



908 WEST GORDON AVE. SUITE #3
LAYTON, UT 84041
(801) 547-8133

September 12, 2017

FIRST REVIEW
WC³ Project #: 217-525-153

Weber County
Building Inspection Department
2380 Washington Boulevard, Suite 240
Ogden, Utah 84401
Phone: (801) 399-8374

Attention: Craig Browne, Building Official

Subject: Ong SFD Footing & Foundation – Plan Review Comments

Mr. Browne:

West Coast Code Consultants, Inc. (WC³) has completed the first review of the proposed Ong SFD Footing & Foundation project located in Eden, UT. This review was based upon the following:

1. Architectural drawings dated 8/28/2017 by hughsumbanhowar, sealed and signed by John Umbanhowar, Licensed Architect.
2. Civil drawings dated 8/22/2017 by Talisman Civil Consultants, sealed and signed by Ryan W Cathey, Professional Engineer.
3. Structural drawings and calculations dated 8/27/2017 by Richmond Hoffmayer Inc, sealed and signed by Joseph Hoffmayer, Professional Engineer.
4. Geotechnical investigation report (#01628-015) dated 12/1/2016 by IGES, sealed and signed by David A Glass, Professional Engineer.

The 2015 IRC, as adopted by the State of Utah, were used as the basis of our review. Specific comments regarding to this project are enclosed with this cover letter. If you have any questions regarding this review please do not hesitate to contact me.

Sincerely,

Mike Molyneux
Attachment: Comments



Plan Review Comments

Project Name: Ong SFD Footing & Foundation

Code Review by: Jason vonWeller

Location(s): 5790 North Daybreak Ridge, Eden, UT

Structural by: Joe Bingham

Checked By: DeAnn Wilde

SQUARE FOOTAGE SUMMARY:

Main Level	Upper Level	Finished Basement	Unfinished Basement	Deck(s)	Covered Patio(s)	Garage	Carport
576-ft ²	520-ft ²	-	-	132-ft ²	-	-	-

* - Items noted with an asterisk may change as a result of the plan review comments.

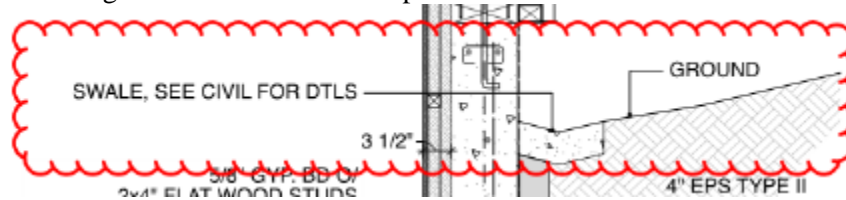
GENERAL INFORMATION:

The submitted documents for the above-mentioned project, as outlined in the cover letter, have been reviewed. The following comments address areas of concern, non-compliance with the governing code, potential errors, or omissions in the proposed design. The appropriate design professional must address each comment below and submit a written response in addition to revised plans and calculations if necessary. **Please cloud any revisions made to the construction drawings and provide the date of the latest revision on each revised sheet.**

CODE REVIEW COMMENTS:

- A1. Sheet A-0.01: Please address the property line and building envelope boundaries, in accordance with Chapter 3 of the IRC and local Weber County codes and ordinances. There are various locations where the building appears to encroach.
- A2. Identify the location of carbon monoxide detectors. Per R315 and Utah State Amendments, provide a minimum of one carbon monoxide alarm on each habitable level, outside each separate sleeping area in the vicinity of bedrooms, and within bedrooms where fuel-burning appliances exist. Alarms shall receive their primary power from the building wiring and shall have battery backup.
- A3. Please provide a window schedule:
 - A. Per R303, all habitable rooms shall be provided with aggregate glazing area of not less than 8 percent of the floor area of such rooms. The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated or a whole house ventilation system designed per M1507.3. Please detail on the plans how the requirements for light and ventilation will be met.
 - B. Per R310.1, every sleeping room and basements are required to have emergency escape and rescue openings with a net clear opening of not less than 5.7 square feet. The clear height shall not be less than 24 inches and the net clear width shall not be less than 20 inches. Please make necessary corrections to the plans to show the required window sizes.
 - C. Per R308.4, please clearly indicate on the plans the requirements for safety glazing and where it is to be provided, i.e., all shower compartments, sliding glass doors, windows adjacent to doors, and other hazardous areas.
- A4. Based on IRC R401.3, lots shall be graded to drain surface water away from the foundation walls. The grade shall fall a minimum of 6 inches within the first 10 feet. Per IRC R403.1.7.3, the top of the

foundation is required to be a minimum of 12 inches, plus 2%, above the top of the curb. Please note this information on the footing/foundation sheet of the plans.



MECHANICAL REVIEW COMMENTS:

- M1. Please provide general mechanical sheet notes to demonstrate compliance with IRC R106.1.1.
- M2. Please identify location and type of interior conditioning equipment, per R106.1.1. Please verify necessary working clearances.
- M3. Please provide 100 cubic inches of makeup air for laundry closet, and note or detail same on the plans.
- M4. Indicate on the plans the length of the clothes dryer vent. Verify that it will meet the requirements of IRC M1502.4.4.1 as amended by the State of Utah.

PLUMBING REVIEW COMMENTS:

- P1. Please provide general plumbing sheet notes to demonstrate compliance with IRC R106.1.1.
- P2. Please indicate location of water heating/circulation device(s) and provide manufacturer details for installation and required working clearances.
- P3. Indicate on the plans that hose bibs shall be provided with an atmospheric or pressure type vacuum breaker, per IRC P2902.4.3
- P4. Please clarify the seismic bracing requirements for the water heater if applicable, per IRC P2801.7.
- P5. Please note on plans that a backwater valve is required to protect plumbing fixtures that are located below the elevation level of the nearest upstream man hole cover. Fixtures that are above the elevation level of the manhole cover shall not discharge through the backwater valve. IRC P3008.1
- P6. Per P2902.4.3, please note on the plans that hose bibs shall be provided with an atmospheric or pressure type vacuum breaker.
- P7. Per P2903.5, please note on the plans that water hammer arrestors are required at quick-closing valves, i.e., dishwashers & clothes washers.

ELECTRICAL REVIEW COMMENTS:

- E1. Please provide general electrical sheet notes to demonstrate compliance with IRC R106.1.1.
- E2. Indicate outlets will be provided on the exterior of the home, in accordance with IRC E3901.7.
- E3. If applicable, please note that electrical outlets in floors shall not be counted as part of the required number of receptacle outlets except where located within 18" of walls, per E3901.2.3.
- E4. Please provide a note on the plans indicating that all outlets will be tamper resistant in accordance with IRC E4002.14.



- E5. Please specify on the plans that electric radiant heating system for the bathroom(s) must have ground-fault circuit protection, per IRC E3902.10.
- E6. Please note on the plans where two or more non-metallic sheathed cables (romex) are installed together in the same space without maintaining space between them and where the opening they are installed in is filled with caulking, foam insulation, or other types of insulation, the conductors must be derated, as required by IRC E3705.4.4.
- E7. Please show the electrical panel on the plans so that working space can be verified, as required by IRC E3405.1
- E8. Please specify that all lighting over tubs or showers must be suitable for wet or damp locations, as required by IRC E4003.9.
- E9. Please show electrical GFCI receptacles within 24" of the edges of counter spaces, within 24" of the sink, within 24" of the cook top at the kitchen counter spaces, and spaced every 4' o.c. thereafter, per IRC E3901.4.
- E10. Please specify two small appliance branch circuits for the kitchen that are limited to supplying wall and counter space outlets for the kitchen, pantry, breakfast room, dining room, or similar areas. Note: These circuits cannot serve outside plugs, range hoods, disposals, dishwashers, or microwaves. They may only serve the required countertop/wall outlets and the refrigerator.
- E11. Please note that a dedicated 20-amp branch circuit for the bathroom receptacle outlets is required. This circuit cannot supply any other receptacles, lights, fans, etc.
- E12. Identify all receptacles in the garage as GFCI protected, per E3902.2.
- E13. Identify on the plans the dishwasher branch circuit shall be protected by GFCI, per E3902.9
- E14. Please note that all 125-volt, single phase, 15- and 20-amp receptacles in laundry areas shall have GFCI protection, per E3902.9.
- E15. Please show a GFCI protected outlet adjacent to each lavatory the bathrooms, per E390.1.6.
- E16. Please show a receptacle in hallway leading to bedrooms, per E3901.2.2.

ENERGY REVIEW COMMENTS:

- N1. Please indicate the U-factor for the windows on the plans. Include a note which clarifies that all U-factors shall be determined by testing in accordance with NFRC 100 and labeled as such by the manufacturer, per Section 102.1.3.
- N2. Please note that a permanent certificate shall be completed and located in an approved location that lists the predominant R-values of the insulation installed in the ceiling/roof, walls, foundation and ducts outside conditioned spaces, and U-factors for fenestration.
- N3. Please indicate on the plans that no less than 75% of the lamps permanently installed in lighting fixtures shall be high efficacy lamps or not less than 75 percent of the permanently light fixtures shall contain only high efficacy lamps. IRC N1104.1
- N4. Per IECC R402.4.5, please indicate that recessed luminaires (can lights) will be IC rated, air-tight and sealed to limit air leakage per ASTM E 283.

STRUCTURAL COMMENTS:



No structural comments.

If you have any questions regarding the above comments, please contact Mike Molyneux at mikem@wc-3.com or by phone at (801) 547-8133.

[END]