Development Services

From Concept to Construction







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Status:	Decision	Rendered
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Appeal ID: 15826	Project Address: 11803 SE Division St
Hearing Date: 9/13/17	Appellant Name: Chris Pagnotta
Case No. : B-012	Appellant Phone: 503-823-7345
Appeal Type: Building	Plans Examiner/Inspector: Chris Pagnotta, Megan Greenauer
Project Type: residential	Stories: 1 Occupancy: Single Family Residence Construction Type: V-B
Building/Business Name:	Fire Sprinklers: No
Appeal Involves: Alteration of an existing structure. Addition	LUR or Permit Application No.: 16-242515-AL

to an existing structure, other. Modification of a manufactured

dwelling

Plan Submitted Option: pdf [File 1] Proposed use: Single family residence

APPEAL INFORMATION SHEET

Appeal item 1

Code Section

ORSC R401.1.4.3

Requires

Requirement: Foundation and under-floor construction requirements related to the installation of manufactured dwellings are to conform to OMDISC Chapter 3. This appeal does not propose compliance with this code in that the areas being considered are additions and are therefore governed by the requirements of the ORSC.

Where the slab is cast monolithically with turned down footings require the turned down footing to contain one of the following (Per ORSC R401.1.1.4.3):

- . One No. 4 bar at the top and bottom of the footing; or
- . One No. 5 bar in the middle third of the footing depth; or
- Two No. 4 bars in the middle third of the footing depth

Additionally, where the slab is cast monolithically with the footing, there shall be one No. 3 or larger vertical dowel with standard hooks on each end spaced not more than 4' on center.

Proposed Design

Proposed design alternative: No modifications to the existing foundation support system(s) are being proposed. This appeal requests to leave all existing, non-permitted foundation systems unchanged regardless of the means and methods of their construction.

Though some of the additions were constructed on pier footings (some cast-in-place and others pre-fabricated), the structural soundness, based on walk-through inspections, appear to be sufficient for the 1-story additions.

In lieu of requiring compliant, retroactive, foundation installations, this appeal proposes that a hold harmless legal agreement to be entered into which declares the building owner(s) and park owner (s) shall hold harmless, defend and indemnify the City of Portland, its officers, agents, officials, and employees against all claims, demands, actions and suits, including attorneys' fees and costs, brought against any of them arising out of or resulting from the terms of this Agreement.

Reason for alternative Reason for alternative: Based on limited visual inspections and in walking through most of the homes, the as-built conditions indicate the gravity support for the additions are sufficient to resist the applied loads. This opinion is based on the absence of, or undiscovered, visible structural fatigue or failure indicators, such as:

- · Sheetrock cracking (interior)
- · "Soft floors"
- · Header deflection
- · Ceiling deflection
- Uneven settling

Increasing (or requiring) modifications will provide only marginal structural improvement. Due to the lack of or absence of discovered visual defect(s), any required improvements or alterations would seem to only serve to improve the structural integrity of the addition during a design capacity seismic or wind event. Due to the close proximity / citing of these homes (in relation to their adjacent manufactured dwelling units), the additions are sheltered from open wind exposure. Furthermore, the foundation systems in place (or lack thereof) are not significantly different than the foundations for the adjoined manufactured dwelling units which were cited with permits.

Appeal item 2

Code Section

2002 MD&P Table 9-A

Requires

Requirement: Table 9-A requires minimum fire separation distances inside parks as 10' with a reference to footnote #3 of the same table. Footnote #3 refers to section 9-5.3 for alternate setback and clearances and also notes further reductions in setback requirements with the use of fire resistive constriction according to the prescriptive requirements contained in the [Oregon One and Two Family Dwelling Specialty Code].

9-5.3(k) reads; the authority having jurisdiction may approve the further reduction of required setbacks and clearances when fire resistive construction is provided between the structures according to the prescriptive requirements in the [Oregon One and Two Family Dwelling Specialty Code]. This section clearly notes this provision is not applicable to the clearances between manufactured dwellings on adjacent lots or between manufactured dwellings and property lines which is not being proposed within this or any appeal contained within this document.

ORSC Section R302.1 sets the fire resistive construction requirements for exterior walls but does not contain specific language in regard to multiple dwelling units on a single lot which, in this case, is the manufactured dwelling park. Exception #1 does refer to fire separation distance which is defined per R201 as "the distance measured from the building to an imaginary line between two buildings on the lot". Per Table 302.1, the separation distance at which fire resistance rated construction is required is 3' (or less). Fire resistance rated construction for the exterior walls are to provide a 1-hour fire rating with testing in conformance with ASTM E 119 or UL 263 with exposure from both sides.

Proposed Design

Proposed design alternative: Site visits and field measurements indicate some separation distances are as close a 30" clear between dwellings. In addition to removing all openings and penetrations from the considered exterior wall lines, this appeal proposes to require additional fire resistive rated construction to be applied to the exterior walls which were modified / added without the benefit of a building permit. A modified version of Gypsum Association assembly WP 8418 is proposed to rate the exterior walls from the exterior face only, leaving the currently installed interior finishes unchanged.

This appeal proposes the following end result construction of the considered exterior walls:

EXTERIOR SIDE: Base layer 5/8" type X gypsum sheathing applied parallel or at right angles to 2 x 4 wood studs 16"o.c. with 11/4" Type W drywall screws 12"o.c. Face layer, with joints staggered 16" from the base layer, 5/8" type X gypsum sheathing applied parallel or at right angles to studs with 17/8" Type W drywall screws 12"o.c. and offset 6" from screws in base layer. Exterior cladding attached through sheathing to studs. (NOTE: this exterior side is an unmodified version of GA File No. WP 8418)

INTERIOR SIDE: It is assumed that all interior wall surfaces along the considered exterior walls are currently covered with 1/2" thick (minimum) gypsum.

- If this material is currently installed, no further modification is proposed along the interior side to increase / provide fire resistive rated construction per this appeal.
- In the event this material is not installed, the interior side will be modified to install 5/8" thick Type-X gypsum board for the full height and extent of the considered walls.

EAVE PROJECTIONS: Eave projections along the considered exterior walls shall be removed flush with the exterior stud framing. The exterior side components (gypsum and cladding) shall be installed from the bottom edge of wood framing (cripple, skirt and dwelling wall) and shall extend up to and be tight against the underside of the existing roof sheathing (covering the cut ends of removed eave framing). Roof sheathing may extend out to, but not beyond, the exterior face of the reinstalled exterior cladding. If a fascia board is installed, the roof sheathing may extend out to, but not beyond, the exterior face of the fascia board. Gutters may be installed directly to the fascia or cladding.

WALL OPENINGS / PENETRATIONS: All installed openings and penetrations in the considered exterior wall lines are to be removed, framed in and covered with interior and exterior materials as described above. Where a window is removed which serves as

Emergency Egress shall be created / provided for all habitable spaces directly affected by the requirements of this appeal. For example, where a bedroom was created by the unpermitted work and contains an exterior wall which is required to me modified to meet the above proposed fire resistive construction criteria, the required emergency egress opening shall be created / provided to serve the bedroom.

- If the emergency egress opening is currently located within the exterior wall being considered (for required rated construction provisions) the opening shall be relocated to another exterior wall serving the same room. The opening shall meet the requirements of ORSC R310.
- If the emergency egress opening is not currently located within the exterior wall being considered (for required rated construction provisions) the opening shall meet the requirements of ORSC R310.

ORSC R310 requires egress openings to provide the following:

- The maximum sill height of 44 inches above the finished floor (ORSC R310.1)
- Net clear opening area of 5.7 square feet or 5.0 square feet if the sill is no more than 44 inches above the grade below (ORSC R310.1.1)
- The minimum net clear opening height shall be 24 inches (ORSC R310.1.2)
- The minimum net clear opening width shall be 20 inches (ORSC R310.1.3)

Related to this appeal item is the condition where a covered porch has been constructed and extends to a point where the distance between combustible material (dwelling to neighboring

dwelling) is less than 6'. The proposed alternate to this condition is to construct a fire rated wall assembly similar to that which has been described above.

In addition, it is proposed for a hold harmless legal agreement to be entered into which declares the building owner(s) and park owner(s) shall hold harmless, defend and indemnify the City of Portland, its officers, agents, officials, and employees against all claims, demands, actions and suits, including attorneys' fees and costs, brought against any of them arising out of or resulting from the terms of this Agreement.

Reason for alternative Reason for alternative: This alternative is proposed to increase the fire resistive rating of the exterior walls which have been modified / added with the least financial impact to the owners and to minimize the disruption to the habitable state of each dwelling.

> By limiting the required alterations to the exterior envelope, the disturbance to the occupied dwellings is significantly reduced, maintains the ability to occupy the dwellings during modification and therefore limits the financial impact to upgrade the resulting conditions.

APPEAL DECISION

1. Multiple manufactured dwellings in park with foundations to remain at non-permitted additions: Granted provided each property owner, tenant and park owner execute a hold harmless agreement with the City. Agreement is to be drafted, reviewed and approved by City prior to recording at Multnomah County.

Appellant may contact Nancy Thorington (503-823-7023) for more information.

2. Insufficient separation of multiple dwellings in manufactured home park: Granted provided each property owner, tenant and park owner execute a hold harmless agreement with the City. Agreement is to be drafted, reviewed and approved by City prior to recording at Multnomah County.

Appellant may contact Nancy Thorington (503-823-7023) for more information.

The Administrative Appeal Board finds with the conditions noted, that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

Rainbow Villa Manufactured Home Park

11803 SE Division St, Portland, OR 97266

Background

Rainbow Villa provides sites for 38 detached manufactured dwellings all of which were placed under the benefit of proper building permits. Nearly every one of these homes has, over time, been modified. Modifications include additions, enclosing of patio covers converting the space to habitable space, modifications / additions to exterior wall openings. These modifications were not completed under the benefit of required building permits nor their associated plumbing, mechanical and electrical trade permits.

This batch building code appeal, being prepared by City staff, seeks to reduce the life safety risk to each dwelling occupant caused by the unpermitted work. The goal is to find the least intrusive, least expensive, and most impactful life safety improvements possible to move each dwelling closer to code compliance than they currently stand.

Consideration of this appeal package is encouraged to be done viewing through an equity lens keeping the following in mind for this project:

- Life safety of the occupants
- All costs associated with required repairs / improvements
 - Permits
 - Materials
 - Labor
 - Disposal

Applicable codes:

2010 OMDISC (Oregon Manufactured Dwelling Installation Specialty Code) 2002 MD&P (Oregon Manufactured Dwelling and park Specialty Code) 2014 ORSC (Oregon Residential Specialty Code)

Appeal Item #1

<u>Code Section:</u> ORSC R401.1.4.3 (slabs-on-ground with turned down footings)

<u>Requirement:</u> Foundation and under-floor construction requirements related to the installation of manufactured dwellings are to conform to OMDISC Chapter 3. This appeal does not propose compliance with this code in that the areas being considered are additions and are therefore governed by the requirements of the ORSC.

Where the slab is cast monolithically with turned down footings require the turned down footing to contain one of the following (Per ORSC R401.1.1.4.3):

- One No. 4 bar at the top and bottom of the footing; or
- One No. 5 bar in the middle third of the footing depth; or

• Two No. 4 bars in the middle third of the footing depth Additionally, where the slab is cast monolithically with the footing, there shall be one No. 3 or larger vertical dowel with standard hooks on each end spaced not more than 4' on center.

<u>Proposed design alternative:</u> No modifications to the existing foundation support system(s) are being proposed. This appeal requests to leave all existing, non-permitted foundation systems unchanged regardless of the means and methods of their construction.

Though some of the additions were constructed on pier footings (some cast-in-place and others pre-fabricated), the structural soundness, based on walk-through inspections, appear to be sufficient for the 1-story additions.

In lieu of requiring compliant, retroactive, foundation installations, this appeal proposes that a hold harmless legal agreement to be entered into which declares the building owner(s) and park owner(s) shall hold harmless, defend and indemnify the City of Portland, its officers, agents, officials, and employees against all claims, demands, actions and suits, including attorneys' fees and costs, brought against any of them arising out of or resulting from the terms of this Agreement.

Reason for alternative: Based on limited visual inspections and in walking through most of the homes, the as-built conditions indicate the gravity support for the additions are sufficient to resist the applied loads. This opinion is based on the absence of, or undiscovered, visible structural fatigue or failure indicators, such as:

- Sheetrock cracking (interior)
- "Soft floors"
- Header deflection
- Ceiling deflection
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Increasing (or requiring) modifications will provide only marginal structural improvement. Due to the lack of or absence of discovered visual defect(s), any required improvements or alterations would seem to only serve to improve the structural integrity of the addition during a design capacity seismic or wind event. Due to the close proximity / citing of these homes (in relation to their adjacent manufactured dwelling units), the additions are sheltered from open wind exposure. Furthermore, the foundation systems in place (or lack thereof) are not significantly different than the foundations for the adjoined manufactured dwelling units which were cited with permits.

Appeal Item #2

Code Section: 2002 MD&P Table 9-A (fire separation distance)

Requirement: Table 9-A requires minimum fire separation distances inside parks as 10' with a reference to footnote #3 of the same table. Footnote #3 refers to section 9-5.3 for alternate setback and clearances and also notes further reductions in setback requirements with the use of fire resistive constriction according to the prescriptive requirements contained in the [Oregon One and Two Family Dwelling Specialty Code].

9-5.3(k) reads; the authority having jurisdiction may approve the further reduction of required setbacks and clearances when fire resistive construction is provided between the structures according to the prescriptive requirements in the [Oregon One and Two Family Dwelling Specialty Code]. This section clearly notes this provision is not applicable to the clearances between manufactured dwellings on adjacent lots or between manufactured dwellings and property lines which is not being proposed within this or any appeal contained within this document.

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<u>Proposed design alternative:</u> Site visits and field measurements indicate some separation distances are as close a 30" clear between dwellings. In addition to removing all openings and penetrations from the considered exterior wall lines, this appeal proposes to require additional fire resistive rated construction to be applied to the exterior walls which were modified / added without the benefit of a building permit. A modified version of Gypsum Association assembly WP 8418 is proposed to rate the exterior walls from the exterior face only, leaving the currently installed interior finishes unchanged.

Unmodified, GA File No. WP 8418 is presented as tested per the below specification:

2 HOUR **GA FILE NO. WP 8418 GENERIC FIRE** GYPSUM SHEATHING, GYPSUM WALLBOARD, WOOD STUDS EXTERIOR SIDE: Base layer 5/8" type X gypsum sheathing applied parallel or at right angles to 2 x 4 wood studs 16" o.c. with 11/4" Type W drywall screws 12" o.c. Face layer 5/8" type X gypsum sheathing applied parallel or at right angles to studs with 17/8" Type W drywall screws 12" o.c. and offset 6" from screws in base layer. Exterior cladding attached through sheathing to studs. INTERIOR SIDE: Base layer 5/8" type X gypsum wallboard or veneer base applied parallel or at right angles to studs with 11/4" Type W drywall screws 12" o.c. Face layer 5/8" type X gypsum wallboard or veneer base applied parallel or at right angles to studs with 17/8" Thickness: 61/8" without exterior cladding Type W drywall screws 12" o.c. and offset 6" from screws in base layer. Approx. Weight: 12 psf Joints staggered 16" each layer and side. (LOAD-BEARING) Fire Test: See WP 4136 (SWRI 01-5920-614, 12-5-94)

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<u>INTERIOR SIDE:</u> It is assumed that all interior wall surfaces along the considered exterior walls are currently covered with 1/2" thick (minimum) gypsum.

- If this material is currently installed, no further modification is proposed along the interior side to increase / provide fire resistive rated construction per this appeal.
- In the event this material is not installed, the interior side will be modified to install 5/8" thick Type-X gypsum board for the full height and extent of the considered walls.

<u>EAVE PROJECTIONS:</u> Eave projections along the considered exterior walls shall be removed flush with the exterior stud framing. The exterior side components (gypsum and cladding) shall be installed from the bottom edge of wood framing (cripple, skirt and dwelling wall) and shall extend up to and be tight against the underside of the existing roof sheathing (covering the cut ends of removed eave framing). Roof sheathing may extend out to, but not beyond, the exterior face of the reinstalled exterior cladding. If a fascia board is installed, the roof sheathing may extend out to, but not beyond, the exterior face of the fascia board. Gutters may be installed directly to the fascia or cladding.

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Reason for alternative: This alternative is proposed to increase the fire resistive rating of the exterior walls which have been modified / added with the least financial impact to the owners and to minimize the disruption to the habitable state of each dwelling.

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