

HIGH-RISE PRESUBMITTAL CONFERENCE

Date: []



Seattle Department of
Construction & Inspections

PROJECT INFORMATION		APPLICANT INFORMATION	
Project Name: [Block 55 Phase 3.3]		Contact Person: [Jodi Patterson-O'Hare]	
Project Address: [530 Dexter Ave North, Seattle, WA 98109]		Contact Address: [17479 7th Ave SW Normandy Park, WA 98166]	
Construction Application/Permit: # [#3039270-LU – Master Use Permit #6883897-CN – Building Permit]		Contact Email: [jodi@permitcnw.com]	
Project: # [6911516-PH]		Contact Phone: [425.681.4718]	
Conference Attendees			
Name	Company	Phone	Email

PROVIDE BRIEF DESCRIPTION OF PROJECT. INCLUDE OVERALL SIZE, NUMBER OF STORIES CONSTRUCTION TYPE AND OCCUPANCIES:

New 10-story above-grade building north of existing Phase 3.1 and Phase 3.2 buildings. Shell and core construction for speculative laboratory. 3 levels of new underground structure connecting to 3 levels of existing Phase 3.1 structure.

New 10-story above-grade building north of existing Phase 3.1 and Phase 3.2 buildings, with 3 levels of below-grade structure. Around 241,000 sf of shell and core construction for spec laboratory and around 93,000 sf of underground parking.

Phase 3.3: new 10-story above-grade building north of existing Phase 3.1 and Phase 3.2 buildings; 3 levels of new underground structure connecting to existing structure.

PROPERTY TYPE - C

1. Type 1A construction
2. Parking: 95,000 sq.ft. on 4 levels below grade
3. Lab / Office: 250,000 sq.ft. core and shell on 10 levels above grade
4. Retail/Cafe: 800 sq.ft.

The following section requires the applicant to demonstrate to the City that this project is in compliance with the high-rise building section, 403, of the 2018 Seattle Building Code. Be aware that Seattle has a significant number of amendments to the International Building Code– full text of each section is NOT reprinted here and can be found at: [http://www.seattle.gov/sdci/codes/codes-we-enforce-\(a-z\)/building-code#2018seattlebuildingcode/](http://www.seattle.gov/sdci/codes/codes-we-enforce-(a-z)/building-code#2018seattlebuildingcode/) You are required to comply with all of the Seattle amendments.

Note: The use of a code alternate or code modification request requires an additional form unless the desired Code Alternate is published in the Seattle Building or Fire Code. The form can be found at: <http://www.seattle.gov/sdci/permits/forms>

HIGH-RISE BUILDING CODE REQUIREMENTS - * DENOTES SEATTLE AMENDMENT IN SECTION

Section 403 Highrise Buildings	
403.1.1.1* Presubmittal Conference	<i>Note: At least 60 days prior to structural application-arrange a presubmittal conference; provide documentation /appropriate analyses and schematic drawings two weeks prior to conference; approved predesign meeting minutes are required prior to permit application and shall be inserted into plans as part of the permanent permit record</i>
403.1.1.2* Smoke Control Presubmittal Conference	<i>Note: At least 60 days prior to architectural application, arrange a second presubmittal conference to review the conceptual smoke control design (see SBC 909.1.1). Provide a draft 909 Concept Report two weeks prior to the smoke control presubmittal conference.</i>
403.2.3* Structural Integrity of enclosures.	<i>Key Items: All fire service access elevators; all exit enclosures and elevator hoistway enclosures in risk category III or IV buildings; and all exit enclosures and elevator hoistways in buildings more than 420 feet in height shall comply with Sections 403.2.3.1 through 403.2.3.4.</i>
	Proposal: [Building is less than 420 Ft.]
Conference discussion & decisions:	
403.3* Automatic sprinkler system	<i>Key Items: Provide a sprinkler system in accordance with Section 903.3.1.1 and Seattle Fire Code (SFC) Section 914.3.1. (and as modified under Section 914.3.1.2 when applicable). Provide a secondary water supply where required by SFC Section 914.3.2. Describe proposed sprinkler system and secondary water supply. Describe access and protection of fire pump room. High-rise building sprinkler systems shall be combination standpipe/sprinkler systems incorporating the following features: 1. Each floor sprinkler system shall be connected between standpipe risers. 2. Shut-off valves, water-flow devices and check valves (or pressure reducing valves) shall be provided on each floor at the sprinkler system connection to each standpipe. 3. Two four-way fire department connections serving the combination system shall be provided on separate streets well separated from each other.</i>

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	<p>4. When a mid-level fire pump is required to meet pressure requirements, two pumps with the same rating shall be installed.</p> <p>5. Dry-pipe sprinkler systems serving parking garages may use a separate two-way fire department connection. The dry-pipe sprinkler system shall be supplied by the on-site water tank.</p> <p>6. The standpipe risers in each required stair shall be a minimum pipe size of 6 inches.</p> <p>7. Two 2½-inch hose connections shall be provided on every floor level landing in every required stairway. If pressure reducing valves (PRV) are required, each hose connection shall be provided with its own PRV.</p> <p>8. The system shall be designed to provide a minimum flow of 300 gpm at a minimum pressure of 150 psi [maximum 205 psi at each standpipe connection] in addition to the flow and pressure requirements contained in NFPA 14.</p> <p>See attached "Seattle Requirements for High-Rise Secondary Water Supply"</p>
	<p>Proposal:</p> <p>[General: Fire protection systems including fire sprinkler, fire alarm and elevator control will be provided in accordance with referenced standards. The design will follow nationally recognized fire protection standards and the requirements of the local building and fire codes. Means of Egress will be in accordance with NFPA. Egress systems designed per NFPA 101 are generally considered to meet or exceed the requirements of the IBC. All other Fire Protection features, such as occupancy, fire resistive construction, building size limitations, and opening protection will be provided in accordance with the IBC and comply with local Amendments.</p> <p>System: A. Fire sprinkler systems will be provided throughout the building in accordance with NFPA 13,14, 20 and insurance company requirements. The prospective insurance company should be contacted early to determine any recommended or mandatory requirements above and beyond code. A wet-pipe system will be provided with individual floor zones and distinct water flow alarms by zone. Quick response sprinklers will be utilized throughout office areas with concealed type heads. Standard response sprinklers will be utilized in parking areas with upright pendent sprinklers. All piping will be Schedule 10 with roll groove Victaulic joints for mains and Schedule 40 steel with threaded fittings for branch piping. B. Each egress stair will contain a standpipe and 2-1/2" hose valve on each floor landing. Two egress stairs will serve sprinkler valve assemblies as 6-inch combined standpipes. A 3-inch drain will be located adjacent to these risers to facilitate system testing and drainage. C. Each floors sprinkler system will be interconnected between each sprinkler valve assembly. Each zone's piping systems will be designed to NFPA standards and will be hydraulically calculated. Office and amenity spaces shall be classified as light</p>

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	<p>hazard.</p> <p>Parking, storage, mechanical, laboratory and retail spaces shall be classified as ordinary hazard.</p> <p>D. The garage will be provided with a dry pipe sprinkler system to prevent freezing. All dry piping will be filled with nitrogen for corrosion control.</p> <p>E. Suggest updating 9th & Harrison to 8th & Mercer. To be finalized with FP Contractor.F. City fire water supply: The 6" fire service connection protected by a double check detector backflow preventer shall be located in the water entry room.</p> <p>]</p>
<p>Conference discussion & decisions:</p>	
<p>403.3.2*</p> <p>Water supply to required fire pumps.</p>	<p>Key Items: <i>In Type IV-A and Type IV-B buildings that are more than 120 feet in building height, required fire pumps shall be supplied by connections to not fewer than two water mains located in different streets.</i></p> <p><i>Exception: Two connections to the same main shall be permitted provided that the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through not fewer than one of the connections.</i></p>
	<p>Proposal:</p> <p>[does not apply to this job because this building is Type IA construction]</p>
<p>Conference discussion & decisions:</p>	
<p>403.4.2</p> <p>Fire alarm systems</p>	<p>Key Items: <i>Fire alarm systems shall comply with Section 907.2.12. Describe proposed fire alarm system. Fire alarm interaction with smoke control system will be discussed at the smoke control presubmittal conference.</i></p>
	<p>Proposal:</p> <p>[An automatic fire alarm system and smoke control system, and emergency voice/alarm communication system will be provided and will meet the requirements of the Fire Marshall. The Fire Alarm and Control Panel (FACP) will be a networked and addressable type with each initiating device annunciated as an individual zone. The FACP shall provide centralized control and annunciation of fire alarm zones. Area smoke detectors will be intelligent analog type to permit monitoring and calibration of smoke detector from the FACP.</p> <p>The system is to be hard wired to dedicated owner provided radio monitoring system.</p> <p>Manual pull station at the fire alarm command center.</p> <p>It will provide connection and reporting for the fire protection system.</p> <p>Stand-alone hard-wired devices (non-system smoke detectors and combination smoke/carbon monoxide alarms) will be installed in the dwelling units to meet Code.</p> <p>Low frequency alarms shall be provided in all Sleeping Areas as required by Code and AHJ.</p> <p>System devices for detection and/or annunciation will be provided in common areas, back of house areas, office areas, and Type A and Type B dwelling units.</p>

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	<p>Stairwell doors shall tie into the Fire Alarm system. The Fire Alarm System shall unlock all stairwell doors during an Event as required by the Fire Marshall to allow firefighter access throughout the building.</p> <p>Any exposed cabling shall be installed in conduit (EMT or GRC as required by Code).</p> <p>Back-up power shall be provided by system battery packs.</p> <p>Fully coordinated, color-coded plans showing proposed installation routes are to be submitted to the Architect for review and approval prior to the finalization of the Design/Build Contractor's design and/or submission of Fire Alarm drawings to the Authority Having Jurisdiction.</p> <p>The Electrical Contractor shall engage a factory-authorized representative to train the Owner's staff on the use, testing and maintenance of the Fire Alarm System.</p>
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Conference discussion & decisions:

403.4.4 Emergency voice/alarm communication systems	<p>Key Items: <i>An emergency voice/alarm communication system shall be provided in accordance with SFC Section 907.5.2.2.</i></p>
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	<p>Proposal: [An emergency voice communication system will be provided from the fire command center to the occupants of the building per NFPA 72.</p> <p>Emergency voice/alarm communication (paging) system will be integrated with the addressable Fire Alarm System in accordance with SFC Section 907.5.2.2. The Emergency voice/alarm communication system will be provided in accordance with SBC 907.5.2.2. The system will be initiated by signal from any fire detector, sprinkler water flow, or manual pull station which will automatically sound an alert tone followed by approved voice instruction. Upon fire alarm initiation, the alarming floor plus the floor above and two floors below will be placed into alarm. Speakers throughout the building provide paging zones for elevator groups, exit stairways and at each floor]</p>
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Conference discussion & decisions:

403.4.5 Emergency responder radio coverage	<p>Key Items: <i>Emergency responder radio coverage shall be provided in accordance with SFC Section 510. For information on emergency responder radio coverage systems, see SFD Client Assistance Memo (CAM) 5123.</i></p>
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	<p>Proposal: [Emergency Responder Radio Enhancement System (DAS): 1. A Distributed Antenna System (DAS) for Emergency Responder Radio Enhancement shall be designed by contractor bidder, its construction and design invoke applicable sections of Seattle Fire Code relating to in-building first responder radio system reinforcement.</p>
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	2. The signal reinforcement system will ensure that public safety-first responder two-way radio system communications can be supported within the building, with performance meeting the requirements outlined in 2015 City of Seattle Fire Code (SFC 2015).]
Conference discussion & decisions:	
403.4.6 Fire command (Center)	<p>Key Items: <i>Dedicated fire command center – provide details on the plans submitted for the pre-submittal conference. Requirements include (but are not limited to) approved location nearby, accessible to the fire service access elevators and minimum room size per SBC 911.1.6. See SFC Section 508.</i></p>
	<p>Proposal: [Fire Command Center conditioning: Packaged heat pump, split system heat pump, or other independent system per Code</p> <p>As the building is a high-rise, a fire command center/room is provided on the main level. The room is to be provided with emergency power and lighting..</p> <p>The Fire Command Center will include the following:</p> <ul style="list-style-type: none"> Emergency voice/alarm communication system control unit. Fire department communication system. Fire detection and alarm system annunciator panels. Annunciator unit visually indicating the location of the elevators and whether they are operational. Status indicators and controls for air distribution system. Fire fighter's control panel required per Section 909.16 for smoke control installed in the building. Controls for unlocking stairways doors simultaneously. Sprinkler valve and water flow detector display. Emergency and stand-by power status indicator. Telephone for fire department use with controlled access to the public telephone system. Fire pump status indicators. <p>]</p>
Conference discussion & decisions	
403.4.8 Emergency power systems	<p>Key Items: <i>Provide an emergency power system complying with Chapter 27 and Section 403.4.8. Include size, location and type of generator, fuel tank fill location, and vent terminations. See Director's Rule 8-2005 on protected above ground fuel tanks. System supervision with manual start and stop features shall be provided at the fire command Center. Provide a 2 hr. separation unless meeting the requirements for the exception for rooms within sprinklered parking garages per Section 909.11. Also see attached "Seattle Requirements for Generator Fuel</i></p>

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	<i>Tanks” Provide location on the plans submitted for the pre-submittal conference.</i>
	<p>Proposal:</p> <ol style="list-style-type: none"> 1. A single diesel generator with integral fuel tank is to supply emergency power to the building. 2. The generator shall be a 1250kW at 0.8 PF (1563kVA), 480Y/277V, 3-phase, located on P1 level. 3. The generator is to be provided with sub-base fuel tank, capable of min. 8-hours of run time at full load, a load bank for routine testing, separate distribution switchboard and automatic transfer switches. 4. Emergency loads: An automatic transfer switch shall serve emergency loads such as: <ol style="list-style-type: none"> a. Emergency egress lighting and exit signs, Add Fire Service Access Elevator hoistway light b. Fire alarm system and Emergency responder radio coverage systems c. Emergency voice/alarm communication systems, d. Elevator machine room mechanical equipment e. All elevators when operating on generator power the elevator controls shall only allow one (1) elevator in each elevator bank to operate at a time, while fire service access elevators shall continue operate. Elevator sump pumps. f. Fire pump: transfer switch/controller will be located adjacent to the fire pump and will be served by dual concrete encased services, one from a SCL vault, another from the emergency switchboard. g. Devices and equipment in Fire Command Center (FCC) 5. Emergency loads (smoke control): An automatic transfer switch shall serve smoke control equipment, a dedicated smoke control ATS and panels to be provided for all smoke control devices and equipment in a dedicated smoke control room with 2-hour fire rated enclosure. <ol style="list-style-type: none"> a. Stairwell and elevator shaft pressurization equipment b. Smoke control systems wiring shall be fire protected for min. 2 hours
Conference discussion & decisions:	
403.4.8.4* Emergency power loads	<p>Key Items: <i>Provide emergency power to exit signs & means of egress illumination; elevator car lighting; emergency voice/alarm communication; fire alarm and detection systems; emergency responder radio coverage system, power and lighting for mechanical equipment rooms and fire command center; lighting for elevator cars, machine rooms, machine spaces and control rooms; Ventilation and cooling equipment for elevator machine rooms, machine spaces and control rooms; fire pumps; smoke control system; all fire service access and occupant evacuation elevators and one elevator per group per Section 3016.9. All elevators shall be transferable to an emergency power system.</i></p>
	<p>Proposal:</p> <p>[Emergency power from the generator will support the loads identified in SBC 403.4.9.1 including;</p> <ol style="list-style-type: none"> 1. A single diesel generator with integral fuel tank is to supply emergency power to the building. 2. The generator shall be a 1250kW at 0.8 PF (1250kVA), 480Y/277V, 3-phase, located on P1 level. 3. The generator is to be provided with sub-base fuel tank, capable of min. 8-hours of run time at full load, a load bank for routine testing, separate distribution

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	<p>switchboard and automatic transfer switches.</p> <p>4. Emergency loads: An automatic transfer switch shall serve emergency loads such as:</p> <ul style="list-style-type: none"> a. Emergency egress lighting and exit signs b. Fire alarm system and Emergency responder radio coverage systems c. Emergency voice/alarm communication systems, d. Elevator machine room mechanical equipment e. All elevators when operating on generator power the elevator controls shall only allow one (1) elevator in each elevator bank to operate at a time, while fire service access elevators shall continue operate. Elevator sump pumps. f. Fire pump: transfer switch/controller will be located adjacent to the fire pump and will be served by dual concrete encased services, one from a SCL vault, another from the emergency switchboard. g. Devices and equipment in Fire Command Center (FCC) <p>5. Emergency loads (smoke control): An automatic transfer switch shall serve smoke control equipment, a dedicated smoke control ATS and panels to be provided for all smoke control devices and equipment in a dedicated smoke control room with 2-hour fire rated enclosure.</p> <ul style="list-style-type: none"> a. Stairwell and elevator shaft pressurization equipment b. Smoke control systems wiring shall be fire protected for min. 2 hours.
Conference discussion & decisions:	
403.5.1* Remoteness of interior exit stairways	<p>Key Item: <i>Exit stairways shall be separated by not less than 30 feet or one-fourth the diagonal dimension whichever is less measured as straight line between nearest points of the outer faces of the walls of the exit enclosures. Pressurization shafts are considered to be part of the stair enclosure and are subject to the separation requirements. Primarily R occupancy buildings are allowed 15 feet.</i></p>
	<p>Proposal: [TBD]</p>
Conference discussion & decisions:	
403.5.2 Additional exit stairway	<p>Key Items: <i>For buildings other than Group R-2 that are more than 420 feet(128 m) in building height, one additional exit stairway meeting the requirements of Sections 1011 and 1023 shall be provided in addition to the minimum number of exits required by Section 1006.3. Amenity assembly spaces above 420 ft associated with, and ancillary to the Group R-2 occupancy do not require an additional stair. An occupant evacuation elevator per Section 403.6.2 may be provided in lieu of a required additional exit stairway per 403.5.2.</i></p>
	<p>Proposal: [Building is less than 420 ft]</p>
Conference discussion & decisions:	
403.5.3* Stairway door operation	<p>Key Items: <i>Stairway doors must be capable of unlocking upon signal from fire command center and must unlock upon activation of fire alarm anywhere in building. Where stairway doors are not locked from the stairway side, wiring and/or conduit shall be installed to facilitate potential future installation of locking hardware.</i></p>

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	Proposal: [Disconnects: Shall be fused type, heavy duty, single throw, lockable type, having door interlock (to prevent opening when energized), enclosure to suit environment. Fuses shall be Bussman low peak dual element type, to suit application, or approved equal. Provide spare set of fuses for each disconnect. Coordinate all fuse sizing with equipment supplier to insure proper sizing.]
Conference discussion & decisions:	
403.5.3.1* Stairway communications system	Key Items: <i>In required stairways a telephone or other two-way communication system connected to an approved constantly attended station shall be provided at not less than every fifth floor in each exit stairway.</i>
	Proposal: [Low voltage consultant to provide requirements. A two-way communication system will be required to meet the requirements of IBC 1007.8, consisting of a call station at the elevator landing on each accessible floor that is one of more stories above or below the story of exit discharge. Communication from each elevator landing call station will connect to a central control point approved by the fire department. It is anticipated that this control point will be located at the fire alarm annunciator near the main entrance to the building.]
Conference discussion & decisions:	
403.5.4* Smoke control in exit stairways	Key Items: <i>Provide a smoke control system complying with Section 403.5.4. Every required exit stairway serving floors more than 75 feet above the lowest level of fire department vehicle access shall comply with Sections 909.20.5 and 1023.11. Smoke control system concepts to be further described and discussed in the smoke control presubmittal conference.</i> <i>For high-rise buildings that have a simple shaft configuration and utilize shaft pressurization for smoke control (i.e., no building-wide smoke control system), shaft pressurization fan status and controls using switches in accordance with Section 909.16.2 (or equivalent) may be installed on the main fire alarm control panel (FACP) in lieu of installing a dedicated fire-fighter's smoke control panel. The building graphics normally provided on the smoke control panel shall be laminated and mounted in the vicinity of the FACP for quick reference by emergency responders. See SDCI Director's Rule: Testing of Stairway and Hoistway Pressurization Systems in High Rise Buildings</i>
	Proposal: [Stair Pressurization 1. Provide a pressurization fan for each stair supplying air within the rating of the stair enclosure and injecting air at least every three floors. 2. Provide relief louver and motorized relief dampers as required. 3. Provide Emergency power per City of Seattle requirement. needs primary and alternate recall floors identified (e.g. Level 1, Level 2)]
Conference discussion & decisions:	

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713.14* Smoke control in elevator hoistways	Key items: Provide hoistway opening protection with one of the following: enclosed elevator lobbies complying with Section 713.14.3; additional doors at each hoistway door opening per 713.14.3 item 3 or elevator hoistway pressurization complying with Section 909.21. Describe which option is being proposed. Pressurization concepts to be further described and discussed in the smoke control presubmittal conference.
	Proposal: [Elevator Pressurization 1. Provide a pressurization fan for each elevator hoistway. 2. Provide pressurization relief louvers and motorized relief dampers at each floor level. 3. Provide Emergency power per City of Seattle requirement.]
Conference discussion & decisions:	
403.5.5 Luminous egress path markings	Key Items: Luminous egress path markings shall be provided in accordance with Section 1025.
	Proposal: [Emergency egress lighting and exit signs]
Conference discussion & decisions:	
403.5.8* Stairway termination	Key Items: All required interior exit stairways shall terminate at a roof in a penthouse with a door complying with Sections 1010.1.1 and 1010.1.2. The building official is permitted to approve an alternate design at the pre-design conference. The intent is for all required stairways to have at least one door or approved penthouse alternate roof hatch that opens directly to the exterior on a roof level, and that all other roof levels may be accessed via stairs, ships ladders or alternating tread devices. See attached "Seattle High-rise Requirements for a Roof Hatch When Approved as a Penthouse Alternate"
	Proposal: [TBD]
Conference discussion & decisions:	
403.6* Elevators	Key Items: Elevator installation and operation in high rise buildings shall comply with Chapter 30 and Section 403.6. Describe proposed primary and alternate recall floors.
	Proposal: [Phase 3.3 will be provided with 4 passenger-style machine room-less (MRL) elevators of 3,500 lb. capacity (Including 1 service elevator) and 1 shaft for future elevator.]
Conference discussion & decisions:	
403.6.1*	Key Items: In buildings with occupied floor more than 120 ft. above the lowest level

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Fire service access elevator	<i>of fire department vehicle access, a minimum of two fire service access elevators shall be provided in accordance with Section 403.6.1. Each fire service access elevator shall be served by a different machine or control room. Indicate location of fire service access elevators, and how the water prevention requirements of Section 403.6.1.2 will be complied with. Sump capacity shall be 3000 gph per state code requirements. Note: Separate shafts and pressurizations systems are not required for the two fire service access elevators.</i>
	Proposal: [Three of the passenger elevators will serve the East Core building levels and will have traveling speeds of 500 feet per minute (fpm). The other two passenger elevators will serve the garage levels and Level 1 and will have traveling speeds of 200 fpm. The West Core will feature one service-style elevator of 4,500 lb. capacity and traveling speed of 350 fpm. The service-style elevator will also be used in the carrying of passengers.]
Conference discussion & decisions:	
403.8* Emergency operational plan	Key Items: <i>In accordance with SFC Section 404, the building is required to have a Fire Safety and Emergency Plan. SFC Section 9309 requires that a Fire Safety Director appointed by the building owner is responsible to oversee the preparedness and initial response of a building's fire and life safety systems and building occupants to a fire alarm, in addition to conducting annual emergency evacuation drills. For more information, see SFD CAMs 5963 and 5982.</i>
	Proposal: [TBD]
Conference discussion & decisions:	
Chapter 7	
712* Vertical openings	Key Items: <i>The code limits the number of stories that can be in common atmosphere with one another without the required fire barrier separation between them. The plans submitted for the predesign meeting should show all architectural floor openings including those relating to escalators. If architectural floor openings reach the threshold meeting the definition of an atrium, the atrium code requirements shall be addressed. Note any garage elevators or duct system using the provisions of Section 712. Fire alarm and smoke control systems will need to be designed to take unenclosed vertical openings into account.</i>
	Proposal: [TBD]
Conference discussion & decisions:	
CHAPTER 10, MEANS OF EGRESS	
Chapter 10* General	Key Items: <i>Provide an exiting plan and describe any issues requiring interpretation or a code alternate or code modification. Indicate occupancy loads and load factors for all assembly type spaces. Clearly note all locations where exit access stairways are being proposed.</i>
Code Alternate/ Modification <input type="checkbox"/> (form attached)	Proposal: []]
Conference discussion & decisions:	
CHAPTER 30, ELEVATORS	

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<p>3016.9* Elevator operation on emergency power - recall</p>	<p><i>Key Items: Elevators shall comply with Sections 3016 through 3019 for hoistway smoke control (lobbies, extra doors or pressurization), elevator operation on emergency power, general emergency operation requirements, and phase I and phase II recall requirements.</i></p>
	<p>Proposal: [Elevators will comply with SBC Section 3016 for construction standard requirements, SBC Section 3017 for emergency operation requirements and SBC Sections 3018 & 3019 for Phase I & II recall requirements. All elevator hoist ways will be pressurized to address smoke control with emergency of legally required standby power.</p> <p>Only Fire Service elevators get automatic recall from fire alarm activation. Per SBC 3018 Phase I emergency recall operation shall be provided for all elevators with fully automatic open and close power operated doors.</p> <p>Elevator Pressurization</p> <ol style="list-style-type: none"> 1. Provide a pressurization fan for each elevator hoistway. 2. Provide pressurization relief louvers and motorized relief dampers at each floor level. 3. Provide Emergency power per City of Seattle requirement. <p style="text-align: center;">]</p>
<p>Conference discussion & decisions:</p>	

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3020.1* & 3020.4* Construction of Hoistways, and machine and control rooms	Key Items: <i>Construction of hoistways and hoistway enclosures shall comply with ASME A17.1 Section 2.1 as amended.</i>
	Proposal: [All elevator hoist ways will be enclosed and will be protected by 2-hour fire resistive construction per SBC 713.4. Emergency loads (smoke control): An automatic transfer switch shall serve smoke control equipment, a dedicated smoke control ATS and panels to be provided for all smoke control devices and equipment in a dedicated smoke control room with 2-hour fire rated enclosure. a. Stairwell and elevator shaft pressurization equipment b. Smoke control systems wiring shall be fire protected for min. 2 hours.]
Conference discussion & decisions:	
OTHER	
Other	<i>Describe any significant interpretation requests or special conditions you wish to address including any issues requiring a code alternate or code modification.</i>
Code Alternate/ Modification <input type="checkbox"/> (form attached)	Proposal: [] [] []
Conference discussion & decisions:	

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Seattle Requirements for High-Rise Secondary Water Supply

Water Tank: An automatic secondary on-site water supply storage tank shall be provided for high-rise buildings in accordance with SFC Sec. 904.3.2, and meet the requirements of NFPA 22 and the following:

OPTION 1 Single Fire Pump with Storage Tank Having Automatic Refill Features**Tank Refill Lines:**

Dual automatic refill lines, each capable of refilling the tank at a minimum rate of 110 percent of the fire pump(s) capacity, shall be installed. Ref: SFD Administrative Rule 9.03.20 or its successors

A manual tank fill bypass designed for and capable of refilling the tank at a minimum rate of 110 percent of the fire pump(s) capacity shall be provided. Ref: SFD Administrative Rule 9.03.20 or its successors

Tank Fill Valves and Control Systems: The two automatic refill lines shall have separate automatic tank fill valves that are listed for fire service and arranged for automatic operation. Each automatic tank fill valve shall be provided with a separate approved means of actuation such as float assemblies, pressure sensors, etc. that are supervised by the fire alarm system. The status of the valves (i.e., 'open', 'closed') shall be indicated at the valves and in the Fire Command Center (FCC).

The tank shall be kept filled, and the water level shall never be more than 4 inches below the designated fire service level. Ref: NFPA 22 - 14.4.3

Tank Level Indicators: Two tank level indicators are required, one located in the FCC and another in the immediate vicinity of the tank fill valves. The tank level indicator monitoring shall be provided through the fire alarm system in accordance with NFPA 72.

Two separate and distinct signals shall be initiated: one indicating that the required water level has been lowered or raised (off-normal), and the other indicating restoration. Ref: NFPA 72 - 17.16.3.1

The off-normal signal shall be initiated when the water level falls three inches or rises three inches. Ref: NFPA 72 - 17.16.3.2.1

Tank Low Level Alarm: Separate and distinct tank low level audible and visible alarms shall be provided in the FCC and in the vicinity of the tank fill valves, and activate when the tank water level drops below 50% capacity. The tank low level monitoring shall be provided

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through the fire alarm system in accordance with NFPA 72. The signaling devices shall be clearly labeled "Water Tank Low Level Alarm" or equivalent. An independent silence switch shall be provided for the tank low level alarms in the immediate vicinity of the alarm devices.

Tank Overflow Protection: An approved means to prevent the tank from overflowing into the building shall be provided. Where an automatic shutoff valve is provided, it shall be listed for fire service and have dual (redundant) means of actuation such as two float assemblies, pressure sensors, etc. that are supervised by the fire alarm system. The valve shall be supervised by the fire alarm system and status (i.e., 'open', 'closed') indicated at the valve and in the FCC.

Pump By-pass: A full size by-pass shall be installed around the storage tank and the fire pump in accordance with NFPA 20. The by-pass shall be installed on the supply side of the tank fill valves and connected to the system on the downstream side of the fire pump and any sprinkler system pressure regulating valves installed on feed mains.

OPTION 2: Two Fire Pumps and Storage Tank Without Automatic Refill Features

The primary fire pump shall be supplied by a dedicated fire service main and the secondary fire pump supplied from the storage tank. The pumps shall operate at the same rated flow capacity and at similar discharge pressures. When using Option 2, automatic refill of the tank is not required.

The means to fill the tank shall be sized to fill the tank in a maximum time of 8 hours. Ref: NFPA 22 – 14.4.2

The tank shall be kept filled, and the water level shall never be more than 4 inches below the designated fire service level. Ref: NFPA 22 - 14.4.3

Tank Level Indicator: A tank level indicator is required in the immediate vicinity of the tank fill valve.

Pump By-pass: A full size by-pass shall be installed around the primary fire pump in accordance with NFPA 20. The by-pass shall be connected to the system on the downstream side of any sprinkler system pressure regulating valves installed on feed mains.

* Seattle amendment to IBC

Seattle Requirements for High-Rise Generator Fuel Tanks

Ensure that the as a minimum the following information is provided on the on the architectural plan submittals:

1. Provide detail on plans indicating type of tank (i.e., UL-142, UL-2085, or other type of tank), type of fuel, and how much will be stored on-site.
2. Provide detail on plan (plan and elevation views) showing the location of the diesel fill connection, located on the exterior of the building, at least 5 feet from building openings and property lines in accordance with SFC Section 5704.2.7.5.2.
3. Provide details on plans indicating location (plan and elevation views) and routing of normal vent for diesel tank (manifolding of normal vents is not allowed) in accordance with SFC Section 5704.2.7.3.3.
4. Provide details on plans indicating location and routing of emergency vents diesel tanks (manifolding of emergency vents is not allowed) in accordance with SFC Section 5704.2.7.4.

Seattle Requirements for Protection of Wiring Required by Section 909.11

1. Power and control wiring that serves the pressurization and other smoke control equipment, regardless of voltage, shall have fire-resistance-rated protection (rated cable, installation in shafts, embedment, etc.) of at least two hours. **Exception:** Fire-resistance rating is not required for wiring serving a generator in an unprotected area in a garage that is separated from the rest of the building by 2 hour-rated construction.
2. Where wiring protection is provided by installing in a rated shaft, protection of wiring is required between the fire command center and the shaft.
3. Protection of wiring is not required for rooftop or penthouse wiring where installed outside the building envelope or in a penthouse that is not required to be protected.
4. Protection is not required for HVAC fans used to exhaust intermittent floors.
5. Protection is not required for the dampers on the HVAC equipment unless dedicated for shaft pressurization.
6. Wiring required to have 2-hour protection can be in a shaft with other wiring. The "independent route" requirement in Section 909.11 means separate raceway from normal power.

Seattle High-Rise Requirements for a Roof Hatch When Approved as a Penthouse Alternate

* Seattle amendment to IBC

Project Name: []
Permit number: []

1. Roof hatch dimensions shall be a minimum of 3'-0" wide x 12'-0" long.
2. Roof hatch shall be installed with a snow sensors/heating cables system.
3. Roof hatch shall be motorized with a remote pushbutton station located at the base of the top stair landing leading to the hatch.
4. Roof hatch electrical system shall be on building emergency power.
5. Provide switch in the Fire Command Center that unlocks the electro-magnetic locks on the hatch doors.
6. Interlock electromagnetic locks on hatch doors with fire alarm system to unlock automatically on any fire alarm signal.
7. Ensure code compliant stairs and height for stairs is met where the stair leads to the hatch.
8. Roof hatch shall be operable from the roof.