NEW YORK CITY
COLLEGE OF TECHNOLOGY
THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF ARCHITECTURAL TECHNOLOGY

ARCH 2330 **BUILDING TECHNOLOGY III** **January 2013**

Assignment Number/Name: **6 - Elevator Core & Service Entry Studies**

Computer Program(s): **AutoCAD,** Revit, Web Browser and Blackboard

Student Learning Objectives:
Upon successful completion of this assignment, the student will:
1. Construct drawings of passenger and service elevator cores.
2. Construct drawings of loading dock / service entrance.

Student Skills Learning Objectives: (AutoCAD)
*Upon successful completion, i*n addition to skills required by previous lessons *the student will:*
1. Be able to externally reference files and images
2. Be able to add annotation and dimensions

Assessment:
To evaluate the student's achievement of the learning objectives, the professor will do the following:
1. Evaluate the student's elevator drawings.
2. Evaluate the student's loading dock drawings.
3. Evaluate appropriate use of annotation including titles, notes and dimensions.
4. Drawing will be evaluated on its own and as part of the AutoCAD drawing set submission.

Project Description:
Students will develop elevator core plans, sections and details for both passenger and service functions. The laboratory/teaching facility will require a loading dock that is easily accessible by a freight elevator that can travel from the basement level to the highest floor. Students are also to develop a plan and sectional study of the freight area indicating vertical and horizontal clearances and turning radius for a delivery truck. Four (4) passenger elevators are required to travel from the entry level to the top level with two of these 4 extending down to the basement level. The Gym will require a second service elevator that can travel from the entry level to the basement locker rooms. This elevator can also serve as a passenger elevator. If the design includes a mezzanine the elevator(s) must travel here as well.

Materials can be sourced from the internet but the completed drawing must be drawn individually by the student. Reference materials are to be externally referenced and traced but should not be a part of the finished sheet. All referenced sources must be sited and reference files must be provided separately.

Process:
1. Research elevator manufacturers and specify elevators that meet all of the buildings needs.
2. Draw each of these in plan, section and interior elevation and indicate other critical data including travel limitations. For each type draw location and proper dimensions of machine rooms etc.
3. Show core wall types and key these from your partitions sheet.
4. All configurations must confirm to code.
5. Post completed sheet as a pdf and as a drawing file by the assigned deadline & add description.

References:
1. Otis Elevator http://www.otisworldwide.com/
2. Schindler Elevator http://www.schindler.com