



## Planning & Development Services

Boise City Hall, 2nd Floor  
150 N. Capitol Boulevard  
P. O. Box 500  
Boise, Idaho 83701-0500

Phone: 208/384-3801  
Fax: 208/384-3814  
TDD/TTY: 800/377-3529  
Website: [www.cityofboise.org/pds](http://www.cityofboise.org/pds)

# Plan Review Report

Plan analysis is based on the Boise City Code and International 2015 Codes as adopted.

<b>Building Permit #</b>	<a href="#">BLD19-04467</a>	<b>1<sup>st</sup> Review Date</b>	03/20/2020
<b>Project Name</b>	The Eno At Harris Ranch	<b>2<sup>nd</sup> Review Date</b>	06/19/2020
<b>Project Address</b>	3850 E Haystack St	<b>3<sup>rd</sup> Review Date</b>	07/01/2020
<b>Primary Applicant</b>	Carl Argon		
<b>Architect</b>	Robert Powell		
<b>Engineer</b>	Jonny Knopp		
<b>Occupancy</b>	R2 / B / S1 / A3		
<b>Construction</b>	VB (Fully sprinklered with an NFPA 13 System - Yes)		
<b>Occupant Load</b>	156 / 40 / 3 / 110		
<b>Seismic Category</b>	C		
<b>Plan Reviewer</b>	<b>Julie Romig</b>		
<b>Reviewer's Phone</b>	208-608-7099		

Note: The code items listed in this report are not intended to be a complete listing of all possible code requirements in the Boise City Code and International 2015 Codes. It is a guide to selected sections of referenced codes.

## Scope of Work

(THE ENO AT HARRIS RANCH CONDOMINIUMS – BUILDING A) (DRH19-00234) Permit to construct a 3-story, 40,354 sq ft multi-family R2 apartment building. This project consists of a 3-story, multi-family residential building and related site work. Special inspections required per attached Form 310. The two multi-family buildings are of Type VB construction and fully sprinklered with a full NFPA 13 system for building area increase. Separate fire sprinkler and fire alarm permits are required as regulated by Boise Fire Department.

\*\*JAR\*\*

## Project Information

### Building Data

This project consists of a 3-story, 40,354 sq ft multi-family residential buildings and four single-story detached carports. The multi-family building is of Type VB construction and fully sprinklered with an NFPA 13 system for building area increase.

**The Eno at Harris Ranch**

Permit Number	Bldg Address	Floor	Total Units	Total Floor Area	Total R2 Occupants
BLD19-04467	3850 E Haystack St	The Eno	30 Units	40,354 sq ft	156 R2 occupants
		1st Floor:	10 Units	15,178 sq ft	56 R2 occupants
		2nd Floor:	12 Units	15,006 sq ft	63 R2 occupants
		3rd Floor:	8 Units	10,585 sq ft	37 R2 occupants

**Common Area Summary: The Eno (3-story, 30-Unit Building)**

Room/Area	Floor	Occupancy	Enlarged Plan	Sq Ft	Load Factor	Occ	Mixed Occ Type
Bike/Main Storage	1	S1 - Storage	1/A7.2	724	300	3	Accessory
Pet/Bike	1	B - Business	1/A7.2	231	100	3	Accessory
<b>Total:</b>				<b>955</b>		<b>6</b>	<i>&lt;10% flr area</i>
The Social	3	B - Business	3/A7.2	597	15	37	Accessory
Rooftop Patio Covered	3	A3 - Assembly	5/A7.2	415	15	21	Accessory
Rooftop Patio Uncovered	2	A3 - Assembly	5/A7.2	1325	15	89	Non-separated

**Unit Summary: The Eno (3-story, 30-Unit Building)**

Unit Type	Floor	Unit Numbers	Enlarged Plan	# of Units	Unit Sq Ft	Occupants	Accessibility
Studio	2	205	1/A7.1	1	585	3	Type B
	3	305	2/A7.1	1		3	Type B
1 Bdrm / 1 Bath	1	107	1/A7.0	1	790	4	Type A
	1	102, 104	2/A7.0	2		8	Type B
	2	202, 203, 206, 209		4		16	Type B
	3	301, 302, 306, 309	3/A7.0	4		16	Type B
2 Bdrm / 2 Bath	1	101, 105, 106, 108, 109	4/A7.0	5	1,112	30	Type B
	2	201, 207, 208, 210, 211	5/A7.0	5		30	Type B
	3	307, 308, 310		3		18	Type B
3 Bdrm / 2 Bath	1	100, 110	6/A7.0	2	1354	14	Type B
	2	200, 212		2		14	Type B

**Third floor Amenity Areas - Rooftop Patio and “The Social” community room**

On the 3<sup>rd</sup> floor, the east rooftop area will be an occupied patio, with a covered portion and the remainder uncovered. The rooftop patio is an A3 occupancy. If the combined area of all accessory occupancies is less than 10% of the third floor area, it can be considered accessory to the main, R2 occupancy, and is permitted on the 3<sup>rd</sup> floor. The total floor area of the 3<sup>rd</sup> floor is 11,264 sq ft including the full rooftop patio. The covered rooftop patio, storage room, and community room is limited to 1,126 sq ft. The total combined area of these spaces is 1,042 sq ft, less than 10%.

Per the attached code modification letter, the 2018 IBC 503.1.4 has been applied and the uncovered rooftop patio is considered a portion of the story below. An A3 occupancy is permitted on a 2<sup>nd</sup> story of a fully sprinklered building and does not contribute to the 10% accessory area of the 3<sup>rd</sup> floor.

**Exterior Fire Resistance Rating Requirements for Type VB:**

The building has at least 10 feet fire separation distance on all sides. On the north side of the building, the edge of the carports are located 13'-8" from the building, greater than the 13'-4" required based on fire separation distance for a Type VB building and U occupancy carport. No exterior rated walls are required per Table 602.

### **Dwelling Separation Walls**

The walls separating dwelling units and walls separating dwelling units from common areas are required by IBC 420 to be constructed as fire partitions in compliance with IBC 708, with a minimum STC rating of 50, as required by IBC 1207. The floors separating dwelling units are required by IBC 420.3 to be constructed as 1-hour rated horizontal assemblies in compliance with IBC 711, with a minimum STC rating of 50 and IIC rating of 50, as required by IBC 1207.

The roof/ceiling assembly is a 1-hour fire resistance rated assembly. Dwelling separation walls are permitted to terminate at the ceiling of the rated roof/ceiling assembly.

### **Interior Exit Stairs.**

the building has two sets of interior exit stairs located on the west and east ends of the building.

### **Draftstopping.**

Draftstopping is not required in the attic or floor/ceiling assemblies per the exceptions under 718.3.2 and 718.4.2 because the building is equipped without with an automatic sprinkler system in accordance with Section 903.3.1.1.

### **Accessibility**

**2015 IBC 1104 Accessible Route:** At least one accessible route within the site shall be provided from public transportation stops, accessible parking, and public streets or sidewalks to each Type A and Type B unit entry.

**2015 IBC 1106.1 Parking:** The parking lot has 40 carport parking spaces. Two accessible parking spaces are required, 3 have been provided. Parking space and access aisle are to be covered by the carport without interruption by carport structure.

**2015 IBC 1107.6.2.2.1 Type A Units:** The site consists of 30 total dwelling units. A minimum of 2% (1 unit) are required to be "Type A". The designated Type A unit is Unit 107, a 1 bedroom, 1 bath unit on the first floor.

**2015 IBC 1107.6.2.2.2 Type B Units:** As an elevator served building, all other units are required to be "Type B" units.

**Accessible means of egress.** The stairways comply as accessible means of egress (2015 IBC 1009.3). The clear width of 48" minimum between handrails is not required in a sprinklered building per Exception 2. The area of refuge is not required in a sprinklered building per Exception 5.

### **Alternates.**

**2018 IBC 503.1.4 Rooftop Patio.** Refer to Code Modification approval applying the 2018 IBC 503.1.4 Occupied Roofs for the 3<sup>rd</sup> Floor assembly occupant load. Based on this code section, the uncovered rooftop is considered a portion of the 2<sup>nd</sup> story below. In a Type VB, fully sprinklered building, an A3 occupancy is allowed on the 2<sup>nd</sup> floor. The uncovered A3 rooftop patio does not contribute to the accessory occupancy of the 3<sup>rd</sup> floor.

**Plumbing Fixture Reduction Request.** At the 3<sup>rd</sup> floor, the A3 Rooftop patio and community room have a total occupant load of 147, requiring two female and one male water closets. The approved plumbing fixture reduction request allows two unisex restrooms, which provides enough water closets to meet the total occupant load requirements. In addition, residents have access to their own unit restrooms.

## Resolved Plan Review Items

No response required for the following resolved plan review items.

1. **RESOLVED:** Carports will be submitted under a separate permit.

### **Carports**

Four new carport structures are shown on the plans. Structural drawings and calculations are required for the carports, as well as a separate permit application (all carports can be issued under one permit).

**Resubmit:** Please confirm that a separate permit will be submitted for the carports, and that they are not a part of the scope of work under the BLD18-04519 drawings. If they are under this scope of work, upload a 502 application specifically for the carports as well as structural drawings/calcs.

2. **RESOLVED:** Refer to Code Modification approval applying the 2018 IBC 503.1.4 Occupied Roofs for the 3<sup>rd</sup> Floor assembly occupant load. Based on this code section, the uncovered rooftop is considered a portion of the 2<sup>nd</sup> story below. In a Type VB, fully sprinklered building, an A3 occupancy is allowed on the 2<sup>nd</sup> floor. The uncovered A3 rooftop patio does not contribute to the accessory occupancy of the 3<sup>rd</sup> floor. The covered roof top patio area is considered part of the 3<sup>rd</sup> story and is included in the accessory occupancies of the 3<sup>rd</sup> floor, limited to 10% of the 3<sup>rd</sup> floor area. The combined area of the 3<sup>rd</sup> floor accessory areas – The Social + Covered Rooftop Patio – is 1,062 sq ft, less than 10% of the 3<sup>rd</sup> floor area.

### **2015 IBC 508.2.3 Allowable building area (Accessory Occupancies)**

Aggregate accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located. The total floor area of the 3<sup>rd</sup> floor (as measured to the inside face of exterior walls and including covered unit patios and the full rooftop patio) is 10,585 sq ft. The combined roof top patio and 3<sup>rd</sup> floor community room (“The Social”) is limited to 10% of the 3<sup>rd</sup> floor area, or 1,058 sq ft. The rooftop patio area (including storage closet) is 1,771 sq ft and The Social is 597 sq ft for a total of 2,368 sq ft of accessory area. This is 1,310 sq ft over the allowable area for an accessory occupancy.

**Resubmit:** Reduce the combined area of the rooftop patio and The Social to 10% or less of the 3<sup>rd</sup> floor area to comply as an accessory occupancy and have the A3 occupancy located on the 3<sup>rd</sup> floor.

3. **RESOLVED:** Additional information provided regarding sound testing and fire ratings.  
**Wall Assemblies: 2015 IBC 703.3 Methods for determining fire resistance, 1207.2 Air-borne sound**  
Fire resistance ratings of wall assemblies are to be established by one of the methods or procedures listed in 703.3. Walls and partitions separating dwelling units from each other or from public or service areas shall have a sound transmission class of not less than 50 for air-borne noise when tested in accordance with ASTM E 90.

**Resubmit:** Provide the following additional information for wall assemblies shown on A9.0.

- a. **RESOLVED: A9.0 Detail 5 – Wall Type E at Stair Wall –STC Rating**

An STC of 50 is required at the Stair Wall between dwelling units, which is not met by WP 3510. Provide tested assembly for sound rating showing that the provided assembly provides a minimum STC rating of 50 or provide assembly meeting STC requirements.

- b. **RESOLVED:** Cavity insulation required in both cavities in accordance with STC test data provided.

**A9.0 Details 4, 8 – Wall Type D and H Party Wall – STC Rating**

The detail shows filling one cavity with acoustical batt insulation. Tested sound assemblies IRC-IR-761 3/98 for a double stud wall require both cavities to be filled with insulation to achieve an STC rating of 53. Fill both cavities or provide test data showing that the wall assembly as shown provides a minimum STC of 50.

- c. **RESOLVED:** Exterior walls are not rated.

**A9.0 Details 3, 6, 7 – Wall Type C, F, and G Exterior Walls – GA File**

The exterior wall types are called out as 1-hour fire resistance rated at bearing walls. The referenced GA file, WP 3660, is for an interior wall with gyp board on each side. The wall details shown do not match the tested assembly. Provide tested assembly that matches each exterior rated wall.

\*Note that rated exterior walls are not required on this project if it is of Type VB construction, but if rated assemblies are called out they must comply as rated assemblies.

- d. **RESOLVED: A9.0 Detail 9 – Wall Type J Corridor Wall – GA File & STC Rating**

GA File WP 3230 was not found in the 2012 GA Fire Resistance Design Manual, the referenced GA Manual. Provide GA File number matching the corridor wall assembly. Minimum STC rating of 50 required.

- e. **RESOLVED:** Documentation found for US Gyp BBN-750706 shows that this assembly only provides an STC rating of 47. Provide test data showing an STC rating of 50 and revise assembly detail as required to match tested assembly.

**A9.0 Detail 12 – Wall Type M Elevator/Unit Wall – STC Rating**

An STC of 50 is required at the Elevator Wall between dwelling units. Sound test data and STC rating are not provided. Provide tested assembly for sound rating showing that the provided assembly provides a minimum STC rating of 50, or provide assembly meeting STC requirements.

4. **RESOLVED:** Tested assemblies provided on A9.1.

**Horizontal Assemblies: 2015 IBC 703.3 Methods for determining fire resistance, 1207.2 Air-borne sound, 1207.3 Structure-borne sound.**

Fire resistance ratings of wall assemblies are to be established by one of the methods or procedures listed in 703.3. Floor/ceilings separating dwelling units from each other or from public or service areas shall have a sound transmission class of not less than 50 for air-borne noise when tested in accordance with ASTM E 90 and an impact insulation class (IIC) rating of not less than 50 when tested in accordance with ASTM E 492.

No tested assemblies are provided on A9.1 for floor/ceiling shown on A9.1 or for roof/assemblies shown in sections. No information is provided on building or wall sections showing compliance with IECC COMcheck for insulation.

**Resubmit:** Provide tested assemblies for fire resistance rating and STC/IIC ratings of all floor/ceiling assemblies. Provide tested assemblies for fire resistance rating of all roof/ceiling assemblies. Provide insulation values on roof/ceiling assemblies matching IECC building envelope COMcheck.

**5. RESOLVED: Wall Assembly Identification.**

Dashed lines are shown on plans at some walls, but no legend is provided identifying what the dashed line represents. Wall tags and notes are provided on some walls identifying the wall type, but not on all walls. Some details and wall sections are provided, but not at all locations and details are inconsistent with requirements for fire barriers.

**Resubmit:** Clearly identify the wall assembly for every wall. On the plans, distinguish between fire partitions and fire barriers.

**6. RESOLVED: 2015 IBC 707 Fire Barriers**

Fire barriers with a 1-hour fire resistance rating are required at the following locations:

- West and East stairs (including between 3<sup>rd</sup> floor stair shaft wall and storage room)
- Elevator Shaft
- Trash Chute, Trash Access Rooms, Trash Discharge room
- Mechanical shafts
- Fire Riser Room

**Resubmit:** Clearly identify location of 1-hr fire barriers on plans. Provide details at floor intersections and roof intersections showing continuity of fire barrier wall in accordance with 707.5. See redlines on architectural plans and sections.

**06/19/20 Resubmit:**

- a. **RESOLVED:** On A7.2, the wall between the trash rooms and the Pet/Bike room is labeled as Wall Type B, a non-rated wall. This is required to be a 1-hour fire barrier wall. Provide 1-hour rated wall type at this location with tested assembly.
- b. **RESOLVED:** Detail 2/A6.5 and 3/A6.5: 1-hour fire barrier walls are identified as Wall Type A, which is non-rated according to A9.0. At 3/A6.5, one wall only shows sheetrock on one side. Provide 1-hour rated assembly with tested assembly at this location and show sheetrock both sides.

**7. RESOLVED: 2015 IBC 708 Fire Partitions**

Fire partitions with a 1-hour fire resistance rating are required at the following locations:

- Corridors (including between corridor and restroom, the social, and 2<sup>nd</sup> and 3<sup>rd</sup> floor storage rooms – storage rooms are not permitted to be open to the corridor per 1020.6).
- Between dwelling units and between dwelling units and other occupancies.

**Resubmit:** Clearly identify location of 1-hr fire partitions on plans. See redlines on architectural plans and sections.

**06/19/20 Resubmit:**

- a. **RESOLVED:** Detail 3/A6.3 shows the corridor side gypsum board terminating at the underside of the dropped ceiling. Fire partitions are required by 708.4 to extend to the underside of the rated horizontal assembly, which in this case is the (2) layers of gyp attached to RC channels above the dropped ceiling. Revise 3/A6.3 to meet 708.4. See redlines on A6.3.
- b. **RESOLVED:** Mechanical plans M2.1 show recessed wall heater located on the rated corridor wall in the Restroom. No architectural detail was found showing how the 1-hour rating is maintained behind the heater. Provide detail showing gyp. bd. continuous behind recessed heater

**8. RESOLVED: Corridor Doors: 2015 IBC Table 716.5 Opening Protection Assemblies**

Doors located in the corridor walls are required to have a minimum 20-minute rating.

- Door 309 is not rated.

**Resubmit:** Provide minimum 20-minute rated door at all doors located in rated corridor wall.

- a. Door 309 – “The Social” Entry

**9. RESOLVED: Corridor Doors: 2015 IBC 716.5.3.1 Smoke and draft control.**

Doors located in the corridor walls are required to have smoke and draft control.

**Resubmit:** Provide smoke/draft control in hardware schedule for all doors located in corridor walls.

**10. RESOLVED: Corridor Doors: 2015 IBC 716.5.9 Door Closing**

Fire doors shall be latching and self- or automatic-closing in accordance with this section.

**Resubmit:** Provide closers in hardware schedule for all doors located in corridor walls.

**11. RESOLVED: Trash Room Access Doors: 2015 IBC 716.5.9 Door Closing**

The trash room access door is required to have a latch and to be automatic-closing by the actuation of smoke detectors.

**Resubmit:** Provide latch and automatic-closure for trash room access doors 112, 204, 308

**12. RESOLVED: 2015 IBC 717 Ducts and Air Transfer Openings**

Mechanical sheets have keynotes identifying fire/smoke dampers in some locations. Other locations that would require a fire/smoke damper have a symbol with a triangle and an F inside, some with an S adjacent. It is assumed this is either a fire damper or fire/smoke damper, but there is no legend for this symbol.

There are also membrane penetrations of the rated horizontal assembly that do not have ceiling radiation dampers. Where a duct and air transfer opening penetrates the ceiling membrane, a ceiling radiation damper is required (717.6.2). Where the duct is a through penetration, a fire damper is required (717.6.1). A smoke damper is required at corridor penetrations (717.5.4).

At the corridor and common areas, ducts, grilles, exhaust fans, etc are shown in spaces that do not have a dropped ceiling according to the reflected ceiling plans. The floor/ceiling and roof/ceiling assemblies are rated horizontal assemblies, requiring ceiling radiation dampers at membrane penetrations. If mechanical ducts are located within the rated horizontal assembly, address penetrations. If ductwork is below rated horizontal assembly, address in architectural details and reflected ceiling plan.

**Resubmit:** Provide legend for symbols. Note that where a duct penetrates a corridor wall, a fire/smoke damper is required. Address membrane penetrations at horizontal assembly. This does not appear to be provided at all locations (ex. bike storage, 2<sup>nd</sup> and 3<sup>rd</sup> floor storage areas, etc). Also refer to Redlines on M2.0 and M3.0.

**13. RESOLVED: 2015 IBC 1010.1.9 Door Hardware**

Additional information is required to verify door hardware compliance.

**Resubmit:** Provide door hardware schedule and additional information for the following doors:

- a. **RESOLVED:** No hardware was provided for the following doors:  
D7: Dwelling Unit Swinging Patio Door  
D9: Dwelling Unit Swinging Patio Door  
D10 and D11: Dwelling Unit Sliding Patio Door  
D8: Door Location not found. Confirm that Door D8 is not used or identify location.
- b. **RESOLVED:** Additional information is required for the following doors:  
D2-D6 - Hardware Group #7:  
This is identified as passage hardware and is used at all interior dwelling unit doors, including bathrooms and bedrooms.  
Confirm that this is the intent. If locks will be provided at bathrooms or bedrooms, provide hardware information.
- c. **RESOLVED:** Doors 310 and 311 – Hardware Group #1  
These are slider doors. Hardware group #1 includes panic hardware  
Provide accurate hardware group for slider doors.

**14. RESOLVED: 2015 IBC 1010.1.9.5 Unlatching.**

The unlatching of any door or leaf shall not require more than one operation. Hardware Group 5 for Door 307 (3<sup>rd</sup> floor unisex restroom) has both a leverset and deadbolt lock listed, but no other information listed. If both a deadbolt and lever handle are provided, the deadbolt lock must be integrated with the lever handle so that the handle will unlock the deadbolt lock.

**Resubmit:** Provide additional information on hardware for Group 5 showing compliance with 1010.1.9.5.

**15. RESOLVED:** Code section 1010.1.9.9 noted on A8.0.

**2015 IBC 1010.1.9.9 Electromagnetically locked egress doors.**

Some of the doors on the door schedule call out “Sec. Access” in the remarks. If this is intended to be a card reader access or another type of electromagnetic lock, it must comply with all requirements of 1010.1.9.9.

**Resubmit:** Clarify what “Sec. Access” is and identify location of card reader or similar. Provide information showing hardware will comply with 1010.1.9.9.

**16. REDLINED:** Handrails are required on both sides of the stairs. Drawings show handrail only one side of the stair. Second handrail has been redlined on A1.0 Site Plan and A2.0 First Floor Plan. Code section redlined on handrail details.

**2015 IBC 1011 Stairways, 1012 Ramps, 1014 Handrails**

There are two accessible ramps on the north side of the building requiring handrails on both sides. There are site stairs on all sides of the exterior of the building. Stairs are required to comply with 1011. Ramps are required to comply with 1012. Handrails in compliance with 1014 are required on both sides of the ramps and stairs. No enlarged details of stairs, ramps, or handrail dimensions are provided.

**Resubmit:** Provide enlarged details with dimensions of exterior stairs and ramps. Provide handrails on both sides of ramp and stairs. Provide ramp and stair details with handrail dimensions for extensions, handrail heights, and edge protection.

**17. RESOLVED:** Access relocated to corridor and 1-hr lid provided under stairs.

**2015 IBC 1011.7.3 Enclosures under interior stairways.**

The walls and soffits within enclosed usable spaces under enclosed and unenclosed stairways shall be protected by 1-hour fire-resistance-rated construction or the fire-resistance rating of the stairway enclosure, whichever is greater. Access to the enclosed space shall not be directly from within the stairway enclosure.

- At the east stair on Level 1, there is a storage closet located under the stair Level 2 stair and accessed within the stair enclosure.

**Resubmit:** Provide details showing the 1-hour fire resistance rated construction of the storage room. Relocate access so the storage closet is not accessed from within the stair enclosure.

**18. REDLINED:** Code section identifying hazardous locations redlined on A8.0.

**2015 IBC 2406.4 Glass and Glazing – Hazardous Locations**

Glazing located in doors and glazing located adjacent to doors where the nearest vertical edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the walking surface are required to have safety glazing.

**Resubmit:** Provide safety glazing at all doors and adjacent to doors as required by 2406.4.

**19. RESOLVED:** Refer to approved Plumbing Fixture Reduction Request letter.

**Plumbing Fixture Counts**

The common spaces, including “The Social” and the Rooftop Patio, require plumbing fixtures per IBC Table 2902.1, including separate sex restrooms. Only one restroom has been provided and no drinking fountain has been provided.

**Resubmit:** Provide plumbing fixtures as required by Table 2902.1 based on the occupant load of The Social (40 occupants) and the Rooftop Patio (occupant load at 118 based on current square footage