



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

Plan Review Report

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

Building Permit #	BLD19-00594	Date: March 13, 2019
Project Name	Wildflower – Flower Shop – Interior Tenant Improvement	
Project Address	2753 W. State Street	
Primary Applicant	Tessa Grundler (arch rep)	
Architect	Trent Koci	
Engineer	N/A	
Occupancy	M / B / S-1	
Construction	V-B (this building does not have a fire sprinkler system)	
Occupant Load	14 / 3 / 1	
Seismic Category	C (Risk Category II)	
Plan Reviewer	Carl Westfall	
Reviewer's Phone	208-608-7106	

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

(WILDFLOWER – FLOWER SHOP – INTERIOR TENANT IMPROVEMENT) This building does not have a fire sprinkler system. To remodel the existing 1,405 square foot interior area of a tenant space within a 2,365 square building (including the 960 square foot canopy) for a new flower shop. Work is to include a 126 square foot walk-in cooler (about 144 square feet including the perimeter cooler walls), a pressure treated wood floor infill to align the floor surface with the main floor level, suspended acoustical ceilings, gypsum board ceilings, sinks, and interior finishes. Building shell work was done under permit BLD18-02750. Work under that permit included a janitor's closet with a mop sink, installing glass overhead doors (safety glass with a U-factor of .45 and SHGC of .58), a new toilet room accessible to the disabled, and an exterior screen wall (fence). The new work is required to comply with the approved drawings, with the plan review report, and with all applicable codes and ordinances. **CJW**

Project Information

A response is not required for items listed under this heading.

Building history. According to Ada County records, this building was constructed in 1954. This parcel was annexed into the City of Boise in 1962. At the time of annexation, this building was considered to be a lawful building even though it did not totally comply with the 1952 UBC (i.e. the code likely in effect in the City of Boise in 1954) because Ada County did not have an adopted building code at the time the building was constructed.

A 32' x 30' canopy addition was constructed in 1966 over fuel pumps for "Richfield Oil". See micro fiche #950568 for those drawings. The interior was remodeled for "McRae's Cleaners" (dry cleaning business) in 1975. A 504 square foot building addition was constructed for "McRae's Cleaners" in 1980. See micro fiche #950569 for those drawings. That addition had a parapet on top of the South wall but the original building did not. The original building had a floor area less than 1,000 square feet.

This building was most recently occupied by "Clothesline Cleaners" under occupancy permit BLD14-00297. That tenant was a commercial dry cleaner with all dry cleaning being done off site. It was a B Occupancy having an occupant load of 10. Before that, this building was occupied by "McRae's Cleaners".

Building shell work was done under permit BLD18-02750. Work included a janitor's closet with a mop sink, glass overhead exterior doors (safety glass with a U-factor of .45 and SHGC of .58), a new toilet room accessible to the disabled, and an exterior screen wall (fence). Existing exterior walls and windows above the walls in the North exterior wall were removed and the glass overhead doors were installed in their place. These openings were originally used to access the vehicle service bays. It was not determined when those infill walls were constructed. The original vehicle service bay openings were re-opened with the original header above being maintained.

Seismic upgrade. The wall infills that were removed under the shell permit were likely not designed to provide any lateral force resisting capacity to the building when they were constructed. This building has never had a seismic upgrade. Removing those walls were not expected to reduce the lateral load resisting capacity of this building. A seismic upgrade was not required now because (1) the risk category of the building is not changing, (2) it is a small building with a small occupant load, (3) the removed wall infills were not specifically designed to increase the lateral load resisting capability of this building when they were constructed, and (4) egress is directly to the outside at grade.

Building data. This building is one story and about 13 feet tall. It has a total floor area, including the 960 square foot canopy, of about 2,365 square feet. It is classified as Type V-B construction (changed from Type III-B because the canopy does not comply with that classification). This building does not have a fire sprinkler system. At least 1,500 gpm of fire flow is required to be available.

The South wall is about 3 feet 10 inches from the South property line. That wall has a total existing window area of about 48 square feet or about 6% of the total wall area (based on a 13 foot high wall). Much of that wall does not have a parapet. The 2015 IBC does not allow any openings in that wall since it is too close to the property line. Since this building was constructed in Ada County before a building code was adopted and since the windows and lack of a parapet are original, these conditions are considered to be lawful (assuming the property line has been at its current location since 1962). The property line was shown in its current location relative to the building in 1966. The windows and no parapet were allowed to remain without upgrade.

This building has a 3 feet 10 inch yard to a property line on the South, a 34 foot yard to a 60 foot public way on the East, a 138 foot public way on the North, and a 12 foot public alley on the West. The West wall is located immediately next to the alley. Per the 2015 IBC, unprotected openings in the West wall are limited to 10% of the total wall area. If the West wall has a total area of 240 square feet, only 24 square feet of unprotected opening is allowed. The overhead door in the West wall was shown on the drawings for the 1980 addition, but the windows were not. The overhead door appears to have an area of about 40 square feet. The 1979 UBC required that door and windows to have a 45 minute fire-protection-rating and to be fixed in the closed position or to be automatic closing by a fusible link.

The “non-separated uses” option of the 2015 IBC was used to evaluate this building with the M Occupancy being the most restrictive. Occupancies include M, B, and S-1. The allowable building area is at least 9,000 square feet. This building is allowed to be one story tall.

Energy code review. New work is required to comply with the 2015 International Energy Conservation Code (IECC). There are no proposed alterations to the building thermal envelope. Vestibules were not required at exterior doors because the doors open into rooms having a floor area less than 3,000 square feet. Service water heating work includes an electric water heater and pipes to serve new sinks. HVAC work includes an exterior heat pump, a branch selector box, and fan coil units. Electric lighting work includes new light fixtures and occupant sensors with manual switches. The total power proposed to be used for lighting is 868.6 watts. The average power used for lighting is .61822 watts per square foot. Daylight-responsive controls are required where the total power of general lighting within a daylight zone exceeds 150 watts. Each daylight zone appears to have less than 150 watts of general lighting within the zone. Daylight-responsive controls were not required.

Functional testing. Prior to passing final inspection, the registered design professional shall provide evidence that the lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed, and in proper working condition in accordance with the construction documents and manufacturer’s instructions. Functional testing shall be in accordance with 2015 IECC Sections C408.3.1.1 (occupant sensor controls), C408.3.1.2 (time-switch controls), and C408.3.1.3 (daylight responsive controls) for the applicable control type. (2015 IBC Section C408.3.1)

Economizers and VRF systems. Each VRF (Variable Refrigerant Flow) terminal is considered to be an individual fan cooling unit. For this reason, economizers were not required since each terminal unit has a capacity of less than 54,000 Btu/h of cooling (i.e. 4.5 tons). A VRF system has the capacity to pull heat from a room that needs cooling and move it to a room that needs heating. A VRF system is believed to be at least as energy efficient as a traditional HVAC system with economizers.

Accessible upgrades. The interior restroom should already be accessible to the disabled. Constructing an interior floor infill to remove a non-accessible sunken floor level is an accessible upgrade. A route accessible to the disabled is required from the accessible parking space and from the public way into this building at the customer entrance.

Tenant use and occupant load. The interior area has a total floor area of about 1,405 square feet (798 square feet retail sales, 323 square feet office, 126 square feet storage, 69 square feet toilet room, and 89 square feet closets and interior walls). The total occupant load is 18 (14 retail sales, 3 office, and 1 storage). The maximum travel distance is 75 feet long. One means of egress is required from this tenant space.

Toilet capacity. Based on a retail sales occupant load of 14, an office occupant load of 3, and a storage occupant load of 1, only one toilet room is required to serve this tenant space ($14 / 100 + 3 / 15 + 1 / 15 = .407$).

The single-user toilet room was provided under shell permit BLD18-02750 and is required to be maintained accessible to the disabled.

Drinking fountains. Since the total occupant load of this building does not exceed 30, drinking fountains were not required.

Service sink. A mop sink was provided under shell permit BLD18-02750 within a new janitor's closet.

Ventilation. There is sufficient openable exterior area to naturally ventilate this tenant space. The toilet room is required to have a minimum 70 cfm exhaust fan ducted to the outside.

Floor infill. The floor infill is required to have the capacity to support at least a 100 PSF live load and at least a 1,000 pound concentrated load.

Asbestos. The Environmental Protection Agency (EPA) must be notified 10 working days in advance for all renovations that disturb 260 lineal feet / 160 square feet / 35 cubic feet of asbestos containing materials. Contact the EPA office at 208-378-5746. Those responsible for the work are required to get the necessary approvals from EPA for asbestos removal.

Employee work areas. Spaces and elements within employee work areas shall only be required to comply with 2015 IBC Sections 907.5.2.3.2 (fire alarms when an alarm system is provided), 1007 (accessible means of egress when an accessible means of egress is required) and 1104.3.1 (accessible route when an accessible route is required) and shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the work area. (2015 IBC Section 1103.2.2)

An employee work area is defined as all or any portion of a space used only by employees and only for work. Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas. (2015 IBC Section 202)

The sink located within the production area and the sink located within the cooler are employee work elements. Elements used only by employees and only for work not required to be accessible to the disabled by the 2015 IBC. Alterations could be required by the ADA in the future to accommodate disabled employees.

Walk-in cooler. The walk-in cooler is not required to be accessible to the disabled if it is used only by employees and only for work. If the walk-in cooler is used by customers, it is required to be accessible to the disabled just like any other room and is required to have compliant landings on both sides of the door with the door threshold limited to 1/2" maximum in height.

Overhead doors. Glass in overhead doors is required to be laminated glass. When in the open position, the glass panels will be horizontal, like skylights. Although not exposed to the environmental loads from rain and snow, the glass will still be located above occupied areas. To mitigate the hazard of falling glass to the occupants below, laminated glass is required. Tempered laminated glass offers even more safety.

South exterior wall. No more unprotected openings are allowed in the South exterior wall. The toilet room exhaust duct is required to be routed through the side wall or provided with a fire damper where the duct penetrates the South exterior wall.

Roof insulation. Earlier drawings show insulation installed below and up against the underside of the wood roof deck. This method of insulating a roof is prone to moisture condensation that may have damaged the roof

deck. The building code requires the insulation to be held at least 1 inch below the roof deck and for the void space between the insulation and the roof deck to be vented to the outside. The energy code requires an air barrier on the warm in winter side of the insulation. When a new roof covering is installed, the old roof covering is required to be removed, the condition of the roof deck is required to be evaluated for dry rot, damaged plywood is required to be replaced, and insulation having the R-value required by the Energy Code in effect at the time of the new work is required to be installed on top of the roof deck below the roofing membrane. Removal of the existing insulation installed below the roof deck may be required at that time.

Referenced Code Sections

In addition to the approved drawings, compliance with the following code sections is required.

Sheet G100 – Site plan

1) Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. Address identification shall be maintained. (2015 IBC Section 501.2)

2) Walking surfaces that are part of an accessible route. Walking surfaces that are a part of an accessible route shall comply with ICC A117.1-2009 Section 403. (ICC A117.1-2009 Section 403.1) Floor surfaces shall comply with ICC A117.1-2009 Section 302 (i.e. stable, firm, slip resistant, openings do not permit a 1/2 inch sphere to pass through, elongated openings placed perpendicular to the direction of travel, etc.). (ICC A117.1-2009 Section 403.2) The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of a walking surface shall not be steeper than 1:48. (ICC A117.1-2009 Section 403.3) Changes in level shall comply with ICC A117.1-2009 Section 303 (i.e. changes in level of 1/4 inch maximum is allowed to be vertical, changes in level greater than 1/4 inch and not more than 1/2 inch shall be beveled with a slope not steeper than 1 unit vertical to 2 units horizontal, changes in level greater than 1/2 inch shall be ramped, etc.). (ICC A117.1-2009 Section 403.4) The clear width of an accessible route shall be 36 inches minimum. (ICC A117.1-2009 Section 403.5)

3) Curb ramps. Ramp runs shall have a running slope not steeper than 1:12. (ICC A117.1-2009 Section 405.2) Cross slope of ramp runs shall not be steeper than 1:48. (ICC A117.1-2009 Section 405.3) Counter slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surfaces at transitions at curb ramps to walks, gutters and streets shall be at the same level. (ICC A117.1-2009 Section 406.2) Where provided, curb ramp flares shall not be steeper than 1:10. (ICC A117.1-2009 Section 406.3.1) If curbs adjacent to the ramp flares are painted, the painted surface shall extend along the flared portion of the curb. (ICC A117.1-2009 Section 406.3.2) Curb ramps shall be 36 inches minimum in width, exclusive of flared sides. (ICC A117.1-2009 Section 406.4) Floor surfaces shall be stable, firm, and slip resistant, and shall comply with ICC A117.1-2009 Section 302. Changes in level in floor surfaces shall comply with ICC A117.1-2009 Section 303. Changes in level of 1/4 inch maximum in height shall be permitted to be vertical. Changes in level greater than 1/4 inch in height and not more than 1/2 inch maximum in height shall be beveled with a slope not steeper than 1:2. (ICC A117.1-2009 Section 406.5) Curb ramps and the flared sides of curb ramps shall be located so they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared

sides. (ICC A117.1-2009 Section 406.6) Landings shall be provided at the tops of curb ramps. The clear length of the landing shall be 36 inches minimum. The clear width of the landing shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing. (ICC A117.1-2009 Section 406.7) Curb ramps shall be located or protected to prevent their obstruction by parked vehicles. (ICC A117.1-2009 Section 406.8)

4) Accessible parking spaces. Van parking spaces shall be 132 inches (i.e. 11 feet) minimum in width. (ICC A117.1-2009 Section 502.2) As an exception, van parking spaces shall be permitted to be 96 inches minimum in width where the adjacent access aisle is 96 inches minimum in width. (ICC A117.1-2009 Section 502.2 Exception) Car and van parking spaces shall be marked to define the width. Where parking spaces are marked with lines, the width measurements of parking spaces and adjacent access aisles shall be made from the centerline of the markings. (ICC A117.1-2009 Section 502.3) Car and van parking spaces shall have an adjacent access aisle. (ICC A117.1-2009 Section 502.4) Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle. Access aisles shall not overlap with the vehicular way. Parking spaces shall be permitted to have access aisles placed on either side of the car or van parking space. Van parking spaces that are angled shall have access aisles located on the passenger side of the parking space. (ICC A117.1-2009 Section 502.4.1) Access aisles serving car and van parking spaces shall be 60 inches minimum in width. (ICC A117.1-2009 Section 502.4.2) As an exception, where van parking spaces are permitted to be 96 inches minimum in width, the adjacent access aisle is required to be 96 inches minimum in width. (ICC A117.1-2009 Section 502.2 Exception) Access aisles shall extend the full length of the parking spaces they serve. (ICC A117.1-2009 Section 502.4.3) Access aisles shall be marked so as to discourage parking in them. Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings. (ICC A117.1-2009 Section 502.4.4) Floor surfaces of parking spaces and access aisles shall be stable, firm, and slip resistant and shall have surface slopes not steeper than 1:48. Access aisles shall be at the same level as the parking spaces they serve. (ICC A117.1-2009 Section 502.5) A vertical clearance of 98 inches minimum shall be provided for parking spaces for vans, the access aisles serving parking spaces for vans, and the vehicular routes serving parking spaces for vans. (ICC A117.1-2009 Section 502.6) Accessible parking spaces are required to be identified by signs. The signs shall include the International Symbol of Accessibility complying with ICC A117.1-2009 Section 703.6.3.1. Signs identifying van parking spaces shall contain the designation “van accessible.” Such signs shall be 60 inches minimum above the floor of the parking space, measured to the bottom of the sign. (ICC A117.1-2009 Section 502.7) Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes. (ICC A117.1-2009 Section 502.8) Curb ramps and the flared sides of curb ramps shall be located so they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. (ICC A117.1-2009 Section 406.6)

Sheet A100 – Floor plan

1) Through penetrations of fire-resistance-rated walls. Through penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814-2013 or UL 1479-03, with a minimum positive pressure differential of 0.01 inch of water and shall have an F rating of not less than the required fire-resistance rating of the wall penetrated. (2015 IBC Sections 714.3.1.2 and 714.3.2) See the exceptions under 2015 IBC Section 714.3.1 for through-penetrations. **Provide compliance for the new penetrations of the South exterior wall.**

2) Interior finish requirements based on group. Interior wall and ceiling finish of rooms shall have a Class C flame spread index (flame spread index not greater than 200 and a smoke-developed index not greater than 450) when tested in accordance with ASTM E 84-2013A or UL 723-2008. (2015 IBC Section 803.11 and 803.1.1)

Textile wall coverings and/or expanded vinyl wall coverings are not allowed within this tenant space unless the materials have been tested and shown to comply with 2015 IBC Sections 803.1.2 (NFPA 286-15) or 803.1.3 (NFPA 265-11). (2015 IBC Section 803.5 and 803.7) Textile ceiling coverings and/or expanded vinyl ceiling coverings are not allowed within this tenant space unless the materials have been tested and shown to comply with 2015 IBC Sections 803.1.2 (NFPA 286-15). (2015 IBC Sections 803.6 and 803.8)

3) Combustible decorative materials. Curtains, draperies, fabric hangings, and similar combustible decorative materials suspended from walls or ceilings shall comply with 2015 IBC Section 806.4 (NFPA 701-10 or NFPA 289-13) and shall not exceed 10 percent of the specific wall or ceiling area to which such materials are attached. (2015 IBC Section 806.3) **Such materials shall be considered interior finish if they cover more than 10 percent of the wall area or more than 10 percent of the ceiling area, and shall not be considered decorative materials or furnishings.**

4) Size of doors. Each door opening shall provide a minimum clear width of 32 inches. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Where this section requires a minimum clear width of 32 inches and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches. The maximum width of a swinging door leaf shall be 48 inches nominal. The height of door openings shall be not less than 80 inches. (2015 IBC Section 1010.1.1)

5) Door opening force. The force for pushing or pulling open interior swinging egress doors shall not exceed 5 pounds. These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other swinging doors (e.g. exterior doors) the door latch shall release when subjected to a 15-pound force. The door shall be set in motion when subjected to a 30-pound force. The door shall swing to a full-open position when subjected to a 15-pound force. (2015 IBC Section 1010.1.3)

6) Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope). (2015 IBC Section 1010.1.5)

7) Thresholds at doors. Thresholds at doorways shall not exceed 1/2 inch in height. Raised thresholds and floor level changes greater than 1/4 inch at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope). (2015 IBC Section 1010.1.7)

8) Door operations. Egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort. (2015 IBC Section 1010.1.9) Manually operated flush bolts or surface bolts are not permitted. (2015 IBC Section 1010.1.9.4) The unlatching of any door or leaf shall not require more than one operation. (2015 IBC Section 1010.1.9.5)

As an exception, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided: (1) the locking device is readily distinguishable as locked and (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 THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch high on a contrasting background. (2015 IBC Section 1010.1.9.3 Exception 2)

The “main door” is that door that must be unlocked for this tenant to conduct business. It is the customer entrance door. No other door is allowed to be considered to be a “main door”. The “main door” is required to be maintained unlocked when this space is occupied. If for security reasons the “main door”

will not be maintained unlocked when this space is occupied, this exception should not be used.

9) Aisles. Aisles or aisle accessways shall be provided from all occupied portions of the exit access that contain seats, tables, furnishings, displays, and similar fixtures or equipment. The minimum width or required capacity of aisles shall be unobstructed. (2015 IBC Section 1018.1)

10) Aisle width. The minimum clear aisle width shall be not less than that required for corridors by 2015 IBC Section 1020.2 (e.g. 36 inches minimum when the occupant load is less than 50 and 44 inches minimum when the occupant load is 50 or more). (2015 IBC Section 1018.3)

11) Toilet facilities. Each toilet room shall be accessible. At least one of each type of fixture, element, control, or dispenser in each accessible toilet room and bathing room shall be accessible. (2015 IBC Section 1109.2)

12) Changes in level on accessible routes. Changes in level of 1/4 inch maximum in height shall be permitted to be vertical. (ICC A117.1-2009 Section 303.2) Changes in level greater than 1/4 inch in height and not more than 1/2 inch maximum in height shall be beveled with a slope not steeper than 1:2. (ICC A117.1-2009 Section 303.3) Changes in level greater than 1/2 inch in height shall be ramped and shall comply with ICC A117.1-2009 Section 405 or 406. (ICC A117.1-2009 Section 303.4)

13) Door hardware on accessible doors. Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the floor. (ICC A117.1-2009 Section 404.2.6)

14) Door closers on accessible doors. Door closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum. (ICC A117.1-2009 Section 404.2.7.1)

15) Door surface of accessible doors. Door surfaces within 10 inches of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door. Parts creating horizontal or vertical joints in such surface shall be within 1/16 inch of the same plane as the other. Cavities created by added kick plates shall be capped. (ICC A117.1-2009 Section 404.2.9)

16) Parallel approach to reception and/or service counters. A portion of the counter surface 36 inches minimum in length and 36 inches maximum in height above the floor shall be provided. Where the counter surface is less than 36 inches in length, the entire counter surface shall be 36 inches maximum in height above the floor. A clear floor space complying with ICC A117.1-2009 Section 305 (i.e. 30" x 48"), positioned for a parallel approach adjacent to the accessible counter, shall be provided. (ICC A117.1-2009 Section 904.3.1) The accessible portion of the countertop shall extend the same depth as the sales and service countertop. (ICC A117.1-2009 Section 904.3)

17) Floors and wall base finish materials in toilet rooms. Toilet room floor finish materials shall have a smooth, hard, nonabsorbent surface. The intersections of such floors with walls shall have a smooth, hard, nonabsorbent vertical base that extends upward onto the walls at least 4 inches. (2015 IBC Section 1210.2.1)

18) Walls and partitions in toilet rooms. Walls and partitions within 2 feet of water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture. (2015 IBC Section 1210.2.2) **As an exception, epoxy paint on water-resistant gypsum board is allowed in lieu of a smooth,**

hard, nonabsorbent surface. (Building Division Policy)

19) Glazing in doors. Glazing in all fixed and operable panels of swinging, sliding, and bifold doors shall be considered a hazardous location for human impact requiring safety glazing materials. (2015 IBC Section 2406.4.1)

20) Glazing adjacent to doors. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24-inch 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 above the walking surface shall be considered a hazardous location for human impact requiring safety glazing materials. (2015 IBC Section 2406.4.2)

21) Glazing in windows near floors. Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered a hazardous location for human impact requiring safety glazing materials: (1) The exposed area of an individual pane is greater than 9 square feet; (2) The bottom edge of the glazing is less than 18 inches above the floor; (3) The top edge of the glazing is greater than 36 inches above the floor; and (4) One or more walking surface(s) are within 36 inches, measured horizontally and in a straight line, of the plane of the glazing. (2015 IBC Section 2406.4.3)

22) Foam plastic in walk-in coolers. In nonsprinklered buildings, foam plastic having a thickness that does not exceed 4 inches and a maximum flame spread index of 75 is permitted without a thermal barrier in walk-in coolers or freezer units where the aggregate floor area does not exceed 400 square feet and the foam plastic is covered by a metal facing not less than 0.032-inch-thick aluminum or corrosion-resistant steel having a minimum base metal thickness of 0.016 inch. A thickness of up to 10 inches is permitted where protected by a thermal barrier. (2015 IBC Section 2603.4.1.3)

23) Ventilation for motor vehicle operation. In areas where motor vehicles operate, mechanical ventilation shall be provided in accordance with 2015 IMC Section 403. Additionally, areas in which stationary motor vehicles are operated shall be provided with a source capture system that connects directly to the motor vehicle exhaust systems. Such system shall be engineered by a registered design professional or shall be factory-built equipment designed and sized for the purpose. (2015 IMC Section 502.14)

This section shall not apply to motor vehicle service areas where engines are operated inside the building only for the duration necessary to move the motor vehicles in and out of the building. (2015 IMC Section 502.14 Exception 3)

Sheet A102 – Ceiling plan

1) Suspended acoustical ceilings. Acoustical tile or lay-in panel ceilings in structures assigned to Seismic Design Category C where the average weight over the entire ceiling is 2.5 pounds per square foot or less shall be designed and installed in accordance with ASTM C 635-13, ASTM C 636-08, and ASTM E 580-09a, Section 4 Seismic Design Category C (i.e. free-floating). (2015 IBC Section 808.1.1.1, 2015 IBC Section 2506.2.1, and ASCE 7-10 Section 13.5.6.2)

Ceilings where an average weight over the entire ceiling is greater than 2.5 pounds per square foot shall be installed as specified in ASTM E580-09a, Section 5 Seismic Design Category D, E, & F (i.e. restrained).

Within Seismic Design Category C where the average weight over the entire ceiling is 2.5 pounds per square

foot or less, either ASTM E580-09a, Section 4 Seismic Design Category C (i.e. free-floating) or ASTM E580-09a, Section 5 Seismic Design Category D, E, & F (i.e. restrained) may be used.

Sheet E2.0 – Lighting plan

1) Egress illumination required. The means of egress serving a room or space shall be illuminated at all times that the room or space is occupied. (2015 Section 1008.2) The means of egress illumination level shall be not less than 1 footcandle at the walking surface. (2015 Section 1008.2.1)

As an alternate to the code, full automatic-on occupant sensors are allowed to control the lighting within intervening rooms if they are the type that, if they fail to function, they fail in the “lights on” mode. In other words, if the occupant sensors malfunction the lights will be on. The minimum required level of egress lighting is not allowed to be controlled by a time-switch control.

It is a building code violation for an occupant sensor to shut off lighting within a room that is occupied. This is especially a risk to life-safety if the occupant sensors are of a manual-on type. The occupant sensors are required to be located so that they will detect occupants anywhere in the room.

2) Occupant sensor controls. Occupant sensor controls shall be installed to control lights in the following space types: (1) Classrooms/lecture/training rooms. (2) Conference/meeting/multipurpose rooms. (3) Copy/print rooms. (4) Lounges. (5) Employee lunch and break rooms. (6) Private offices. (7) Restrooms. (8) Storage rooms. (9) Janitorial closets. (10) Locker rooms. (11) Other spaces 300 square feet or less that are enclosed by floor-to-ceiling height partitions. (2015 IECC Section C405.2.1)

3) Occupant sensor control function. Occupant sensor controls in spaces shall comply with the following: (1) Automatically turn off lights within 30 minutes of all occupants leaving the space. (2) Be manual on or controlled to automatically turn the lighting on to not more than 50 percent power. As an exception, full automatic-on controls shall be permitted to control lighting in public corridors, stairways, restrooms, primary building entrance areas, and lobbies, and areas where manual-on operation would endanger the safety or security of the room or building occupants. (3) Shall incorporate a manual control to allow occupants to turn lights off. (2015 IECC Section C405.2.1.1) **Full automatic-on controls are required in intervening rooms or areas.**

It is a violation of the 2015 International Building Code (IBC) for the required minimum level of egress lighting to shut off when a room is occupied. Occupant sensors are required to be located so that a person anywhere within the room will be detected by the occupant sensor so that the lights will not shut off when the room is occupied.

Plan Corrections – Revised Drawings

Please respond to each of the following items with revised drawings or more information as requested.

IBC 2015 International Building Code and ICC A117.1-2009 Standard

1) 403.1 Walking surfaces that are part of an accessible route.

Walking surfaces that are a part of an accessible route shall comply with ICC A117.1-2009 Section 403. (ICC

A117.1-2009 Section 403.1) Floor surfaces shall comply with ICC A117.1-2009 Section 302 (i.e. stable, firm, slip resistant, openings do not permit a 1/2 inch sphere to pass through, elongated openings placed perpendicular to the direction of travel, etc.). (ICC A117.1-2009 Section 403.2) The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of a walking surface shall not be steeper than 1:48. (ICC A117.1-2009 Section 403.3) Changes in level shall comply with ICC A117.1-2009 Section 303 (i.e. changes in level of 1/4 inch maximum is allowed to be vertical, changes in level greater than 1/4 inch and not more than 1/2 inch shall be beveled with a slope not steeper than 1 unit vertical to 2 units horizontal, changes in level greater than 1/2 inch shall be ramped, etc.). (ICC A117.1-2009 Section 403.4) The clear width of an accessible route shall be 36 inches minimum. (ICC A117.1-2009 Section 403.5)

Resubmit: (Sheet G100) The total value of work under this permit is estimated to be \$34,000. The obligation under the “20% rule” to upgrade routes is \$6,800 unless the route can be upgraded for less than this. Revise the drawings to show the customer entrance door accessible to the disabled. Show a minimum 5 foot by 5 foot landing at the door (or as required based on the approach to the door). Show a curb ramp to make the elevation change. Show a route accessible to the disabled from the accessible parking space and from the public way to the customer entrance door.