

4. FIRE SAFETY

4.1 OVERVIEW

FST has completed the Fire Department checklist and performed ongoing coordination with Fire Department representatives and City Planning officials. The accompanying memorandum outlines our findings with respect to compliance with the City's Public Safety standards as set forth in the City's Technical Manual Section 3 – Public Safety Standards.

Generally, the site access conditions will include at least three sided building access from proposed paved area and Warren Ave. Fire hydrants are located on Warren Ave opposite the site thus offering ample fire protection support. The proposed building will be fully sprinkled and code compliant to current standards.

Additional fire safety review and building related fire code evaluation and compliance evidence will be provided as part of the building permit process.

4.2 ATTACHMENTS

Attachment H – NFPA 1 Review to Access and Other Fire Department Issues Memo

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NFPA 1 Review to Access and Other Fire Department Issues Memo



April 17, 2014

Captain Chris Pirone
City of Portland Fire Department
380 Congress Street
Portland, ME 04101

**Subject: 421 Warren Avenue
6 Unit Commercial Building
Fire Department Site Review Checklist**

Dear Captain Pirone:

In accordance with instructions in the City’s Site Plan Review packet, please find enclosed the drawing necessary for your review of the proposed 421 Warren Avenue project in Portland. We have listed each item in your checklist below, followed by our response.

1. *Name, address, telephone number of applicant.*

PH Warren Avenue, LLC
c/o Peter F. Holmes – Harbor Auto Body
401 Warren Avenue
Portland, ME 04101
c/o Fay, Spofford & Thorndike
207-775-1121

2. *Name, address, telephone number of architect.*

Project Architect: Biskup Construction
16 Danielle Drive
Windham, ME 04062
Attn: Jim Biskup
207-892-9800

3. *Proposed uses of any structures (NFPA and IBC classification).*

Building	IBC Code	NFPA Code
Commercial	VB	V (000)

4. *Square footage of all structures (total and per story).*

Single Story – Industrial 25,040 SF

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5. *Elevation of all structures.*

The first floor elevation is expected to be approximately 73.5 feet. Architectural building elevations accompany this letter and they show the various locations of door openings, etc. around the building perimeter.

6. *Proposed fire protection of all structures.*

The building will have a sprinkler system with additional protection per code. Fire flows and requirements for system storage or booster pumping are subject to the fire system design which will be performed prior to the request for a building permit.

7. *Hydrant locations.*

A fire hydrant is currently located on Warren Avenue less than 500 feet from the site.

8. *Water main(s) size and location.*

The site will be served by a 6" sprinkler service to be extended into the building off an existing 8" main stub into the site. A 2" domestic service will also be extended to the building. The building is expected to have internal sprinkler risers and a Siamese fire pump connection on the Warren Avenue side of the building.

9. *Access to all structures (min. 2 sides).*

The accompanying site plan depicts the site access conditions from Warren Avenue.

10. *A code summary shall be included referencing NFPA 1 and all fire department technical standards.*

NFPA 1 – Chapter 18 Fire Department Access and Water Supply

18.2 Fire Department Access:

The project site is located in a commercial developed area and is fronted by a public street. The following street width is currently available:

<u>Street</u>	<u>Width</u>
Warren Avenue	40 FT

Per NFPA 1 – Chapter 18.2.3.3.1, there will be public street access within 50 ft. of at least one exterior door. Per NFPA 1 – Chapter 18.2.3.2.2.1, all first story floors shall be located not more than 450 ft. from a Fire Department access road.

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City of Portland Technical Manual – Section 3 Public Safety

3.4.1 Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figure I-5).

Supporting Evidence: Not applicable

3.4.2 Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.

Supporting Evidence: As depicted on the site plan, the proposed building layout provides for minimum two sided access to the structure.

3.4.3 Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- *Building Height.*
- *Building Occupancy.*
- *Construction Type.*
- *Impediments to the Structures.*
- *Safety Features Provided.*

Supporting Evidence: The proposed development layout has contemplated emergency access conditions and provides for safe and efficient access along the public street for emergency vehicles.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Supporting Evidence: The building will be provided with an exterior door that will be within 50' of a Fire Department access route, namely Warren Avenue and the site entrance at 429 Warren Avenue.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Supporting Evidence: A minimum of 9 ft. vertical clearance will be provided below any overhead signage or utilities entering the site.

3.4.6. Elevators shall be sized to accommodate an 80 x 24 inch stretcher.

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Supporting Evidence: The building does not require an elevator.

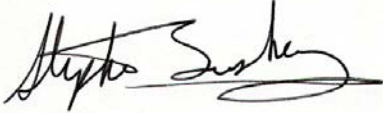
3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Supporting Evidence: The applicant will work with the City's Public Services Division to assign street addresses and numbering to meet City Standards.

If you need any further information, please contact our office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, P.E., C.P.E.S.C.
Senior Principal Engineer

SRB/cmd

Attachments: Drawing C-3.0 Site Layout & Utility Plan

c: Peter Holmes
Jim Biskup