



**EXISTING FLOOR PLAN**

SCALE 1/4" = 1'-0"

**NOTE:**  
EXISTING RESIDENCE HAS THREE BATHROOMS, KITCHEN AND LAUNDRY.  
EXISTING FIXTURES TO BE MOVED ONLY AND SEPTIC TO BE USED.

- 1. ) ALL PRODUCTS LISTED BY AN EVALUATION SERVICE REPORT (ESR), SHALL BE INSTALLED PER THE REPORT AND THE MANUFACTURER'S WRITTEN INSTRUCTIONS. PRODUCT SUBSTITUTIONS SHALL ALSO BE LISTED BY AN ESR.
- 2. ) PROVIDE FIRE SPRINKLER SYSTEM PER SCOTTSDALE FIRE CODE. (IRC 313 AMENDED)
- 3. ) SEPARATE PERMITS REQUIRED: POOLS, SPAS, FENCES, SITE WALLS, RETAINING WALLS, AND GAS STORAGE TANKS.
- 4. ) FOUNDATION AND FOOTING DEPTH SHALL BE A MINIMUM OF 18 INCHES BELOW GRADE (OR PER PROPERTY SOILS REPORT), PROVIDE A MINIMUM OF 3 INCH CLEARANCE BETWEEN REBAR AND SOIL. (R403.1 AMENDED)
- 5. ) DOORS BETWEEN GARAGE AND RESIDENCE SHALL BE SELF-CLOSING MINIMUM 1 3/8" THICK SOLID CORE OR 20 MINUTE FIRE RATED. (R302.5.1)
- 6. ) EXTERIOR WALL PENETRATIONS BY PIPES, DUCTS OR CONDUITS SHALL BE SEALED. (R703.1)
- 7. ) WOOD SILL PLATES SHALL BE PRESSURE TREATED OR DECAY RESISTANT. EXTERIOR SILL PLATES SHALL BEAR A MINIMUM OF 6 INCHES ABOVE FINISHED GRADE. (R317.1)
- 8. ) GYPSUM BOARD APPLIED TO A CEILING SHALL BE 1/2" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN FRAMING MEMBERS ARE 24" O.C. OR USE LABELED 1/2" SAG-RESISTANT GYPSUM CEILING BOARD (TABLE R702.3.5 (d))
- 9. ) SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE. (P2708.4)
- 10. ) SHOWER AREA WALLS SHALL BE FINISHED WITH A SMOOTH, HARD NON-ABSORBENT SURFACE, SUCH AS CERAMIC TILE, TO A HEIGHT OF NOT LESS THAN 72 INCHES ABOVE THE DRAIN INLET. CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS INSTALLED IN ACCORDANCE WITH MIFOR'S RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS. (R702.4.2)
- 11. ) PLUMBING FIXTURES SHALL COMPLY WITH THE FOLLOWING CONSERVATION REQUIREMENTS: WATER CLOSETS - TANK TYPE 1.28 GAL./FLUSH, SHOWER HEADS - 2.0 GPM, SINKS - 2.2 GPM, LAVATORY - 1.5 GPM (TABLE P2903.2 AMENDED)
- 12. ) STORAGE-TANK TYPE WATER HEATERS SHALL BE INSTALLED WITH A DRAIN PAN AND DRAIN LINE. (P2801.6)
- 13. ) A DEMAND-CONTROLLED HOT WATER CIRCULATION SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH AMENDED SECTIONS M1103.5.1.1 AND M1103.5.2.
- 14. ) PROVIDE ROOF/ATTIC VENTILATION UNLESS INSULATION IS APPLIED DIRECTLY TO UNDERSIDE OF ROOF SHEATHING OR THE DIMENSION IS 24 INCHES OR LESS BETWEEN THE CEILING AND BOTTOM OF THE ROOF SHEATHING. (R806.1 AMENDED).
- 15. ) THE BUILDING THERMAL ENVELOPE SHALL COMPLY WITH CLIMATE ZONE 2. ENERGY COMPLIANCE SHALL BE DEMONSTRATED BY A UA TRADE-OFF (RESCHECK) OR PERFORMANCE (REM/RATE) COMPLIANCE PATH OR BY THE FOLLOWING PRESCRIPTIVE VALUES (TABLE M1102.1.2):  
A) PRESCRIPTIVE MINIMUM R-VALUES: <CEILING-R-38> / <WALLS-R-13>  
B) PRESCRIPTIVE MINIMUM WINDOW FENESTRATION VALUES: <U>-FACTOR<-0.40> / <SHGC<-0.25>
- 16. ) PROVIDE MINIMUM R-3 INSULATION ON HOT WATER PIPES. (M1103.5.3)
- 17. ) SUPPLY AND RETURN DUCTS SHALL BE INSULATED TO A MINIMUM R-8. DUCTS IN OTHER PORTIONS OF THE BUILDING SHALL BE INSULATED TO MINIMUM R-6. DUCTS AND AIR HANDLERS LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE ARE EXEMPT. (M1103.1.1)
- 18. ) REGISTERS, DIFFUSERS AND GRILLS SHALL BE MECHANICALLY FASTENED TO RIGID SUPPORTS OR STRUCTURAL MEMBERS ON AT LEAST TWO OPPOSITE SIDE.
- 19. ) EXHAUST AIR FROM BATHROOMS, KITCHENS AND TOILET ROOMS SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS, NOT RECIRCULATED OR DISCHARGED INDOORS. (M1507.2 AMENDED)
- 20. ) EXHAUST FANS IN BATHROOMS WITHA SHOWER OR TUB SHALL BE PROVIDED WITH A DELAY TIMER OR HUMIDITY/CONDENSATION CONTROL SENSOR. EXHAUST FANS SHALL BE SWITCHED SEPARATELY FROM LIGHTING SYSTEMS. (R303.3)
- 21. ) PROVIDE A WALL MOUNTED GFCI PROTECTED RECEPTACLE OUTLET WITHIN 36" OF A BATHROOM OR POWDER ROOM LAVATORY. (E3901.6)
- 22. ) RECEPTACLES SERVING KITCHEN COUNTERTOPS INSTALLED IN BATHROOMS, GARAGES, UNFINISHED ACCESSORY BUILDINGS, OUTDOORS AND LOCATED WITHIN 6 FEET OF SINKS SHALL HAVE GFCI PROTECTION FOR PERSONNEL. (33902)
- 23. ) ALL BRANCH CIRCUITS THAT SUPPLY 15- AND 20-AMPERE OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER (AFCI) INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. (E3902.12).

- 24. ) GENERAL PURPOSE 15- AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT. (E4002.14)
- 25. ) PROVIDE SMOKE ALARMS IN NEW AND EXISTING AREAS OF HOME. (R314)
- 26. ) APPROVED CARBON MONOXIDE ALARMS SHALL BE INSTALLED OUTSIDE OF EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. (R315)
- 27. ) A MINIMUM OF 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS. (M1104.1).
- 28. ) RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE IC-RATED AND LABELED AS HAVING AN AIR LEAKAGE RATE NOT MORE THAN 2.0 CFM. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. (M1102.4.5)
- 29. ) PROVIDE ILLUMINATION WITH WALL SWITCHES FOR STAIRWAYS WHEN THERE ARE 6 OR MORE RISERS. (R303.7)
- 30. ) RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH. (E3901.2)
- 31. ) PROVIDE A MINIMUM OF TWO 20-AMP SMALL APPLIANCE BRANCH CIRCUITS FOR THE KITCHEN/DINING/BREAKFAST. (E3703.2)
- 32. ) BOTH METAL PIPING SYSTEMS AND GROUNDED METAL PARTS IN CONTACT WITH THE CIRCULATING WATER ASSOCIATED WITH A HYDRO MASSAGE TUB SHALL BE BONDED TOGETHER USING AN INSULATED, COVERED, OR BARE SOLID COPPER BONDING JUMPER NOT SMALLER THAN NO. 8 AWG. (E4209)
- 33. ) PROVIDE COMBUSTION AIR TO ALL INDOOR FIREPLACES WITH AIR INTAKE LOCATED NOT HIGHER THAN THE FIREBOX. (R1006.1)
- 34. ) AT LEAST ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM. (M1103.1)

THE FOLLOWING THREE NOTES ARE APPLICABLE TO NEW CONSTRUCTION ONLY:  
(BP CERTIFIED PROFESSIONALS ARE APPROVED FOR TESTING AIR LEAKAGE IN EXISTING BUILDINGS, OTHERWISE RESNET PROFESSIONALS ARE APPROVED FOR NEW AND EXISTING):

35. ) THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT MEETS THE REQUIREMENTS OF SECTION M1507. OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING. (M1103.6)

36. ) THE BUILDING OR DWELLING UNIT SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING FIVE AIR CHANGES PER HOUR FOR DETACHED DWELLING UNITS AND SEVEN AIR EXCHANGES PER HOUR FOR ATTACHED DWELLING UNITS. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E 779 OR ASTM E 1827 AND REPORTED AT A PRESSURE OF 0.2 INCH W.G. (50 PASCALS). TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY (RESNET CERTIFIED). A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL. TESTING SHALL BE PERFORMED AT ANY TIME AFTER CREATION OF ALL PENETRATIONS OF THE BUILDING THERMAL ENVELOPE. (M1102.4.1.2 AMENDED)

37. ) DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED IN ACCORDANCE WITH M1103.3.2. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1. DUCTS SHALL BE PRESSURE TESTED TO DETERMINE LEAKAGE BY ONE OF THE FOLLOWING METHODS (M1103.3.3):  
1. ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE IF INSTALLED AT HE TIME OF THE TEST. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.  
2. POST-CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE MEASURED WITH A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 PA) ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.  
EXCEPTION: A DUCT LEAKAGE TEST SHALL NOT BE REQUIRED WHERE THE DUCTS AND AIR HANDLERS ARE LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.  
A WRITTEN REPORT OF THE RESULTS SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL PRIOR TO THE BUILDING FINAL.

TOTAL UNDER ROOF	
EXISTING LIVABLE AREA	2077 SQ. FT.
LAUNDRY/STORAGE TO LIVABLE AREA	143 SQ. FT.
NEW LIVABLE AREA	931 SQ. FT.
TOTAL LIVABLE AREA	3151 SQ. FT.
NEW GARAGE	260 SQ. FT.
EXISTING GARAGE	420 SQ. FT.
TOTAL ENCLOSED AREA	680 SQ. FT.
NEW COV. PORCH	75 SQ. FT.
TOTAL UNENCLOSED AREA	75 SQ. FT.
TOTAL UNDER ROOF FOOTPRINT	3906 SQ. FT.
	3906 SQ. FT.

EDITION OF CODES	
2015	IBC
2015	IRC
2015	IPC
2015	IMC
2011	NEC
2015	IFGC

**NOTE:**  
CONTRACTOR/OWNER TO VERIFY ALL DIMENSIONS, EXISTING CONDITIONS, AND CONSTRUCTION DOCUMENTS FOR DISCREPANCIES PRIOR TO START OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO THE START OF WORK.

**CORNERSTONE DESIGN**  
MESA, ARIZONA  
PHONE: (602) 695-5324  
E-MAIL: rdc@msi.com

CACTUS ADDITION/REMODEL  
8417 E. CACTUS ROAD  
SCOTTSDALE, ARIZONA 85260

EXISTING FLOOR PLAN

SHEET 1 OF 7

REVISIONS

DATE: 03/05/20

DRAWN BY:

CHKD BY:

JOB #

STK PLN

DRAWING NO. A-1