Default]
  - Section 2 [View.dgn, Default]
  - Section 3 [View.dgn, Default]
  - Section 4 [View.dgn, Default]
  - Section 5 [View.dgn, Default]
  - Section 6 [View.dgn, Default]
  - Section 7 [View.dgn, Default]
  - Section 8 [View.dgn, Default]
  - Section build mod. [Default]
  - Section-22 [build mod. Default]
  - Section-55 [build mod. Default]
- Details
  - Drawing Titles



Element Selection

- Move
- Copy
- Paste
- Delete
- Undo
- Redo
- Zoom
- Rotate
- Scale
- Lock
- Unlock

- Default
  - Building Model [View.dgn]
  - Composition [View.dgn]
  - Default [atum mod]
  - Default [build mod]
  - Default [Building Project.dgn]
  - Default [extst mod]
  - Default [osmap mod]
  - Default [foods mod]
  - Default [View.dgn]
  - Default [View.rdl]
- Drawings
  - design elevation [View.dgn]
  - design section 2 [View.dgn]
  - Section [View.dgn]
  - Section-22 [View.dgn]
  - Section-55 [View.dgn]
  - Sheet 1 [Sheet\_01a\_floor\_01.dgn]
  - Sheet 1 [Sheet\_01a\_floor\_01\_PartA.d
  - Sheet 1 [Sheet\_01B\_floor\_01\_PartB.d
  - Sheet 1 [Sheet\_15\_Core\_Plans\_01.dg
  - Sheet 1 [Sheet\_16\_Core\_Plans\_02.dg
  - Sheet 2 [Sheet\_02\_floor\_02.dgn]
  - Sheet 2 [Sheet\_20\_Elevations.dgn]
  - Sheet 2 [Sheet\_21\_Elevations.dgn]
  - Sheet 2 [Sheet\_22\_Elevations.dgn]
  - Sheet 2 [Sheet\_23\_Elevations.dgn]
  - Sheet 2 [Sheet\_30\_Sections.dgn]
  - Sheet 2 [Sheet\_31\_Sections.dgn]
  - Sheet 2 [Sheet\_40\_Wall\_Sections.dgr
  - Sheet 2 [Sheet\_50\_Section\_Details.dg
  - Sheet 3 [Sheet\_03\_floor\_03.dgn]
  - Sheet 4 [Sheet\_04\_floor\_04.dgn]
  - Sheet 5 [Sheet\_05\_floor\_05.dgn]
  - Sheet 6 [Sheet\_06\_floor\_06.dgn]
  - Sheet 6 [New.dgn]
  - Sheet 7 [Sheet\_07\_floor\_07.dgn]
  - Sheet 8 [Sheet\_08\_floor\_08.dgn]
  - Sheet 8 [New.dgn]
  - Sheet 9 [Sheet\_09\_floor\_09.dgn]
  - Sheet 10 [Sheet\_10\_floor\_10.dgn]
  - Sheet 11 [Sheet\_11\_reflected\_ceiling,
- Plans
  - Section 1 [View.dgn, Default]
- Elevations
- Sections



Fit View  
Files: All

- Default
- Designs
  - Building Model [View.dgn]
  - Composition [View.dgn]
  - Default [tahnum.mod]
  - Default [build.mod]
  - Default [Building Project.dgn]
  - Default [extst.mod]
  - Default [osmap.mod]
  - Default [foods.mod]
  - Default [View.dgn]
  - Default [View.dgl]
- Drawings
- Sheets
  - design elevation [View.dgn]
  - design section 2 [View.dgn]
  - Section [View.dgn]
  - Section-22 [View.dgn]
  - Section-55 [View.dgn]
  - Sheet 1 [Sheet\_01a\_floor\_01\_PartA.dgn]
  - Sheet 1 [Sheet\_01a\_floor\_01\_PartB.dgn]
  - Sheet 1 [Sheet\_01B\_floor\_01\_PartB.dgn]
  - Sheet 1 [Sheet\_15\_Core\_Plans\_01.dgn]
  - Sheet 1 [Sheet\_16\_Core\_Plans\_02.dgn]
  - Sheet 2 [Sheet\_02\_floor\_02.dgn]
  - Sheet 2 [Sheet\_20\_Elevations.dgn]
  - Sheet 2 [Sheet\_21\_Elevations.dgn]
  - Sheet 2 [Sheet\_22\_Elevations.dgn]
  - Sheet 2 [Sheet\_23\_Elevations.dgn]
  - Sheet 2 [Sheet\_30\_Sections.dgn]
  - Sheet 2 [Sheet\_31\_Sections.dgn]
  - Sheet 2 [Sheet\_40\_Wall\_Sections.dgn]
  - Sheet 2 [Sheet\_50\_Section\_Details.dgn]
  - Sheet 3 [Sheet\_03\_floor\_03.dgn]
  - Sheet 4 [Sheet\_04\_floor\_04.dgn]
  - Sheet 5 [Sheet\_05\_floor\_05.dgn]
  - Sheet 6 [Sheet\_06\_floor\_06.dgn]
  - Sheet 7 [Sheet\_07\_floor\_07.dgn]
  - Sheet 8 [Sheet\_08\_floor\_08.dgn]
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  - Sheet 10 [Sheet\_10\_floor\_10.dgn]
  - Sheet 11 [Sheet\_11\_reflected\_ceiling.dgn]

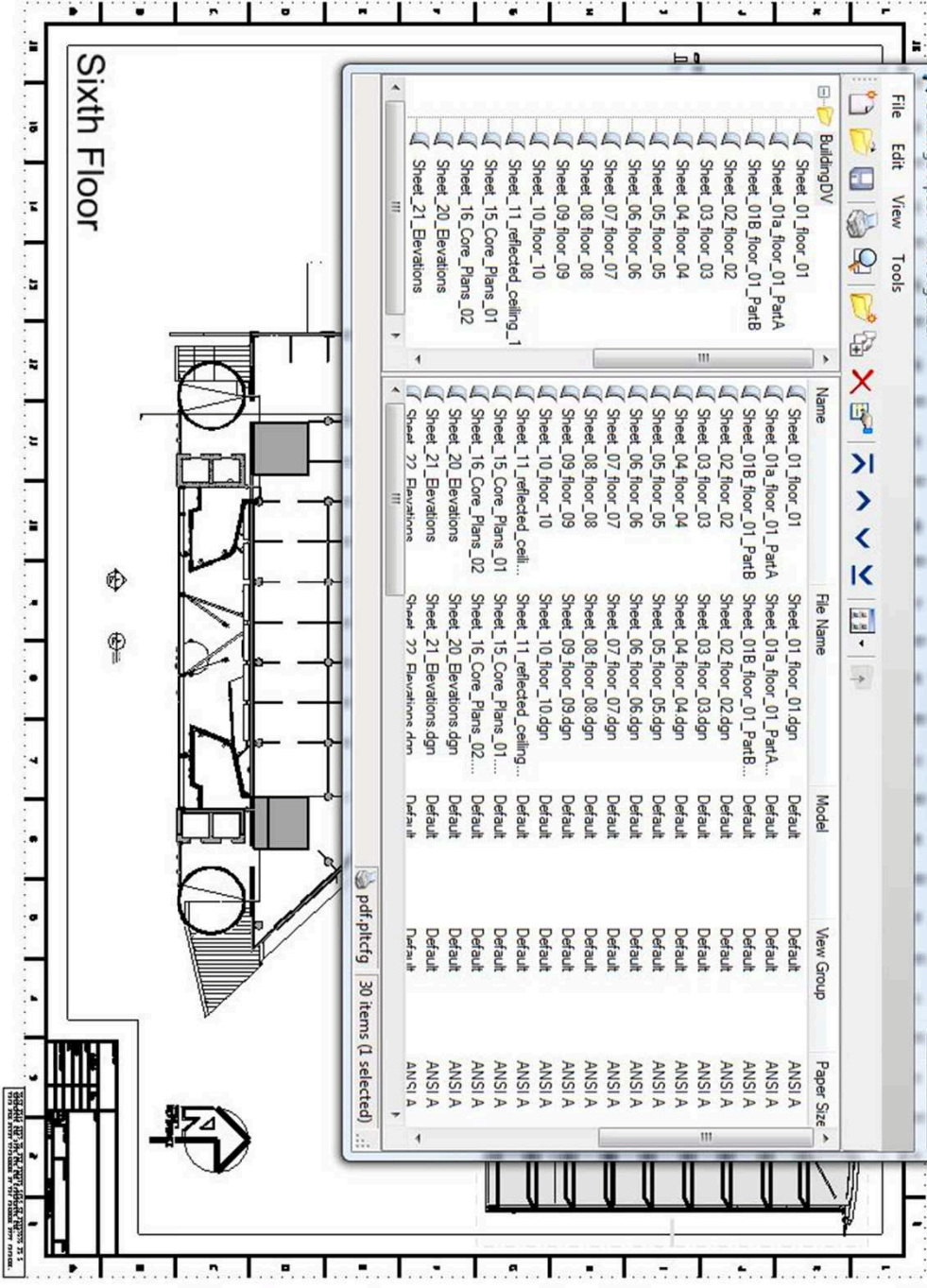
- BuildingDV
  - Sheet\_01\_floor\_01
  - Sheet\_01a\_floor\_01\_PartA
  - Sheet\_01B\_floor\_01\_PartB
  - Sheet\_02\_floor\_02
  - Sheet\_03\_floor\_03
  - Sheet\_04\_floor\_04
  - Sheet\_05\_floor\_05
  - Sheet\_06\_floor\_06
  - Sheet\_07\_floor\_07
  - Sheet\_08\_floor\_08
  - Sheet\_09\_floor\_09
  - Sheet\_10\_floor\_10
  - Sheet\_11\_reflected\_ceiling\_1
  - Sheet\_15\_Core\_Plans\_01
  - Sheet\_16\_Core\_Plans\_02
  - Sheet\_20\_Elevations
  - Sheet\_21\_Elevations

Name	File Name	Model	View Group	Paper Size
Sheet_01_floor_01	Sheet_01_floor_01.dgn	Default	Default	ANSI A
Sheet_01a_floor_01_PartA	Sheet_01a_floor_01_PartA...	Default	Default	ANSI A
Sheet_01B_floor_01_PartB	Sheet_01B_floor_01_PartB...	Default	Default	ANSI A
Sheet_02_floor_02	Sheet_02_floor_02.dgn	Default	Default	ANSI A
Sheet_03_floor_03	Sheet_03_floor_03.dgn	Default	Default	ANSI A
Sheet_04_floor_04	Sheet_04_floor_04.dgn	Default	Default	ANSI A
Sheet_05_floor_05	Sheet_05_floor_05.dgn	Default	Default	ANSI A
Sheet_06_floor_06	Sheet_06_floor_06.dgn	Default	Default	ANSI A
Sheet_07_floor_07	Sheet_07_floor_07.dgn	Default	Default	ANSI A
Sheet_08_floor_08	Sheet_08_floor_08.dgn	Default	Default	ANSI A
Sheet_09_floor_09	Sheet_09_floor_09.dgn	Default	Default	ANSI A
Sheet_10_floor_10	Sheet_10_floor_10.dgn	Default	Default	ANSI A
Sheet_11_reflected_ceiling_1	Sheet_11_reflected_ceiling...	Default	Default	ANSI A
Sheet_15_Core_Plans_01	Sheet_15_Core_Plans_01.....	Default	Default	ANSI A
Sheet_16_Core_Plans_02	Sheet_16_Core_Plans_02.....	Default	Default	ANSI A
Sheet_20_Elevations	Sheet_20_Elevations.dgn	Default	Default	ANSI A
Sheet_21_Elevations	Sheet_21_Elevations.dgn	Default	Default	ANSI A
Sheet_22_Elevations	Sheet_22_Elevations.dgn	Default	Default	ANSI A
Sheet_23_Elevations	Sheet_23_Elevations.dgn	Default	Default	ANSI A

pdf.plt (30 items (1 selected))

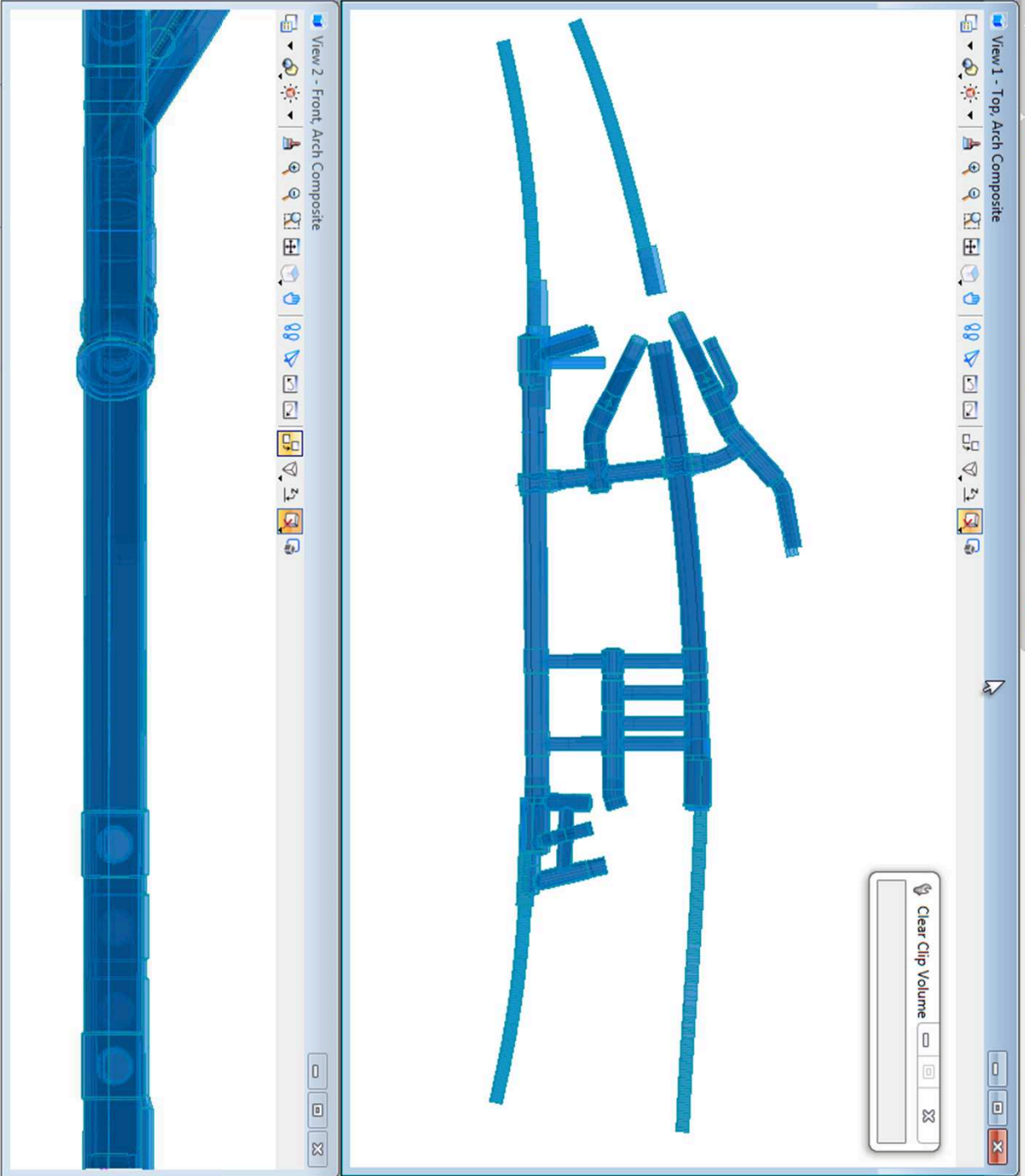
Fit View

Files: All



- Q H I
- W O P
- E O P
- R O P
- T O P
- A A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21 A22 A23 A24 A25 A26 A27 A28 A29 A30 A31 A32 A33 A34 A35 A36 A37 A38 A39 A40 A41 A42 A43 A44 A45 A46 A47 A48 A49 A50 A51 A52 A53 A54 A55 A56 A57 A58 A59 A60 A61 A62 A63 A64 A65 A66 A67 A68 A69 A70 A71 A72 A73 A74 A75 A76 A77 A78 A79 A80 A81 A82 A83 A84 A85 A86 A87 A88 A89 A90 A91 A92 A93 A94 A95 A96 A97 A98 A99 A100
- D
- S
- F

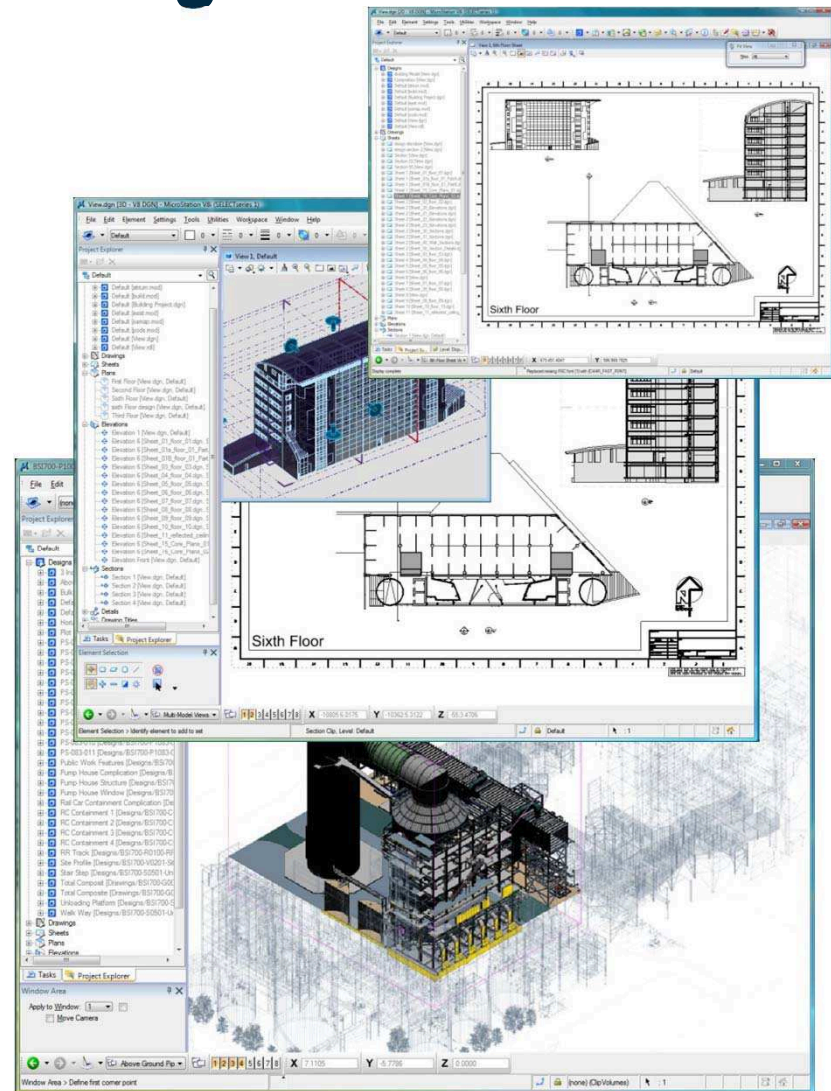
- Drawing Composition
- Solids Modeling
- Surface Modeling
- Mesh Modeling
- Feature Modeling
- Visualization
- Animation



Clear Clip Volume

# The Dynamic Views Advantage

- Save Time
  - Automate 3D/2D updates
  - Eliminate repetitive tasks
  - Streamline drawing composition
  - Simplify user interaction
- Save Money
  - Improve productivity
  - Reduce risk of errors
- Improve Quality
  - Make design information reliable
  - Produce data-rich deliverables





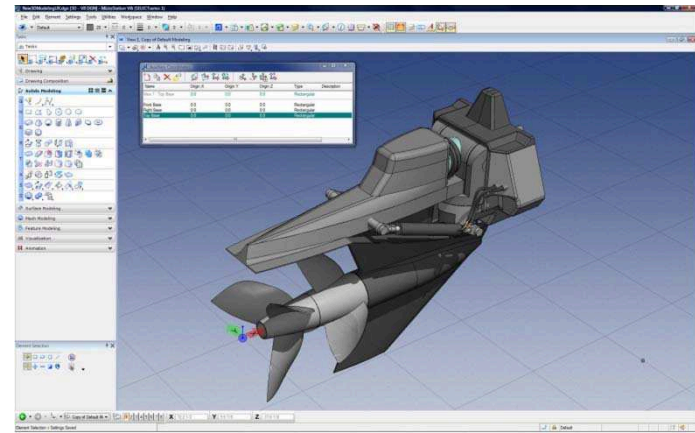


# MicroStation V8i (SELECTseries 2)

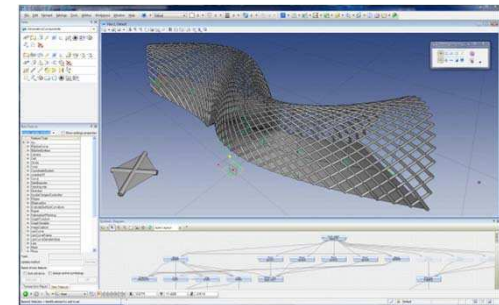
Intuitive Design Modeling

# MicroStation V8i (SELECTseries 2)

- Intuitive Design Modeling
  - Intuitive New Modeling tools
  - Precise Freeform Modeling tools
  - 3D Printing
  - GenerativeComponents Extension

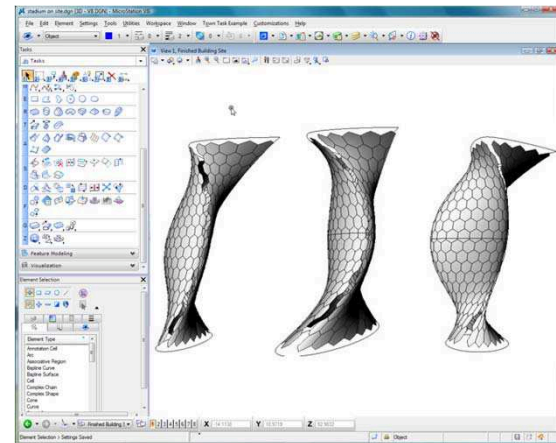
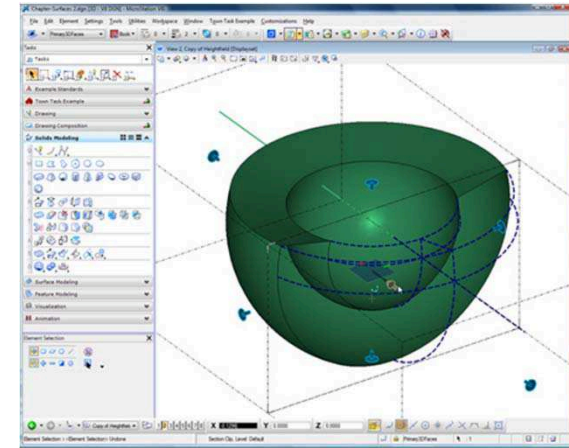


- New in MicroStation V8i (SELECTseries 2)
  - GenerativeComponents Symbolic Diagram
  - GenerativeComponents Element Sensors



# Why Make It “Intuitive”?

- Satisfy all modeling needs using a single 3d modeling application
- Move models from one design stage to the next without lossy translations
- Model intuitively to create more versatile design models
- Edit models by simply pushing on and pulling at 3d faces
- Generate parametric design models for rapid iteration through design options

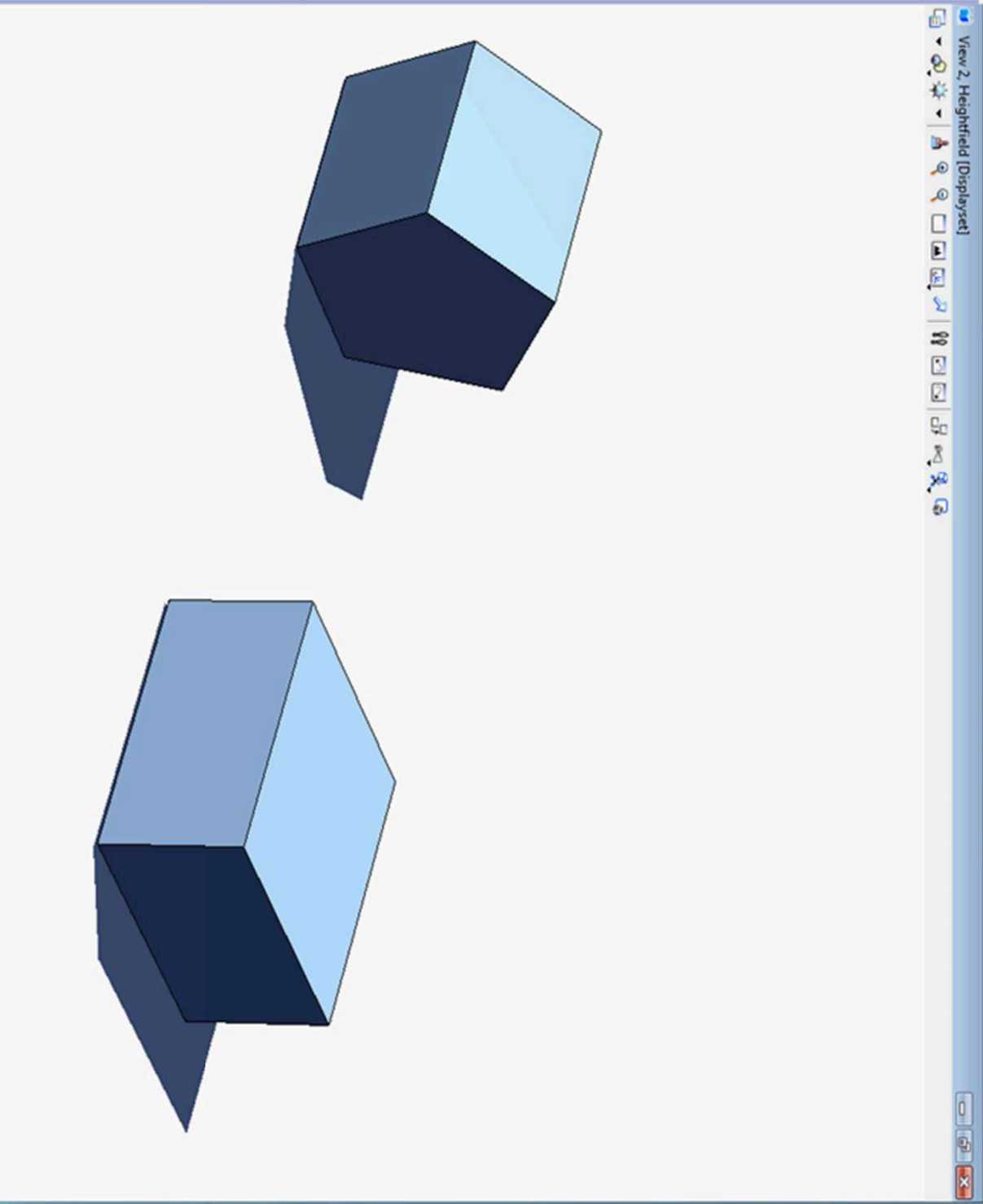


Q W E R T A S D F G Z

Surface Modeling toolbar icons including selection, manipulation, and feature creation tools.

Feature Modeling Visualization

Element Selection

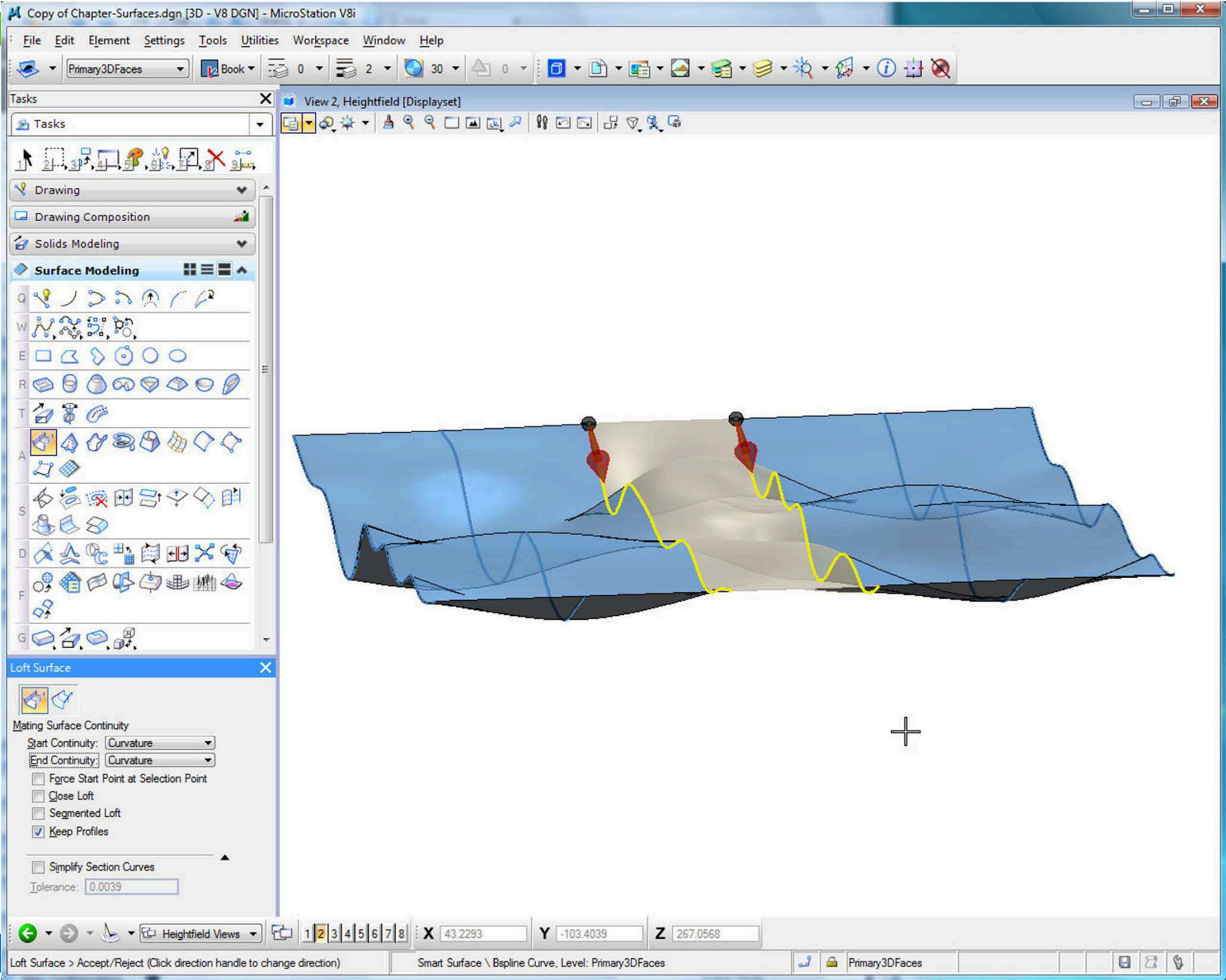


Element Selection > Identify element to add to set

Heightfield Views

1 2 3 4 5 6 7 8 X 2.5174 Y 0.7456 Z -0.1508

Primary3DFaces



Level Display - View 1

View Display

Levels

- Building 3D Printing.dgn, Model Composition
  - BS1300AE9-Shell.dgn, Composite
    - Structural Composite, ... Designs\BS1300S-9
      - Column Enclosure, ... Designs\BS1300AE9-S
        - Interior Composite, ... Designs\BS1300I-9-Hite
          - Core - Stairs and Shafts, ... Designs\BS1300I
            - BS1300C-9-Ste.dgn

Name	Used
A-Z032-G-GndStrc	
A-G26-G-Cd	
A-G26-G-Beam	
A-G24-G-Roof	
A-G21-G-Frdn	
A-F1915-G-BesepkSTL	
A-F134-G-FloGrnd	
Default	
A-F13803-G-Flo0003	
A-F13802-G-Flo0002	
A-F13801-G-Flo0001	
A-F1374-G-FloHigh	

Tasks

Level Displ...

Project Ex...

Element Selection

References (12 of 13 unique, 8 displayed)

Tools Settings

Hierarchy

Slot

File Name

Model

Hlite Mode: Boundaries

Description

Logical

Slot	File Name	Model	Description	Logical
2	BS1300S-9-Structural.dgn	Structural Composite	Structural Composite	Structure
3	BS1300AE9-Shell.dgn	Column Enclosure	Column Enclosure	Column I
4	BS1300I-9-Interior.dgn	Interior Composite	Interior Composite	Interior C
5	BS1300AE9-Core.dgn	Core	Core	Core - St

Scale: 1.000000

Rotation: 0°

Offset X: 0.00000

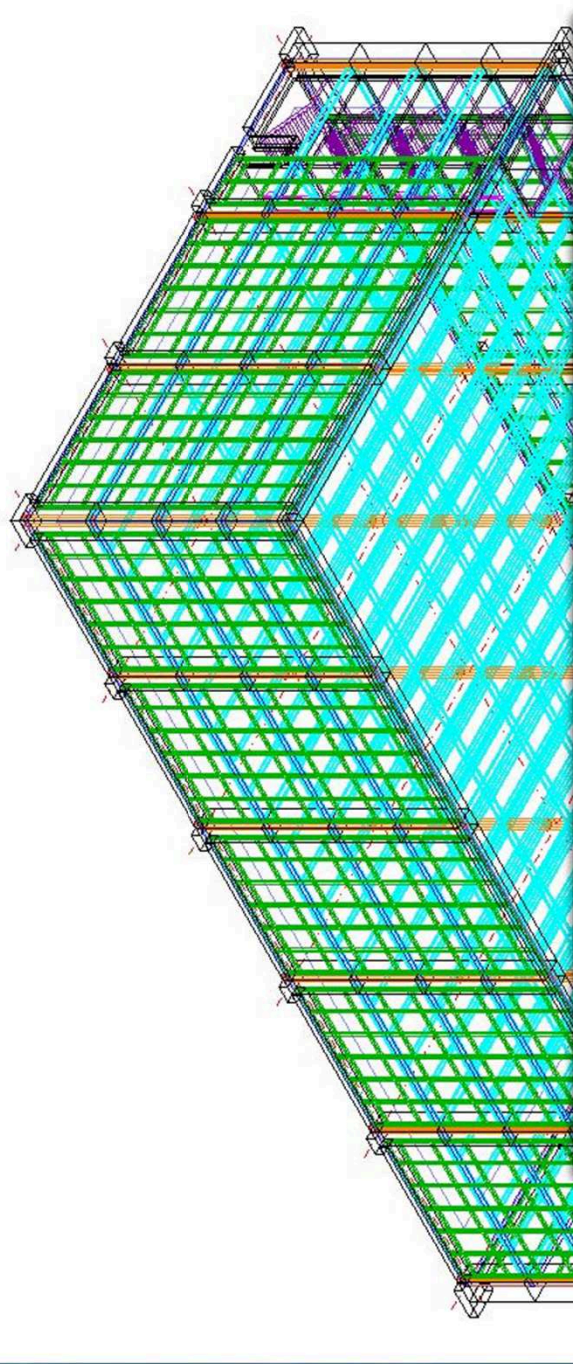
Y: 0.00000

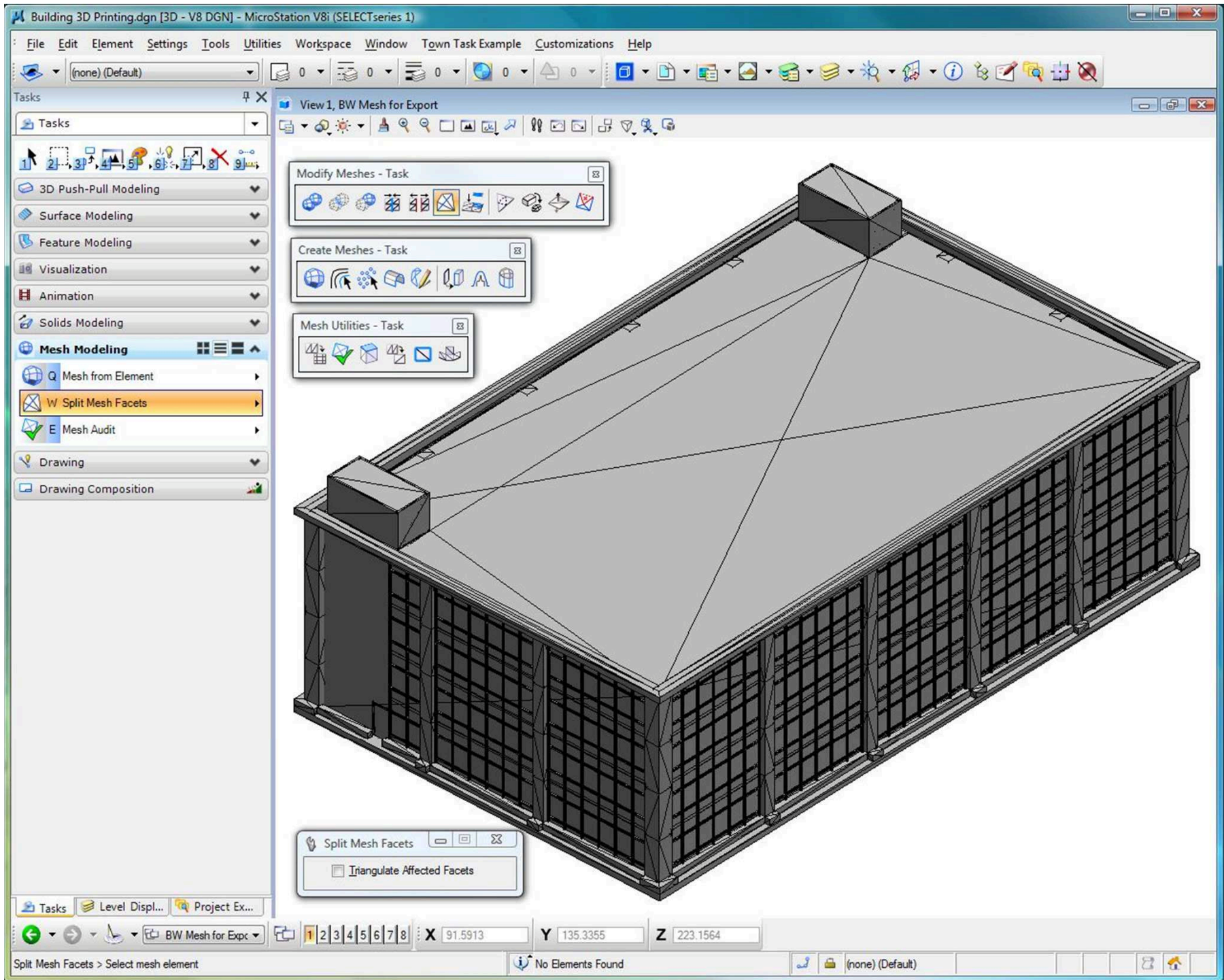
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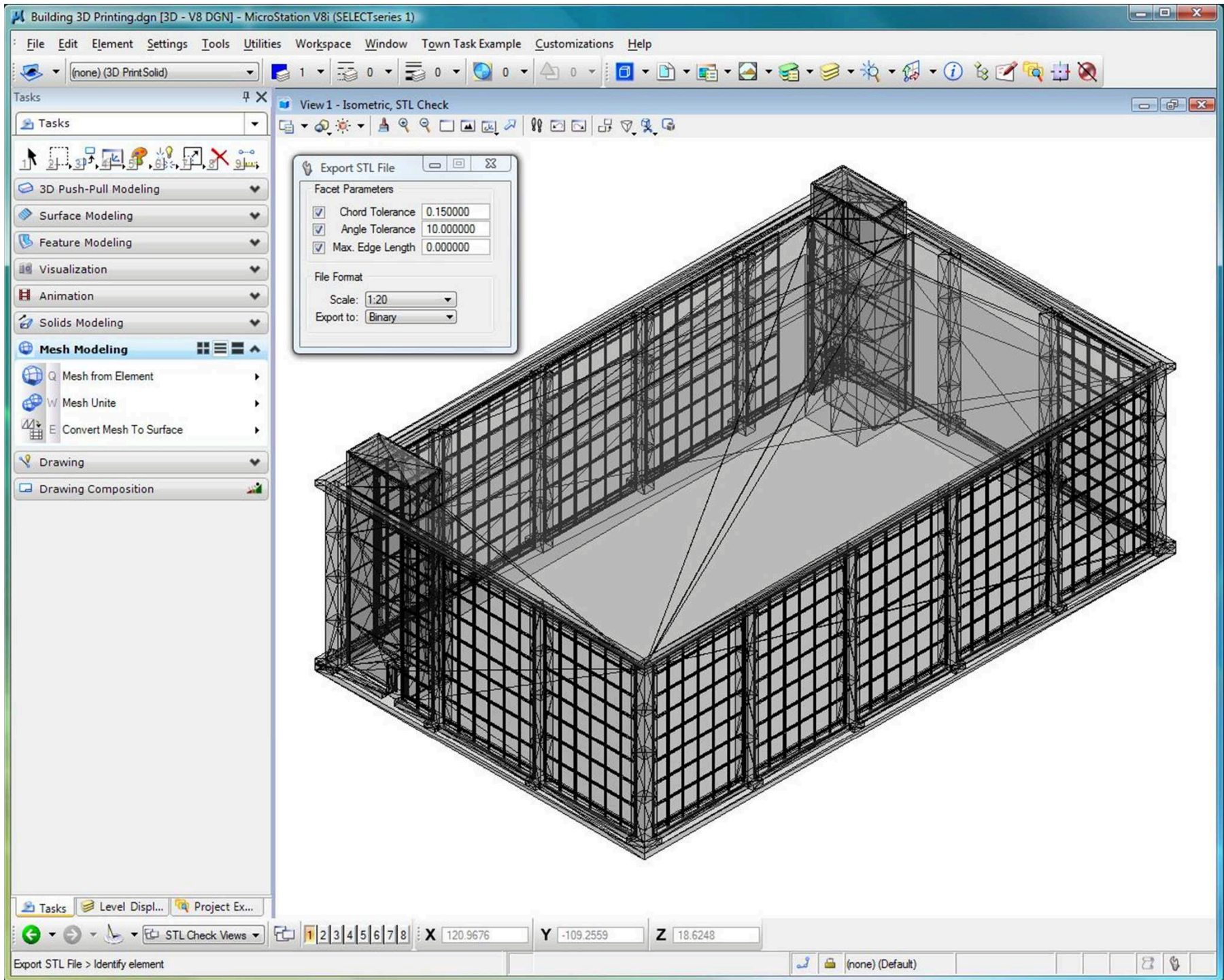
Depth: 1

New Level Display:

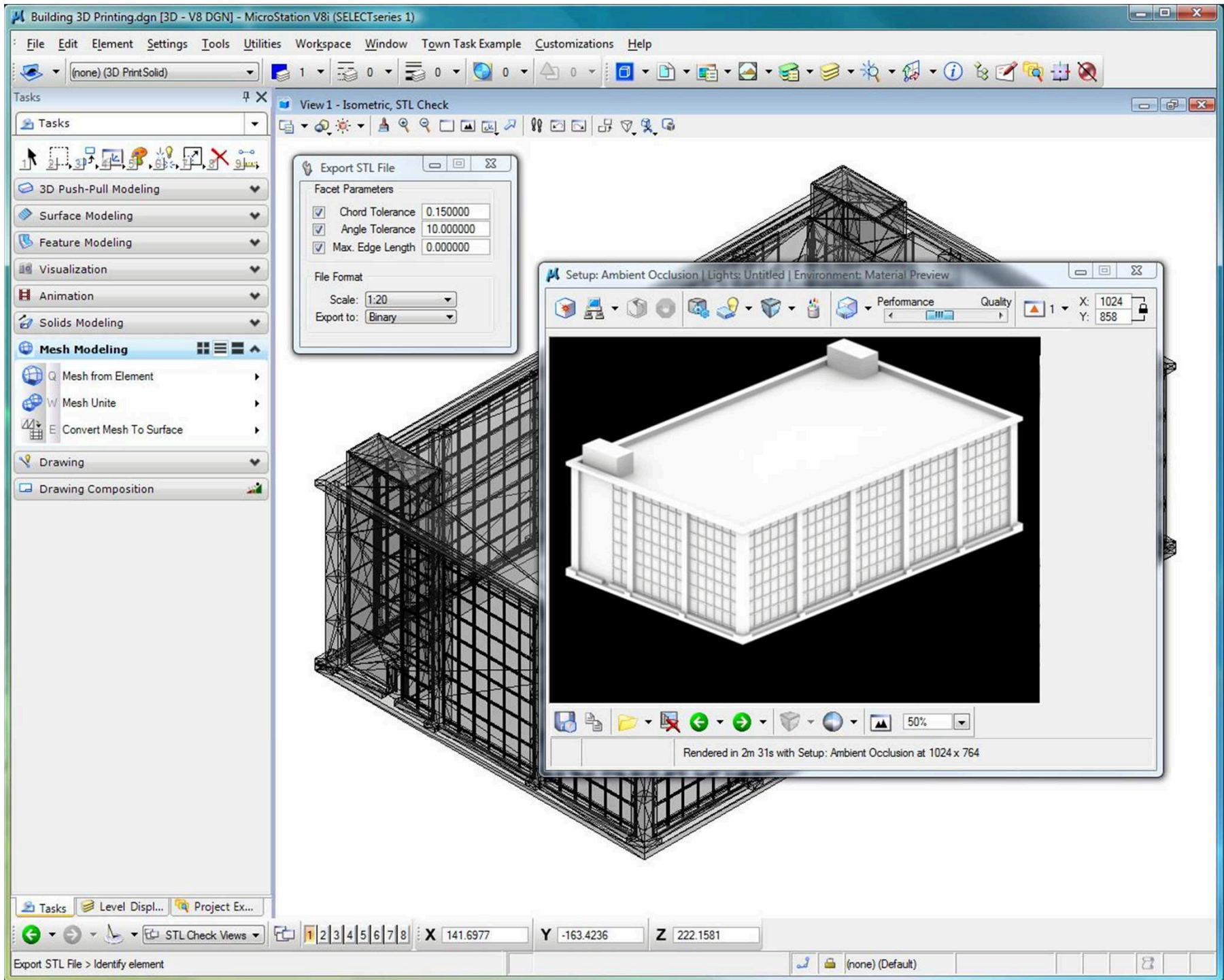
Georeferenced:





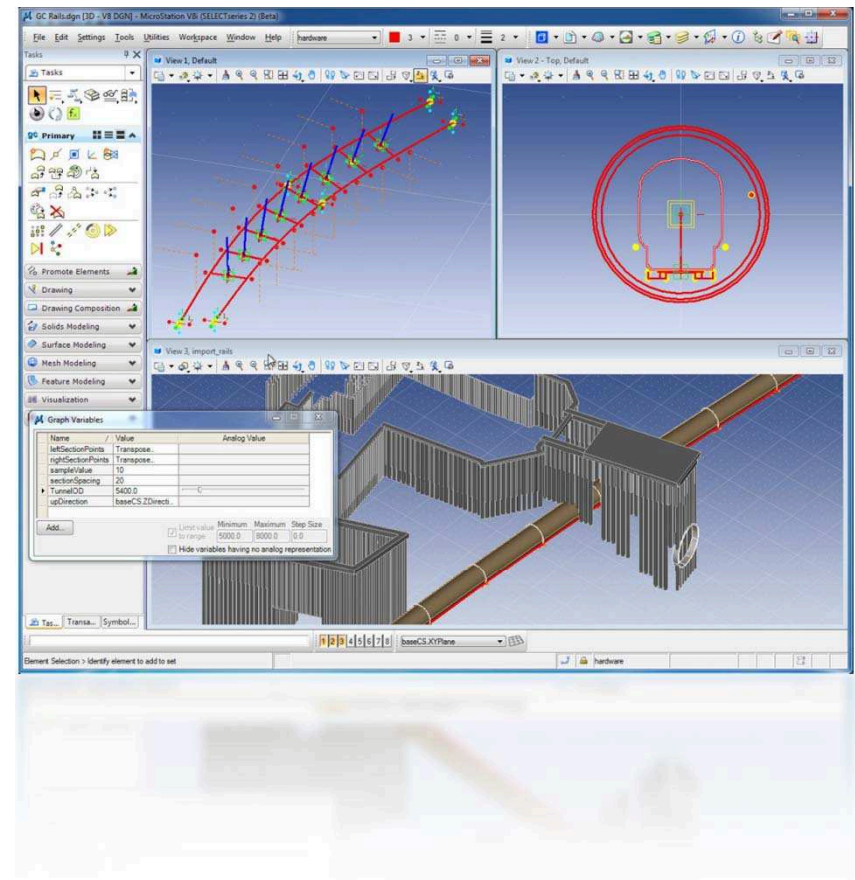






# GenerativeComponents Extension

- Automate design processes and accelerate design iterations
- Pursue designs and achieve results that were virtually unthinkable before
- Leverage the power and flexibility of computational design and associative parametric modeling



Tasks

gc Primary

Transactions

- Transaction
- 1 left and right rails
- 2 span lines on sample points and GV
- 3 center point
- 4 interpolated centerline
- 5 plane for finding the points by intersection and spacing GV
- 6 change visibility and construction
- 7 leftSectionPoints, rightSectionPoints GVs
- 8 cs\_cant and ties
- 9 upDirection GV
- 10 cs\_ww
- 11 add Tunnel Profile
- 12 Add TunnelOD GV and use it
- 13 Add CS\_host\_train\_env
- 14 transformed cs for copying tunnel sections
- 15 train envelope reference file - SUPPRESS IF ATTACHING DGN
- 16 Add elemSensor02 on
- 17 create curve from elementsensor on envelope reference
- 18 add tunnel sections to track
- 19 create walkway construction geometry
- 20 walkway edge lines
- 21 SURFACES walkway surfaces
- 22 SURFACES train and tunnel surfaces
- 23 Add Export tunnel
- 24 Pause...reassign to existing rails
- 25 create element sensor on rails in new model
- 26 create exg\_rail01, exg\_rail02 curves
- 27 reassign sampleOnCurvePoint, samplePoint to exg\_rails and c

Transactions

Symbolic Diagram

Element Selection > Identify element to add to set

View 1 - Rail Rig, Default

View 3, Import\_rails

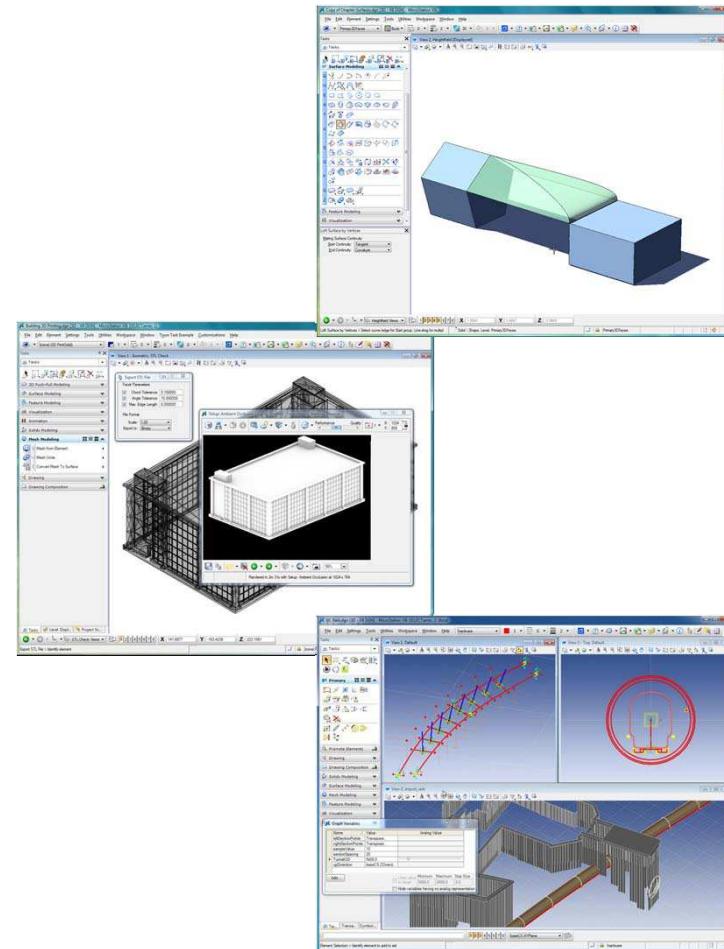
View 4 - Tunnel Rig, Default

baseCS\_XYZPlane

hardware

# The Intuitive Modeling Advantage

- Save Time
  - Create and edit models faster
  - Avoid duplicating effort
  - Streamline 3D printing process
  - Reuse models from 3<sup>rd</sup> parties
- Improve Quality
  - Integrate design data
  - Eliminate unnecessary detail
- Save Money
  - Maintain fewer 3D applications
  - Pressure-test digital model before printing to 3D media reduces waste

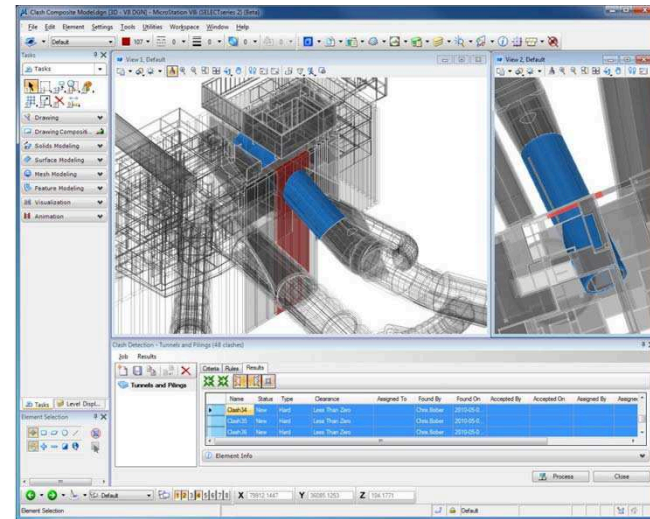


# MicroStation V8i (SELECTseries 2)

Insightful Design Review

# MicroStation V8i (SELECTseries 2)

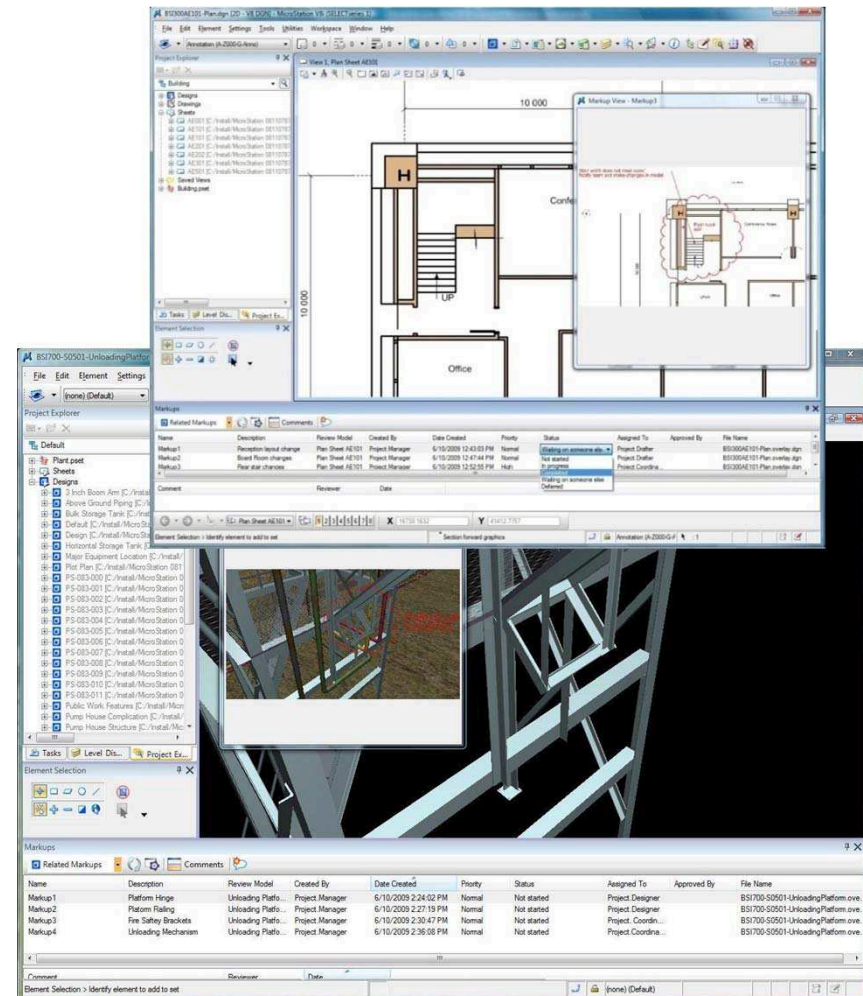
- Insightful Design Review
  - Overlay Files
  - Mark up Manager
  - i-model Creation

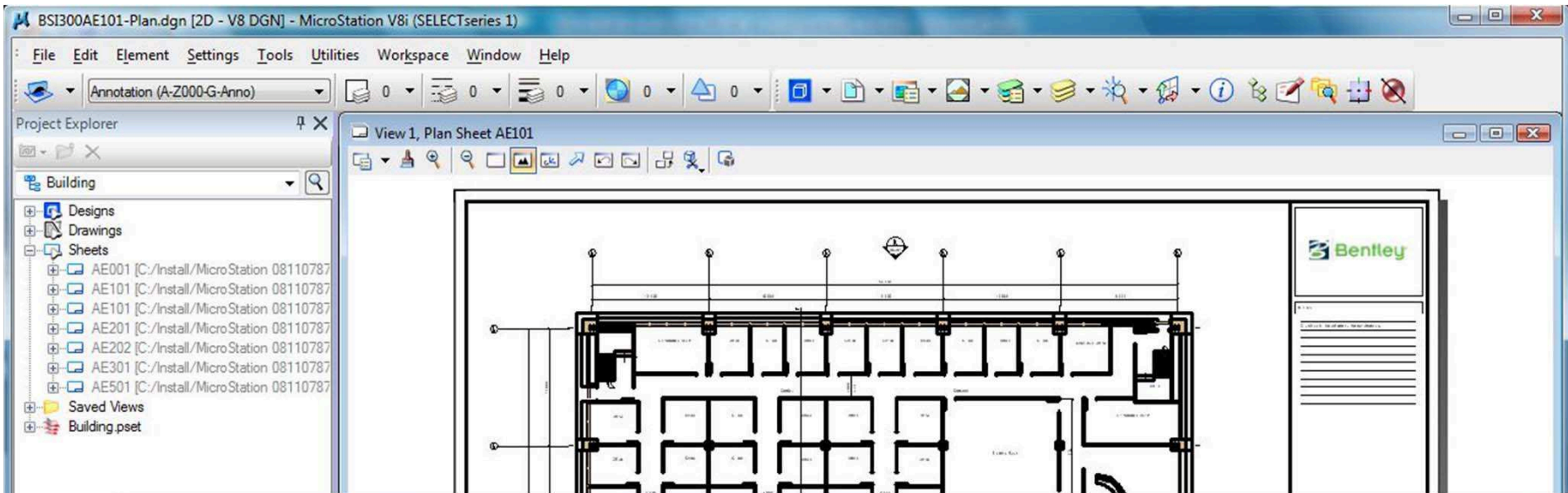


- New in MicroStation V8i (SELECTseries 2)
  - ProjectWise Clash Detection\*
  - ProjectWise Schedule Simulation\*
  - \*Requires ProjectWise Visa

# Why Review Designs on Screen?

- Eliminate rooms full of drawings and review designs electronically
- Assemble and review multiple files to coordinate and analyze design decisions
- Enable multi-discipline project teams to add comments to project designs
- Track comment status using the design review mark-up dialog
- Publish all design information to an optimized 3d model file format for interactive review





Markups

Related Markups | Comments

Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Reception layout change	Plan Sheet AE101	Project.Manager	6/10/2009 12:43:03 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
Markup2	Board Room changes	Plan Sheet AE101	Project.Manager	6/10/2009 12:47:44 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
Markup3	Rear stair changes	Plan Sheet AE101	Project.Manager	6/10/2009 12:52:55 PM	High	Not started	Project.Coordina...		BSI300AE101-Plan.overlay.dgn

Fit View

Files: [A]

Comment

Reviewer

Date

Markups

Related Markups | Comments

Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Reception layout change	Plan Sheet AE101	Project.Manager	6/10/2009 12:43:03 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
Markup2	Board Room changes	Plan Sheet AE101	Project.Manager	6/10/2009 12:47:44 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
Markup3	Rear stair changes	Plan Sheet AE101	Project.Manager	6/10/2009 12:52:55 PM	High	Not started	Project.Coordina...		BSI300AE101-Plan.overlay.dgn

Comment

Reviewer

Date

Plan Sheet AE101

X 59526.9305 Y 54733.3833

Display complete

Annotation (A-Z000-G-A)



BSI300AE101-Plan.dgn [2D - V8 DGN] - MicroStation V8i (SELECTseries 1)

File Edit Element Settings Tools Utilities Workspace Window Help

Annotation (A-Z000-G-Anno)

Project Explorer

View 1, Plan Sheet AE101

10 000

10 000

Office

Confere

Markup View - Markup3

Stair width does not meet code!  
Notify team and make changes in model

Push back wall

10 300

10 000

Office

Markups

Related Markups Comments

Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Reception layout change	Plan Sheet AE101	Project.Manager	6/10/2009 12:43:03 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
Markup2	Board Room changes	Plan Sheet AE101	Project.Manager	6/10/2009 12:47:44 PM	Normal	Waiting on someone else	Project.Drafter		BSI300AE101-Plan.overlay.dgn
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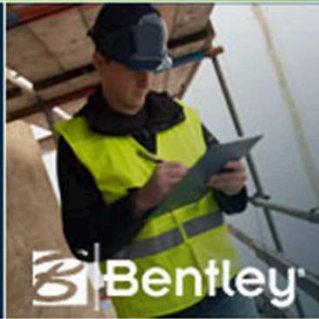
Comment Reviewer Date

Plan Sheet AE101

X 9546.0145 Y 46046.6300

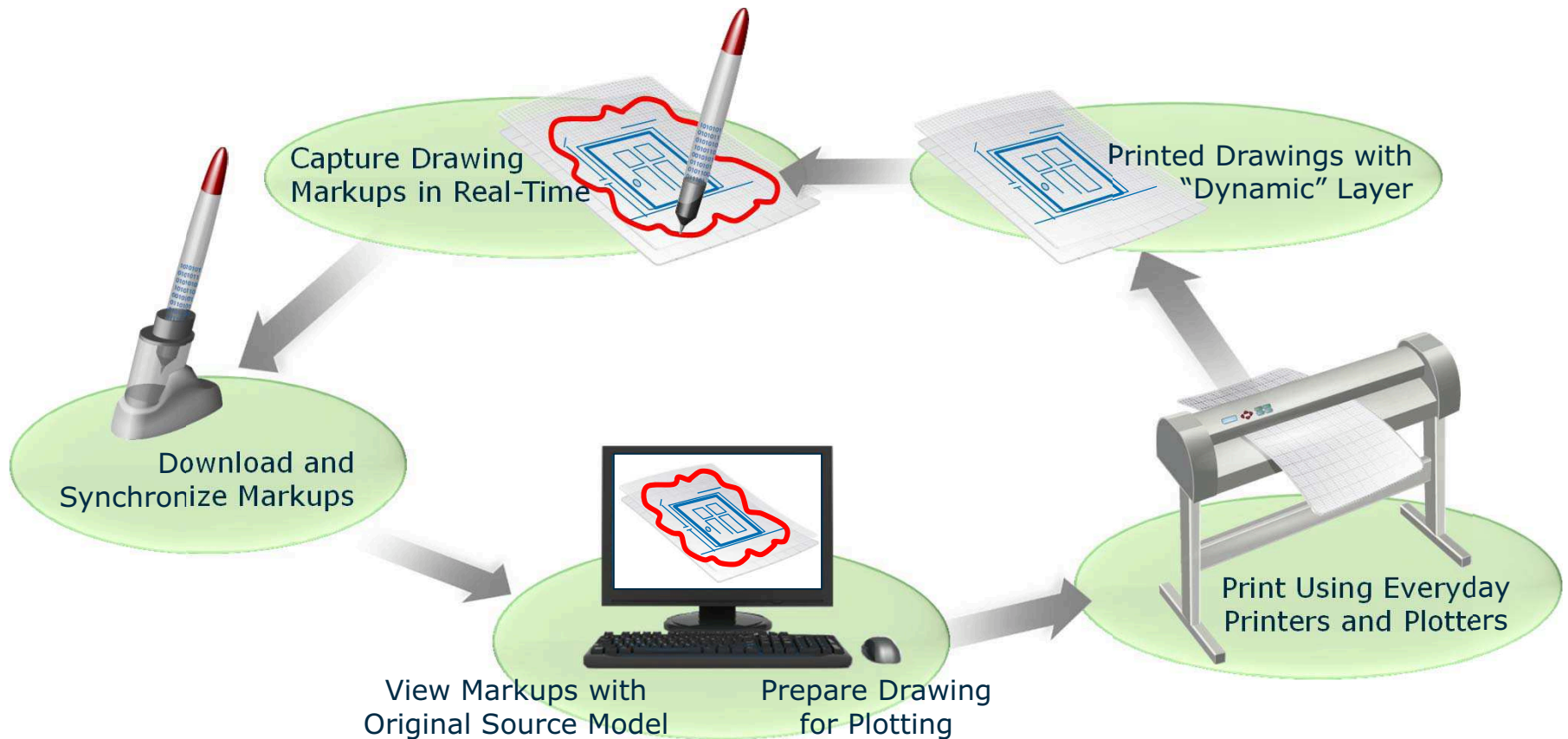
Element Selection

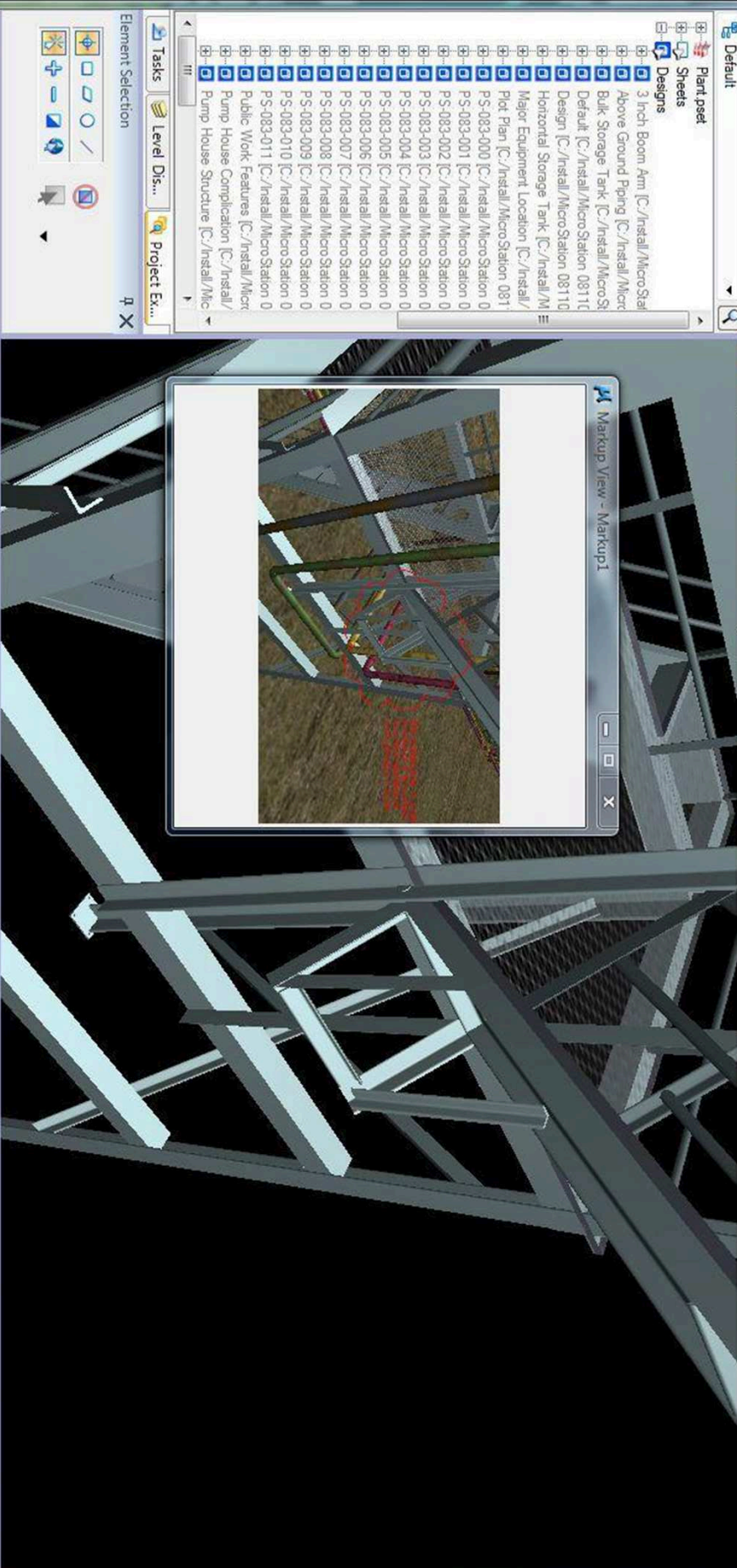
Annotation (A-Z000-G-A)



# ProjectWise Dynamic Plot

Bringing Paper into the Digital Age





Markups

Element Selection

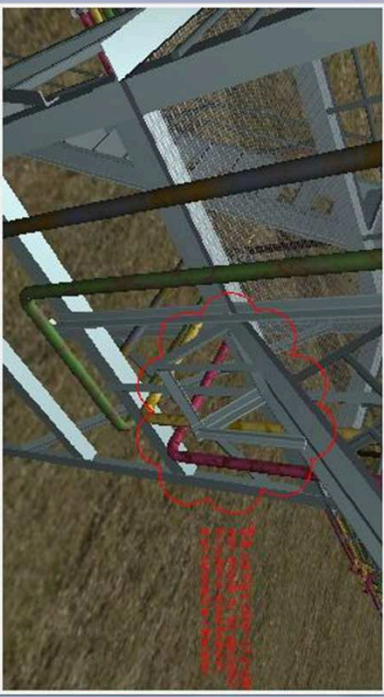
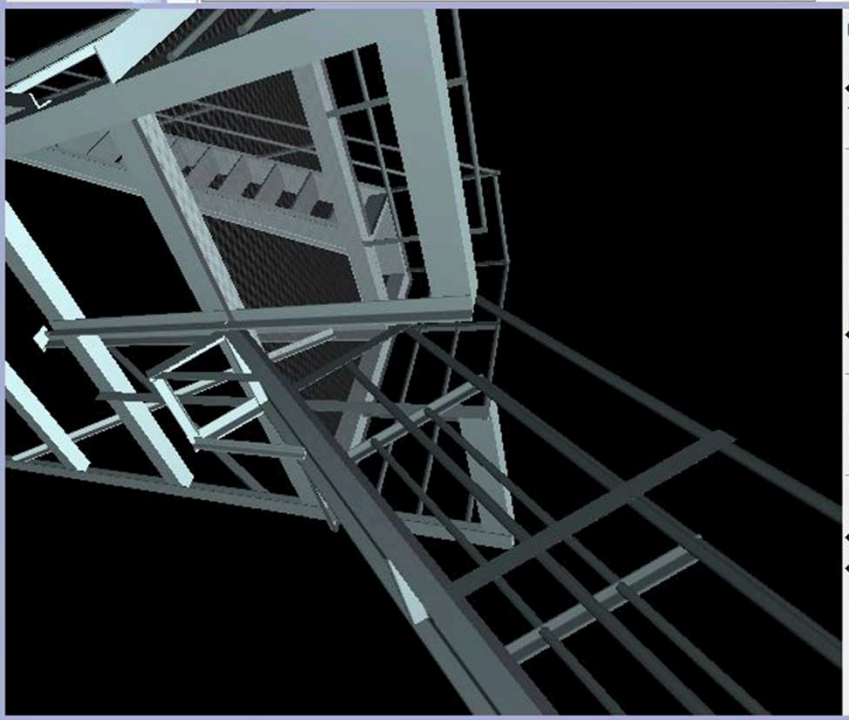
Tasks Level Dis... Project Ex...

Related Markups

Comments

Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Platform Hinge	Unloading Platf...	Project: Manager	6/10/2009 2:24:02 PM	Normal	Not started	Project: Designer		BS1700-S0501-UnloadingPlatform.ove
Markup2	Platform Railing	Unloading Platf...	Project: Manager	6/10/2009 2:27:19 PM	Normal	Not started	Project: Designer		BS1700-S0501-UnloadingPlatform.ove
Markup3	Fire Safety Brackets	Unloading Platf...	Project: Manager	6/10/2009 2:30:47 PM	Normal	Not started	Project: Coordina...		BS1700-S0501-UnloadingPlatform.ove
Markup4	Unloading Mechanism	Unloading Platf...	Project: Manager	6/10/2009 2:36:08 PM	Normal	Not started	Project: Coordina...		BS1700-S0501-UnloadingPlatform.ove

- Part.pset
- Sheets
- Designs
  - 3 Incht Boom Arm [C:/install/MicroStal
  - Above Ground Piping [C:/install/Micro
  - Bulk Storage Tank [C:/install/MicroSt
  - Default [C:/install/MicroStation 081110
  - Design [C:/install/MicroStation 081110
  - Horizontal Storage Tank [C:/install/M
  - Major Equipment Location [C:/install/
  - Pit Plan [C:/install/MicroStation 081
  - PS-083-000 [C:/install/MicroStation 0
  - PS-083-001 [C:/install/MicroStation 0
  - PS-083-002 [C:/install/MicroStation 0
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  - PS-083-004 [C:/install/MicroStation 0
  - PS-083-005 [C:/install/MicroStation 0
  - PS-083-006 [C:/install/MicroStation 0
  - PS-083-007 [C:/install/MicroStation 0
  - PS-083-008 [C:/install/MicroStation 0
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  - PS-083-010 [C:/install/MicroStation 0
  - PS-083-011 [C:/install/MicroStation 0
  - Public Work Features [C:/install/Micro
  - Pump House Complication [C:/install/
  - Pump House Structure [C:/install/Micr



Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Platform Hinge	Unloading Platf...	Project Manager	6/10/2009 2:24:02 PM	Normal	Not started	Project Designer		BS1700-S0501-UnloadingPlatform.ove.
Markup2	Platform Ring	Unloading Platf...	Project Manager	6/10/2009 2:27:19 PM	Normal	Not started	Project Designer		BS1700-S0501-UnloadingPlatform.ove.
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Markup4	Unloading Mechanism	Unloading Platf...	Project Manager	6/10/2009 2:36:08 PM	Normal	Not started	Project Coordina...		BS1700-S0501-UnloadingPlatform.ove.

Element Selection > Identify element to add to set

Comment

Reviewer

Date

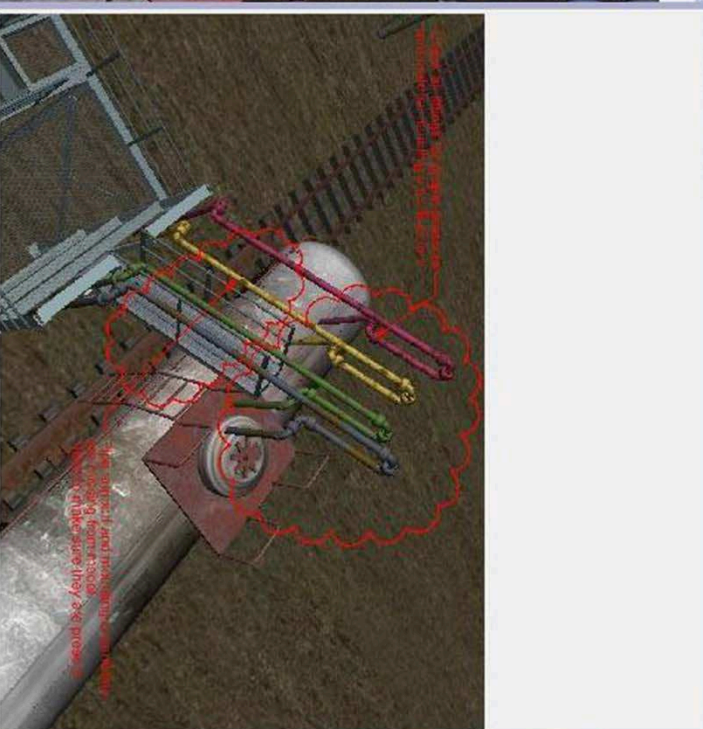
566.0797

98.0044

449.9815

(none) (Default)

- Plant.pset
- Sheets
- Designs
  - 3 Inch Boom Arm [C:/install/MicroStal
  - Above Ground Piping [C:/install/Micro
  - Bulk Storage Tank [C:/install/MicroSt
  - Default [C:/install/MicroStation 08111C
  - Design [C:/install/MicroStation 08111C
  - Horizontal Storage Tank [C:/install/M
  - Major Equipment Location [C:/install/
  - Pilot Plan [C:/install/MicroStation 081
  - PS-083-000 [C:/install/MicroStation 0
  - PS-083-001 [C:/install/MicroStation 0
  - PS-083-002 [C:/install/MicroStation 0
  - PS-083-003 [C:/install/MicroStation 0
  - PS-083-004 [C:/install/MicroStation 0
  - PS-083-005 [C:/install/MicroStation 0
  - PS-083-006 [C:/install/MicroStation 0
  - PS-083-007 [C:/install/MicroStation 0
  - PS-083-008 [C:/install/MicroStation 0
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  - PS-083-010 [C:/install/MicroStation 0
  - PS-083-011 [C:/install/Micro
  - Public Work Features [C:/install/Micro
  - Pump House Complication [C:/install/
  - Pump House Structure [C:/install/Mic



Element Selection

Tasks Level Dis... Project Ex...

Related Markups

Comments

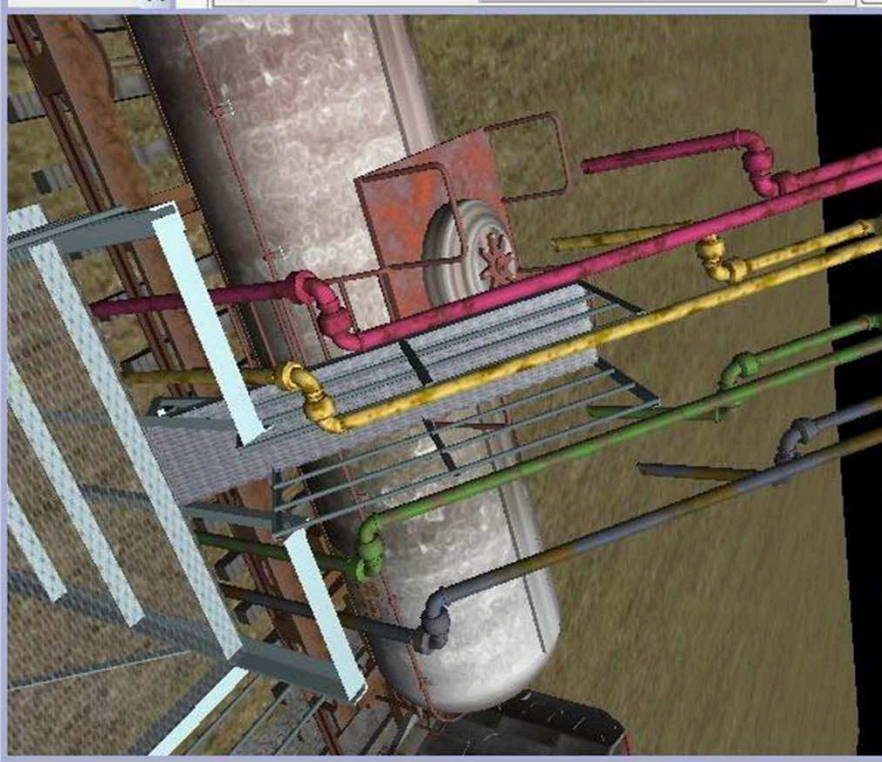
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Markup1	Platform Hinge	Unloading Platf...	Project Manager	6/10/2009 2:24:02 PM	Normal	Not started	Project Designer		BS1700-S0501-UnloadingPlatform.ove
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Markup3	Fire Safety Brackets	Unloading Platf...	Project Manager	6/10/2009 2:30:47 PM	Normal	Not started	Project: Coordin...		BS1700-S0501-UnloadingPlatform.ove
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Element Selection > Identify element to add to set

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- Plant pset
- Sheets
- Designs
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  - Above Ground Piping [C:/Install/Micro
  - Bulk Storage Tank [C:/Install/MicroSt
  - Default [C:/Install/MicroStation 08110
  - Design [C:/Install/MicroStation 08110
  - Horizontal Storage Tank [C:/Install/M
  - Major Equipment Location [C:/Install/
  - Prod. Plan [C:/Install/MicroStation 081
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  - PS-083-011 [C:/Install/MicroStation 0
  - Public Work Features [C:/Install/Micro
  - Pump House Complication [C:/Install/
  - Pump House Structure [C:/Install/Mic

Tasks Level Dis... Project Ex...



Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup 1	Platform Hinge	Unloading Platf...	Project Manager	6/10/2009 2:24:02 PM	Normal	Not started	Project Designer		BS1700-S0501-UnloadingPlatform.ove.
Markup 2	Platform Railing	Unloading Platf...	Project Manager	6/10/2009 2:27:19 PM	Normal	Not started	Project Designer		BS1700-S0501-UnloadingPlatform.ove.
Markup 3	Fire Safety Brackets	Unloading Platf...	Project Manager	6/10/2009 2:30:47 PM	Normal	Not started	Project Coordina...		BS1700-S0501-UnloadingPlatform.ove.
Markup 4	Unloading Mechanism	Unloading Platf...	Project Manager	6/10/2009 2:36:08 PM	Normal	Not started	Project Coordina...		BS1700-S0501-UnloadingPlatform.ove.



- Designs
- 3 Inch Boom Arm [C:/Install/MicroStal
- Above Ground Piping [C:/Install/Micro
- Bulk Storage Tank [C:/Install/MicroSt
- Default [C:/Install/MicroStation 08111
- Design [C:/Install/MicroStation 081110
- Horizontal Storage Tank [C:/Install/M
- Major Equipment Location [C:/Install/
- Pilot Plan [C:/Install/MicroStation 081
- PS-083-000 [C:/Install/MicroStation 0
- PS-083-001 [C:/Install/MicroStation 0
- PS-083-002 [C:/Install/MicroStation 0
- PS-083-003 [C:/Install/MicroStation 0
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- PS-083-011 [C:/Install/MicroStation 0
- Public Work Features [C:/Install/Micro
- Pump House Complication [C:/Install/
- Pump House Structure [C:/Install/Micr
- Pump House Window [C:/Install/Micr
- Rail Car Containment Complication [C
- RC Containment 1 [C:/Install/MicroSt
- RC Containment 2 [C:/Install/MicroSt

Markups

Name	Description	Review Model	Created By	Date Created	Priority	Status	Assigned To	Approved By	File Name
Markup1	Platform Hinge	Unloading Platf...	Project: Manager	6/10/2009 2:24:02 PM	Normal	Not started	Project: Designer		BS1700-S0501-UnloadingPlatform.ove
Markup2	Platform Railing	Unloading Platf...	Project: Manager	6/10/2009 2:27:19 PM	Normal	Not started	Project: Designer		BS1700-S0501-UnloadingPlatform.ove
Markup3	Fire Safety Brackets	Unloading Platf...	Project: Manager	6/10/2009 2:30:47 PM	Normal	Not started	Project: Coordin...		BS1700-S0501-UnloadingPlatform.ove
Markup4	Unloading Mechanism	Unloading Platf...	Project: Manager	6/10/2009 2:36:08 PM	Normal	Not started	Project: Coordina...		BS1700-S0501-UnloadingPlatform.ove

Comment: [Empty text box]

Reviewer: [Empty text box]

Date: [Empty text box]

Select the active element template

Unloading Platform

1 2 3 4 5 6 7 8

X 225.8852 Y 233.1628 Z 273.3820

(home) (Default)

- Plant.pset
- Sheets
- Designs
  - 3 Inch Boom Arm [C:/install/MicroStal
  - Above Ground Piping [C:/install/Micro
  - Bulk Storage Tank [C:/install/MicroSt
  - Default [C:/install/MicroStation 081110
  - Design [C:/install/MicroStation 081110
  - Horizontal Storage Tank [C:/install/M
  - Major Equipment Location [C:/install/
  - Pid Plan [C:/install/MicroStation 081
  - PS-083-000 [C:/install/MicroStation 0
  - PS-083-001 [C:/install/MicroStation 0
  - PS-083-002 [C:/install/MicroStation 0
  - PS-083-003 [C:/install/MicroStation 0
  - PS-083-004 [C:/install/MicroStation 0
  - PS-083-005 [C:/install/MicroStation 0
  - PS-083-006 [C:/install/MicroStation 0
  - PS-083-007 [C:/install/MicroStation 0
  - PS-083-008 [C:/install/MicroStation 0
  - PS-083-009 [C:/install/MicroStation 0
  - PS-083-010 [C:/install/MicroStation 0
  - PS-083-011 [C:/install/MicroStatio
  - Public Work Features [C:/install/Micr
  - Pump House Complication [C:/install/Micr
  - Pump House Structure [C:/install/Micr



Element Selection

Level Dis... Project Ex...

Markups

Related Markups

Comments

Name	Description	Review Model	Created By	Date Created	Priority	Status	As	File Name
------	-------------	--------------	------------	--------------	----------	--------	----	-----------

Comment

Reviewer

Date

1	2	3	4	5	6	7	8	X	-2041.2543	Y	1866.2690	Z	-2013.3606
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Element Selection > Identify element to add to set

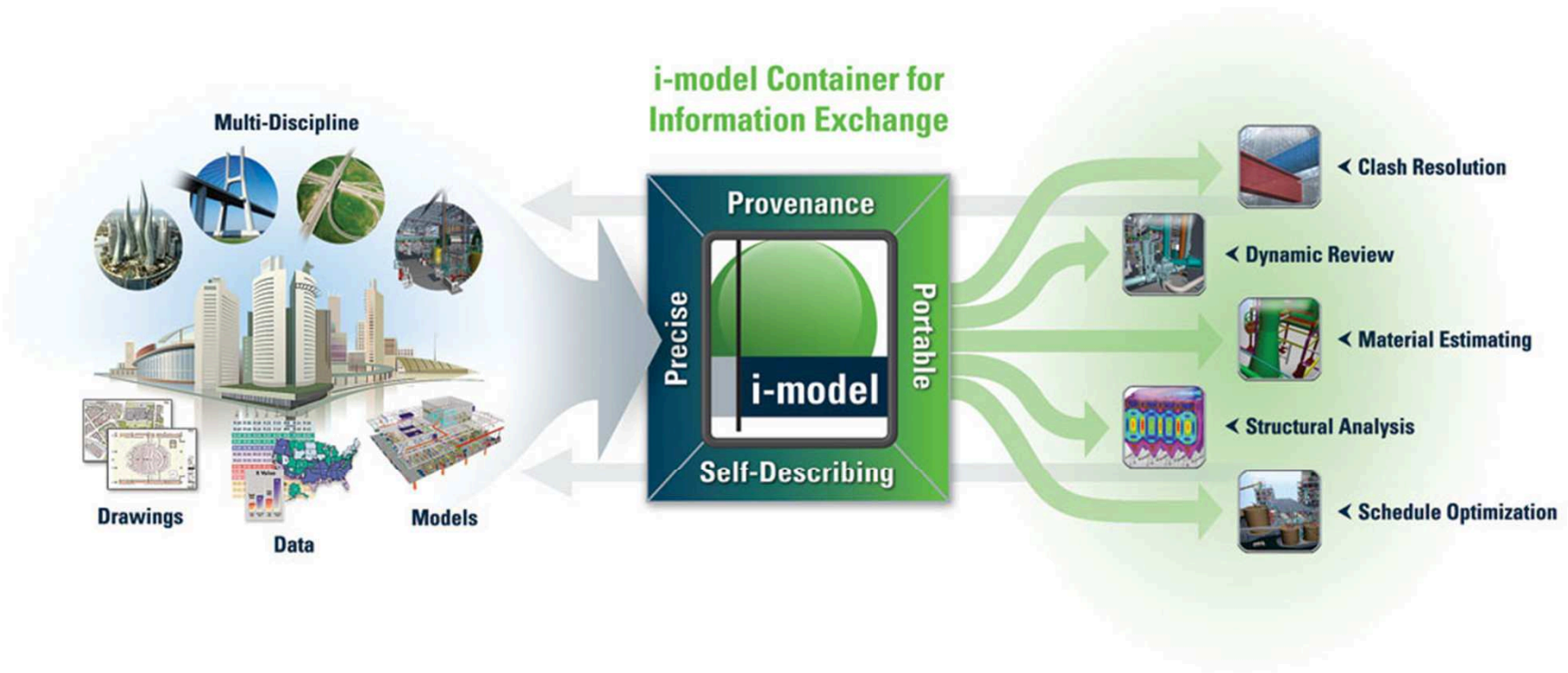
Cone, Level: (none) (Pipe 102)

(none) (Clip Volumes)

: 1



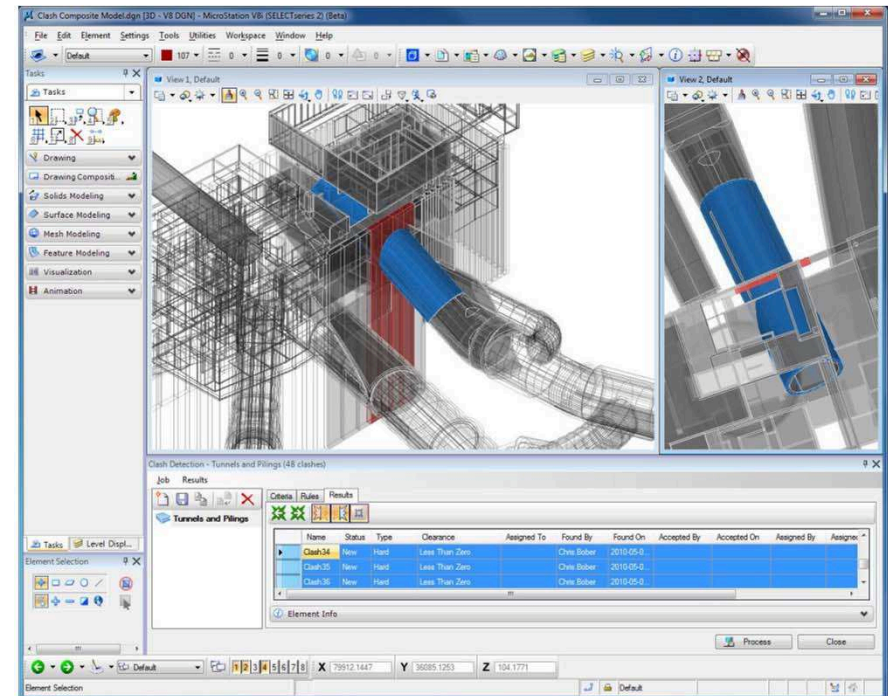
# What is an i-model?





# MicroStation V8i (SELECTseries 2)

- Clash Resolution
  - Validate design at the time of creation
  - Make changes in real-time during design and layout to avoid costly mistakes downstream
  - ProjectWise Clash Resolution Visa Required



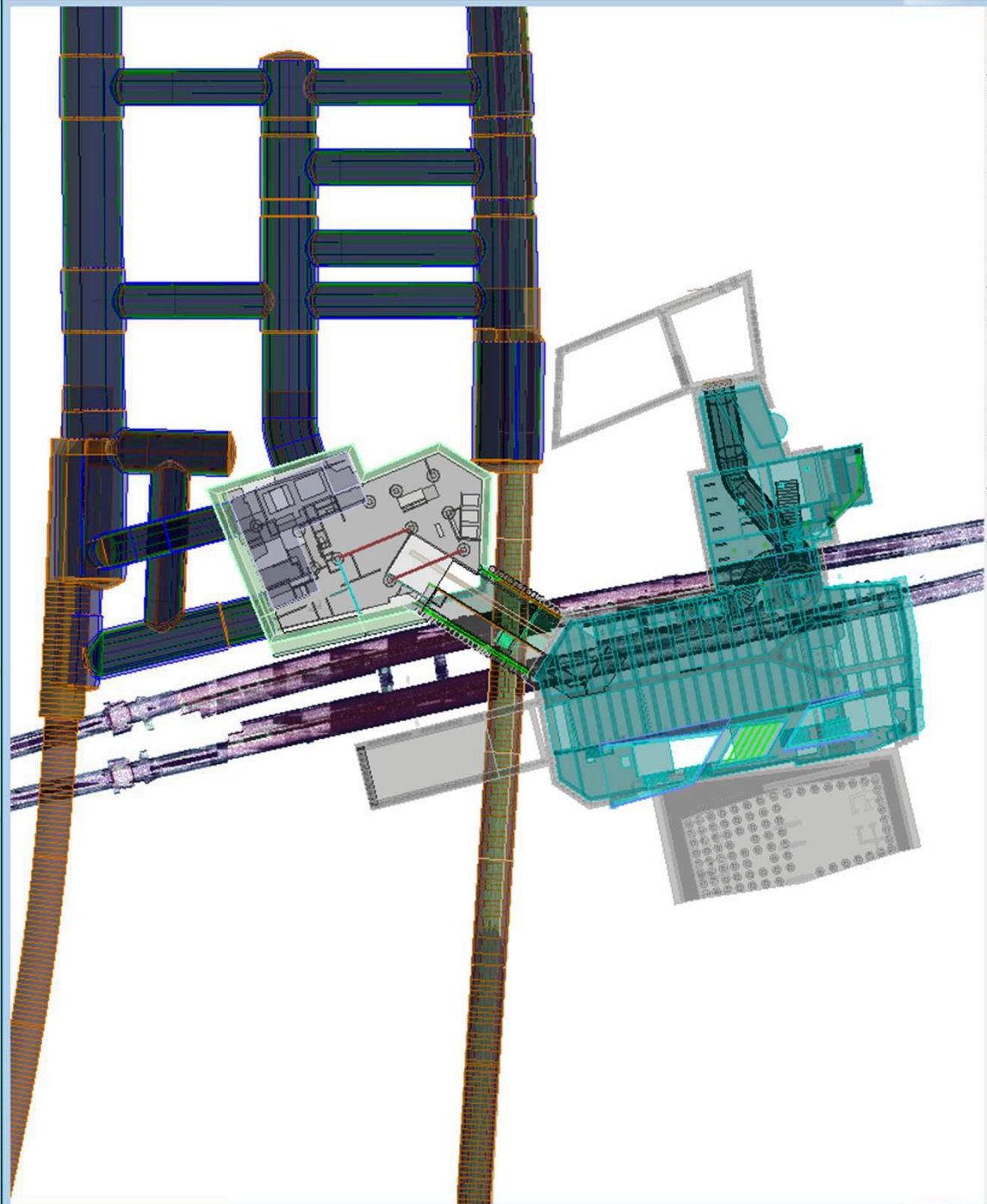
Tasks

- Default
- 0
- 0
- 0
- 0



- Drawing
- Drawing Composition
- Solids Modeling
- Surface Modeling
- Mesh Modeling
- Feature Modeling
- Visualization
- Animation

View 1 - Start AVI, Composite



Level Display - View 1

X 80154.7102 Y 36152.0629

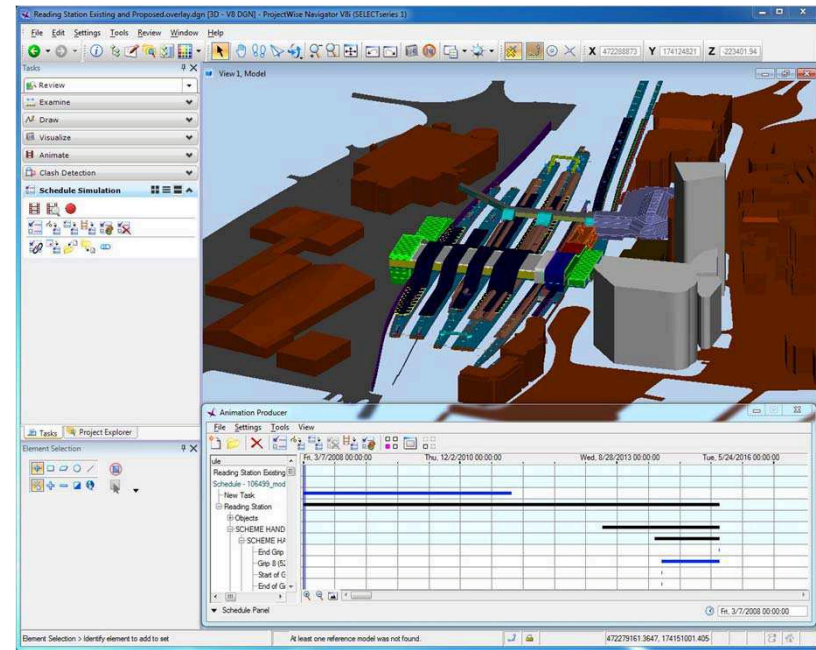
Z -0.0393

Define Clip Volume By 2 Points > Enter first point



# MicroStation V8i (SELECTseries 2)

- Schedule Simulation
  - Visualize project scheduling
  - Round trip data from scheduling software
  - Build schedules directly from in MicroStation
  - ProjectWise Schedule Simulation Visa Required





Tasks

Review

Examine

Measure Distance  
Apply or Modify Clip Volume  
Create Markup

Draw

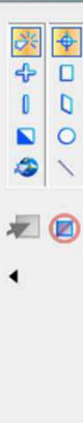
Visualize

Animate

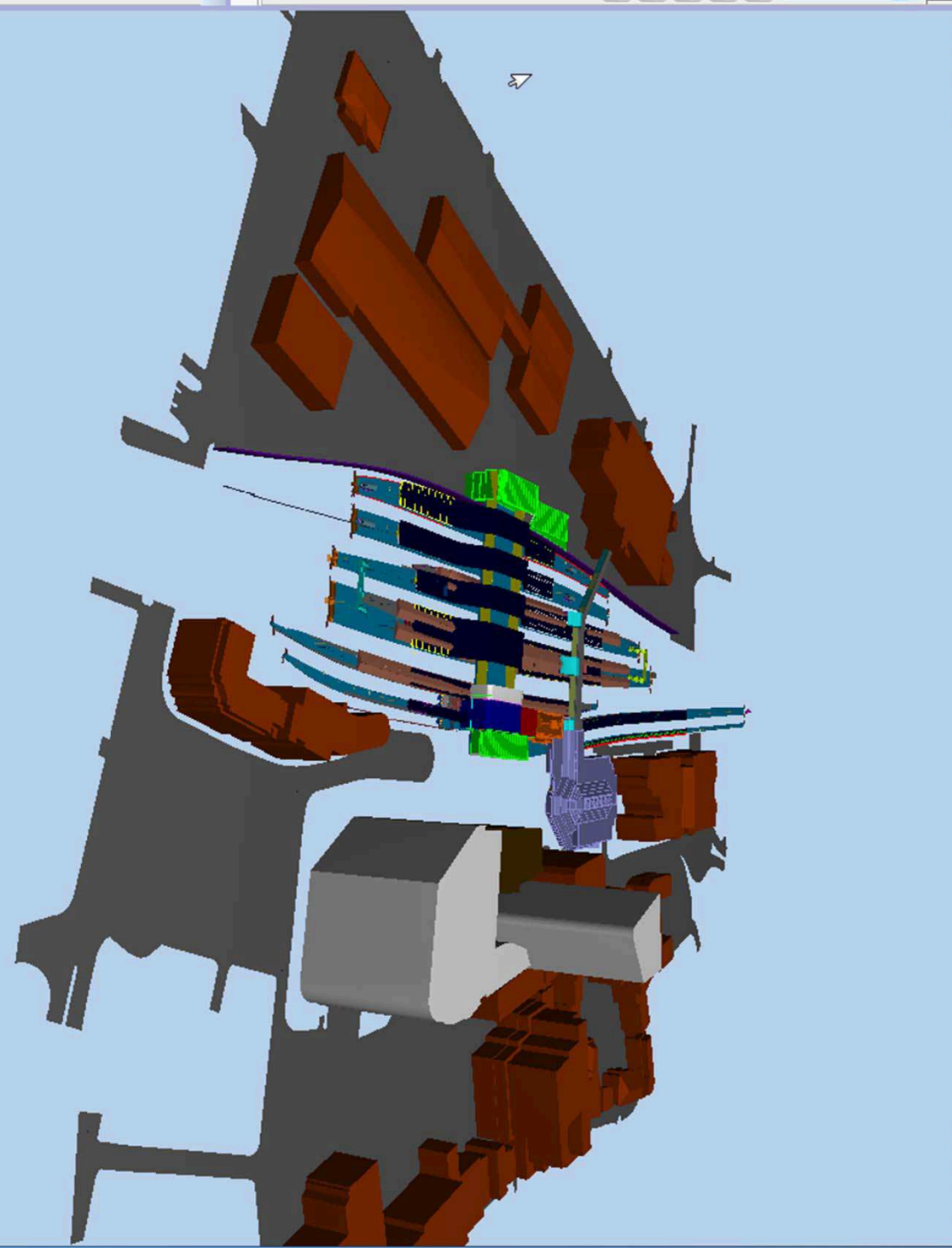
Clash Detection  
Schedule Simulation

Tasks Project Explorer

Element Selection

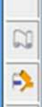


View 1, Model



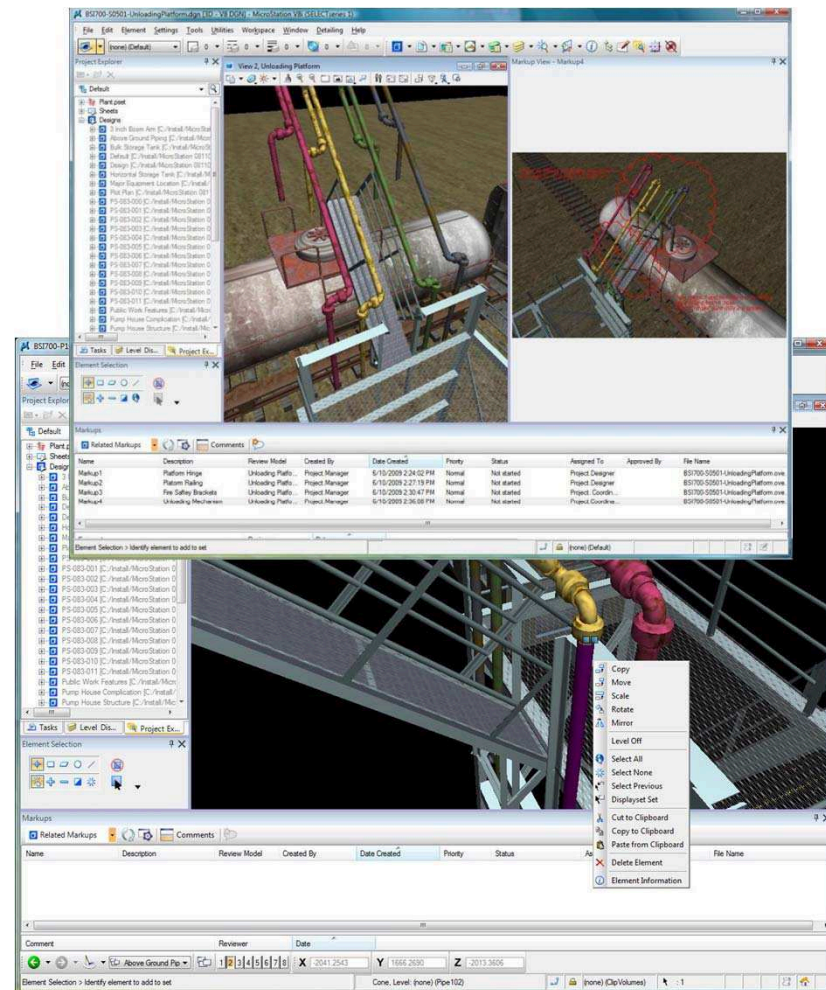
Element Selection > Identify element to add to set

888059321.5830, 341689677.162



# The Insightful Review Advantage

- Save Time
  - Faster review workflows
  - Automate comment tracking
  - Simplify review process
- Save Money
  - Reduce paper cost
  - Reduce review cycle time
- Improve Quality
  - Better managed markups
  - Maintain data integrity
  - Projects are better designed



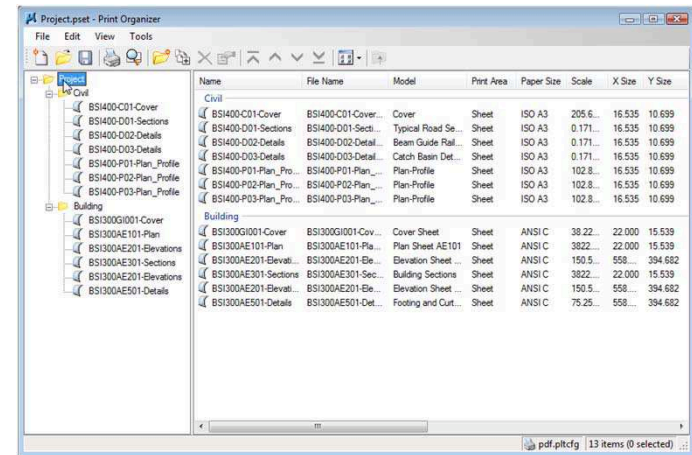
# MicroStation V8i (SELECTseries 2)

Integrated Print Organizer



# MicroStation V8i (SELECTseries 2)

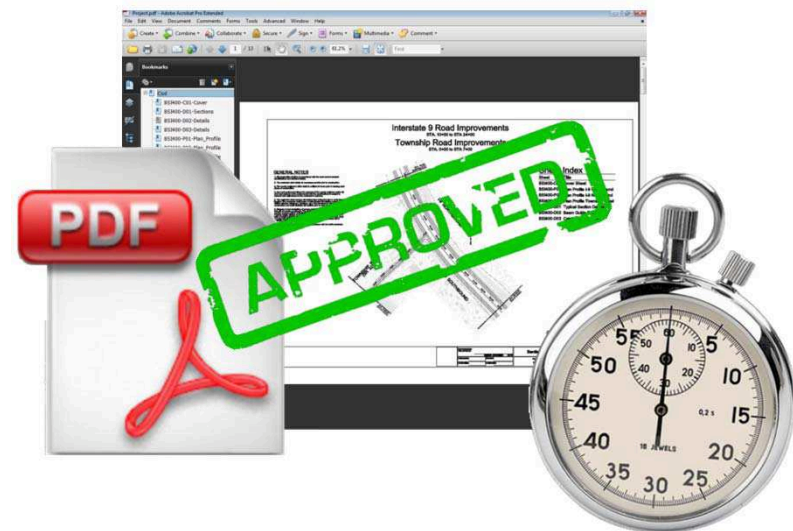
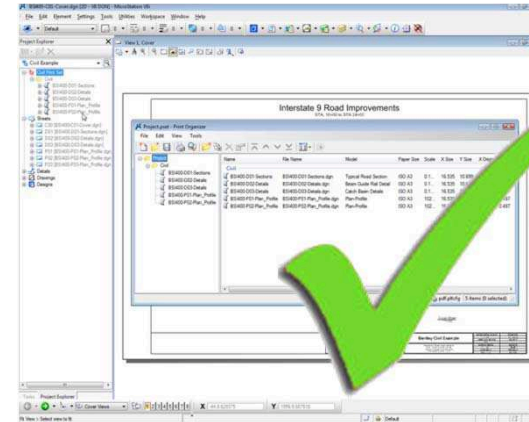
- Integrated Print Organizer
  - Print Organizer Client dialog
  - Print Definitions
  - Print Styles
  - Batch Printing
  - Multi sheet, hierarchal PDF Support



- New in MicroStation V8i (SELECTseries 2)
  - More coming in (SELECT series 3)

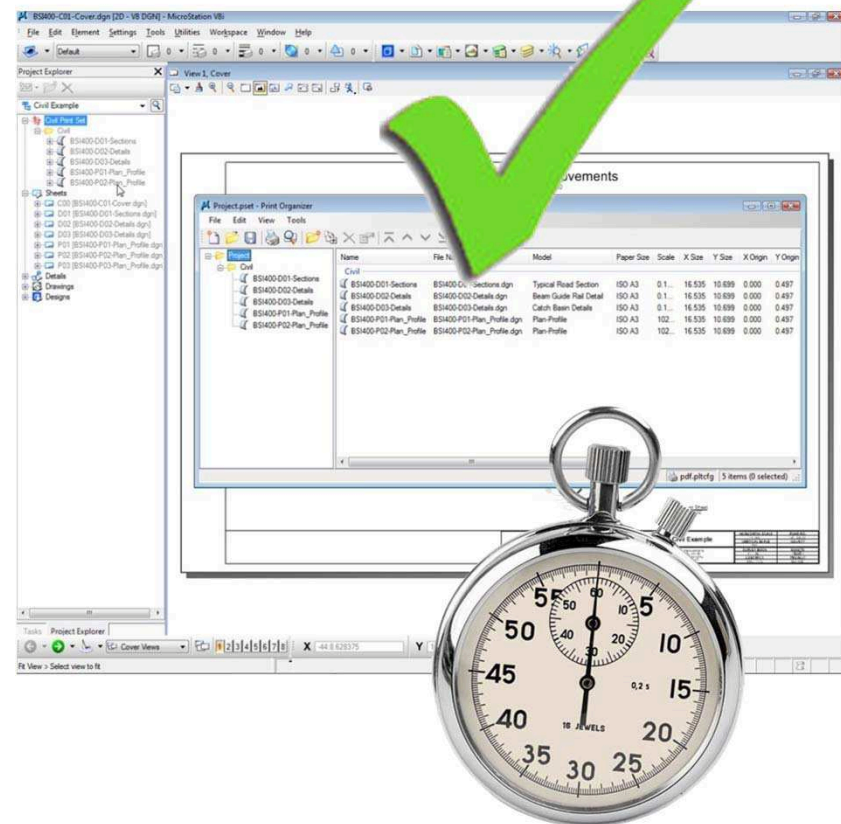
# Why Integrate Print Organizer?

- Guarantee all published drawings match standards
- Assemble and plot data from multiple file formats
- Plot each file just once to many output formats
- Produce identical versions of paper and PDF
- Eliminate manual plot processes
- Automate plot setup and execution



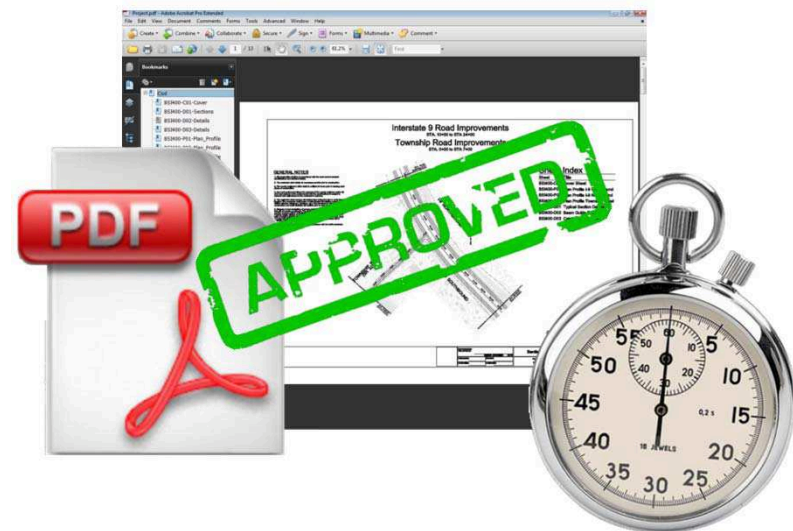
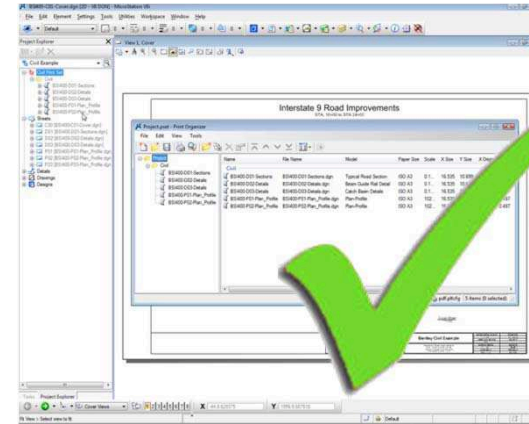
# MicroStation V8i (SELECTseries 2)

- Print Definitions
  - Page Size, Scale, Orientation, More
- Print Styles
  - For Each Print Type
  - By Discipline, Use, Deliverable Type
- Batch Printing
  - Single or Multiple Formats



# Integrated Advantages

- Save Time
  - Streamline Print Production
  - Simplify Printing Process
- Save Money
  - Produce Electronic Deliverables and Check Prints
  - Produce Consistent Results
- Improve Quality
  - Guarantee corporate and project standards compliance



# MicroStation V8i (SELECTseries 2)

Iterative Luxology Rendering

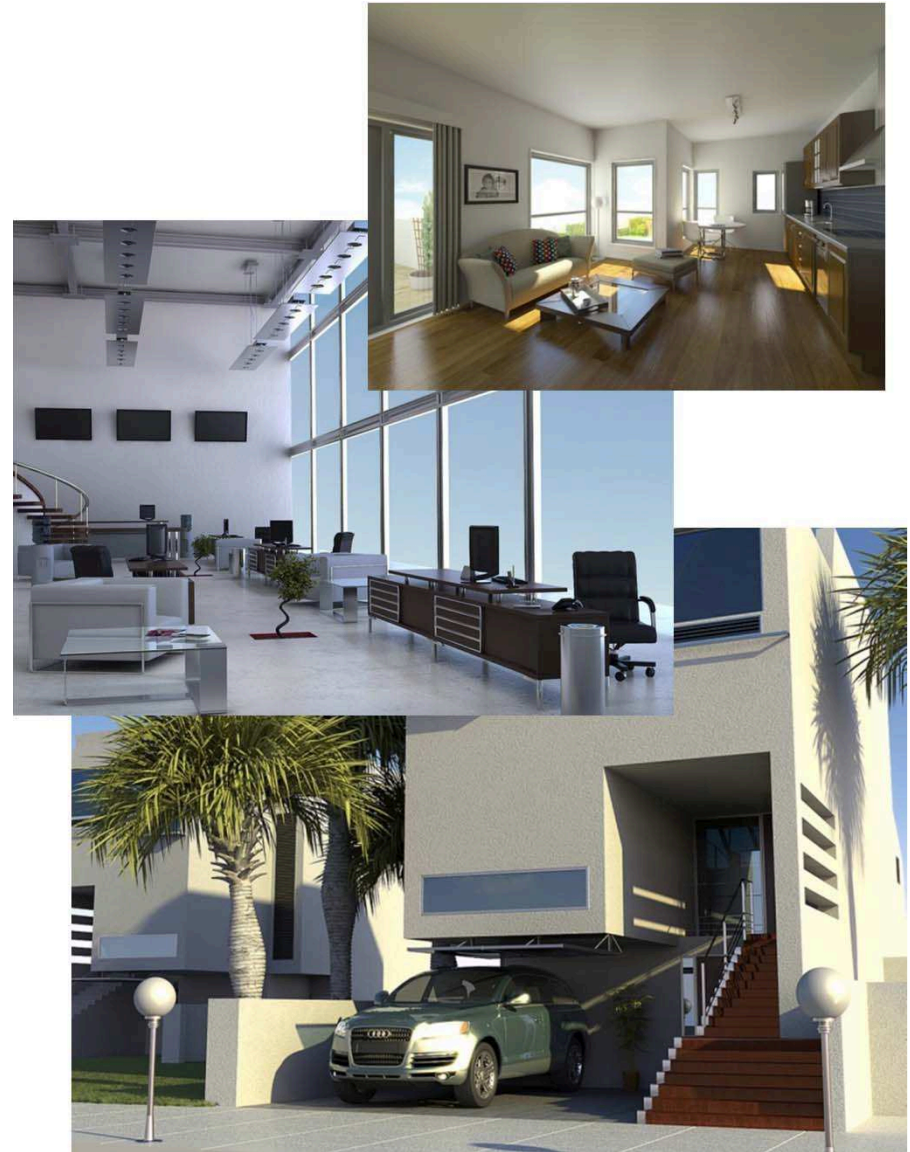
# MicroStation V8i (SELECTseries 2)

- Iterative Luxology Rendering
  - High Performance Rendering Engine
  - Physically Correct Materials
  - Environmental Lighting
  - Global Illumination
  - Render Setups
  - Distributed Rendering
  - Camera Speed Control
  - Tone Mapping
- New in MicroStation V8i (SELECTseries 2)
  - Render Output Channels
  - User Interface Optimization
  - Animation improvements



# Why Luxology?

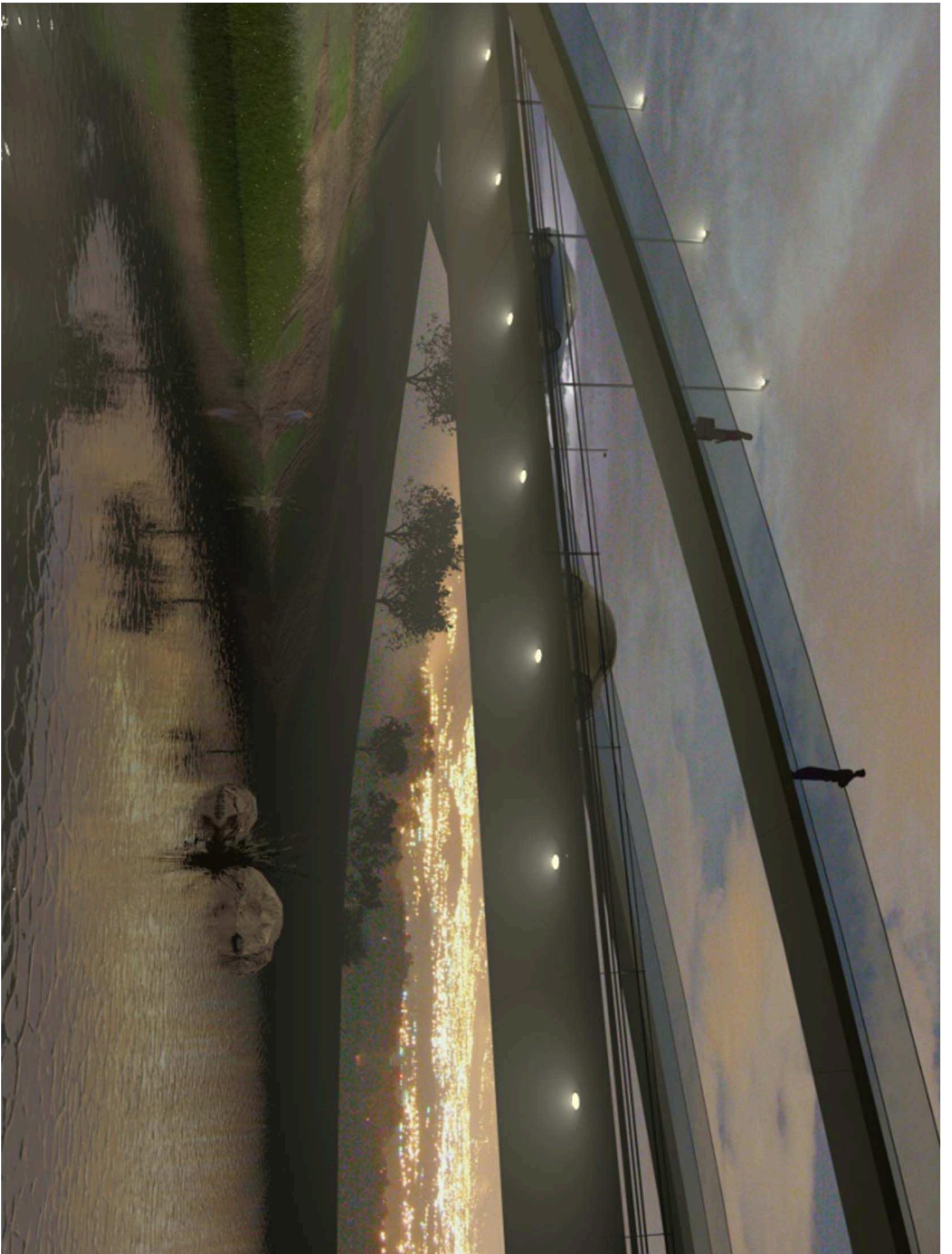
- Produce high quality images using pre-configured settings to better balance speed and quality
- Deliver photo-realistic interior and exterior views using lighting and textures that mirror project reality
- Improve stakeholder insight and secure buy-in
- Validate the fit and finish of a project
- Secure project funding for design alternatives

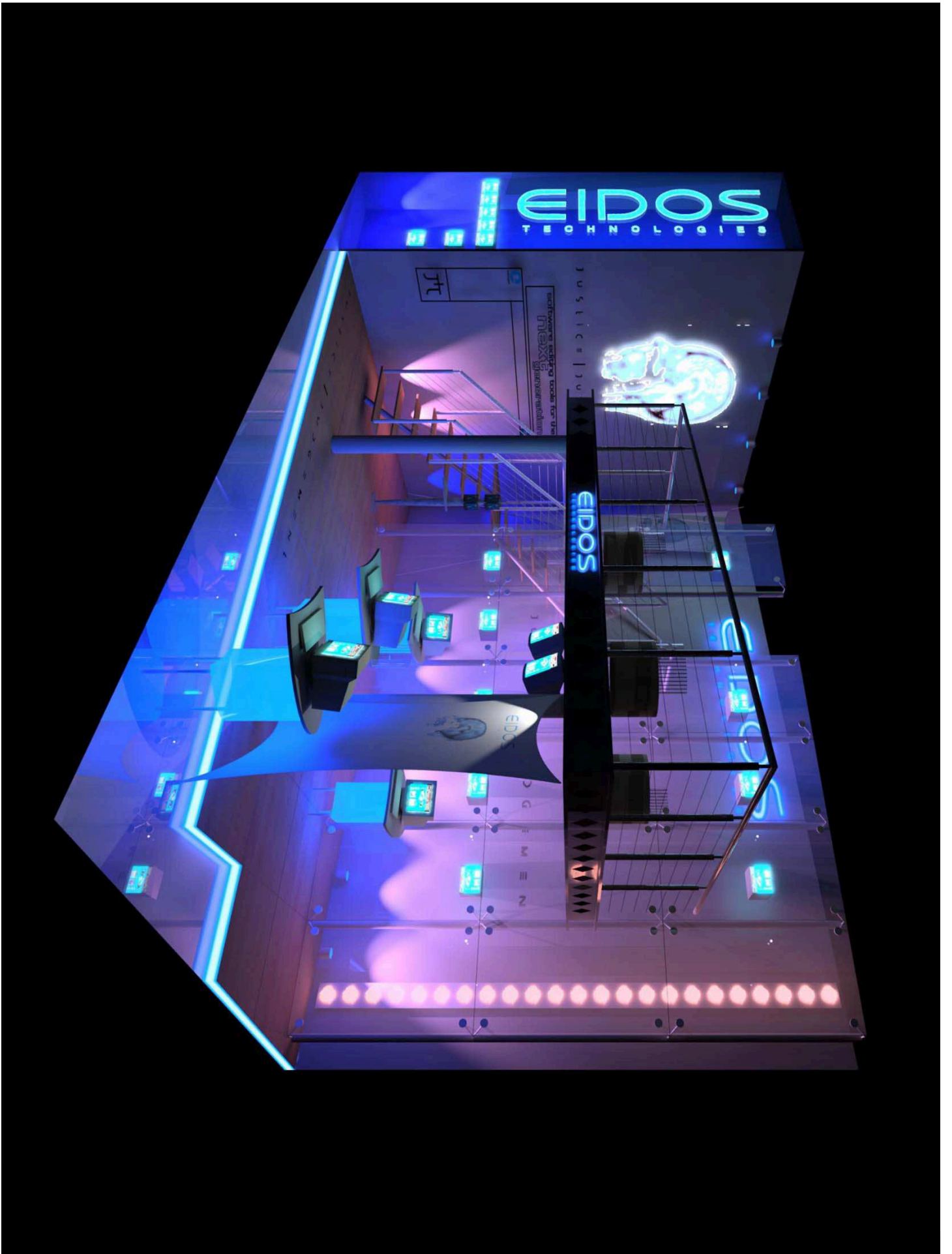


# Simplified Lighting









EIDOS  
TECHNOLOGIES



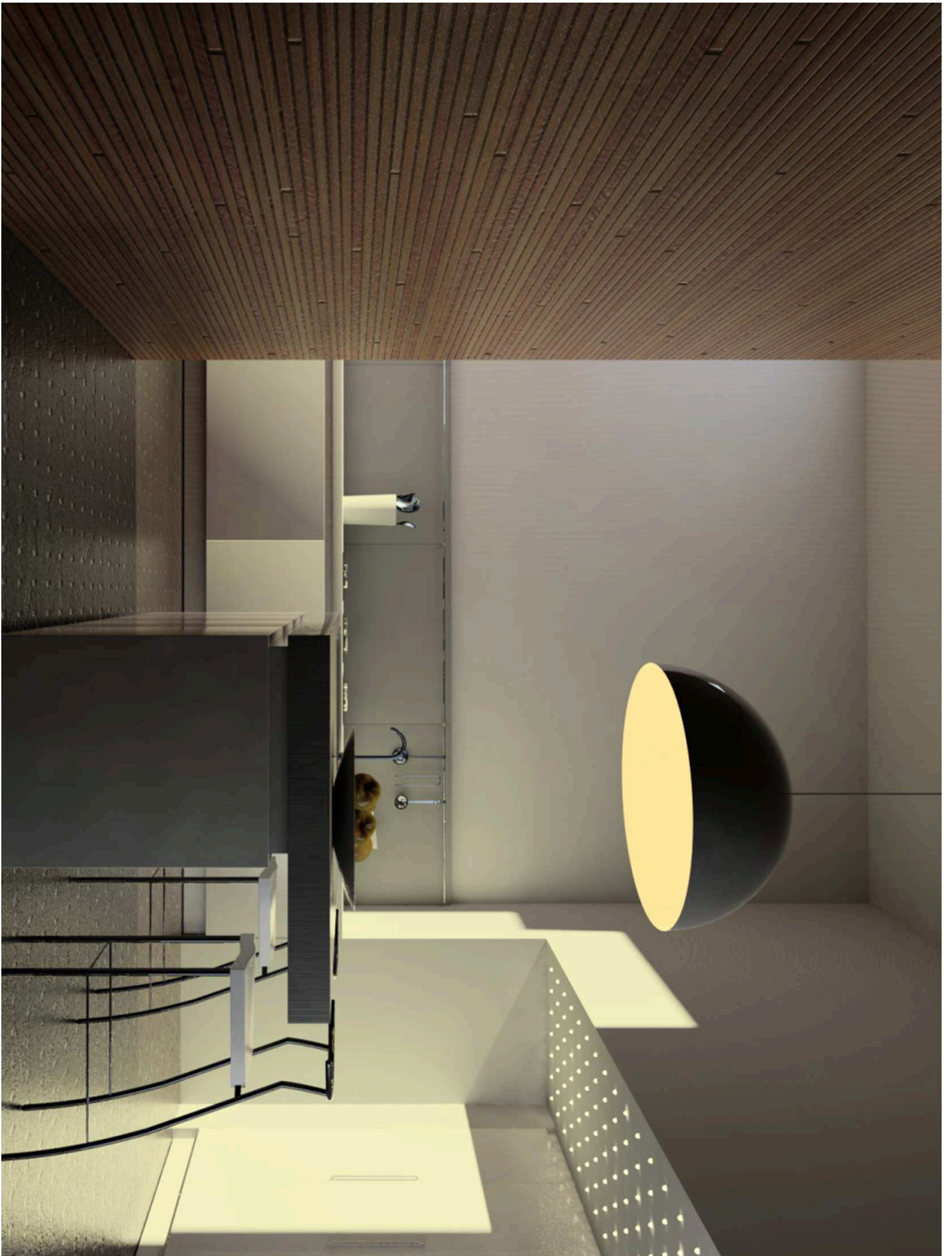
EIDOS

JUSTICE | U

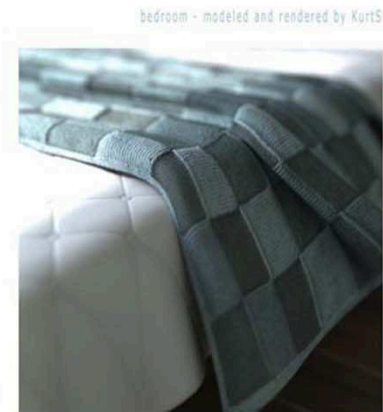
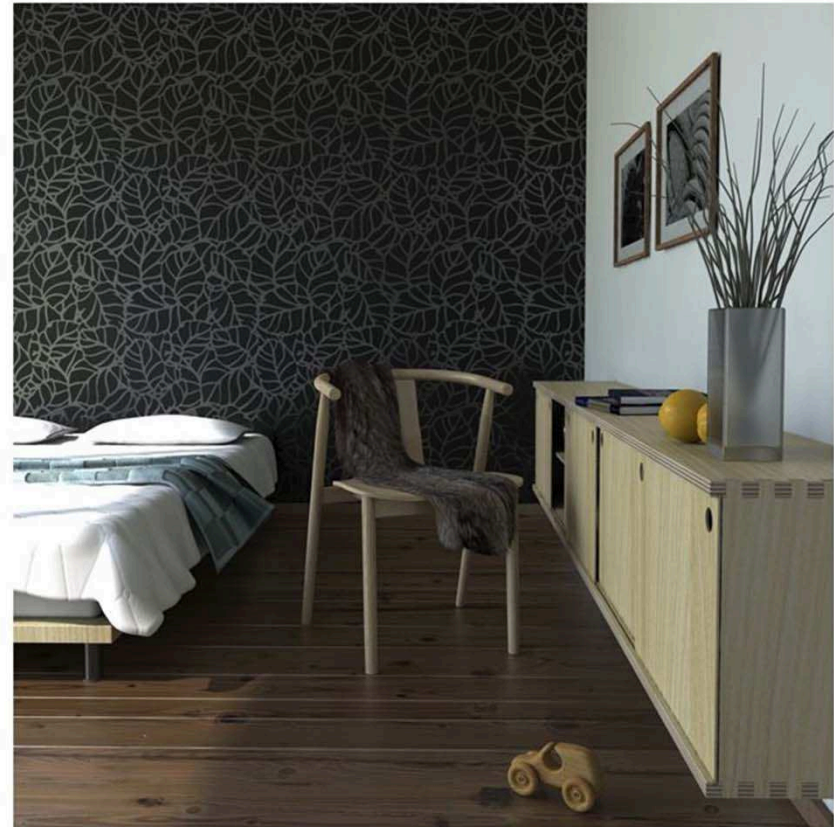
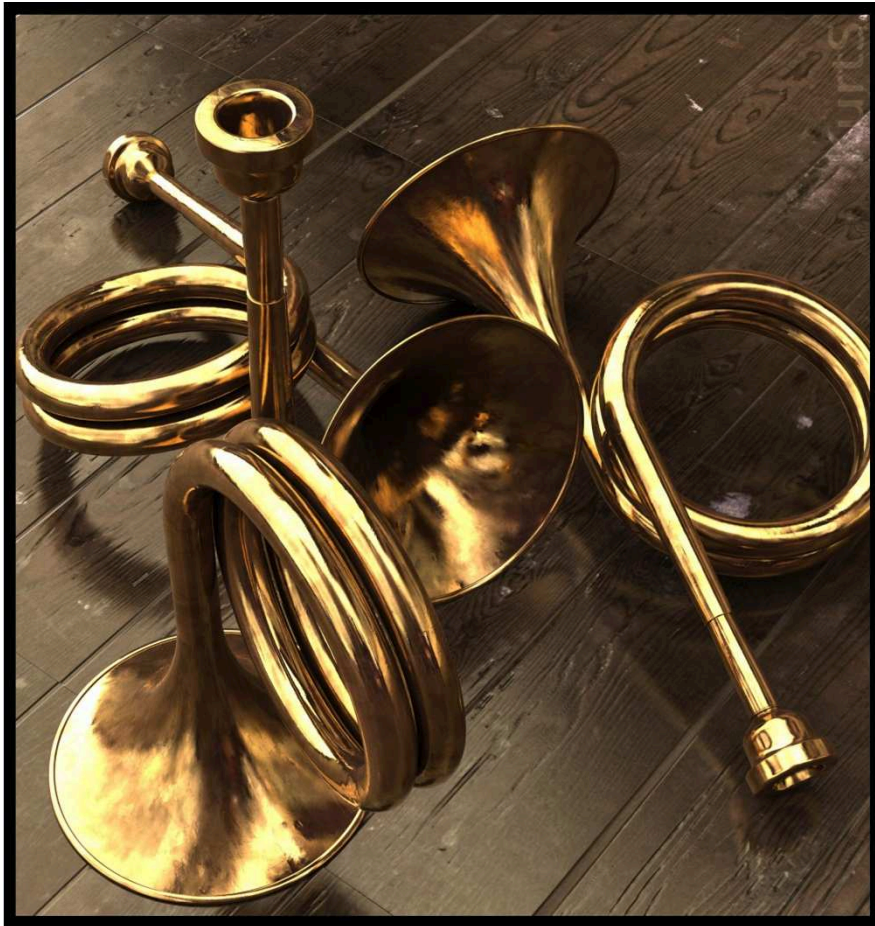
Introducing the first scale for the  
United Kingdom

JIT

CON  
MEN

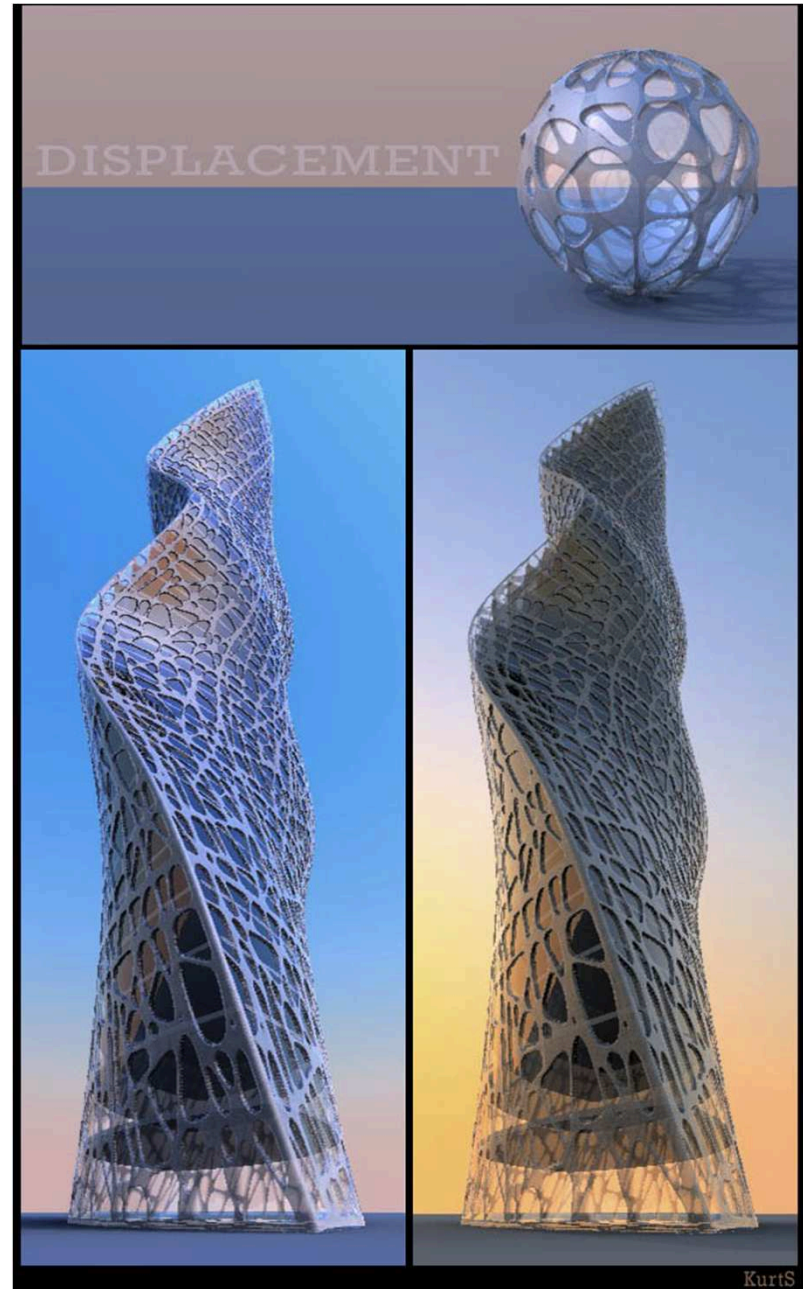


# Realistic Materials



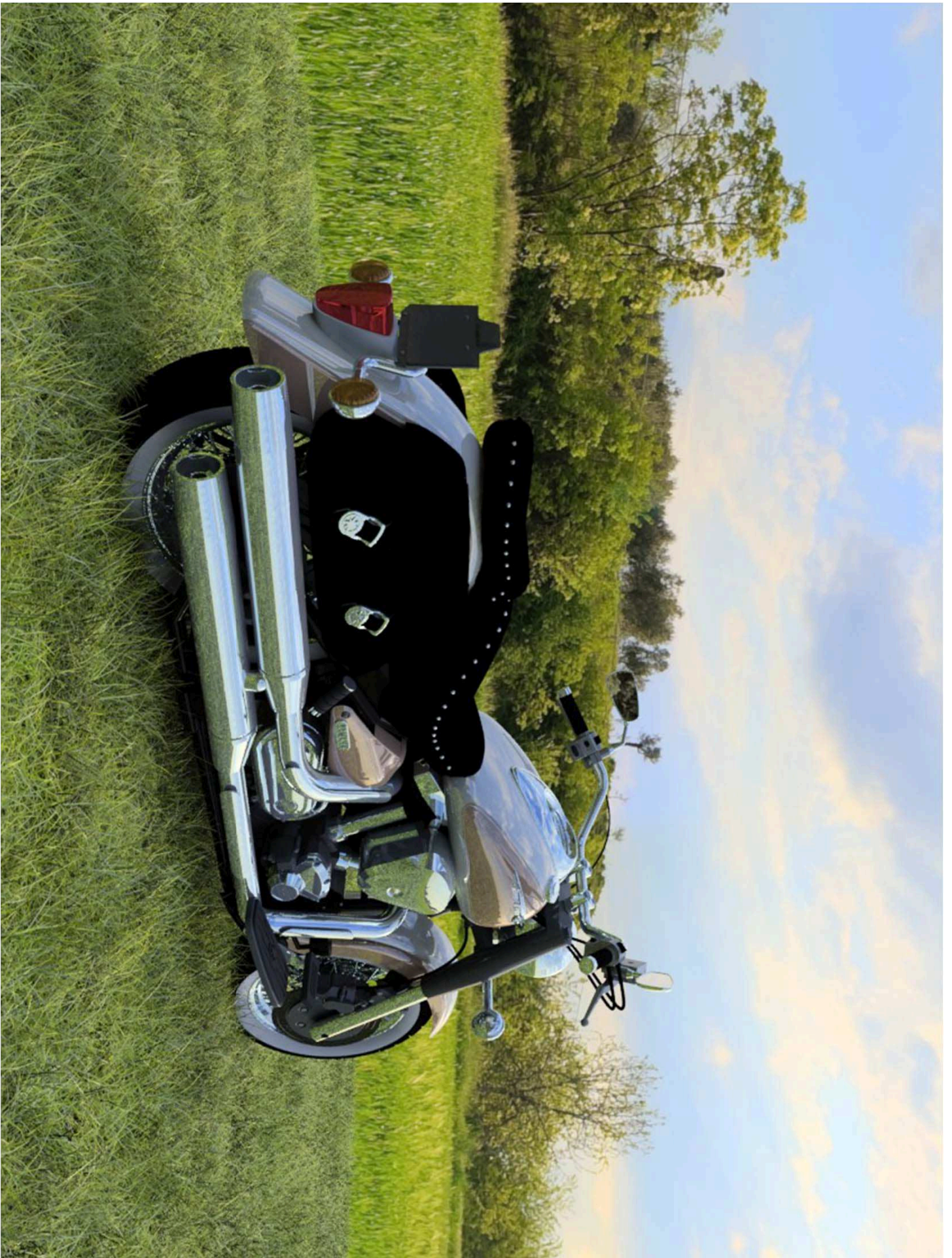
bedroom - modeled and rendered by KurtS

# Realistic Materials





KurtS



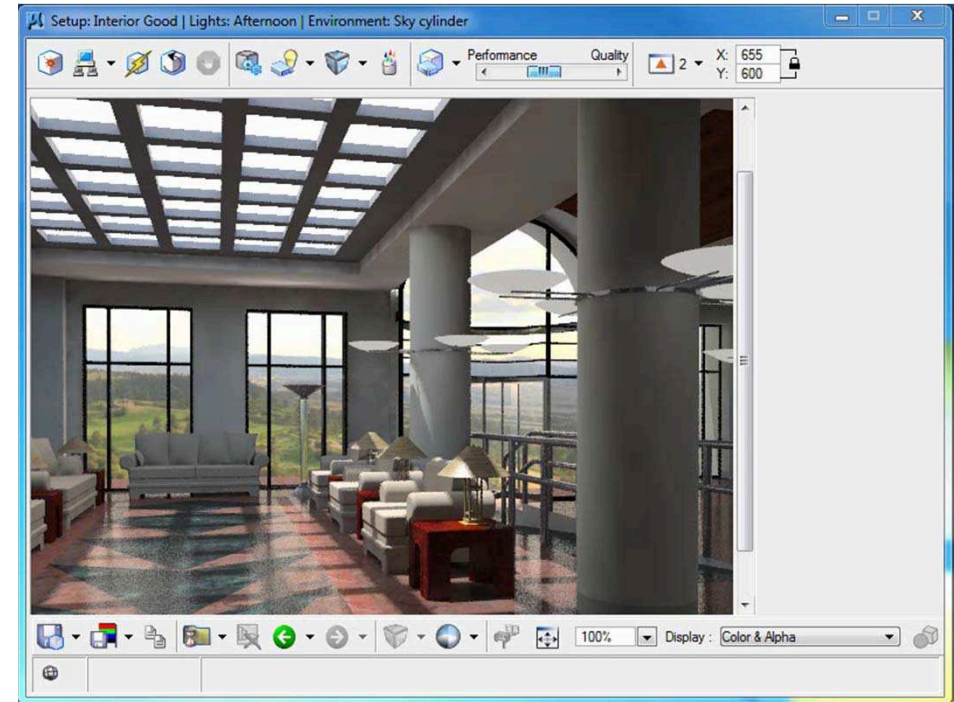
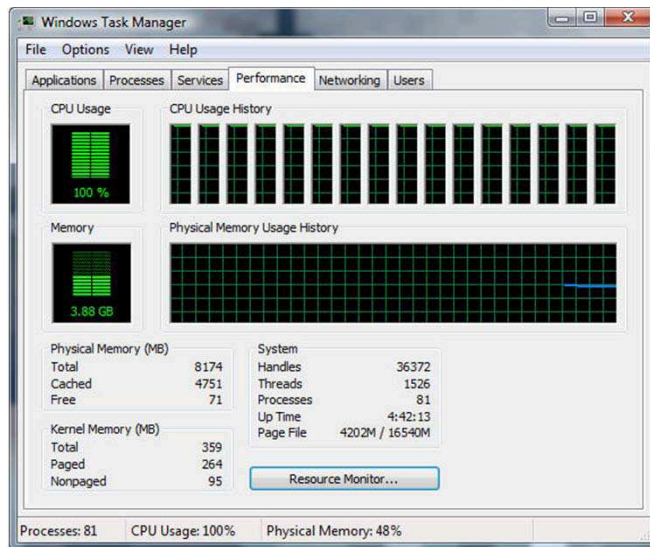


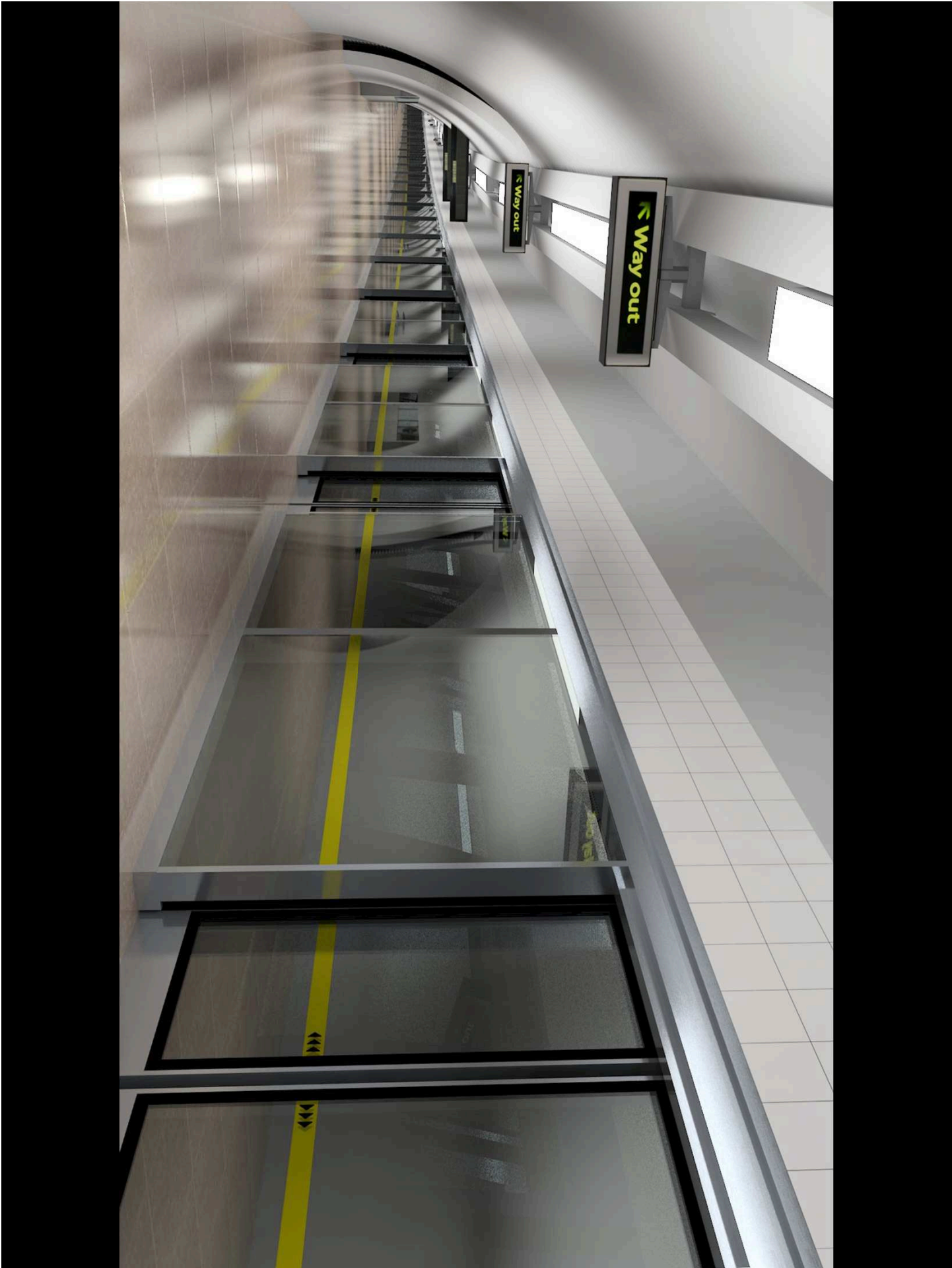


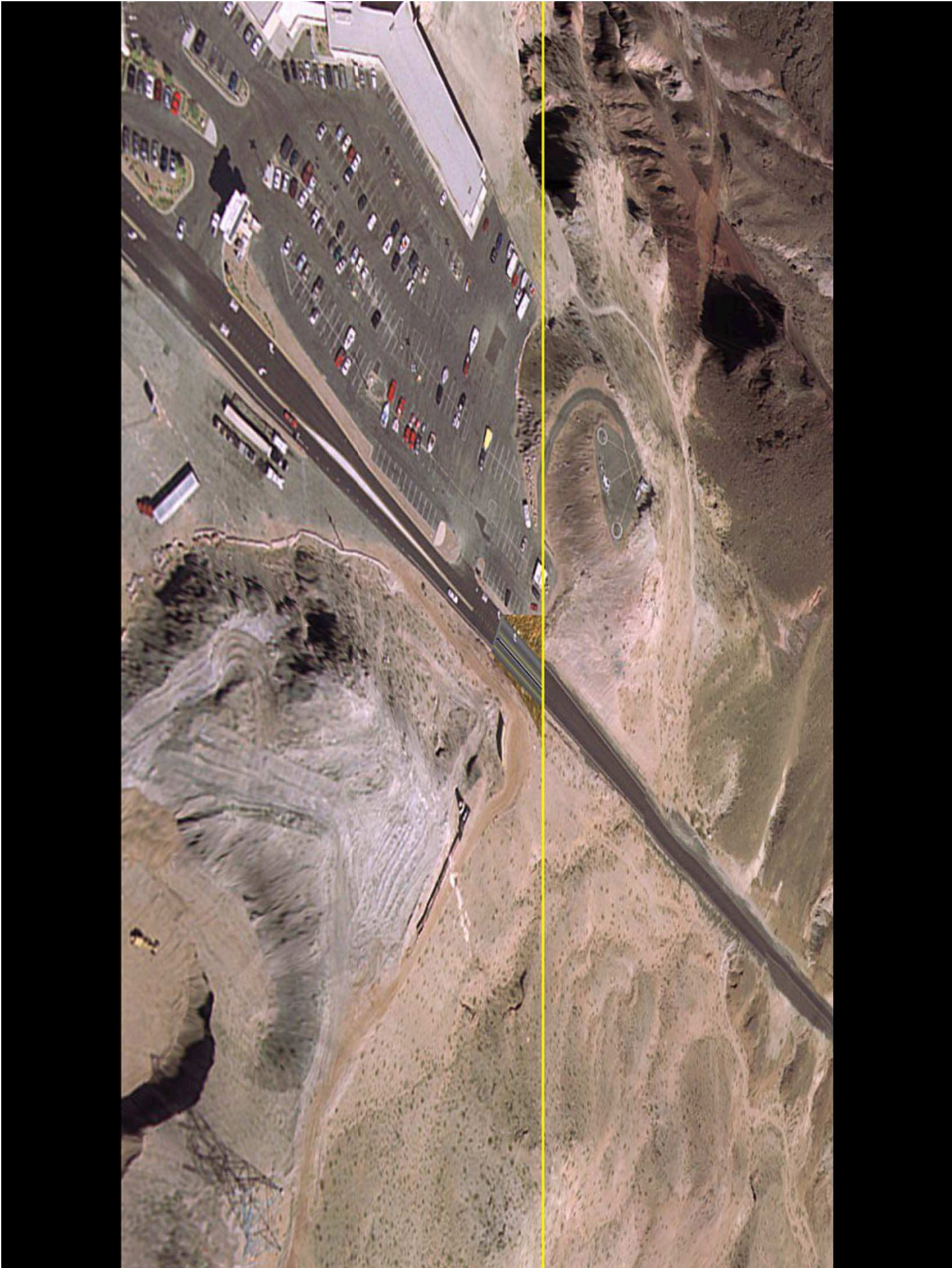


# Performance, Performance, Performance

- Native 64 Bit Engine
- Use up to 32 Cores
- Real Time Updates Onscreen







# Be Communities

- Solutions
- Products
- Bentley Programs
- Communities
- Members
- Help

Home » Products » MicroStation » MicroStation Visualization » MicroStation Visualization Community Gallery



## MicroStation Visualization

This is where you can find and contribute to discussions, ideas, and other information about MicroStation Visualization.

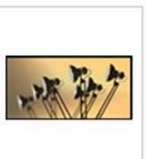
- Home
- Blog
- Forum
- Files
- Wiki

### MICROSTATION VISUALIZATION COMMUNITY GALLERY

- Recent
- Name
- Downloads
- Views
- Comments
- Rating



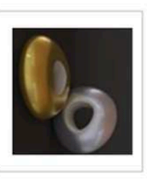
render-test-comparison  
★★★★★



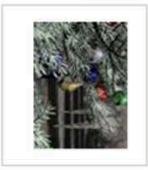
Luxolamps - 1  
★★★★★



bmw-speed.jpg  
★★★★★



gold-silver-metallic-lp3  
★★★★★



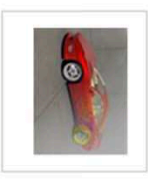
OnyxTree 4 Christmas  
★★★★★



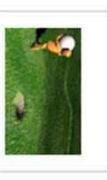
armchair3min31.jpg  
★★★★★



Electric Guitar - HDR Lighting - 5 min  
★★★★★



Fade2wireframe2 Nebula  
★★★★★



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- TAGS
- 3d rendering Architecture
  - BIM car caustics civil depth of field displacement dof exterior fur glow hard Interior kurtz luxology luxology render material microstation photorealistic rendering v8i visualization Volume Light

# The Iterative Advantage

- Save Time
  - Near real-time rendering
  - 64-bit rendering engine
  - Create time for more design review iterations
- Improve Quality
  - Photo-realistic images
  - Better design
  - Higher Project Win-Rate
- Increase Profits
  - More Efficient Teams
  - Lower Operating Costs



# MicroStation V8i (SELECTseries 2)

Improved Deployments



# MicroStation V8i (SELECTseries 2)

- Improved Deployments
- New in MicroStation V8i (SELECTseries 2)
  - Update Installs
  - Bentley Application Compatibility
  - Citrix Ready Verification



# MicroStation V8i (SELECTseries 2)

- Less Disruptive Updates and Upgrades
  - Same Licensing as V8i, and V8i (SELECT series 1)
  - Same V8 DGN format
  - Same V8 workspace and standards support
- New Update and Upgrade Options
  - Incremental enhancements will be available as Updates
    - i.e. RealDWG, Luxology, Others
  - Major releases will be delivered as complete Installs or Updates
    - (SELECTseries 1), (SELECTseries 2)..
  - Compatibility across applications will be maintained where possible

# MicroStation V8i (SELECTseries 2)

- Virtualized Deployment
  - Supported in specific virtualized environments (like Citrix XenApp) for deployment
  - Provides IT organizations and administrators with more control over software deployments in their organizations
  - Users will benefit from standardized configurations and less disruptive upgrades



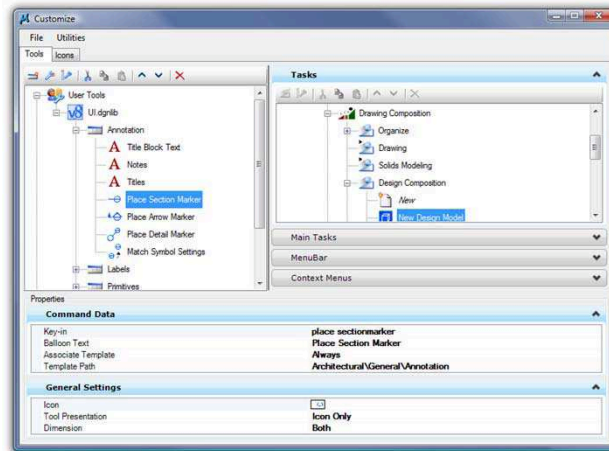
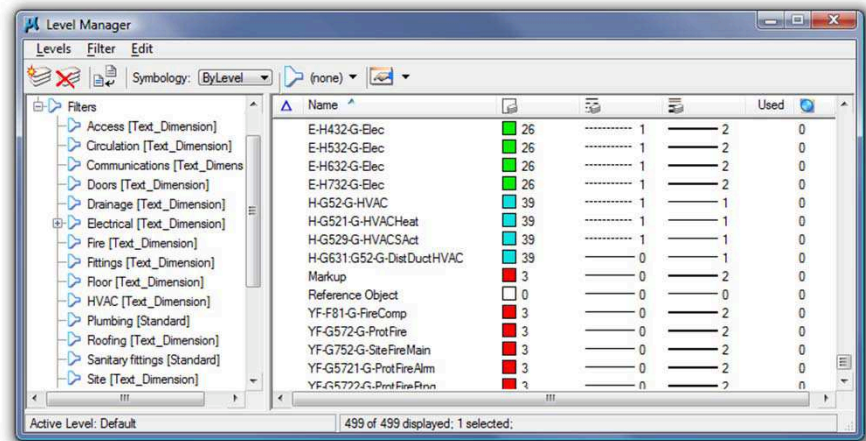
- MicroStation V8i (SELECTseries 2) is
  - Specific to Application Virtualization with Citrix XenApp
  - More specifically:
    - Citrix XenApp 5.0 64bit on Microsoft Server 2008
  - Additional certifications under consideration

# MicroStation V8i What's NOT New

**Feature**  
Same V8DGN Format

**Advantage**  
Enables the team to transition seamlessly from previous versions of software to V8i

**Benefit**  
Eliminate wasted time  
Improve upgrade experience  
Maintain high quality data



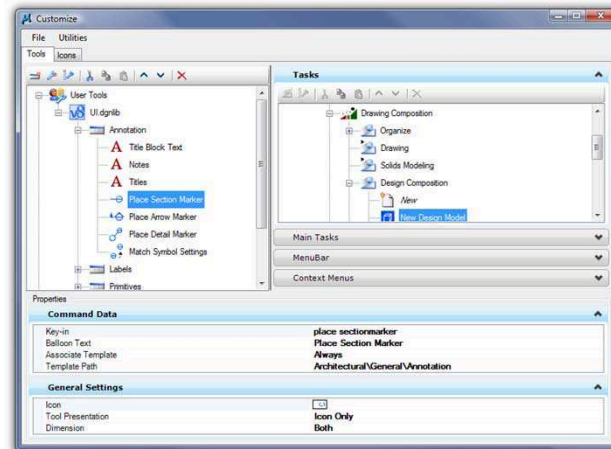
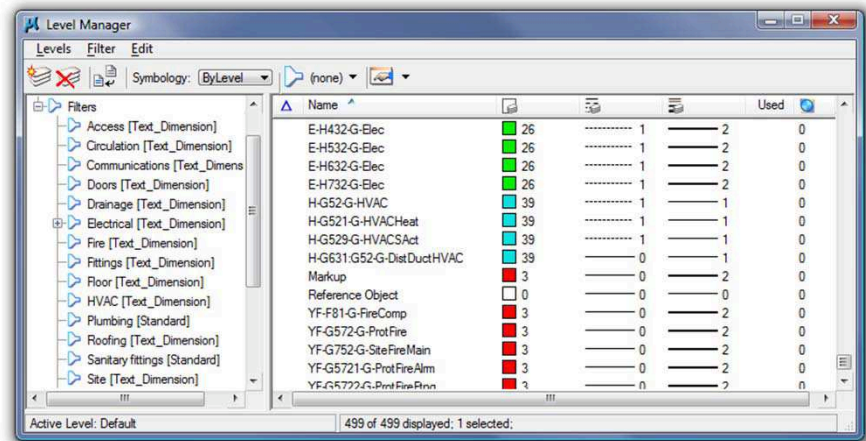
# MicroStation V8i What's NOT New

**Feature**  
Supports current standards



**Advantage**  
Streamlines the process of moving projects from older versions of software to V8i

**Benefit**  
Eliminate wasted time  
Reduce risk to project schedule  
Maintain high quality data





# Discover the Value in MicroStation V8i (SELECTseries 2)