

## REVIT Tutorial-4

[http://users.etown.edu/w/wunderjt/Architecture Lectures/REVIT 4 Tutorial.pdf](http://users.etown.edu/w/wunderjt/Architecture%20Lectures/REVIT%20Tutorial.pdf)  
JT Wunderlich PhD

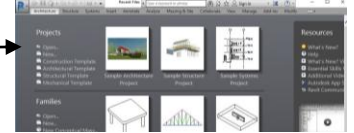
Name(s) and signature(s) confirming completion of tutorial: \_\_\_\_\_

In E273 Studio, use College REVIT licenses; At home, use free 3-year student license: <http://www.autodesk.com/education/free-software/revit>

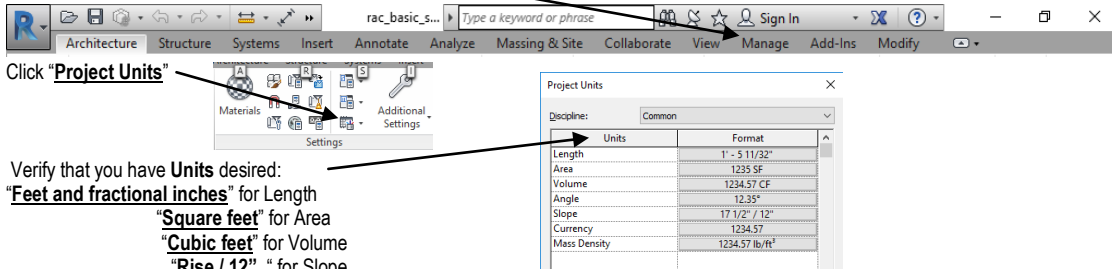
## GRID and EXTERIOR WALLS for High Library

Using 2017 Revit Architectural software, do everything below: (Adapted from 2013: <https://www.youtube.com/watch?v=i098Ky4WBmY>)

- Open **Revit** (not "Revit Viewer") in **Autodesk** Folder (in "**All Apps**" for Windows10)
- Click "**New**" under "**Projects**" on Start Screen
- Select "**Architecture template**" and "**Imperial units**" if asked
- Click "**Manage**" Tab on Ribbon



- Click "**Project Units**"
- Verify that you have **Units** desired:  
"**Feet and fractional inches**" for Length  
"**Square feet**" for Area  
"**Cubic feet**" for Volume  
"**Rise / 12**" for Slope  
"**Pounds per cubic foot**" for Mass Density

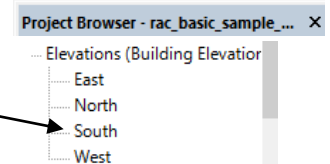
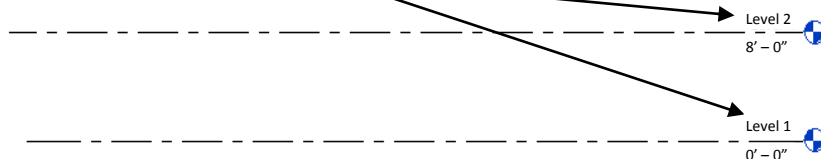


OPTIONAL: Watch again this 2017 video on **Levels**:

[https://www.youtube.com/watch?v=N52QSVu5dDA&list=PLzAQZFR7SsdgX\\_v1enjlesCkMeMo8CON&index=6#t=629.258139](https://www.youtube.com/watch?v=N52QSVu5dDA&list=PLzAQZFR7SsdgX_v1enjlesCkMeMo8CON&index=6#t=629.258139)

Click "**South**" Elevation in **Project Browser** window

You'll see two default Levels



Click "**Architecture**" then "**Level**" on **Ribbon** to **Create two new levels**  
(click and drag pointer across screen)

Rename "**Level 4**" to "**Mezzanine**"

(click on it) -- And respond "Yes" when asked if you would like to change corresponding views

Set Floor Level values to actual Elizabethtown College High Library **Elevations** ("EL") above sea level:

Level 1 = 490' - 4"

Level 2 = 503' - 0"

Level 3 = 515' - 8"

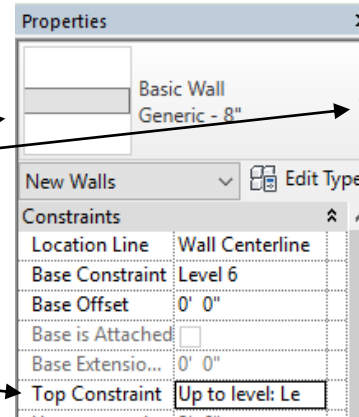
Mezzanine = 528' - 4"

Click on **Level 1** Indicator →

or click **"First Floor"** now listed under **"Floor Plans"** in **Project Browser** window

Click on **"Architecture"** then **"Wall"** on **Ribbon** to create walls

Use default **"Basic Wall – 8"** shown in **Properties Window**  
(or find in a wall with brick on the outside)



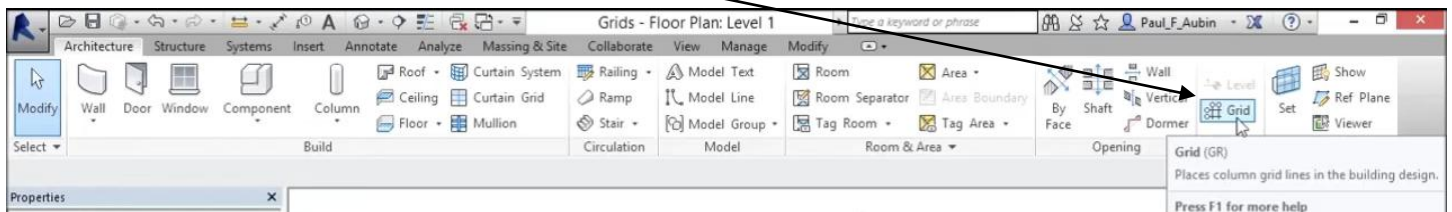
In **Properties Window**, click on **"Top Constraint"**  
and select **"up to Attic Level"**

## Before we draw walls, **CREATE ACTUAL GRID THAT LIBRARY IS BUILT TO**

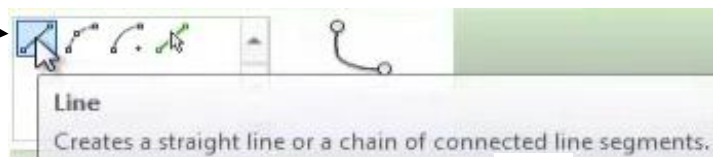
First watch these videos:

- <https://www.youtube.com/watch?v=E1nj-hbjqQk>
- [https://www.youtube.com/watch?v=E1nj-hbjqQk&index=10&list=PLzAQZFR7SsdgX\\_v1enjjlesCkMeMo8CON](https://www.youtube.com/watch?v=E1nj-hbjqQk&index=10&list=PLzAQZFR7SsdgX_v1enjjlesCkMeMo8CON)

Click **"Architecture"** then **"Grid"** on **Ribbon**



Click **Line** in **"Draw"** part on **Ribbon**



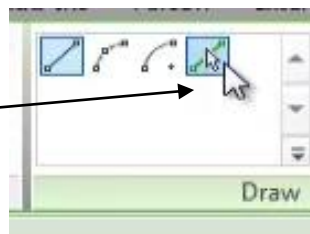
**Draw first Grid Line**

Bubble will be at end of the line

You may need to zoom to see it, or check a little box near it



Click **pick-line** in **Draw** part of **Ribbon**



Set **"Offset"** to **11'-4"** and **DON'T** click **"Lock"**

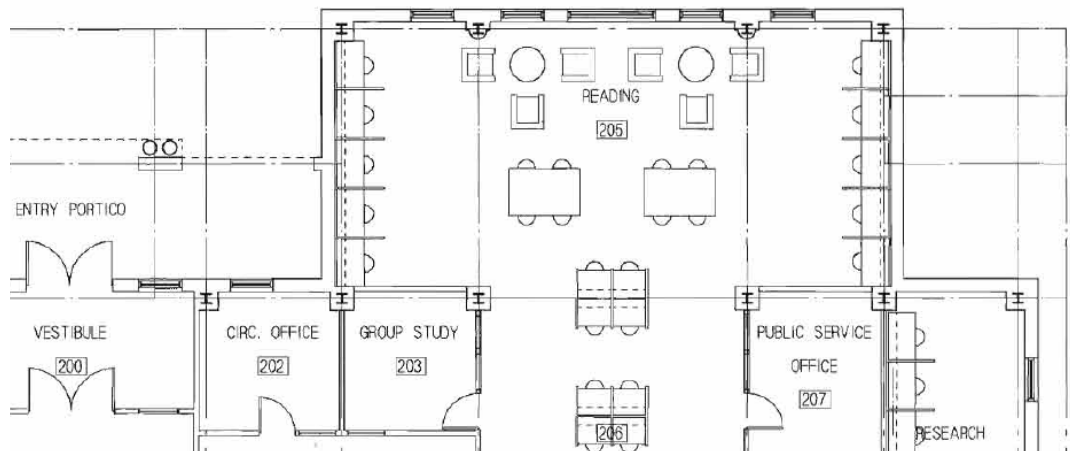
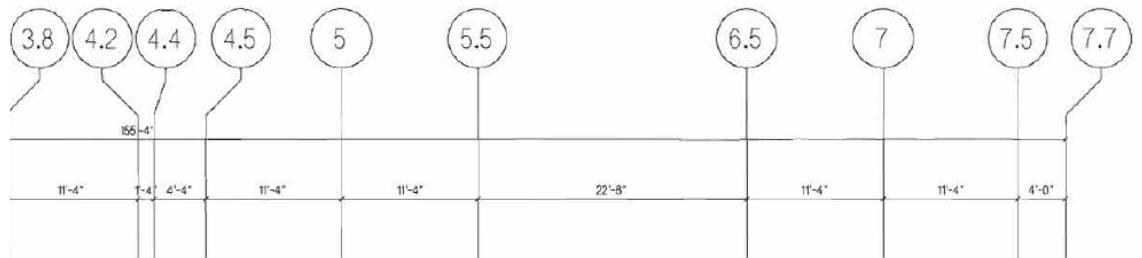
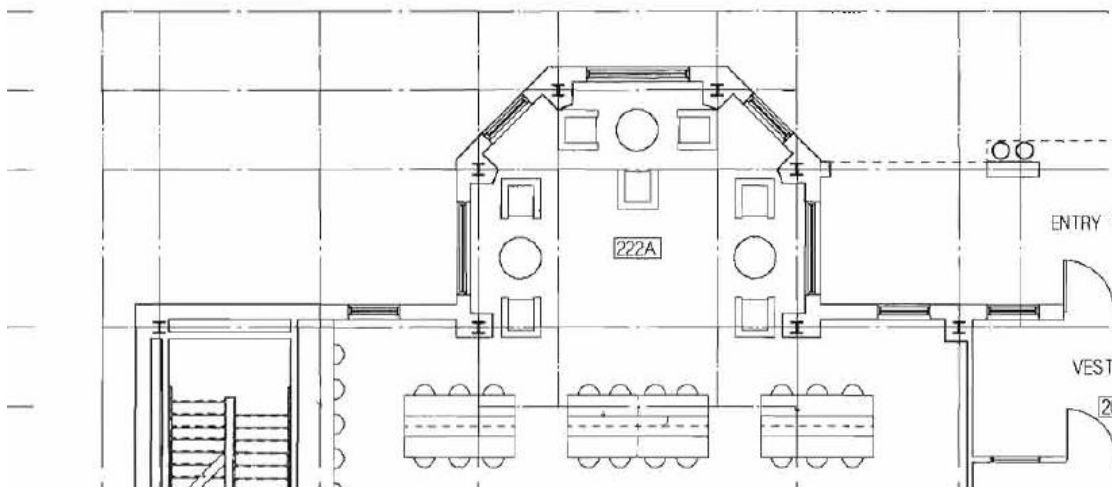
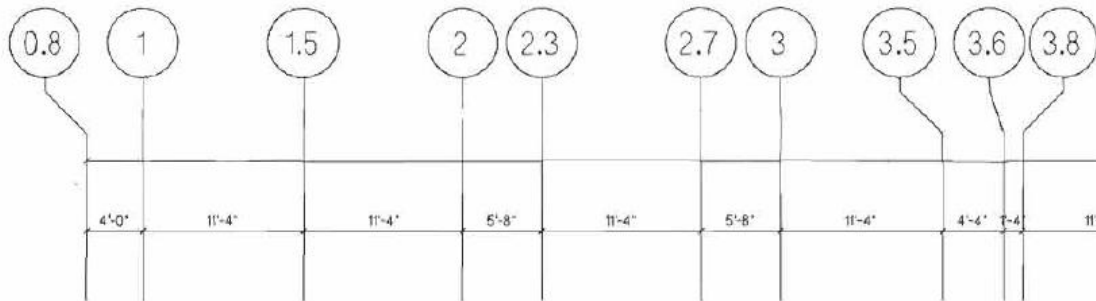


To duplicate, at an offset, click on line, move cursor slightly to the right, click again

Create a "Shell" of the Elizabethtown College High Library in preparation for redesigning the Main floor ("Level 2")

Make 19 vertical grid lines at an 11' - 4" offset.

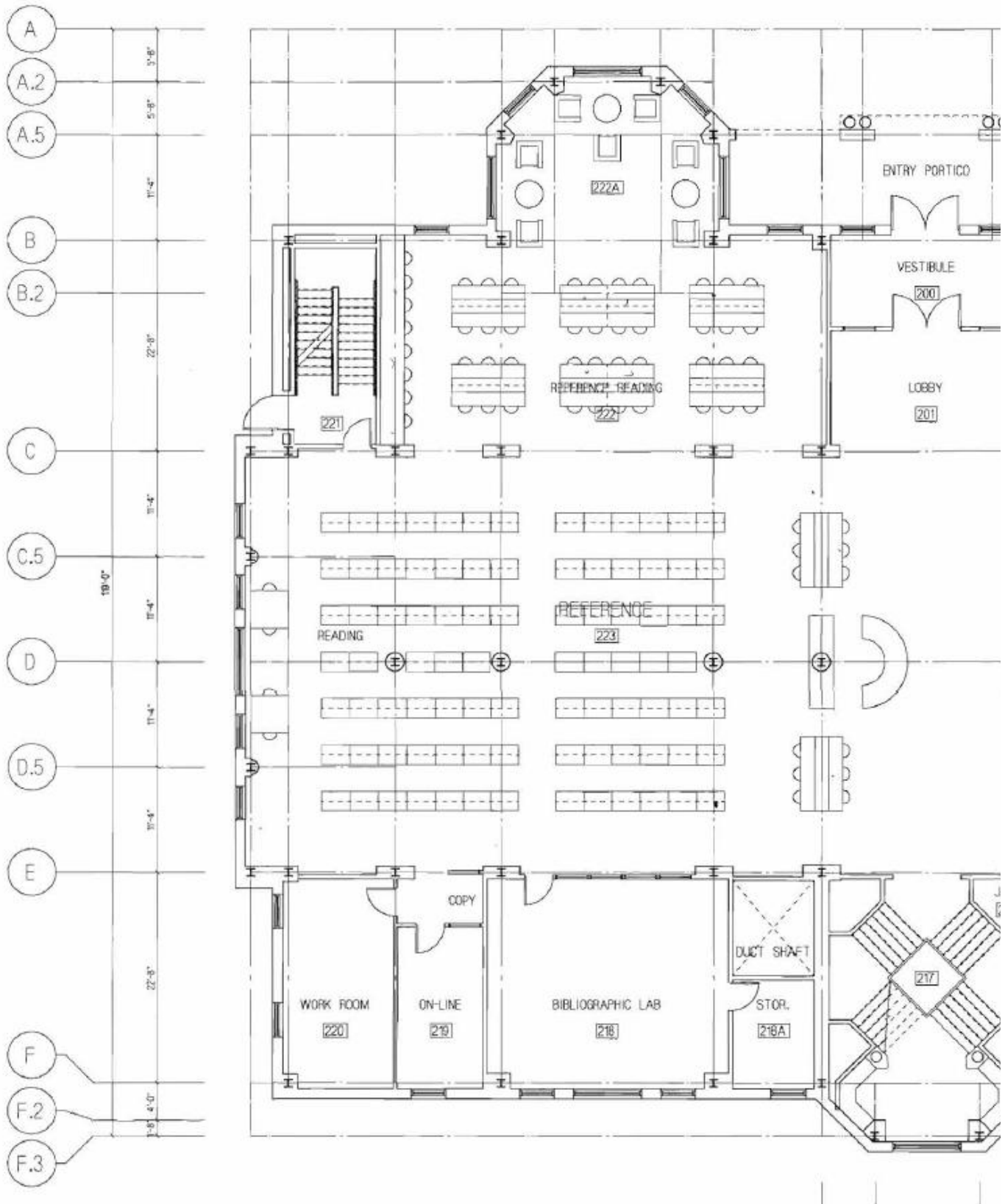
Label Grid Lines in circles, and move some grid lines (i.e., ones not supposed to be at 11' - 4") as needed to match correct dimensions as shown below, referring to file "1989 High Library DRAWINGS CDs - Arch Set.pdf" in Dr W's Public Folder for COURSES, or on his website at: [http://users.eta.edu/w/wunderjt/Architecture Lectures/1989 High Library DRAWINGS CDs - Arch Set.pdf](http://users.eta.edu/w/wunderjt/Architecture%20Lectures/1989%20High%20Library%20DRAWINGS%20CDs%20-%20Arch%20Set.pdf) for more readable drawings:



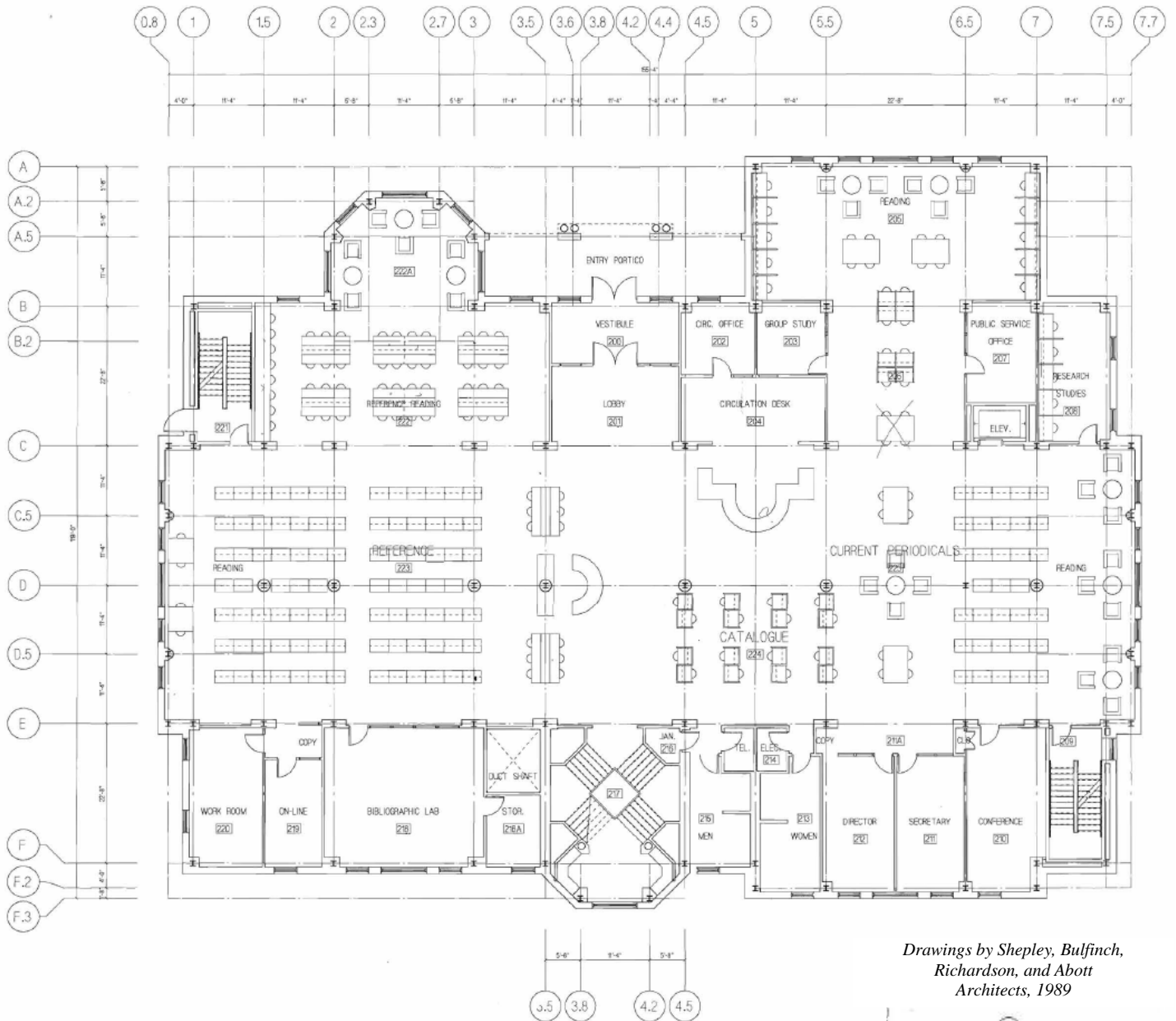
**Repeat above for 13 horizontal Grid Lines.**

Referring to file "1989 High Library DRAWINGS CDs - Arch Set.pdf" in Dr W's Public Folder for COURSES, or on his website at:

<http://users.etown.edu/w/wunderjt/Architecture Lectures/1989 High Library DRAWINGS CDs - Arch Set.pdf> for more readable drawings:

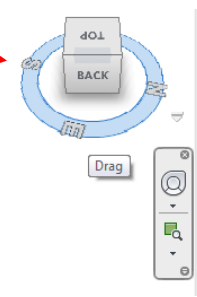


Use mouse to draw all Elizabethtown College High Library Exterior Walls, horizontally all the way around the building, and vertically between Level 1 and Mezzanine, as if they were one continuous ribbon with no windows or doors -- referring to file "1989 High Library DRAWINGS CDs - Arch Set.pdf" in Dr W's Public Folder for COURSES, or on his website at: [http://users.etown.edu/w/wunderjt/Architecture Lectures/1989 High Library DRAWINGS CDs - Arch Set.pdf](http://users.etown.edu/w/wunderjt/Architecture%20Lectures/1989%20High%20Library%20DRAWINGS%20CDs%20-%20Arch%20Set.pdf) for more readable drawings.

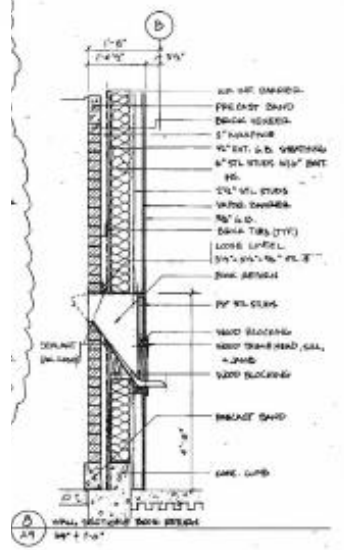


Drawings by Shepley, Bulfinch, Richardson, and Abbott Architects, 1989

Click "Aerial" in "3D Views" in Project Browser window  
 Play with this to spin your 3D model



- Type "W" "T" for Window Tiles (i.e., a mosaic of your windows)
- Open a Word file
- ALT+PrintScreen, then CTRL-V to paste it into a word file
- PRINT IT TO BE HANDED IN and put your name(s) on it
- Save your Revit project file where you know you can retrieve it; Call it "High Library Entire Building"
- Go to [Tutorial-5](#)



Exterior Brick Wall