

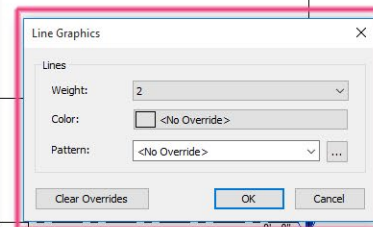
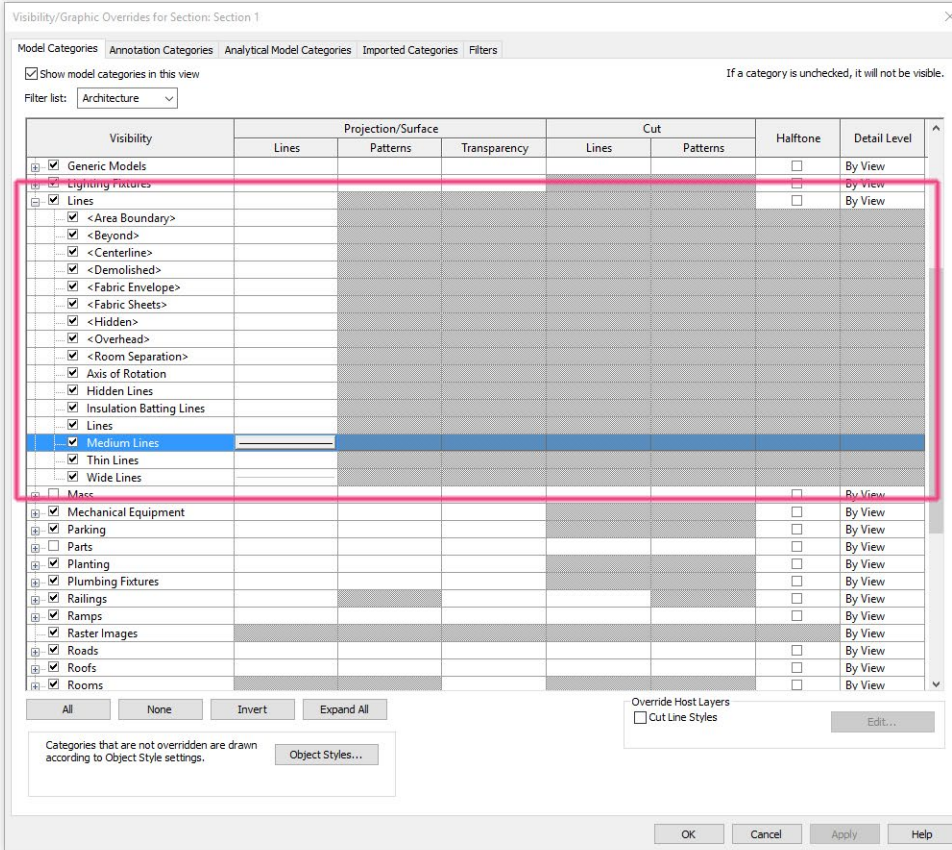
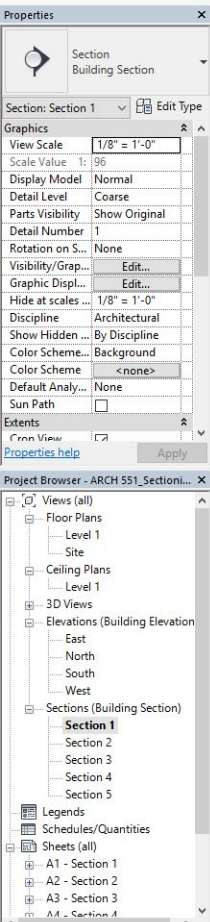
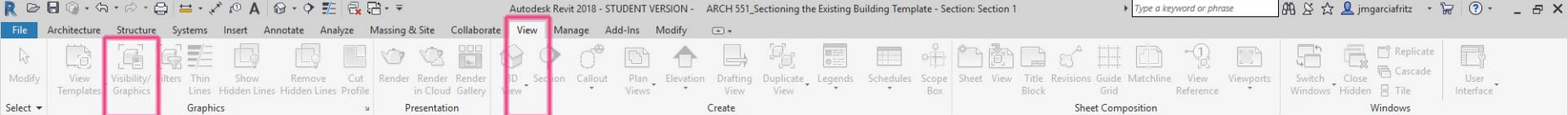
ARCH 451: PRESENTING IN REVIT
ADDING MATERIAL

MODEL LINES & VISIBILITY GRAPHICS

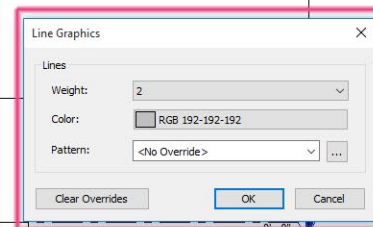
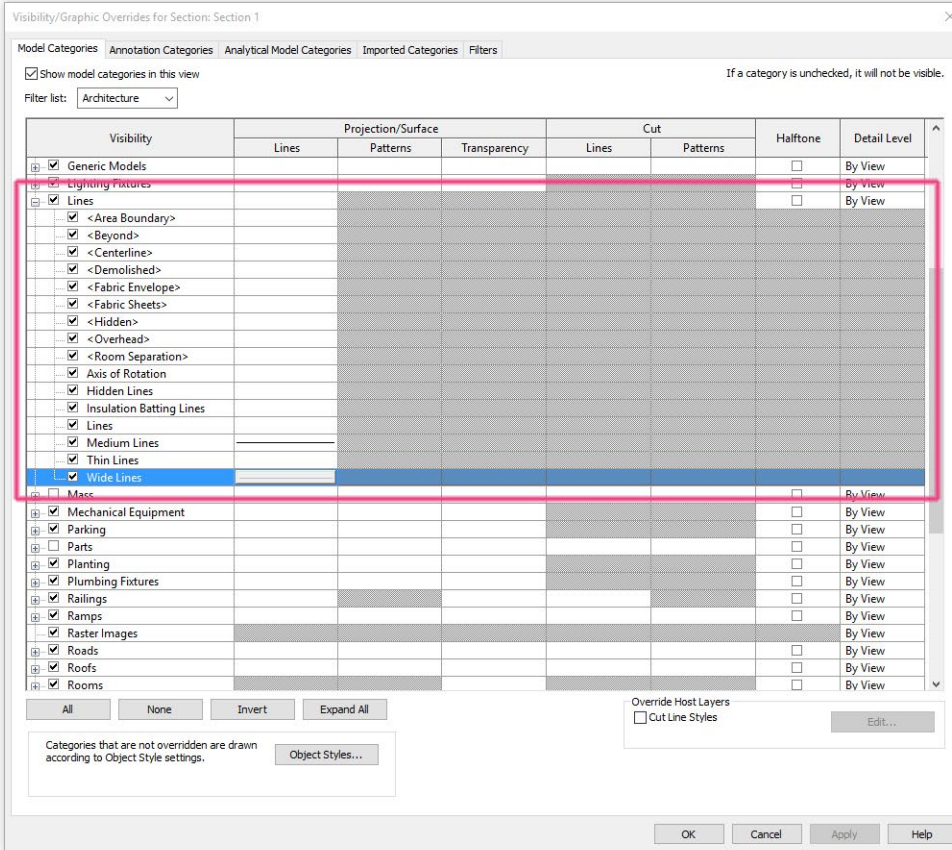
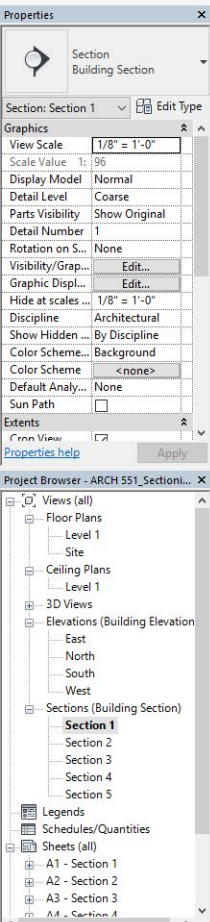
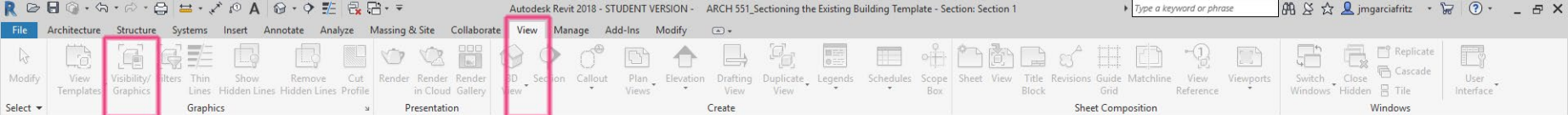
MODEL LINES

Model lines are work plane-based elements that exist in 3D space and are visible in all views.

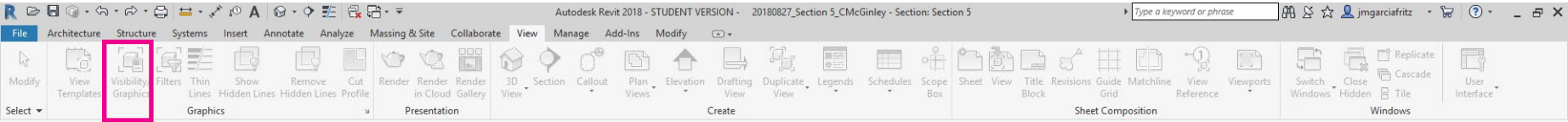
- Revit uses categories instead of layers.
- To change a line weight or line, you must edit the visibility graphics.



EXISTING PROFILE LINES: All existing profile lines should be in the *Medium Lines* category and the line weight should be 2.



HISTORIC PROFILE LINES: All historic profile lines should be in the *Wide Lines* category, the line weight should be 2, and the color RGB 192.



Properties

Section Building Section

Section: Section 5

Graphics

View Scale: 1/8" = 1'-0"

Scale Value: 1:96

Display Model: Normal

Detail Level: Fine

Parts Visibility: Show Original

Detail Number: 1

Rotation on Surfaces: None

Visibility/Graphic Overrides: Edit...

Graphic Display Settings: Edit...

Hide at scales: 1/8" = 1'-0"

Discipline: Architectural

Show Hidden: By Discipline

Color Scheme: Background

Color Scheme: <none>

Default Analysis: None

Sun Path: []

Extents: []

Crop View: []

Project Browser - 20180827_Section ...

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- Groups
- Revit Links

Visibility/Graphic Overrides for Section: Section 5

Model Categories Annotation Categories Analytical Model Categories Imported Categories Filters

☒ Show model categories in this view

Filter list: Architecture

Visibility	Projection/Surface			Cut		Halftone	Detail Level
	Lines	Patterns	Transparency	Lines	Patterns		
<input checked="" type="checkbox"/> Curtain Panels						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Curtain Systems						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Curtain Wall Mullions						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Detail Items						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Doors						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Equipment						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Fixtures						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Entourage						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Floors						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture Systems						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Generic Models						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Lighting Fixtures						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Lines						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> <Area Boundary>							
<input checked="" type="checkbox"/> <Beyond>							
<input checked="" type="checkbox"/> <Centerline>							
<input checked="" type="checkbox"/> <Demolished>							
<input checked="" type="checkbox"/> <Fabric Envelope>							
<input checked="" type="checkbox"/> <Fabric Sheets>							
<input checked="" type="checkbox"/> <Hidden>							
<input checked="" type="checkbox"/> <Overhead>							
<input checked="" type="checkbox"/> <Room Separation>							
<input checked="" type="checkbox"/> Axis of Rotation							
<input checked="" type="checkbox"/> Hidden Lines							
<input checked="" type="checkbox"/> Insulation Batting Lines							
<input checked="" type="checkbox"/> Lines							
<input checked="" type="checkbox"/> Medium Lines							
<input checked="" type="checkbox"/> Thin Lines							
<input checked="" type="checkbox"/> Wide Lines							
<input type="checkbox"/> Mass						<input type="checkbox"/>	By View

All None Invert Expand All

Categories that are not overridden are drawn according to Object Style settings. Object Styles...

Override Host Layers
☐ Cut Line Styles Edit...

OK Cancel Apply Help

Line Graphics

Lines

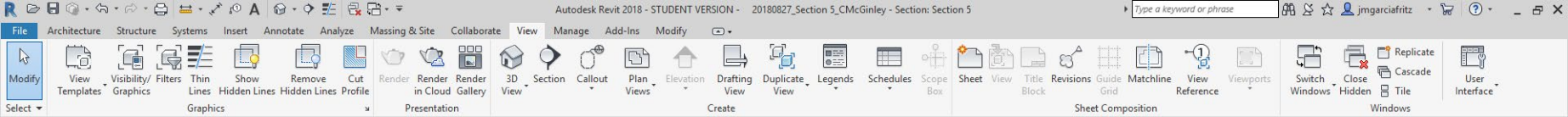
Weight: 1

Color: Black

Pattern: Dot 1/16"

Clear Overrides OK Cancel

CONSTRUCTION LINES: All construction lines should be in the *Hidden Lines* category, the line weight should be 1, and the pattern Dot 1/16".



Properties

Section Building Section

Section: Section 5 Edit Type

Graphics

View Scale 1/8" = 1'-0"

Scale Value 1: 96

Display Model Normal

Detail Level Fine

Parts Visibility Show Original

Detail Number 1

Rotation on S... None

Visibility/Grp... Edit...

Graphic Displ... Edit...

Hide at scales 1/8" = 1'-0"

Discipline Architectural

Show Hidden ... By Discipline

Color Scheme Background

Color Scheme <none>

Default Analy... None

Sun Path ☐

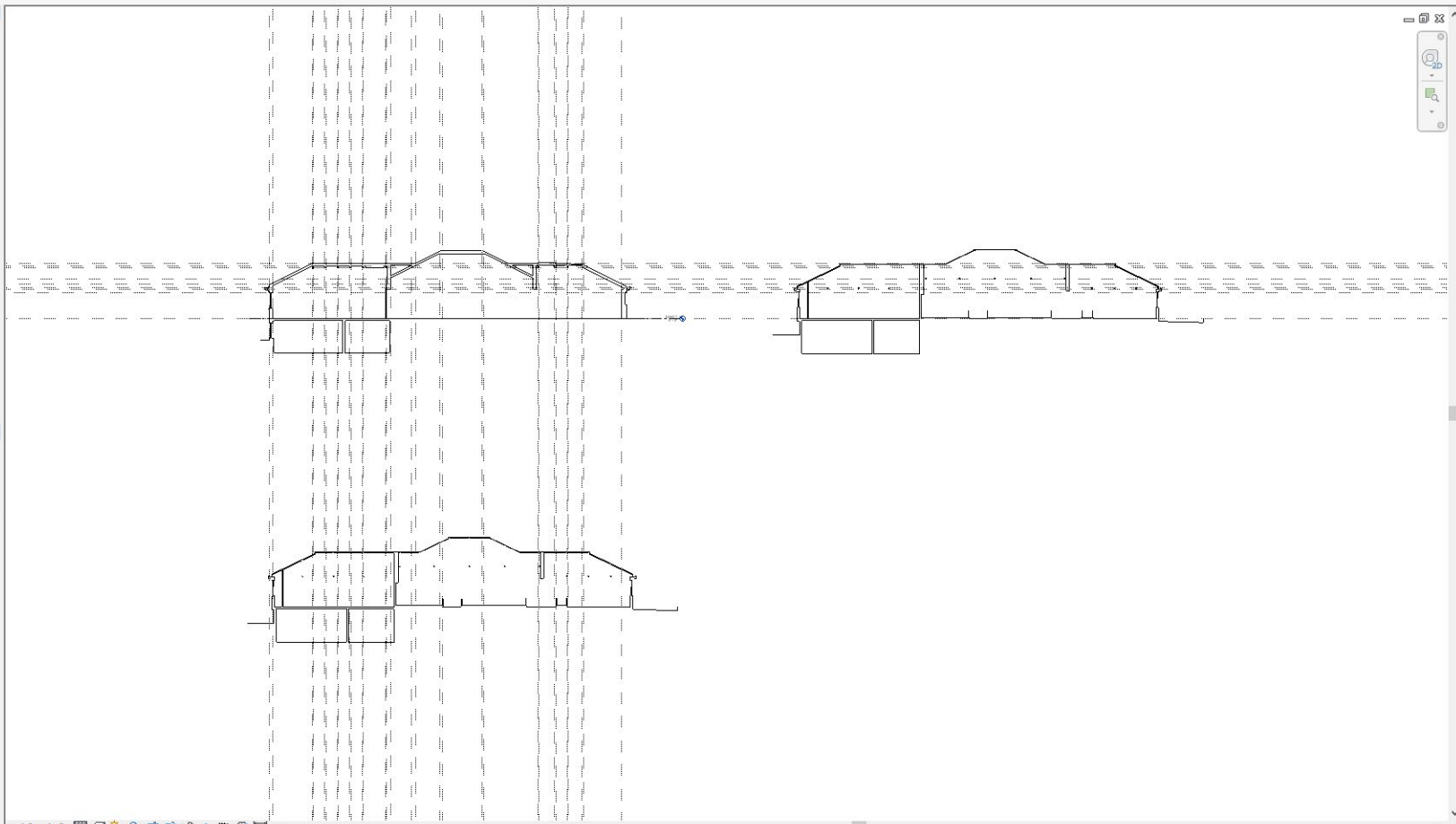
Extents

Crop View ☐

[Properties help](#) Apply

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Click to select, TAB for alternates, CTRL adds, SHIFT unselects.

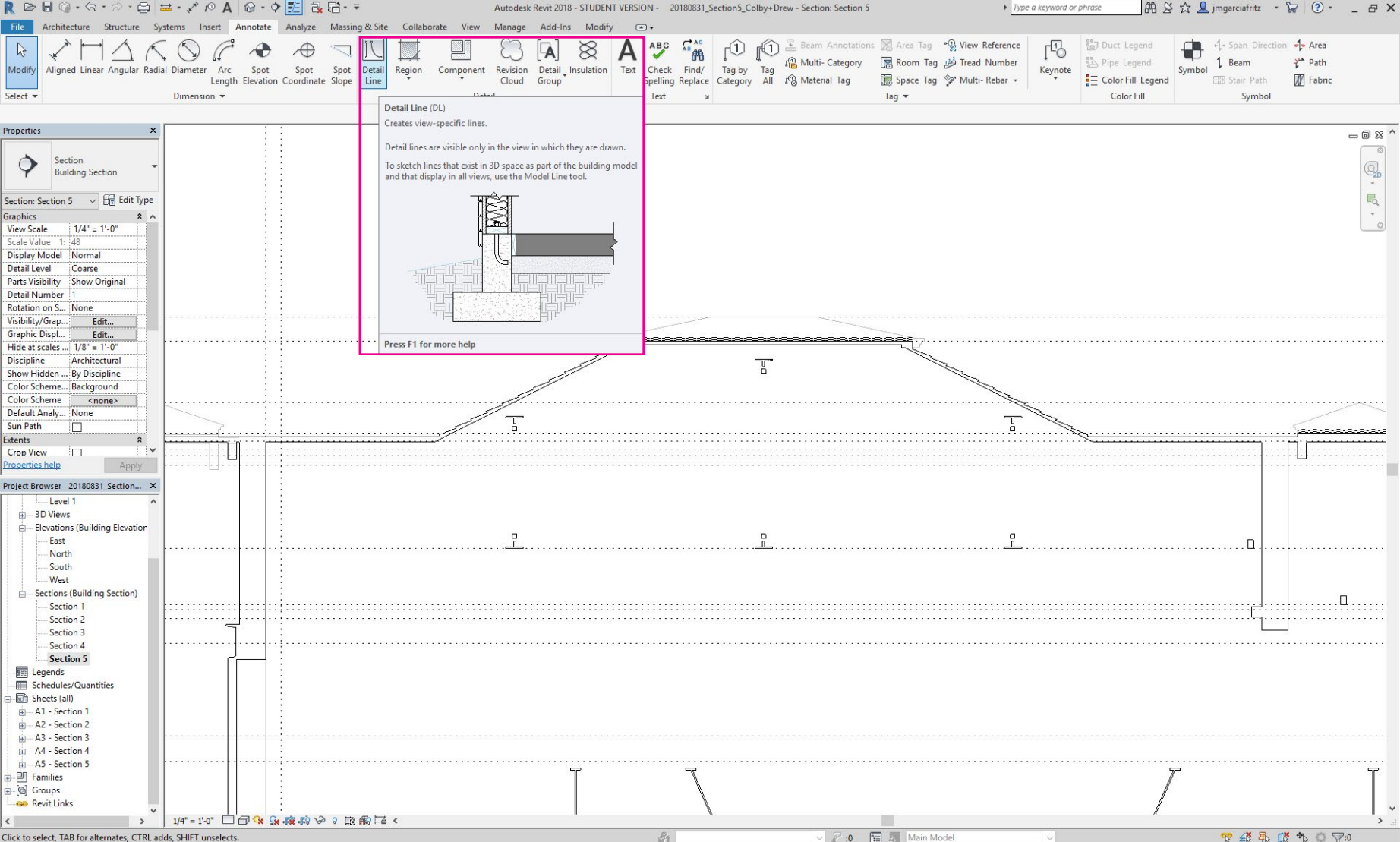
"Draw" (Model) CONSTRUCTION LINES across all three sections in 3D to compare measurements and establish notation.

DETAIL LINES & MATERIAL

DETAIL LINES

Detail lines are work plane-based elements that exist in 2D space and are visible in the view they are “drawn” (modeled) in.

- Use the Detail Line tool to draw detail lines to provide additional information to the model geometry in detail and drafting views.
- Create a view-specific graphic that fills an area with a pattern. You can use filled regions when detailing a view or creating an annotation family.



MATERIAL LINES: Draw the border of material using Detail Lines. The Linestyle should be "thin".

Properties

New Lines (Thin Line) Edit Type

Graphics

Line Style Thin Lines

Detail Line

Properties help Apply

Project Browser - 20180831_Section...

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Visibility/Graphic Overrides for Section: Section 5

Model Categories Annotation Categories Analytical Model Categories Imported Categories Filters

☒ Show model categories in this view If a category is unchecked, it will not be visible.

Filter list: Architecture

Visibility	Projection/Surface			Cut		Halftone	Detail Level
	Lines	Patterns	Transparency	Lines	Patterns		
<input checked="" type="checkbox"/> Doors						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Equipment						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Electrical Fixtures						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Entourage						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Floors						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Furniture Systems						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Generic Models						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Lighting Fixtures						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Lines						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> <Area Boundary>							
<input checked="" type="checkbox"/> <Beyond>							
<input checked="" type="checkbox"/> <Centerline>							
<input checked="" type="checkbox"/> <Demolished>							
<input checked="" type="checkbox"/> <Fabric Envelope>							
<input checked="" type="checkbox"/> <Fabric Sheets>							
<input checked="" type="checkbox"/> <Hidden>							
<input checked="" type="checkbox"/> <Overhead>							
<input checked="" type="checkbox"/> <Room Separation>							
<input checked="" type="checkbox"/> Axis of Rotation							
<input checked="" type="checkbox"/> Existing Building							
<input checked="" type="checkbox"/> Hidden Lines							
<input checked="" type="checkbox"/> Insulation Batting Lines							
<input checked="" type="checkbox"/> Lines							
<input checked="" type="checkbox"/> Medium Lines							
<input checked="" type="checkbox"/> Thin Lines							
<input checked="" type="checkbox"/> Wide Lines							
<input type="checkbox"/> Mass						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Mechanical Equipment						<input type="checkbox"/>	By View
<input checked="" type="checkbox"/> Parking						<input type="checkbox"/>	By View
<input type="checkbox"/> Parts						<input type="checkbox"/>	By View

All None Invert Expand All

Override Host Layers ☐ Cut Line Styles Edit...

Categories that are not overridden are drawn according to Object Style settings. Object Styles...

OK Cancel Apply Help

Line Graphics

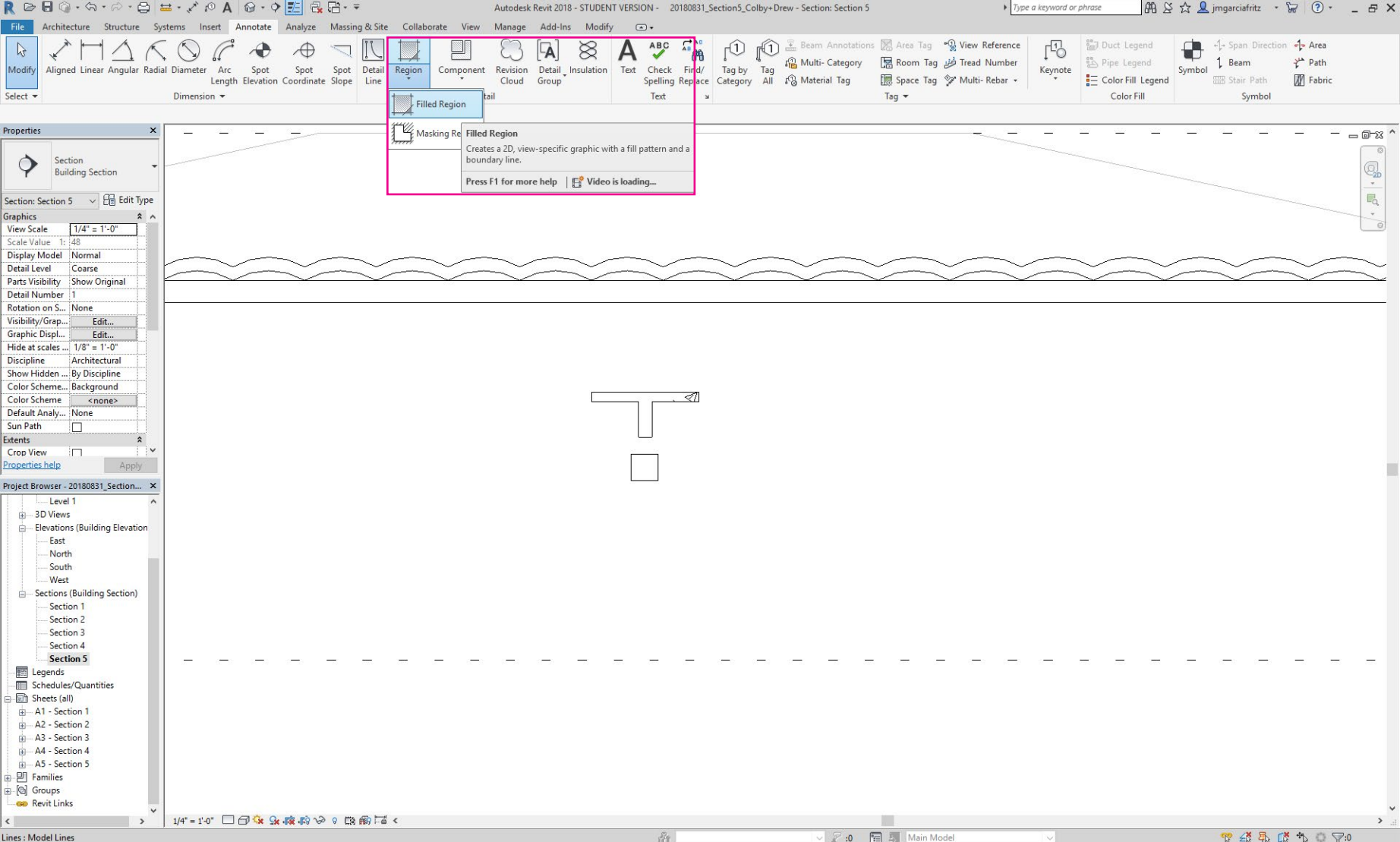
Lines

Weight: 1

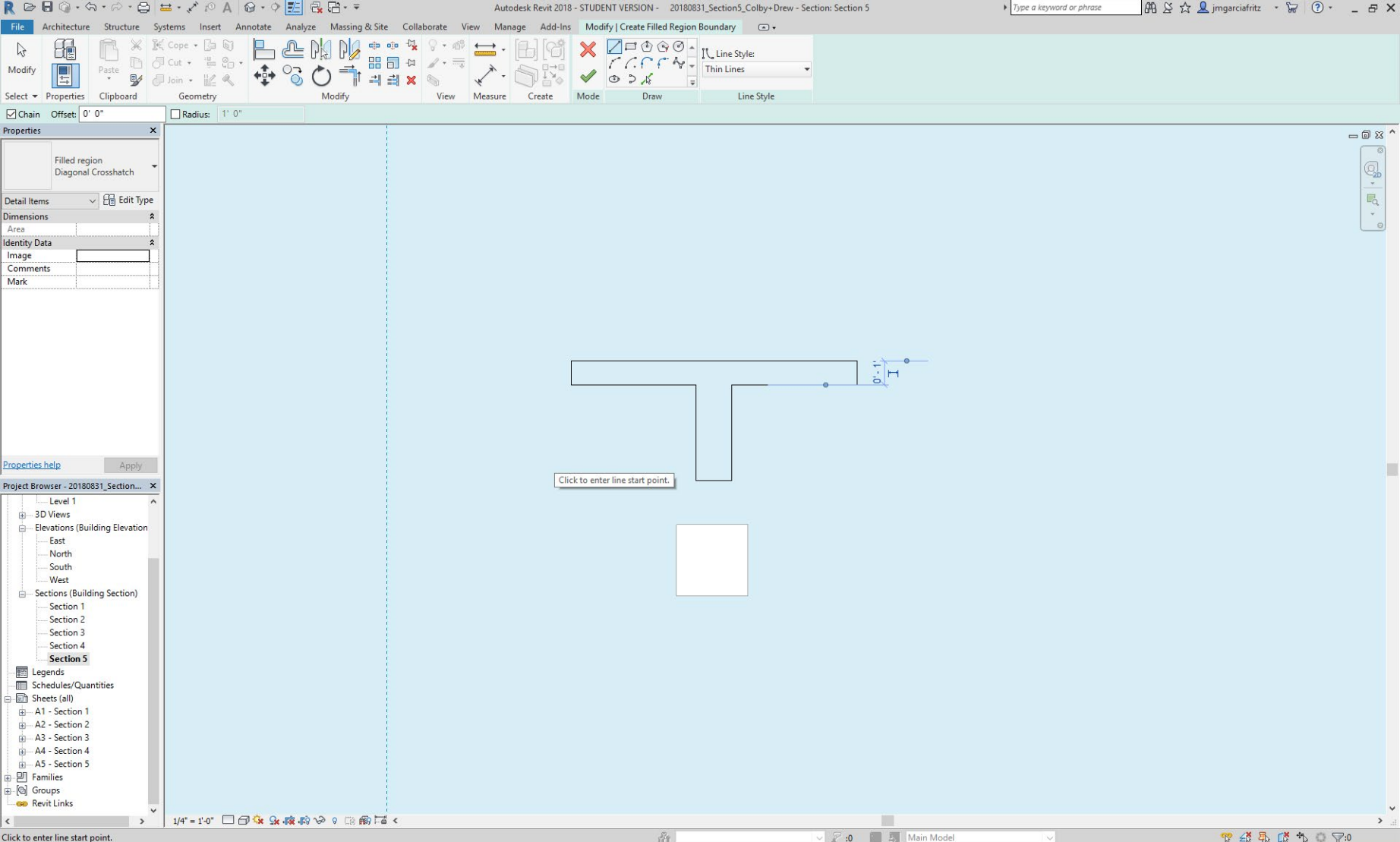
Color: <No Override>

Pattern: <No Override>

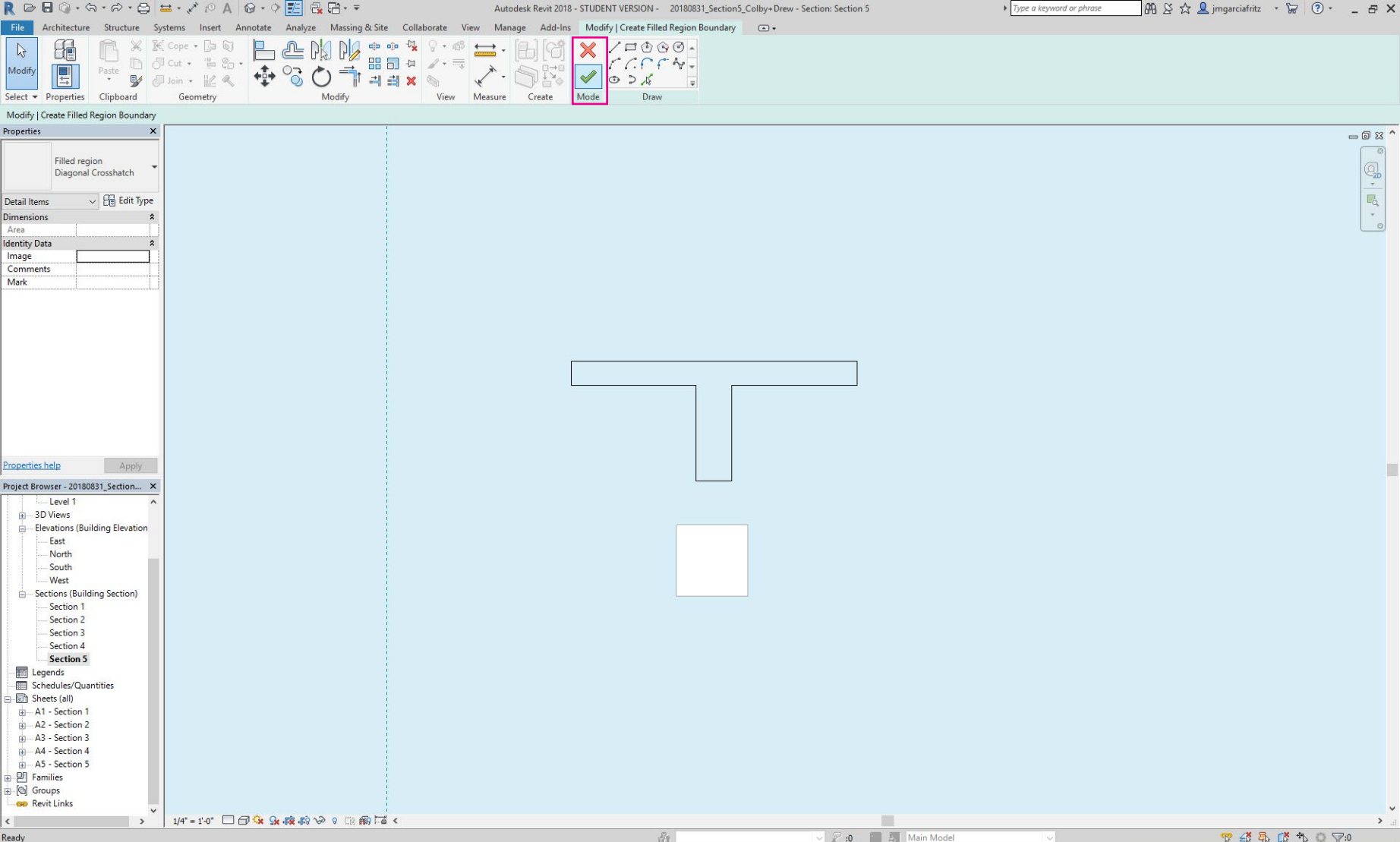
Clear Overrides OK Cancel



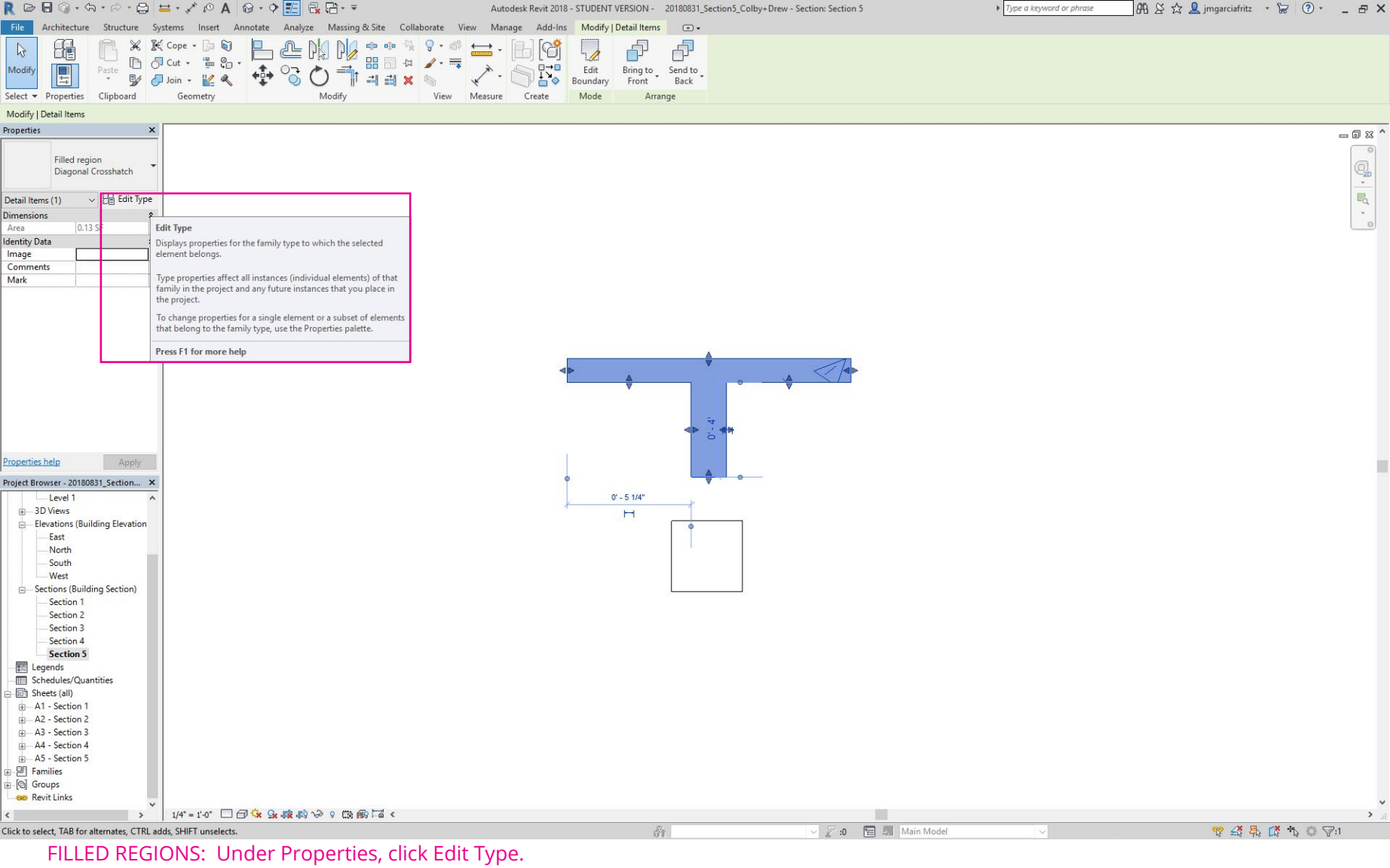
FILLED REGIONS: Go to Annotate > Region > Filled Region to make filled regions.



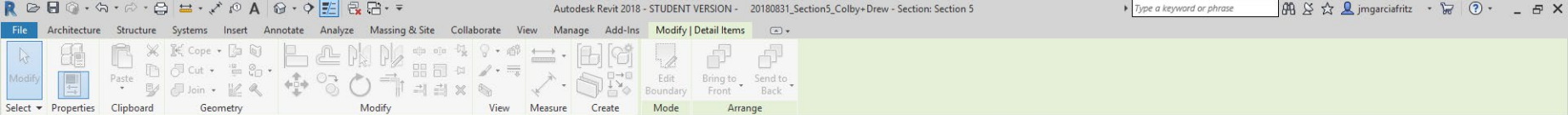
FILLED REGIONS: “Draw” (model) the filled region using thin lines.



FILLED REGIONS: To accept, click the green check mark under "mode".



FILLED REGIONS: Under Properties, click Edit Type.



Modify | Detail Items

Properties

Detail Items (1) Edit Type

Dimensions

Area 0.13 SF

Identity Data

Image

Comments

Mark

Properties help Apply

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Type Properties

Family: System Family: Filled region Load...

Type: Diagonal Crosshatch Duplicate... Rename...

Type Parameters

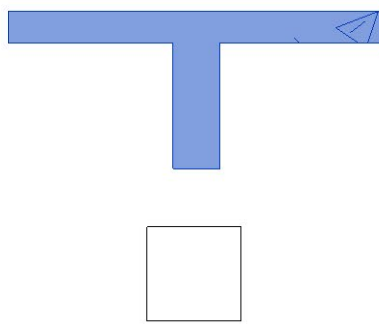
Parameter	Value
Graphics	
Fill Pattern	Steel [Drafting]
Background	Opaque
Line Weight	1
Color	Black
Structural	
Section Shape	Not Defined
Identity Data	
Type Image	
Model	
Manufacturer	
Type Comments	
URL	
Description	
Section Name Key	
Assembly Description	
Assembly Code	
Type Mark	
Cost	

<< Preview OK Cancel Apply

Name

Name: Diagonal Crosshatch_ARCH 551

OK Cancel

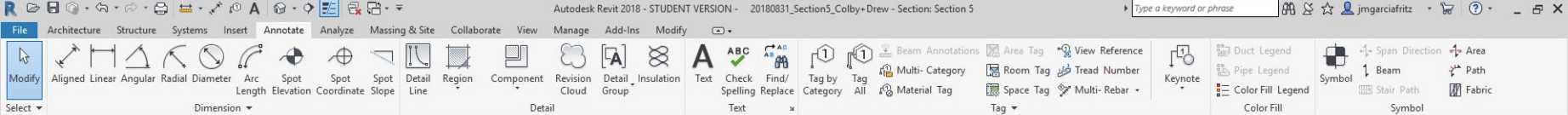


Ready

1/4" = 1'-0"

Main Model

FILLED REGIONS: Duplicate the Fill Pattern by adding_ARCH 451 (or similar) to the end.



Properties

Section Building Section

Section: Section 5 [Edit Type](#)

Graphics

View Scale: $1/4" = 1'-0"$
Scale Value: 1:48

Display Model: Normal
Detail Level: Coarse
Parts Visibility: Show Original
Detail Number: 1
Rotation on S...: None
Visibility/Grp...: [Edit...](#)
Graphic Displ...: [Edit...](#)
Hide at scales ...: $1/8" = 1'-0"$
Discipline: Architectural
Show Hidden ...: By Discipline
Color Scheme...: Background
Color Scheme: <none>
Default Analy...: None
Sun Path: ☐

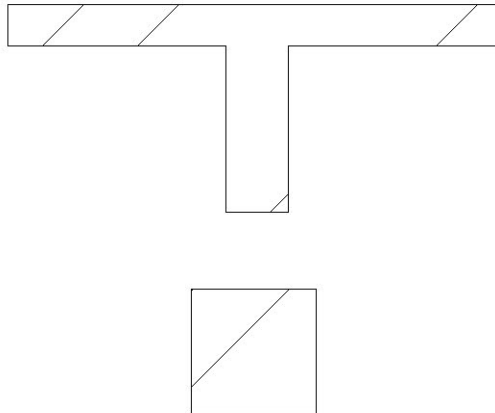
Extents

Crop View: ☐

[Properties help](#) [Apply](#)

Project Browser - 20180831_Section...

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MATERIALS

- The following materials will need their own Fill Type:

- Steel
- Masonry
- Diagonal Up (for earth)
- Concrete
- Wood