

# E.G. Construction

Building Process

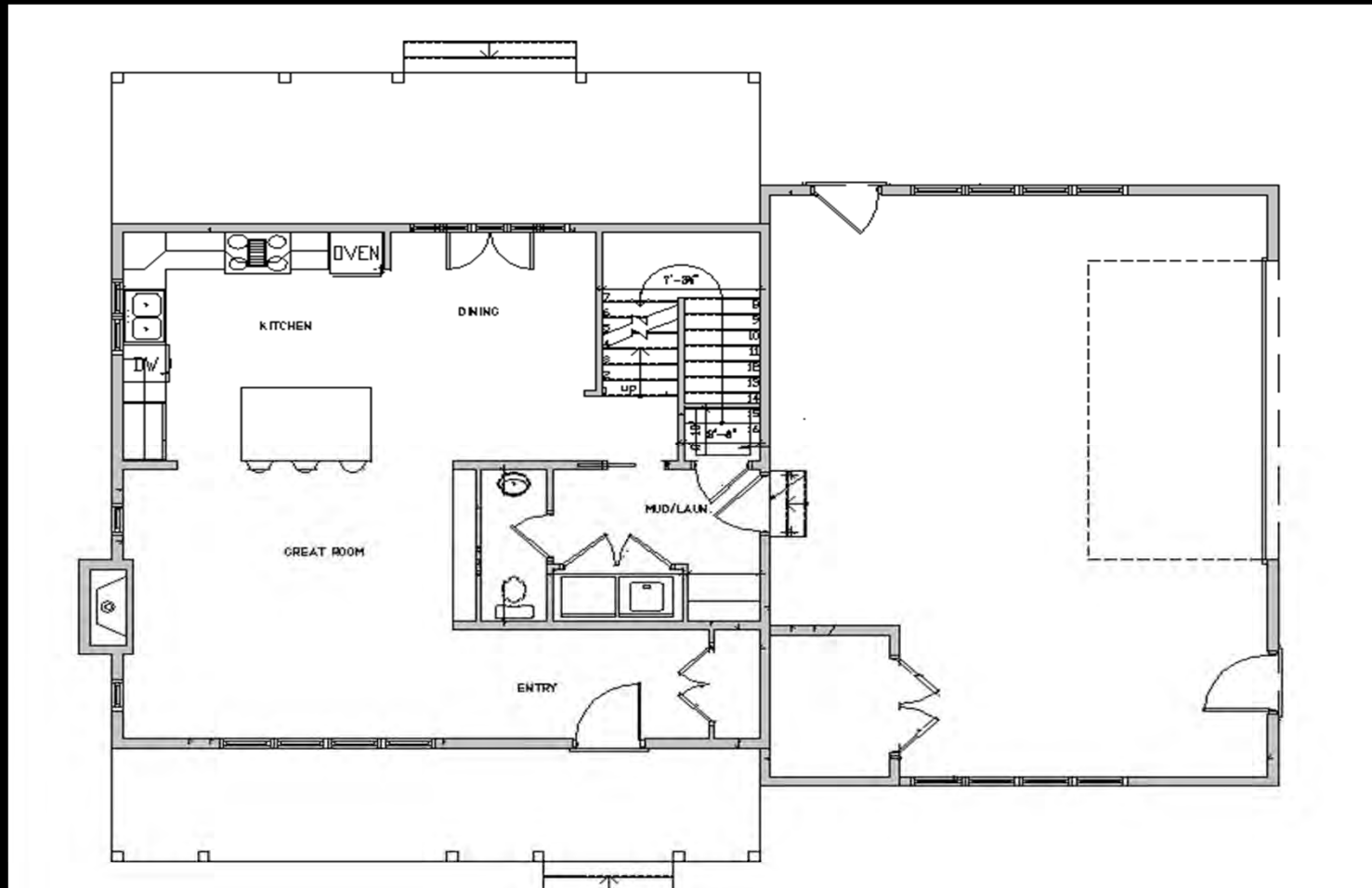
# Phases of the Building Process

- **Pre Construction Phase**
  - Development of plans, Specification, Financing, Budgets and Permits
- **Initial Construction Phase**
  - Building the foundation, framing floors, walls and roof
  - Installing windows, doors, exterior walls, and roof coverings
- **Finishes Phase**
  - Interior Components are installed in this phase
    - Mechanical systems installed: plumbing, electrical, and HVAC
    - Interior finishes applied: walls, flooring, ceilings, fixtures, appliances, and cabinets
    - Exterior Landscaping plantings, drives, walks
- **Post Construction Phase**
  - Final finishing touches, completion inspections, and establish a move-in date

# Pre-Construction Phase

- Selection of building site
- Develop final working plans
- Develop specifications
- Develop cost analysis
- Develop detailed construction budget
- Develop homeowner allowances
- Develop site and landscape plans
- Building contract executed
- Determine exterior & trim surfaces, color, & roofing materials
- Secure local government approval & permits
- Financing Secured
  - Construction
  - Permanent

# Building Plans Development



# Sample Budget Allowance

# Development of Specifications

- Date
- Project Name
- Location
- House Dimensions in Square Footage (sf)
- First Floor
- Second Floor
- Basement
- Bonus Room
- Garage
- Porch
- Patio
- Deck

The following specification are based on plans and initial interviews with the homeowner.

Site work: Generally the contractor is responsible for the removal of all unwanted trees on the construction site and protection of the remaining trees to excavate any soil as needed for placement of the foundation and to install any erosion control systems, as needed. (Note: If at any time during construction, should unsuitable soils, underground water, or any other unknown structures or substances be found, the builder will notify the owner and a resolution will be determined with the owner's consent and at the owner's expense.)

Footings: 3000 psi concrete

Foundation:

Waterproofing and Drainage:

Framing:

# Preliminary Shopping for Budget Allowance Components

- Shop for kitchen cabinets, counter tops and appliances
- Shop for bathroom fixtures, faucets, and accessories
- Shop for floor coverings (carpet, hardwood floors and/or ceramic tile)
- Shop for interior and exterior door styles
- Shop for interior finishes
- Shop for window styles
- Shop for other allowance components

# Initial Construction Phase

- Pour footings & build foundation
- Construct floor system(s)
- Construct wall system(s)
- Construct roofing system
- Apply exterior wall & roof sheeting
- Install vapor barrier
- Install roof covering
- Install windows & exterior doors
- Initial walk-thru inspection
- Rough-in plumbing
- Rough-in electrical
- Rough-in HVAC
- Rough-in fireplace(s)
- Install exterior surfaces, & exterior trim



# Initial Construction Phase



# Footings and Foundation Walls



# Building the Flooring System



# Building Stud Walls



# Installing the Roof System



# Owner Walk-Through, Layout, and Inspection

Occurs at the end of the initial construction or rough-in phase. Confirmation of the work in progress and layout, as to meeting the expectations of the owner, and consideration of any adjustments to the applicability of the allowances and their associated costs prior to their purchase and installation.

# Rough-In for Plumbing, Electrical, and HVAC



# Finishes Phase

- Install insulation
- Install & finish interior sheetrock wall coverings
- Install & finish ceiling sheetrock
- Install trim and moldings
- Install fireplace & mantle
- Paint walls, ceilings, & trim
- Install closet systems
- Install electrical fixtures
- Install kitchen and bath “finished” floor surfaces
- Install bath and other plumbing fixtures
- Install kitchen cabinets and appliances
- Install other built-ins, as specified
- Install floor coverings
- Complete landscaping, drives, walks



# Insulation is Installed



# The Finishes Phase



# Interior Sheet Rock Installation and Finishes



# Interior Finishes



# Kitchen



# Baths



# Landscape



# Post-Construction Phase

- Conduct Final Inspections
  - Homeowner
  - Building Inspector
  - Appearance Committee
- Secure Certificate of Occupancy
- Secure Permanent Financing
- Establish Move-In Date



# House Is Completed and Ready for Occupancy

