

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Zoning Copy

2007-0089

Application I. D. Number

5/24/2007

Application Date

Portland Harbor Hotel Addition

Project Name/Description

468 Fore Street Realty, LLC

Applicant

261 Commercial Street, Portland, ME 04101

Applicant's Mailing Address

Consultant/Agent

Agent Ph:

Agent Fax:

Applicant or Agent Daytime Telephone, Fax

468 - 470 Fore St, Portland, Maine

Address of Proposed Site

038 F008001

Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☐ New Building ☒ Building Addition ☒ Change Of Use ☒ Residential ☐ Office ☐ Retail
☐ Manufacturing ☐ Warehouse/Distribution ☐ Parking Lot ☐ Apt 0 ☐ Condo 0 ☐ Other (specify) _____

20430

B-3

Proposed Building square Feet or # of Units

Acreage of Site

Zoning

Check Review Required:

- ☒ Site Plan (major/minor) ☐ Zoning Conditional - PB ☐ Subdivision # of lots _____
☐ Amendment to Plan - Board Review ☐ Zoning Conditional - ZBA ☐ Shoreland ☐ Historic Preservation ☐ DEP Local Certification
☐ Amendment to Plan - Staff Review ☐ Zoning Variance ☐ Flood Hazard ☐ Site Location
☐ After the Fact - Major ☐ Stormwater ☐ Traffic Movement ☐ Other _____
☐ After the Fact - Minor ☐ PAD Review ☐ 14-403 Streets Review

Fees Paid: Site Plan \$500.00 Subdivision _____ Engineer Review _____ Date 5/24/2007

Zoning Approval Status:

Reviewer

Marge

- ☐ Approved ☐ Approved w/Conditions
See Attached

☐ Denied

Approval Date _____ Approval Expiration _____ Extension to _____ ☐ Additional Sheets
Attached

☐ Condition Compliance

signature

date

Performance Guarantee

☐ Required*

☐ Not Required

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted

date

amount

expiration date

☐ Inspection Fee Paid

date

amount

☐ Building Permit Issue

date

☐ Performance Guarantee Reduced

date

remaining balance

☐ Temporary Certificate of Occupancy

date

☐ Conditions (See Attached)

☐ Final Inspection

date

signature

☐ Certificate Of Occupancy

date

☐ Performance Guarantee Released

date

signature

☐ Defect Guarantee Submitted

submitted date

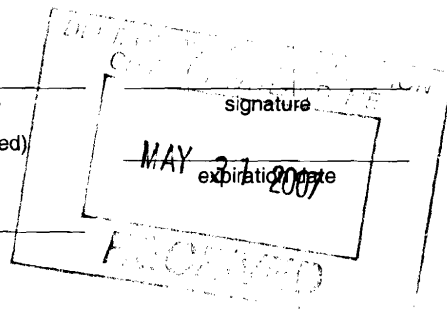
amount

expiration date

☐ Defect Guarantee Released

date

signature



MEMORANDUM

To: FILE

From: Marge Schmuckal

Dept: Zoning

Subject: Application ID: 2007-0089

Date: 9/7/2007

I have reviewed the floor plans received on August 29, 2007. My parking analysis of the new structure would require an additional 16 parking spaces. The parking study submitted on 5/31/2007 shows the existing parking capacity for the 16 addition parking spaces.

Any new signage associated with this project will require a separate permit and approvals through the Inspections Division.

Marge Schmuckal
Zoning Administrator

MEMORANDUM

To: FILE

From: Marge Schmuckal

Dept: Zoning

Subject: Application ID: 2007-0089

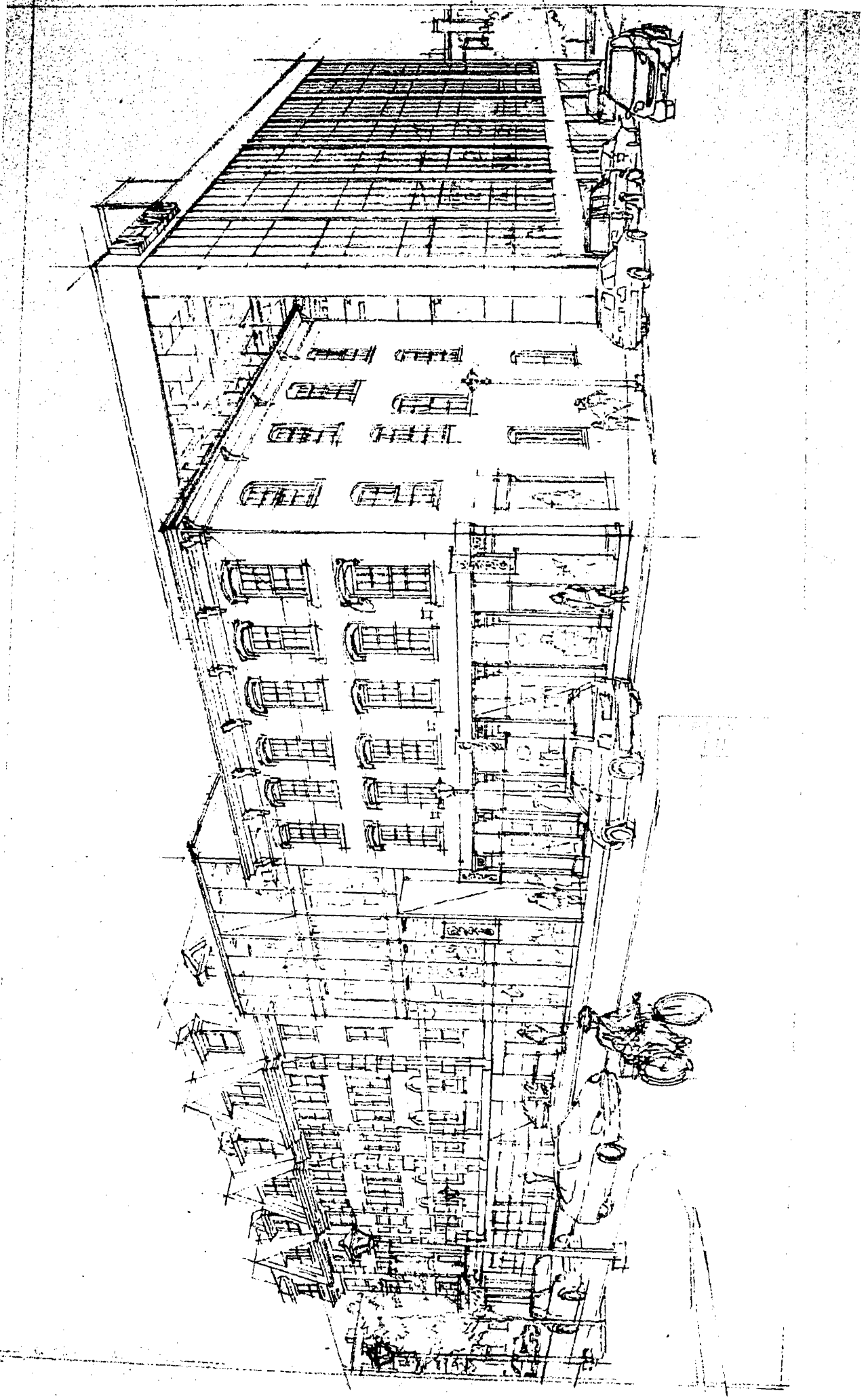
Date: 7/3/2007

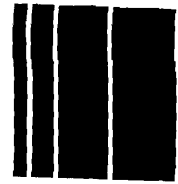
I have reviewed the basic submittal. I have noted that there are no floor plans to help determine uses and parking requirements. I do not agree with the methodology used to create the submitted parking analysis. The old Akari building was determined to be all retail in its past use. It was only partial retail with personal services throughout the upper floors. The wrong numbers from the parking section of the ordinance were used in this analysis. This being said, I agree with the bottom line that there is apparently a parking surplus that the proposed structure on site can use. I believe that the parking requirements are being met with this proposal. Only the new structure generates parking requirements. The change of use of the existing Akari building does not need to meet the parking requirements based upon the B-3 zone parking allowances.

I would like to see floor plans of the new structure and for the rehabbed Akari building to quantify the number of hotel rooms in total proposed.

This property is located in a B-3 Zone with a PAD overlay along Fore Street. All the B-3 Zone dimensional requirements are being met. The minimum building height of 35' is being met. The first floor retail-like requirements of the PAD district are being met. The streetwall build-to line is being met.

Marge Schmuckal
Zoning Administrator





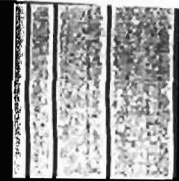
Report on Subsurface and Foundation Investigation

Proposed Addition Portland Harbor Hotel Portland, Maine

for

468 Fore Street Realty, LLC
261 Commercial Street
Portland, Maine 04101

May 17, 2007



May 17, 2007
07241

sebagotechnics.com

One Chabot Street
P.O. Box 1339
Westbrook, Maine
04098-1339
Ph. 207-856-0277
Fax 856-2206

Mr. David Bateman
468 Fore Street Realty, LLC
261 Commercial Street
Portland, ME 04101

Report on Subsurface and Foundation Investigation, Proposed Addition, Portland Harbor Hotel, Portland, Maine

Dear David:

This report presents the results of our subsurface and foundation investigation for the proposed addition to the Portland Harbor Hotel in Portland, Maine. This work was completed in accordance with our proposal dated April 18, 2007.

In summary, it is our opinion that the addition and ground floor slab may be supported on steel H-piles driven to end bearing in the underlying glacial till and bedrock. Specific recommendations regarding foundation design and construction considerations are presented below.

Introduction

The site is located on the south side of Fore Street between the Portland Harbor Hotel (468 Fore Street) and Akari (470 Fore Street). An approximately 12-foot high granite block and brick retaining wall supporting Fore Street is located on the north side of the site. The site is presently occupied by a large air conditioning unit for the Portland Harbor Hotel, landscaped areas and steel stairs up to Fore Street.

We understand that the addition will be 5 stories in height with no basement. The building wall along Fore Street will be independent of the retaining wall. The addition will connect to the Portland Harbor Hotel and to 470 Fore Street. Columns will vary from approximately 12 feet to 22 feet on center. Column loads will vary from approximately 40 kips to 230 kips. We understand that the exterior walls will cantilever beyond the columns to accommodate foundations located to avoid the footings of 470 Fore Street and the retaining wall.

Subsurface Explorations

On May 2 and 3, 2007, Maine Test Borings, Inc., (MTB) of Brewer, Maine drilled two borings, B1 and B2, at locations shown on Sheet 1, Subsurface Exploration Plan. MTB drilled the borings to depths below ground surface varying from 22.0 feet and 27.0 feet, respectively. Sebago Technics, Inc. monitored the borings and prepared the logs included in Appendix A. MTB backfilled the borings with the drilled material.

On May 2, 2007, two test pits, TP1 and TP2, were hand excavated adjacent to 470 Fore Street and the retaining wall, respectively. Test pits were excavated to depths below ground surface of 6.2 feet and 4.5 feet, respectively. Sebago Technics, Inc monitored the test pits and

and bear in the underlying glacial till and bedrock.

May 15, 2007

**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**

A separate drawing[s] shall be provided to the Portland Fire Department for all site plan reviews.

*468-470 Fore Street
Portland Harbor Hotel Addition
Portland, ME 04101*

1. Name, address, telephone number of applicant.

*David Bateman
Dictar Associates
PO Box 3572
Portland, ME 04104
(207) 772-2992*

2. Name address, telephone number of architect

*David Lloyd
Archetype, P.A.
49 Union Wharf
Portland, ME 04101
(207) 772-6022*

3. Proposed uses of any structures [NFPA and IBC classification]

*R-1 – IBC
Hotel - NFPA*

4. Square footage of all structures [total and per story]

*Annex 1,780 Sq. Ft. per floor x 5 = 8,120 Sq. Ft.
470, 2,127 x 4 = 8,502 Sq. Ft.*

5. Elevation of all structures

44' at 468 Fore St. & 37' at 470 Fore St.

6. Proposed fire protection of all structures

Building is fully sprinkled per NFPA 13

7. Hydrant locations

Two hydrants see attached map.

8. Water main[s] size and location

Project is an addition and renovation, see attached.

9. Access to any fire department connections

Union St. for 468 Fore St. and Cross St. for 470 Fore St.

10. Access to all structures [min. 2 sides]

Access to 470 Fore Street is on Fore St & Cross St.

11. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

See attached code analysis.

12. Elevators shall be sized to fit an 81" x 23" stretcher and two personnel.

Some structures may require Fire flows using annex H of NFPA 1

--SIZING CALCULATION-----Printed On: 7/ 1/1997

Supply Location: Fore and Union Streets Portland

97.0 psi, supply pressure available during demand

Demand Location: Uion Street

147.0 gpm demand flowing at psi pressure

--Head Loss Data-----

Elevation Difference: 25.0 ft (minus if demand location lower than supply)

Pipe Length: 20.0 ft Other Loss In Equivalent Pipe Length: 30.0 ft

Number of Valves & Fittings:

:Corp Stop	:Curb Stop	2:Gate Valve	:Globe Valv	:Angle Valv
:Bfly Valve	:Swing Chk	:Side Tee	:Straight T	:Std Elbow
:Long Elbow	:45 Elbow	:	:	:

Backflow Prev: 12.0 psi Water Meter: 4.0 psi PRV: psi Other: psi

--Design Calculation-----

Permitted Velocity: fps Pipe Type: CUM Calculated Pipe Size: 4 in

Actual Velocity: 3.9 fps Head Loss: 27.1 psi Pres at Demand: 69.9 psi

--DEMAND CALCULATION-----

Predominantly Flushometers: N

Public Use: N

--Number of Fixtures-----

:Bathtub	:Bar Sink	:Bidet	41:Clothes Washr
:Cuspidor	41:Dishwasher	:Drinking Ftn	3:Hose Bib
41:Kitchen Sink	82:Lavatory	:Laundry Tub	59:Shower Head
:Service Sink	:Urinal Pedest	:Urinal Wall	:Urinal Tank
:Wash Sink	:WC Flushometr	82:WC Tank	41:Disposal
:Hot Tub	:	:	:

Additional: fixture units

Total: 616.0 fixture units

Continuous Demand: gpm

Fixture Demand: 147.0 gpm

Total Demand: 147.0 gpm

In our opinion, HP12x53 steel H-piles (grade 50) are the most appropriate pile type for support of the building and lowest floor level. Due to the presence of ash and slag in the fill and organic materials in the harbor bottom deposits, we recommend that 0.125-inch be deducted from all exposed metal surfaces to account for corrosion of the steel. Piles should be driven to an ultimate capacity of 90 tons and a design capacity of 40 tons should be used for support. This provides a factor of safety of 2.25. In addition, the International Building Code does not require load testing of piles of 40-ton design capacity or less which are designed by an approved driving formula. We evaluated pile capacity by both wave equation analyses and the Engineering News Formula.

Based on preliminary wave equation analyses, we recommend the piles be driven to bearing in the underlying glacial till or bedrock with a diesel hammer with a minimum rated energy of 23,000 foot pounds per blow. Based on the Engineering News Formula, we recommend a drop hammer with a minimum rated energy of 14,000 foot pounds per blow. A final penetration resistance equal to 6 blows per inch for the final 6 inches of driving should be required. If abrupt refusal is encountered, driving may be terminated when the pile penetration is less than 0.5-inch for 6 successive blows. Piles should be spaced at least 3 feet on center when groups are required. The bottoms of exterior pile caps should be founded a minimum of 4.5 feet below the lowest adjacent ground surface exposed to freezing except those located adjacent to the retaining wall on Fore Street, the Portland Harbor Hotel and 470 Fore Street. The bottom of pile caps adjacent to these structures should not penetrate below the line defined by a 1 horizontal to 1 vertical line drawn outward and downward from the bottom of the adjacent footings to prevent undermining these existing footings.

Ground Floor Slab

We recommend that the lowest (ground) floor slab be designed as a structural slab supported by the piles. The slab may be cast on grade but should be designed to span between pile caps.

Seismic Design Considerations

We recommend that the addition be designed in accordance with the seismic requirements of the latest edition of the International Building Code. Based on the average Standard Penetration Resistance, N , in the upper 100 feet of the site, the site classification is Class D; the site response coefficient F_a is 1.0 for a short period spectral response acceleration S_s of 0.37g; the site response coefficient F_v is 1.0 for the 1-second period spectral response acceleration S_1 of 0.10g. The subgrade soils are not considered liquefaction susceptible.

Lateral Foundation Loads

We recommend that lateral loads be resisted by earth pressure against pile caps and grade beams as follows:

$$P_r = (1/2 K_p H^2)^{1/3}$$

Where P_r = Passive force in pounds per foot of beam or pile cap

= Soil unit weight in pounds per cubic foot (use = 110)

K_p = Passive earth pressure coefficient (use 3.0)

H = Thickness of pile cap or depth of grade beam in feet below ground surface

In addition, a lateral resistance of 1 kip per pile may be used for piles. If this does not provide sufficient lateral resistance, the piles may be driven at a batter. Pile batter should not be flatter than 3 horizontal to 12 vertical.

Lateral Soil Pressure

We understand that the building wall adjacent to the retaining wall at Fore Street will be designed as a retaining wall cast as a one-sided wall against the retaining wall. We recommended that a drainage geonet be placed against the retaining wall prior to casting the building wall to allow drainage between the two walls and prevent hydrostatic buildup and possible seepage through the building wall. The drainage geonet should have a filter fabric backing on the side against the retaining wall and a membrane backing on the side against the building wall.

We recommend that the building wall, restrained at the top, be designed to resist a lateral earth pressure calculated on the basis of an equivalent fluid unit weight of 55 pounds per cubic foot. This fluid unit weight assumes an at rest earth pressure coefficient of 0.45 and a free-draining geonet. In addition, the building wall should be designed for a uniform lateral pressure acting over the full height of the retaining wall calculated on the basis of 0.5 times the surcharge stress (vehicle loads in Fore Street) in addition to the lateral soil pressure recommended above.

Backfill Materials

Fill used below pile caps, grade beams and the floor slab may consist of excavated on-site soil and if necessary, imported fill. Imported fill may be common fill consisting of inorganic mineral soil that can be placed in layers and compacted. The maximum particle size should be less than 4 inches. Fill should be placed in layers not exceeding six inches in loose measure and compacted by self propelled vibratory compaction equipment at the optimum moisture content to a dry density of at least 95 percent of the maximum dry density, as determined in accordance with ASTM Test Designation D1557. In confined areas, the compaction should be performed by hand-guided vibratory equipment.

Construction Considerations

Excavation, Lateral Support and Control of Water

We anticipate that foundation excavation can be accomplished with sloped open excavation through the overburden soils provided safe side slopes can be maintained. Some sloughing and raveling should be anticipated in temporary slopes. Temporary excavations should be made in accordance with all OSHA and other applicable regulatory agency requirements.

We anticipate that groundwater may be encountered at proposed subgrade level or bottom of pile caps and grade beams. If encountered, open pumping from sumps can likely control groundwater. Water should be discharged in accordance with the requirements of the City of Portland. In general, the contractor should control groundwater and water from runoff and other sources by methods which prevent disturbance of bearing surfaces or adjacent soils and allow construction in-the-dry.

Construction Monitoring

The foundation recommendations contained herein are based on the known and predictable behavior of a properly engineered and constructed foundation. Monitoring of the foundation construction is required to enable the geotechnical engineer to keep in contact with procedures and techniques used in construction. Therefore, we recommend that a person qualified by training and experience be present to provide monitoring at the site during pile installation and placement of compacted fill.

Limitations of Recommendations

This report has been prepared for specific application to the subject project in accordance with generally accepted geotechnical engineering practices. In the event that any changes in the nature, design or location of the addition are planned, the conclusions and recommendations contained in this report should not be considered valid, unless the changes are reviewed and the conclusions of this report modified or verified in writing.

The recommendations presented herein are based in part on the data obtained from the referenced test borings and test pits. The nature and extent of variations between the explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

We request that we be provided the opportunity for a general review of final design and specifications in order to determine that our earthwork and foundation recommendations have been interpreted and implemented in the design and specifications as they were intended.

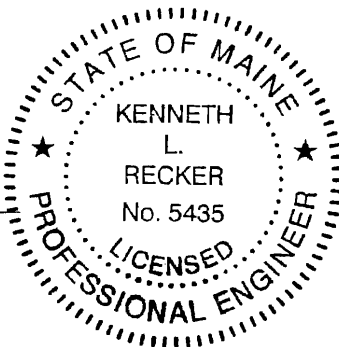
It has been a pleasure to work with you on this project. Please do not hesitate to contact us if you have any questions or need additional information.

Sincerely,

SEBAGO TECHNICS, INC.



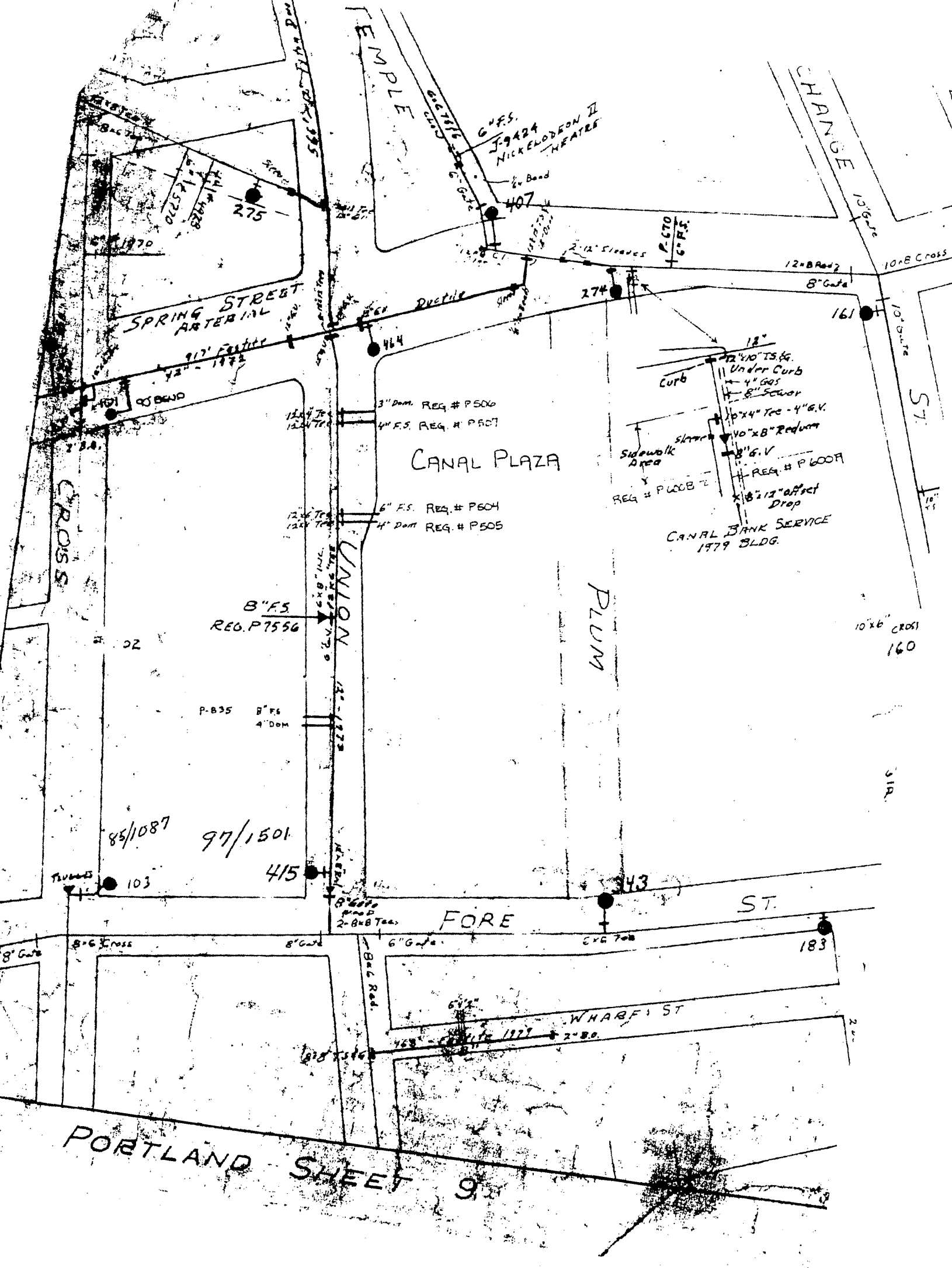
Kenneth L. Recker, P.E.
Geotechnical Engineering Manager



KLR:klr/kn

Enclosures:

- Sheet 1 - Subsurface Exploration Plan
- Appendix A - Logs of Borings
- Appendix B - Logs of Test Pits and Photographs



038 B002
RREEF AMERICA REIT III CORP Z4
038 B002

24-92
23-87
UNION ST

428-448
FORE ST
429-451

032 R008
FORE STREET HOLDINGS LLC
032 R008

18-22
15-21
UNION ST

450-472
FORE ST
455-481

038 F008
DICTAR ASSOCIATES II
038 F008

259

038 F009
HARBOR PLAZA ASSOCIATES II
038 F009

038 G001
RREEF AMERICA REIT III CORP Z4
038 G001

038 F006
245 COMMERCIAL ST PARTNERS
038 F006

245

038 F010

038 F006

038 G003

038 G001

A R C H I T E C T U R E

May 23, 2007

Barbara Barhydt
Planning Division
City of Portland
389 Congress Street
Portland, ME 04101

**RE: Downtown Urban Design Guidelines for Addition to Portland Harbor Hotel
468 Fore Street & Renovation to 470 Fore Street.**

Dear Ms. Barhydt,

As an appendix to our application for Site Plan Review for a new addition to the Portland Harbor Hotel at 468 Fore Street, we are including an analysis and presentation of the Downtown Urban Design Guidelines for the City's B-3 Downtown Business District Zoning Ordinance and Site Plan Standards. This letter will take the format of the above Guidelines and shall address each item in turn.

I. RELATIONSHIP TO PEDESTRIAN ENVIRONMENT

A. Distinguish the lower 35 feet of building facades

Standard: "The exterior design of portions of buildings within the first thirty-five (35) feet of height shall enhance the character, attractiveness, comfort, security, and usability of the street level pedestrian environment . . ."

- *Pedestrian Character: The design of storefronts should complement the pedestrian activity being accessible and visible from the public sidewalk. The design of 468 Fore St, a narrow infill building, takes as its primary concern the relationship to the pedestrian environment. The façade is the element of the building with which the pedestrian will develop a relationship with the rest of the building.*
- *Transparency: A predominance of glass which assures transparency between interior activities or products and pedestrian activity on the streets and sidewalks is very important to the vitality of the pedestrian environment. Glass should be used on the street level which assures visibility for pedestrian interest and, to the extent feasible, assures that there are obvious "eyes on the street" or a sense of security as a result of indoor and outdoor activity being readily visible. The façade is oriented to the North, allowing us to use clear rather than tinted glazing. This makes it possible for pedestrian's views to penetrate deep into the ground floor retail spaces, effectively extending the public zone of the streetscape into the building itself.*
- *Relationship to Context: In general, the design of storefronts and the facades of lower portions of buildings should relate to the architecture of the rest of the building and should demonstrate a unified overall building design. The height of the building is forty-four (44) feet from sidewalk to cornice. This height is of a scale that allows us to not only relate the first thirty-five feet of the façade to the storefront zone, but the full height, creating a unified, intimate experience of the materials and their disposition towards the streetscape.*