INTRODUCTION

This document is an updated Fire Protection Report for the Unitus Plaza Building in Portland Oregon. This report summarizes the applicable fire/life safety related requirements associated with the existing building, based on current building and fire codes. This report describes the applicable requirements, and the existing system within the building. This is intended to serve as a reference document for future work at the building. This is based on the current Oregon Structural Specialty Code (OSSC) and the Uniform Building Code which were in effect at the time of original construction.

The latter sections of this report describe the various appeals accepted by the City for the Unitus Plaza, and describe the current Oregon Structural Specialty Codes provisions relating to these appeal items. Many of the requirements addressed in the appeals are no longer included within the applicable codes, or are now specifically permitted, such that similar appeals are no longer necessary.

BUILDING DESCRIPTION

The Unitus Plaza building at 1300 SW 6th Avenue is a five store building with two levels of under ground structured parking (S-2 per current OSSC). It was designed and built in 1963-64 under the old UBC codes. The primary occupancy classifications are office, B occupancy and a small Deli on the first floor, A-2 occupancy per current OSSC. Listed below is a break down by floor of total gross square footage and by occupancy type with useable square footages.

PARKING LEVEL 1 (P-1)
37,024 S.F. GROSS

PARKING LEVEL 2 (P-2)
37,O24 S.F. GROSS

1ST FLOOR
B OCCUPANCY: 18,157 S.F.
A-2 OCCUPANCY: 1,485 S.F.
COMMON AREA: 17,382 S.F.
TOTAL GROSS: 37,024 S.F.

2ND FLOOR
B OCCUPANCY: 5,396 S.F.
COMMON AREA: 2,005 S.F.
TOTAL GROSS: 7,401 S.F.

3RD FLOOR
B OCCUPANCY: 13,477 S.F.
COMMON AREA: 2,537 S.F.
TOTAL GROSS: 16,014 S.F.

4TH FLOOR
B OCCUPANCY: 13,450 S.F.
COMMON AREA: 2,564 S.F.
TOTAL GROSS: 16,014 S.F.

5TH FLOOR
B OCCUPANCY: 13,477 S.F.
COMMON AREA: 2,537 S.F.
TOTAL GROSS: 16,014 S.F.

The buildings original classification under the old UBC code is listed as a Type I-FR (fire rated) with automatic fire sprinklers throughout. The current code classification lists the building as a Type I-A fully sprinklered. Per OSSC Table 508.4 Individual hazardous areas will need to be separated. This will require that the parking garage areas be separated from the adjacent building areas by not less than 1-hour fire barriers. It is our belief after review of the original construction documents that the parking garage is separated from the adjacent areas by a least 1-hour rated concrete walls vertically and a 2 hour rated slab horizontally.

Existing Egress Configuration – The building includes two basement levels. These levels are provided with direct access to two enclosed stairs that provide direct access to the exterior at the ground floor level. The ground floor level includes multiple tenant areas. These tenant areas include a combination of access to doors discharging to the exterior on the North & South of the building and some tenant have direct access to the exterior from there individual spaces. The North exit is the ADA accessible route. The second level consists of one tenant with access to exit doors on the West & East side of the building with discharging to the exterior. The upper floors (3rd, 4th, & 5th) have a combination of multiple & single tenants with access to two central stairs in the core of the building with direct access egress corridors to the exterior on both the second level and ground level. Also on the upper floors there are some existing tenants with exit access common path of travel distances of greater than 100 ft. by 15 ft. (115 ft total) Since the exit stairs are part of the concrete walled core and are located at the ends of the core. Previous approved life-safety system upgrades have been provided, pressurized stair & elevator shafts, smoke detectors at 1 per 900 s.f. throughout the building.

Corridors – Previous editions of the UBC based building codes included requirements for fire-rated corridors. The current OSSC with permit corridors within this building to be non-rated, with doors, based on current uses and the sprinkler protection within the building. This will permit glazed doors and openings in these exit paths with no requirements for smoke gaskets.

Previous editions of the UBC building codes also included restriction on the dead-end distances within corridors which limited this distance to a maximum of 20 ft. The current OSSC permits dead-end corridors up to 50 ft. in length in B occupancy spaces. This will allow more flexibility regarding the egress configuration.

PER TABLE 1018.1 (CORRIDOR FIRE RESISTANCE RATING)
B OCCUPANCY – GREATER THAN 30 OCCUPANTS, CORRIDORS ARE NOT REQUIRED TO BE RATED IF SPRINKLER SYSTEM IS INSTALLED.
THE EXISTING BUILDING IS FULLY SPRINKERED THEREFORE CORRIDORS CAN BE NON-RATED. DOORS IN CORRIDORS ARE PERMITED TO BE NON-RATED AND SMOKE-GASKETS ARE NOT REQUIRED.

THE CURRENT STAIRS AND ELEVATOR SHAFTS ARE PRESURIZED AND SMOKE DETECTORS ARE AT 1 PER 900 SQ. FT. THROUGHOUT THE BUILDING.

CURRENTLY THE FIRE SPRINKLER HEADS ARE IN THE PROCESS OF BEING UP-GRADED TO QUICK RELEASE SPRINKLER HEADS AND WILL CONTINUE TO BE UP-GRADED AS PART OF NEW TENENT IMPROVEMENTS.

See attached Code Comparison Matrix for additional past & current code information.

Below is a historic listing of past granted code appeals:

City Appeal #	Date	Description of Condition	Appeal Request
	6-19-64	Replace copper pipe with welded fittings in place of cast iron as required by Plumbing Code.	Due to the unique problem involved with limited space & accessibility connected with providing drainage for interior cavity area at the precast exterior walls the replacement was requested.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4a).**	
	11-12-70	1. In office building, no corridor shall have any dead end extending more than 35 ft. Proposed dead end corridor extends more than 35 ft. from computer area that is operated 24 hours per day.	Corridor is not used by others than employees in computer area. Dead end corridor opens into office space with clear traffic path to exit. For security reasons, visitors should have no way to enter Into corridor. This floor is fully sprinklered.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
		2. Top risers at stair risers at Columbia Street, risers at 5th Avenue & bottom riser at Jefferson Street very greater than 3/16" as required by Code.	Building entrances are level. Existing sidewalks are sloping. Variation of risers required to provide transition.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4b).**	
		3. Code requires that stairs more than 88" wide shall have intermediate hand-rails dividing the stairway into portions more than 66". East portion of Columbia St. stair railing Distance is 120" on top And 84" at bottom of Flight	East portion of stair is not in direct direction of travel from door. Distance at bottom of flight between rails would be 42" which is too narrow for two people passing comfortably.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
2	2-25-71	The Code requires where corridor walls are required to be 1-hour fire resistive, doors shall be & other interior openings shall be ¼" wire glass set in steel frames. Openings other than doors shall not exceed 25% of the area of the room wall adjacent to the corridor.	¼" clear polished plate relites in steel frames at 3 locations in the corridor, all adjacent interior doors. Glass sizeat 2 of these openings (to general office space) is 1'-6" wide x 4'-0" high. The 3rd opening (to a telephone exchange room) is 4'-6" wide x 4'-0" High (which is less than 25% of the area of the room wall adjacent to the corridor. The entire floor is sprinklered. Sprinkler systems are not required for office areas.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
5	10-27-77	Existing toilet facilities on the 2nd, 3rd, & 4th floors with proposed interior handi-capped improvements as approved by the City. Existing doors to toilet Rooms provide only 27" Of clear unobstructed access, not the required 32 inches.	Since subject toilet facilities are existing and to be main-tained, they cannot meet the requirement unless the door & frame are replaced in addition to the proposed interior changes. As the building is only ten years old & serviced by three elevators, we propose to make the handicapped improvements on every other floor (2 & 4) only.
APPEAL STATUS:		**This appeal is no longer necessary due to fact that new remodeled toilet facilities have been submitted for permit.**	

City Appeal #	Date	Description of Condition	Appeal Request
1	10-27-82	1. Entrances to stairs serving typical upper floor are 78 ft. apart, compared to ½ diagonal measurement of 82 ft. (east half of floor).	The stairs are existing & part of a concrete walled core & are located at the ends of the core. An upgrade life-safety system is provided including Pressurized stairs & elevator shafts. And automatic sprinkler system (throughout building).
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
		2. Exit (corridors) is cont-inuous means of egress to a public way… Exit routs which pass Through open plan areas of Varying width. "Discon-tinuous corridors" as shown are interrupted by doors, many of them locked for security.	Combination of open plan & private offices requires development of "dis-continuous corridors" to meet tenant's space needs & utilize available space efficiently. The building will be provided with automatic sprinkler system. Complete life-safety System is described Item #1.
APPEAL STATUS:		**This appeal was amended, see the next appeal dated 10-27-82.**	
		3.Corridors are required to to be1-hour construction. Non-combustible construc-tion for all 'corridors on tenant floors with unlimited glass area. Corridors forming exit routs will be developed to beet smoke transfer requirements of Fire Marshal.	Flexible tenant spaces & large interior glass partitions are needed to respond to tenant's requirements Building will be fully sprinklered & have a up-graded life-safety system described in Item #1
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
Continued #1		4. Removal of open fire-man's ladder & upgrading stairs to meet intent of current code. Stairs & elevator shafts will be pressurized.	Improved fire safety system & increased usability of typ. floors. Complete life-safety system is described in Item #1. Fire Marshal's Office has Indicated a preference for this change, since an open ladder is a hazardous means to access upper floors.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
		5. Development of new Accessible entrance on North side of Level 1 & Accessible toilet rooms; However, due to dimensional Constraints of existing Structure, width of access Corridor to handicapped Toilet stalls is 40" vs. 44"	Main entrance to building is not being modified for handi-capped access due to tenant development of this space which will return main level to a single space (a bank); therefore, limiting access to elevators when bank is closed. The following item required by Code. will be corrected to meet Code: a) providing ramps for internal level changes; b) revision to elevator controls and signage; c) signage to identify new handicapped building entry; d) handicapped toilet on each level.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
1 (Rehearing of appeal originally heard 10-27-82	12-1-82	1. Entrances to stairs serving typical upper floor are 78 ft. apart, compared to ½ diagonal measurement of 82 ft. (east half of floor).	The stairs are existing & part of a concrete walled core & are located at the ends of the core. An upgrade life-safety system is provided including a) Pressurized stairs & elevator shafts; b)Smoke detectors at 1 per 900 sf throughout building.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
		2. Exit (corridors) is cont-inuous means of egress to a public way… Exit routs which pass Through open plan areas of Varying width. "Discon-tinuous corridors" as shown are interrupted by doors, many of them locked for security.	Combination of open plan & private offices requires development of "dis-continuous corridors" to meet tenant's space needs & utilize available space efficiently. The building will be provided with smoke detectors at 1 per 900 sf. Complete life-safety system is described in Item #1.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4c).**	
		3.Corridors are required to to be1-hour construction. Non-combustible construc-tion for all 'corridors on tenant floors with unlimited glass area. Corridors forming exit routs will be developed to beet smoke transfer requirements of Fire Marshal.	Flexible tenant spaces & large interior glass partitions are needed to respond to tenant's requirements Building will have an upgraded life-safety system described in Item #1
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
7	1-6-83	…exit doors shall be operated from the inside without use of a key or any special knowledge or effort the second required exit from the cafeteria is through an adjacent conference room. This second exit from the cafeteria utilizes a "break glass device to control accidental disruption of conferences an to increase security of reception area furnishings.	Existing cafeteria has only one exit; in developing a new second exit we are exiting through an accessory space which functions as a conference-dining area. The "break-glass" is needed to assure security except in a fire emergency. An electric latch will be interconnected with the ionization system & a pull station adjacent to the door signed in accordance with the Fire Marshal.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4d).**	
5	9-14-88	1. Corridors serving an occupant load greater than ten shall not be interrupted by intervening rooms. Those serving more than 30 to have walls and ceilings of one-hour construction, with rated openings.	Full & partial floor tenant spaces (up to 16,000 sf) may be designed as open-plan areas with unrated internal corridors interrupted by intervening spaces. Building will be sprinklered on a floor by floor basis as tenant improvements occurs, & floors will be fully protected by smoke detectors mounted in the return air plenum (and on the underside of the public corridor). Activation of detectors (as will as sprinkler flow) will sound alarm & shut down HVAC distribution system.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
Continued #5		2. Corridors serving an occupant load of 30 or more shall have walls & ceilings of one-hour construction and protected openings.	Public corridors (connecting the exit stairs, and passing in front of the elevator) will be of unrated but smoke-tight construction, with smoke-tightness of the corridor ceiling provided by a layer of "Thermofibre" safing in-sulation laid over the corridor ceiling tiles & extending two feet beyond the corridor walls. (Ceiling light fixtures will be surface mounted and/or sealed.(Uhrated glass relites & doors will be protected by additional sprinkler protection to the satisfaction of the Fire Marshal (see Item I for description of sprinkler & smoke detector coverage).
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
9	4-26-89	Corridors with dead ends are permitted when the dead end does not exceed 20 ft. in length. Excepting Group B Division 2, office occupancies may have 30ft. dead end corridors in tenant spaces. The corridor needs to be created to provide exiting for an existing tenant & new cafeteria space within the context of other tenant loca-tions & exiting system. To accomplish this however, a corridor is created that exceeds 20 ft. in length allowed for dead end corridors.	To mitigate the situation, the building owner proposes a smoke detection system. We believe that approval of this appeal will be consistent with appeals approved for neigh-boring properties. The smoke detection devices to be installed will be connected to the building's fire protection system. Also. additional sprinklers will be installed in the corridor.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
1	5-11-94	1. Existing Code permits corridor dead ends of 30 ft.; unrated corridor construction if occupant load is 100 or less; foyers, lobbies, etc., as part of corridor. Proposal is for a 50 ft. dead end corridor with a full floor tenant of 13,000 sf with 60 work-stations. Area could be interpreted as corridor rather than lobby or foyer. Door at dead end condition is un-locked during business hours. Stairs can be access from Open office area without Accessing elevator lobby.	Provisions for mitigation: a) Floor is fire spriklered, along with floors 1 & 32. b) Floors 2 & 4 will be fire sprinklered when renovated. c) Smoke detectors provided a one per 900 sf on ceiling d) Mechanical system is up-graded with smoke detection. Individual supply or return fans shut off on detection. e) Fire alarm system is addressable type. f) Stairs & elevator shafts are mechanically pressurized if smoke is sensed. g) All wood paneling & fabric is fire treated.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
		2.Code permits foyers, lobbies of reception rooms as part of corridors. Proposal is to have a coat alcove open to corridor.	Provisions for mitigation: Provide additional fire sprinkler & smoke detector in coat alcove. Improve coat closet accessibility & prevent door from being blocked open.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	

City Appeal #	Date	Description of Condition	Appeal Request
B-6	5-5-99	1. Code requires rooms in Class I, Class II, & Class IIA flammable of combustible liquids are stored in closed containers shall be constructed in accordance with the requirements for a Group H, Division 3 occupancy. Proposal is to install a 2000-gallon, UL 142 approved tank in a 3-hour enclosure on the P-2 level of the building. Installation to comply with NFPA 37, Sections 6-3.5.1 through 6-3.5.3.	Design meets NFPA standards & allows for an adequate supply of fuel to be stored on site. A separate Fire Marshal's permit will be taken out for the tank & pipping.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4e-1).**	
		2. Emergency generators used to supply power to the building emergency equipment shall be separated from the rest of the building by two-hour fire-resistive construction. Proposal is to install 1000kw generator as backup to building main power supply. Existing building life safety systems (battery backed egress lighting) will be maintained as they currently exist. Generator to sit on concrete pad on grad located on the ramp between P1 & P2. Generator to be enclosed in a chain link fence.	Generator is being installed as a SEC required backup power for Columbia Financial Data Center. As a side benefit, it will serve as a backup for the entire building's electrical system. The generator is also part of Columbia Financial's Y2K compliance plan.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4e-2).**	

City Appeal #	Date	Description of Condition	Appeal Request
Continued B-6		3. Code requires emergency generators & the automatic switching equipment shall be separated from the rest of the building by two-hour fire-resistive construction. Proposed design: the Switching equipment is in a Remote location from the generator. The electric conductors are enclosed in a 4" metal conduit, which is not protected from the parking garage.	The reason for the alternate is the generator is not required emergency power source. As such, it does not require a 2-hour separation. Hence, the conduit connecting it to the building main power feeder should not require a 2-hour enclosure.
APPEAL STATUS:		**This appeal should be continued as part of current appeal (4e-3).**	

City Appeal #	Date	Description of Condition	Appeal Request
B-8	7-26-00	Code requires that exit doors shall be openable from the inside with out the use of a key or any special knowledge or effort. For security reasons all tenant floors of the Hoffman Columbia Plaza Occupied by Columbia Management Company require access via an electronic card reader system. Proposed design would have Locked elevator lobby doors With electronic strikes tied to the building's fire & life safety system.	The tenant, Columbia Management Company, requires a high level of security & access control at all levels of their operation. Therefore it is extremely important to have some access control between public elevator lobbies & company operations. Keypad Access would meet these requirements efficiently. The followings shall be made: 1) A sensor shall be provided on the egress side arranged to Detect an occupant approaching the doors & the doors shall unlock upon detection of approaching occupant. 2) The mechanism responsible for door lock control shall automatically release door locks upon los of all power. 3) The doors shall unlock from a manual release device. The device shall be readily accessible and clearly identified by a sign that reads, "EMERGENCY DOOR RELEASE PUSH (PULL) TO EXIT". Upon device operation, the manual release device shall result in direct interruption of power to the locking device shall de-activate. In addition the doors shall remain unlocked for at least 30 seconds. 4) Activation of the building smoke detection signaling system, the fire sprinkler or fire detection system shall automatically unlock the doors.

City Appeal #	Date	Description of Condition	Appeal Request
B-6	2-21-01	Code requires that when 2 exits are required they will be separated by ½ the diagonal. Two separate spaces on the third floor will be combined to create a 6900 sf space. The diagonal is 148 ft, requiring 74.5 ft. Proposed is 65', 85% of Required.	Building is fully sprinklered, with alarms & detection. Relocation of doors to allow compliant separation would require an existing storage area to be altered. Exit separation for stairs from floor was approved by previous appeal.
APPEAL STATUS:		**This appeal is no longer necessary due to new OSSC (IBC) requirement.**	
6275	5-28-09	Code Section 1024.6 Access to a Public Way requires the exit discharge shall provide a direct & unobstructed access to a public way. The existing exit discharge (the plaza level) has multiple points of access to the public way. Proposal is to remove the exterior stair from the plaza exit discharge to the public way in the southwest corner or the southeast corner & the northeast corner.	The removal of the stair(s) is required to provide additional accessible entry access to the lower level business occupancies. Equivalent safety is maintained because sufficient points of access to the public way exist; the points of access to be eliminated is redundant.
APPEAL STATUS:		**This appeal is no longer necessary due to the fact the stair has been removed.**	