

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND BUILDING PERMIT

This is to certify that HENRY STEINBERG

Located At 21 PLEASANT ST

Job ID: 2011-11-2801-CH OF USE

CBL: 038- E-024-001

has permission to Change of use, 8 residential units to 9 (from previously unpermitted day care), 1<sup>st</sup> fl vacant commercial provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

\_\_\_\_\_  
**Fire Prevention Officer**

*[Signature]* 12/22/11  
\_\_\_\_\_  
**Code Enforcement Officer / Plan Reviewer**

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY  
PENALTY FOR REMOVING THIS CARD

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2011-11-2801-CH OF USE	Date Applied: 11/28/2011	CBL: 038- E-024-001	
Location of Construction: 21 PLEASANT ST	Owner Name: HENRY STEINBERG	Owner Address: PO BOX 2187 SOUTH PORTLAND, ME 04116	Phone: 207-899-3014
Business Name:	Contractor Name: Owner	Contractor Address:	Phone:
Lessee/Buyer's Name:	Phone:	Permit Type: BLDG - Building- change of use	Zone: B-3
Past Use: One commercial space 1 <sup>st</sup> on first floor and 8 dwelling units.	Proposed Use: Commercial space and 9 dwelling units - split one dwelling unit off from the rear of the commercial space.	Cost of Work: 1000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: R-2 Type: IB-2009 Signature: <i>[Signature]</i>
Proposed Project Description: Change of use from commercial to residential		Pedestrian Activities District (P.A.D.)  12/22/11	
Permit Taken By:		<b>Zoning Approval</b>	

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	<p><b>Special Zone or Reviews</b></p> <p><input type="checkbox"/> Shoreland</p> <p><input type="checkbox"/> Wetlands</p> <p><input type="checkbox"/> Flood Zone</p> <p><input type="checkbox"/> Subdivision</p> <p><input type="checkbox"/> Site Plan</p> <p>___ Maj ___ Min ___ MM</p> <p>Date: <i>DK w/ cond. basis</i> 12/6/11 <i>APM</i></p>	<p><b>Zoning Appeal</b></p> <p><input type="checkbox"/> Variance</p> <p><input type="checkbox"/> Miscellaneous</p> <p><input type="checkbox"/> Conditional Use</p> <p><input type="checkbox"/> Interpretation</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Denied</p> <p>Date:</p>	<p><b>Historic Preservation</b></p> <p><input type="checkbox"/> Not in Dist or Landmark</p> <p><input type="checkbox"/> Does not Require Review</p> <p><input type="checkbox"/> Requires Review</p> <p><input type="checkbox"/> Approved</p> <p><input type="checkbox"/> Approved w/Conditions</p> <p><input type="checkbox"/> Denied</p> <p>Date: <i>Any exterior work requires a separate review! approval thru historic preservation</i></p>
	<b>CERTIFICATION</b>		

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

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

## BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: [buildinginspections@portlandmaine.gov](mailto:buildinginspections@portlandmaine.gov)

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Electrical close in if required

Certificate of Occupancy/Final Inspection

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



# PORTLAND MAINE

*Strengthening a Remarkable City, Building a Community for Life • [www.portlandmaine.gov](http://www.portlandmaine.gov)*

Director of Planning and Urban Development  
Penny St. Louis

Job ID: 2011-11-2801-CH OF USE

Located At: 21 PLEASANT ST

CBL: 038- E-024-001

## **Conditions of Approval:**

### **Zoning**

1. This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.
2. ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
3. With the issuance of this permit and the certificate of occupancy, the use of this property shall remain as first floor commercial in front, and three dwelling units in the rear, second floor as four dwelling units and third floor as two dwelling units for a total of nine dwelling units. Any change of use shall require a separate permit application for review and approval.

### **Building**

1. Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.
2. Permit approved based on the plans submitted and reviewed w/applicant, with additional information as agreed on and as noted on plans.
3. All penetrations through rated assemblies must be protected by an approved firestop system installed in accordance with ASTM E 814 or UL 1479, per IBC 2009 Section 713.
4. This is a Change of Use ONLY permit. It does NOT authorize any construction activities, except to close the former doorway with studs, 5/8" type x drywall and insulation.
5. Separate permits are required for any electrical, plumbing, sprinkler, fire alarm, HVAC systems, heating appliances, including pellet/wood stoves, commercial hood exhaust systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.
6. Those creating dwellings shall install a CO detector in each area within or giving access to bedrooms. That detection must be powered by the electrical service in the building and battery.
7. Hardwired interconnected battery backup smoke detectors shall be installed in all bedrooms, protecting the bedrooms, and on every level.

### **Fire**

1. Installation shall comply with City Code Chapter 10.
2. All construction shall comply with City Code Chapter 10.
3. This permit is being approved on the basis of the plans submitted. Any deviation from the plans would require amendments and approval.
4. Any cutting and welding done will require a Hot Work Permit from Fire Department.
5. All outstanding code violations shall be corrected prior to final inspection.



3-3  
his name  
not PAD

# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>21 PLEASANT STREET, PORTLAND, ME 04101</u>		
Total Square Footage of Proposed Structure/Area <u>700 SQ FT</u>	Square Footage of Lot <u>2500</u>	Number of Stories <u>2 AND 3</u>
Tax Assessor's Chart, Block & Lot Chart# <u>38</u> Block# <u>E</u> Lot# <u>24</u>	Applicant *must be owner, Lessee or Buyer* Name <u>HENRY STEINBERG</u> Address <u>21 PLEASANT ST</u> City, State & Zip <u>PORTLAND ME 04101</u>	Telephone: <u>508 437 0983 CELL</u> <u>207 899 3014 HOME</u>
Lessee/DBA (If Applicable)	Owner (if different from Applicant) Name Address City, State & Zip	Cost Of Work: \$ <u>70</u> C of O Fee: \$ _____ Total Fee: \$ _____
Current legal use (i.e. single family) _____	Number of Residential Units <u>100</u> <u>30</u>	
If vacant, what was the previous use? _____		
Proposed Specific use: _____	<u>130</u>	
Is property part of a subdivision? _____	If yes, please name _____	
Project description: <u>Change of use from day care to residential</u>		
Contractor's name: _____		
Address: _____		
City, State & Zip _____	Telephone: _____	
Who should we contact when the permit is ready: <u>AS ABOVE</u>	Telephone: _____	
Mailing address: _____		

RECEIVED  
28  
Dept. of Building Inspections  
City of Portland Maine

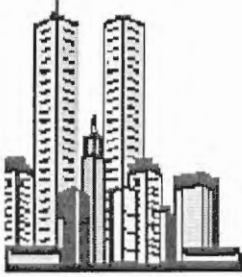
Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at [www.portlandmaine.gov](http://www.portlandmaine.gov), or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

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.

Signature: [Signature] Date: Mar 28 2011

This is not a permit; you may not commence ANY work until the permit is issue



Ora Properties LLC  
13 Hunts Point Road  
Cape Elizabeth, ME 04107  
207-899-3014

December 5 2011

Dear Ms Machado,

With reference to our telephone conversation, please find attached a plot plan (green) with 21 Pleasant Street building foot print in black. The commercial space at the front of the building is shown in detail but mostly comprises of open space. I have also shown the proposed cutoff from the proposed apartment #9 (incorrectly referred previously as apartment #10)

Please do not hesitate to call me should you have any questions.

Henry Steinberg.

**RECEIVED**

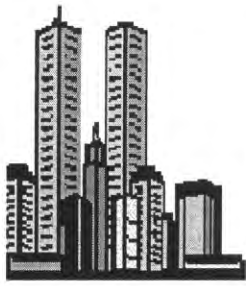
DEC - 6 2011

**Dept. of Building Inspections  
City of Portland Maine**

2nd floor floor.  
4 on next level  
2 on bottom below.

- need floor plan for each floor.

Need plot plan  
Need floor plan of entire 1st floor  
local use - 2005 - 8 dwelling units  
PA D use 1st floor commercial space.



Ora Properties L.L.C  
13 Hunts Point Road  
Cape Elizabeth, ME 04107  
207-899-3014

City of Portland  
Licensing and works department  
City Hall  
Portland.

1998 Day Care  
~~PA D~~ no permit

permit 05-1117  
7-8 residential units

November 23<sup>rd</sup> 2011

g - spoke to Henry Steinshenberg 12/5/11

Dear Sir,

Please find attached plan for proposed Apartment 10 at 21 Pleasant Street, Portland. The space was formally used for the last 13 years as a children's day care. No structural changes have been made, or are required. We do however propose to close off entrance from the highlighted retail space thereby creating a self contained residential apartment

**Kitchen**

We have placed a counter top comprising Lazy Suzie, double sink, and storage on the left hand side of the kitchen which needs to be connected to the water and drainage pipes that served the old kitchen unit.

**Living room**

No changes have been made or need to be made. Carpet has been laid. Walls and ceilings have been painted.

**Bedroom**

No changes have been made or need to be made. Carpet has been laid. Walls and ceilings have been painted.

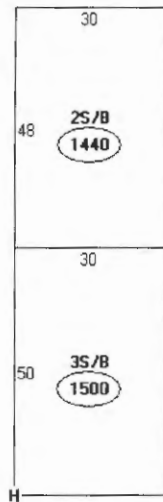
**Bathroom**

We have replaced old cracked and dysfunctional bathroom fixtures with new.

**Windows**

We have replaced old rotting and cracked windows where needed in the bedroom and bathroom. Dimensions are shown on the plan.

*Henry Steinshenberg*

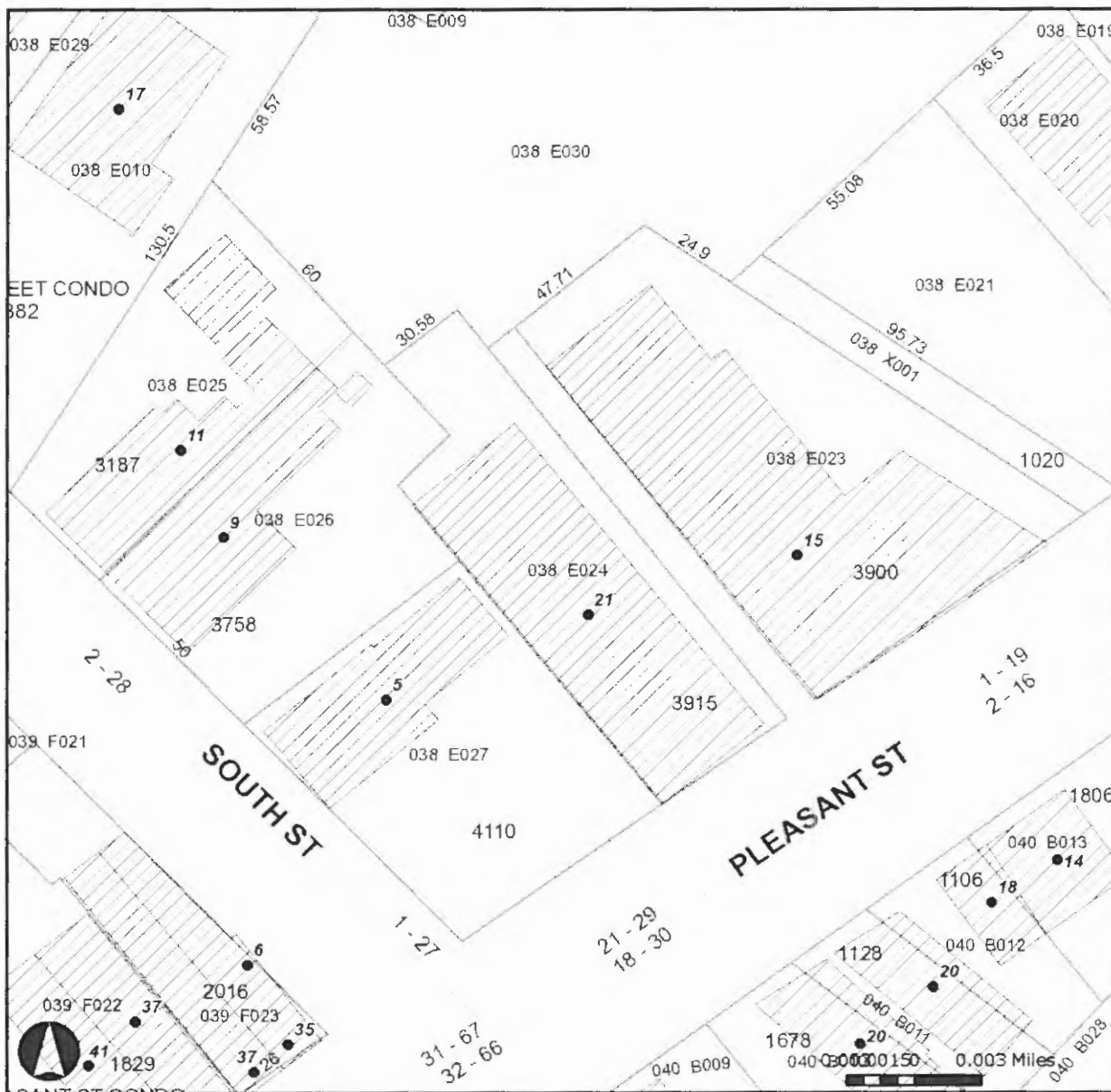


Descriptor/Area

- A:086  
2940 sqft
- B:082  
1500 sqft
- C:011  
1440 sqft
- D:011  
2940 sqft
- E:011  
1500 sqft
- F:3S/B  
1500 sqft
- G:2S/B  
1440 sqft
- H:PA1  
800 sqft



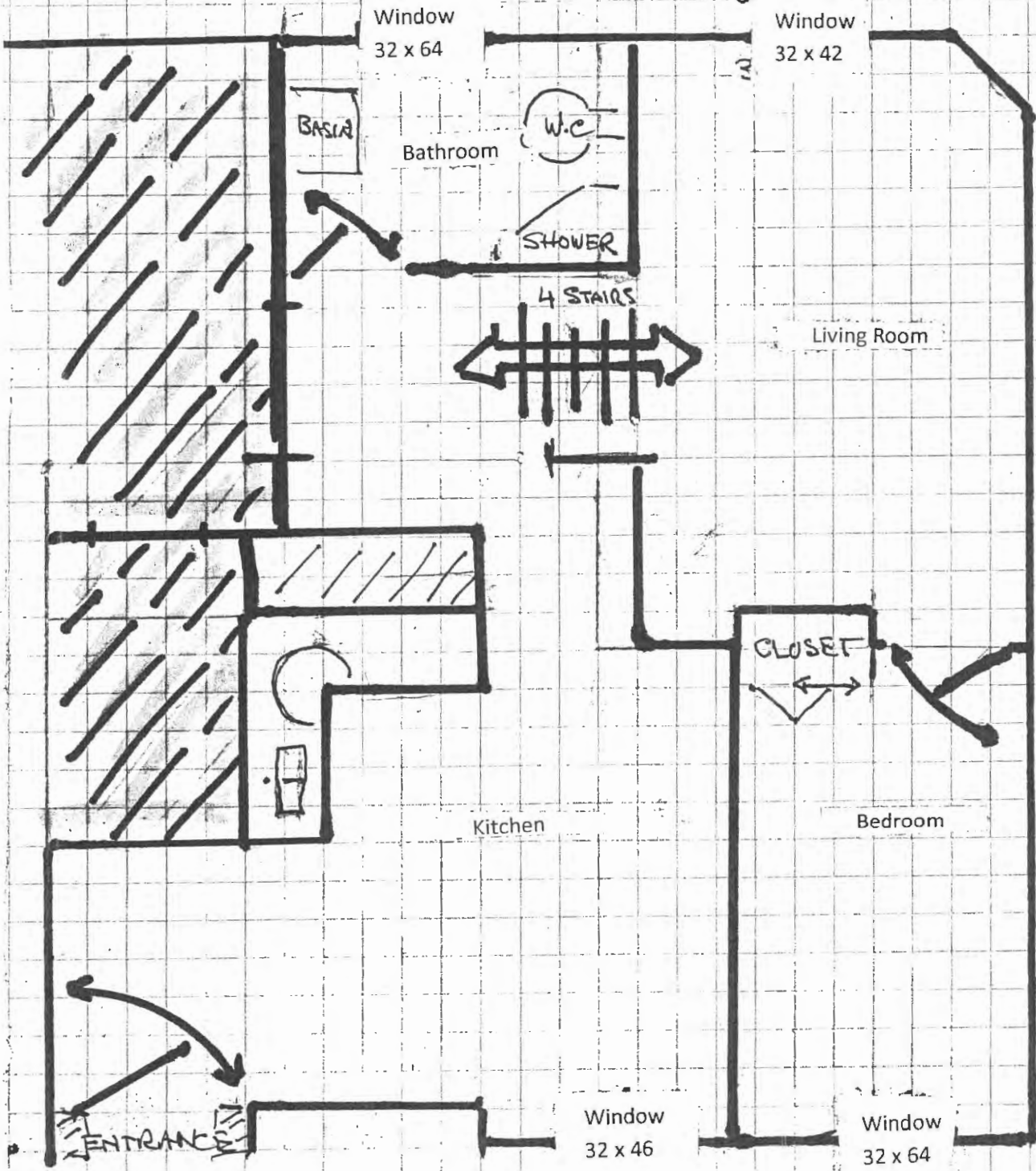
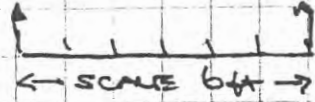
# Map



Interstate 	Traveled Ways 	Jetport 	Ocean 
Streets 	Stream 	County Streets 	
Buildings 	Wetland 	A15 	
	swamp 	A21 	
Parcels 	Lake/Pond 	A31 	
	under_road 	ME Towns 	
	waterbody 	Land 	
		Water Body 	

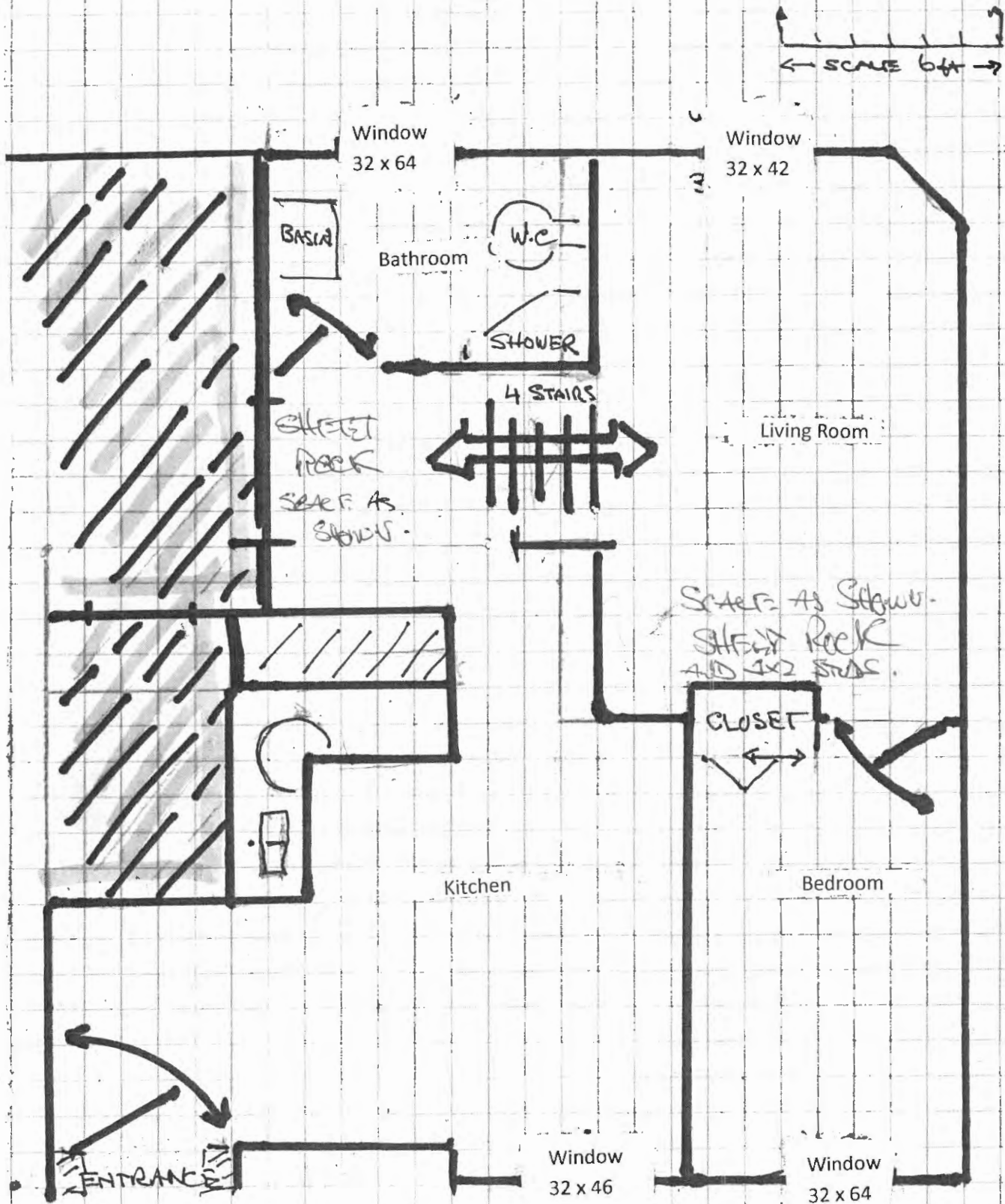
Existing

21 Pleasant Street Apartment 10



# Proposed

## 21 Pleasant Street Apartment 10



**City of Portland, Maine – Building or Use Permit Application** 339 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

Location of Construction: 21 Pleasant St		Owner: Pleasant St Limited		Phone:	
Owner Address:		Lessee/Buyer's Name: George's Restaurant 21 Pleasant St Portland, ME 04101		Business Name:	
Contractor Name:		Address:		Phone: 774-5260	
Past Use: Restaurant		Proposed Use: Same		COST OF WORK: \$	
				PERMIT FEE: \$ 25.00	
				FIRE DEPT. <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	
				INSPECTION: Use Group: Type:	
		Signature: <i>WYM</i>		Signature:	
Proposed Project Description: Conduct Outside Dining - 1997 Season		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied	
Permit Taken By: Mary Gresik		Date Applied For: 27 May 1997		Signature: Date:	

Permit No: **70674**

**PERMIT ISSUED**

Permit Issued:

**JUN 27 1997**

**CITY OF PORTLAND**

Zone: **B3** CBL: 038-E-024

Zoning Approval: *OK - shall comply with*

Special Zone or Reviews:

Shoreland *Traffic engineer*

Wetland *Reg*

Flood Zone

Subdivision *6/24/97*

Site Plan major  minor  imm

*Can not use the entire*

Zoning Appeal

Variance *side walk*

Miscellaneous *area must*

Conditional Use *be kept*

Interpretation *clear per*

Approved *The Regs*

Denied

**Historic Preservation**

Not in District or Landmark

Does Not Require Review

Requires Review

Action:

Approved

Approved with Conditions

Denied

Date: *6/19/97*

*D. Andrews*

CEO DISTRICT **2**

*A. Powl*

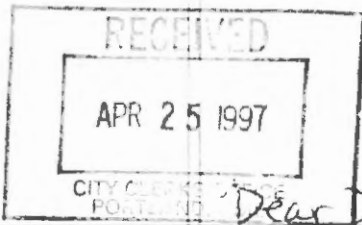
**WITH REQUIREMENT**

**CERTIFICATION**

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

*George T. Kando* 31 Sheridan St #3 19 June 97  
 SIGNATURE OF APPLICANT George Kando ADDRESS: Portland, ME DATE: 27 May 1997 PHONE:

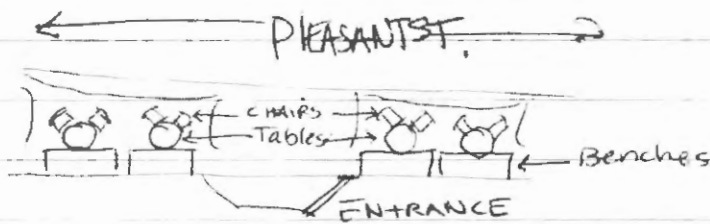
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE PHONE:



Dean Hoehle  
George's Restaurant  
21 Pleasant St.  
774-5260

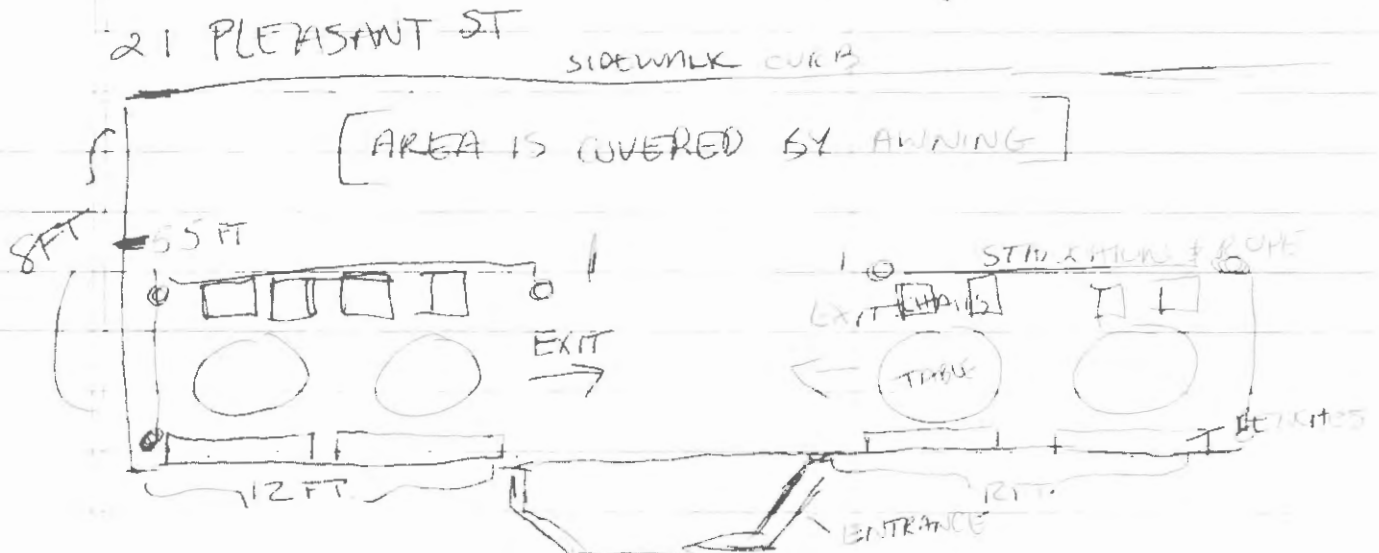
Dear Dina:

We would like you to consider allowing  
"George's" to have sidewalk seating.  
It would look as follows:



If you have any questions or comments,  
please call either Dean or George @ 774-5260.

Thank you,  
Diana Pell





**City of Portland, Maine - Building or Use Permit**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 05-1117	Date Applied For: 08/01/2005	CBL: 038 E024001
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Location of Construction: 21 Pleasant St	Owner Name: Steinberg Henry	Owner Address: 11 Joanne Dr	Phone: ( ) 899-3014
Business Name:	Contractor Name: Owner	Contractor Address: Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: Change of Use - Commercial	

Proposed Use: multi-use commercial building (8 residential units and 1 commercial space)	Proposed Project Description: convert one residential unit on 3rd floor of multi-use commercial building into two residential units
---	--

**Dept:** Zoning      **Status:** Approved with Conditions      **Reviewer:** Marge Schmuckal      **Approval Date:** 08/26/2005  
**Note:** **Ok to Issue:**

- 1) This property shall remain an eight (8) family dwelling with commercial Pedestrian Activity District (PAD) uses on the first floor with the issuance of this permit and subsequent issuance of certificates of occupancy. Any future change of use shall require a separate permit application for review and approval.
- 2) ANY exterior work requires a separate review and approval thru Historic Preservation
- 3) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

**Dept:** Building      **Status:** Approved with Conditions      **Reviewer:** Mike Nugent      **Approval Date:** 09/12/2005  
**Note:** **Ok to Issue:**

- 1) Bedroom A2 as shown on the plans has been converted from a non-sleeping room, therefore must have at least one egress window.
- 2) Both units must have Smoke detectors installed to reflect compliance with "new Construction" standards.  
One in each sleeping room, one in the common areas interconnected within the unit to house current w/battery back up
- 3) The door into Bedromm B 1 as shown on the plan cannot be subject to locking as it accesses the fire escape.

**Dept:** Fire      **Status:** Approved with Conditions      **Reviewer:** Cptn Greg Cass      **Approval Date:** 09/08/2005  
**Note:** Need more info on means of egress from 3rd. Floor. **Ok to Issue:**

- 1) No parking under any fire escape.

**Comments:**  
9/6/2005-gg: received partial exemption. /gg



CITY OF PORTLAND, MAINE  
Department of Building Inspection

# Certificate of Occupancy

LOCATION 21 Pleasant Street

Issued to **Thomas Russell**

Date of Issue **November 17, 1983**

This is to certify that the building, premises, or part thereof, at the above location, built—altered—changed as to use under Building Permit No. **63-565**, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

**1st floor**

Limiting Conditions:

APPROVED OCCUPANCY

**Restaurant**

This certificate supersedes  
certificate issued

Approved:

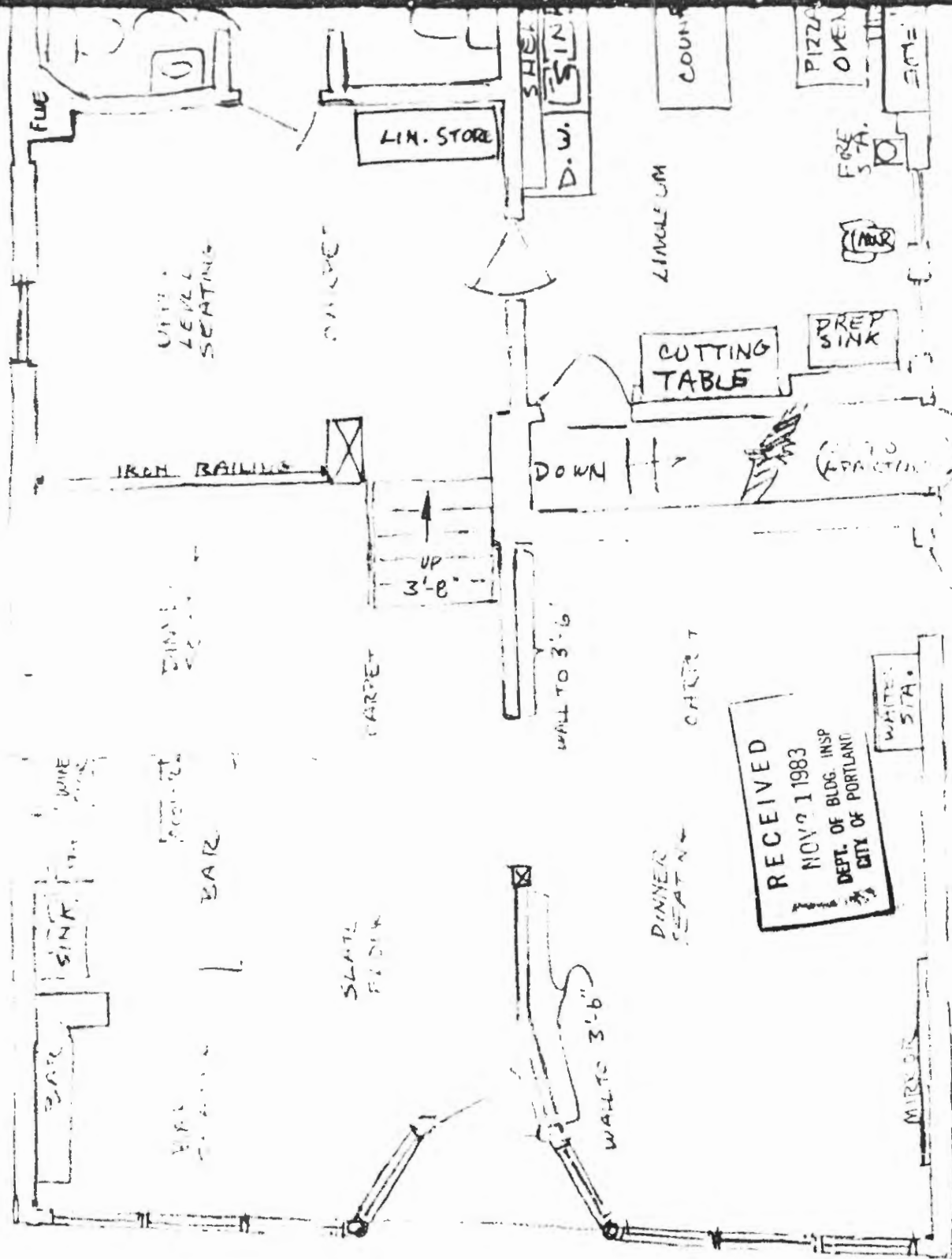
**11-17-83**

(Date)

*Inspector*

*Inspector of Building*

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

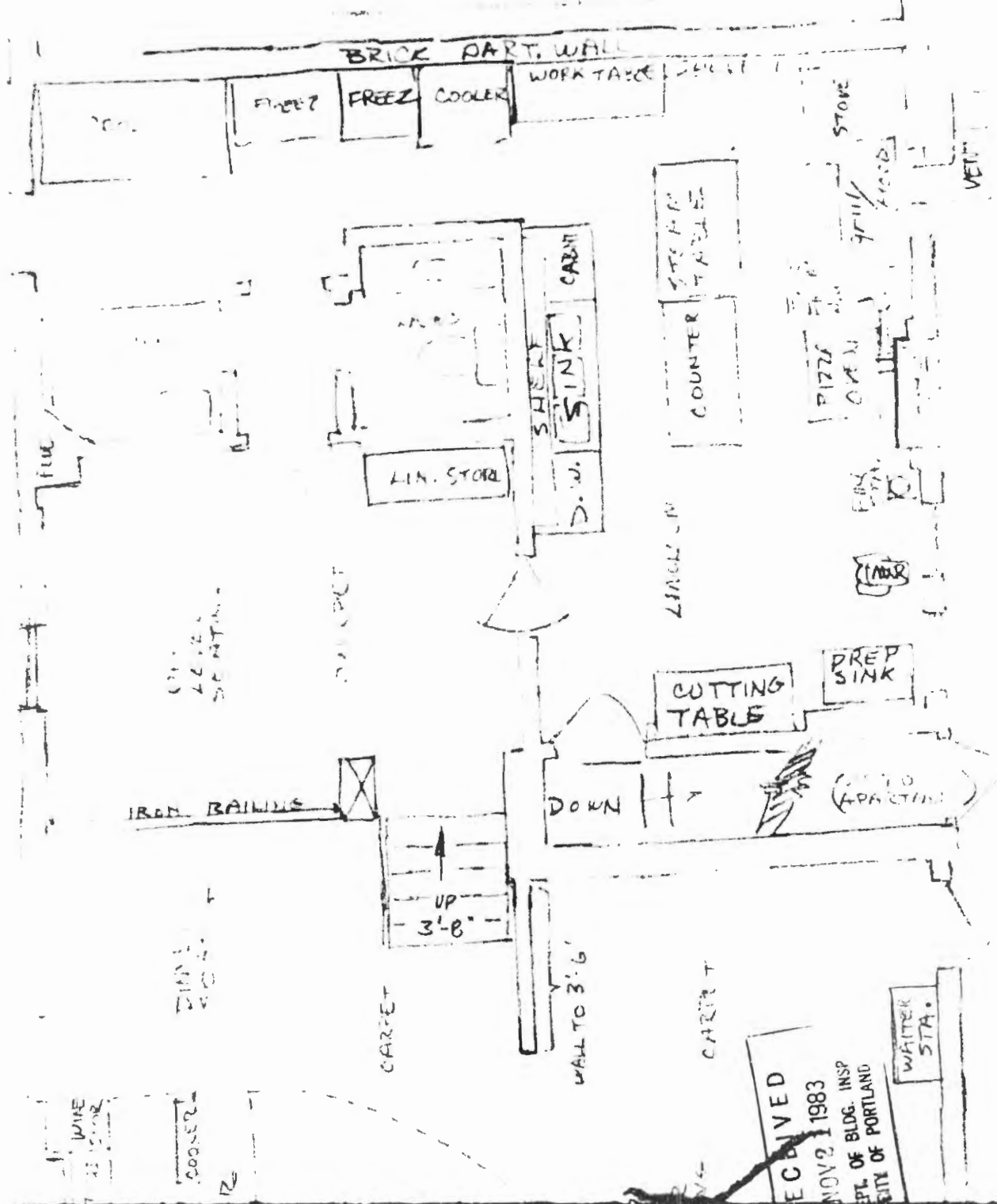


VA = 1'-0"

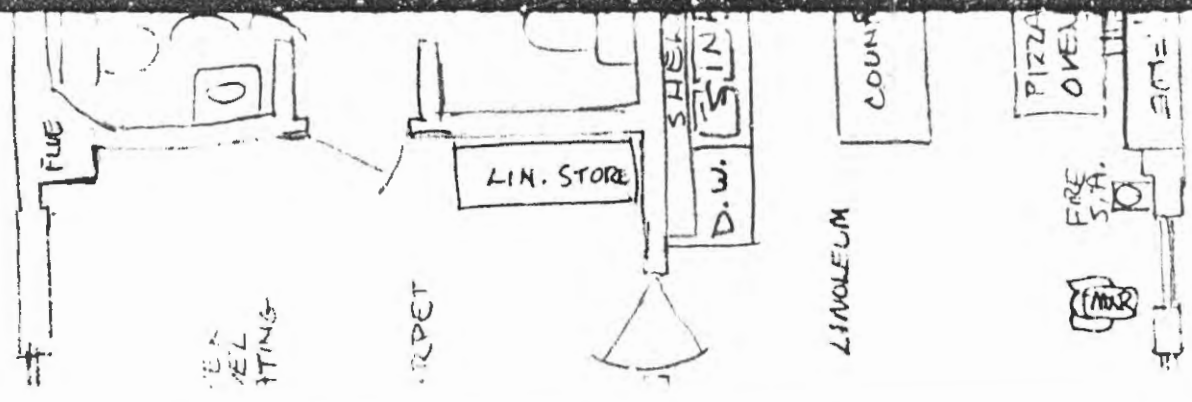
ALBERTAS  
21 PLEASANT ST.  
PORTLAND ME.

11/19/83  
R:





RECEIVED  
 NOV 2 1983  
 DEPT. OF BLDG. INSP.  
 CITY OF PORTLAND  
 WATER STA.



Addenda

I-Units

TABLE 5.5-6 Building Envelope Requirements For Climate Zone 6 (A, B)\*

Opaque Elements	Nonresidential		Residential		Semiheated	
	Assembly Maximum	Insulation Min. R-Value	Assembly Maximum	Insulation Min. R-Value	Assembly Maximum	Insulation Min. R-Value
<i>Roofs</i>						
Insulation Entirely above Deck	U-0.048	R-20.0 c.i.	U-0.048	R-20.0 c.i.	U-0.093	R-10.0 c.i.
Metal Building <sup>a</sup>	<del>U-0.065</del> U-0.049	<del>R-19.0</del> R-13.0 + R-19.0	<del>U-0.065</del> U-0.049	<del>R-19.0</del> R-13.0 + R-19.0	<del>U-0.097</del> U-0.072	<del>R-10.0</del> R-16.0
Attic and Other	U-0.027	R-38.0	U-0.027	R-38.0	U-0.034	R-30.0
<i>Walls, Above-Grade</i>						
Mass	U-0.080	R-13.3 c.i.	U-0.071	R-15.2 c.i.	U-0.151 <sup>a</sup>	R-5.7 c.i. <sup>a</sup>
Metal Building	<del>U-0.113</del> U-0.069	<del>R-13.0</del> R-13.0 + R-5.6 c.i.	<del>U-0.057</del> U-0.069	<del>R-13.0 + R-13.0</del> R-13.0 + R-5.6 c.i.	U-0.113	R-13.0
Steel-Framed	U-0.064	R-13.0 + R-7.5 c.i.	U-0.064	R-13.0 + R-7.5 c.i.	U-0.124	R-13.0
Wood-Framed and Other	U-0.051	R-13.0 + R-7.5 c.i.	U-0.051	R-13.0 + R-7.5 c.i.	U-0.089	R-13.0
<i>Walls, Below-Grade</i>						
Below-Grade Wall	C-0.119	R-7.5 c.i.	C-0.119	R-7.5 c.i.	C-1.140	NR
<i>Floors</i>						
Mass	U-0.064	R-12.5 c.i.	U-0.057	R-14.6 c.i.	U-0.137	R-4.2 c.i.
Steel-Joist	U-0.038	R-30.0	U-0.032	R-38.0	U-0.052	R-19.0
Wood-Framed and Other	U-0.033	R-30.0	U-0.033	R-30.0	U-0.051	R-19.0
<i>Slab-On-Grade Floors</i>						
Unheated	F-0.540	R-10 for 24 in.	F-0.520	R-15 for 24 in.	F-0.730	NR
Heated	F-0.860	R-15 for 24 in.	F-0.688	R-20 for 48 in.	F-1.020	R-7.5 for 12 in.
<i>Opaque Doors</i>						
Swinging	U-0.700		U-0.500		U-0.700	
Nonswinging	U-0.500		U-0.500		U-1.450	
Fenestration	Assembly Max. U	Assembly Max. SHGC	Assembly Max. U	Assembly Max. SHGC	Assembly Max. U	Assembly Max. SHGC
<i>Vertical Glazing, 0%–40% of Wall</i>						
Nonmetal framing (all) <sup>bc</sup>	U-0.35		U-0.35		U-0.65	
Metal framing (curtainwall/storefront) <sup>ed</sup>	U-0.45	SHGC-0.40 all	U-0.45	SHGC-0.40 all	U-0.60	SHGC-NR all
Metal framing (entrance door) <sup>ed</sup>	U-0.80		U-0.80		U-0.90	
Metal framing (all other) <sup>ed</sup>	U-0.55		U-0.55		U-0.65	
<i>Skylight with Curb, Glass, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -1.17	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -0.98	SHGC <sub>all</sub> -0.46	U <sub>all</sub> -1.98	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -1.17	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -0.98	SHGC <sub>all</sub> -0.36	U <sub>all</sub> -1.98	SHGC <sub>all</sub> -NR
<i>Skylight with Curb, Plastic, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -0.87	SHGC <sub>all</sub> -0.71	U <sub>all</sub> -0.74	SHGC <sub>all</sub> -0.65	U <sub>all</sub> -1.90	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -0.87	SHGC <sub>all</sub> -0.58	U <sub>all</sub> -0.74	SHGC <sub>all</sub> -0.55	U <sub>all</sub> -1.90	SHGC <sub>all</sub> -NR
<i>Skylight without Curb, All, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -0.69	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -0.58	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -1.36	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -0.69	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -0.58	SHGC <sub>all</sub> -0.39	U <sub>all</sub> -1.36	SHGC <sub>all</sub> -NR

\*The following definitions apply: c.i. = continuous insulation (see Section 3.2), NR = no (insulation) requirement.

<sup>a</sup>When using R-value compliance method, a thermal spacer block is required; otherwise use the U-factor compliance method. See Table A2.3.

<sup>bc</sup>Exception to Section A3.1.3.1 applies.

<sup>b</sup>Nonmetal framing includes framing materials other than metal with or without metal reinforcing or cladding.

<sup>ed</sup>Metal framing includes metal framing with or without thermal break. The "all other" subcategory includes operable windows, fixed windows, and non-entrance doors.

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S-I units

Addenda

TABLE 5.5-6 Building Envelope Requirements for Climate Zone 6 (A, B)\*

Opaque Elements	Nonresidential		Residential		Semiheated	
	Assembly Maximum	Insulation Min. R-Value	Assembly Maximum	Insulation Min. R-Value	Assembly Maximum	Insulation Min. R-Value
<i>Roofs</i>						
Insulation Entirely above Deck	U-0.273	R-3.5 c.i.	U-0.273	R-3.5 c.i.	U-0.527	R-1.8 c.i.
Metal Building <sup>a</sup>	<u>U-0.369</u> U-0.278	<u>R-3.3</u> R-2.3 + R-3.3	<u>U-0.369</u> U-0.278	<u>R-3.3</u> R-2.3 + R-3.3	<u>U-0.551</u> U-0.409	<u>R-1.8</u> R-2.8
Attic and Other	U-0.153	R-6.7	U-0.153	R-6.7	U-0.192	R-5.3
<i>Walls, Above-Grade</i>						
Mass	U-0.453	R-2.3 c.i.	U-0.404	R-2.7 c.i.	U-0.857 <sup>a</sup>	R-1.0 c.i. <sup>a</sup>
Metal Building	<u>U-0.642</u> U-0.392	<u>R-2.3</u> R-2.3 + R-1.0 c.i.	<u>U-0.324</u> U-0.392	<u>R-2.3 + R-2.3</u> R-2.3 + R-1.0 c.i.	U-0.642	R-2.3
Steel-Framed	U-0.365	R-2.3 + R-1.3 c.i.	U-0.365	R-2.3 + R-1.3 c.i.	U-0.705	R-2.3
Wood-Framed and Other	U-0.291	R-2.3 + R-1.3 c.i.	U-0.291	R-2.3 + R-1.3 c.i.	U-0.504	R-2.3
<i>Walls, Below-Grade</i>						
Below-Grade Wall	C-0.678	R-1.3 c.i.	C-0.678	R-1.3c.i.	C-6.473	NR
<i>Floors</i>						
Mass	U-0.363	R-2.2 c.i.	U-0.321	R-2.6 c.i.	U-0.780	R-0.7 c.i.
Steel-Joist	U-0.214	R-5.3	U-0.183	R-6.7	U-0.296	R-3.3
Wood-Framed and Other	U-0.188	R-5.3	U-0.188	R-5.3	U-0.288	R-3.3
<i>Slab-On-Grade Floors</i>						
Unheated	F-0.935	R-1.8 for 600 mm	F-0.900	R-2.6 for 600 mm	F-1.264	NR
Heated	F-1.489	R-2.6 for 600 mm	F-1.191	R-3.5 for 1200 mm	F-1.766	R-1.3 for 300 mm
<i>Opaque Doors</i>						
Swinging	U-3.975		U-2.839		U-3.975	
Nonswinging	U-2.839		U-2.839		U-8.233	
Fenestration	Assembly Max. U	Assembly Max. SHGC	Assembly Max. U	Assembly Max. SHGC	Assembly Max. U	Assembly Max. SHGC
<i>Vertical Glazing, 0%–40% of Wall</i>						
Nonmetal framing (all) <sup>b</sup>	U-1.99		U-1.99		U-3.69	
Metal framing (curtainwall/storefront) <sup>c</sup>	U-2.56	SHGC-0.40 all	U-2.56	SHGC-0.40 all	U-3.41	SHGC-NR all
Metal framing (entrance door) <sup>c</sup>	U-4.54		U-4.54		U-5.11	
Metal framing (all other) <sup>c</sup>	U-3.12		U-3.12		U-3.69	
<i>Skylight with Curb, Glass, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -6.64	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -5.56	SHGC <sub>all</sub> -0.46	U <sub>all</sub> -11.24	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -6.64	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -5.56	SHGC <sub>all</sub> -0.36	U <sub>all</sub> -11.24	SHGC <sub>all</sub> -NR
<i>Skylight with Curb, Plastic, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -4.94	SHGC <sub>all</sub> -0.71	U <sub>all</sub> -4.20	SHGC <sub>all</sub> -0.65	U <sub>all</sub> -10.79	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -4.94	SHGC <sub>all</sub> -0.58	U <sub>all</sub> -4.20	SHGC <sub>all</sub> -0.55	U <sub>all</sub> -10.79	SHGC <sub>all</sub> -NR
<i>Skylight without Curb, All, % of Roof</i>						
0%–2.0%	U <sub>all</sub> -3.92	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -3.29	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -7.72	SHGC <sub>all</sub> -NR
2.1%–5.0%	U <sub>all</sub> -3.92	SHGC <sub>all</sub> -0.49	U <sub>all</sub> -3.29	SHGC <sub>all</sub> -0.39	U <sub>all</sub> -7.72	SHGC <sub>all</sub> -NR

\*The following definitions apply: c.i. = continuous insulation (see Section 3.2), NR = no (insulation) requirement.  
<sup>a</sup>When using R-value compliance method, a thermal spacer block is required, otherwise use the U-factor compliance method. See Table A2.3.  
<sup>b</sup>Exception to Section A3.1.3.1 applies.  
<sup>c</sup>Nonmetal framing includes framing materials other than metal with or without metal reinforcing or cladding.  
<sup>d</sup>Metal framing includes metal framing with or without thermal break. The "all other" subcategory includes operable windows, fixed windows, and non-entrance doors.

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