Starting the Senior Design Project

Goal: To emphasize the need to (1) establish milestone tasks, and (2) begin visualizing deliverable, as early as possible

Suggestion: Look at last year’s Tables of Contents (ToCs) and Executive Summaries
- Why? It’s a first look at (1) The big (i.e. milestone) design tasks that you will need to accomplish, and (2) The elements of your deliverable

1) Milestone Tasks (Visualize the Scope of Work and the Plan of Attack)
   a. Caution: Burden on your firm (not on client-consultant) to set milestones
      i. Examples: Design of elements (e.g. shearwalls, pipe sizes, warrant analysis) {Tip: Be aware of dependencies between milestone tasks}
   b. Two kinds of knowing: (1) “Knowing what you don’t know”, (2) “NOT knowing what you don’t know”
      i. Situation (1): You at least know the questions to ask
         ii. Talk with your client-consultant to set your milestone tasks and to set your design schedule. Find out early on what you don’t (yet) know how to do

2) Deliverable (Visualize the End Product [PDR, then FDR])
   a. Caution: There is a difference between establishing the deliverable and establishing the milestone tasks
      i. Why? Because the Design is more important than the Deliverable. No longer a fill-in-the blanks research project.
   b. Don’t brush off the deliverable:
      i. (Report) Only the summary and justification of your design
      ii. (Appendices) The design work itself (e.g. plan sets, calcs, etc)
   c. Remember: Looking at last year’s ToCs and Exec Summs lets you begin figuring out (1) your milestone tasks, (2) elements of your deliverable

Other Tips:
- If your project did not exist last year, look at the Exec Summs and ToCs for other projs in your group’s specialization (e.g. other T projs for T4, W projs for W1)
- When asking questions of client-consultant, show initiative
  - Legitimate questions: “Where can we go find out how to do X?” “Do you have design examples, manuals showing how to do X?”
  - Better than: “How do you do X?” “Can you show us how to do X?”
- New This Year: W Qtr HWs often directly related to the Final Project, and can be done by group (e.g. HW1, HW2). I will notify you in lab and lecture. Opportunity: Look at the purpose of the group assignment. Tip: Bring in your group’s answer and discuss it with me in any of the labs on or before the due date (the discussion will benefit you). If you do, I will be more understanding when grading.

Reminders:
- Prof. McNally WILL hold you responsible for – (1) Design Requirements and Deliverables, (2) Design Report Format Guidelines, (3) Proj Management Responsibilities (see website)
- First Tech Memo: Week 6 or Week 7, depending on Faculty Advisor availability.

Final Project Start-Up Tips Handout
Or, “Some words of wisdom from a former 181 student and sophomore TA”