CITY OF WINNEMUCCA
STANDARD GARAGE PLAN

The following is an outline of the requirements for a garage plan submittal. This list is for reference purposes only and may not include all items needed to complete the plan review.

General Requirements for Submittal

- Two complete sets of plans.
- All pages of the plans shall be on the same size paper. The minimum size of plans allowable is 18" x 24".
- All plans must be legible and clear, drawn to scale (1/4" per foot preferred), and fully dimensioned.

Site Plan Requirements

The following information shall be included on either a title sheet or on the site plan.

- Owners name, mailing address and contact information (email, phone #)
- Project address, assessor's parcel number (APN)
- Show all property lines with dimensions, adjacent streets, and the location of the driveway serving the proposed garage.
- Location of right-of-ways, drainage and/or utility easements (building cannot be located on any easement). Check your deed, if unsure.
- Show all existing structures, the location of the proposed garage and distance of the garage to all property lines and other structures (check with the Planning Department at 623-6392 for the required setbacks from the property lines). No **detached** accessory building may occupy the front of any lot.
- On lots with a slope of **greater than 10%** (12" in 10'), show existing topography, type of slope stabilization and/or retaining walls including heights and finished grade (permits are required for retaining walls over 4' in height measured from the bottom of the footing to the top of the wall). If the building will be located on compacted fill, you must provide a compaction report.
- Show the location of any existing sewer, water or gas lines in the vicinity of the garage. You may not build the garage over any main lines; or any laterals of materials not approved for use inside of the building

Floor Plan

Submit a scaled floor plan of the garage indicating the following:

1. All dimensions of the building;
2. All doors and windows and the sizes of the openings;.
3. The distance of the openings from the corners of the building, as well as distances from any other openings along the same wall line.
4. Header sizes of each opening. If headers are a manufactured product, such as a Versalam, Microllam, etc. specify which product will be used;
5. Bearing walls are to be indicated by showing which direction the trusses (or rafters) are laid out and the peak of the roof.
6. Indicate braced wall lines and methods of bracing.
7. Show the location of electrical subpanels, outlets, lights, and switches on the floor plan, and any plumbing or heating (including wood or pellet stoves).

Footings/Foundations

Garage footings/foundations shall comply with the minimum standards as designated by the International Residential Code. See handout for minimum foundation detail. Footings shall be continuous on the perimeter of the building and under the garage door openings.

Framing

All framing shall comply with minimum standards as designated by the International Residential Code. (Refer to the **cross section** detail for required information). Provide a cross section detail.

Roof Framing (see cross section)

Eave Height of Garage ____ (Maximum 10')

Roof Design

Provide a roof layout

Type (Flat, Hip, gable, Etc.)

Trusses: **Submit Nevada Stamped Engineered Truss Design**

Rafters: Indicate size and spacing on plan

Ceiling joist: Indicate size and spacing

Install hurricane clips on each truss or rafter at double top plate.

Is garage to be sheetrocked? _____. If so, provide attic ventilation and attic access and insulation baffles (if insulated).

Fire Protection

1. Exterior walls shall be protected by a one-hour fire resistive rating with exposure from **both sides** when less than 5' from the property line.
2. No openings are permitted in exterior walls less than 3' from the property line, and limited openings less than 5' from the property line.
3. Eaves are to be protected 2'-<5' from the property line (one hour on the underside). No projections less than 2' to property line except detached garages within 2' of the property line are allowed a 4" eave projection.
4. Garages located less than 3' from a dwelling unit on the same lot must be separated from the house and its attic space by not less than ½" gypsum board applied to the garage side.
5. Doors between a garage and a dwelling unit less than 3' apart are to be 1-3/8" thick solid wood, or 20 minute rated doors with a self-closing device.
6. Where a breezeway separates a single-family dwelling and a garage, the interior wall and gable end wall of the garage adjacent to the dwelling shall be protected by one layer of ½" sheetrock from the floor to the underside of the roof sheathing.

Miscellaneous

1. If the garage will be attached to the house the existing underfloor house vents must be sealed off in the garage. House vents are to be relocated to another location unless the house meets the formula for underfloor vents without relocation.
2. No openings permitted between the house and garage except for an approved 20-minute rated door with a self-closure.
3. There shall be no direct openings between the garage and a bedroom
4. Dryer must be ducted to the outside of the garage with rigid metal pipe with the maximum length as allowed by code.

5. Overflow and condensate lines must be terminated outside of the garage.
6. Egress windows must be maintained from existing bedrooms directly to the outside.

Garages Adjacent to a Manufactured Home

1. The door from the house to the garage is a required exit from the house per Manufactured Housing and the man door from the garage must be in close proximity to the man door from the house. (Two exits are required from a manufactured house).
2. Garage shall be independently supported from the manufactured house. Dormers may be constructed to provide an attachment. The size and construction of the dormer will determine if engineering is required.
3. Existing appliance vents, exhaust ducts and plumbing vents must extend through the new roof and terminate per minimum code requirements.
4. You may be requested to obtain Nevada Division of Manufactured Housing approval if attachment to the manufactured home is in question.

Electrical

1. The owner shall verify the existing service size is adequate for the additional electric load. Only one service is permitted on a residential lot.
2. Show electrical outlets, switches and lights on the floor plan, location of the main service, location of the subpanel and the feeder size to the subpanel. Inform the Building Dept. if an upgraded main service panel is required.
3. A disconnecting means and overcurrent protection are to be provided per the NEC. Overcurrent protection requires the breaker to be rated for the amperage of the wire (i.e. #12 wire/20 amp breaker, #10 wire/30 am breaker, etc.).
4. Outlets in garage are to be GFI unless for dedicated use such as a garage door opener.
5. All exposed wiring shall be protected from damage (run vertically down the studs and securely stapled, unless the wire is protected).
6. Exterior outlets shall be GFI with weather tight covers, which will remain weather tight when a plug is inserted (such as a bubble cover).
7. All wiring used underground shall be listed for wet location or underground use when installed in conduit.
8. Schedule 80 (PVC) rigid nonmetallic electric conduit is required to protect above ground conductors.
9. Provide individual UFER/ground rod/ground wire when more than one circuit is provided in the garage. If a four-wire system is run from the service to the subpanel a separate grounding method is not required.

Mechanical

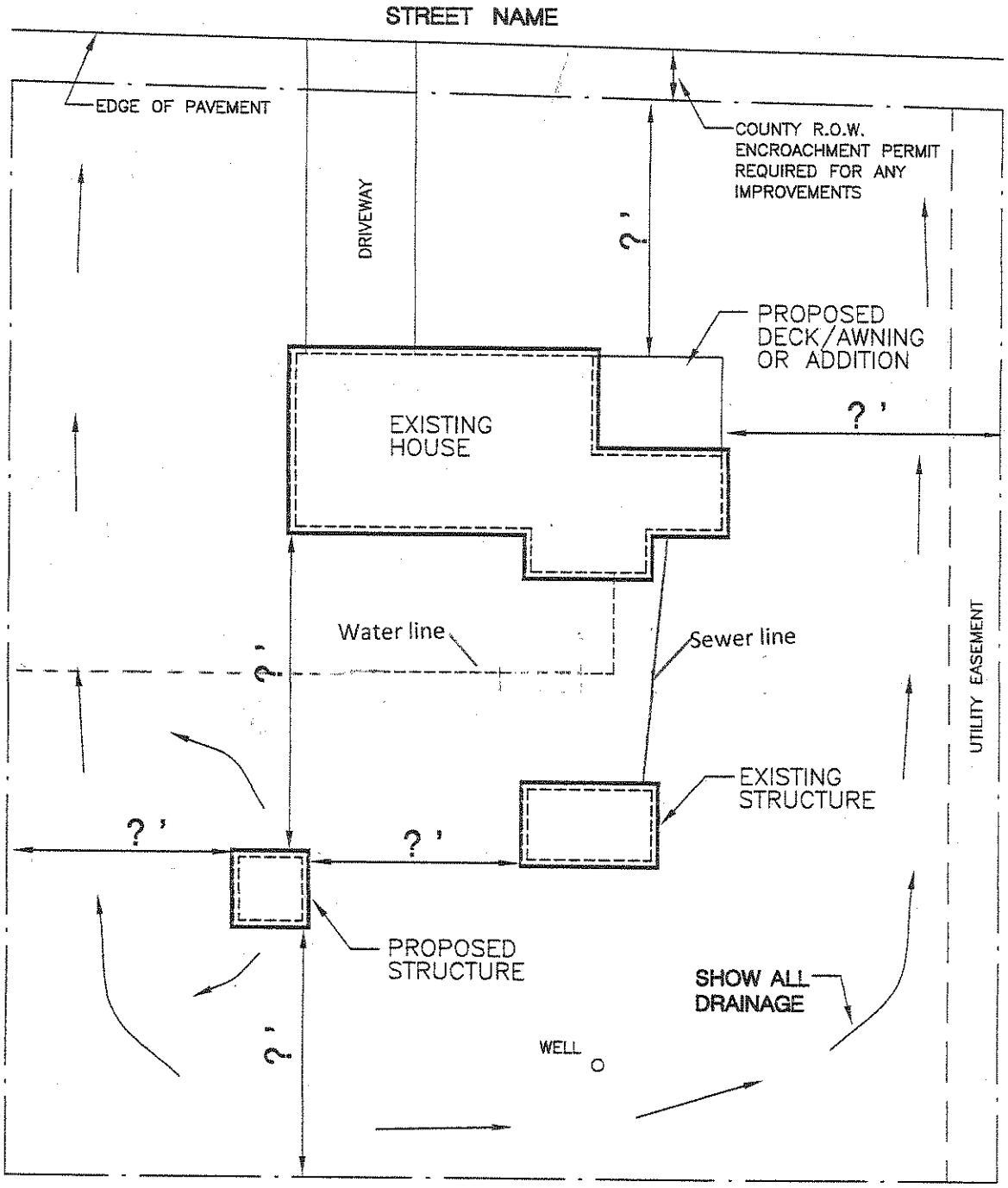
1. Permits are required for all mechanical installations.
2. Show heating and/or cooling equipment on floor plan.
3. Provide a gas line schematic for gas appliances. Indicate the location of the meter, size of each portion of the line, distance to appliances from the meter, etc.)
4. Appliances shall be installed to the manufacturer's installation instructions and the Mechanical Code. Installation instructions must be left with the equipment for the inspection.
5. Heating and cooling equipment located in a garage which generates a glow, spark or flame capable of igniting flammable vapors shall be installed with the pilots and burners or heating elements and switches at least 18" above the floor level.
6. Appliances located in a garage or carport shall be protected from impact by automobiles.

NAME:
ADDRESS:
PARCEL NUMBER:

CHECKLIST

- SHOW ALL DIMENSIONS BETWEEN STRUCTURES
- SHOW NEW STRUCTURE DIMENSIONS
- SHOW DISTANCES TO PROPERTY LINES
- SHOW PROPANE TANK LOCATIONS
- SHOW DISTANCES FROM WELL TO LEACH FIELDS
- SHOW ADDRESS & PARCEL NUMBER
- SHOW SEPTIC TANK LOCATION & SIZE
- SHOW ALL UTILITY & ACCESS EASEMENTS

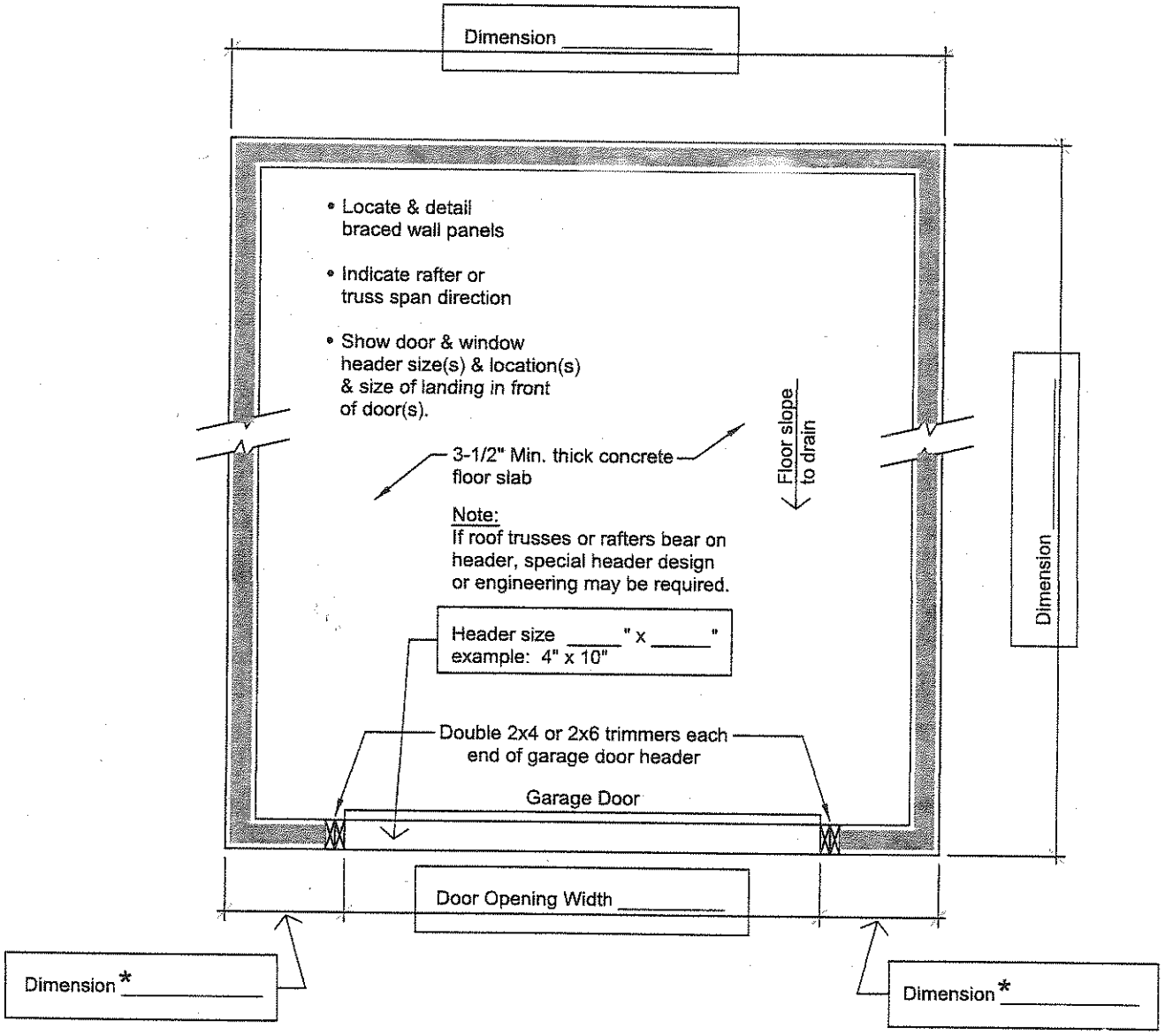
** ADDITIONAL GRADING INFO MAY BE REQUIRED



PLOT PLAN EXAMPLE

SCALE (1" = 30'–0" IS RECOMMENDED) b1dwg1

Single Family Residential
One-Story Detached Garage



Floor Plan

HUMBOLDT COUNTY BUILDING & SAFETY DEPARTMENT
CITY OF WINNEMUCCA
HEADER SCHEDULE

LOAD BEARING EXTERIOR HEADERS-ROOF & CEILING ONLY (IRC TABLE R502.5(1))

	BUILDING WIDTH					
	20'		28'		36'	
Size	Span	# of Jack Studs	Span	# of Jack Studs	Span	# of Jack Studs
2-2x4	3'6"	1	3'2"	1	2'10"	1
2-2x6	5'5"	1	4'8"	1	4'2"	1
2-2x8	6'10"	1	5'11"	2	5'4"	2
2-2x10	8'5"	2	7'3"	2	6'6"	2
2-2x12	9'9"	2	8'5"	2	7'6"	2
3-2x8	8'4"	1	7'5"	2	6'8"	2
3-2x10	10'6"	1	9'1"	2	8'2"	2
3-2x12	12'2"	2	10'7"	2	9'5"	2
4-2x8	9'2"	1	8'4"	1	7'8"	1
4-2x10	11'8"	1	10'6"	1	9'5"	2
4-2x12	14'1"	1	12'2"	2	10'11"	2

LOAD BEARING INTERIOR HEADERS-ROOF & CEILING ONLY (IRC TABLE R502.2(2))

	BUILDING WIDTH					
	20'		28'		36'	
Size	Span	# of Jack Studs	Span	# of Jack Studs	Span	# of Jack Studs
2-2x4	3'1"	1	2'8"	1	2'5"	1
2-2x6	4'6"	1	3'11"	1	3'6"	1
2-2x8	5'9"	1	5'0"	2	4'5"	2
2-2x10	7'0"	2	6'1"	2	5'5"	2
2-2x12	8'1"	2	7'0"	2	6'3"	2
3-2x8	7'2"	1	6'3"	1	5'7"	2
3-2x10	8'9"	1	7'7"	2	6'9"	2
3-2x12	10'2"	2	8'10"	2	7'10"	2
4-2x8	9'0"	1	7'8"	1	6'9"	1
4-2x10	10'1"	1	8'9"	1	7'10"	2
4-2x12	11'9"	1	10'2"	2	9'1"	2

SPANS FOR MIN. #2 GRADE SINGLE HEADER SUPPORTING ROOF & CEILING ONLY (IRC TABLE R602.7.1)

	BUILDING WIDTH		
	20'	28'	36'
2X8	5'3"	4'6"	4'0"
2X10	6'8"	5'8"	5'1"
2X12	8'1"	6'11"	7'2"

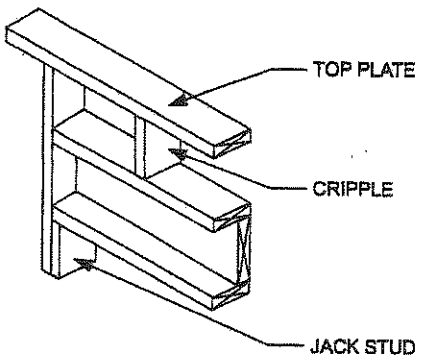


FIGURE R602.7.1(1)
SINGLE MEMBER HEADER IN EXTERIOR BEARING WALL

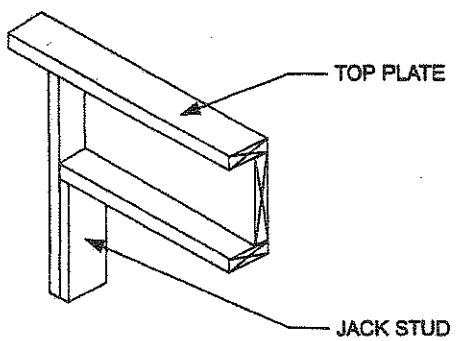


FIGURE R602.7.1(2)
ALTERNATIVE SINGLE MEMBER HEADER WITHOUT CRIPPLE

Person Submitting Cross Section _____

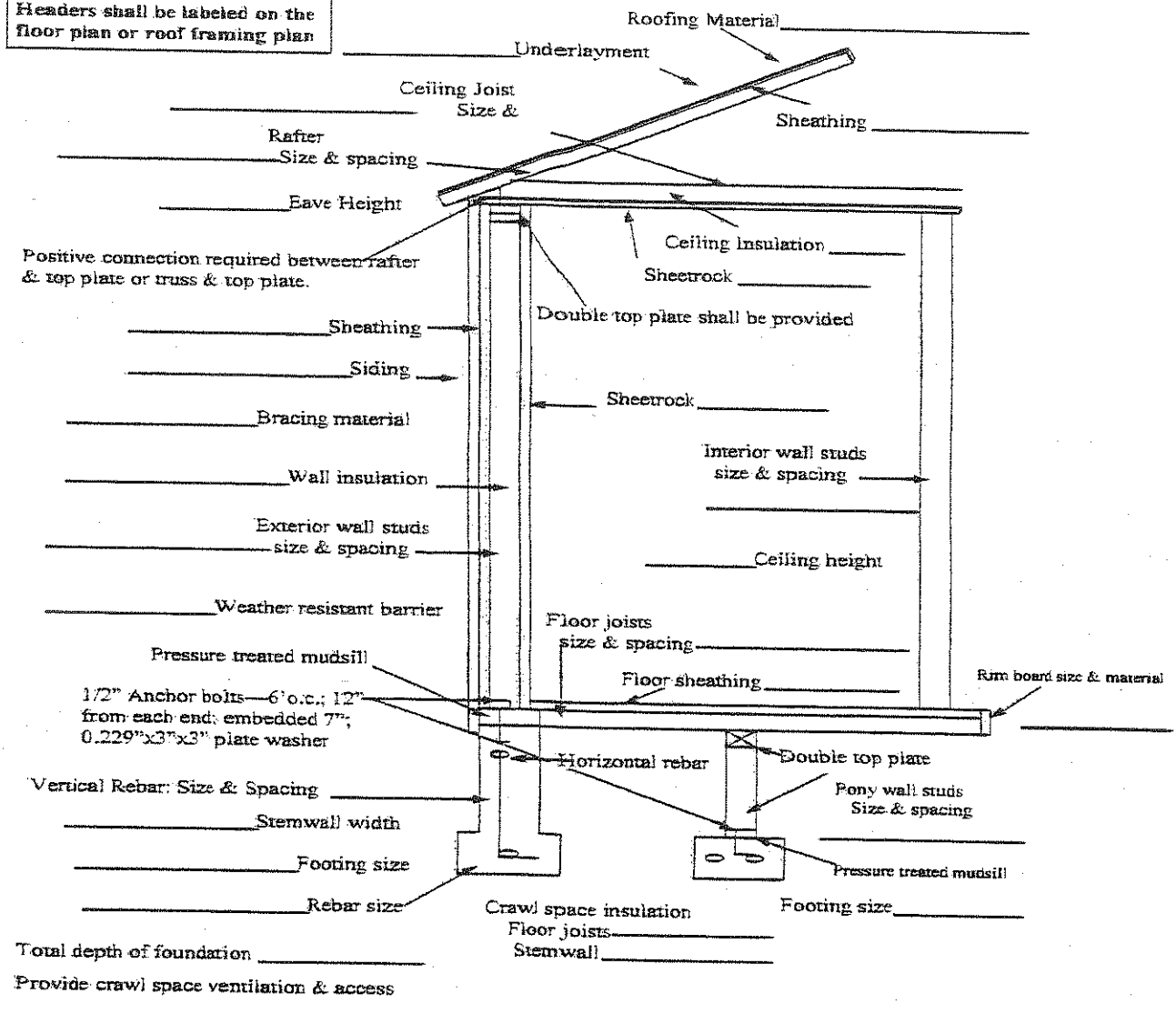
Job Address _____

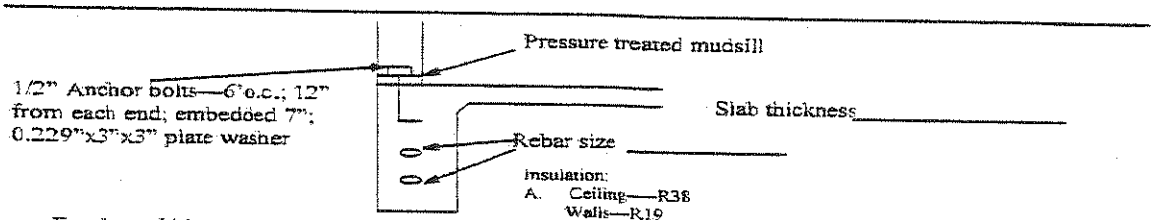
Date: _____

Engineered Truss System [Yes] [No]

Roof Slope

Headers shall be labeled on the floor plan or roof framing plan





Revised 01-09

Insulation:

A. Ceiling—R38
Walls—R19
Floors—R30 (or sufficient to fill the framing cavity, R-19 min.
Basement walls—R10
Crawl Space walls—R10

B. Stemwall insulation—Do not install under floor vents. See other specific requirements

C. Floor insulation—install under floor vents. Wrap all ducts and water lines below the insulation.

D. Slab insulation—R-10 for 24". Insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended by 2' in any combination of vertical insulation, insulation extending under the slab or insulation extending out form the building.

HUMBOLDT COUNTY BUILDING DEPARTMENT
CITY OF WINNEMUCCA BUIDING DEPARTMENT
FOUNDATON DETAIL FOR ONE AND TWO FAMILY CONSTRUCTION
2012 INTERNATIONAL RESIDENTIAL CODE

1. Plates, sills or sleepers on concrete or masonry which is in direct contact with earth shall be treated wood. R318 &319.1(3)
2. Foundations supporting wood shall extend at least 6" above the adjacent finished grade. R319.1(5) & R401.1.6
3. Foundation plates or sills shall be bolted to the foundation or foundation wall with not less than 1/2" anchor bolts embedded at least 7" into concrete and spaced not more than 6' apart (2-story anchor bolts shall be placed 4' apart). There shall be a min. of (2) bolts per piece with one bolt located within 12" of each end of each piece. A min. of 0.229"x3"x3" thick plate washer shall be used on each bolt. A properly sized nut shall be tightened on each bolt to plate. Anchor bolts shall not be countersunk in the sill plate. R402 & R602.11.1
4. Min. of (1) #4 bar shall be installed within 12" of the top of the stemwall and (1) #4 rebar located 3" to 4" from the bottom of the footing. Where a construction joints occurs between a footing and stemwall install a min. 1/2" diameter rebar @ 48" o.c. The vertical bar shall extend 3" clear of bottom of the footing, have a standard hook & extend a min. of 14" into the stemwall. (R403.1.3).
5. Monolithic foundations shall have a min. of (1) #4 rebar at the top and bottom of the footing. Where slab is not cast monolithically with footing #3 or larger vertical dowels with standard hooks on each end shall be provided. All rebar shall be supported. R403.1.3.2
6. Footings & foundations shall extend below frost line (24" depth) and be continuous, including under garage door openings. R403.1.2 & R403.1.4.1 (Exception: **Freestanding** accessory structures 600 sq ft or less, of light frame construction with a max. 10' eave height shall not be required to have frost protected footings. Min. depth of such footings shall be 12". R403.1.4.1, Exception 1).
7. All exterior footings shall be placed at least 12**" below undisturbed ground surfaces** (refer to depth of footing in item #6 above). R403.1.4
8. Rebar shall not be bent with heat (IBC Section 1907.3.1) When lapping rebar the lap shall be a min. of 20" for #4 rebar.
9. The grade away from foundation wall shall fall a min. of 6" in the first 10'. R401.3
10. Underfloor areas shall be ventilated by openings of 1 sf/150 sf of floor area. With Class I vapor retarder the min. net area of ventilation openings shall not be less than 1/1500. Openings shall be provided within 3' of each corner. Close with 1/4" mesh. R408.1 & R408.2
11. Provide an 18"x24" foundation crawl space access. Access shall not be located under door to the residence. R408.4
12. Hold down devices are to be installed where required by wall bracing requirements of IRC 602.10 (simplified method of bracing without hold downs include a 4' braced panel at corners and every 25' (20' to inner edges of panels).
13. All vertical reinforcement and seismic hardware shall be in place at the time of footing inspection.
14. Masonry walls shall be solidly grouted. R403.1.3