## **CITY OF BULLHEAD CITY**

## **Development Services Department**

2355 Trane Road Bullhead City, AZ 86442 Office (928) 763-0124

Office (928) 763-0124 Fax (928) 763-0131

#### **GENERAL INFORMATION**

Retain these approved plans for your permanent records. The City will destroy our copy 180 days after the project has passed final inspection and/or is issued a Certificate of Occupancy.

Do not install or construct any structures over utility company maintained service lines. Prior to digging call Arizona 811; in AZ dial 811, out of state 1-800-STAKE-IT (1-800-782-5348). The City will be verifying the presence of blue staked lines during your first inspection.

#### TEMPORARY RESTROOM AND TRASH

**RECEPTACLES:** All construction type work for which a building and or grading permit is required shall have on site prior to commencing any work authorized by such permit issued by the city: A. Temporary restroom facilities; and B. One minimum three cubic yard trash receptacle.

**TERMITE CERTIFICATION:** For all habitable structures, prior to issuance of a Certificate of Occupancy or a Certificate of Compliance, the applicant for the building permit must submit a Certificate of Guarantee issued by a pest-control agency licensed by the Arizona Office of Pest Management. The guarantee shall indicate that the soil on the subject lot has been treated for the prevention of termite infestation.

RIGHT-OF-WAY PERMIT: If you are building, constructing, encroaching, or working in any City right-of-way which includes, but not limited to: streets, drainage easements, and public utility easements, you need a Right-Of-Way permit from the Engineering Department, prior to performing the work (i.e. Driveways, Sidewalks) 928-763-9400

**UTILITIES:** Electric, Water and Gas utilities must be turned on for the final inspection.

**FINISHED FLOOR ELEVATIONS:** The top of any exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent. Alternate drainage methods must be reviewed and approved by the City. Lots located in a flood zone may be required to meet additional FEMA requirements.

**GRADING & DRAINAGE**: Grading is to be done per the IRC or IBC, Maintain 2:1 slopes or shallower. In areas of fill or unknown soils characteristics a soils test, made by an approved agency using an approved method, may be required. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as not to create a hazard.

#### **ELECTRICAL/MECHANICAL/PLUMBING**

#### ALL PIPING:

Shall be supported in such a manner as to maintain its alignment and prevent sagging.

Shall be laid on a firm bed for its entire length.

Shall be backfilled with clean earth not to contain stones or other materials which would damage or break the piping.

#### WATER LINES:

Must be buried a minimum of 12" below grade. (Copper piping must be sleeved)

#### **SEWER LINES:**

Using Schedule 40 DWV or SDR35 piping, install 3" pipe with a minimum of 1/8" per foot fall. Provide an inline double sweep cleanout at the building, additional COs at 100 foot intervals and at each change of direction exceeding 45 degrees. A water test is required for inspection, fill pipe with water prior to the inspector's arrival.

#### NATURAL GAS:

Piping to be approved for conveying gas. Piping not to be buried under any structure. Plastic pipe to be buried 18" (with #18 AWG tracer wire). Metal pipe to be buried 12" (coated or wrapped) OR securely attached to structure a minimum of 6" above grade (1/2" @ 6', 3/4"-1" @ 8').

A pressure test is required for inspection, 10# for 15minutes.

### **ELECTRICAL:**

UG electrical must be buried a minimum of 18" in non-metallic conduit. Exposed conduit to be schedule 80.

Do not cut electrical service boxes into braced wall panels.

The following appliances are required to have a separate 20amp circuit: Swamp Cooler and Washer. The Washer circuit may serve one additional outlet in the laundry area.

Two or more separate small appliance 20amp circuits are required in the Kitchen, breakfast room, dining room or similar area.

### Kitchen Receptacle Locations:

Wall Counters: Counter spaces separated by range tops, refrigerators or sinks are considered a separate counter space. At each space, 12" or wider, start 1st receptacle at 24" maximum from the edge of the counter space, and the next receptacle at 48" maximum from the 1st receptacle and so on, so that no point along wall line is more than 24" from a receptacle in that space.

Island/Peninsular Counters (Min 12"x24"): One receptacle is required for the space regardless of how large it is.

All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere outlets installed in dwelling unit bedrooms shall be protected by a combination type arc-fault circuit interrupter listed and installed to provide protection of the entire branch circuit. (Exceptions may apply)

## CONVENTIONAL FRAMING Bracing Requirements EXTERIOR

Residential conventional light framed buildings are to meet the wall bracing requirements of the 2018 International Residential Code, Section R602.10 or may be alternately designed by an Arizona licensed registrant.

Typically, this includes providing a braced wall panel a maximum of 10' from each building corner and providing additional panels spaced a maximum of 20' apart.

Various bracing methods such as 4' width wood structural panels, 8' width gypsum wall board panels, portal frames with hold-downs, 2'8" alternate braced walls panels with hold-downs, etc.

# Post & Beam Construction of Awnings & Carports: If Building Height is:

<=12': PC	OST BAS	SES and CAP	'S must be	rated for a
minimum	of	_# of uplift (	sqft of	awning x
10)/	# of 4x	1 nosts		•

Knee Bracing is required on all corners and every 25' along a wall line. Transverse knee bracing shall be located at each end of the building and every 25'. 12 Gauge "T" and "L" brackets are approved connectors when used in pairs and through bolted with ½" bolts.

**OR** structures may be designed by an AZ licensed registrant

>12': Building must be designed by an AZ licensed registrant

### **MISCELLANEOUS:**

### **FENCES AND RETAINING WALLS:**

No portion of a fence or retaining wall is to encroach into any Drainage or Public Utility Easement unless an Encroachment permit is first obtained from the Engineering Division.

## BARRIERS FOR SWIMMING POOLS, SPAS, AND HOT TUBS:

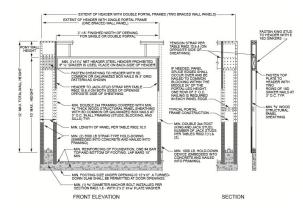
Residential pool barriers must meet the requirements of the adopted code. See separate Pool Barrier handout for specific requirements.

## **RESIDENTIAL STAIRWAYS:**

Size: Minimum 36" width, Max. 7 3/4" rise, Min.10" run Headroom: Maintain minimum 6'8" clearance Landings: Minimum 36" in the direction of travel Handrails: If 4+ risers, 34-38" height, 1 ½ "-2" handgrip Guardrails: Min. 36" height, <4" sphere max. spacing

	Material	SIZE/ STUDS	WIDTH	NAILS	EDGE, FIELD
EXTE	RIOR (See IRC 602.	10 for full lis	st)		
WSP	Wood Structural Panel	3/8" or 7/16" Studs @ 16"OC	4'W panels OK for use as 2'8"W alternate panel	3/8" use: 6d, 1.5" penetration 7/16" use: 8d, 1.75" penetration	6", 12"
HPS	Hardboard Panel Siding	7/16* Studs @ 16* OC	4'W panels OK for use as 2'8"W alternate panel	0.092" dia., 0.225" dia. Head nails with length to accommodate 1.5" penetration into studs.	4", 8"
LIB	Let-In-Bracing	1x4 wood or Approved metal straps at 45 to 60 angles Studs @16" OC	8'H = 55"W 9'H = 62"W 10'H = 69"W	Wood use: 2-8d common nails or 3-8d (2 1/2" long x 0.113" dis.) nails Metal use: per manufacturer specifications	Wood: per stud and top and bottom plates. Metal: per manufacturer
PFH	Portal Frame with hold-downs	3/8" Studs @ 16" OC	One Story: 16"W Two Story: 24"W	See Diagram R602.10.6.2 Simpson STHD14 strap (or equal)	
ABW	Alternate Braced Wall	3/8" Studs @ 16" OC	8"H = 28"W 9"H = 32"W 10"H = 34"W	See Diagram R602.10.6.1  1story: 1800 lb. rated hold-down.  2sd Story: 3000 lb. rated hold-down.  See WSP for nailing	
INTER	IOR (See IRC 602.1	10 for full lis	t)		
GB	Gypsum Wallboard (1/2")	1/2" 16" OC	4' on 2 faces or 8' on 1 face	1/2* long galvanized roofing nail;     1/2* long galvanized staple;     1/4* long screws, Type W or S.	7", 7"
GB	Gypsum Wallboard (5/8")	5/8" 16" OC	4' on 2 faces or 8' on 1 face	1 3/4" long galvanized roofing nail; 1 5/8" long galvanized staple; 1 5/8" long screws, Type W or S.	T*, T*
				Interior braced walls to be secured with anchor bolts OR shot down per manufacturers schedule for shear.	

#### FIGURE R602.10.6.2 METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS



#### FIGURE R602.10.6.1METHOD ABW—ALTERNATE BRACED WALL PANEL

