Plan Review Email TB-19-682

Jim,

I found these two old Plan Review letters on this building. Please use these letter to reference the Occupancy Use of this building on your resubmittal, you can place this on the title page if you want for a short Code Analysis.

Also, please review the Type of Construction, this is a bit conflicting on our plan review letters. The Foundation Only review states it was VB and the building is sprinkled, while the full building permit states VB and does not mention sprinklers at all. So I will need to know if the building is sprinkled now, or non-sprinkled. It's possible the decided not to sprinkler the building, and therefore went with the Type VA Construction because of this after the foundation only permit was issues. So please research this and provide this information on the title page.

Keep in mind, this may alter you exterior bearing wall design and roof construction a bit, if we need to go with Type VA Construction, as it would drive a 1-Hour rating per table 601.

As discussed, please resubmit the interior walls that will be built to make the custom walk-in cooler and freezer for us to review, then all mechanical plans or equipment that will be used on the cooler and freezer with sizing specifications, and location of the equipment as well. Also include the type of finished materials for walls and ceilings, specifically exterior wall finishing on the cooler/freezer side or interior side.

The 2015 IMC Chapter 11 will need to be used in the design and review of the cooler and freezer under Refrigeration. Section 1103 Refrigeration System Classification, and Occupancy Classification. Read Section 1103.2, and see if you can place the equipment outside the building and more than 20 feet from an opening to the building on the exterior, this would then avoid needing to declare an Occupancy Classification in accordance with this section, and fire ratings potentially as well then. Then also see if you can remain as a Low-probability system in accordance with 1103.3.1 as well.

I don't see any reason you can't make the above IMC sections work, I'm sure this is relatively small equipment for the cooler and freezer.

Thanks Jim,

Todd Carr, Building Official

ROUTT COUNTY
REGIONAL BUILDING DEPARTMENT

Routt County Regional Building Dept.
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Steamboat Springs, CO 80477
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ROUTT COUNTY REGIONAL BUILDING DEPARTMENT

136 Sixth Street * PO Box 773840 * Steamboat Springs, CO 80477 * (970) 870-5566 * FAX (970) 870-5489

PLAN REVIEW COMMENTS
(Foundation Only)

Job Address: 58000 Cowboy Way
Applicant: Vista Verde Guest Ranch

Plan Log No. CB-07-836
Designer: Jakes'

Design information:
Occupancy Classification: A-2, B, R-2, S-1
Character and Use: Multi-use Parlor Building
Type of Construction: VB, Sprinkled
Number of Stories: 2 w/B

THIS REVIEW OF THE PLANS, SPECIFICATIONS AND ADDITIONAL INFORMATION SUBMITTED HAS CONSISTED OF REVIEWING THE ANSWERS TO THE ORIGINAL QUESTIONS AND THEIR RELATIVE COMPLIANCE WITH THE CODES. THE ITEMS THAT ARE STRUCK-THROUGH HAVE BEEN ADEQUATELY ADDRESSED AND NOTED OK. COMMENTS NEEDING MORE INFORMATION HAVE BEEN LEFT IN PLACE AND ADDITIONAL COMMENTS HAVE BEEN PLACED IN ALL CAPITAL LETTERS. THE ORIGINAL NUMBERING OF THE PREVIOUS PLAN REVIEW COMMENTS HAS BEEN USED FOR CLARITY..

1. ~~Please provide plans for Plumbing, Mechanical, and Electric to obtain Full Permit. NOT ADDRESSED.~~
2. ~~FG304.1 General. Air for combustion, ventilation and dilution of flue gases for gas utilization equipment installed in buildings shall be provided by application of one of the methods prescribed in Sections 304.5 through 304.9. Where the requirements of Section 304.5 are not met, outdoor air shall be introduced in accordance with one of the methods prescribed in Sections 304.6 through 304.9. Direct-vent appliances, gas appliances of other than natural draft design and vented gas appliances other than Category I shall be provided with combustion, ventilation and dilution air in accordance with the equipment manufacturer's instructions. NOT ADDRESSED~~
3. ~~Please provide Occupancy Load for Multi-Use building. NOT ADDRESSED~~
4. ~~THE DESIGN LOAD OF 40 PSI FOR THE MAIN LEVEL FRAMING PLAN IS INSUFFICIENT FOR THE OCCUPANCIES ANALYZED: A-2, B, & S-1. REFER TO TABLE 10040102, SEC. 1004, 2003 IBC.~~
5. ~~CONFIRM THE QUANTITY OF HAZARDOUS MATERIALS. IF IT IS EQUAL TOO OR LESS THAN THE AMOUNT IN EITHER TABLE 307.7(1) OR 307.7(2) THE STORAGE OR SHOP DOES NOT NEED FURTHER CONSIDERATION. IF YOU ARE OVER THE EXEMPT AMOUNT PROVIDE CONTROL AREA AND COMPLIANCE WITH THE FIRE CODE.~~
6. ~~LAP SPLICES FOR REINFORCEMENT BARS IS STATED TO BE 24" BAR DIAMETERS. PLEASE CLARIFY WHETHER INCHS OR BAR DIAMETERS IS TO BE USED.~~
7. ~~ARCHITECTS SEAL REQUIRED (CRS 12-4-116). PLANS AND SPECIFICATIONS SUBMITTED TO THE ROUTT COUNTY REGIONAL BUILDING DEPARTMENT PREPARED BY ARCHITECTS OR ARCHITECTURAL FIRMS PRACTICING IN THE STATE OF COLORADO SHALL BE SEALED (STAMPED), SIGNED AND DATED BY A COLORADO LICENSED ARCHITECT. THE ARCHITECTS SEAL MUST BE APPLIED DIRECTLY TO EACH REPRODUCED DRAWING; ON THE COVER, TITLE PAGE AND TABLE OF CONTENTS OF THE SPECIFICATIONS OR REPORTS, AND ON SUBSEQUENT ISSUES OF ADDENDA, REVISIONS, CLARIFICATION, OR OTHER MODIFICATIONS.~~
8. ~~LPG APPLIANCES IN PIT OR BASEMENT (IMC SEC. 303.3 - AS AMENDED). LIQUEFIED PETROLEUM GAS-BURNING APPLIANCES INSTALLATIONS LOCATED IN PITS OR BASEMENTS WHERE HEAVIER-THAN-AIR GAS MIGHT COLLECT SHALL INCLUDE 1) THE~~

~~INSTALLATION OF A LISTED GAS DETECTOR INTERLOCKED TO A LISTED SOLENOID VALVE, LOCATED AT THE EXTERIOR OF THE BUILDING, SO AS TO SHUT OF THE SUPPLY OF GAS TO THE BUILDING IN THE EVENT OF AN ALARM, AND 2) THE INSTALLATION OF AN EXHAUST SYSTEM FOR THE PURPOSE OF REMOVING UNBURNED GASES. THE EXHAUST SYSTEM SHALL 1) BE INTERLOCKED TO THE GAS DETECTOR SO AS TO OPERATE AUTOMATICALLY IN THE EVENT OF AN ALARM, AND 2) PROVIDE A MINIMUM OF FOUR (4) AIR CHANGES PER HOUR, WITH THE EXHAUST INTAKE LOCATED WITHIN SIX (6) INCHES OF THE FLOOR.~~

❄ **Corrections noted above are required. Please make all necessary corrections and resubmit the corrected plans for review. Corrections shall be "ballooned" if made on the plans and a narrative that specifically references the items on this list shall be included with the resubmittal.**
(Corrections have been made and approved. Date_12 March 2008_By_Rick_)

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1. B501.2 Premises identification. Approved numbers or addresses shall be provided for all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property.
2. R319.1 Protection against decay. All foundation plates or sills and sleepers on a concrete or masonry slab, which is in direct contact with earth, and sills that rest on concrete or masonry foundations, shall be treated or approved wood of natural resistance to decay
3. R319.1.3 Posts, poles and columns. Wood columns and posts located on concrete or masonry floors or decks exposed to the weather or to water splash or in basements and that support permanent structures shall be supported by concrete piers or metal pedestals projecting at least 6 inches above exposed earth and at least 1 inch above such floors unless approved wood of natural resistance to decay or treated wood is used. Individual concrete or masonry piers shall project at least 8 inches above exposed ground unless the wood columns or posts which they support are of approved wood of natural resistance to decay or treated wood is used.
4. R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection to not create a hazard. Lots shall be graded to drain surface water away from foundation walls.
5. Blocking- Wood structural panel wall sheathing shall be attached to framing in accordance with Table R602.3(1) including footnote i, which states "…spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and at all roof plane perimeters…Floor and roof perimeter shall be supported by framing members or solid blocking.
6. R905.2.7.1 Ice protection**.** In areas where the average daily temperature in January is 25_F (-4_C) or less or when Table R301.2(1) criteria so designates, an ice barrier that consists of a least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from the eave.s edge to a point at least 24 inches (610mm) inside the exteriorwall line of the building
7. R806.1 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilating openings shall be provided with corrosion-resistant wire mesh, with 1/8 inch (3.2 mm) minimum to 1/4 inch (6.4 mm) maximum openings. The total net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1 to 300when a vapor barrier having a transmission rate not exceeding 1 perm (57.4 mg/s · m2 · Pa) is installed on the warm side of the ceiling.
8. R807.1 Attic access. In buildings with combustible ceiling or roof construction, an attic access opening shall be provided to attic areas that exceed 30 square feet (2.8m2) and have a vertical height of 30 inches (762 mm) or greater. The rough-framed opening shall not be less than 22

inches by 30 inches (559mmby 762mm)and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.

9. Smoke Detectors. Provide smoke detection per 2003 IRC Sec. 313
10. G2439.5 (614.6) Clothes dryer ducts. Exhaust ducts for domestic clothes dryers shall be constructed of metal and shall have a smooth interior finish. The exhaust duct shall be a minimum nominal size of 4 inches (102 mm) in diameter. The entire exhaust system shall be supported and secured in place. The male end of the duct at overlapped duct joints shall extend in the direction of airflow. Clothes dryer transition ducts used to connect the appliance to the exhaust duct system shall be metal and limited to a single length not to exceed 8 feet (2438 mm) in length and shall be listed and labeled for the application. Transition ducts shall not be concealed within construction. The maximum length of a clothes dryer exhaust duct shall not exceed 25 feet (7620 mm) from the dryer location to the outlet terminal. The maximum length of the duct shall be reduced 21/2 feet (762 mm) for each 45 degree (0.79 rad) bend and 5 feet (1524 mm) for each 90 degree (1.6 rad) bend. Exception: Where the make and model of the clothes dryer to be installed is known and the manufacturer's installation instructions for such dryer are provided to the code official, the maximum length of the exhaust duct, including any transition duct, shall be permitted to be in accordance with the dryer manufacturer's installation instructions.
11. Handrails at Stairways (2003 IRC Sec. 311.5.6). Continuous, graspable handrails shall be provided at all stairs. The top of the rail shall be not less than 34 or more than 38 inches above the nose of the treads. The handgrip portion of handrails shall not be less than 1 $^{1}/_{4}$ inches nor more than 2 inches in cross sectional dimension, or the shape shall provide an equivalent gripping surface. Return ends to wall or newel post or provide safety terminals.
12. R312.2Guard opening limitations. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches (102mm) or more in diameter. Exceptions: The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches (152 mm) cannot pass through, and openings for required guards on the sides of stair treads shall not allow a sphere 43/8 inches (107mm)to pass through.
13. IBC 1008.1.8.3 Locks and latches. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in churches, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided the locking device is readily distinguishable as locked and a readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED.
14. International Symbol of Accessibility (2003 IBC Sec. 1110.1) — The following elements and spaces of accessibility facilities shall be identified by the international symbol of accessibility:
    - Accessible parking spaces, except where the total parking spaces provided are five or less.
    - Accessible areas of refuge.
    - Accessible passenger loading zones.
    - Accessible toilet
15. R2003 Sec. 602.8 Fireblocking. In combustible construction fireblocking shall be provided as follows:

    a) In concealed spaces of stud walls and partitions, including furred spaces at the ceiling and floor levels.

    b) At 10 foot intervals both vertical and horizontal.

    c) At all interconnections between concealed horizontal and vertical spaces such as occur at soffits, drop ceilings and cove ceilings.

    d) In concealed spaces between stair stringers at the top and bottom of the run and between studs along and in line with the run of the stairs.

    e) In openings around vents, pipes, ducts, chimneys, fireplace and similar openings which afford a passage for fire at the ceiling and floor levels, with noncombustible materials..

f) At openings between attic spaces and chimney chases for factory built chimneys.

Except as provided in Item e) above, fireblocking shall consist of (1) 2 inch nominal lumber, (2) two thicknesses of 1 inch nominal lumber with broken lap joints, (3) one thickness of 23/32 inch wood structural panel with joints backed by 23/32 inch wood structural panel, or (4) one thickness of 3/4 inch Type 2-M particleboard with joint backed by 3/4 inch Type 2-M particleboard. Fireblocking may also be of gypsum board, cement asbestos board, mineral fiber, glass fiber or other approved material securely fastened in place.

16. R308 Glazing. Except as indicated in Section R308.1.1, each pane of glazing installed in hazardous locations as defined in SectionR308.4 shall be provided with a manufacturer's or installer's label, designating the type and thickness of glass and the safety glazing standard with which it complies, which is visible in the final installation. The label shall be acid etched, sandblasted, ceramic-fired, embossed mark, or shall be of a type which once applied cannot be removed without being destroyed. Exceptions: Tempered spandrel glass may be identified by the manufacturer with a removable paper label
17. R311.5.3.1 Riser height. The maximum riser height shall be 73/4 inches (196 mm). The riser hall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm)
18. R311.5.3.2Tread depth. The minimum tread depth shall be 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread.s leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

❄ **Items noted above are required and will be checked by field inspectors.**

Reviewed by: Rick Spencer Date: 28 August 2019

ROUTT COUNTY REGIONAL BUILDING DEPARTMENT

136 Sixth Street * PO Box 773840 * Steamboat Springs, CO 80477 * (970) 870-5566 * FAX (970) 870-5489

PLAN REVIEW COMMENTS

Job Address: 38000 Cowboy Way
Applicant: Vista Verde Guest Ranch Inc.

Plan Log No. CB-08-368
Designer: YVE

Design information:
Occupancy Classification: A2, R3, B, M, S1
Character and Use: Addition to Lodge
Type of Construction: VA
Number of Stories: 2 w/basement
Occupant Load: <300

Scope: This project involves the addition of banquet hall, retail space, conference and office.

1. This building is in the concurrent review process with the Routt County Planning Department. Administrative approvals from planning, health and engineering are required before any permits can be issued.
2. The Foundation Only permit as issued by Routt County Regional Building Department allows the owner/contractor to proceed with the construction project at their own risk. However, the Routt County Regional Building Department will only perform footing and foundation inspections. Your request for Foundation Only permit is denied as the issues as seen by Routt County Regional Building Department are too many and widespread to issue a foundation only permit at this time without adequately addressing the following items in regard to the code analysis submitted, please revise and resubmit in accordance with the following:
   - The addition will not be considered a Level 3 Alteration. An "Addition" is defined in Chapter 2 as "an extension or increase in the floor area, number of stories or height of a building or structure." While work within the existing building may be performed under the IEBC, Chapter 9 contains the minimum requirements for an addition, which is not separated from the existing building by a fire wall. 901.1 Scope states that the addition, but not the existing, unaltered, portion of the building or structure, must meet the requirements of the current editions of the building, plumbing, mechanical and electrical codes. Submit revised code analysis without consideration of work areas or exceptions to sprinklers allowed under the IEBC with consideration only to the 2003 IBC for the addition. Revise allowable area calculations to include the whole building which is a two story and if going to be built as VB under the 2003 IBC requires sprinklering (the whole building).
   - Provide occupant load based on the number of occupants computed at the rate of one occupant per unit of area as prescribed in IBC Table 1004.1.2.
   - Provide egress in accordance with IBC 1003 to consider door swing in direction of egress travel, hardware, emergency lighting etc.
   - 1603.1.5 Earthquake design data. The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral force-resisting system of the building:
     1. Seismic importance factor, IE, and seismic use group.
     2. Mapped spectral response accelerations SS and S1.

3. Site class.
4. Spectral response coefficients SDS and SD1.
5. Seismic design category.
6. Basic seismic-force-resisting system(s).
7. Design base shear.
8. Seismic response coefficient(s), CS.
9. Response modification factor(s), R.

- Ratio of unsupported height to average least lateral dimension of plain concrete pedestals shall not exceed 3, otherwise concrete columns shall comply with ACI 318-99 Section 7.10.5.2 where the vertical spacing of ties shall not exceed 16 longitudinal bar diameters, 48 tie diameters, or the least dimension of the compression member. And ties shall be arranged such that every corner and alternate longitudinal bar shall have lateral support of a tie with an included angle of not more than 135 deg and no bar shall be farther than 6 in. clear on each side along the tie from such a laterally supported bar. However, before correcting the spacing of ties shown in the concrete columns shown in Detail 1/A-16, G/F-2 check the minimum reinforcement requirements of ACI 10.9.1 – area of longitudinal reinforcement for non-composite compression members shall not be less than 0.01 times gross area of section (as diameter of the longitudinal steel appears to be a determining factor in tie spacing requirement).
- ACI 318-99 Section 12.2.2 the minimum development length for deformed bars where the clear spacing, clear cover is not less than one bar diameter is 38 bar diameters (57 bar diameters for others). Please correct the general notes. (F-0)

3. IBC 106.1.2 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, as applicable in Section 101.2, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces. This is also an ideal place to show fire-separation requirements, and building sections, etc.
4. Provide copies of all fire-resistive assemblies and penetration assemblies.
5. Provide door hardware schedule. (A-0)
6. Open risers are not permitted where accessibility is required based primarily on the difficulty open risers pose to people with sight or mobility impairments. In fact, ICC A117.1 specifically prohibits open risers. Provide closed stairs in accordance with IBC 1009.3.2 Profile. (1/A-5)
7. Provide details of interior finishes, wall construction, bracing at head of wall details, etc. (A-6)
8. Combustible materials, such as framing studs and joists, must not be installed closer than 2 inches (51 mm) to the exterior surface of fireplace walls because of the fire hazard to materials in this location. Heat transmitted through fireplace walls can ignite combustible structural materials in contact with the walls. For this reason, a minimum required clearance has been established from the fireplace to combustibles. Provide details of construction of fireplace. (S-5)
9. This building may contain structural elements that are either unconventional or exceed the prescriptive limitations of the code. This is acceptable, provided these elements are designed in accordance with accepted engineering practice and shall result in a system that provides a complete load path capable of transferring all loads from their point of origin through the load-resisting elements to the foundation. Positive connections and anchorages, capable of resisting the design forces, shall be provided between the horizontal wood shear panel and the attached components, such as where the shear walls connect to the diaphragm. Please submit engineered design in accordance with the International Building Code.
10. Provide details of SIP connection details provide for continuity of diaphragm shear walls, etc. in accordance with approved engineered design. (A-16, S-5)

11. Provide engineered designs of all trusses (main, west, east, and breezeway) with consideration of all load combinations and unbalanced loading in accordance with Chapter 16. The construction documents and the individual truss design drawings should specify the bracing requirements of all members. (A-7, S-5)
12. There are few specific notes concerning the required connection between the existing walls and new construction. It is very important that the addition and the existing house be tied together very well. Ideally, the level of interconnection should be the same as would occur if they have been built at the same time, but this generally cannot be practically achieved. Top plates and sill plates should be strapped between the new and existing construction to provide continuity. Sheathing should be continuous and fastened to the same or interconnected framing members where possible. Where not possible, strapping of framing members should occur at a regular interval. Specify connection or provide details of expansion joint and show addition is capable of its own support. (S-2)
13. Provide detailed engineered design for feature rock and boulders flanking the rumford fireplace as unreinforced masonry.
14. Provide for support of veneer above roof. (A-4)
15. Provide details of drystack stone veneer and specify attachment to structure. Explain reference in specification "in accordance with the requirements of 2109.6.3" in R/S-4.

❄ **Corrections noted above are required. Please make all necessary corrections and resubmit the corrected plans for review. Corrections shall be "ballooned" if made on the plans and a narrative that specifically references the items on this list shall be included with the resubmittal.**

(Corrections have been made and approved. Date_____By_____)

1. IBC 501.2 Premises identification. Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly visible and legible from the street or roadway fronting the property. Letters or numbers shall be a minimum 3 inches (76 mm) in height and stroke of minimum 0.5 inch (12.7 mm) of a contrasting color to the background itself.
2. A floor drain is required for all boilers.
3. IBC 717.1 Fire blocking required. Fire blocking shall be provided in wood-frame floor construction and floor-ceiling assemblies in the following locations:
   - In concealed spaces of stud walls and partitions, including furred spaces and parallel rows of studs or staggered studs; as follows: Vertically at the ceiling and floor levels, Horizontally at intervals not exceeding 10 feet (3048 mm).
   - At all interconnections between concealed vertical and horizontal spaces such as occur at soffits, drop ceilings and cove ceilings.
   - In concealed spaces between stair stringers at the top and bottom of the run. Enclosed spaces under stairs shall comply with Section R311.2.2.
   - At openings around vents, pipes, and ducts at ceiling and floor level, with an approved material to resist the free passage of flame and products of combustion.
   - For the fire blocking of chimneys and fireplaces, see Section R1001.16.
   - Fire blocking of cornices of a two-family dwelling is required at the line of dwelling unit separation.
4. IBC 1008.1.8 Door operations. Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. 1008.1.8.1 Hardware. Door handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate. 1008.1.8.2 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm)

minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height. 1008.1.8.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists: 1. Places of detention or restraint. 2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in churches, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided: 2.1. The locking device is readily distinguishable as locked, 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background, 2.3. The use of the key-operated locking device is revokable by the building official for due cause. 1008.1.8.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted. Exceptions: 1. On doors not required for egress in individual dwelling units or sleeping units. 2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. 1008.1.8.5 Unlatching. The unlatching of any leaf shall not require more than one operation. Exception: More than one operation is permitted for unlatching doors in the following locations: 1. Places of detention or restraint. 2. Where manually operated bolt locks are permitted by Section 1008.1.8.4. 3. Doors with automatic flush bolts as permitted by Section 1008.1.8.3, Exception 3. 4. Doors from individual dwelling units and guestrooms of Group R occupancies as permitted by Section 1008.1.8.3, Exception 4.

5. IBC 1110.1 Signs. Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations:
   1. Accessible parking spaces required by Section 1106.1 except where the total number of parking spaces provided is four or less.
   2. Accessible passenger loading zones.
   3. Accessible areas of refuge required by Section 1007.6.
   4. Accessible rooms where multiple single-user toilet or bathing rooms are clustered at a single location.
   5. Accessible entrances where not all entrances are accessible.
   6. Accessible check-out aisles where not all aisles are accessible. The sign, where provided, shall be above the check-out aisle in the same location as the check-out aisle number or type of check-out identification.
   7. Unisex toilet and bathing rooms.
   8. Accessible dressing, fitting and locker rooms where not all such rooms are accessible.

   1110.2 Directional signage. Directional signage indicating the route to the nearest like accessible element shall be provided at the following locations. These directional signs shall include the International Symbol of Accessibility:
   1. Inaccessible building entrances.
   2. Inaccessible public toilets and bathing facilities.
   3. Elevators not serving an accessible route.
   4. At each separate-sex toilet and bathing room indicating the location of the nearest unisex toilet or bathing room where provided in accordance with Section 1109.2.1.
   5. At exits and elevators serving a required accessible space, but not providing an approved accessible means of egress, signage shall be provided in accordance with Section 1007.7.
6. Means of egress identification shall conform to the requirements of Section 1003.2.8. Exit signs, if required, shall comply with Article 701-11 (f) of the NEC, and be connected to circuits per same, not to building exit sign circuit.
7. IBC 1203.2 Ventilation required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for

each separate space by ventilating openings protected against the entrance of rain or snow. Ventilating openings shall be provided with corrosion-resistant wire mesh, with 1/8 inch (3.2 mm) minimum to 1/4 inch (6.4 mm) maximum openings. The total net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1 to 300when a vapor barrier having a transmission rate not exceeding 1 perm (57.4 mg/s · m2 · Pa) is installed on the warm side of the ceiling.

8. IBC 1209.2 Attic spaces. An opening not less than 20 inches by 30 inches (559 mm by 762 mm) shall be provided to any attic area having a clear height of over 30 inches (762 mm). A 30 inch (762 mm) minimum clear headroom in the attic space shall be provided at or above the access opening.
9. IBC 1803.3 Site Grading. Grading shall be sloped away from the building at a 1/20 units vertical to horizontal.
10. IBC 1807.2 Damp proofing required. Except where required to be waterproofed by Sec. 1807.3, foundation walls shall be damp proofed on the exterior surface of the wall and shall extend from the top of the footing to above ground level.
11. IBC 2303.4.1 Truss design drawings. Truss construction documents shall be prepared by a registered design professional and shall be provided to the building official and approved prior to installation.
12. IBC SECTION 2406 SAFETY GLAZING, 2406.1 Human impact loads. Individual glazed areas, including glass mirrors, in hazardous locations as defined in Section 2406.3 shall comply with Sections 2406.1.1 through 2406.1.5.
13. Operable parts of doors, equipment, and appliances in accessible spaces, along accessible routes, or as part of accessible elements shall be operable without tight grasping, pinching or twisting of the wrist and located at the appropriate height for accessibility.
14. Permanently constructed building elements shall be accessible as required in IBC Section 1105. Movable cases, counters, and partitions less than 5 feet 9 inches in height that do not require permits are the responsibility of the designer, owner and tenant to provide for accessibility as may be required by law.
15. IBC 1009.1 Stairway width. The width of stairways shall be determined as specified in Section 1005.1, but such width shall not be less than 48 inches (1118 mm) in accordance with an amendment. Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. Stair tread depths shall be 11 inches (279 mm) minimum. Stairways shall have handrails on each side. Handrails shall be adequate in strength and attachment in accordance with Section 1607.7. Handrails for ramps, where required by Section 1010.8, shall comply with this section. Handrail height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34 inches (864 mm) and not more than 38 inches (965 mm). See Section 1007.3 for accessible means of egress stairways.
16. IBC 1009.11.3 Handrail graspability. Handrails with a circular cross section shall have an outside diameter of at least 1.25 inches (32 mm) and not greater than 2 inches (51 mm) or shall provide equivalent graspability. If the handrail is not circular, it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6.25 inches (160 mm) with a maximum cross-section dimension of 2.25 inches (57 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm). IBC 1009.11.4 Continuity. Handrail-gripping surfaces shall be continuous, without interruption by newel posts or other obstructions.

17. IBC 1010.10 Guards. Guards shall be provided where required by Section 1012 and shall be constructed in accordance with Section 1012. Guards shall form a protective barrier not less than 42 inches (1067 mm) high, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seatboard.
18. P904.2 Frost closure. Where the 97.5-percent value for outside design temperature is 0°f (-18°c) or less, every vent extension through a roof or wall shall be a minimum of 3 inches (76 mm) in diameter.

✓**Items noted above are required and will be checked by field inspectors.**

Reviewed by: Ted Allen Date: August 28, 2019