



**Today's Class:**

- Attendance & today's agenda outlined on the board or reviewed on OpenLab
  - *Team Desk Crits – Review of Grids and Levels*
  - *Lecture/Discussion of Building Foundations and Footings*
  - *Drawing Session with Revit Continued*

**Activity 1 (Team Desk Crits)**

- While teams work together to develop their buildings  
Professor will provide team desk crits to review levels & grids, titleblock setup and sheet size.

**Activity 2 (Sketch on board discussion of Foundation and Footings of Buildings)**

- Concrete foundation wall with footing (serves structural, waterproofing and thermal functions)
  - Works as retaining wall, waterproof the building & a thermal barrier
  - Supports structure above – steel beams & steel columns
    - Concrete columns integrated into perimeter foundation wall to support steel columns
    - Concrete foundation wall for support of steel beams
  - Perimeter footing
    - Eccentric footing along properly lines
- Work out estimate of distance from structural grid to exterior façade – so foundation can be located
- Review and sketch a typical foundation detail showing waterproofing, drainage etc.

**-Break-**

**Activity 3 (Drawing Session with Revit – continued)**

- Quick Review discussion of grids and levels
- Discuss difference between structural vs architectural views for basement level
  - Architectural (basement level) vs Structural (Foundation Plan)
  - Review View Templates – View Range Settings
- **Work from Level 1 – STRUCTURAL (Foundations have depth)**
  - Build Foundation Walls – Add Structural Foundation to Wall (show eccentric setting)
  - Add Isolated Footings w/short concrete columns at grid intersections (basement level to -5'-0") with Isolated footings (**Work on Basement – STRUCTURAL**)
  - Create Slab on Grade – add openings for concrete footing columns.
- **Work on Basement – STRUCTURAL – add steel columns – make columns multistory like connections assignment – first column from basement to Level 2 + 3'-0". Second column up to roof. (splice plate)**
- **Work on Level 1 – STRUCTURAL – add steel beams (tag on placement) – copy beams up to all levels**
- Add Structural Slabs (Floors > Structural) All floors and Roof – show shaft tool
- Building Façade Wall – create placeholder wall – add windows – show tags

**Assignment Review**

- Complete all work begun in class before next session
- Create structural drawings and layout on titleblocks
- Progress Posting of Case Study Building to include all work begun and assigned in class
- Upload Progress Revit file and PDF to Blackboard