**EIND 434**

**Project 2**

You are a homeowner and have decided to build a shop on your property. See attached rough sketch to show approximate location of the shop and layout. (NOTE: This assignment is to test your project management skills not your construction technical understanding. I do want you to research this to the level to make approximations for times, but you will not be held to technical accuracy of the construction process.)

1. You will be the general contractor for the shop. You will hire out subcontractors for the following work; excavation, concrete, framing (including windows and door installs), roofing, insulation, dry wall, painting, internal siding, plumbing, electrical, garage door install, septic, and sewer line attach to existing system, final grading.
2. The shop will be a monitor style building 60X60 with a 10X60 lean to on the West side of the shop. The inside of the shop will be 40X60 garage like space, 20X60 office space. You want the entire 60X70 footprint to be concrete. (see attached drawings)
3. The shop will be wood board and bat exterior, stained to the same color as your house.
4. You want to use radiant floor heat in the concrete to heat the shop. You will lay insulation below the concrete pad and outside the exterior of the pad to reduce heat loss. The radiant tubes will sit on the Styrofoam, the rebar for the concrete will sit on the tubes and the concrete will be poured over that. You want the concrete to be 5” thick.
5. The roof will be asphalt shingles on the high roof and metal roof on the flatter portion of the roof (see attached drawing).
6. You need to excavate the footprint for the shop to get down to “pit run” and then bring in “pit run” to bring the level of the shop to the height of the current driveway.
7. You plan to have a small kitchen area (break room) with a sink, microwave, refrigerator, dishwasher.
8. You plan to have a bathroom with a sink, toilet and large shower.
9. You will connect to your existing well for water.
10. You will place a separate septic tank for shop, but you will connect the output of the septic to your existing septic pump to the leach field.
11. You need a Property Information Form from the county.
12. You need an EHS permit for you septic tank.

Boundary Conditions:

1. You are outside the city limits and your property is not zoned in the county. You only need a Property Information Form, EHS permit, electrical permit / inspection and a plumbing permit/inspection. If you do the plumbing yourself you are not required to get a plumbing permit. You do NOT need any building permits.
2. You cannot run the septic line closer than 50 feet from your existing water well.
3. You have a dry creek bed with culvert that crosses underneath your driveway and ends open to the yard that you will dig up for the shop. You will need to bury a culvert around the shop and have it release to a ditch you construct W of the site. (see attached drawing)

Put together a Project Plan for the Project. Use the rubric to guide you on the deliverables for the assignment.

1. Define the Project Scope.
2. Establish the Project Priorities.
3. Create the Work Breakdown Structure (WBS).
4. Create a network diagram.
5. Create a Project Communication Plan.
6. Create a Responsibility Matrix.
7. Create a Gantt Chart.
8. Create a Risk Assessment.
9. Create a Project Baseline Budget.
10. Create a Project Status Report representing ½ way through the project (based on the timeline you represented in the project plan).
11. Create a Project closeout report. Turn in all deliverables of the assignment to D2L project 2, by Sunday, Oct. 25, 11:59pm.