SUBMITTAL REQUIREMENTS FOR ONE AND TWO FAMILY DWELLINGS, ADDITIONS AND RENOVATIONS

All submittals shall be site specific and designed to the provisions of the 2018 International Residential Code and the 2006 International Energy Conservation Code as adopted by Yavapai County. Information on this list may be used in conjunction with submittals for additions to and renovations of single family dwellings. Residential renovations and additions shall comply with the 2006 IECC requirements.

Any dwellings designed to be constructed in a non-conventional manner or beyond the scope of the International Residential Code, shall be prepared by an Arizona registrant (Architect or Engineer) licensed in the State of Arizona. Any portion of the design which is beyond the scope of the International Residential Code shall have that portion designed in accordance with accepted engineering practices. Plans, details and calculations shall be signed, sealed and dated by an Arizona registrant (Architect or Engineer).

THE MINIMUM CONTENT REQUIREMENTS FOR PLAN SUBMITTALS ARE AS FOLLOWS:

General:

- Two (2) sets of plans correctly orientated (no reversed plans) and site specific in a non-erasable media.
- Two sets of plans sealed by the Arizona registrant of record, if applicable, with one set containing the original wet seal.
- Minimum sheet size – 18”x24” (Maximum 30”x42”).
- Standard architectural scale used for all details/plan views and standard engineering scale used for site plan. Approved scale is no less than ¼”=1’ and all details scaled at not less than ½”=1’, using standard architectural scale.
- Plans shall be legible, organized, numbered pages and all plan pages secured together in an approved manner (i.e. staples).
- Two copies of the Geotechnical Report as required by policy PB-21.
- Two copies of calculations and all other supporting documents.

Site Plan

- Include locations of all new structures and any existing structures on the site.
- Setbacks to all structures and lot lines are marked and labeled.
Submittal Requirements for One and Two Family Dwellings, cont.

- All utility lines are marked and labeled. If propane fuel used, indicate the size and location of the tank in relation to the structure.
- Contour lines at two (2’) foot increments for existing and proposed grade are indicated.
- Provide 2 cross sections, perpendicular to each other showing existing and proposed grade.
- Show the locations and cut and fill amounts on the plans (grading permit required if over 50 cubic yards).
- Indicate finished pad elevations, finished floor elevations and drainage flow directions.

**Foundation Plan**

- Foundation and required expanded footings shall include dimensions and reinforcement type, size and locations (Per Geotechnical report)
- Cross-section of the foundation and details.
- Hold-down types or other embedded hardware including locations.
- Include heights and limits for stem walls of varying heights.
- Provide details showing type and R-value of slab insulation to comply with 2006 IECC.
- Engineered design and details for post tension slabs including special inspection criteria and form.

**Floor Plan**

- Provide a square footage summary of each of the following: livable, garage, carport, covered patios, decks, covered entries, storage and basement (finished or unfinished) and any other areas.
- Provide a complete floor plan for each floor including the basement.
- Provide a window/door/skylight schedule. Schedule shall include sizes, operation (fixed, slider, awning, etc.) safety glazing, egress, fenestration U-factors and glazing solar heat gain coefficient (SHGC).
- Label intended use for all rooms and ceiling heights of each room.
- Indicate location and types of fire separations including detailed construction methods to be used.

**Brace Wall Plan**

- Braced wall lines (exterior and interior) shall be clearly labeled, with brace wall method, schedule and calculations.
- Provide details for all alternate braced walls and portal frames.
Submittal Requirements for One and Two Family Dwellings, cont.

- Indicate all hold-downs types and locations, conditions and portal frames.
- A brace wall designed exceeding prescriptive code will require an engineered lateral analysis.

**Floor Framing Plan**

- Provide manufacturer’s specifications and layout sheet for I-joist floor systems.
- Indicate sizes, locations, grades and species for posts, beams, headers and girders.
  Provide details for all connections, including fastener types. Indicate the load path from floor system to foundation.
- All floor joists are noted with dimensions and connections/fasteners indicated.
- Include under-floor access, location and under-floor ventilation types, sizes and locations.
- Detail insulation material types with notes as to R-value at the intersection of floor systems with exterior walls, crawlspaces, basement walls, mass walls, and at conditioned space separation barriers complying or exceeding with the 2006 IECC.

**Roof Framing Plan**

- Provide engineered manufacturer’s specifications and layout sheet.
- Size and location of headers, beams and/or lintel sizes. Specify the number of required trimmers/jacks for load bearing walls including grade and species.
- Rafters and ceiling joists are noted with dimensions and construction/fasteners indicated.
- Connections/fasteners detailed to provide the continuous tie from the foundation to the roof line.
- Types and sizes of attic ventilation and their locations.
- Over-framing details for conventionally framed portions on truss roof systems.
- Show locations of any roof-mounted equipment such as solar panels, HVAC, etc.
- Provide insulation details, locations, type and R-values complying with 2006 IECC requirements.

**Elevations**

- Materials used for roof covering and exterior finishes are noted.
- Show existing and proposed grade lines and plate and building heights.
- Stepped foundation, if applicable, shown.
Submittal Requirements for One and Two Family Dwellings, cont.

Building Sections and Connections

- Complete cross-sections of the building, in each direction showing proposed materials to be used, and how load path connections are to be achieved.
- All materials used (steel, wood, concrete, etc.)
- Provide details for all framing connections.
- Clearly indicate the building thermal envelope elements that enclose the conditioned space. Provide insulation details, location, type and R-value complying with or exceeding with the 2006 IECC requirements.
- Details on how the air barrier will be achieved

Mechanical Plans

- Location and type of thermostatically controlled heat source.
- Provide a complete mechanical layout – include all duct work with sizes, length of sections, material types with notes as to R-value. Show return and supply air grill locations and sizes.
- Identify the manufacturer, model number(s) and equipment capacities of A/C and heating units. Show locations for equipment.
- Specify condensation line locations and terminations with notes as to R-values.
- Specify the CFM ratings for exhaust fans.
- Provide combustion air details for all gas appliances including calculations for amount required (show compliance with 2018 IRC Chapter 17, Chapter 24 and the 2018 IFGC).

Plumbing Plan

- Specify type of water supply (well, public system, shared well or haul) and size of main water service line (size based on fixture unit count and 2018 IRC P2903.7).
- Indicate location of the water heater temperature/pressure relief piping
- Provide a one-line gas isometric drawing to include:
  1. Type of fuel – natural or LPG.
  2. Total developed length of piping from meter/tank to furthest appliance outlet.
  3. Total BTU/CFH demand.
  4. Total BTU/CFH rating of each appliance.
  5. The size, type and length of each pipe section in the system.
  6. The size, type (above or below grade) and location of the LPG tank.
  7. Indicate which table was used from the IRC or IFGC for sizing of the gas line.
- Indicate the type of pump shut off and piping insulation R-value for hot water circulating system (system required in dwellings with 2 or more bathrooms per 2018 IRC adopted ordinance).
Submittal Requirements for One and Two Family Dwellings, cont.

Electrical Plan

- Complete layout showing locations of receptacles including GFCI’s and AFCI’s, switches, smoke detectors, carbon monoxide detectors, fixed equipment, sub-panels and service entrance.
- Indicate a minimum of two (2) 20 amp GFCI protected circuits are provided for small appliances in the kitchen/dining room.
- Electrical service 400 amps or greater shall include load calculations and a one-line diagram. Services over 400 amps must be done by an Arizona electrical engineer.
- Indicate locations and sizes of all electrical panels.
- Grounding method details see Policy PE-2 for reference.

Additional Drawings/Information Required if Utilized for the Structure

Truss Design Drawings sealed by an Arizona registrant, including truss to truss connections and a layout sheet, with considerations for permanent roof-mounted or attic-mounted equipment. The design professional of record shall provide information stating that the truss calculations have been reviewed by him/her for compliance with his/her design loads and design criteria on the roof framing plan.

- I-Joists Systems (roof or floor) from the manufacturer with the manufacturer’s layout sheet and engineering sheets designed and sealed by an Arizona Registrant.
- Engineering calculations, plans and details must be sealed by an Arizona registrant.
- ICC/ESR Evaluation Reports for all alternative building materials being used.
- Specification sheets for special equipment such as solar systems, elevators, saunas, alternative heating/cooling systems, etc.
- Off Grid Solar systems will require a separate permit. Reference Policy PE-8 for requirements.

Separate permit will be required for:

- If more than one (1) building is being constructed on the same project.
- Grading in excess of 50 cubic yards (total of cut and fill amounts) (Refer to Policy PB-22)
- Off Grid Solar systems (Refer to Policy PE-8)
- Generators (Refer to Policy PE-8)
- Wind Turbines
- Alternative power or mechanical systems

This list is not all inclusive. Additional information, as determined by the building official, may be required.