

January 30, 2018

Mike Molyneux
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908 W. Gordon Ave. Suite #3
Layton, UT 84041

Re: Plunkett Kuhr SFD — Plan Review Comments (First Review)
WC³ Project #: 217-525-188

Mr. Molyneux:

We have reviewed the plan review comments dated October 26, 2017. See below for responses in [blue](#). The numbering of the responses corresponds to the numbering of the review comments. Also find attached structural review comments, revised Res Check, Fireplaces manufacture information, and revised drawings.

CODE REVIEW COMMENTS

A1. Sheet G-5: Please address the following:

- A. The IRC code summary references several I-codes besides the IRC. Other than the IECC, please clarify why the list of codes has been provided. Detail in writing that the plans were designed based upon and meet the requirements of the 2015 IRC.

[The Applicable Codes to this Project it is only IRC 2015 and IECC 2015. See Revision 1 @ G-5](#)

A2. Sheet A-101: Please address the following:

- A. A crawl space access door is identified on the Level 1 floor plans. The south elevation drawing provided on Sheet A-201 shows the access door to be approximately 6-feet above grade. Please clarify what is occurring at these locations.

[See revision 1 @ Sheet A-101, A-201, and 1 / A-301. The access door is 2" above grade.](#)

- B. Detail the size of the crawl space access door, per R408.4.

[See revision 1 @ Sheet A-101, A-201, and 1 / A-301. The size of the access door is 3'-0" / 2'-6".](#)

A3. Sheet A-102: Please address the following:

- A. Door 205c is identified as an interior fire rated glass door. Door 205d is identified as an interior single flush door. Door 205d is required to be fire rated in the same manner as the other door since it is separating habitable space from the garage. Please detail on the plans how all openings between the garage and the residence will meet the requirements of IRC R302.5.1.

[See revision 1 @ Sheet A-102 and A-701. Door numbering has been updated, Door 209 is an interior fire rated single flush door.](#)



A4. Sheet A103: Please address the following:

- A. A firebox is identified in the study, and yet no other information is provided. Please provide the listing information for the firebox, the cut sheet, and the manufacturer's installation information.

[See revision 1 @ Sheet A-102, A-103, and attached manufacture information.](#)

[Firebox Level 3: Rais Rondo Classic Wood Stove UL: 1482](#)

[Firebox Level 2: Mason-Lite Firebox-MEP 49 UL: 127; ULC: 103](#)

A5. Sheet A-201: Please address the following:

- A. Guards are shown at various locations throughout the elevations drawings. Per R312.1, the minimum height of guards located more than 30 inches above the floor shall be not less than 36 inches, except at the sides of stairs where the minimum height is 34 inches. Openings in guards shall have intermediate rails or ornamental closures that do not allow passage of a 4-inch sphere. Please detail the required guard on the plans.

[See revision 1 @ Sheet A-201, A-202, A-801, and A-802. Also refer to Architectural Notes @ Sheet G-3](#)

A6. Sheet A-301: Please address the following:

- A. General Notes 5 and 6 reference IRC 703 for exterior walls. The statement is insufficient for construction. Detail on the plans how the exterior wall coverings will meet the requirements of IRC 703. Sheet G-1 identifies siding details and weather-resistive barrier as deferred submittals. This information may not be deferred.

[See revision 1 @ Sheet A-301 and G-1.](#)

A7. Sheet A-606: Please address the following:

- A. Sheet G-1 identifies the unvented roof system as a deferred submittal. This information may not be deferred. Sheet A-301 references details on this sheet. Provide complete details on the plans identifying how the requirements of R806.5 for unvented attic and unvented enclosed rafter assemblies will be met.

[See revision 1 @ Sheet A-301, A-606, and G-1.](#)

A8. Sheet A-901: Please address the following:

- A. This sheet is identified as Level 1 reflected ceiling plan. Sheet MEP-101 is also identified as Level 1 reflected ceiling plan. Provide only one complete and accurate reflected ceiling plan for each level of the structure. *This comment also applies to Sheets A-902 and MEP-102.*

[See revision 1 @ Sheet MEP-101, and MEP-102.](#)

A9. Per R302.11, please detail on the plans the required fireblocking materials to be provided in concealed spaces of stud walls and partitions, at interconnections between concealed vertical and horizontal spaces, and in concealed spaces between stair stringers.

[See revision 1 @ Sheet A-604, A-605, A-606, A-801, and A-802.](#)

A10. Per 302.12, please detail on the plans the required draft stopping material to be provided to breakup concealed spaces into areas not to exceed 1,000 square feet at suspended ceilings or open-web floor framing.

[See revision 1 @ Sheet A-001 and A-901. There is no space greater then 1,000 square feet with suspended ceiling. The space is 752 square feet at Level 1b.](#)

MECHANICAL REVIEW COMMENTS

M1. Sheets MEP-101 and MEP-102 do not provide information regarding the mechanical aspects of the project. Provide complete general mechanical sheet notes. Per IRC R106.1.1, construction documents shall be of sufficient clarity to indicate the location, nature and extend of the work proposed and show in detail that it will conform to the provisions of code.

- A. It is acknowledged that the HVAC system and radiant heat system are identified as deferred submittals. That does not eliminate the requirement to address the general requirements of code for mechanical systems.

[See revision 1 @ Sheet G-4.](#)

M2. Per R303.3, toilet rooms without windows are required to have vent fans in accordance with M1507. Please identify the required vent fan on the plans.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

PLUMBING REVIEW COMMENTS

P1. Sheets MEP-101 and MEP-102 do not provide information regarding the plumbing aspects of the project. Provide complete general plumbing sheet notes. Per IRC R106.1.1, construction documents shall be of sufficient clarity to indicate the location, nature and extend of the work proposed and show in detail that it will conform to the provisions of code.

[See revision 1 @ Sheet SP-1 and A-101.](#)

P2. The gas piping schematic is identified as a deferred submittal. This information cannot be deferred and must be defined prior to the placement of footings.

[See revision 1 @ Sheet SP-1.](#)

ELECTRICAL REVIEW COMMENTS

E1. Sheets MEP-101 and MEP-102 do not provide sufficient information regarding the electrical aspects of the project. Provide complete general electrical sheet notes. Per IRC R106.1.1, construction documents shall be of sufficient clarity to indicate the location, nature and extend of the work proposed and show in detail that it will conform to the provisions of code.

[See revision 1 @ Sheet G-1, SP-1, and A-101.](#)

E2. Per E3901, receptacle outlets are required at the following locations:

- A. No point measured horizontally along "wall space" is more than 6 feet from receptacle. "Wall space" includes any space 2 feet or more in width.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

- B. At each wall counter space 12" or wider so that no point along the wall is more than 24" from a receptacle outlet.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - C. At least one receptacle outlet at each island or peninsular counter space with a long dimension of 24" or greater and a short dimension of 12".
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - D. Within 6 feet of intended appliance locations (i.e. oven, laundry, etc.). No less than one receptacle is required in laundry areas.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - E. At least one receptacle outlet on the wall within 36" of the outside edge of each lavatory basin in bathrooms.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - F. Outdoor outlets at the front and back of each dwelling unit within 6.5 feet from grade.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - G. Basements, garages, and accessory buildings shall have at least one receptacle outlet, in addition to any provided for specific equipment.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - H. Provide a receptacle outlet in hallways 10 feet or more in length. Foyers > 65 ft² shall have receptacles on all wall spaces > 3 feet.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - I. Provide a convenience receptacle for the servicing of appliances (HVAC) within 25 feet of the appliance.
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
- E3. Per E3902, the following receptacles shall have GFCI protection:
- A. Bathrooms receptacles
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - B. Garage receptacles and grade-level receptacles in unfinished accessory buildings used for storage or work areas
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - C. Outdoor receptacles (These are also required to be weatherproof.)
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
 - D. Crawl space receptacles
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

- E. Unfinished basement receptacles
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
- F. Kitchen receptacles
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
- G. All receptacles located within 6 feet of sinks, bath tubs or showers
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
- H. Laundry areas
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)
- I. Dishwasher receptacles
[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E4. Per E4002.14, please provide a note on the plans indicating that all outlets will be tamper resistant.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E5. Per E3902.10, please specify on the plans that electric radiant heating system for the bathroom(s) must have ground-fault circuit protection.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E6. Per E4203.4, please specify on the plans the types of lighting to be installed over or within 5' horizontally of the hot tub.

[See revision 1 @ Sheet MEP-101 and MEP-102. There is no lighting over or within 5' horizontally of the hot tub.](#)

E7. Per E4002.9, please specify that all receptacles located outside must be the weather resistant type.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E8. Per E4003.9, please specify that all lighting over tubs or showers must be suitable for wet or damp locations.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E9. Per E3703.3, please note that a dedicated 20-amp branch circuit for the laundry receptacle outlets.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E10. Per E3703.4, 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.

[See revision 1 @ Sheet MEP-101 and MEP-102.](#)

E11. A smoke detector is required outside of bedrooms 104 and 106.

[See revision 1 @ Sheet MEP-101.](#)

ENERGY REVIEW COMMENTS

N1. Sheet A-301: Please address the following:

- A. The general notes reference the 2009 IECC. The currently adopted code for the State of Utah is the 2015 IECC and the Utah State Amendments. Make all necessary corrections throughout the plans to ensure the energy code requirements meet the requirements of current code.
[See revision 1 @ Sheet A-301 and REScheck.](#)

- B. General Note 2 states “roof/ceiling assembly does not allow sufficient space for required insulation, minimum required insulation may be reduced to R-30 at ceiling”. The REScheck identifies R-49 insulation at the cathedral ceiling. Make necessary corrections throughout to accurately identify the R-value of the insulation to be installed at the unvented attic assembly.
[See revision 1 @ Sheet A-301 and REScheck.](#)

- C. General Note 2 states “floors R-30 of insulation sufficient to fill cavity R-19 minimum”. The REScheck identifies 49 SF of floor area with R-49 insulation. Make necessary corrections throughout to accurately identify the R-value of the insulation to be installed in the floor(s).
[See revision 1 @ Sheet A-301 and REScheck.](#)

- D. General Note 2 states “...R-15 for heated slabs”. The REScheck identifies the heated slab-on-grade with R-10 continuous insulation.
[See revision 1 @ Sheet A-301 and REScheck.](#)

- E. General Note 3 identifies the fenestration U-factor at 0.35. The REScheck identifies 0.32.
[See revision 1 @ Sheet A-301 and REScheck.](#)

- F. Ensure the plans and the REScheck provide the same accurate and code compliant information.
[See revision 1 @ Sheet A-301 and REScheck.](#)

N2. Per IECC R402.4.5, please indicate that recessed luminaires (can lights) will be sealed to limit air leakage per ASTM E 283.

[See revision 1 @ Sheet A-301.](#)

N3. Per N1102.4.5, recessed lighting installed in the building thermal envelope shall be IC rated and sealed to the interior finish. Please note these requirements on the plans.

[See revision 1 @ Sheet A-301.](#)

N4. Per N1104.1, 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.
[See revision 1 @ Sheet A-301.](#)

STRUCTURAL REVIEW COMMENTS

Please refer to Canyons Structural Consulting Letter.

Let us know if you have any questions or additional comments.

Respectfully,

Carla Lehigh

Elliott Workgroup Architecture