



Certificate of Design Application

From Designer:

Bruce W. MacLeod, P.E.

Date:

11/5/08

Job Name:

AVENUE AUTO CO. ANNEX

Address of Construction:

745-757 FOREST AVE

2003 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year 2003 IBC Use Group Classification (s) _____

Type of Construction IV UNPROTECTED

Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2003 IRC NO

Is the Structure mixed use? NO If yes, separated or non separated or non separated (section 302.3) _____

Supervisory alarm System? NO Geotechnical/Soils report required? (See Section 1802.2) YES

Structural Design Calculations

_____ Submitted for all structural members (106.1 - 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
<u>OFFICE</u>	<u>50psf + 20psf PART.</u>
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

1609.1.1 Design option utilized (1609.1.1, 1609.6)

100 Basic wind speed (1809.3)

Iw=1.0 Building category and wind importance Factor, I_w table 1604.5, 1609.5)

B Wind exposure category (1609.4)

±0.18 Internal pressure coefficient (ASCE 7)

±19 / ±25 Component and cladding pressures (1609.1.1, 1609.6.2.2)

+15psf / Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

Simplified 1617.5 Design option utilized (1614.1)

F₁ C Seismic use group ("Category")

0.328 / 0.124 Spectral response coefficients, S_Ds & S_{D1} (1615.1)

D Site class (1615.1.5)

- _____ Live load reduction
- _____ Roof live loads (1603.1.2, 1607.11)
- 42psf Roof snow loads (1603.7.3, 1608)
- 60psf Ground snow load, P_g (1608.2)
- 42psf If $P_g > 10$ psf, flat-roof snow load P_f
- 1.0 If $P_g > 10$ psf, snow exposure factor, C_e
- 1.0 If $P_g > 10$ psf, snow load importance factor, I_s
- 1.0 Roof thermal factor, C_t (1608.4)
- 42psf Sloped roof snowload, P_s (1608.4)
- C Seismic design category (1616.3)
- Shear walls Basic seismic force resisting system (1617.6.2)
- 7/4.5 Response modification coefficient, R_d and deflection amplification factor C_d (1617.6.2)
- Simplified Analysis procedure (1616.6, 1617.5)
- 0.047 Design base shear (1617.4, 1617.5.1)
- Flood loads (1803.1.6, 1612)**
- _____ Flood Hazard area (1612.3)
- _____ Elevation of structure
- Other loads**
- _____ Concentrated loads (1607.4)
- _____ Partition loads (1607.5)
- _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)



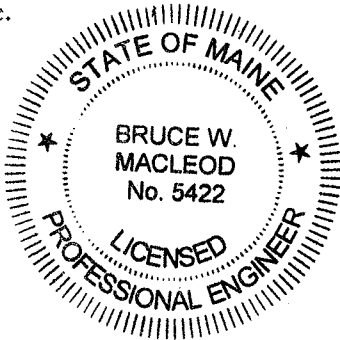
Accessibility Building Code Certificate

Designer: Bruce W. MacLeod, PE.

Address of Project: 745-757 Forest Ave

Nature of Project: New Building for
USED CAR SALES OFFICES

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act. Residential Buildings with 4 units or more must conform to the Federal Fair Housing Accessibility Standards. Please provide proof of compliance if applicable.



(SEAL)

Signature: Bruce W. MacLeod

Title: Professional Engineer

Firm: MacLeod Structural Engineers, PA

Address: 404 Main St
Gorham, Me 04038

Phone: 207-839-0980

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov



Certificate of Design

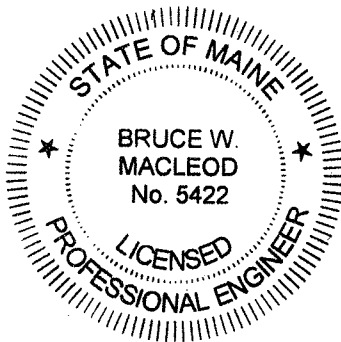
Date: 4/5/08

From: Bruce W. Macleod, PE

These plans and / or specifications covering construction work on:

745-757 Forest Ave, Portland, Me

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the *2003 International Building Code* and local amendments.



(SEAL)

Signature: Bruce W. Macleod

Title: Professional Engineer

Firm: Macleod Structural Engineers, PA

Address: 404 Main Street

Gorham, Me.

Phone: 207-839-0980

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