Form # P 04

# DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

## **CITY OF PORTLAND**

Please Read Application And Notes, If Any, Attached

## PLUL DING INSPECTION

## PERIM.

ine and or the P

e of buildings and

This is to certify that \_\_\_\_\_\_MASTERMAN DREW D & ANCY A CUMMING JTS/B

Roof top deck w/access only 3rd floo ondo-a

rm or

APR - 2 2008

epting this permit shall comply with all

Mances of the City of Portland regulating

uctures, and of the application on file in

Permit RIVER 1350ED

AT TO VESPER ST

has permission to \_

provided that the person or persons of the provisions of the Statutes of the construction, maintenance and this department.

Apply to Public Works for street line and grade if nature of work requires such information.

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A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. Onea Chas

Health Dept. \_\_\_

Appeal Board

Other \_\_\_\_

Department Name

PENALTY FOR REMOVING THIS CARD

lion a

389 Congress Street,  Location of Construction:	Owner Name:				r Address:	77	09	Phone:		
77 VESPER ST	i	N DREV	W D & NANC	l .	ESPER ST	•		1		
Business Name:	Contractor Name			Contra	actor Address:			Phone		
	Blackburn Cu	stom Wo	oodworking /T	155 5	Spring Street	t Westbrook		20723281	34	
Lessee/Buyer's Name	Phone:			Permi	t Type:			Zone:		
				Add	litions - Mult	ti Family		R-6		
Past Use:	Proposed Use:	1	416	Permi	it Fee:	Cost of Wor	k:	CEO District:	1057	
3 Unit Condo	3 Unit Condo		op deck	<u> </u>	\$180.00	\$16,00	00.00	1	77/	
	w/access only	to 3rd fl	oor Condo	FIRE	FIRE DEPT: Approved			INSPECTION:		
	tenant					Denied	Use Gi	roup: K-2	Type: 56	
10		1		C.	ne Doo	us Reco		see Group: R-2 Type: 56  [R-2007]  gnature: 3/2-1/06		
light use;	SESIdential Con	<u>acs</u>		[ ' '			ľ	المسائل		
Proposed Project Description	on: s anhyta 2md flaam Canda tanan	nt		d: .	1.	C		alalla		
Roof top deck w/access	s only to 3rd floor Condo tenai	111		Signature:						
							,	•		
				Action	ı: Appro	ved App	roved w	/Conditions	Denied	
				Signat	ture:			Date:		
Permit Taken By:	Date Applied For:	T			Zoning	Approva	ı			
ldobson	10/11/2007	<u></u>		Fouring Typhioter						
1. This permit applic	ation does not preclude the	Spec	cial Zone or Revie	ws	Zoni	ng Appeal		Historic Preservation		
Applicant(s) from	meeting applicable State and	Sh	oreland	☐ Variance			İ	Not in District or Landmark		
Federal Rules.		ł					,			
2. Building permits d	lo not include plumbing,	☐ We	etland	Miscellaneous			1	Does Not Require Review		
septic or electrical	work.						ł			
	re void if work is not started	Flo	ood Zone		Conditi	onal Use	Requires Revi		ew	
	ths of the date of issuance. may invalidate a building						- 1	Approved		
permit and stop all	•		bdivision		Interpre	tation	ition			
r · · · · · · · · · · · · · · · · · · ·			e Plan	Approved			- 1	Approved w/Conditions		
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<u> </u>		Maj∫	☐ Minor ☐ MM	Denied			Denied			
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		Date:	2 10/2							
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API	R - 2 2003									
CITY (	OF PORTLAND									
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	n the owner of record of the na									
	by the owner to make this apple, if a permit for work describe									
	to enter all areas covered by su									
such permit.	·	•	•			•				
SIGNATURE OF APPLICAL	TNT		ADDRESS			DATE		PHON	NE	
The state of the block						2		11.01		
RESPONSIBLE PERSON IN	I CLIAB CE OF WORK EVELE									

# **BUILDING PERMIT INSPECTION PROCEDURES Please call 874-8703 or 874-8693 (ONLY)**

## to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

Delow.	
A Pre-construction Meeting will take place upor	n receipt of your building permit.
Footing/Building Location Inspection:	Prior to pouring concrete
MA Re-Bar Schedule Inspection:	Prior to pouring concrete
Foundation Inspection:	Prior to placing ANY backfill
Framing/Rough Plumbing/Electrical:	Prior to any insulating or drywalling
	to any occupancy of the structure or NOTE: There is a \$75.00 fee per ction at this point.
Certificate of Occupancy is not required for certain you if your project requires a Certificate of Occupa inspection	incy. All projects <b>DO</b> require a final
If any of the inspections do not occur, the phase, REGARDLESS OF THE NOTICE OR C	
CERIFICATE OF OCCUPANICES MU	
BEFORE THE SPACE MAY BE OCCUPIED	}
50/	4/2/08
Signature of Applicant/Designee	Date / 9
Signature of Inspections Official	Date
CBL: $\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc\bigcirc$ Building Permit #: $\bigcirc\bigcirc\bigcirc\bigcirc$	7-1276

	0.10 TT TO 1		Permit No:	Date Applied For:	CBL:
City of Portland, Maine - Bu	•		07 1276	10/11/2007	<b>\</b>
389 Congress Street, 04101 Tel		(207) 874-871	0	10/11/2007	003 D016001
Location of Construction:	Owner Name:		Owner Address: 77 VESPER ST		Phone:
77 VESPER ST	MASTERMAN DRE	W D & NANC			
Business Name:	Contractor Name:		Contractor Address:	_	Phone
	Blackburn Custom W	oodworking /T	155 Spring Street	Westbrook	(207) 232-8134
Lessee/Buyer's Name	Phone:		Permit Type:		
		<u> </u>	Additions - Multi	Family	
Proposed Use:  3 Unit Condo - Roof top deck w/acctenant	cess only to 3rd floor Con	1 -	ed Project Description: top deck w/access o	only to 3rd floor Con	ndo tenant
Dept: Zoning Status: Note:  1) Separate permits shall be require	Approved with Condition red for future decks, sheds		: Marge Schmucka	al Approval D	Oate: 10/29/2007 Ok to Issue: ✓
<ol><li>This is NOT an approval for an not limited to items such as stoy</li></ol>					nt including, but
<ol><li>This property shall remain a thr for review and approval.</li></ol>	ee (3) family condominium	m dwelling. Any	change of use shall	require a separate p	permit application
4) This permit is being approved owork.	on the basis of plans subm	itted. Any devia	itions shall require a	separate approval b	pefore starting that
Dept: Building Status: Note:	Approved with Condition	ns <b>Reviewer</b>	: Chris Hanson	Approval D	Oate: 03/24/2008 Ok to Issue: ✓
1) Fastener schedule per the IRC 2	2003				
<ol> <li>Guards must be 42 inches in hei guard. Stair treads shall not be</li> </ol>				installed on both sic	des of the stair
3) This permit is approved under I not meet new construction dime fullest extent possible					
4) Permit approved based on the p noted on plans.	lans submitted and review	ved w/owner/cor	tractor, with addition	onal information as a	agreed on and as
5) Your guardrail system installed Code.	around your deck must m	eet the loading i	equirements of sect	ion 1607.7.1 of the 1	IBC 2003 Building
Dept: Fire Status:	Pending	Reviewer	: Capt Greg Cass	Approval D	
Note: Stairs to new occupiable sp Called 10-30-2007	_				Ok to Issue:

#### Comments:

10/26/2007-mes: called Tom B. to get me an elevation of the building to show that it is under the 45' max. height - he will get that to me.

10/29/2007-mes: Tom B. dropped off a sketch of the building height.

Location of Construction:	Owner Name:		Owner Address:	Phone:				
77 VESPER ST	MASTERMAN DREV	W D & NANC	77 VESPER ST					
Business Name:	Contractor Name:	<u> </u>	Contractor Address:	Phone				
	Blackburn Custom Wo	oodworking /T	155 Spring Street Westbrook	(207) 232-8134				
Lessee/Buyer's Name Phone:			Permit Type:					
			Additions - Multi Family					

10/30/2007-Capt Cass: Stairs don't meet code called 10-30-2007

# General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any

Location/Address of Construction:	7 VES	PER STR	EET	
Total Square Footage of Proposed Structure	/Area	Square Footage of I	Lot 406:	5
Tax Assessor's Chart, Block & Lot		*must be owner, Lessee	or Buyer*	Telephone:
Chart# 3 Block# Det# 16	Name D/ Address	REN MASTER. AN CUMMINE 77 VESPER	MAN ST#3	(4) 773-7147 (2) 650-8241
	City, State	& Zip POETLAND	Ð4101	
Lessee/DBA (If Applicable)	Owner (if	different from Applica	nt) (	Cost Of
	Name		7	Work: \$ 6,000
	Address			C of O Fee: \$
	City, State	& Zip	7	Total Fee: \$
Current legal use (i.e. single family)	WENTA	L ROOF	51.11	- 1 La 1/1
If vacant, what was the previous use? **Proposed Specific use:	cutes Sect-	SCOPE uccessonly	OF V	YORK For tenent -
Address: 155 SPRING	ST	7.07. VV 00,		
City, State & Zip WESTBROOK	ME 0	4092	 Tele	ephone: 409-6367
Who should we contact when the permit is r	eady: Tom B	ACKBURN	Tele	phone: 232-8134
Mailing address:				QUESTIONS
Please submit all of the information do so will result in the order to be sure the City fully understands the ay request additional information prior to the	<b>he automat</b> ne full scope o	ic denial of your p	ermit. ng and Deve	elopment Department
is form and other applications visit the Inspections office, room 315 City Hall or call 874-8703	ctions Division			
ereby certify that I am the Owner of record of th	,			

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 repr	esenta	ative	e shal	l hav	e the	e autho	ority								at any reasonable hour to enforce		`
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Signature:	10		4	1	$D_0$	2EW	M	ASM	ERM	A Date	: 11	MI	0	1		100 V	1
	T	his	is n	ot a									vork	ะนถ	til the permit is issue		7
																5%	

#### Scope of Work 77 Vesper Street, Portland, Maine

- 1. The third floor owner has requested a deck be constructed on the flat roof of his building.
- 2. A review of the structure revealed several issues that are problematic.
  - a. First, the access to the roof does not meet code in two areas. The stairs have a riser that is 9 1/2 inches and a tread that is 8 1/2 inches.
  - b. The vertical clearances are substantially below code. In one area the clearance is 61 inches.
- 3. Therefore the first issue to be addressed is the access to the roof to comply with vertical clearance. The stairs cannot be changed to conform to code. The solution for the access vertical clearance is to remove the roof top structure and replace it with a larger L shaped structure, which will allow the vertical clearance requirements to be met. A new exterior door and a new double hung window (size TBD) will installed.
- 4. Another issue associated with the roof access is the threshold to the actual roof. This is only 4 inches above the roof. The new roof access will be expanded to the south west side of the building to allow for an additional step with the same dimensions as the existing stair system. This will allow the threshold to be approximately 13 ½ inches above the roof surface, but will further allow the deck to be constructed so that one additional step on the deck to be installed meeting code requirements of riser of less than 7 ¾ inches, and a tread of 12 inches.
- 5. The roof system is vintage framing with 2x6 full dimension hemlock 20 inches OC (average). Twenty four inches below the bottom of the upper level framing is another set of ceiling joists of similar dimension and configuration. There also is an interior load bearing partition as well as exterior wall framing constructed of full dimension 2x4 inches 16 inches OC.
- 6. In order to accommodate the loads associated with a deck of this size Alfred Hodson of Resurgence Engineering has been consulted and his letter is made part of this application. The plan is to remove the section of the roof slightly larger than the deck dimension (16'x16') and expose the framing. 6"x 6" PT posts will be installed rising 12 inches above the existing roof structure. To support these columns will be 2 LVL 1 3/4"x11 7/8" sandwiching each post at mid way from the center wall and the exterior wall. Each post will be through bolted

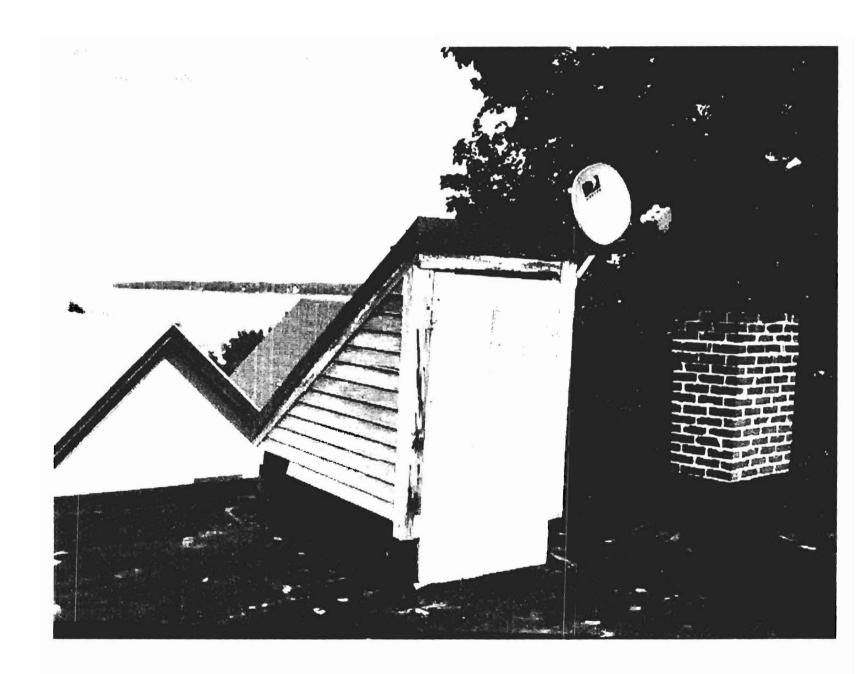


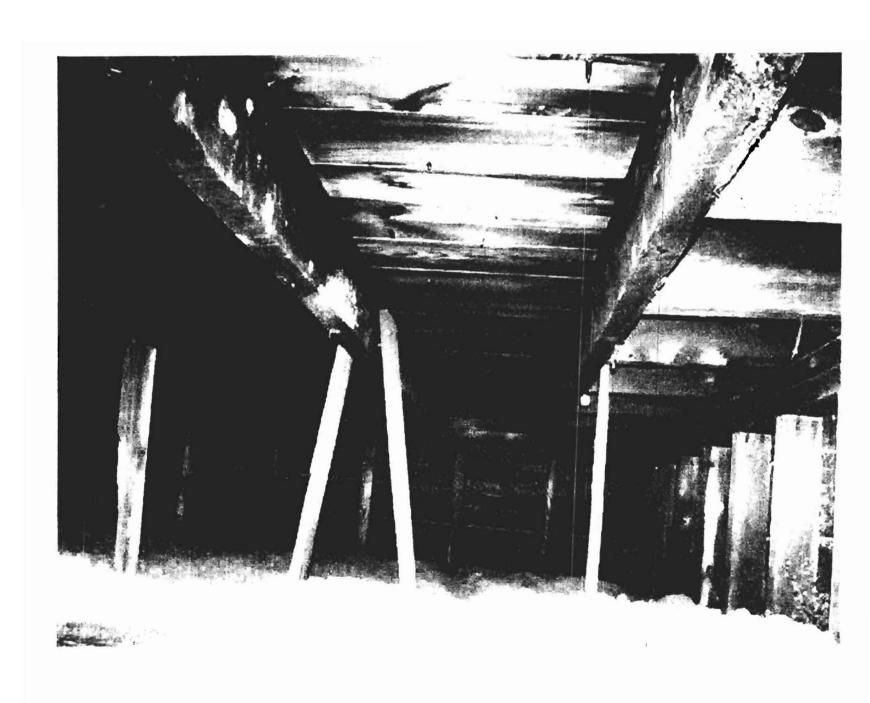
with 4 one half inch bolts the existing framing will be removed and the LVL's will be substituted. Post will also be installed on the center wall for interior support.

- 7. Once the framing is completed the roof deck will be resurfaced with similar dimension OSB or CDX sheathing. The removed fiberboard insulation will either be reinstalled or replaced depending on the condition. Maine Roofing has consulted and will reinstall the EDPM membrane and flash all penetrations, including the roof access structure.
- 8. A plumbing vent pipe that would be located adjacent to the deck will be relocated while the roof work is being done.
- 9. On top of the posts a Pressure Treated deck system consisting of the posts a Pressure Treated deck system consisting of the posts and floor joists, with a composite deck installed. A conventional rail system with a height of the post access deck will be constructed from the Roof access structure with a single step to the deck surface.
- 10.A roof drain installed recently with the cage will remain in the same location but will be accessed by a removable floor panel on the deck surface.
- 11. The existing cellulose insulation located on top of the ceiling joists will remain.











132 BRENTWOOD STREET
PORTLAND, MAINE 04103
v/f (207) 773-4880
EMAIL: RESURGENCE@VERIZON.NET

October 12, 2007

Tom Blackburn
Maine Construction Consultants LLC
14 Hanover Street
Portland, ME 04101

RE: Rooftop Deck Addition Structural Feasibility Review, 77 Vesper Street, Portland, ME

Tom,

The following letter summarizes our discussions about the rooftop deck you wish to install at the above-mentioned address. As we discussed, you are responsible for reviewing permitting issues related to the roof deck height.

The building in question is balloon-framed, with a basically flat roof that slopes to a center drain. The owner intends to install a rooftop deck, approximately 16' x 20', and you have concerns about the strength of the existing roof framing. As we discussed, you also need to properly anchor the new roof deck to prevent uplift caused by wind loading.

The existing roof rafters consist of rough-cut 2x6 members spaced at approximately 20 inches on center, a technique often employed for these types of buildings. They are insufficient to carry the new roof deck's concentrated loads.

As we discussed, you will need to remove the existing roofing and roof sheathing in the area of work.

Fasten the new roof deck 6x6 p.t. stub posts to internal pairs of LVL girders.

Cut the bottom of the LVL girders to span over the existing center and outside walls. Taper the LVLs with a 1:3 end taper before leveling the ends to match the existing joist height at the center and end bearing walls.

Side-fasten the stub posts to new, internal 1 3/4" x 11 1/4" LVLs or Versa-Lam members below the roof surface. Use 4" long Timberlok screws, with five screws through each LVL into the stub post. Locate all Timberlok screws at least 2 inches off the ends of the timber posts.

Have the roofing contractor fully flash and cap the stub posts prior to building the deck above.

You will need to have two or three pairs of LVL rafters to support the new deck on each side of the building midspan wall. Depending on the way the deck spans, you may need to have stub posts below the center of the deck or at an intermediate location near the center wall.

Tom Blackburn re: 77 Vesper Street Rooftop Deck Addition Structural Feasibility Study October, 2007

Page 2 of 3

Build your roof deck platform on the flashed stub posts. Frame the deck with 2x10 pressure-treated joists spaced at 12 inches on center. While this results in a few more joists, it is a necessary loading requirement for a common tenant deck on this 3-unit building.

End girders should be triple 2x10 joists for spans exceeding 8 feet. End girders can be attached to the inside and outside faces of the LVL stub posts, allowing the joists to cantilever over the girders on two sides of the deck. The other rim joists can at the deck can terminate at the posts.

You will need to leave space to provide a cleanout for the roof drain which runs along the center bearing wall of the building. You may locally space the joists 16 inches wide at this location.

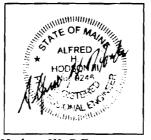
New deck railings need to be 42 inches high. Intermediate railing posts should be 6x6 pressure-treated material spaced no more than six feet on center. Top and bottom railings should be 2x6 pressure-treated wood. You should install a block between the bottom rail and the decking at the midspan of each railing. Balusters must be spaced to provide no greater than a 4" gap between them.

As we discussed, stainless steel fasteners are expensive. All structural fasteners should be specially galvanized or treated to conform with current pressure-treated wood formulations. One such warranteed fastener is the Timberlok system (<a href="www.fastenmaster.com">www.fastenmaster.com</a>). It is fully tested and approved for use in ACQ and CA-B pressure treatments.

I recently spoke with the city of Portland about proximity of the deck to the chimney. I was told that there was no definitive distance beyond 2 inches of clearance necessary. You should confirm this again with the city before actually locating the posts and building the deck.

If you have any questions or concerns during construction, please do not hesitate to contact me. I look forward to working with you on this project.

Sincerely,



Alfred H. Hodson III, P.E.

AHH/ah c:\2007\07jobs\0729 blackburn vesper st letter.doc

From: Marge Schmuckal To: Thomas Blackburn

**Date:** 10/29/2007 9:38:02 AM **Subject:** Re: 77 Vesper Street

Tom, This is very helpful. But can I get a quick drawing too. Marge

>>> "Thomas Blackburn" <teblkbrn@maine.rr.com> 10/26/2007 3:32:22 PM >>> Marge, The height to the top of the roof deck is 34 feet 1 inch. The height of the tallest point in the roof (the roof access structure) from the ground is 40 feet 3 inches. If you requiire any more information please advise.

As always thanks for your help. TEB

Thomas E. Blackburn
Maine Construction Consultants, LLC
14 Hanover Street
Portland, Maine 04101-2908
207-232-8134, fax 207-774-2588

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MAR - 4 2008

134 x 1178 LVL EINTER SIDE 7x6 ROOF JUISIS 00 アメス 13/4 11/18 LJL 2×10 PT STARING MHCL

2×6 JOISTS 7×6 0 0

NEW ROSE DIECK OSB MATCHING EKISTNY WITH FIBER BOLFI ROUTING MEMBRANE AXA PT DOSSS

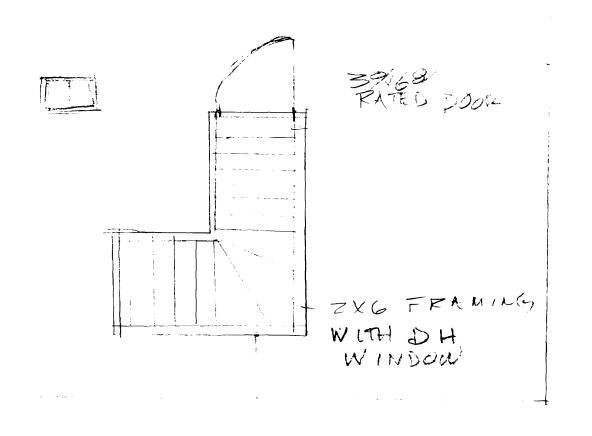
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POSTS 1347 1178 LVL DIMINESON 20" OC (AVE) OT 2 T 421 

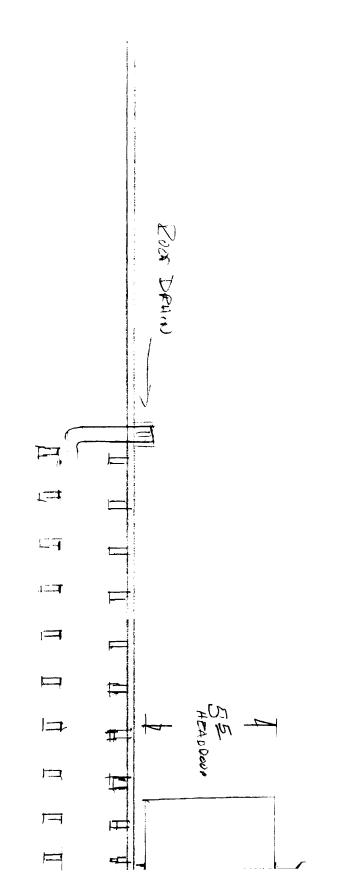
1. EVISTING RUOF ACCESS DOES NOT MEET CODE IN SEVERAL AREAS & (a) HEAD ROOM CLEARANCE 15 TOO SMALL AT THE ENTRY TO THEROOF (55) (b.) THE STAIR SYSTEM RISERS 942" TREADS 842" (1) EXTEROR FRAMING 15 2 2X3 ROUGH CUT WITH NO INSULATION

2. PROPOSED IS AN EXPANSION OF THE ROOF ACCESS TO ACCOMODATE GO CLEARANCE AT ALL POINTS. AND FRAMED WITH 246 WITH 6" INSULITION ALSO THE EXPANSION WILL BE TALLED 86 VS 69, AND WIDER TO ACCOMODATE THE 2×6 FRAMING. THE EXISTING STAIR 11 OTH 15 39.

3. IT IS A
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13" ABOVE
THE PRO
UF 734" PI



77 VESPER PROPOSED ROOF ACCESS 12 ZX 8 PT HEADER ZX8 PT DECK JOISTS 16"OC, WITH GALV HANGERS COMPOSITE DECKING ACCESS FOR 24" Y24" POOF DRAIN RAIL SYSTEM 414 PT POSS LAGGED TO SIDES WITH ZV4 PT TOP+ BUTTOM PAIL WITH Z" BALCUSTER 4" OC 3º GATE IN PAILTED PROPOSED DECK FRANING PROPOSED DECK PLUMBING 0



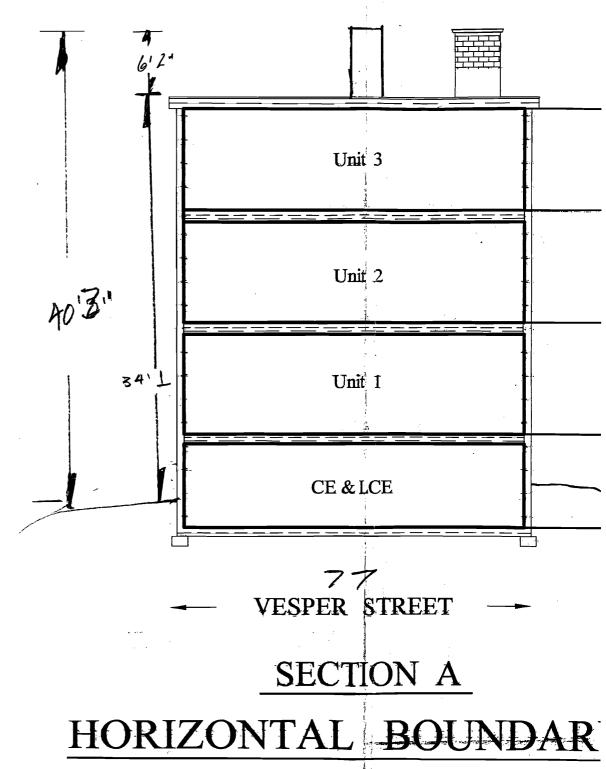
77 VESPER STREET EXISTING SOUTHVIEW

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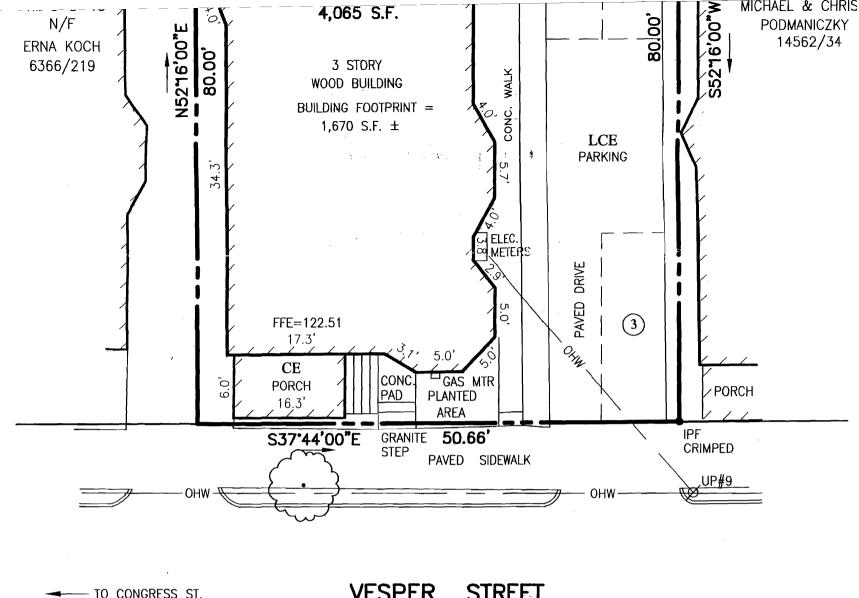
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NOTE: ELEVATIONS BASED ON CITY DATUM

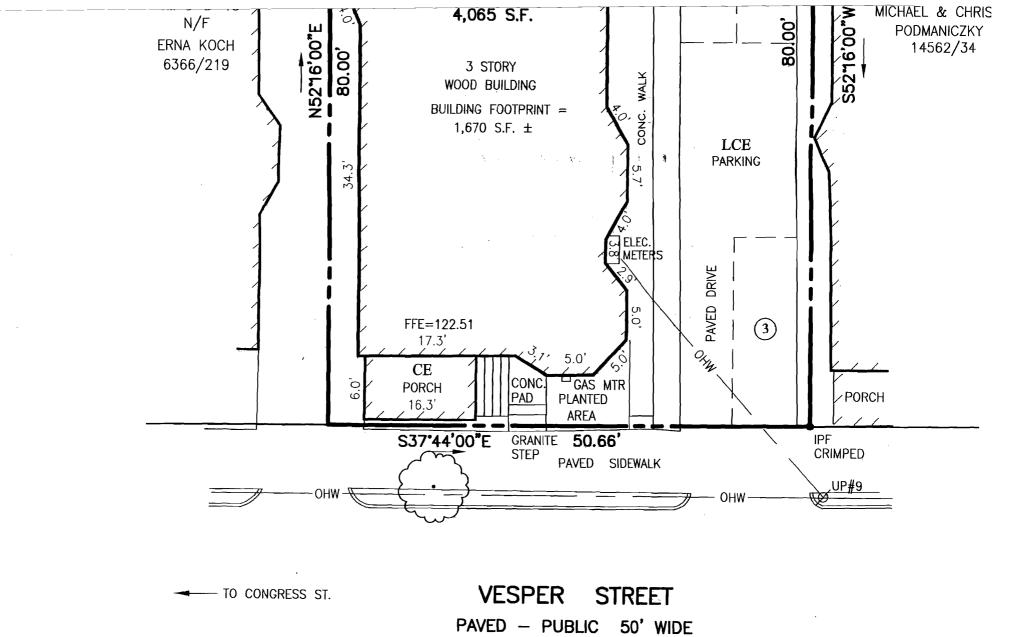


- TO CONGRESS ST.

**VESPER STREET** 50' WIDE PAVED - PUBLIC

1 = 10 Feet

#### **NOTES:**



PAVED - PUBLIC

**NOTES:**