

Fall 2011

Sheet.Layout.2 SETTING UP SHEETS - THE FIRST MOCKUP SET

Overview: Now that we have enough of the building created lets go through the process of mocking up as many sheets as we can. We can setup the Floor Plans, the Reflected Ceiling Plans (RCP), Interior and Exterior Elevations and Schedules.

Sheet Numbering: Since we are working in Design Development we have not yet fully developed a complete list of the drawing sheets we will need. To plan out a good numbering system we need to anticipate changes and the addition of new sheets.

If we number with a simple system **A1, A2, A3**, etc. and start with 3 floor plans, 3 ceiling plans and 4 elevations we might use sheet numbers **A1-3** for the plans, **A4-6** for the ceiling plans and **A7-10** for the elevations. If later we added an additional floor plan or we wanted to add the roof plan between the floor plans and the ceiling plans we would want the numbering to be sequential. To insert these two additional sheets into the sequence we would want to use **A4 & A5**, numbers already in use causing us to renumber the existing sheets. Any details that reference these sheets would need to be re-keyed.

Grouping Sheets: A more flexible system that can better accommodate changes uses the strategy of grouping sheets by category. For example all the **A-100** series would be for floor plans, the **A-200** series would be for reflected ceiling plans, **A-300** for the exterior elevations, etc.

In addition we would use similar numbers for the corresponding first floor plan and ceiling plans by using the numbers **A-101** and **A-201**. In a similar fashion the drawings created by the structural engineer would follow the system **S-101** for the first floor structure, S-102 for the second floor, etc. In any case our goal is to setup a number system that makes sense and is easy to follow.

Sample Numbering:

- A-101** -First Floor Plan
- A-102** -Second Floor Plan
- A-103** -Third Floor Plan

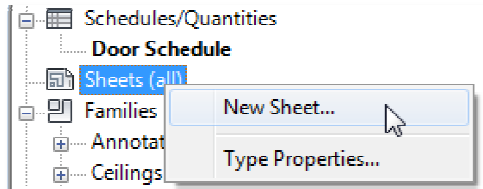
- A-201** -First Floor RCP (Reflected Ceiling Plan)
- A-202** -Second Floor RCP
- A-201** -Third Floor RCP

- A-301** -North Elevation
- A-302** -South Elevation
- A-303** -East Elevation
- A-304** -West Elevation

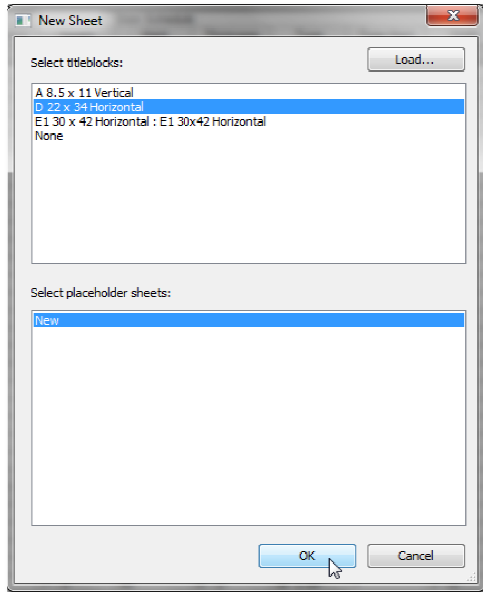
- S-101** -First Floor Structural

Fall 2011

Create Sheets: Sheet > Right Click > New Sheet in the Project Browser

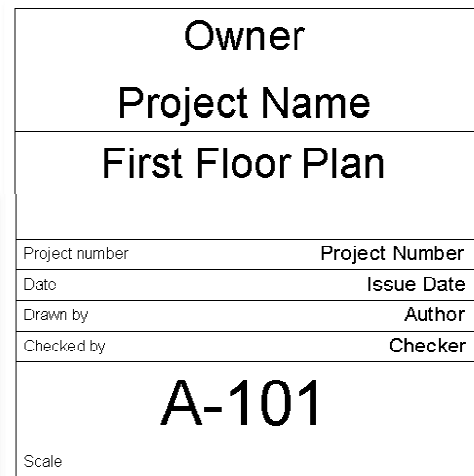
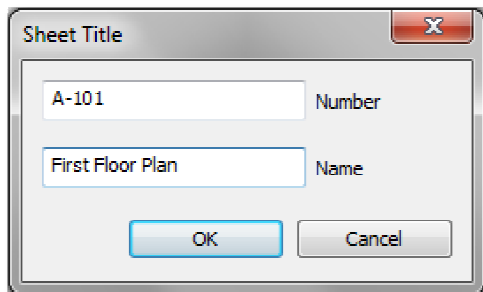


Load the Titleblock family if you do not see your chosen size.



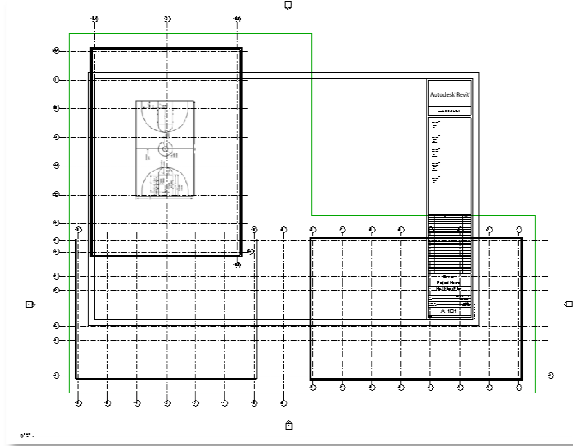
22 x 34 Horizontal:

A101 - 1st Floor Plan: Number the new sheet **A-101** and name it **First Floor Plan**.



Fall 2011

Add Floor Plan: With the sheet visible on the screen scroll up in the **project browser** until you find **Level 1**. *Drag this sheet from the browser and onto the sheet.*

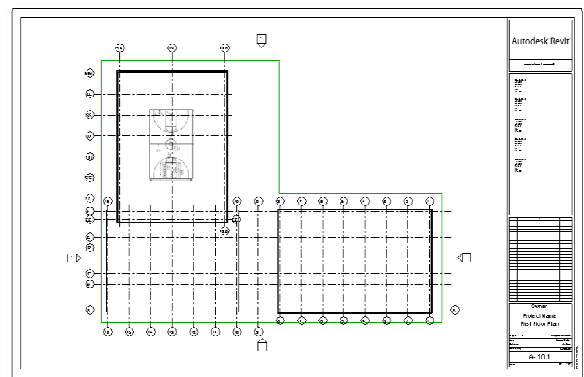
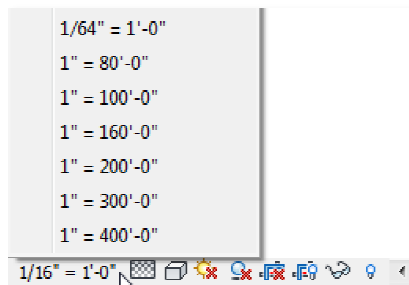


Notice that the first floor plan at a scale of 1/8" = 1'-0" and showing all three parts of the building (the Modular Lab Building, the Atrium and the Multiuse Gym/Auditorium) does not fit on a 22" x 34" sheet.

How can we fix this?

- Option 1:** Use a larger sheet. Change the standard sheet size to a larger sheet
- Option 2:** Used a smaller scale. (This solution will lose some detail) Change 1/8" to 1/16"
- Option 3:** Use Part plans and Break up the drawing into three sheets. A-101.1, 101.2, A-101.3 or A-101.a, A-101.b, A-101.c, etc. or some similar number system.
- Option 4:** A combination of Options 2 & 3. Use a smaller scale plan as a key plan and part plans to show more details. The overall smaller scale plan shows the relationship of the three separate sections of the building and the part plans can still show the details.

Changing scale: At the bottom of the any view you can set the scale. If you change the scale of the plan to 1/16" = 1'-0" then it would fit properly on a 22" x 34" sheet.



Fall 2011

Overview: Format the first floor plan both showing the entire plan of all three buildings (Multi-Use, Atrium & Modular Lab Building) at 1/16" and then 3 additional sheets with each building separately at 1/8" scale. First you will need to setup the views and then you will need to format them on the TitleBlocks.

Overall Plan:

First Floor 1/16": Format a 1/16" scale first floor plan that shows all three buildings (Multi-Use, Atrium & Modular Lab Building) on a single 22 x 34 sheet

Step 1: **Right Click** on Level 1 and select > **Duplicate**.
Rename the new view **Level 1 - 1/16" Scale**.

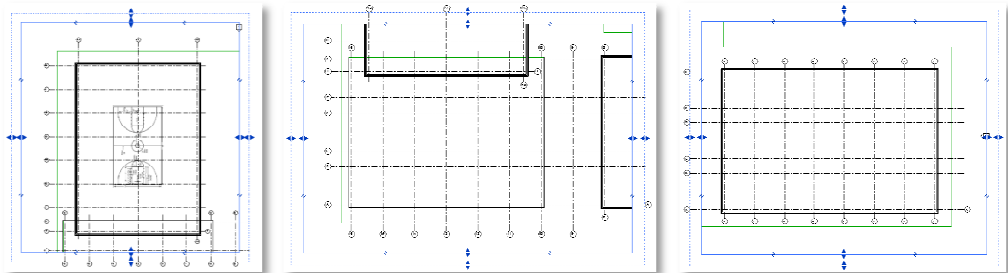
Step 2: Create a first floor sheet. **Project Browser > Sheet > New Sheet > 22 x 34**
Drag view "Level 1- 1/16 Scale" onto the **Titleblock**

Part Plans:

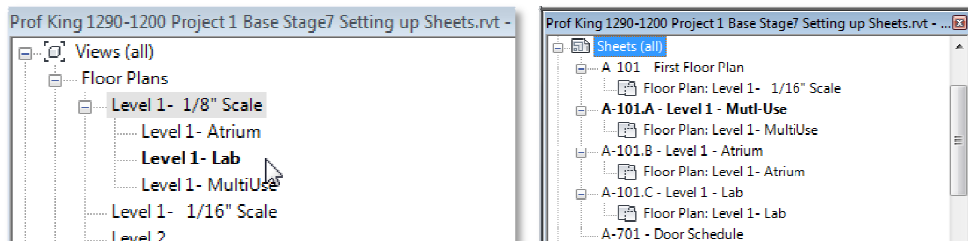
First Floor 1/8": Create 3 additional sheets at 1/8" scale for the first floor with each of the three buildings shown separately.

Step 1: **Right Click** on **Level 1** and select > **Duplicate as dependent**.
Do this three (3) times once for each of the three buildings.
Name each of the views: **Level 1 - Mutli-Use, Level 1 - Atrium & Level 1 - Lab**

Step 2: Crop each of the views to show only the portion that will show on the sheet.



Step 3: Create three additional sheets one for each of the views.
Drag each view onto the corresponding sheet.



Repeat: Repeat the process to create plans for Level 2. Then create your **Typical Lab Floor**, your **Roof Plans** and your **Exterior Elevations**, etc.

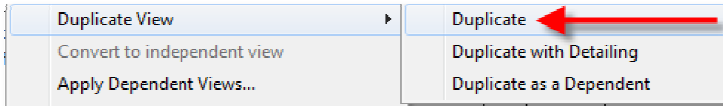
Numbering System: What will be your comprehensive sheet naming and number system?

Fall 2011

Project Browser: In the project browser right click to create duplicate views

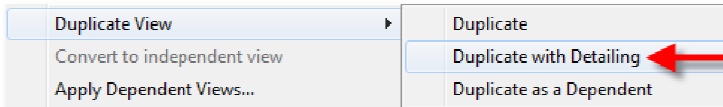


Duplicate: Duplicates and creates an independent view



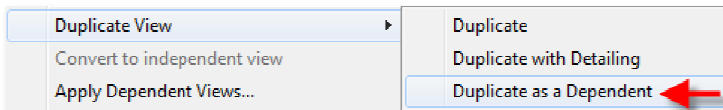
Duplicate w/Detailing:

Duplicates a view but also includes any detail geometry including detail components, detail lines, detail groups and filled regions.



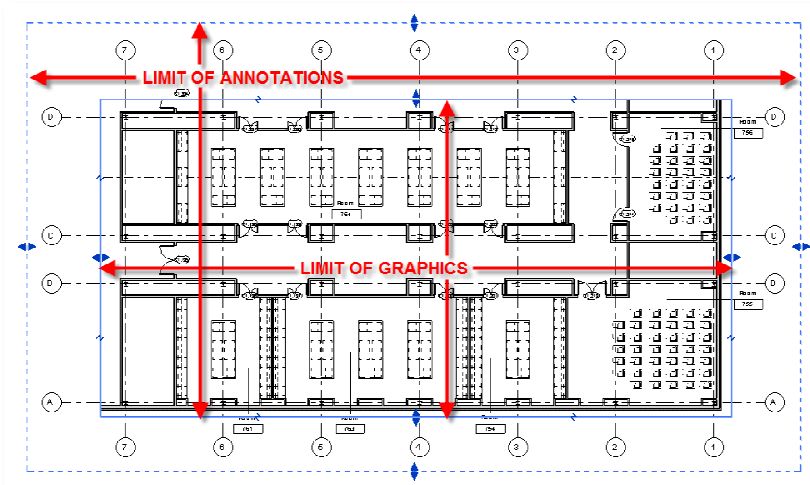
Duplicate as Dependant:

Dependant views rely on their "host view" for their scale and VG Visibility Graphics. The original view and all the dependant views are the same scale and display the same combination of layers.



Cropping Views:

Dependant views can also be cropped where other view cannot. The inner rectangle determines the limits of drawn information (walls, doors, etc) and the outer rectangle determines the limits of annotation information.



Fall 2011

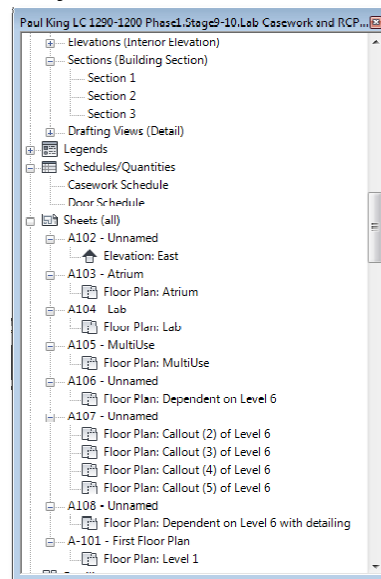
Sheet.Layout.3: TESTING YOUR SHEET NUMBERING SYSTEM

- Overview:** Complete a series of exercises that will help to evaluate your numbering. The goal is to create a numbering and naming system that accounts for the complexity of a project that includes three buildings but maintains a level of simplicity that others can follow.
- Test 1:** Give your numbering system without titles to another team. Ask them to see if they can add titles that match your system.
- Test 2:** Give your numbering system without titles to another team. Ask them to see if they create the correct legend based on your system.
- Test 3:** Give your legend to another team and ask them to write out a numbering and naming system that matches.
- Balance:** The system has to work on the Titleblock, with section and callout references and still make sense in Revit's project browser.

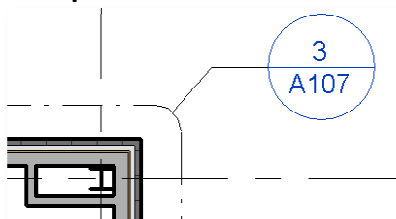
Titleblock

<p>NYCCT New Academic Complex</p>	
<p>First Floor Plan</p>	
Project Number	2011-01
Date	Issue Date
Drawn By	Author
Checked By	Checker
<p>A-101</p>	
Scale	1/16" = 1'-0"

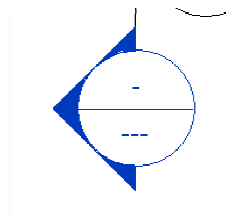
Project Browser



Part plan callout



Section



Elevations

