- *Materials and detailing: The design of storefronts and lower building facades should include the selection of high quality materials and detailing which relate to the rest of the building and to the surrounding context, and which convey a sense of permanence, durability, and richness in character. Ease of maintenance and a commitment to continuing upkeep are important considerations.* The design of the façade is based upon the selection of a very sophisticated, richly detailed curtain wall system; one that far exceeds in quality that typically associated with aluminum storefront glass systems. The juxtaposition of this glass and steel system with the granite base and vestibule will be treated with a reglet or reveal detail that will heighten the relationship between the smoothness of the glass and the roughness of the stone. The selection of such a system only serves to highlight the building developer's commitment to the quality of this building and its durability.
- *Contemporary Design:* The relationship to the existing storefront context is complicated by the fact that the adjacent façade of the Portland Harbor Hotel is a street wall and garage entrance that is entirely opaque. The only reference for retail elements within this block is across Fore Street in "The Shops at Two Portland Square". The image below depicts the character of these retail

storefronts. The current vacancy of four out of six of these stores, along with the site's relative isolation from the more prosperous Fore and Exchange block, serves as a commentary on the nature of the architecture within which it is contained. The Two Portland Square building only treats the transparency of the lower thirty-five feet as an afterthought, or as a "merely sufficient" fulfillment of the guidelines. The character of this is such that it is unable to generate enough visual interest to draw pedestrians across Union Street from the Old Port Exchange.

- The design of 468 Fore Street, on the other hand, is founded upon the idea of visual interest, and will be fully visible from the Old Port Exchange. The large two-story height entry, the rich detailing, the eminence of light from the interior at night (when the Old Port is very active), all are meant to extend the life of the streetscape beyond Union Street and Two Portland Square, essentially extending the Old Port towards the Tracy Causer Block and the restaurants and shops of Pleasant Street.

B. Pedestrian Activities District (PAD)

Standard: "In addition to subsection 1 (a through d), proposed development and substantial building alterations located within the Pedestrian Activities District (PAD) overlay zone . . . shall be designed and constructed to accommodate pedestrian-oriented uses at the street level. Proposed development located within the PAD encouragement areas which is not initially constructed to accommodate pedestrian-oriented activities at the street-level shall be designed to have the capability of accommodating pedestrian-oriented uses through non-structural building alterations."

- This project does not fall within a designated PAD overlay zone. However, we took it upon ourselves to address the guidelines and to show the manner in which the design principles are at work in the proposed project.
- *Orientation and accessibility to the street:* Our design and programming of 468 Fore Street creates an extended retail zone through the integration of the existing ground floor retail located at 470 Fore Street with the new ground floor spaces through a unifying use of transparent glass storefronts, while simultaneously creating handicap access to the shops of 470 Fore Street (currently impossible due to the sixteen-inch granite steps into the space). The entrance, highlighted as it is by the recess into the façade, effectively extends the sidewalk into the building, creating a public zone which would overlap with the building's ground floor retail space. The signage (depicted in the drawings) will be prominent and attractive visual queues to pedestrians from a distance along Fore Street in both directions.
- *Adequacy of interior layout:* The ground floor of 468 Fore Street is an open plan space with two column bays in both width and depth. This configuration works equally well as retail or as a restaurant establishment. Both possibilities would only encouragement the PAD zone to extend to what is now a somewhat in-active block of Fore Street (see image and text above). The design allows for flexibility over time while ensuring the continued relationship to the streetscape in future potential uses.

C. Sidewalk Areas and Open Space

Standard: "The design of publicly accessible sidewalk areas and open space shall complement the general pattern of the Downtown pedestrian environment, conform with special City of Portland streetscape programs described in the Technical and Design Standards and Guidelines, and enhance the attractiveness, comfort, security, and usability of the pedestrian environment."

- All sidewalk treatment, street lighting and building lighting will follow the City of Portland *Technical and Design Standards and Guidelines.*

II. RELATIONSHIP TO EXISTING DEVELOPMENT

The physical development of the Downtown has been incremental over the last century. For much of this period, a fairly limited palette of available building technology and materials combined with a generally consistent approach to architectural character and

building form. This has resulted in an existing building fabric noteworthy for its comfortable and consistent scale and compatibility of building materials. A closer look at buildings throughout the Downtown supports this consistency of general character while also revealing an extremely rich diversity in architectural styles and detailing which collectively provide a rich visual experience and a sense of the evolving history of the City. Where markedly different buildings deviated from the prevalent character, those that remain today tend to be noteworthy public buildings such as the Customs House and City Hall, or buildings that introduced a new era of design such as the Fidelity Trust Company Building.

Any development within this context, whether an infill or an individual building lot at mid-block or the redevelopment of an entire vacant block, should look to the character and prevailing pattern of development as an important frame of reference for new construction or substantial alteration.

In recognition of the intimate, pedestrian scale of the Downtown area, a premise of these guidelines is that large buildings (either exceptionally tall or massive) should be built differently in a small-scaled city than they might be built in a City of larger size or different character. Care must be taken to assure that new buildings be so composed and sited to reinforce and respect the scale and composition of existing building fabric while striving to meet the evolving functional needs and aesthetic interests of contemporary society. Care must also be taken to encourage diversity, an essential quality in creating an interesting and lively Downtown.

A. Integrate with, respect and enhance:

Standard: "Proposed development shall respect, enhance, and be integrated with the existing character of the general pattern of development in the Downtown, surrounding building environment and streetscape."

The development of new buildings, building additions, and other improvements such as publicly accessible open space should be responsive to the character of existing buildings and open space, achieving a ***creative integration of past, present and future building design*** *and construction. Throughout this discussion, it is important not only to respect and integrate with the existing fabric of the City, but also to enhance that fabric.* ***Where existing structures are of high quality and in themselves positive examples of the concerns identified in these guidelines, they provide an important reference for nearby new construction. Where existing buildings are not responsive to the concerns described herein, proposals for new construction in their vicinity have the opportunity to creatively enhance that portion of the Downtown.***

- The guidelines elaborated within the context of the relationship to the existing urban fabric are appropriately concerned with the treatment of large or very tall structures built within the downtown zone. The definition of setbacks, street walls, open spaces, building mass and scale, ensure the preservation of the existing character of the city while allowing for expansion and development.
- The guidelines specify that all buildings located at the street line shall provide very clear definition and character to the street. The design of 468 Fore Street, as

can be seen in the streetscape study (Drawing 'A') addresses the street and is fully integrated into the public sidewalk space. At the same time, the massing of the design leaves some "breathing room" between the new glass façade and the distinctly different façades of the abutting buildings.

- *Structure of the City: The character of the built environment results from incremental growth, development and redevelopment over an extended period of time. This incremental growth accommodated individual buildings of relatively small and discreet interior space demands while responding to the Downtown's changing topography by stepping buildings and entrances along sloping streets. The resulting pattern of building form and massing along the street is characterized by* ***multiple, relatively narrow and discreet building facades****.* It is clear from the documents that the building proposed herein follows and takes advantage of this guideline while adapting it to a contemporary architectural language.
- *Massing: The overall volumetric relationships, or massing, of major architectural elements contributes to the building's overall appearance and sense of scale. Buildings,* ***particularly larger buildings****, should be designed to lessen the appearance of excessive bulk in order to maintain a scale and pattern comfortable to the pedestrian and to integrate with the prevailing pattern of existing buildings throughout the Downtown. While encouraging original design responses and distinguished architecture, the appearance and visual impact of a building's mass and bulk can be diminished in a variety of ways, such as the following:*
    - *i. varying the planes of exterior walls through setbacks, recesses, or changes in direction;*
    - *ii. varying building height so that the upper portions of larger buildings appear divided into distinct massing elements; and*
    - *iii. articulating different components of a building, such as the overall building composition (base, middle, and top), the arrangement of façade elements and openings, and the choice and variation of building façade materials.*
- The guideline for the massing (above) is distinctly important for buildings at the large scale such as the Two Portland Square building across from the proposed development. As the design of 468 Fore Street is significantly smaller than the majority of buildings on the block or in the vicinity (Portland Harbor Hotel, The Memic Building, etc.), the question of setbacks and massing (and the allied concerns of shadow and wind impacts) is, to a certain extent, not relevant (the street wall height zoned for this site is sixteen (16) feet above the height of the building). However, the question of architectural articulation, and the treatment of the "base, middle and top" has not been dismissed, nor is it lacking in the design. While not the traditional tripartite, or "classical" treatment of the pediment, shaft and capital, the design of 468 Fore Street addresses the base through the use of granite as a material division between the glass and brick sidewalk; the double height entry addresses the distinct treatment of the middle, or primary mass of the building; and the "rolled" edge of the top, or cornice of the façade, treated in a metal such as lead-coated copper, sets it apart from the rest of the building and accentuates the top.

- The context for the proposed design, architecturally speaking, is mixed, at best. The character, or architectural vocabulary, as well as the scale of the surrounding buildings is varied and heterogonous. Two Portland Square, The Portland Harbor Hotel, The Memic Building and the more traditional building currently housing the Akari Spa, bear little if any relationship to one another. It is our intention, as is depicted in the rendering, that this new building would serve not as yet another architectural statement, but as a sort of unifier. For any building to act as a bridging element between buildings with such diverse character as those of the Hotel and the Akari buildings it must, almost by default, do it in a new language. The design we are proposing is, in our opinion, one which ties these together with subtlety.

The balance of the text of the guidelines will not be treated here in that the design proposal as submitted will not vary from, nor challenge any interpretation of them as such.

Sincerely,

Kevin Gough
Archetype, P.A.

48 Union Wharf, Portland, Maine 04101 (207) 772-6022 • Fax (207) 772-4056

Parking Analysis for the Change of Use of 470 Fore Street
& The Addition to the Portland Harbor Hotel at 468 Fore Street

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
MAY 31 200
RECEIVED

Note: The site includes the Hotel, the Memic Building, and 470 Fore Street (Currently Akari Salon) old Akari Bldg

Current parking requirement @ 470 Fore Street

The current use is retail on 1st thru 3rd story. The daylight basement is half restaurant and half retail. There is 2,127 sq. ft. per floor. use the 4 on 1st

1st fl.: One space per 200 over 2,000 sq. ft. 127-200 = .635 1 Space Required - yes
2nd & 3rd fl.: One space per ~~700~~ 400 sq. ft. 2127 2127 / 4254 ÷ 400 = 10.63 11 Spaces Required
Basement: 1,050 sq. ft. restaurant (by definition) /150 sq ft. - 6 Spaces Required - must add Sentra the kitchen prep.
Basement: 1,050 sq. ft. retail /700 sq ft each floor Above 5K Space Required
Should be 1/200 not 1/700 = 5.25
Total existing required parking @ 470 ~~14 spaces~~ 23 spaces

Parking requirement @ 470 after change of use → B-3 Zone doesn't require any new parking cases with a change of use

Basement use to be storage
1st fl.: One space per 200 over 2,000 sq. ft. 1 Space Required
2nd & 3rd fl.: Hotel, One space per 4 rms. yes 1 Space Required
How many Hotel Rooms proposed
Total proposed required parking @ 470 **2 spaces**

Parking requirement @ Portland Harbor Hotel New

Basement spa for hotel use
✓ 1st fl. Retail 1,780 sq. ft.: No spaces required
✓ 2nd fl. hotel meeting rooms: No spaces required
3rd fl. 2 – hotel rooms: No spaces required
4th fl. hotel offices: No spaces required
Note: The requirement for hotel parking is One space per 4 rooms. The addition requires no parking as the retail space is less than 2,000 sq. ft., there will be only 2 additional hotel rooms, and the other uses are under hotel use.

With the construction of the Annex and change in use of 470 Fore Street there will 12 less parking spaces than currently required.

6 rooms total
Are shown on 2nd & 3rd floors

Existing on-site parking spaces

Parking garage	198
Surface lot	20
Total spaces	**218**

Current parking requirements excluding 470 Fore Street

47,700# ÷ 400 = 119.25

Memic Building, 47,700 sq. ft. / 400 sq. ft per space	~~120~~ 119 spaces
Hotel,100 rooms / 4 rooms per space ok	25 spaces ok
Total	~~145~~ 144 spaces

There are 218 existing spaces on site. 147 spaces go to existing and new requirements (120 +25+ 2). This leaves a balance of 71 spaces

DAVID Hoyer

Parking Analysis for the Change of Use of 470 Fore Street
& The Addition to the Portland Harbor Hotel at 468 Fore Street

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2nd & 3rd fl.: One space per 700 sq. ft.	6 Spaces Required
Basement: 1,050 sq. ft. restaurant (by definition) /150 sq ft.	6 Spaces Required
Basement: 1,050 sq. ft. retail / 700 sq ft	1 Space Required
Total existing required parking @ 470	**14 spaces**

Parking requirement @ 470 after change of use

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8/29/07

Memorandum
Department of Planning and Development
Planning Division

030-F-008
#2007-0089
468-470 Fore St

To: Development Review Staff

From: Molly Casto, Planner

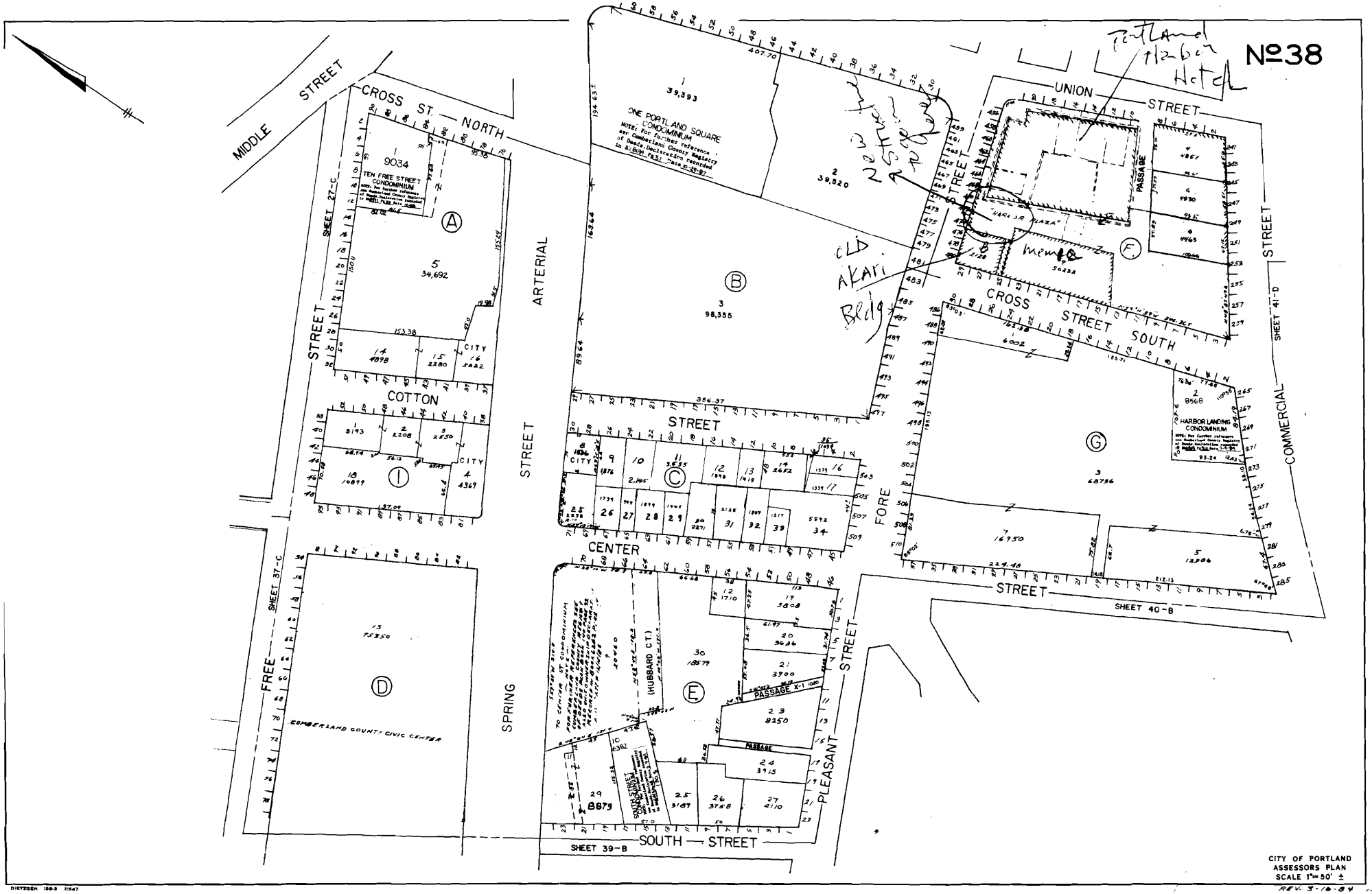
Date: August 29, 2007

Re: **Portland Harbor Hotel Addition and Renovation. Fore Street.**

Revised plans have been submitted for the Portland Harbor Hotel Addition and Renovation. This project is slated for Public Hearing on **Sept 11, 2007**.

Thanks!
Molly Casto

38-F-9


№38
MIDDLE STREET
CROSS ST. NORTH
SHEET 27-C
STREET
ARTERIAL
STREET
ONE PORTLAND SQUARE CONDOMINIUM
TEN FREE STREET CONDOMINIUM
COTTON
STREET
CENTER
STREET
UNION STREET
PASSAGE
CROSS STREET SOUTH
HARBOR LANDING CONDOMINIUM
FORE
STREET
COMMERCIAL
STREET
SHEET 41-D
SHEET 40-B
FREE
STREET
SHEET 37-C
CUMBERLAND COUNTY CIVIC CENTER
SPRING
STREET
(HUBBARD CT.)
PASSAGE X-1
PASSAGE
PLEASANT
STREET
SOUTH STREET
SHEET 39-B
CITY OF PORTLAND
ASSESSORS PLAN
SCALE 1"=50' ±
REV. 3-10-94

A R C H E T Y P E

May 23, 2007

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

RE: Site Plan Application for Addition to Portland Harbor Hotel
468 Fore Street & Renovation to 470 Fore Street.

Dear Ms. Barhydt,

We are submitting our application for Site Plan Review on behalf of applicant and owner, 468 Fore Street, LLC, for a new addition to the Portland Harbor Hotel at 468 Fore Street. In addition, we are proposing a change of use of 470 Fore Street from retail to hotel with partial retail. The project has the following scope and statistics.

Hotel Addition: The building site is currently used as a patio entry for Akari hair Salons Coffee Shop and the Hotels HVAC equipment. The new addition will consist of four floors and a daylight basement. The floor plates are 1,740 sq. ft. for the basement and ground floor and 1,780 sq. ft. for the upper three floors. Total floor area will be 8,120 sq. ft. The ground floor will be a retail use. The basement and upper floors will be hotel uses including, guest rooms, meeting rooms and hotel management offices.

Located in a B-3 zone, the addition is a permitted use and meets all dimensional requirements. The proposed height is 51 feet. Off street parking requirements are addressed in the attached document.

We propose using glass curtain wall for the façade on fore street and EIFS on the rear wall. See attached elevations.

Renovation of 470 Fore Street: The building, three stories and a daylight basement, is currently occupied by Akari Hair Salon. It is our intention to do a complete renovation of the interior. Proposed uses would be retail on the 1st floor and hotel rooms on the 2nd and 3rd floors.
The floor plate of the building is 2,127 sq. ft. for a total of 10,635 sq. ft. Exterior work is limited to new windows and glazing as shown on the elevations. There will be remedial work on the south facing the Memic building.

The total land area of the site is 20,430 sq. ft. The approximate cost of construction is $1,200,000.

THE FOLLOWING SUBMISSION ITEMS FOR SUBDIVISION AND SITE PLAN REVIEW ARE LISTED FOR BOTH STATUS AND APPLICABILITY.

Plat Requirements:
1. Date, north point, title and graphic scale. Scale shall not be more than sixty (60) feet to the inch unless lots are more than an acre, but in no event more than one hundred (100) feet to the inch;
These are noted on attached survey

2. Based on a recent survey by the subdivider, existing contours at two (2) feet intervals or as otherwise required by the public works authority. Existing structures which are to remain will be delineated;
Spot elevations are shown on site in area of new building. All existing structures are shown and will remain.

3. Names of proposed streets, width of rights-of-way, and typical cross section reservation, and depth of construction materials; *N/A*

4. Locations, widths and purposes of other rights-of-way or easements to be recorded;
There are no proposed ROW or easements.

5. All appropriate street curve information, including point of curvature, point of tangency, tangent distance, radii and interior angle, in standard engineering format; *N/A*

6. Location of those utilities existing on or adjacent to the tract to be subdivided, including size and elevation of buried or underground utilities (may be shown on separate plan);
These are noted on attached survey

7. Tract boundary lines and property lines of lots, with accurate dimensions and either bearings or deflection angles. All lots shall be numbered;
These are noted on attached survey

8. Names of adjacent property owners with parcels over twenty-five thousand (25,000) square feet or names of adjacent subdivision;
Please advise if this is required or notification within 500'

9. Designation of flood hazard areas, as defined by the National Flood Insurance Program and shown on the city flood hazard boundary map, as well as any other areas in the subdivision subject to inundation by storm water or storm sewer overflow; *N/A*

10. Existing historic sites and structures which either appear on the National Register or are nominated to the National Register by the state historic preservation officer;
This is not an historic site nor are there any existing buildings on National Register.

11. Proposed private and public utility system including water, gas, telephone, fire hydrants, and any other services
We are currently not proposing any street connections.

12. Sanitary sewer and storm drain plans and profiles showing size, kind and slope of pipe, proposed manhole rim and invert elevations and catch basin locations and drains (may be shown on separate plan);
We are currently not proposing any street connections.

13. Lighting plan showing the location, design, height and spacing from each other of the support poles, in accordance with standards and specifications established by the public works authority (may be shown on separate plan). *N/A*

14. Tree plan showing groups of existing, sizeable trees which the subdivider intends to preserve (may be shown on separate plan);
We await instruction from Jeff Tarling as to street trees

15. A detailed plan of the entire subdivision and the immediate vicinity showing all existing and proposed drainage both on and off-site including drainage swales, ditches, etc., with directional flow arrows and approximate slope grades, and showing proposed finished "spot elevations" around the perimeter of the subdivision. Proposed drainage shall be shown as it may affect or restrict development on individual lots and with reference to improvements for which a performance guarantee is required under this article.

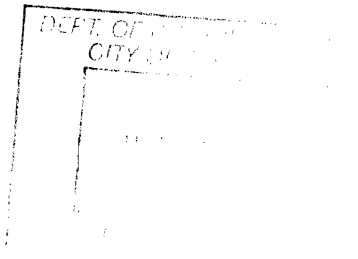
Where deemed feasible by the public works authority, proposed finished contours at intervals of two (2) feet shall be provided on the drainage plan upon request (may be shown on separate plat):
Drainage is through roof drains. Please advise as to additional requirements

16. Location and designation of any zoning district boundaries affecting the subdivision:
Zoned B-3

17. All future phases and sections of the subdivision proposed by the subdivider (may be shown on separate plat);
There are no proposed future phases

18. Proposed parks and school sites, or other public open space that the developer proposes to convey to the city; *N/A*

19. Names and addresses of registered professional engineer, subdivider and owner:
Civil Engineer:
DeLUCA-HOFFMAN ASSOC., INC.
778 Main Street, Suite 8
So. Portland, Maine 04106



Owner:
Fore Street Realty, LLC
261 Commercial Street, Suite 101
Portland, ME 04104

20. At the option of the subdivider, any other information that may be necessary for the full and proper consideration of the subdivision shall be submitted in writing; *N/A*

21. Streets and right-of-way monuments and property line markers;
This is on Survey

22. Vicinity sketch, as defined in section 14-493 (may be shown on separate plan);
This is on Survey

23. Total site data, including total area of the subdivision, total area in streets, total area in recreation or open space and number of house lots;
Site data is on survey and site plan. No recreation or open space is proposed.

24. Additional submission items if required by the Planning Board and insofar as feasible (may be shown on separate sheets or by other appropriate method):

a. When private sewage systems are used, the results and supporting data of a soil test of each lot in the subdivision conducted by a soil evaluator licensed in the state;
None

b. When the adequacy of the subdivision's load bearing capacity is in question, the results and supporting data of test borings conducted by a professional engineer registered in the state;
Structure to be pile supported, see attached geotechnical report.

c. When conditions warrant, a program which shall be implemented by the subdivider to control dust, erosion and sedimentation and/or vehicular traffic during construction;
We will be coordinating with and instructed by Public Works and Inspections for these items

d. Evidence of the applicant's financial capability to carry out all phases of the proposed development;

We will forward this to you as soon as it's available.

e. Evidence of state and federal approvals, licenses or permits required by law or the status of applications therefore;

None required other than City Building Permit and State Fire Marshal

f. Price range of houses that will be built in the subdivision; *N/A*

g. Traffic impact analysis; *N/A*

h. High intensity soil survey, if required by the planning authority; *N/A*

i. Evidence of technical capacity to undertake the development;

Architect has designed numerous buildings through out the city of Portland

j. Types and estimated quantities of solid waste to be generated by the development;

Solid waste disposal will be by the current hotel vendor.

k. Construction plan outlining the anticipated sequence of construction of the major features of the project including without limitation roads, retention basins, sewer lines, seeding and other erosion and sedimentation control measures, and pollution abatement measures and also setting forth the approximate dates for commencement and completion of the project;

We would address these items as directed by staff. We intend to begin construction within 6 months of planning board approval. Duration of construction will be approximately 12 months

l. A narrative and a plan showing all proposed buffer strips, their dimensions, and maintenance plans and responsibilities; and

No buffer strips are proposed

m. A description of any wetlands, wildlife and fisheries habitats, archaeological sites or unusual natural areas located on or near the project site and a description of the methods that will be used to protect such areas. ***None***

n. Where submission drawings are available in electronic form; the applicant shall submit any available electronic CADD.DXF files with final plans. ***We will submit CADD drawings when directed by staff.***

Site Requirements:

(1) A standard boundary survey prepared by a registered land surveyor at a scale of not less than one (1) inch to one hundred (100) feet and shall set forth:

a. Name and address of the applicant and name of the proposed development;

b. Scale and north points;

c. Boundaries of the site;

d. Total land area of the site;

e. Topography, showing pre-development grade on the islands or existing and proposed contours at intervals of not more than two (2) feet or, in the case of a minor site plan, at intervals determined by the public works authority to be sufficient to properly evaluate existing and proposed drainage patterns and systems;

See survey plans

(2) Plans and maps prepared by competent professionals, based upon the boundary survey, including the following

a. Existing soil conditions; ***See attached geotechnical report.***

b. Location of watercourses, wetlands, rock outcroppings and wooded areas within the project site, and the nature, width and location of proposed easements, rights-of-way, culverts, catch basins or other means of channeling surface water within the development and over adjacent properties, and all proposed buffer strips;

Drainage will be by roof drains. There are no proposed buffer strips.

c. Location, ground floor area and grade elevations of building and other structures existing and the location, ground floor area and grade of any proposed buildings and structures, and the elevation drawings of exterior facades, and materials to be used;
See attached floor and building elevations
d. Approximate location of buildings or other structures on parcels abutting the site;
These are noted on attached survey
e. Location of on-site solid waste receptacles, public utilities, water and sewer mains, culverts, drains, existing and proposed; showing size and direction of flows;
Utilities are noted on attached survey and site plan.
f. Location, dimensions and ownership of easements, public or private rights-of-way, both existing and proposed; ***See attached survey.***
g. Location and dimensions of on-site pedestrian and vehicular accesses, parking areas, loading and unloading facilities, designs of ingress and egress of vehicles to and from the site onto public streets, and curb and sidewalk lines;
There is no vehicular access. Pedestrian access is shown on site plan.
h. Landscape plan showing location, type, quantity and approximate size of plantings, areas of existing vegetation to be preserved, preservation measures to be employed, and details of planting and preservation specifications;
Street trees will be as directed by Jeff Tarling
I. Location and dimensions of all fencing and screening;
None proposed
j. Location and intensity of outdoor lighting system;
Lighting will highlight the building itself (downlighting) as well as provide ample coverage for pedestrian entries to building. The scheme is being designed by a lighting professional and will be provided in due course.
k. Location of fire hydrants, existing and proposed;
There are two hydrants across from the site on Fore Street, one at the corner of Fore and Cross and one at the corner of Fore and Union St.
l. If a site falls within or in proximity to an area shown on the United States Department of the Interior National Wetlands Inventory or within or in proximity to an area indicating hydric soils as shown on the Soil Conservation Service Soil Survey of Cumberland County or shows other evidence of the existence of wetlands as defined by the Natural Resources Protection Act and based on the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, a copy of which is on file in the department of planning and urban development, a delineation of wetlands boundaries prepared by a qualified professional shall be included on the plan or a written statement from a qualified professional that no wetlands exist on the site shall be submitted with the site plan. Development activities requiring written permits from federal or state agencies shall be submitted to the building authority prior to construction; ***N/A***
m. Location of test pits and test borings;
Two borings were done within the area of the proposed addition.
n. Location and details of all temporary and permanent erosion and sedimentation control measures;
There is no permanent erosion or sediment control. A temporary plan will be developed as directed by staff and public works.
o. Size and location of all on-site storage containers for recyclable materials for any commercial or industrial property.
None proposed

(3) In the case of a change of use of an existing building, the planning authority or the board may waive required submissions as to the exterior of the building or to the lot if there are no exterior or outside changes proposed or required. ***N/A***

(c) *Written statements.* All site plans shall be accompanied by a written statement by the applicant that shall set forth the names and addresses of all owners of the parcels proposed to be developed and the estimated cost of the development. The applicant shall also provide written statements containing the following: ***See cover letter***

(1) A description of the proposed uses to be located on the site, including quantity and type of residential units,
This item has been covered in this letter. Please advise as to additional information required

(2) The total land area of the site and the total floor area and ground coverage of each proposed building and
This item has been covered in this letter. Please advise as to additional information required.

(3) General summary of existing and proposed easements or other burdens now existing or to be placed on the property;
See survey for existing easements. There are no proposed easements.

(4) The types and estimated quantities of solid waste to be generated by the development;

(5) Evidence of the availability of off-site facilities including sewer, water and streets;
Water Capacity Letter and Sewer Capacity letters to follow.

(6) A narrative describing the existing surface drainage on the site and a storm water management plan indicating measures which will be taken to control surface water runoff;
Runoff from the building will be directed with internal drains

(7) A construction plan outlining the anticipated sequence of construction of the major aspects of the proposed project, including without limitation roads, retention basins, sewer lines, seeding and other erosion control measures, and pollution abatement measures, and also setting forth the approximate dates for commencement and completion of the project;
No phasing projected project completion 12 months.

(8) A list of all state and federal regulatory approvals to which the development may be subject, the status of any pending applications, and the anticipated time frame for obtaining such permits or that a determination of no jurisdiction from the agency will be requested;
None

(9) Evidence of financial and technical capacity to undertake and complete the development including, but not limited to, a letter from a responsible financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved, if requested to do so;
See Attached

10) Evidence of the applicant's title, right, or interest in the property, including without limitation deeds, leases, purchase options or any other documentation;
Title, deeds to follow.

(11) A narrative describing any unusual natural areas, wildlife and fisheries habitats, or archaeological sites located on or near the project site and a description of the methods that will be used to protect such areas or sites; ***None***

(12) Where submission drawings are available in electronic form, the applicant shall submit any available electronic CADD.DXF files with final plans.

(13) All new commercial property and industrial development shall include a narrative description of the estimated amount and type of recyclable material generated on-site; the location, size and type of containers providing outdoor storage of recyclable materials; the manner and methods of timely removal of recyclable materials generated on-site; and the screening and landscaping proposed to provide adequate buffering between the stored materials and remainder of site and neighboring properties. The applicant may provide any other information detailing its plan to address the temporary storage and timely removal of recyclables. ***We will forward this information.***

Sincerely,

David Lloyd
Architect

Attached:

Project Narrative, Including Status of Site Plan Review Items
Parking Analysis
Geotechnical Report
Fire Response with Maps
Code Analysis
Drawings:
Title Survey - 1 0f 2 Rev. 11-28-05
Title Survey - 2 0f 2 Rev. 05-15-07
Exhibit (Spot grades, Boring locations and geometrics) 05-02-07
Building Cover Sheet 5-23-07
SD-1 Site Plan 5-23-07
A0-1 Elevations 5-23-07
A0-2 Elevations 5-23-07
A0-3 Elevations 5-23-07
A Streetscape 5-23-07
Letter of Compliance with Downtown Urban Design Guideline for B-3 Zone

Site Plan Application

Department of Planning and Development
Portland Planning Board

Address of Proposed Development: 468-470 Fore Street **Zone:** B-3

Project Name: Portland Harbor Hotel Addition

Existing Building Size: 8,502 **sq. ft.**	**Proposed Building Size:** 8,120 **sq. ft.**
Existing Acreage of Site: 20,430 **sq. ft.**	**Proposed Acreage of Site:** 20,430 **sq. ft.**

Tax Assessor's Chart, Block & Lot: Chart# 38 Block # F Lot# 8	**Property Owners Mailing address:** 468 Fore Street Realty, LLC 261 Commercial Street Portland, ME 04101	**Telephone #:** (207) 772-2992 **Cell Phone #:** (207) 332-1459
Consultant/Agent Contact Name and mailing address, Telephone # and Cell Phone # : David Lloyd Archetype, PA 48 Union Wharf Portland, ME 04101 (207) 772-6022 (207) 831-8627	**Applicant's Name/Mailing Address:** 468 Fore Street Realty, LLC 261 Commercial Street Portland, ME 04101	**Telephone #:** (207) 772-2992 **Cell Phone #:** (207) 332-1459

Fee For Service Deposit (all applications) __X__ **($200.00)**

Proposed Development (check all that apply)

___ New Building _X_ Building Addition _X_ Change of Use _X_ Residential ___ Office ___ Retail
___ Manufacturing ___ Warehouse/Distribution ___ Parking lot
___ Subdivision ($500.00) + amount of lots____ ($25.00 per lot) $_____ + major site plan fee if applicable
___ Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___ Traffic Movement ($1,000.00) ___ Storm water Quality ($250.00)
___ Section 14-403 Review ($400.00 + $25.00 per lot)
___ Other_____

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
MAY 31 2007
RECEIVED
DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME

Major Development (more than 10,000 sq. ft.)

_X_ Under 50,000 sq. ft. ($500.00)
___ 50,000 - 100,000 sq. ft. ($1,000.00)
___ Parking Lots over 100 spaces ($1,000.00)
___ 100,000 - 200,000 sq. ft. ($2,000.00)
___ 200,000 - 300,000 sq. ft. ($3,000.00)
___ Over 300,000 sq. ft. ($5,000.00)
___ After-the-fact Review ($1,000.00 + applicable application fee)

~ Please see next page ~

Minor Site Plan Review

___ Less than 10,000 sq. ft. ($400.00)

___ After-the-fact Review ($1,000.00 + applicable application fee)

Plan Amendments

___ Planning Staff Review ($250.00)

___ Planning Board Review ($500.00)

Who billing will be sent to:

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

Submittals shall include (7) separate **folded** packets of the following:

a. copy of application
b. cover letter stating the nature of the project
c. site plan containing the information found in the attached sample plans checklist
d. 1 set of 11x17 plans

Section 14-522 of the Zoning Ordinance outlines the process which is available on our web site: **portlandmaine.gov**

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit

This application is for site review only; a Building Permit application and associated fees will be required prior to construction.

Signature of Applicant::	**Date:** 5/23/7

Fore St

From: Marge Schmuckal
To: Molly Casto
Date: 7/13/2007 10:41:51 AM
Subject: Re: question- floor plans

There are no written guidelines that I am aware of. However, I would need enough labeling and dimensionaling to sufficiently know what uses are being proposed within the structures.
Thanks,
Marge

>>> Molly Casto 7/13/2007 10:39:40 AM >>>
Hey Marge-
How detailed are the floor plans that we typically request from applicants. For Fore Street (Harbor Hotel) do they need to show exactly what use will go in each space? How general can it be? Are there any written guidelines anywhere?

thanks- have a great weekend
Molly

Molly Casto
Planner
City of Portland
207-874-8901
MPC@portlandmaine.gov

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657 6910
FAX: 207 657 6912
E-Mail:mailbox@gorrillpalmer.com

August 21, 2007

Mr. David Lloyd
Archetype, P.A.
48 Union Wharf
Portland, ME 04101

RE: Traffic and Parking Impacts
Portland Harbor Hotel Expansion
468 - 470 Fore Street, Portland

Dear David:

Gorrill-Palmer Consulting Engineers Inc. completed a review of the traffic and parking impacts for the proposed expansion to the Portland Harbor Hotel on Fore Street in Portland. The site is currently occupied by the Portland Harbor Hotel, the Akari Hair Salon and other retail and restaurant uses. The expansion of the hotel will include the conversion of 470 Fore Street from retail/restaurant uses to storage on the basement level, retail on the ground level, hotel conference space on the first floor and office space on the second floor. Also, an addition will be built which will connect the existing hotel with 470 Fore Street. This addition will include retail on the ground level, hotel conference space on the first floor, and guest rooms on the second and third floors, with a spa/fitness center for hotel guests located on the basement level.

The Portland Harbor Hotel had previously received site plan approval for 60 PM peak hour trip ends, based on the Jack Murphy Traffic Impact Study dated March 17, 1998. Our office utilized the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 7th Edition in order to determine the additional trips for the hotel expansion. ITE Land Use Code (LUC) 310 – Hotel, defines hotels as "places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities and/or other retail and service shops." The conference facilities are intended for hotel guest use and are not anticipated to generate additional traffic. The following table outlines the trip generation for each use within the complex:

Trip Generation Summary for Portland Harbor Hotel Expansion

Land Use Code	Weekday	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
LUC 310: Hotel (106 guest rooms)	866	55	65	76
LUC 710: General Office (2,000 sf)	22	3	8	1
LUC 814: Specialty Retail (3,780 sf)	89	14	10	7
Trips Generated	**977**	**72**	**83**	**84**
Less Previously Permitted Trips	---	---	**-60**	---
Increase	---	---	**23**	---

Based on this level of trip generation, the expansion of the Portland Harbor Hotel does not require a traffic permit from the Maine Department of Transportation. (A MaineDOT traffic movement permit is required for any development generating over 100 trip ends in a peak hour.) The increase in trips is not anticipated to have a significant impact on the operations at either the site drive or the nearby intersections.

Parking for the Hotel is available on site. Within the parking structure and small surface lot, there are 218 available parking spaces. The on-site parking is shared between the Portland Harbor Hotel, 470 Fore Street and the Memic Building. The Memic Building requires the use of 120 parking spaces, leaving 98 spaces available for the Hotel use. Based on a memo from Marge Schmuckal, Zoning Administrator, dated July 3, 2007, only the area within the new structure needs to meet the City parking requirements; the re-use of the building at 470 Fore Street does not need to meet the parking requirements. The following table outlines the parking requirements for the expansion.

Parking Requirement for Portland Harbor Hotel Expansion

Land Use	Zoning Ordinance Requirements	Parking Spaces Required
Hotel (106 guest rooms)	1 space per 4 rooms	27
Specialty Retail (2,000 sf in new structure)	1 space per 200 s.f. over 2,000 s.f. (1st floor)	0
Total		**27**

Based on City of Portland ordinance requirements, the expansion of the Portland Harbor Hotel will require a total of 27 parking spaces. There is adequate capacity within the existing parking structure to accommodate the expansion of the Hotel, since only 120 of the existing 218 parking spaces are dedicated to Memic.

It is the opinion of Gorrill-Palmer Consulting Engineers Inc. that the expansion of the Portland Harbor Hotel can be accommodated by the existing roadway network and parking facilities.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Thomas L. Gorrill, P.E., PTOE
President

Enclosures

TLG/jlw/JN1935/Lloyd08-21-07.doc

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date: August 20, 2007

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Hotel
Land Use Code (LUC) 310

Numer of Rooms: 106

Trip Ends Based on Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	T = 8.95 (X) - 373.16	576	50%	50%	288	288
AM Peak Adjacent Street	Ln(T) = 1.24 Ln(X) - 2.00	44	60%	40%	26	18
PM Peak Adjacent Street	---	---	55%	45%	---	---
AM Peak hour of Generator	Ln(T) = 0.87 Ln(X) + 0.02	59	55%	45%	32	27
PM Peak Hour of Generator	Ln(T) = 1.00 Ln(X) - 0.58	59	60%	40%	35	24
Saturday	T = 9.62 (X) - 294.56	725	50%	50%	363	362
Saturday Peak Hour of Gen.	T = 0.69 (X) + 4.32	77	55%	45%	42	35

* Percentages rounded to nearest 5%

Trip Ends Based on Average Rate

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	T = 8.17 (X)	866	50%	50%	433	433
AM Peak Adjacent Street	T = 0.56 (X)	59	60%	40%	36	23
PM Peak Adjacent Street	T = 0.59 (X)	63	55%	45%	34	29
AM Peak Hour of Generator	T = 0.52 (X)	55	55%	45%	30	25
PM Peak Hour of Generator	**T = 0.61 (X)**	**65**	**60%**	**40%**	**39**	**26**
Saturday	T = 8.19 (X)	868	50%	50%	434	434
Saturday Peak Hour of Gen.	T = 0.72 (X)	76	55%	45%	42	34

* Percentages rounded to nearest 5%

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date: August 20, 2007

Gorrill-Palmer Consulting Engineers, Inc
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

General Office Building
Land Use Code (LUC) 710

Gross Floor Area 2,000

Trip Ends Based on Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	Ln (T) = 0.77 Ln (X) + 3.65	66	78	50%	50%	33	33	0.80
AM Peak Hour	Ln (T) = 0.80 Ln (X) + 1.55	8	217	90%	10%	7	1	0.83
PM Peak Hour	T = 1.12 (X) + 78.81	81	235	15%	85%	12	69	0.82
Saturday	T = 2.14 (X) + 18.47	23	17	50%	50%	12	11	0.66
Peak Hour of Generator	Ln (T) = 0.81 Ln (X) - 0.12	2	10	55%	45%	1	1	0.59

* Percentages rounded to nearest 5%

Trip Ends Based on Average Rate

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 11.01 (X)	22	78	50%	50%	11	11	---
AM Peak Hour	T = 1.55 (X)	3	217	90%	10%	3	0	---
PM Peak Hour	T = 1.49 (X)	3	235	15%	85%	0	3	---
Saturday	T = 2.37 (X)	5	17	50%	50%	3	2	---
Saturday Peak Hour of Gen.	T = 0.41 (X)	1	10	50%	50%	1	0	---

* Percentages rounded to nearest 5%

PM Peak Hour:	T = 1.49/1.55 (AM Peak)	8		15%	85%	1	7	0.82

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date. 8/20/2007

Gorrill-Palmer Consulting Engineers, Inc.
P.O Box 1237
15 Shaker Road
Gray, Maine 04039

Specialty Retail Center
Land Use Code (LUC) 814

Gross Floor Area (ft^2): 3,780

Average Rate

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 44.32 (X)	168	4	50%	50%	84	84	---
Peak Hour of Adjacent Street Traffic 7-9 AM**	---	---	---	---	---	---	---	---
Peak Hour of Adjacent Street Traffic 4-6 PM	T = 2.71 (X)	10	5	45%	55%	5	5	---
AM Peak Hour of Generator	T = 6.84 (X)	26	4	50%	50%	13	13	---
PM Peak Hour of Generator	T = 5.02 (X)	19	3	55%	45%	10	9	---
Saturday	T = 42.04 (X)	159	3	50%	50%	80	79	---
Saturday Peak Hour of Gen.***	---	---	---	---	---	---	---	---
AM Peak of Adjacent Street 7-9 AM***	T = 0.275 (PM Peak Hour)	3		60%	40%	2	1	
Saturday Peak Hour***	T = 1.325 (PM Peak Hour)	13		50%	50%	7	6	

**Based on ratio of AM/PM traffic for LUC 820, Shopping Center
***Saturday Peak Hour comes from a ratio of PM to Saturday trip rates from LUC 820 - Shopping Center

* Percentages rounded to nearest 5%

Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 42.78 (X) + 37.66	199	4	50%	50%	100	99	0.69
Peak Hour of Adjacent Street Traffic 7-9 AM	---	---	---	---	---	---	---	---
Peak Hour of Adjacent Street Traffic 4-6 PM	T = 2.40 (X) + 21.48	31	5	45%	55%	14	17	0.98
AM Peak Hour of Generator	T = 4.91 (X) + 115.59	134	4	50%	50%	67	67	0.90
PM Peak Hour of Generator	---	---	---	---	---	---	---	---
Saturday	---	---	---	---	---	---	---	---
Saturday Peak Hour of Gen.	---	---	---	---	---	---	---	---
AM Peak of Adjacent Street 7-9 AM***	T = 0.275 (PM Peak Hour)	9		60%	40%	5	4	
Saturday Peak Hour***	T = 1.325 (PM Peak Hour)	41		50%	50%	21	20	

* Percentages rounded to nearest 5%
(---) Not Given

**Based on ratio of AM/PM traffic for LUC 820, Shopping Center
***Saturday Peak Hour comes from a ratio of PM to Saturday trip rates from LUC 820 - Shopping Center

August 24, 2007

Molly Casto
Planning Division
City of Portland
389 Congress Street
Portland, ME 04101

RE: Site Plan Application for Addition to Portland Harbor Hotel
468 Fore Street & Renovation to 470 Fore Street.

The following are the occupant loads, per floor, for the uses proposed in the addition and renovation presented with this application:

- Lower Floor Level – Fitness Area (1261 sq.ft. = 26 people), Retail Storage (1192 sq.ft. = 4 people)
- Ground Floor Level – Retail Annex (1345 sq.ft. = 45 people), Retail Renovation (1610 sq.ft. = 54 people)
- First Floor Level – Conference Room (1209 sq.ft. = 81 people), Hotel Use (1561 sq.ft. = 8 people)
- Second Floor Level – Hotel Use (1650 sq.ft. = 9 people), Office (1389 sq.ft. = 14 people)
- Third Floor Level – Hotel Use (1650 sq.ft. = 9 people).

These calculations should be considered when analyzing the parking and traffic requirements. The numbers are reflected on the 11x17 set of drawings, but are absent from the full size 24x36 drawings.

Thank you,
Kevin Gough
Archetype Architects

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

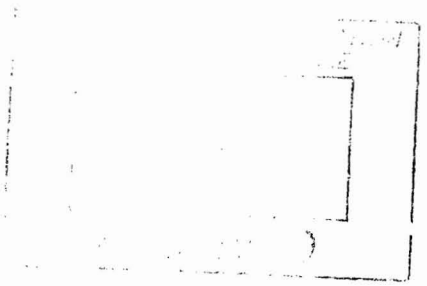
PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

August 21, 2007

Mr. David Lloyd
Archetype, P.A.
48 Union Wharf
Portland, ME 04101

RE: Traffic and Parking Impacts
Portland Harbor Hotel Expansion
468 - 470 Fore Street, Portland



Dear David:

Gorrill-Palmer Consulting Engineers Inc. completed a review of the traffic and parking impacts for the proposed expansion to the Portland Harbor Hotel on Fore Street in Portland. The site is currently occupied by the Portland Harbor Hotel, the Akari Hair Salon and other retail and restaurant uses. The expansion of the hotel will include the conversion of 470 Fore Street from retail/restaurant uses to storage on the basement level, retail on the ground level, hotel conference space on the first floor and office space on the second floor. Also, an addition will be built which will connect the existing hotel with 470 Fore Street. This addition will include retail on the ground level, hotel conference space on the first floor, and guest rooms on the second and third floors, with a spa/fitness center for hotel guests located on the basement level.

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Trip Generation Summary for Portland Harbor Hotel Expansion

Land Use Code	Weekday	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
LUC 310: Hotel (106 guest rooms) ÷ 4 = 27	866	55	65	76
LUC 710: General Office (2,000 sf) ÷ 400 = 5	22	3	8	1
LUC 814: Specialty Retail (3,780 sf) 1780 ÷ 200 = 8.9 ≈ 9	89	14	10	7
Trips Generated	**977**	**72**	**83**	**84**
Less Previously Permitted Trips	**---**	**---**	**-60**	**---**
Increase	**---**	**---**	**23**	**---**

27
5
9
51

Based on this level of trip generation, the expansion of the Portland Harbor Hotel does not require a traffic permit from the Maine Department of Transportation. (A MaineDOT traffic movement permit is required for any development generating over 100 trip ends in a peak hour.) The increase in trips is not anticipated to have a significant impact on the operations at either the site drive or the nearby intersections.

Parking for the Hotel is available on site. Within the parking structure and small surface lot, there are 218 available parking spaces. The on-site parking is shared between the Portland Harbor Hotel, 470 Fore Street and the Memic Building. The Memic Building requires the use of 120 parking spaces, leaving 98 spaces available for the Hotel use. Based on a memo from Marge Schmuckal, Zoning Administrator, dated July 3, 2007, only the area within the new structure needs to meet the City parking requirements; the re-use of the building at 470 Fore Street does not need to meet the parking requirements. The following table outlines the parking requirements for the expansion.

Parking Requirement for Portland Harbor Hotel Expansion

Land Use	Zoning Ordinance Requirements	Parking Spaces Required
Hotel (106 guest rooms)	1 space per 4 rooms	26.5 27
Specialty Retail (2,000 sf in new structure)	1 space per 200 s.f. over 2,000 s.f. (1st floor)	0
Total		**27**

Based on City of Portland ordinance requirements, the expansion of the Portland Harbor Hotel will require a total of 27 parking spaces. There is adequate capacity within the existing parking structure to accommodate the expansion of the Hotel, since only 120 of the existing 218 parking spaces are dedicated to Memic.

It is the opinion of Gorrill-Palmer Consulting Engineers Inc. that the expansion of the Portland Harbor Hotel can be accommodated by the existing roadway network and parking facilities.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Thomas L. Gorrill, P.E., PTOE
President

Enclosures

TLG/jlw/JN1935/Lloyd08-21-07.doc

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date: August 20, 2007

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Hotel
Land Use Code (LUC) 310

Numer of Rooms: 106

Trip Ends Based on Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	T = 8.95 (X) - 373.16	576	50%	50%	288	288
AM Peak Adjacent Street	Ln(T) = 1.24 Ln(X) - 2.00	44	60%	40%	26	18
PM Peak Adjacent Street	---	---	55%	45%	---	---
AM Peak hour of Generator	Ln(T) = 0.87 Ln(X) + 0.02	59	55%	45%	32	27
PM Peak Hour of Generator	Ln(T) = 1.00 Ln(X) - 0.58	59	60%	40%	35	24
Saturday	T = 9.62 (X) - 294.56	725	50%	50%	363	362
Saturday Peak Hour of Gen.	T = 0.69 (X) + 4.32	77	55%	45%	42	35

* Percentages rounded to nearest 5%

Trip Ends Based on Average Rate

Time Period	ITE Trip Rate	Trip Ends	Directional Split *		Directional Distribution	
			IN	OUT	IN	OUT
Weekday	T = 8.17 (X)	866	50%	50%	433	433
AM Peak Adjacent Street	T = 0.56 (X)	59	60%	40%	36	23
PM Peak Adjacent Street	T = 0.59 (X)	63	55%	45%	34	29
AM Peak Hour of Generator	T = 0.52 (X)	55	55%	45%	30	25
PM Peak Hour of Generator	**T = 0.61 (X)**	**65**	**60%**	**40%**	**39**	**26**
Saturday	T = 8.19 (X)	868	50%	50%	434	434
Saturday Peak Hour of Gen.	T = 0.72 (X)	76	55%	45%	42	34

* Percentages rounded to nearest 5%

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date: August 20, 2007

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

General Office Building
Land Use Code (LUC) 710

Gross Floor Area 2,000

Trip Ends Based on Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	Ln (T) = 0.77 Ln (X) + 3.65	66	78	50%	50%	33	33	0.80
AM Peak Hour	Ln (T) = 0.80 Ln (X) + 1.55	8	217	90%	10%	7	1	0.83
PM Peak Hour	T = 1.12 (X) + 78.81	81	235	15%	85%	12	69	0.82
Saturday	T = 2.14 (X) + 18.47	23	17	50%	50%	12	11	0.66
Peak Hour of Generator	Ln (T) = 0.81 Ln (X) - 0.12	2	10	55%	45%	1	1	0.59

* Percentages rounded to nearest 5%

Trip Ends Based on Average Rate

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 11.01 (X)	22	78	50%	50%	11	11	---
AM Peak Hour	T = 1.55 (X)	3	217	90%	10%	3	0	---
PM Peak Hour	T = 1.49 (X)	3	235	15%	85%	0	3	---
Saturday	T = 2.37 (X)	5	17	50%	50%	3	2	---
Saturday Peak Hour of Gen.	T = 0.41 (X)	1	10	50%	50%	1	0	---

* Percentages rounded to nearest 5%

PM Peak Hour:	T = 1.49/1.55 (AM Peak)	8		15%	85%	1	7	0.82

JN: 1935
Project Description: Harbor Hotel
Project Location: Portland
Date: 8/20/2007

Gorrill-Palmer Consulting Engineers, Inc.
P.O. Box 1237
15 Shaker Road
Gray, Maine 04039

Specialty Retail Center
Land Use Code (LUC) 814

Gross Floor Area (ft^2): 3,780

Average Rate

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 44.32 (X)	168	4	50%	50%	84	84	---
Peak Hour of Adjacent Street Traffic 7-9 AM**	---	---	---	---	---	---	---	---
Peak Hour of Adjacent Street Traffic 4-6 PM	T = 2.71 (X)	10	5	45%	55%	5	5	---
AM Peak Hour of Generator	T = 6.84 (X)	26	4	50%	50%	13	13	---
PM Peak Hour of Generator	T = 5.02 (X)	19	3	55%	45%	10	9	---
Saturday	T = 42.04 (X)	159	3	50%	50%	80	79	---
Saturday Peak Hour of Gen.***	---	---	---	---	---	---	---	---
AM Peak of Adjacent Street 7-9 AM***	T = 0.275 (PM Peak Hour)	3		60%	40%	2	1	
Saturday Peak Hour***	T = 1.325 (PM Peak Hour)	13		50%	50%	7	6	

**Based on ratio of AM/PM traffic for LUC 820, Shopping Center
***Saturday Peak Hour comes from a ratio of PM to Saturday trip rates from LUC 820 - Shopping Center

* Percentages rounded to nearest 5%

Fitted Curve Equation

Time Period	ITE Trip Rate	Trip Ends	Number of Studies	Directional Split * IN	Directional Split * OUT	Directional Distribution IN	Directional Distribution OUT	R^2
Weekday	T = 42.78 (X) + 37.66	199	4	50%	50%	100	99	0.69
Peak Hour of Adjacent Street Traffic 7-9 AM	---	---	---	---	---	---	---	---
Peak Hour of Adjacent Street Traffic 4-6 PM	T = 2.40 (X) + 21.48	31	5	45%	55%	14	17	0.98
AM Peak Hour of Generator	T = 4.91 (X) + 115.59	134	4	50%	50%	67	67	0.90
PM Peak Hour of Generator	---	---	---	---	---	---	---	---
Saturday	---	---	---	---	---	---	---	---
Saturday Peak Hour of Gen.	---	---	---	---	---	---	---	---
AM Peak of Adjacent Street 7-9 AM***	T = 0.275 (PM Peak Hour)	9		60%	40%	5	4	
Saturday Peak Hour***	T = 1.325 (PM Peak Hour)	41		50%	50%	21	20	

* Percentages rounded to nearest 5%
(---) Not Given

**Based on ratio of AM/PM traffic for LUC 820, Shopping Center
***Saturday Peak Hour comes from a ratio of PM to Saturday trip rates from LUC 820 - Shopping Center

From: Molly Casto
To: Kevin Gough
Date: 8/23/2007 4:00:17 PM
Subject: RE: 468-470 Fore Street Planning Submission

Kevin-

Thanks for your revised traffic study. I forwarded the information on to our Traffic Engineers in case you hadn't done so already.

After my initial review, my concern is that the traffic analysis does not incorporate the proposed 60-80 person meeting space. At the Planning Board Workshop in June, the Board specifically requested that the meeting facility be considered and incorporated into traffic analyses. I recognize that, in the proposal, the space is intended for hotel guest use only, however, there is no way for the City to ensure that this will always remain the case. The City must factor the proposed use into our analysis of traffic and parking.

Please have Gorrill-Palmer submit a revised traffic analysis incorporating the meeting area that can be compared to the analysis you have already submitted.

If you have any questions, please get in touch.

Thank you-
Molly

Molly Casto, Planner
Portland Planning Division
389 Congress Street
Portland, Maine 04101-3509
207-874-8901
MPC@portlandmaine.gov

>>> "Kevin Gough" <gough@archetypepa.com> 8/22/2007 2:57:31 PM >>>
Molly,
Attached please find the traffic study for the re-submission. This study also includes an analysis of parking for the project. Having read through this, it seems to me to have addressed all of the concerns from the workshop. I trust this will be sufficient.

Thank you, and do expect the balance of our re-submission in a short while.

Kevin

-----Original Message-----
From: Molly Casto [mailto:MPC@portlandmaine.gov]
Sent: Tuesday, August 21, 2007 8:56 AM
To: gough@archetypepa.com
Subject: Re: 468-470 Fore Street Planning Submission

Hi Kevin-

For written submittals (e.g.- fire department checklist, letters), simply submit your updates to the previous materials. For plans, please include everything in a complete updated plan set.

Please submit eight full size plan sets and one 11 x 17 set.

GP Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

August 27, 2007

Mr. David Lloyd
Archetype, P.A.
48 Union Wharf
Portland, ME 04101

RE: Traffic and Parking Impacts
Portland Harbor Hotel Expansion
468 - 470 Fore Street, Portland

Dear David:

Gorrill-Palmer Consulting Engineers Inc. is please to submit this response to Molly Casto's comments regarding the traffic and parking impacts for the proposed expansion to the Portland Harbor Hotel on Fore Street in Portland. As stated in our analysis dated August 21, 2007, our office utilized the Institute of Transportation Engineers (ITE) publication *Trip Generation*, 7th Edition in order to determine the additional trips for the hotel expansion. ITE Land Use Code (LUC) 310 – Hotel, defines hotels as "places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities and/or other retail and service shops." Based on information provided by your office, it is our understanding that the conference facilities are intended for hotel guest use and are not anticipated to generate additional traffic. For these reasons, we have not included any additional trips for the conference rooms.

It should also be noted that our forecast of 23 additional PM peak hour trip ends is conservative, in that we have not taken any credit for the uses in the existing 470 Fore Street, such as the hair salon and other uses in the building. Overall, the increase in trips is not anticipated to have a significant impact on the operations at either the site drive or the nearby intersections.

Should you have any questions, or require additional information, please contact us.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Thomas L. Gorrill, P.E., PTOE
President

TLG/jlw/JN1935/Lloyd08-27-07.doc

Bartlett Design
LIGHTING & ELECTRICAL ENGINEERING
942 WASHINGTON STREET BATH, MAINE 04530
TEL (207) 443-5447 FAX (207) 443-5560
e-mail: bartdes@blazenetme.net

August 21, 2007

Portland Harbor Hotel Annex, 468-470 Fore Street
Portland, Maine

Lighting Fixtures

There are two different exterior lighting fixtures types, Type S1 and Type S2. Type S1 is a surface mounted cylinder light that has a clear glass lens and utilizes a 100-watt metal halide lamp. This fixture will be mounted to the ceiling structure of the entrance alcove leading into Corridor 201 at approximately 19-1/2 feet above the ground. Type S2 is a decorative surface mounted fixture that utilizes a 75-watt Par 38 lamp. This fixture will be mounted to the ceiling structure of the entrance alcove leading into Retail Space 202 and the entrance alcove located to the left at approximately 12-1/2 feet above the ground. Also provided with this submission are manufacturer's catalog sheets for the Types S1 and S2 lights for review.

Illuminance Calculations

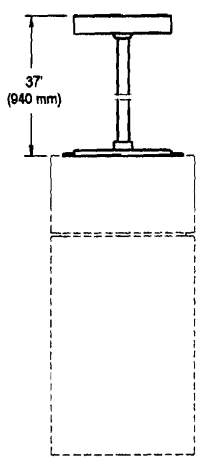
Lighting calculations have been performed to indicate the intensity of maintained illuminance levels. The Type S1 lights and Type S2 lights were entered into the calculation. The lighting at the taller entrance alcove is slightly higher. This is because the proposed fixture is extremely efficient and has very little light loss. The efficiency of the fixture also keeps the light focused so there is not excessive illumination beyond the alcove. The other alcoves are lit at a lower level. Very little light from these fixtures enters the street.

Conclusion

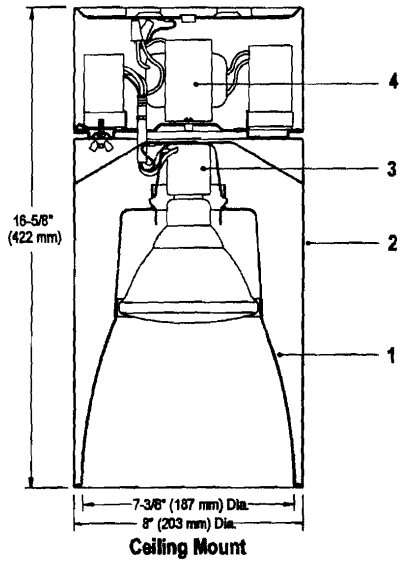
The proposed lighting is intended to provide a higher level of lighting than that of the general sidewalk. The lighting levels in the taller alcove are elevated even more to direct attention to the hotel entrance. The proposed lighting is focused and contained to the areas being illuminated.

Calculite® HID Surface Cylinder **C7CS-P38MH**

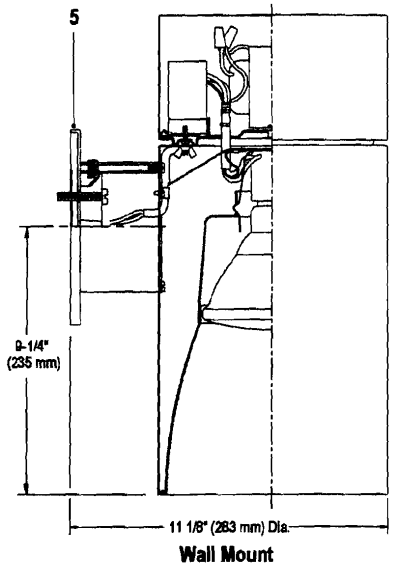
7" Aperture, PAR38 Ceramic Metal Halide Downlight



Stem Kit



Ceiling Mount



Wall Mount

Reflector Trim		
C7P38MH	**CL**	Specular Clear, Minimal Flange
	CCD	Comfort Clear Diffuse, Minimal Flange
	CCZ	Champagne Bronze, Minimal Flange

Cylinder Housing		Lamp		
Ceiling-Mount	**Wall-Mount**			
C7CS70MHE1	**C7CW70MHE1**	Electronic 120V	70W	PAR38 Ceramic MH
C7CS70MHE2	**C7CW70MHE2**	Electronic 277V	70W	PAR38 Ceramic MH
C7CS10MHE1	**C7CW10MHE1**	Electronic 120V	100W	PAR38 Ceramic MH
C7CS10MHE2	**C7CW10MHE2**	Electronic 277V	100W	PAR38 Ceramic MH
C7CS70MHU	**C7CW70MHU**	Magnetic 120V/277V	70W	PAR38 Ceramic MH
C7CS10MHU	**C7CW10MHU**	Magnetic 120V/277V	100W	PAR38 Ceramic MH

Features

1. **Reflector:** Low brightness with 45° cut-off to lamp and lamp image. Specular with minimal flange fits precisely into Cylinder housing.
2. **Cylinder Housing:** White painted seamless aluminum with groove designed to minimize visual appearance. Returned edge precisely seats reflector without visible hardware.
3. **Socket:** Medium base pulse rated socket with nickel plated screw shell. Special socket design In open rated fixtures accepts only open rated lamps. Snaps onto upper reflector for secure attachment without tools. Unitized construction assures proper lamp alignment to optics for consistent performance.
4. **Ballast:** Electronic or magnetic. Accessible for service and replacement.
5. **Back Plate:** Cast aluminum, suitable for mounting over 4" octagon outlet box.

Electrical

Electronic Ballast: 120V or 277V. Encased, high power factor, T.H.D. <15%, thermally and transient protected, RMI/RFI complies with FCC part 18 non-consumer limits, shut-down circuit at end of lamp life, sound rating "A", -5° F minimum starting temperature, Type 1 outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	0.67/0.28	78
100W MH	M90/M140	120/277	0.90/0.43	110

Magnetic Ballast: 120V/277V dual voltage, 60 Hz., core and coil, HX-HPF circuit type, high power factor, -20° F minimum starting temperature, Type 1 Outdoor rating.

Ballast	ANSI Code	Voltage	Max. Amps	Input Watts
70W MH	M98/M143	120/277	1.90/0.80	94
100W MH	M90/M140	120/277	2.40/1.10	125

Options and Accessories

C4CSW: Stem Kit: – White (45" Swivel, 37" long) Provide with 5/8" dia. Stem and 5 1/2" dia. Canopy. Self-aligning swivel provides max. 45° vertical tilting. Installs over 4" octagonal outlet box. Stem can be cut to length on site.

Auxiliary Lighting: Add suffix **A** to Cylinder Housing and Reflector Trim.

Labels

UL (Suitable For Wet Locations), CSA, I.B.E.W.

Job Information **Type:**

Job Name:

Cat. No.:

Lamp(s):

Notes:

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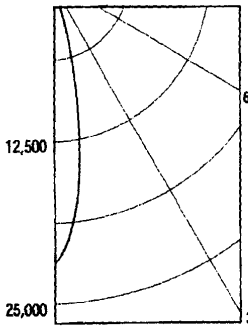
LIGHTOLIER®

Calculite® HID Surface Cylinder C7CS-P38MH

7" Aperture, PAR38 Ceramic Metal Halide Downlight

70W PAR38, FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 4800 LMS, ELECTRONIC AROMAT BALLAST CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	22077	
5	19279	1769
10	13483	
15	7146	2166
20	2784	
25	721	513
30	205	
35	85	64
40	29	
45	1	6
50	0	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	59
55	0
65	0
75	0
85	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	4446	92.65	98.46
0-40	4510	93.97	99.86
0-60	4516	94.1	100
0-90	4516	94.1	100
40-90	6	0.13	0.14
60-90	0	0	0
90-180	0	0	0
0-180	4516	94.1	100

Coefficients of Utilization

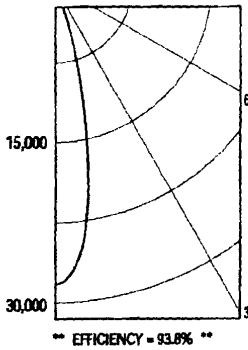
CEILING	80%				70%		50%		30%		
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	1.12	1.12	1.12	1.12	1.08	1.08	1.05	1.05	1.00	1.00	.94
1	1.09	1.07	1.06	1.05	1.06	1.03	1.02	1.00	.98	.97	.93
2	1.06	1.04	1.02	1.00	1.02	.99	.99	.96	.97	.94	.91
3	1.04	1.01	.98	.96	1.00	.96	.98	.94	.96	.93	.90
4	1.02	.98	.96	.94	.98	.93	.96	.92	.94	.91	.89
5	1.00	.96	.93	.91	.95	.91	.94	.90	.92	.89	.88
6	.99	.94	.91	.89	.94	.89	.93	.88	.92	.88	.87
7	.97	.92	.89	.87	.92	.87	.91	.87	.90	.86	.85
8	.95	.91	.88	.86	.90	.85	.89	.85	.89	.85	.84
9	.94	.89	.86	.84	.89	.84	.88	.84	.87	.84	.83
10	.92	.87	.85	.83	.87	.83	.87	.83	.86	.82	.82

LUMINAIRE INPUT WATTS = 78.0

** EFFICIENCY = 94.1% **
SC = .4

CERTIFIED TEST REPORT NO. 2419FR. DATE: JAN 26, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

100W PAR38, FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 6800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMENS
0	28361	
5	26181	2386
10	19254	
15	10393	3130
20	4124	
25	1080	763
30	291	
35	120	91
40	47	
45	5	11
50	0	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	231
55	0
65	0
75	0
85	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	6278	92.33	98.41
0-40	6369	93.67	99.83
0-60	6380	93.82	100
0-90	6380	93.82	100
40-90	10	0.16	0.17
60-90	0	0	0
90-180	0	0	0
0-180	6380	93.82	100

Coefficients of Utilization

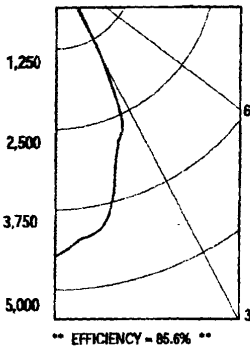
CEILING	80%				70%		50%		30%		
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	1.12	1.12	1.12	1.12	1.09	1.09	1.04	1.04	1.00	1.00	.94
1	1.09	1.07	1.06	1.04	1.05	1.03	1.01	1.00	.98	.97	.92
2	1.06	1.03	1.01	.99	1.02	.98	.99	.96	.96	.94	.91
3	1.04	1.00	.98	.96	.99	.95	.97	.94	.95	.92	.90
4	1.02	.98	.95	.93	.97	.92	.95	.91	.94	.91	.89
5	1.00	.96	.92	.90	.95	.90	.93	.89	.92	.89	.87
6	.98	.94	.91	.89	.93	.89	.92	.88	.91	.87	.86
7	.96	.92	.89	.87	.91	.86	.90	.86	.89	.86	.85
8	.95	.90	.87	.85	.89	.85	.89	.85	.88	.84	.83
9	.93	.88	.86	.84	.88	.84	.87	.83	.87	.83	.82
10	.92	.87	.84	.82	.87	.82	.86	.82	.86	.82	.81

LUMINAIRE INPUT WATTS = 110.0

** EFFICIENCY = 93.8% **
SC = .4

CERTIFIED TEST REPORT NO. 2421FR. DATE: JAN 21, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

70W PAR38, WIDE FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 4800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMS.
0	4860	
5	4540	437
10	4365	
15	4197	1180
20	3890	
25	3162	1498
30	2735	
35	1466	929
40	250	
45	42	65
50	0	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	2104
55	0
65	0
75	0
85	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	3115	64.9	75.81
0-40	4044	84.26	98.42
0-60	4109	85.61	100
0-90	4109	85.61	100
40-90	64	1.35	1.58
60-90	0	0	0
90-180	0	0	0
0-180	4109	85.61	100

Coefficients of Utilization

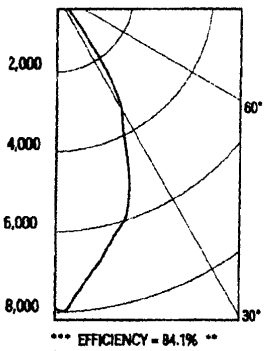
CEILING	80%				70%		50%		30%		
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	1.02	1.02	1.02	1.02	1.00	1.00	.95	.95	.91	.91	.86
1	.98	.96	.94	.93	.95	.91	.91	.89	.88	.86	.82
2	.94	.91	.88	.86	.90	.85	.87	.83	.85	.82	.79
3	.91	.87	.83	.81	.85	.80	.84	.79	.82	.78	.75
4	.88	.83	.79	.76	.82	.76	.80	.75	.78	.74	.72
5	.84	.79	.74	.72	.78	.71	.76	.71	.75	.70	.68
6	.81	.75	.71	.68	.74	.68	.73	.67	.72	.67	.66
7	.78	.71	.67	.64	.71	.64	.70	.64	.69	.63	.62
8	.75	.68	.64	.61	.67	.61	.67	.61	.66	.60	.59
9	.71	.65	.60	.58	.64	.58	.63	.57	.63	.57	.56
10	.69	.62	.57	.54	.61	.54	.61	.54	.60	.54	.53

LUMINAIRE INPUT WATTS = 78.0

** EFFICIENCY = 85.6% **
SC = .9

CERTIFIED TEST REPORT NO. 2420FR. DATE: JAN 26, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

100W PAR38, WIDE FLOOD, PHILIPS 3K MH LAMP, LUMEN RATING = 6800 LMS, ELECTRONIC AROMAT BALLAST, CL FINISH TRIM



ANGLE	MEAN CP	LUMS.
0	7868	
5	7495	709
10	6849	
15	6228	1761
20	5546	
25	4295	2032
30	3425	
35	1738	1130
40	296	
45	69	84
50	2	
55	0	0
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

LUMINANCE SUMMARY - CD. / SQ. M.

ANGLE	MEAN CD/SQ M
45	3439
55	0
65	0
75	0
85	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	4502	66.21	78.74
0-40	5632	82.83	98.51
0-60	5717	84.08	100
0-90	5717	84.08	100
40-90	84	1.25	1.49
60-90	0	0	0
90-180	0	0	0
0-180	5717	84.08	100

Coefficients of Utilization

CEILING	80%				70%		50%		30%		
WALL	70	50	30	10	50	10	50	10	50	10	0
RCR	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	1.00	1.00	1.00	1.00	.98	.98	.93	.93	.89	.89	.84
1	.97	.95	.93	.91	.93	.90	.89	.87	.86	.85	.81
2	.93	.90	.87	.85	.88	.84	.86	.82	.83	.81	.78
3	.90	.86	.82	.80	.84	.79	.83	.78	.81	.77	.75
4	.87	.82	.78	.76	.81	.75	.79	.74	.78	.74	.72
5	.83	.78	.74	.71	.77	.71	.76	.71	.75	.70	.68
6	.81	.75	.71	.68	.74	.68	.73	.68	.72	.67	.66
7	.77	.71	.68	.65	.71	.64	.70	.64	.69	.64	.63
8	.75	.68	.64	.62	.68	.61	.67	.61	.66	.61	.60
9	.71	.65	.61	.58	.65	.58	.64	.58	.63	.58	.57
10	.69	.62	.58	.56	.62	.56	.61	.55	.61	.55	.54

LUMINAIRE INPUT WATTS = 110.0

*** EFFICIENCY = 84.1% **
SC = .8

CERTIFIED TEST REPORT NO. 2422FR.
DATE: JAN 21, 2004
COMPUTED BY LSI PROGRAM **TEST-LITE**

Job Information **Type:**

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We reserve the right to change details of design, materials and finish.

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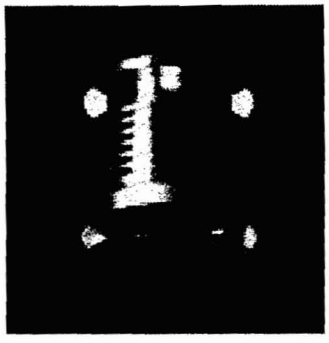
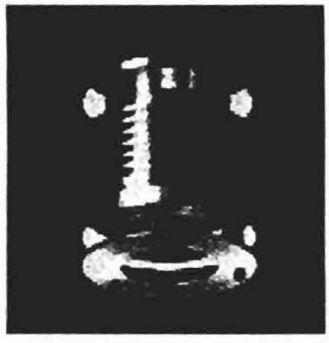
3

BARI 130

3.151





BARI 130
Ceiling Mounted Luminaire

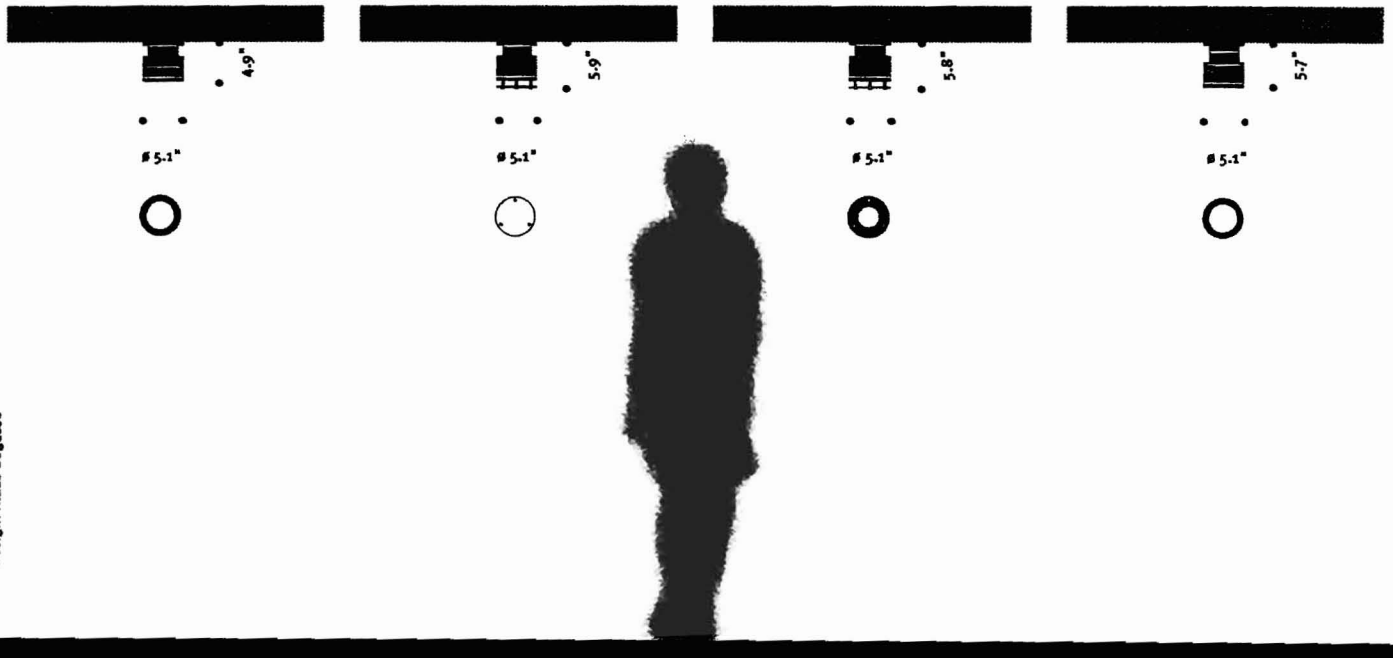
Precision machined cooling grooves and natural aluminum finish make the BARI family a perfect accent to contemporary architecture. Housing is machined from billet aluminum, then natural anodized. Standard housing has matching trim ring, while optional offset glass or aluminum disk adds a diffusing element, or lamp cut-off. Additional luminaire sizes are available, scaled to meet a variety of applications. Hardware is stainless steel. Optional low voltage model with perforated stainless steel insert and remote transformer is available. See technical data sheet for details.

Ⓤ Listed for Damp Locations

BARI 130 A
Ceiling Mounted Luminaire

Same as BARI 130 except luminaire includes extension housing to allow power connection when recessed junction box is not available. Extension housing is finished to match luminaire, and may be used with all three Bari 130 models shown. See technical sheet for details.

Model	Mounting	Lamp
BR130	Ceiling	75 / 50 Halogen
BR130G	Ceiling	75 / 50 Halogen
BR130M	Ceiling	75 / 50 Halogen
BR130A	Ceiling w/ extension	75 / 50 Halogen
BR130AG	Ceiling w/ extension	75 / 50 Halogen
BR130AM	Ceiling w/ extension	75 / 50 Halogen



Design: Klaus Begasse

BR130 BR130G BR130M BR130A

Phone: 864.487.3535 • Fax: 864.487.3175 • www.hessamerica.com
P.O. Box 28 • Gaffney, SC 29342-0028

Floodlights for 150W PAR-38 lamps

Type:
BEGA Product #: 7423
Project:
Voltage:
Color: Black
Options:
Modified:

Housing: One piece die cast aluminum with integral cooling vents.

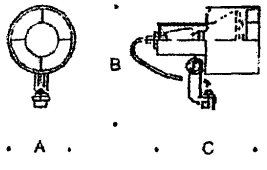
Mounting: Die cast aluminum swivel with positive stainless steel lock-up can be locked in a fixed position and allows for horizontal and vertical adjustment. Provided with a stainless steel nipple threaded ½" I.P.S. for direct attachment to cast boxes or a selection of mounting accessories.

Louver: Supplied with removable, die cast aluminum, "concentric ring" louver for shielding and lamp protection.

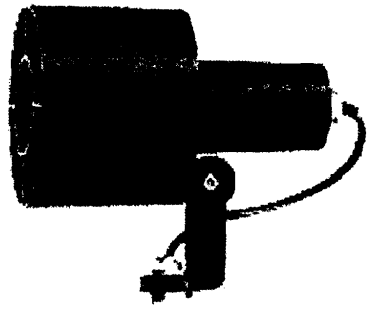
Electrical: Lampholder is porcelain medium base with nickle plated copper screw shell supplied with 200°C high temperature leads, rated 600V. Molded, one piece high temperature silicone rubber "boot" seals lamp base to housing.

Finish: These luminaires are available in five standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV); Eurocoat (URO). To specify, add appropriate suffix to catalog number. For complete description of BEGA finishing process, refer to technical information section at end of catalog. Custom colors supplied on special order.

U.L. listed, suitable for wet locations and any mounting orientation. Protection class: IP 55.



Die cast aluminum floodlight with stainless steel hardware. Fully adjustable 90° vertical, 360° horizontal rotation. Removable die cast aluminum concentric ring louver provided.
U.L. listed, suitable for wet locations. IP 55.
Color: Standard BEGA finishes.

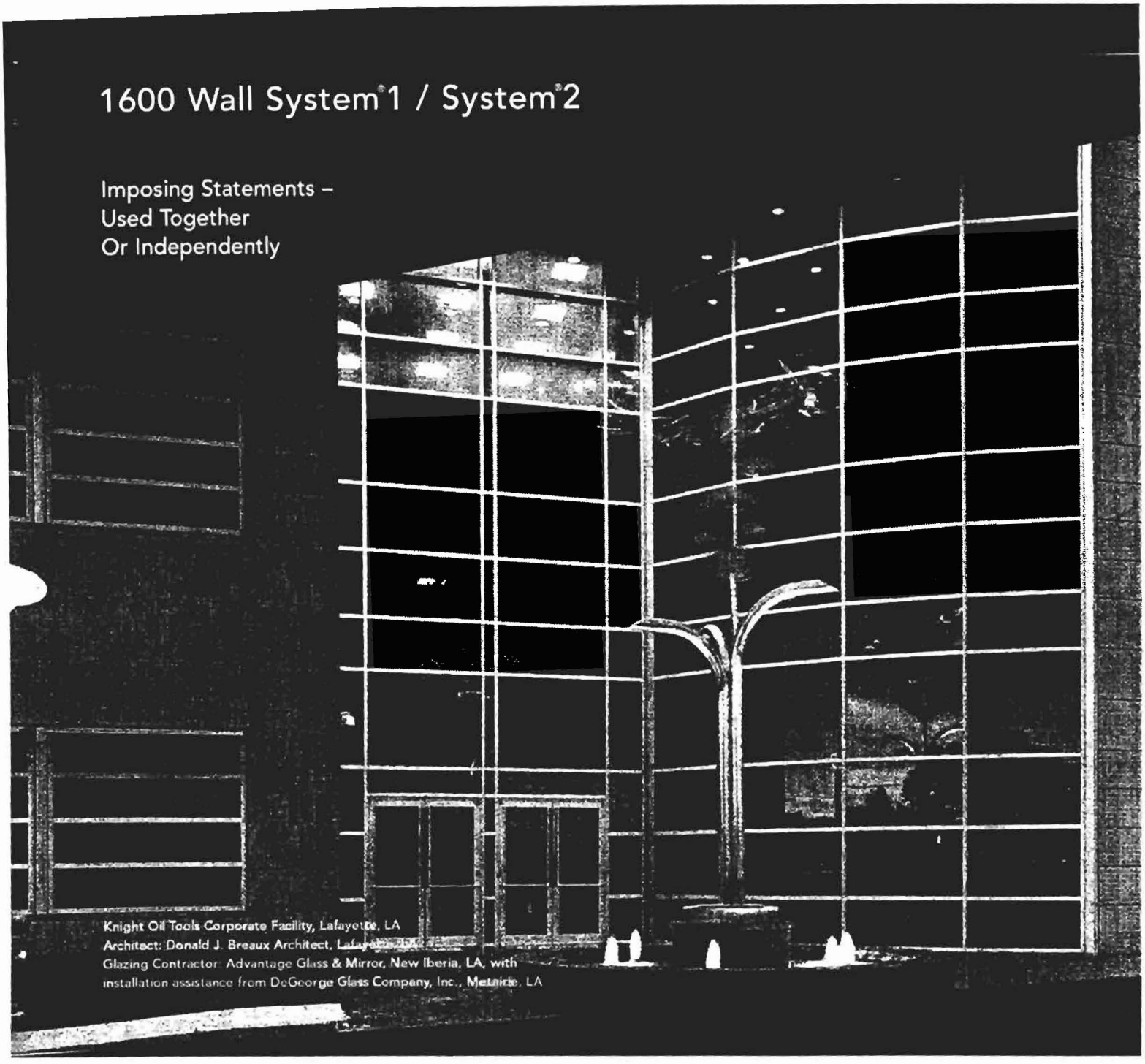


	Lamp	Lumen	A	B	C
9475 W/½" I.P.S.	1 120W PAR-38	1800	5¼	7⅝	8⅞

BEGA/US 1000 BEGA Way, Carpinteria, CA 93013 [P] 805-684-0533 [F] 805-684-6682

1600 Wall System®1 / System®2

Imposing Statements – Used Together Or Independently



Knight Oil Tools Corporate Facility, Lafayette, LA
Architect: Donald J. Breaux Architect, Lafayette, LA
Glazing Contractor: Advantage Glass & Mirror, New Iberia, LA, with installation assistance from DeGeorge Glass Company, Inc., Metairie, LA

Building on the proven success of Kawneer's 1600 Wall System® which set the standards for curtain wall engineering, 1600 Wall System®1 and 1600 Wall System®2 provide reliability with versatile features. Both are stick-fabricated, pressure glazed curtain walls for low-to-mid-rise applications and are designed to be used independently or as an integrated system to provide visual impact for almost any type of building.

- **1600 Wall System®1 is an outside glazed, captured curtain wall**
- **1600 Wall System®2 is a Structural Silicone Glazed (SSG) curtain wall**

Aesthetics

Even the smallest details of 1600 System®1/1600 Wall System®2 reflect the aesthetics and reliability that derive from Kawneer's precise engineering and experience. The joinery for both systems is accomplished with concealed fasteners to create unbroken lines and a monolithic appearance. When using optional, open back horizontal mullions, the fillers snap at the edge, producing an uninterrupted sight line.

KAWNEER
AN ALCOA COMPANY

Performance

Key aspects of 1600 System®1 and 1600 Wall System®2 are enhanced for higher performance. Pressure equalization has been designed into the system and all components are silicone compatible to provide superior longevity. For installations where severe weather conditions are prevalent, 1600 Wall System®1 has been large missile hurricane impact and cycle tested. Proven through years of high performance, both systems are tested according to industry standards:

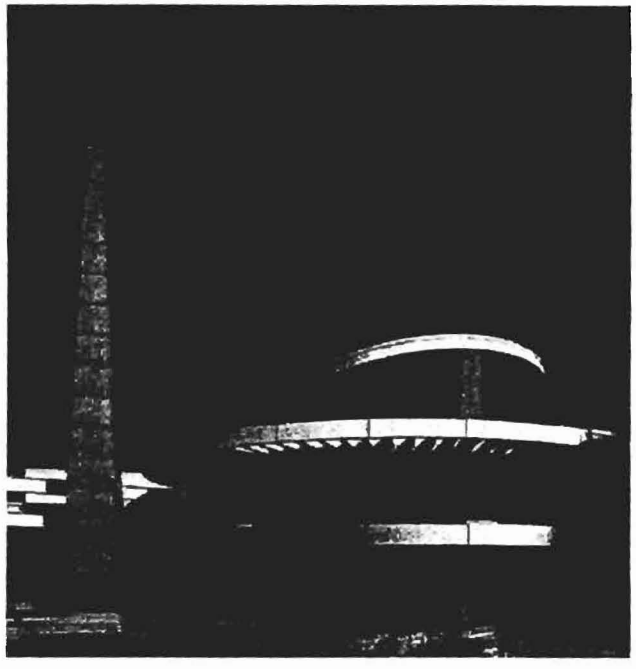
Air Performance	ASTM E-283
Static Water Penetration	ASTM E-331
Dynamic Water Penetration	AAMA 501.1
Structural Performance	ASTM E-330
"U" Value, CRF	AAMA 1503.1
Sound Transmission Rating	ASTM E 90-90
Seismic Performance	AAMA 501.4

For the Finishing Touch

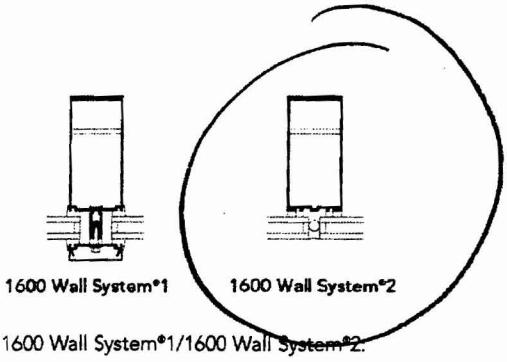
Permadonic Anodized finishes are available in Class I and Class II in seven different colors.

Painted Finishes, including fluoropolymer that meet or exceed AAMA 2605, are offered in many standard choices and an unlimited number of specially-designed colors.

Solvent-free powder coatings add the "green" element with high performance, durability and scratch resistance that meet the standards of AAMA 2604.



Hunter Henry Center at Mississippi State University, Mississippi State, MS
Architect: Foil Wyatt Architects & Planners, P.A., Jackson, MS
Glazing Contractor: American Glass Company, Inc., Columbus, MS



ALL VERTICAL JOINTS ARE BUTT-GLAZED

1600 Wall System®1/1600 Wall System®2:

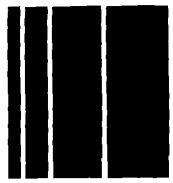
- for reliability
- for performance
- for versatility
- for a smooth, monolithic appearance
- for uninterrupted sight lines

Kawneer Company, Inc.
Technology Park / Atlanta
555 Guthridge Court
Norcross, GA 30092

kawneer.com
770 . 449 . 5555

KAWNEER
AN ALCOA COMPANY

SebagoTechnics
Engineering Expertise You Can Build On



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

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

Sebago Technics
Engineering Expertise You Can Build On

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

May 17, 2007
07241

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

prepared the logs included in Appendix B. Representative photographs of the test pits are included in Appendix B. The test pits were backfilled with the excavated material.

Borings were drilled using portable equipment consisting of a tripod and gasoline powered wench. Borings were advanced by wash methods using 3-inch diameter steel casing. Samples were recovered at 5-foot intervals and standard penetration resistance (N) was measured at each sample using ASTM procedures.

The boring and test pit logs and related information depict the subsurface conditions and water levels encountered at the locations and during the times indicated on the logs. Subsurface conditions at other locations may differ from those encountered in the explorations. The passage of time may result in a change in groundwater conditions at the explorations.

Subsurface Conditions

The borings encountered four principal soil units at the site: fill, harbor bottom deposit, marine deposit and glacial till. Encountered thickness and generalized descriptions of the strata encountered are presented below in order of increasing depth below ground surface. Due to the complexity of the deposition process, strata thickness will vary and may be absent at specific locations.

Fill - Fill consists of loose to medium dense, brown silty SAND with gravel (SM); to well-graded SAND with silt and gravel (SW-SM) with various amounts of roots, ash, slag, brick fragments, glass and wood. Encountered thickness varied from 8.0 feet to 9.3 feet.

Harbor Bottom Deposit - The harbor bottom deposit consists of very loose to dense, gray to dark gray silty SAND with gravel (SM), to well-graded SAND with gravel (SW) with wood and glass. Encountered thickness varied from 5.0 feet to 8.0 feet.

Marine Deposit - The marine deposit consists of soft, gray SILT (ML). Boring B2 encountered 4.0 feet of silt.

Glacial Till - Glacial till consists of medium dense to very dense, gray-to-gray brown silty SAND with gravel (SM) with cobbles and boulders. Borings penetrated from 7.0 feet to 7.7 feet into the glacial till.

Water was encountered in the borings at depths below ground surface varying form 7.7 feet to 9.5 feet. Observations or water were made over a relatively short period of time after introducing water to advance the boring and may not reflect the stabilized groundwater level. In addition, water levels at the site will vary with season, precipitation, temperature and construction activity in the area. Therefore, water levels during and following construction will vary from those observed in the borings.

Recommendations for Foundation Design

Recommended Foundation Type and Design Criteria

The fill, harbor bottom and marine deposits, are not considered suitable for support of the addition or lowest floor level. In our opinion, the addition and lowest floor level should be supported on foundations which penetrate through the fill, harbor bottom and marine deposits and bear in the underlying glacial till and bedrock.

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 1.5 for a short period spectral response acceleration S_s of 0.37g; the site response coefficient F_v is 2.4 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.

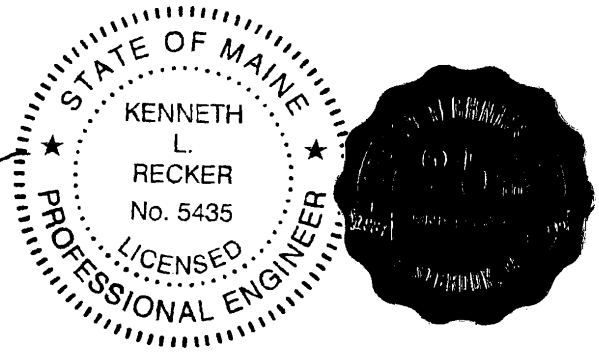
The recommendations presented herein are based in part on the data obtained from the referenced test borings and test pits. The nature and extent of variations between the explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the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

Appendix A

Logs of Borings

SEBAGO TECHNICS, INC.

TEST BORING REPORT

BORING NO. B1

Page 1 of 1

PROJECT	PROPOSED ADDITION, PORTLAND HARBOR HOTEL	STI JOB NO.	07241
LOCATION	FORE STREET, PORTLAND, MAINE	PROJECT MGR.	K. RECKER
CLIENT	468 FORE STREET REALTY, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	5/3/2007
DRILLER	M. PORTER	DATE FINISHED	5/3/2007

Elevation ft. Datum — Boring Location See Plan

Item	Casing	Sampler	Core Barrel
Type	BW	SS	
Inside Diameter (in.)	2.375	1.375	
Hammer Weight (lb.)	140	140	
Hammer Fall (in.)	24	30	

Rig Make & Model: Acker

☐ Truck ☑ Tripod ☑ Cat-Head
☐ ATV ☐ Geoprobe ☐ Winch
☐ Track ☐ Air Track ☑ Chopping Bit
☐ Skid ☐ Cutting Head

Hammer Type: ☐ Safety ☑ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — BW/Driven/20.0 ft.

Drilling Notes:

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	1	S1	0.0		0.1		-BARK MULCH-										
	1					SM	Medium dense, brown silty SAND with gravel (SM), trace roots, ash and brick, mps = 1.3 in., damp	10	10	30	20	15	15				
	12																
	58	10	2.0														
							-FILL-										
5	7	S2	5.0			SM	Loose, brown silty SAND with gravel (SM), brick, ash, slag, mps = 1.2 in., wet	10	20	30	20	5	15				
	6																
	2																
	2	10	7.0														
							-FILL-										
					8.7												
							Casing refusal at 9.1 ft. Washed ahead of casing to 10.0 ft.										
					9.3		-WOOD-										
10	12	S3	10.0			SM	Dense, gray silty SAND with gravel (SM), mps = 0.7 in., wet	15	10	30	25	5	15				
	13																
	44						-HARBOR BOTTOM DEPOSITS-										
	14	8	12.0														
							Note: drove casing to 15.0 ft.										
					14.3												
15	8	S4	15.0			SM	Dense, gray silty SAND with gravel (SM), bonded, mps = 1.3 in., wet	10	15	30	20	10	15				
	19																
	15						-GLACIAL TILL DEPOSITS-										
	9	3	17.0														
20	29	S5	20.0			SM	Very dense, gray to brown silty SAND with gravel (SM), bonded, mps = 1.2 in., wet	15	15	30	15	10	15				
	30																
	23						-GLACIAL TILL DEPOSITS-										
	19	10	22.0														
							Bottom of exploration at 22.0 ft. below ground surface										
							No refusal										
25																	
30																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Bottom of Casing	Bottom of Hole	Water
5/3/2007	1115		--	14.7	7.7

Sample ID

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon Sample
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (Linear ft.)	22.0
Rock Cored (Linear ft.)	--
Number of Samples	5S

BORING NO. B1

Field Tests

Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.

SEBAGO TECHNICS, INC.

TEST BORING REPORT

BORING NO. **B2**

Page 1 of 1

PROJECT	PROPOSED ADDITION, PORTLAND HARBOR HOTEL	STI JOB NO.	07241
LOCATION	FORE STREET, PORTLAND, MAINE	PROJECT MGR.	K. RECKER
CLIENT	468 FORE STREET REALTY, LLC	FIELD REP.	K. B. STEPHENSON
CONTRACTOR	MAINE TEST BORINGS, INC.	DATE STARTED	5/2/2007
DRILLER	M. PORTER	DATE FINISHED	5/2/2007

Elevation ft. Datum — Boring Location See Plan

Item	Casing	Sampler	Core Barrel
Type	BW	SS	
Inside Diameter (in.)	2.375	1.375	
Hammer Weight (lb.)	140	140	
Hammer Fall (in.)	24	30	

Rig Make & Model: Acker

☐ Truck ☑ Tripod ☑ Cat-Head ☐ Winch ☑ Chopping Bit ☐ Cutting Head
☐ ATV ☐ Geoprobe
☐ Track ☐ Air Track
☐ Skid ☐

Hammer Type: ☐ Safety ☑ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance: Type Method Depth — BW/Driven/25.0 ft.

Drilling Notes:

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0	1	S1	0.0		0.1		-BARK MULCH-										
	2				0.6	SM	Loose, brown silty SAND (SM), roots, mps = 0.2 in., damp-TOPSOIL/FILL-			15	40	25	20				
	3				1.8	SM	Loose, brown silty SAND (SM), ash, brick, mps = 0.5 in., damp -FILL-	5	5	20	20	30	20				
	4	14	2.0			SW-SM	Loose, brown well-graded SAND with silt and gravel (SW-SM), mps = 0.5 in., damp	10	10	30	20	20	10				
					3.0		-FILL-										
5	2	S2	5.0			SW-SM	Medium dense, brown well-graded SAND with silt and gravel (SW-SM), glass, brick, wood, mps = 0.75 in., wet	10	10	15	30	20	15				
	7																
	10																
	3	8	7.0				-FILL-										
					8.0												
10	1	S3	10.0			SW	Very loose, dark gray well-graded SAND with gravel (SW), wood, trace glass, mps = 0.5 in., wet	10	20	30	20	15	5				
	1																
	WOH																
	1	8	12.0				-HARBOR BOTTOM DEPOSITS-										
					13.0												
							Note: wood in wash to 15.0 ft.										
15	8	S4	15.0			SW	Medium dense, gray SAND with gravel (SW), mps = 0.75 in., wet	20	20	40	10	10					
	14				16.0		-HARBOR BOTTOM DEPOSITS-										
	4					ML	Very soft, gray SILT (ML), trace coarse sand and gravel, mps = 0.3 in., wet					10	90		L	N	
	2	8	17.0														
							-MARINE DEPOSITS-										
					20.0												
20	3	S5	20.0			SM	Medium dense, gray silty SAND with gravel (SM), bonded, mps = 1.0 in., wet	15	15	20	20	10	20				
	7																
	8																
	8	11	22.0														
							-GLACIAL TILL DEPOSITS-										
25	15	S6	25.0		25.2												
	16					SM	Medium dense, gray-brown silty SAND with gravel (SM), mps = 1.0 in., wet (rock fragment in tip of spoon)	15	15	30	15	10	15				
	12																
	27	10	27.0				-GLACIAL TILL DEPOSITS-										
							Bottom of exploration at 27.0 ft. below ground surface										
							No refusal										
30																	

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Bottom of Casing	Bottom of Hole	Water
5/2/2007	1730		–	18.0	9.5

Sample ID

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon Sample
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (Linear ft.)	27.0
Rock Cored (Linear ft.)	–
Number of Samples	6S

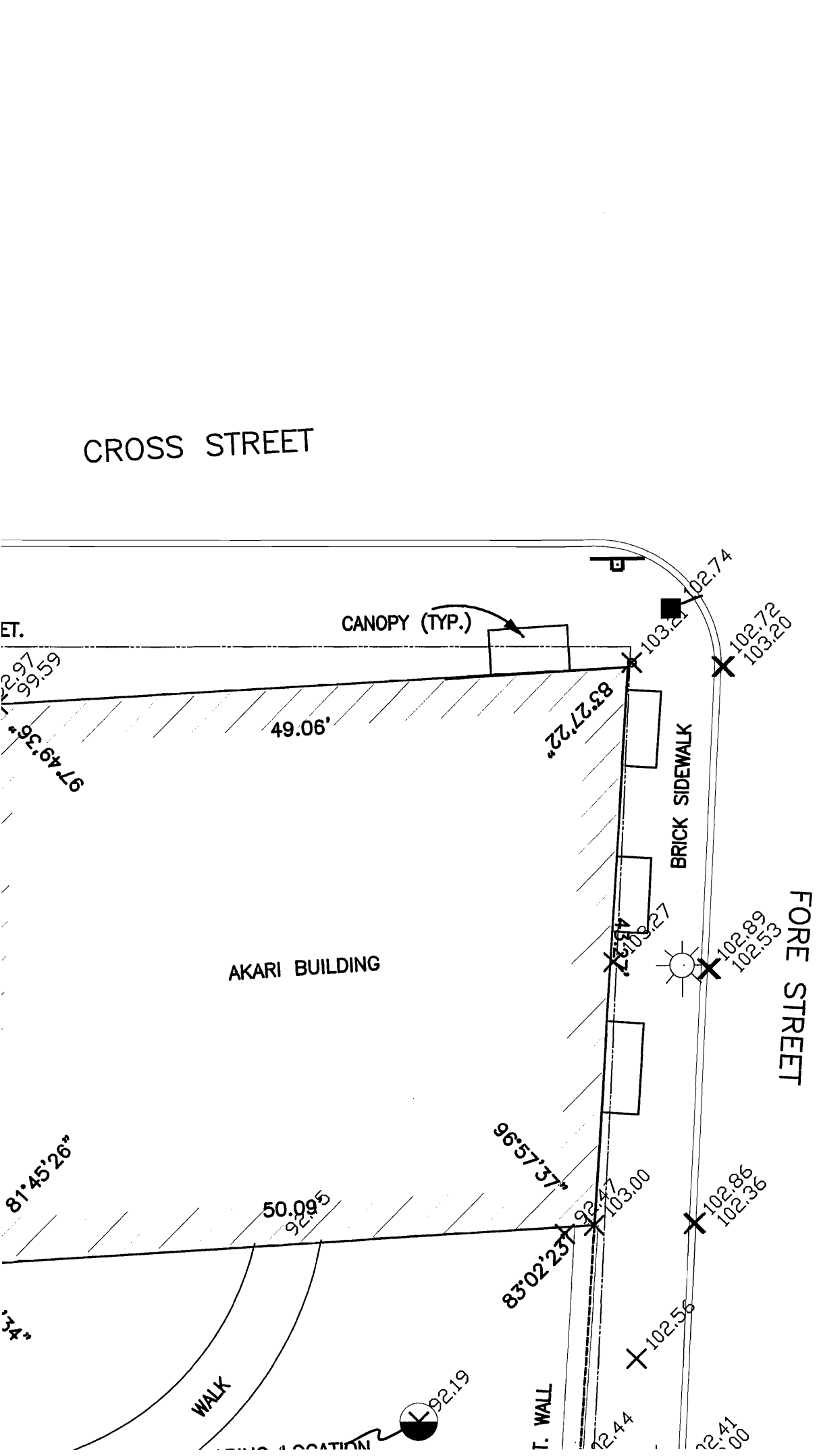
BORING NO. B2

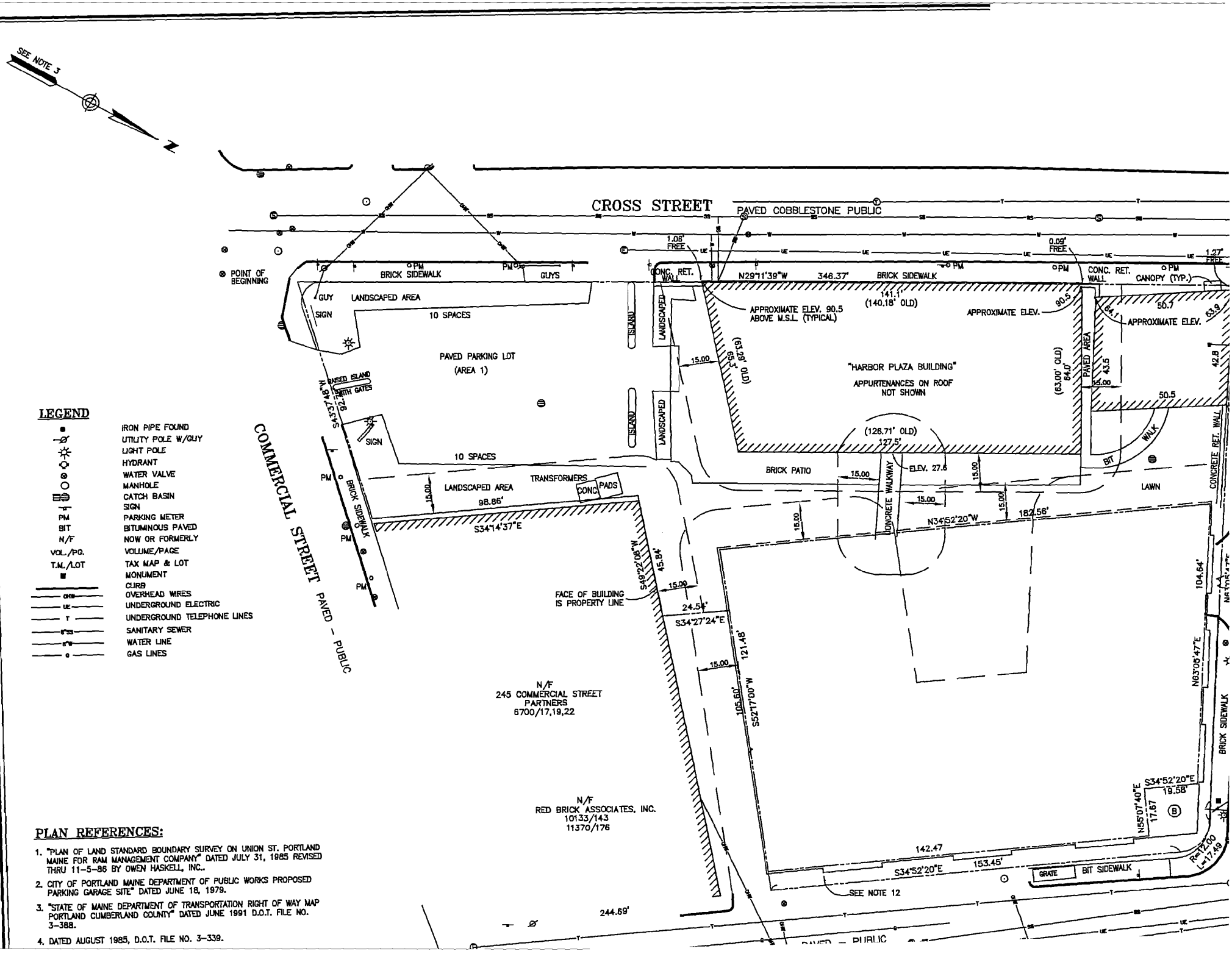
Field Tests

Dilatancy: R - Rapid S - Slow N - None
Toughness: L - Low M - Medium H - High
Plasticity: N - Nonplastic L - Low M - Medium H - High
Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Sebago Technics, Inc.


CROSS STREET
CANOPY (TYP.)
102.74
102.72
103.20
BRICK SIDEWALK
FORE STREET
AKARI BUILDING
49.06'
83°27'22"
97°49'36"
81°45'26"
50.09'5
96°57'37"
83°02'23"
102.89
102.53
102.86
102.36
102.56
WALK
92.19

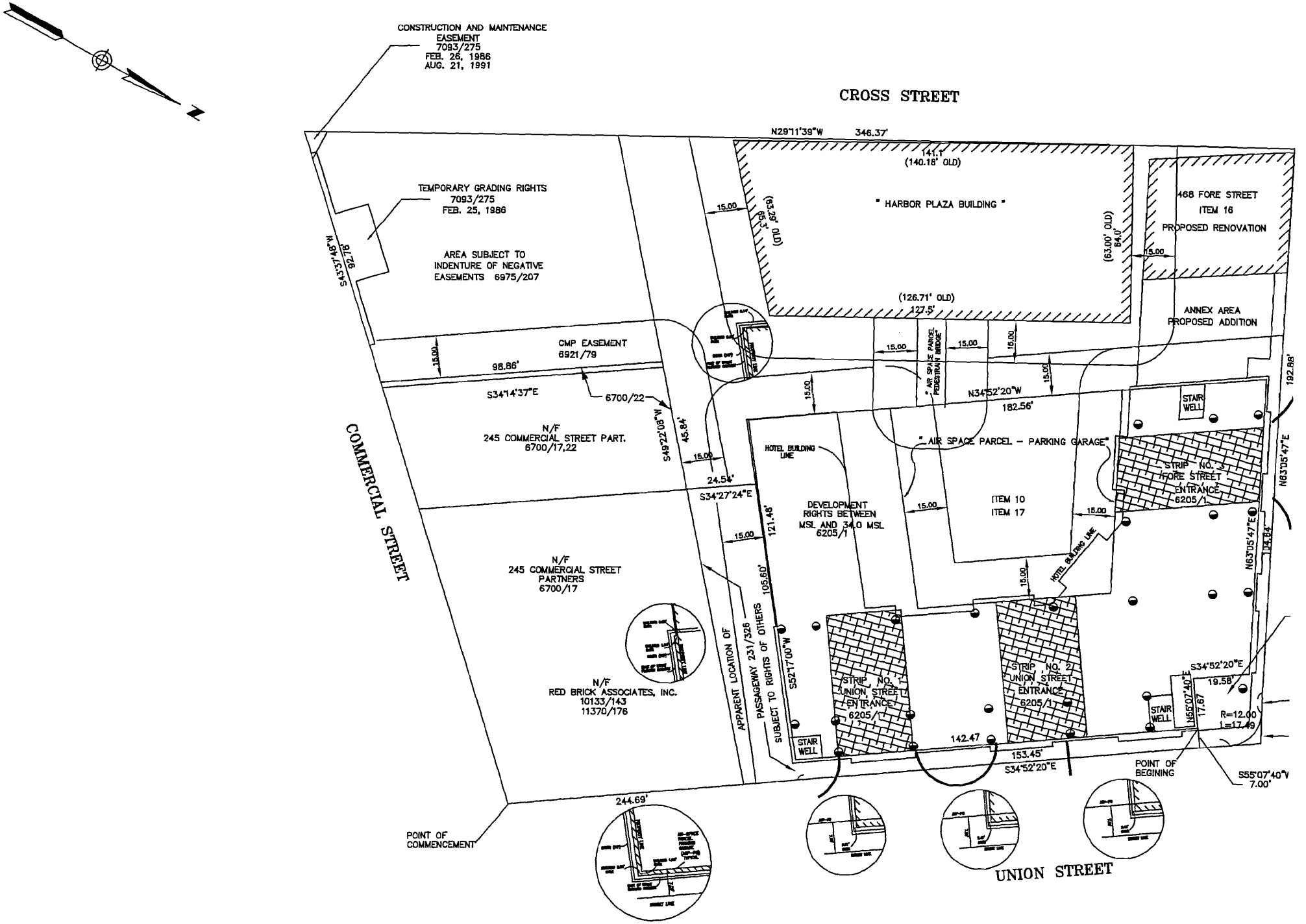


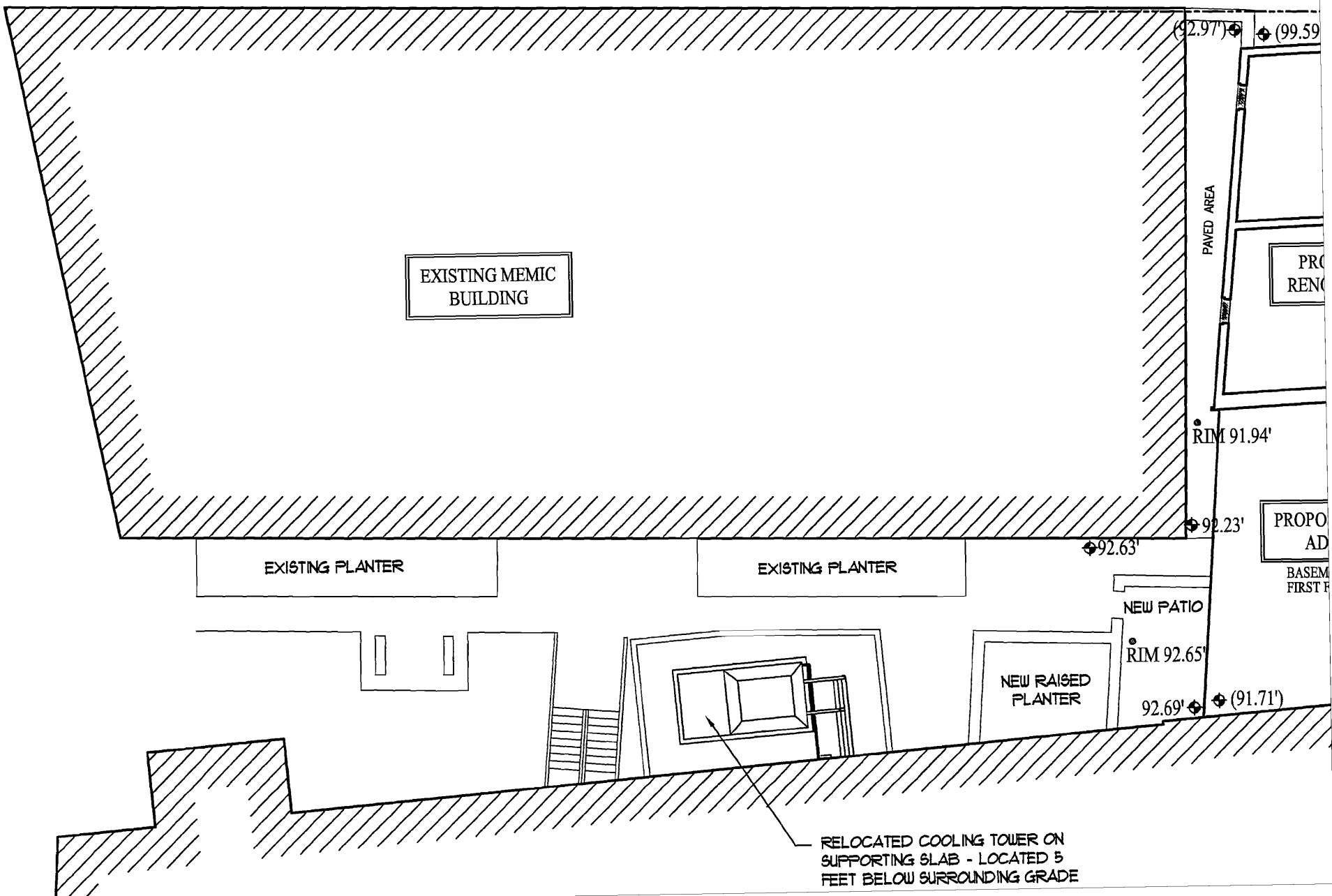
LEGEND

- IRON PIPE FOUND
- UTILITY POLE W/GUY
- LIGHT POLE
- HYDRANT
- WATER VALVE
- MANHOLE
- CATCH BASIN
- SIGN
- PM — PARKING METER
- BIT — BITUMINOUS PAVED
- N/F — NOW OR FORMERLY
- VOL./PG. — VOLUME/PAGE
- T.M./LOT — TAX MAP & LOT
- MONUMENT
- CURB
- OHW — OVERHEAD WIRES
- UE — UNDERGROUND ELECTRIC
- T — UNDERGROUND TELEPHONE LINES
- S — SANITARY SEWER
- W — WATER LINE
- G — GAS LINES

PLAN REFERENCES:

1. "PLAN OF LAND STANDARD BOUNDARY SURVEY ON UNION ST. PORTLAND MAINE FOR RAM MANAGEMENT COMPANY" DATED JULY 31, 1985 REVISED THRU 11-5-86 BY OWEN HASKELL, INC..
2. CITY OF PORTLAND MAINE DEPARTMENT OF PUBLIC WORKS PROPOSED PARKING GARAGE SITE" DATED JUNE 18, 1979.
3. "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP PORTLAND CUMBERLAND COUNTY" DATED JUNE 1991 D.O.T. FILE NO. 3-388.
4. DATED AUGUST 1985, D.O.T. FILE NO. 3-339.


CONSTRUCTION AND MAINTENANCE EASEMENT
7093/275
FEB. 26, 1986
AUG. 21, 1991
CROSS STREET
N29°11'39"W 346.37'
141.1'
(140.18' OLD)
" HARBOR PLAZA BUILDING "
468 FORE STREET
ITEM 16
PROPOSED RENOVATION
TEMPORARY GRADING RIGHTS
7093/275
FEB. 25, 1986
AREA SUBJECT TO
INDENTURE OF NEGATIVE
EASEMENTS 6975/207
(63.28' OLD)
(63.00' OLD)
64.0'
(126.71' OLD)
127.5'
ANNEX AREA
PROPOSED ADDITION
CMP EASEMENT
6921/79
98.86'
S34°14'37"E
6700/22
N/F
245 COMMERCIAL STREET PART.
6700/17,22
S49°22'08"W
45.84'
24.54'
S34°27'24"E
COMMERCIAL STREET
" AIR SPACE PARCEL - PARKING GARAGE"
N34°52'20"W
182.56'
HOTEL BUILDING LINE
DEVELOPMENT
RIGHTS BETWEEN
MSL AND 34.0 MSL
6205/1
ITEM 10
ITEM 17
STRIP NO. 3
FORE STREET
ENTRANCE
6205/1
STAIR WELL
N/F
245 COMMERCIAL STREET
PARTNERS
6700/17
121.46'
105.60'
APPARENT LOCATION OF
PASSAGEWAY 231/326
SUBJECT TO RIGHTS OF OTHERS
S52°17'00"W
N/F
RED BRICK ASSOCIATES, INC.
10133/143
11370/176
STRIP NO. 1
UNION STREET
ENTRANCE
6205/1
STRIP NO. 2
UNION STREET
ENTRANCE
6205/1
142.47
153.45'
S34°52'20"E
S34°52'20"E
19.58'
N55°07'40"E
17.67'
R=12.00
I=17.49
POINT OF
BEGINING
S55°07'40"W
7.00'
244.69'
POINT OF
COMMENCEMENT
UNION STREET


EXISTING MEMIC BUILDING
(92.97')
(99.59
PAVED AREA
PRO
RENO
RIM 91.94'
92.23'
PROPO
AD
92.63'
EXISTING PLANTER
EXISTING PLANTER
BASEM
FIRST F
NEW PATIO
RIM 92.65'
NEW RAISED PLANTER
92.69'
(91.71')
RELOCATED COOLING TOWER ON SUPPORTING SLAB - LOCATED 5 FEET BELOW SURROUNDING GRADE

RELEVANT CODES – ADDITION TO PORTLAND HARBOR HOTEL

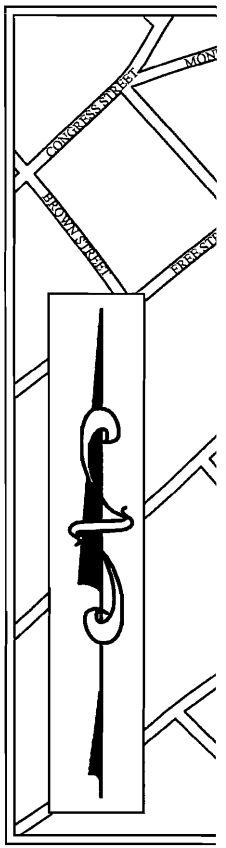
IBC–2003	CODE REFERENCE
USE GROUP R–1 (HOTEL)	310.1
USE GROUP S–2 (STORAGE)	311.3
USE GROUP M (MERCANTILE)	309.1
CONSTRUCTION TYPE 1–B (Protected non–combustible)	T–503
R–1 Sprinkled W/NFPA 13	903.3.1.1
79,000sf. ALLOWED WITHOUT INCREASES	
1,790sf. PROPOSED	
ALLOWABLE HGT. WITH SPRINKLER 180'	504.2
12 STORIES ALLOWED WITH SPRINKLER	504.2
4 STORIES PROPOSED	

FIRE RESISTANCE FOR TYPE 1–B	
COLUMNS AND FLOOR/CEILING – 2 HOURS	T–601
ROOF – 2 HOURS	T–601

MAINE HUMAN RIGHTS COMMISSION
ACCESSIBILITY CODE TO BE ANSI A117.1 – 2003

FIRE PARTITIONS	708.1
CORRIDOR FIRE PARTITION (NONBEARING) – 1/2 HR	T–1016.1
DWELLING UNIT SEPARATION – 1 HR	708.3
4–STORY SHAFT – 2 HOURS	707.4
DRAFTSTOPPING – N/A	717.3.2 exception 2
STANDPIPE REQUIRED	905.3.1
FIRE DEPT. CONNECTION REQUIRED	903.3.7 (AS DIRECTED BY FIRE)
ALARM REQUIRED	907.2.8.1 exception 2
SMOKE DETECTORS REQUIRED	907.2.10.1.1
3' ELEVATOR VENT REQUIRED	3007.3
FIREWALL REQUIRED BETWEEN USES – 3 HOURS	T–705.4
FIREWALL – ANY NON–COMBUSTIBLE MATERIAL	705.3
FIREWALL HAS NO 18" EXTENSION	705.5 Exception 3
FIREWALL STOPS AT LOW ROOF OF STEPPED BLDG.	705.6.1
DOORS IN FIREWALL TO BE RATED 3 HOURS	T–715.3
RATING OF BRICK FIREWALL 3 HOURS = 4.9 IN.	T–720.1(2)
RATING OF EXTERIOR WALLS – 1 HOUR < 5ft.	T–602

MEANS OF EGRESS	1003
USE GROUP M OCCUPANT LOAD 1450/30 = 49	T–1004.1.2
ONE MEANS OF EGRESS ALLOWED	T–1014.1
USE GROUP R–1 OCCUPANT LOAD 2,007/200 = 10	T–1004.1.2
MINIMUM REQUIRED CORRIDOR WIDTH – N/A	1005.1



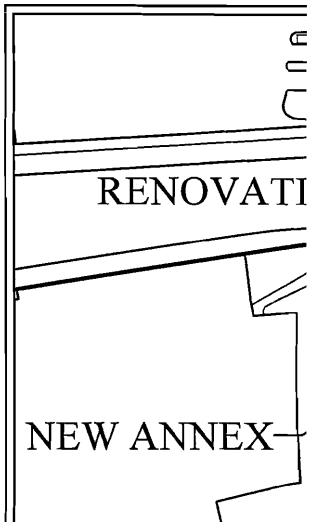
LOCAT

RELEVANT CODES – RENOVATION OF 470 FORE ST.

IBC–2003	CODE REFERENCE
USE GROUP R–1 (HOTEL) AND M (MERCANTILE)	310.1 AND 309.1
CONSTRUCTION TYPE 3–B	T–503
R–1 Sprinkled W/NFPA 13	903.3.1.1
12,500sf. ALLOWED WITHOUT INCREASES	
2,077sf. PROPOSED	
ALLOWABLE HGT. WITH SPRINKLER 75'	504.2
5 STORIES ALLOWED WITH SPRINKLER	504.2
3 STORIES PROPOSED (EXISTING)	

FIRE RESISTANCE FOR TYPE 3–B	
COLUMNS AND FLOOR/CEILING – 0 HOURS	T–601
BEARING WALLS – EXTERIOR – 2 HOURS	T–601
BEARING WALLS – INTERIOR – 0 HOURS	T–601

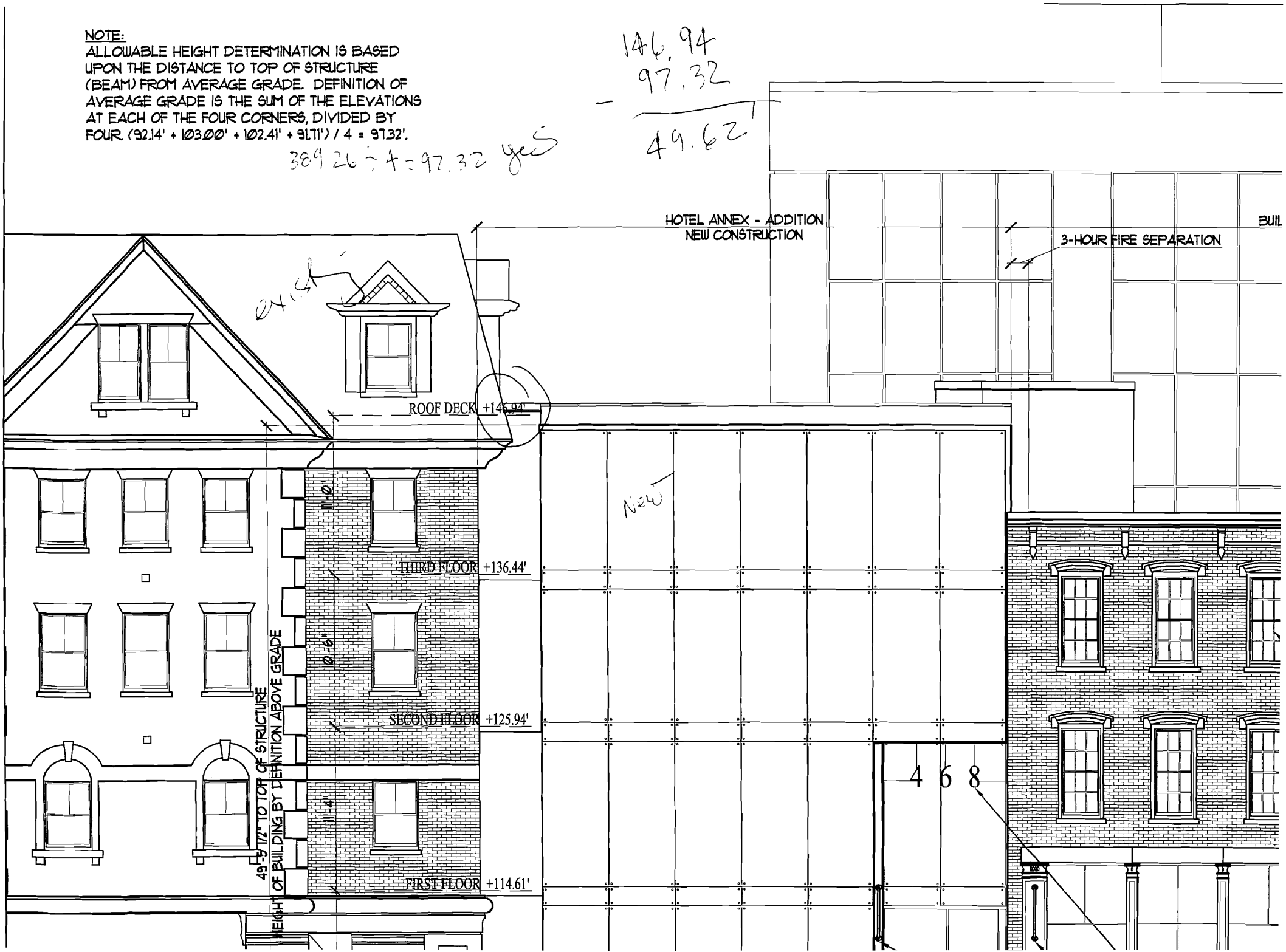
FIRE PARTITIONS	708.1
CORRIDOR FIRE PARTITION (NONBEARING) – 1/2 HR	T–1016.1
DWELLING UNIT SEPARATION – 1 HR	708.3
DRAFTSTOPPING – N/A	717.3.2 exception 2
STANDPIPE REQUIRED	905.3.1
FIRE DEPT. CONNECTION REQUIRED	903.3.7 (AS DIRECTED BY FIRE)
ALARM REQUIRED	907.2.8.1 exception 2
SMOKE DETECTORS REQUIRED	907.2.10.1.1
FIREWALL REQUIRED BETWEEN USES – 3 HOURS	T–705.4
FIREWALL – ANY NON–COMBUSTIBLE MATERIAL	705.3
FIREWALL HAS NO 18" EXTENSION	705.5 Exception 3
FIREWALL STOPS AT LOW ROOF OF STEPPED BLDG.	705.6.1

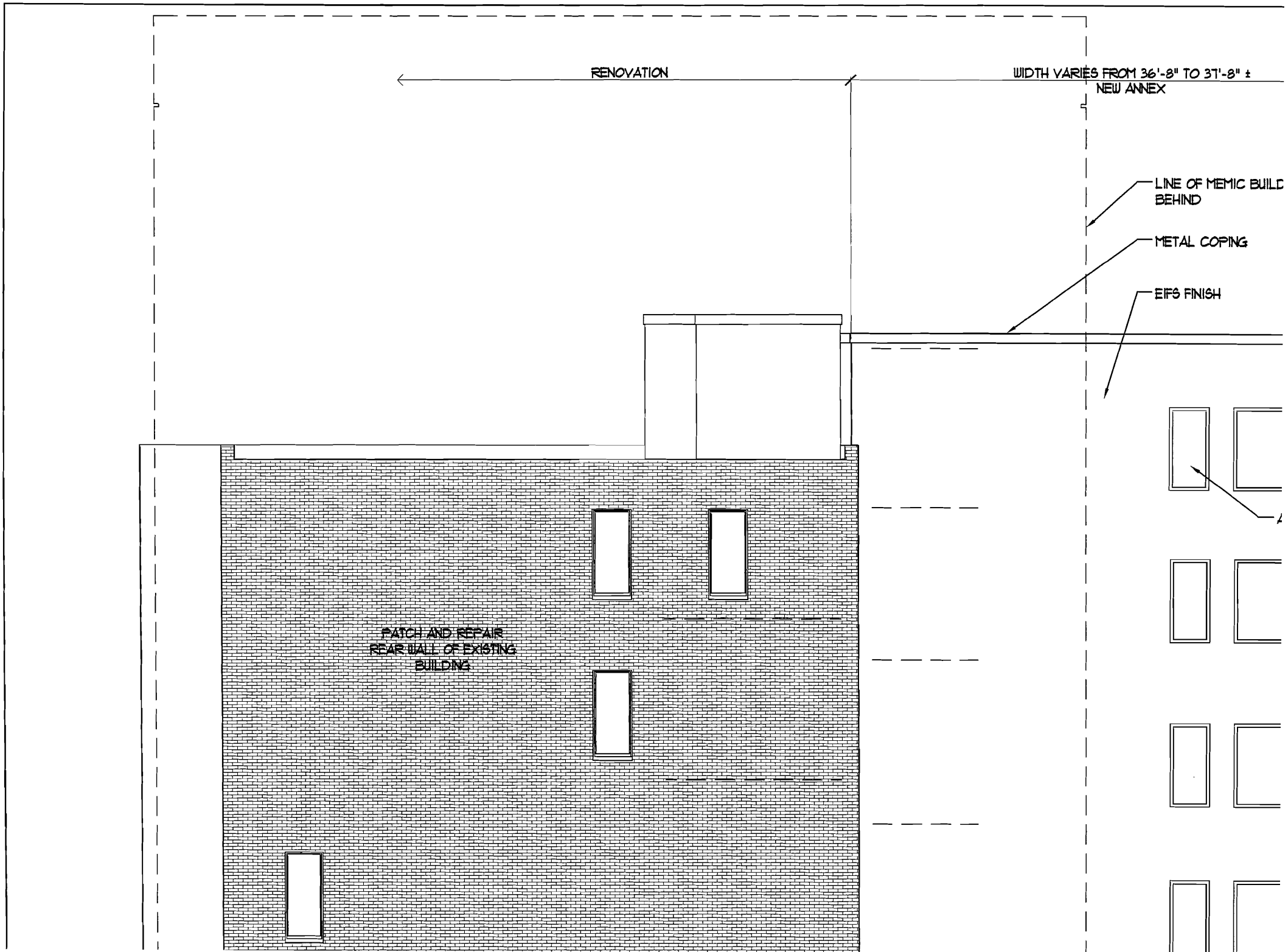


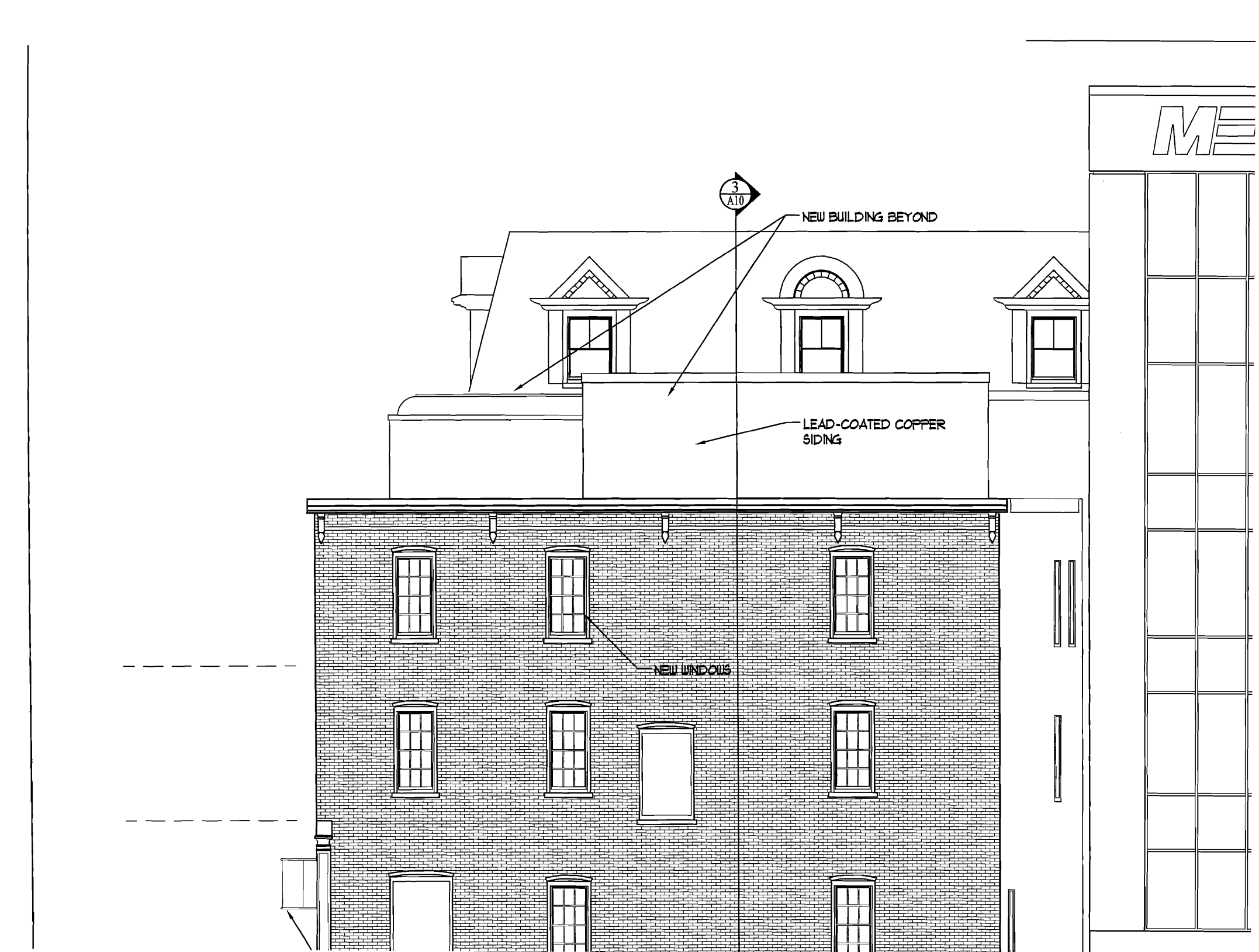
NOTE:
ALLOWABLE HEIGHT DETERMINATION IS BASED UPON THE DISTANCE TO TOP OF STRUCTURE (BEAM) FROM AVERAGE GRADE. DEFINITION OF AVERAGE GRADE IS THE SUM OF THE ELEVATIONS AT EACH OF THE FOUR CORNERS, DIVIDED BY FOUR. (92.14' + 103.00' + 102.41' + 91.71') / 4 = 97.32'.

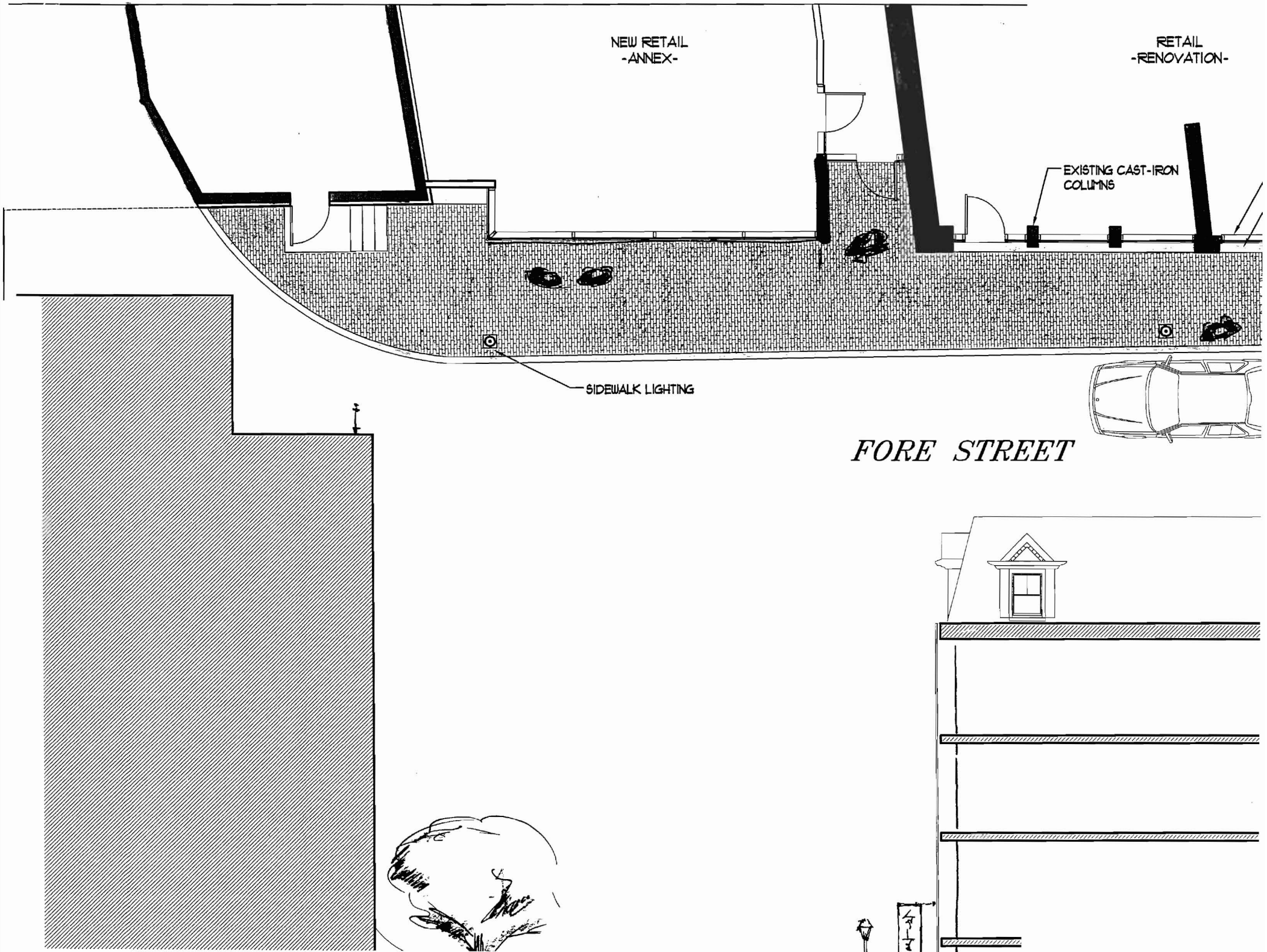
389.26 ÷ 4 = 97.32 yes

146.94
- 97.32
49.62'




RENOVATION
WIDTH VARIES FROM 36'-8" TO 37'-8" ±
NEW ANNEX
LINE OF MEMIC BUILD
BEHIND
METAL COPING
EIFS FINISH
PATCH AND REPAIR
REAR WALL OF EXISTING
BUILDING


3
A10
NEW BUILDING BEYOND
LEAD-COATED COPPER SIDING
NEW WINDOWS


NEW RETAIL
-ANNEX-
RETAIL
-RENOVATION-
EXISTING CAST-IRON
COLUMNS
SIDEWALK LIGHTING
FORE STREET