

April 8th, 2019

City of Columbus
Department of Building and Zoning Services
111 N. Front St.
Columbus, OH 43224-3218
Ph: (614) 645-2979

Attention: Joshua F. Shelley, Plans Examiner
Amit Ghosh, Chief Building Official

Subject: **Application #: NEWM1901290**
Parsons Place, 354 E. Barthman Ave. Columbus, Ohio 43207

Dear Mr. Shelly and Mr. Ghosh:

We are in receipt of your review comments for the captioned project dated March 5th, 2019. Below we have provided our responses to your comments listed consecutively, and corresponding to your correction items.

ADEQUACY CHECKLIST ITEMS

1. Provide occupant load per space. The construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces, OBC 106.1.1(item 3).
Response: Please refer to additional sheets ALS101-102&103 for provision of proposed occupancy numbers per room.
2. Provide a life safety plan identifying the required ratings of all egress elements and required separations to verify the intent of the design. Currently, the ratings are not identified as a whole per floor. Construction documents shall be coordinated and of sufficient clarity to indicate the location,, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, OBC 106.1.1. Revise drawing set to clarify the intent of the design.
Response: Please refer to additional sheets ALS101,102&103 for provision of proposed ratings of all egress elements and required separations.
3. Provide frontage calculations to verify area increase. Rough calculations were performed and the resulting frontage increase factor was below 25%. Every building shall adjoin or have access to a public way to receive an area factor increases based on frontage. Area factor increase shall be determined in accordance with Sections 506.3.1 through 506.3.3, OBC 506.3. Provide calculations to allow verification of application.
Response: Please refer to additional sheet Ca301 for Area factor increase exhibit graphics and calculations. Additionally please refer to provided Rezoning Legislation for restrictive development of North side adjoining property. (Both 354 Barthman, purchased from the City's land bank, and City owned adjoining property were rezoned prior to initiation of construction documents. No permanent structure is to be permitted on the site North of Parson's Place.

City of Columbus

Legislation Report

File Number: 3069-2016

1. PERMITTED USES: The only permitted use of Subarea B shall be a community garden/fruit park. The term "fruit park" refers to the presence of fruit trees and bushes which may be included in a community garden, as a community garden typically suggests active gardening, such as summer vegetables.

4. The 2nd and 3rd stories which contain R-2 occupancies have actual area that is greater than the allowable floor area calculated. The allowable area of a building shall be determined in accordance with the applicable provisions of Sections 506.2.1 through 506.2.4 and Section 506.3, OBC 506.2. Provide area calculations to verify 2nd and 3rd floor code compliance.
Response: Please refer to response #3.
5. If the 1st floor is intended to be a mixed separated occupancy then 2-HR fire barriers are required to separate the occupancy type A-3. In order for the fire barrier to be reduced in rating a NFPA 13 system per 903.3.1.1 is required. Currently, an NFPA 13R system is specified, 903.3.1.2. Reference foot note definition for 'S' at the bottom of table 508.4. Provide proper separation for the 1st floor.
Response: Please refer to response #2 & #6.
6. If there will be separated occupancies on the first and/or other floors then fire barriers are required. Fire barriers must provide the following code compliant features:
 - 1.) Fire barriers shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing. Such fire barriers shall be continuous through concealed spaces, such as the space above a suspended ceiling OBC 707.5. Revise drawing set as needed to comply with requirement.
Response: Please refer to additional sheet ALS101,102&103 for provision of proposed fire barrier separations. Additionally please refer to revised Enlarged Core Plan A301 and Wall type sheet A002.
 - 2.) Door openings in fire barriers shall be ¾-HR fire-resistance-rated per Table 716.5.
Response: Please refer to revised Door Schedule A701.
 - 3.) Ducts and air transfer openings of fire barriers shall be protected with approved fire dampers, OBC 717.5.2.
Response: Refer to Sheet M402 fire damper and fire damper access detail, and radiation damper details. Refer to sheet M403 exhaust fan duct routing detail compliant with OBC 714.4.1.2.
7. It is unclear if you are trying to use separated occupancies for the first floor. In each story, the building area shall be such that the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1, OBC 508.4.2. Provide calculations for floors where separated occupancies are utilized to verify the ratios are ≤ 1 .
Response: Please refer to response #3.
8. The following Provide a combination fire/smoke dampers at corridor wall penetrations only. Specify fire/smoke dampers on mechanical room details where ducts penetrating corridor walls located on sheets M101 through M103. A listed smoke damper designed to resist the passage of smoke shall be provided, OBC 717.5.4.1(item 3). Ducts and air transfer openings that penetrate fire partitions shall be protected with listed fire dampers installed in accordance with their listing, OBC 717.5.4. Clarify locations of combination Fire/smoke dampers per code requirements specified.
Response: Fire dampers, combination fire/smoke dampers and ceiling radiation dampers are shown where penetrating rated assemblies. See revised plans and details on M402 and M403. Specification 23 3300 requires dampers to match UL assembly listing and detail.
9. The location of all ceiling radiation dampers have not been specified. Documents shall include information necessary to determine compliance with the building code and other applicable codes OBC 106.1.1. Identify ceiling radiation dampers in the following areas:
 - 1.) All corridor transfer openings where the ducts are routed within the rated ceiling including duct penetration into the rated roof/ceiling assembly.
Response: Corridor ducts are typically routed within the unrated interstitial space except for 3rd floor which are shown protected with radiation dampers at rated structural ceiling membrane penetrations. Refer to M103, Coded Note 9.
 - 2.) All floor/ceiling and roof/ceiling penetrations by ducts identified in the mechanical room details specified on sheets M101 through M103.
Response: Refer to M101, Coded Note 5 noted as typical and shown at wall penetration fire dampers.

- 3.) Reference sheet M103, air transfer duct openings from the corridor to the laundry room are required to be provided with radiation dampers.

Response: Refer to coded note 9 requiring damper to maintain rating and Sheet M402 fire damper and fire damper access detail, and radiation damper details.

- 4.) Identify penetration method for public restroom exhaust fans on sheet M101.

Response: Refer to Sheet M403 exhaust fan duct routing detail compliant with OBC 714.4.1.2.

10. How will conditioned air be provided to the restrooms since the corridor door entries will be leak tight per 717.5.4.1(item 3). Documents shall include information necessary to determine compliance with the building code and other applicable codes OBC 106.1.1. Provide method of delivering conditioned air to public restrooms.

Response: Air will be transferred from corridors per OMC 601.2 and exhausted per OMC403.

11. How will air be returned to the HVAC unit from laundry room on 3rd floor? Documents shall include information necessary to determine compliance with the building code and other applicable codes OBC 106.1.1. Provide method of return air from laundry room.

Response: Laundry conditioning is served by a ductless split heat pump within the room – refer to AHU-6 shown on plan. Transfer air is to make up for air exhausted by dryers to the exterior.

12. Accessibility plan sheets A003 and A004 have been reduced on sheets. Construction documents shall be of sufficient clarity to indicate the nature of the work proposed, OBC 106.1.1. Provide plan sheets that are correctly sized per the sheet for clarity of review and construction.

Response: Please refer to replacement of the captioned sheets.

13. Reference detail program room sheet A301, detail call out located on sheet A405 which is missing from the set. Construction documents shall be coordinated and of sufficient clarity to indicate the nature of the work proposed, OBC 106.1.1. Provide sheet or revise detail to clarify location.

Response: Please note - plumbing for the identified location has been provided - cabinet layout specifics are currently part of proposed scope of work cost analysis, and do not affect code or life safety considerations. Non-code related scope has been reviewed and approved by client, general contractor, funding agency (OCCH), and (OHFA) Ohio Housing Finance Agency.

14. Reference sheet A502 & A505, identify location of details indicated by dashed boxes. Construction documents shall be coordinated and of sufficient clarity to indicate the nature of the work proposed, OBC 106.1.1.

Response: Please note provision of revised building sections and details. Location of referenced details identified.

15. Reference sheet A101 through A103, reference detail C/A603 does not identify the correct detail. Rated separation fire partition detail appears to be missing from the set. Documents shall include information necessary to determine compliance with the building code and other applicable codes OBC 106.1.1. Provide partition detail to verify required draft stop above units.

Response: Please refer to replacement of sheets A101,102&103 - tags for all three wall sections on sheet A603 have been updated. Additionally please refer to Wall type sheet A002 for fire separation details.

16. Missing door hardware identification in door schedule and description of door hardware. Documents shall include information necessary to determine compliance with the building code and other applicable codes OBC 106.1.1. Provide door hardware for doors and hardware description.

Response: Please refer to provision of consultant generated door hardware schedule. coordination/ identification of hardware set numbers added to re-provided sheet A701.

17. Plumbing system is missing isometric layout for DWV for individual dwelling units. Complete description of the plumbing systems including general routing and sizes of all piping; location and type of plumbing fixtures and equipment; plumbing schematics and isometrics, OBC 106.1.1(15). Provide DWV isometric for the dwelling plumbing system.

Response: There are no individual dwelling unit plumbing systems, only repetitive shared (Jack and Jill) sanitary DWV systems typical to low rise residential apartments. Sheets P401 and P402 show isometric stack diagrams with sanitary and vent sizes typical to this project. DFUs are tabulated in a non-print layer for sizing purposes. Plan shows stack locations and horizontal building drain(s).

RELATED DESIGN ITEMS

18. Provide a letter from the owner identifying the intended clientele the apartments will be leased to. The complex is equipped with a nursing room, program space and administration offices that could possibly be considered I-1 use group amenities. If the intent is to provide these spaces to elderly people and provide limited medical attention related to an I-1 then identify the use appropriately.
Response: Please refer to building description on cover sheet.
19. (SPECIAL INSPECTIONS) OBC Section 1704.2.3 requires that *the applicant shall submit a statement of special inspections as a condition for issuance of a plan approval.* The City of Columbus requires that applicants use the form prepared by the city for this purpose. The form, along with other information regarding special inspections, can be found on the web page: <https://www.columbus.gov/Templates/Detail.aspx?id=2147508279> . Some of the required inspections may include, but are not limited to:
- 1) Steel construction 1705.2 including bolted and / or welded connections.
 - 2) Concrete construction 1705.3 including reinforcing steel, design mix, and in-situ concrete strength.
 - 3) Masonry construction 1705.4.
 - 4) Soil bearing and fill placement 1705.6.
 - 5) Sprayed fire-resistant materials 1705.14.
 - 6) Intumescent fire-resistant coatings 1705.15.
 - 7) EIFS applications 1705.16.
 - 8) Water-resistive barrier coating for EIFS where installed over sheathing 1705.16.1.
 - 9) Fire-resistant penetrations in high-rise buildings or in buildings of Risk Category II or IV 1705.17.
 - 10) Smoke control systems 1705.18.
 - 11) Additional inspections as determined by the design professional.
 - 12) Further instructions regarding the Statement of Special Inspections.
 - i. **Parts I and II must be completed and signed. DO NOT SIGN THE FINAL REPORT.** The Final Report is to be completed and signed at the job site at the end of the job.
 - ii. A special inspector shall be the registered design professional of record involved in the design of the project, or an agent contracted by the owner or registered design professional to perform special inspections **whose qualifications comply with Section 1704.2.1.** A list of approved inspection agencies and the personnel qualified to perform particular inspections can be found at <https://www.columbus.gov/Templates/Detail.aspx?id=2147508279> . A list of qualifying experience and certifications can be found on the same page. (The ORC says that the design professional is empowered to inspect work he has designed).
 - iii. One statement of special inspections can serve a number of permits where the drawings for the permits are in one set and the required inspections are the same for all buildings.
 - iv. Where a project consists of multiple phases to achieve a completed building, requiring multiple permits, such as for foundations, shell, an interior build-out, one statement of inspections can be submitted. Indicate on the first page that the statement is for all phases and list the phases.
 - v. Special inspections will be required for this job for truss-to-truss connections. Such connections shall be included with the truss design drawings, as required by OBC 2303.4.1.1, Item 11.

20. (SOILS REPORT) Submittal did not include a geotechnical report. Provide report and include items specified per OBC 1803.6. The geotechnical report shall be prepared by the registered design professional and will be utilized to determine compliance OBC 1704.7. Provide soils report to verify compliance with design requirements. Construction documents shall include information necessary to determine compliance with the building and other applicable codes, OBC 106.1.1.
Response: Please refer to soils report included in originally provided project specifications.
21. Submittal did not include design information to demonstrate how the proposed structure conforms to lighting, mechanical and envelope energy conservation regulations. Buildings shall be designed and constructed in accordance with the applicable provisions of the “2012 International Energy Conservation Code” or the requirements of “2010 ASHRAE 90.1” listed in chapter 35 of this code OBC 1301.1.1. Provide required design information to show proposed facility complies with energy conservation requirements. (I.E. Com Check Reports)
Response: Please refer to ResCheck forms and report included with submission package. (ComCheck is for buildings (4) stories and above.)
22. Submittal did not include shop drawing for wood trusses proposed for the new facility. The written, graphic and pictorial depiction of each individual truss shall be provided to the building official for approval prior to installation OBC 2303.4.1.1. Include shop drawings that include, at a minimum the information specified in OBC 2303.4.1 items (1) thru (14).
NOTE: Provide the truss drawing information specified above within a submittal package that consists of each individual truss design drawing (as described above), the truss placement diagram, the permanent individual truss member restraint/bracing method and details and any other structural details germane to the trusses; and, as applicable, the cover/truss index sheet, reference OBC 2303.4.3.
Response: As sealed truss drawings are produced by the manufacturer’s structural engineer only after the trusses are ordered, and truss’ cannot be ordered prior to permit issue - as is typical; wood truss shop drawings shall be provided by the General Contractor’s supplier prior to erection.
23. Provide an 11”x17” of the sheet where you will include your occupant load calculations and also a 11 x 17 sheet of the A-3 space. These sheets are needed to provide max occupancy cards for assembly occupancy areas.
Response: Please refer to additional sheets ALS101,102&103 for provision of occupant load calculations. Also please note provision of 11x17 sheet of the A-3 designated spaces.

SPRINKLER AND FIRE ALARM REQ., FIRE PROTECTION

24. Manual fire alarm required for the facility due to R-2 occupancy. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where the building contains more than 16 dwelling units or sleeping units, OBC 907.2.9.1(item 3). Provide manual fire alarm.
Response: Project is submitted for phased approval with delegated design and deferred submittals noted on cover in development summary. Sheet E000, General Note P requires the fire alarm sub-contractor to have a state certified fire alarm designer assemble shop drawings and product data/catalog cuts of the equipment selected with UL listing, battery calculations, and all other information required, then submit for review and approval. Please issue conditional plan approval per OBC 105 and 106.1.1.1.

ASSEMBLIES, FIRE PROTECTION

25. The plan sheets do not include the listed/labeled fire-resistance assembly and fire penetration assemblies referenced for proposed wall assemblies on the construction documents. It is no longer acceptable to incorporate fire protective assemblies and through penetration details by reference only. Assemblies and through penetration details must be incorporated into the construction documents as tested. All approved rating numbers, manufacturer's technical data and complete installation instructions including assembly details, fire-stopping and/or fire-stop penetration systems provided or required per Chapter 7 of the Ohio Building Code shall be provided prior to building permit issuance. Fire resistive ratings shall be determined in accordance with the test procedures set forth in ASTM 119 or in accordance with Section 703.3.

Response: Sheet A002 shows rated assemblies. Penetration listings are shown on sheets F000, P000, M000 and E801. Basis-of-design penetration UL installation details are attached. Other acceptable listed manufacturers may be in the architectural firestopping specifications, and each manufacturer has multiple products acceptable for installation. Actual products selected for use by contractor may or may not match basis of design. Requested details may or may not match actual construction.

26. Fire dampers, smoke dampers, combination fire/smoke dampers, corridor dampers and ceiling radiation dampers must be listed and labeled for installation in the associated horizontal and vertical fire-resistance-rated assembly, OMC 607.5. Provide details including listing/labeling that include type and model number to verify that dampers are installed as tested.

Response: Fire dampers, combination fire/smoke dampers and ceiling radiation dampers are shown where penetrating rated assemblies. See revised plans and details on M402 and M403. Specification 23 3300 requires dampers to match UL assembly listing and detail.

27. If applicable, can lights may not be installed in fire rated horizontal assemblies. Where floor/ceiling assemblies are required to have a fire-resistance rating, recessed fixtures shall be installed such that the required fire resistance will not be reduced OBC 713.4.1.2. Provide listing and manufacturer installation instructions for all light fixtures that will be recessed within a fire-rated horizontal assembly.

Response: Please refer to originally provided fixture schedule sheet E601.

28. Doors located in fire-resistance-rated assembly are not self-closing. Fire doors shall be latching and self-or automatic-closing in accordance with this section except for fire doors located in common/separation walls between dwelling/sleeping units per OBC 716.5.9.

Response: Please refer to response #16

29. Girders B5, B6, B7, B8 and B11 require individually encased to provide equivalent fire rating per the assembly they are located in. Members of the primary structural frame other than columns that are required to have protection to achieve a fire-resistance rating and support more than two floors or one floor and roof, or support a load-bearing wall or an non-load-bearing wall more than two stories high, shall be provided individual encasement protection by protecting them on all sides for the full length, including connections to other structural members, with materials having the required fire-resistance rating, OBC 704.3. Provide a detail for encasement based on the listed/labeled fire-resistance-rated assembly, OBC 707.5.1. Provide individual encasement for primary structural beams on the 1st and 2nd floor.

Response: Please refer to bold lettered note on sheet S102 (Second floor deck framing - Only first floor columns and beams within the 2nd floor deck support more than two floors or one floor and a roof)

PER OBC 704.3: STRUCTURAL MEMBERS SUPPORTING MORE THAN TWO FLOORS OR ONE FLOOR AND A ROOF TO BE INDIVIDUALLY PROTECTED WITH UL FIRE RATED ASSEMBLY / FIRE PROOFING.
ALL STEEL BEAMS AND ASSOCIATED COLUMNS AT THIS LEVEL ARE TO BE INDIVIDUALLY PROTECTED WITH UL FIRE RATED ASSEMBLY / FIRE PROOFING.

Additionally please refer to Wall type sheet A002 for fire rated encasement of the captioned structural components.

30. Columns supporting primary structural beams on the 1st, 2nd and 3rd floor elevator lobby area require individual 1-HR fire-resistance-rated encasement. Where columns are required to have protection to achieve a fire-resistance rating, the entire column shall be provided individual encasement protection by protecting it on all sides of the full column height, including connection to other structural members, with materials having the required fire-resistance rating. Where the column extends through a ceiling, the encasement protection shall be continuous from the top of the foundation or floor/ceiling assembly below through the ceiling space to the top of the column, OBC 704.2. Provide individual encasement for primary structural columns.
Response: Please refer to responses #2 - #15 & #29. Columns above the first floor level are enclosed in one hour rated walls and floor ceiling assemblies.
31. If the A-3 use group will be separated from the R-2 group by a 2-HR fire barrier then windows 'L', 'M' and 'N' may not be allowed unless compliant with OBC 716.2, OBC Table 716.6. Interior fire barriers 1-HR or greater are not allowed to have window openings per OBC 716.6 unless fire-resistance-rated glazing assemblies tested to ASTM E119 or UL 263, as specified in Section 716.2. Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall or floor/ceiling assembly in accordance with ASTM E119 or UL 263 and labeled in accordance with Section 703.6 shall not otherwise be required to comply with this section where used as part of a wall or floor/ceiling assembly. Provide a listing/labeling for windows identifying installation in interior 2-HR fire barriers.
Response: No glazing is anticipated in 2-HR fire barriers.
32. Reference sheet A501, fire blocking is not adequate at the horizontal and vertical connection to the horizontal and the vertical fire-resistance-rated assemblies. In combustible construction, fire blocking shall be installed to cut off concealed draft openings (both vertical and horizontal) and shall form an effective barrier between floors, between a top story and a roof or attic space. Fire blocking shall be installed in the location specified in Sections 718.2.2 through 718.2.7. Fire blocking shall be provided at interconnections between concealed vertical stud walls or partition spaces and concealed horizontal spaces create by an assembly of floor joists or trusses and between concealed vertical, OBC 718.2.3. Provide fire-blocking at the transition point from vertical to horizontal.
Response: Please refer to response #14.
33. Doors located in the fire-resistance-rated stair enclosure are specified 45 minute fire-resistance-rated. Per OBC 715.4 table 715.4, fire doors are required to be 1-HR rated when installed in a 1-HR fire-resistance-rated enclosed stairway exit. Revise door schedule to include a 60 minute fire-resistance-rating.
Response: Fire resistance rating of enclosed stairway exits has been revised.
34. Door 100B is an opening in an elevator shaft and is required to comply with the code requirements. Openings in a shaft enclosure shall be protected in accordance with Section 716 as require for fire barriers. Doors shall be self- or automatic-closing by smoke detection in accordance with Section 716.5.9.3, OBC 713.7. Verify doors comply with requirement. Provide a 60 min fire-resistance-rated door that self- or automatic-closes by smoke detection.
Response: Please refer to response #16 & updated sheet A701. The rating of the referenced door has also been upgraded to 1hr.

DOOR/DOOR HARDWARE

35. Egress doors shall unlatch with only one operation of the door hardware, readily operable from egress side without use of a key or special knowledge and shall not require tight grasping, tight pinching or twisting of the wrist to operate OBC 1010.1.9/1010.1.9.1/1010.1.9.5.
Response: Please refer to response #16
36. Doors located in fire-resistance-rated assembly are not self-closing. Fire doors shall be latching and self- or automatic-closing in accordance with this section except for fire doors located in common/separation walls between dwelling/sleeping units per OBC 716.5.9.
Response: Please refer to response #16
37. Panic hardware required for exit doors from the A-3 space including both sets of vestibule doors unless no latch is provided for any of the doors in question. Doors serving rooms or spaces with an occupant load of 50 or more in a Group A occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware OBC 1010.1.10. Revise drawings to comply with code.
Response: Please refer to response #16

38. Panic hardware required on doors that are intended for entrance to and egress from the working space less than 25 feet from the nearest edge of the working space, the door(s) shall open in the direction of egress and be equipped with listed panic hardware for equipment rated 800 A or more that contains overcurrent devices, switching devices, or control devices installed, NEC70 Art. 110.26(A)(3).

Response: Please refer to response #16

ACCESSIBILITY

39. Verify refrigerator/freezer meets accessibility requirements for Type A units. Combination refrigerators and freezers shall have at least 50 percent of the freezer compartment shelves, including the bottom of the freezer 54 inches maximum above the floor when the shelves are installed at the maximum heights possible in the compartment, ICC A117.1-2009 Sec. 1003.12.5.6.

Response: Please refer to specification **SECTION 11 3013 - RESIDENTIAL APPLIANCES**

4. Unit Refrigerator: "GE" Model No. GTE18DTHWW. Frost Free. 15.5 cf., energy star rated, ADA compliant, with R-135 freon.

MECHANICAL

40. Provide outside air calculations for all spaces. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403, OMC 401.2.

Response: Ventilation schedule added. See revised plans.

PLUMBING

41. Provide design information for the washing machine master lint trap to verify proper venting location on layout. Interceptors and separators shall be designed so as not to become air bound. Interceptors and separators shall be vented in accordance with one of the methods in Chapter 9, OPC 1003.9.

Response: Refer to sheet P402, Stack C showing Lint Interceptor 4" drain and 2" vent. All vents shall connect to common venting manifold in attic. See sheet P402, stack C.

42. Provide the location of the proposed washing machine lint trap. Construction documents shall include information necessary to determine compliance with the building code and other applicable codes and standards, OBC 106.1.1.

Response: Refer to sheet P100, Bicycle room 108. See sheet P402, stack C.

43. Reference P402, Stack C, the isometric indicates a vertical pipe connected multiple stories of washing machines without a stack vent. A vertical section of pipe between the connections of horizontal branches (OPC 202), 8 feet or more in developed length, is considered a drainage stack and must have a stack vent sized per OPC Sec. 916 Provide stack vent. The waste stack shall be vertical, and both horizontal and vertical offsets shall be prohibited between the lowest fixture drain connection and the highest fixture drain connection, OBC 913.2. Provide individual waste stacks.

Response: OPC 913 only applies to waste stack-vent systems. Refer to OPC 906.1 and 906.2. Vents are sized based on fixture units and developed length. The washers are common vented per OPC 911 before the horizontal branch drain per OPC 914.1 with independent vent connections per 914.2. The waste stack is required to have a vent stack where connecting 5 intervals or more per 904.2.

44. The following waste stack vents need to be independent from other venting methods to the termination of the stack into the building drain: B, B1, B2, B3 and B4. A waste stack shall be considered a vent for all of the fixtures discharging to the stack where installed in accordance with the requirements of this section, OPC 913.

Response: Section 913 of the OPC, the ICC Plumbing Code Commentary, and ICC "Methods of Venting Plumbing Fixtures and Traps" in the 2018 IPC brochure, each address permissible methods of incorporating plumbing vent into sanitary stacks. The captioned waste stack vents are each configured to comply with the methods and limitations stipulated for inclusion of fixture venting as part of the captioned assemblies.

ELECTRICAL

45. Provide GFCI, weather protected, receptacle within a 25 foot distance to all HVAC systems located on the ground floor. 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlets shall be installed at an accessible location for the servicing of heating, air conditioning, and refrigeration equipment. The receptacle shall be located on the same level and within 25 feet of the heating, air-conditioning, and refrigeration equipment, NEC70 210.63/210.8(B)(3)/406.9(B)(1).
Also, 15- 20-Amperes, 125 and 250 volts installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted NEC70 Art. 406.9(A)(1). (LOCATION, WET - DEF. Page 70-32)
Response: GFI receptacles have been added to plans within 25' of HVAC equipment.
46. All 15- and 20-ampere 125- and 250-volt nonlocking-type receptacles in the areas specified as follows shall be listed tamper-resistant receptacles: (NEC70 Art. 406.12)
1.) Dwelling units in all area specified in 210.52 and 550.13.
(EXCEPTION: Unless receptacles are located 5.5 feet above the floor)
Response: Dwelling unit receptacles are shown with tamper resistant receptacles. See E000 General Note L.
47. Electrical plan is required to identify the circuits that are required to be arc fault protected or specify the requirements of arc fault protection by note in its entirety per NEC 70 Art. 210.12(A). All 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in dwelling unit kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or similar rooms or areas shall be protected by any of the means described in 210.12(A)(1) through (6). Identify areas of arc fault protection and method of arc fault protection per items (1) through (6).
Response: Dwelling unit circuits are required to have AFCI protection where required by the NEC. See sheet E000 General Note L.

We trust this correspondence adequately responds to your review comments, however, should you require else please do not hesitate to contact us.

Respectfully,



T. Michael DeLorme
Sr. Project Manager - TMD

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