

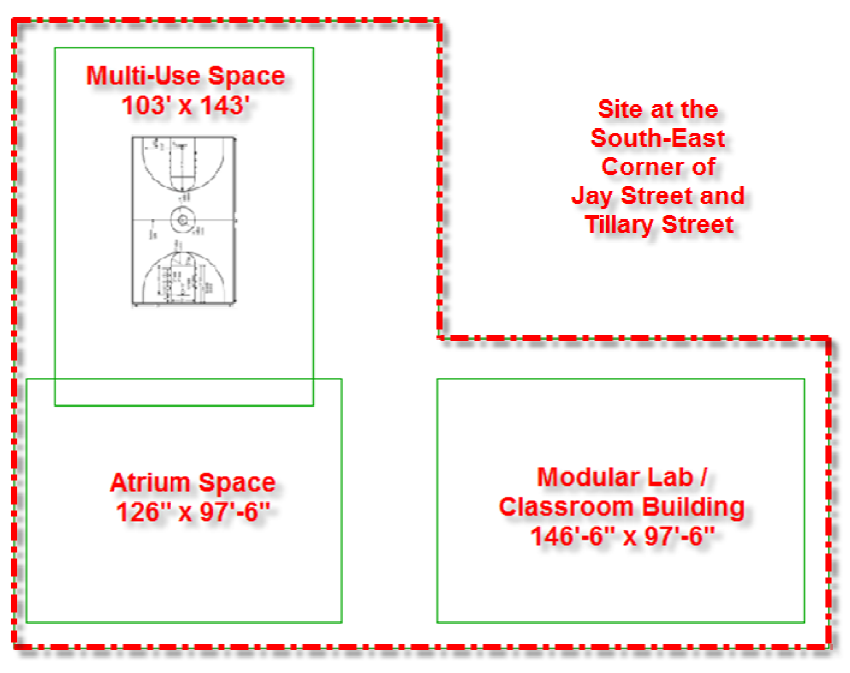
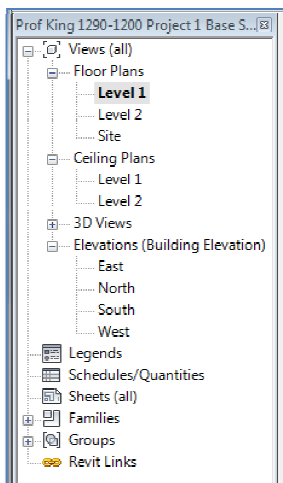
Fall 2011

Bldg: Grid

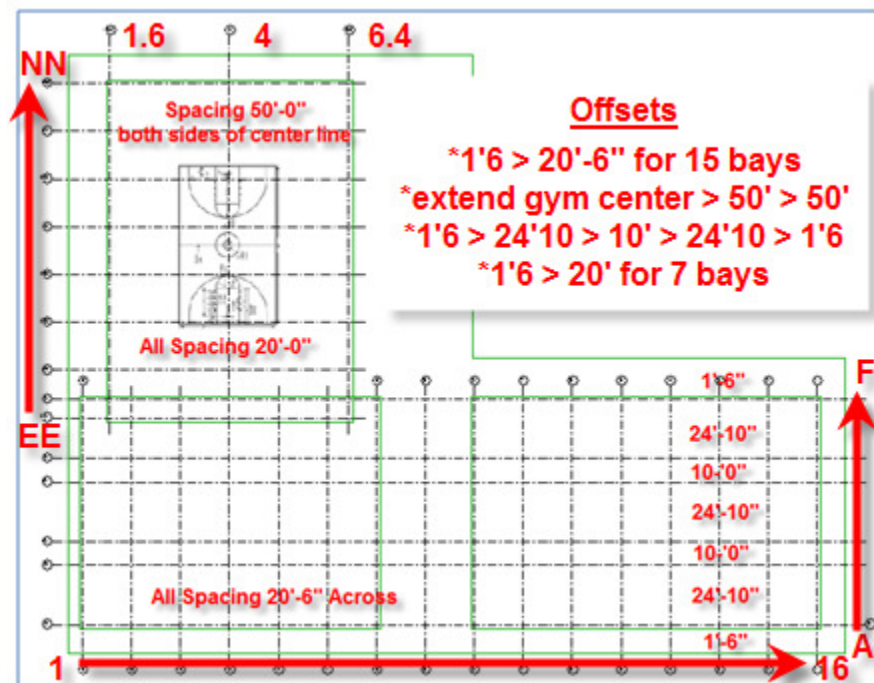
DEVELOPMENT OF THE STRUCTURAL GRID

Grid Layout: We will layout the structural grid working from the building outlines of each of the three main buildings. Note that the project currently contains only 2 levels.

Project Browser:



Spacing: The column spacing is indicated below:



Fall 2011

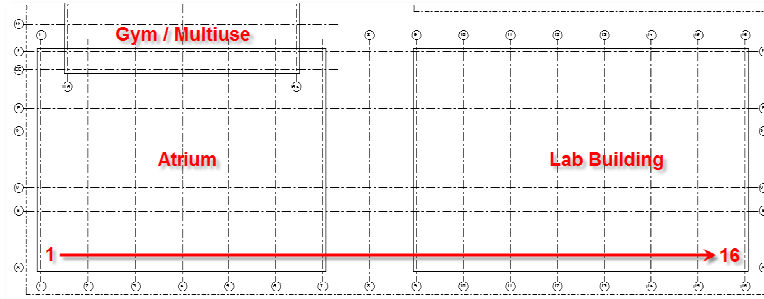
Overview: Layout the structural grid for the Modular Lab Building, the Atrium space and the Multi-use Gymnasium/Auditorium. Follow these steps:

Select Level 1: From the project browser select "**Level 1**"

1: Lab / Atrium:

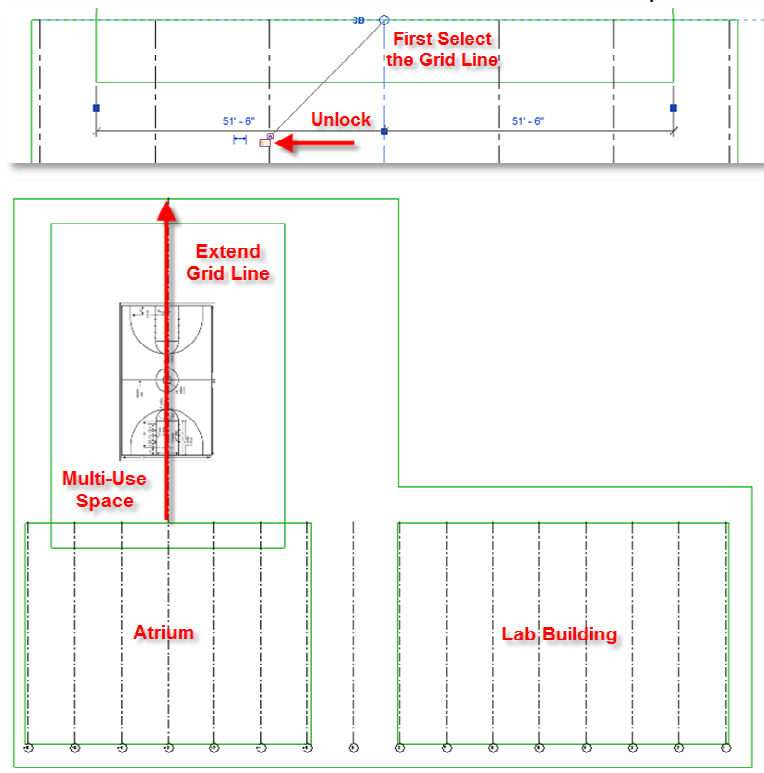
Vertical Grid: **Home > Grid > Pick Lines > Offset = 1'6"**

Start on the left hand side with column grid #1 and work your way to the right until column grid #16. The first grid line begins 1'-6" from the edge of the modular lab building facade. The column spacing is a consistent 20'-6"



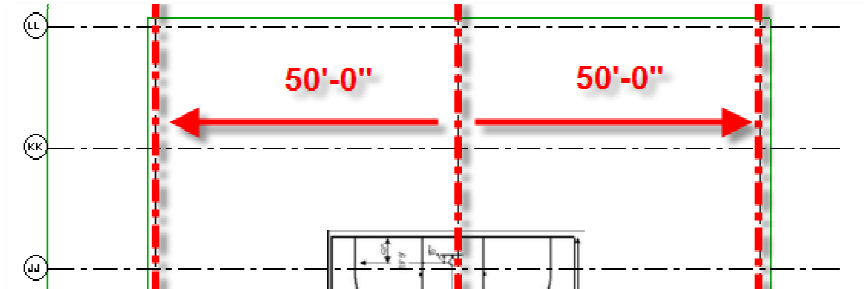
2: Multi-Use:

Vertical Grid: Column grid line #4 aligns with the center of the Multi-Use Gymnasium / Auditorium. Extend this column grid up to extend beyond the top edge of the facade. You will need to unlock it to move it independent of the other grid lines

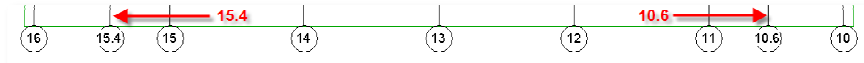


Fall 2011

Offset this grid line **50'** to each side. These grid lines should be **1'-6"** from the edge of the facade of the multi-use space.

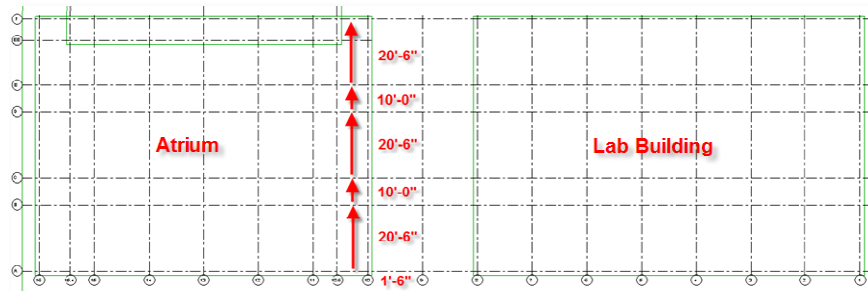


Re-label these grid lines to indicate their relative positions between the two adjacent grids. Between grid line **1** and **2** name the new grid line **1.6** since it is closer to grid line **2**. Name the new grid line between grids **6** and **7** to **6.4** to indicate its relative position.



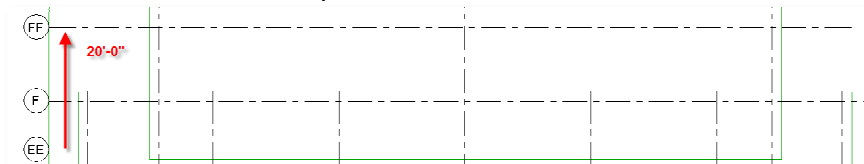
3: Lab / Atrium: Horizontal Grid:

Create the horizontal grid at the bottom of the Lab building starting **1'-6"** from the edge of the facade. The spacing of these grid lines across both the Lab and Atrium space from the bottom to the top is **24'-10"**, **10'**, **24'-10"**, **10'** & **24'-10"**. The horizontal grid should be labeled starting from the bottom up with the letters **A, B, C, D, E & F**. Create just the first grid and change the label to **A** to start an alphabetical labeling sequence. Then create the rest of the grids.



4: Multi-Use: Horizontal Grid:

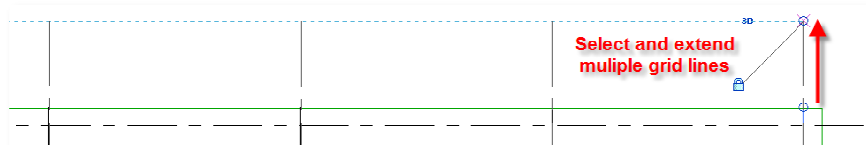
Begin creating the horizontal grid at the bottom of the multi-use building **1'-6"** from the edge of the facade. Change the label of the first grid to **EE** to indicate its position between the Atrium/Lab grid lines **E & F**. Create the remainder of the horizontal grid lines for the multi-use space offsetting **20'-0"** from this grid. The label sequence should continue with **FF, GG, HH, JJ, KK, MM, NN** etc. Skip the use of **II** or **LL** as they can be confused with numbers.



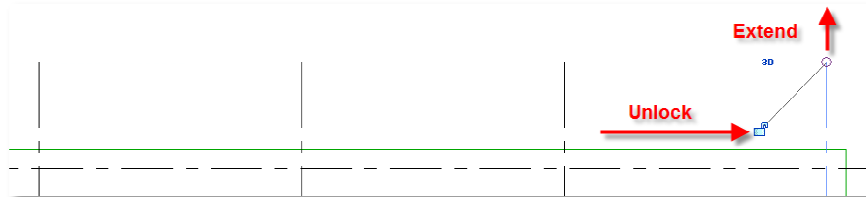
Fall 2011

- 5: Cleanup:** Extend all the grid lines so they extend beyond the edge of the building facade and leave enough room to allow for dimensions. Turn on all the column bubbles that appear beyond the edge of the building facade. If column bubbles appear within the floor plan turn off their display.

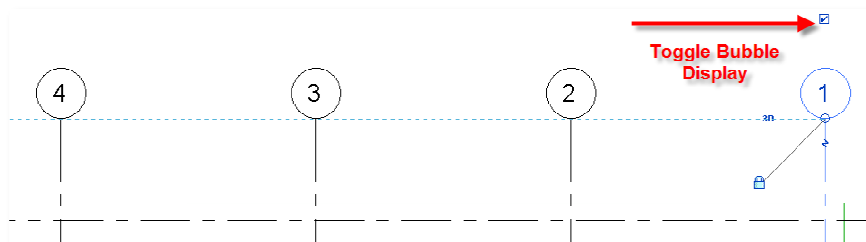
Grid Lines: Select one and extend multiple grid lines.



Select and unlock to move a single grid line.



Toggle Bubble: Select one and toggle the bubble display.



Drawing Tips: The following tips will help you with this exercise.

ZE: Zoom Extents - type to see the entire view.

Pick Lines: Revit's version of the offset command.

Default Units: For Revit 1 equals 1 foot.

Modify: Selecting Modify will end the current command.

Project Browser: The project browser allows you to choose the current view, setup sheets and view families.