

PERMIT ISSUED

City of Portland, Maine - Building or Use Permit Application

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

Permit No: 02-0301	Issue Date: APR 24 2002	CBL: 089 E023001
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Location of Construction: 126 Hussey Rd <i>P.I.</i>	Owner Name: Ghent Walter H Jr &	Owner Address: Po Box 832 <i>CITY OF PORTLAND</i>	Phone: 774-0111
Business Name:	Contractor Name: Bunton, Bill	Contractor Address: 87 Middle Road Cumberland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: Amendment to Single Family	Zone: <i>IR-1</i>

Past Use: Single Family	Proposed Use: Single Family	Permit Fee: \$968.00	Cost of Work: \$135,000.00	CEO District: 3	<i>Zone</i>
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FIRE DEPT: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: <i>P-4</i> Type: <i>5 (New Castle)</i>
Signature:	Signature: <i>[Signature]</i>

Proposed Project Description:
Amend Permit # 011517 & #011558
New Kitchen and Windows

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: Approved Approved w/Conditions Denied

Signature: _____ Date: _____

Permit Taken By: gad	Date Applied For: 04/03/2002	Zoning Approval
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- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan <i>NA</i> Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> <i>to remaining 1 family</i> Date: <i>OK with conditions</i>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>[Signature]</i>
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The house just touches the 250' setback - The rest is completely outside

[Signature] 4/12/02

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 provision of the code(s) applicable to such permit.

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

Application ID Number: 2-0301

Department: Zoning

Status: Approved with Conditions

Reviewer: Marge Schmuckal

Comments: 126 Hussey Rd., P.I.

Approval Date: 04/12/2002

Given On Date: 04/08/2002

OK to Issue Permit Name: Marge Schmuckal Date: 04/12/2002 Date 2:

Conditions Section: Add New Condition From Default List Add New Condition Delete Condition

This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

This property shall remain a single family dwelling. Any change of use shall require a separate permit application for review and approval.

This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.

Create Date: 04/04/2002 By: gad Update Date: 04/12/2002 By: mes

4/3

To:

25 June 2003

 Mike Nugent, Manager of Inspection Services - City of Portland

WAIVER REQUEST FOR:**Property:**

126 Hussey Rd, Peaks Island
 Owners: Walter Ghent and Catherine Barry

Architect and local contact:

Will Winkelman w/ Whitten Architects - 37 Silver Street, Portland, ME 04101
 Phone: 774-0111 x102

Reference permit #020301 / 24 April 02 - (photos and drawings attached)

Summary of request:

This waiver request concerns improving an existing ladder/stair configuration that travels through an existing opening of limited size in an existing concrete slab floor. This stair is for travel from the 2nd to the 3rd (and uppermost) floor. The project is a single family dwelling.

The structure is an existing steel reinforced concrete 26'x16', 3 story WWII look-out tower, w/ 12" thick conc walls and 6" thick conc slab floors, w/ 8'-0" floor to floor heights, exist dimensions, w/ new additions.

The existing structure had been vacant until the late 70's when the property changed hands from the military at which time it became a single family residence.

The third floor (a single space which has wonderful views but is odd otherwise, w/ a clear ceiling height of 6'-9" and window daylight openings that stop at a height of 5'-2") will be unchanged in its use as a loft like den/guestbed -overflow space. There was not, nor will be, a door at the head of the stair (i.e. no privacy), nor a closet (see 3-d sketch and plans).

The existing ladder/stair is very hazardous. It has 8 risers at 11" each, landing oddly. Treads are 11", but the run is 6" w/ no upper landing. This stair type also existed from the first to the second floor, but that run is replaced by the new stairway in the new rear addition, now rough framed.

Expanding this new rear addition vertically to replace this stair was considered - but would have been very costly, especially when it was discovered that it would have involved cutting not only 12" thick concrete walls but also 12" thick sloped concrete roof slab as well - a very complicating factor.

The replacement stair proposed is a 48" dia. spiral (largest that can squeeze into opening). All components of this new stair would be BOCA '99 code 1014.6.4 conforming (re minimum headroom, treads, risers handrails, guards) - accept width: which is where waiver is requested.

-774-1668

G.E. - 23

Re cutting slab for width:

Structural evaluation: Our structural engineer, Paul Becker, strongly discouraged any attempt to cut existing concrete slab floor (which would be required to improve stair size to a BOCA '99 code 1014.6.4 conforming 60" dia. spiral stair). His concern was less w/ any heading off that might be necessary in the corner for the stair, but very much on the larger scale of the stability of the slab as a whole. And, as well, with the integrity of the structure as a whole - acting as a diaphragm for the structure. (See attached letter)

Cutting the 12" thick concrete walls for window openings or room sized openings with steel reinforcing overhead was not a big issue, within certain parameters. But the slab was out of bounds.

Beyond limiting us to not cutting the 2nd or 3rd floor slabs (anywhere, not just for the stair), we were required to reinforce the slabs substantially to bring up to code.

In the photographs, note the heavy 'I' section under the third floor slab and rods hanging the channel that is below the second floor slab. Both slabs had notably deflected, and some spalling had occurred under the third. Paul had us place the steel to the low point of the slab as it is now, and then pack w/ non-shrinking grout between the steel and slab (rather than make any move to take the deflection out of the slab). Under the 2nd floor slab we had no first floor program for walls or dropped beams of any kind, so we had to rig up the dropped rods w/ channel (which gets buried in drywall), to reinforce and bring up to code the existing slab.

When we did explore alternatives for reinforcing the slab, there was discussion of using a new technology which I am not familiar w/: carbon fiber sheets of some sort which would have been laminated to the underside of the slab... but was way too expensive to realistically entertain the idea of.

My personal perspective:

I have lived w/ a 42" spiral stair, and I found it to be very acute and one must move w/ considerable caution.

I have designed two residences w/ BOCA 99 minimum 60" spirals, and found them to be just comfortable - neither generous, nor too big.

With that in mind, if I had any opportunity at all - I would be the first to advocate for a stair larger than 48" in diameter. I simply can't find any other options around this concrete opening issue (within reason).

Thanks - Will Winkelman



11/5/02 Checked wall setback. VERY close. Contractor will
have surveyor RE-check and send letter certifying compliance
JM

BECKER
structural engineers, inc.

January 29, 2003

Mr. Will Winkleman
Whitten Architects
37 Silver Street
Portland, ME 04101

WO802 Ghent Residence
Peaks Island, ME

Dear Will,

During the design phase of the referenced project, we spent several days on site, reviewing the existing conditions and assessing the condition of the existing structure. Our field work was followed by a structural analysis of the existing conditions and further evaluation of the proposed modifications.

It was apparent to us that the existing slab at the stair openings was as large as it could be without adversely affecting the structural integrity of the slab. Enlarging the existing stair openings would render the slab ineffective and would essentially require its removal, and replacement. This level of work would have made the project unaffordable. I trust this explains our position regarding the floor openings.

Sincerely,

BECKER STRUCTURAL ENGINEERS, Inc.



Paul B. Becker, P.E.
Principal