

## **Building a Building for a Hobby Room**

There is an old saying and it goes (in part) like this, “Where there is no vision the people perish...”. There isn’t any truer statement in taking on a building project.

Building professionals put everything on paper BEFORE a project is started. It is all planned out, down to how the boards are nailed together! We do this through codes, laws, industry standards, contracts, specifications, building plans, schedules.....These documents are CRITICAL to communicating the result or VISION.

### **Where to build?**

In developing a vision, you will need to ask yourself a lot of questions. Where do you want to build this? Where can you legally build? You must consider things like setbacks, existing easements, attached to an existing building? detached building? basement? slab on grade? set up on piers?

### **Utilities?**

Will the building have HVAC? plumbing? How will it be heated and cooled? gas? propane? electric? Will the cooling be performed with a split system? thru the wall unit? Will you provide bathroom facilities? How will the sanitary remove? pumped out? follow grade out? tie into existing? How will power be installed? it's service? feed off an existing panel with a sub-panel or simply a circuit run from an existing circuit?

Once one has all the plans, details, and documents in place, the next step is developing an actual plan to implement the “vision”. That sequence is loosely as follows:

- Land clearing and excavation
- Temporary road
- Excavation for building the structure
- Layout/Engineering stakeout
- Footing
- Walls

- Plumbing groundworks
- Slab
- Framing
- Exterior trim
- Roof
- House wrap
- Windows and door installation
- HVAC rough-in (RI)
- Plumbing RI
- Electric RI
- Inspection close in
- Insulation/Fire and air stop
- Inspection
- Drywall
- Siding
- Cabinets/Trim
- Paint
- Plumbing final
- Electric final
- HAVC Final
- Flooring
- Hardware
- Final Touch Up and Punchout
- Final building/Trade inspection
- Move-in

## **Site Work**

The typical grading sequence for a property around a building follows this sequence:

- Construction entrance
- Land clearing of trees
- Rough grade
- Building excavation
- Backfill and rough grade for utilities
- Utility install (gas, power)
- Driveway or road
- Lead walks, sidewalks
- Final grade
- Landscaping
- Fine grade
- Sod/seed and straw
- RUP Inspection

One of the most overlooked items is grading. It is so important that water drains away from the building. Generally, this is performed by sloping the grade away from the house to either a swale (shallow ditch), sheet flow (flat ground sloped away from the house) then to a ditch, storm structure. On larger projects, this requires engineers to design water flow, storm structures, plans, engineering...

To start a contractor must excavate the site and install a construction entrance. Before any dirt is moved the contractor must install a construction entrance and silk fence to prevent soil from leaving the property. Once this is performed and the site inspector has inspected this work the "clearing" can proceed. At this time the trees, unnecessary buildings are removed. The site has a rough grade installed for the building foundation excavation to start.

The next step is building a stakeout and excavation for footings and foundation walls. After the walls are poured and any plumbing groundworks are installed the backfill and rough grade can begin.

At this point, the utility companies will verify the property is on rough grade within 2" of the final grade and will schedule the install of underground gas and power. This is typically installed in conjunction while the structure is moving forward.

Once the utilities are installed the contractor will install sidewalks, lead walks and driveways. These items are typically very short duration items and once completed the final phase of site work can begin.

The yard has the fine grade performed either by an excavator contractor or landscaper. The landscaping is installed after the yard has been fine grade. The yard is then touched up a bit and the sod or seed and straw is installed.

Once the structure has passed final inspection and the exterior yard is completed the contractor can call in the RUP (residential use permit) inspection. With this vision completed the next vision can start! The next step is bench work and operations!