All Electrical, Mechanical & Plumbing Construction must be done in accordance with the adopted Anne Arundel County Codes & subject to field inspection.

FOOTINGS: Footing shall bear on undisturbed soil & below frost line (Minimum 30 inches finish grade to bottom). Minimum continuous footing size is: Depth 8 inches, Width 2X width of foundation wall. Minimum pier footing size is: 16 inches round or 14 inches square by 8 inches thick. Provide continuous footings under all exterior walls.

FOUNDATION WALLS: Reinforce masonry & concrete foundation walls per the IRC that exceed maximum allowable backfill. The maximum depth of unbalanced fill allowed for foundation walls: 8” CMU = 4’, 10” CMU = 5’, 12” CMU = 6’, 8” plain concrete = 7’.

CONCRETE FLOORING: Concrete slab on grade to be a minimum of 3-1/2” thick with 6 mil vapor barrier. A base course of 4” thick crushed stone or gravel is required for slab below grade.

BASEMENT EGRESS: Basement & every sleeping room shall have at least one emergency escape & rescue opening. Emergency escape exit shall be directly to the outside. Emergency escape & rescue opening shall have a minimum net clear opening of 5.7 sq. ft. (5.0 sq. ft. for grade floor windows). Min. Net opening height = 24 inches; Min. Net opening width = 20 inches; Max. sill height = 44 inches; Emergency escape & rescue opening is not required with basement to house mechanical equipment & not exceeding total floor area of 200 sq.ft.

DRAIN TILES: Subsoil drains are required for dwelling with basement, cellars, crawl spaces, or floor below grade & must be located Inside & Outside of the foundation. Weepholes are required with hollow blocks, maximum 48 inches apart.

WATERPROOFING: Exterior walls that retain earth & enclose interior spaces & floors below grade shall be waterproofed from top of the footing to the finished grade. Waterproofing shall consist of either; 2-ply hot mopped felts, 55-lbs. roll roofing, 6 mil Polyvinyl chloride, 6 mil polyethylene, 40 mil flexible polymer-modified asphalt, 1/8 inch. (3mm.) cement-based fiber-reinforced waterproof coating, 60 mil (.22mm) solvent-free liquid-applied synthetic rubber. All joints in membrane waterproofing shall be lapped & sealed with an adhesive compatible with the membrane.

DECK: Deck construction must comply with Section R507 & all the specifications provided in the attached Deck Construction Guide.

WOOD FRAMING: Provide double joists under oversized bathroom tubs. Firestop all duct chases & bulkheads, laundry chutes, metal flues, tub traps & all shafts @ each floor. Per R302.13 Fire Protection of Floors; Provide ½’ gypsum wallboard, 5/8” wood structural panel, or equivalent on the underside of all floor assemblies using 2’ x 8’ or less & all engineered floor joists. Exceptions: Sprinklered spaces, crawl spaces not intended for storage or fuel-fired appliances, unprotected portion not to exceed 80SF, fire blocking in accordance with R302.11.1.

MANUFACTURED FRAMING: Submit two (2) copies of roof truss fabricators shop details for approval to the building inspectors at framing inspection, if pre-fabricated trusses are used. Submit two (2) copies of manufactured floor joist & beam fabricators span & load data for approval to the building inspectors at the time of framing inspection, if pre-fabricated floor joists & beams are used.

TRUSS HEEL & COLLAR TIES: Provide 15-1/2” heel at roof truss bearings for R-49 insulation (15-1/2” minimum cavity required). Provide collar ties @ 4’ spacing OR a structural ridge beam at all framed cathedral ceiling roof per Section R802.3.1.

STAIR: Width = 3’-0”; Tread = 10” min.; Riser = 7-3/4” max.; Spiral stair is allowed with 26” min. clear width. Handrails required @ 4 or more risers. Guardrails required @ 36” high walking surfaces 30” or greater above lower surface. Maximum 4” spacing of pickets. A landing is required at an exterior door unless served by 2 or fewer risers & the door does not swing over the stairway. The egress door shall be provided with a landing.

GARAGE: Attached garage separation from residence & attic = ½ inch gypsum board on common walls & walls supporting floor/ceiling assemblies. Habitable room above garage = 5/8 inch Type “X” gypsum board. Garage floor shall be of approved non-combustible floor materials. Opening shall be equipped within minute fire-rated or 1-3/8 inches solid wood or honeycomb-core steel, equipped with self-closing device. No openings into sleeping areas.

INSULATION: R-49 ceiling; R-20 wall; R-19 floors over unheated areas. Slab-on-grade floors; R-10, 2 feet. Sunroom with thermal isolation; R-19 ceiling; R-13 wall. Window, U-factor = 0.35; Skylight, U-factor = 0.55. Thermally isolated Sunroom if conditioned must be equipped with a separate heating or cooling system or thermostatically controlled as a separate zone. Per N1101.14 (R401.3); Mandatory Certificate, a permanent certificate for R-values shall be completed & posted in the electrical distribution panel by the builder or design professional. Per N1104.1 (R404.1); Mandatory Lighting Equipment, a minimum of 75% of the lamps in permanently installed lighting fixtures shall be or contain only high-efficacy lamps.

CRAWL SPACE: 16” x 24” access crawl opening shall be provided to all under-floor spaces. Vents to be located per Section R408.

ATTIC ACCESS: 22” x 30” access opening shall be provided to any attic area having a clear height of 30 inches or more per Section R807. Appliances in attic space shall be provided by a permanent or pull down stairway in all new construction.

GLAZING: Safety glazing required per Section R308. Window fall protection shall be provided per Section R312.

SMOKE ALARMS: Location shall be as follows: 1) in each sleeping room, 2) Outside each separate sleeping area in the immediate vicinity of the bedrooms. 3) On each additional story of the dwelling including basements, habitable attics but not crawl spaces or unhabitable attic. In dwellings or units with split levels without an intervening door between the adjacent levels, a smoke alarm shall suffice for the adjacent lower level provided that the lower level is less than one full-story below the upper level. Smoke Alarms shall be installed not closer than 3’-0” from a bathroom door containing bathtubs or shower.

CARBON MONOXIDE: Carbon monoxide alarms shall be provided in dwelling units where either or both conditions exist; (1) dwelling unit contains a fuel-fired appliance (2) dwelling unit has an attached garage with an opening that communicates with the dwelling unit.

AUTOMATIC FIRE SPRINKLER SYSTEMS: An automatic fire sprinkler system shall be installed in all new one & two-family dwellings, & throughout existing one & two-family dwellings where any alteration, enlargement, replacement, or repair exceeds 50% of the existing habitable square footage, including bathrooms, closets, hallways, storage & utility spaces.