

## SUMMARY MEMORANDUM

TO: Mr. Patrick J. Carroll  
Principal  
Carroll Associates  
217 Commercial Street, Suite 200  
Portland, ME 04101

DATE: October 12, 2016

RE: Shared Parking Analysis for 23 Ocean Avenue, Portland

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This is written to respond to provide updated information regarding parking requirements for the proposed development at 23 Ocean Avenue in Portland. The existing site provides 1,580 square feet (S.F.) of office space. The proposed additional building will provide 2,389 additional S.F. of office space in the basement and first floor levels with four residential apartments on the second floor.

Parking needs were first determined using the Institute of Transportation Engineers (ITE) "Parking Generation, 4<sup>th</sup> Edition", published in 2010, and land use codes 221 – Low/Mid-Rise Apartment and 701 – Office Building. It was determined at a meeting with City staff on September 29<sup>th</sup> that the area is best represented as an average of urban and suburban rates. The 85<sup>th</sup> percentile parking needs, the typical figure used for transportation design purposes, are outlined below for the overall project using the average of the two rates:

Existing Office Space and Proposed Office Spaces –

$1,580 \text{ S.F. plus } 2,389 \text{ S.F.} = 3,969 \text{ S.F. X } (3.45 + 2.98/2 \text{ per } 1,000 \text{ S.F.} = 3.22) = 12.78$   
 $= 13 \text{ spaces}$

Proposed Apartments –  $(1.42 + 1.61/2 \text{ vehicles per dwelling unit} = 1.52) \text{ X } 4 = 6.08 = 6$

**Total Required Spaces = 13 office and 6 apartment = 19**

Additionally, parking needs were analyzed on the basis of the City of Portland requirements. The City parking code specifies one (1) parking space for every 400 S.F. of office space and two (2) parking spaces for every dwelling unit. The parking needs based upon the City requirements are outlined below for the overall project:

Existing Office Space and Proposed Office Spaces –

$1,580 \text{ S.F. plus } 2,389 \text{ S.F.} = 3,969 \text{ S.F. X } 1 \text{ per } 400 \text{ S.F.} = 9.92 = 10 \text{ spaces}$

Proposed Apartments –  $2.00 \text{ vehicles per dwelling unit X } 4 = 8 \text{ spaces}$

**Total Required Spaces = 10 office and 8 apartment = 18**

Based upon the ITE 85<sup>th</sup> percentile urban and suburban rates, the proposed development would require 19 parking spaces. Based upon the City of Portland requirements, a similar 18 spaces are necessary. The proposed uses are ideal for consideration of shared parking. Parking for the residential units peaks from 10:00 PM until 5:00 AM. During this overnight period the residential apartments will require 6 – 8 spaces while the office spaces will require none.

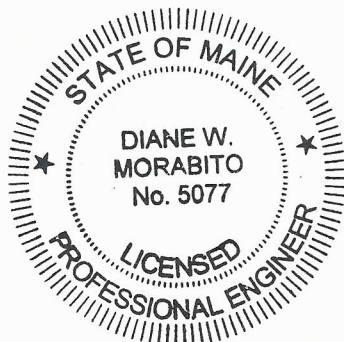
The peak parking demand for office space occurs from 10:00 AM until 2:00 PM. During the 10:00 AM to 2:00 PM period little parking is generally needed by residential units. ITE residential data suggests the percent of residential demand during the 10:00 AM to 2:00 PM period is 30 to 33 %, which reduces the daytime parking apartment requirement to 2 spaces.

To summarize the shared parking results, the overnight requirement is expected to be 6 – 8 spaces for the apartments, which is met on site. The peak daytime demand is expected to be 10 – 13 for the office spaces and two for the apartments for a total of 12 – 15 spaces.

The proposed site plan provides ten (10) parking spaces. This meets the nighttime requirement of 6 – 8 spaces. Based upon the shared parking analysis, the on-site parking is deficient by two (2) spaces to five (5) spaces during the daytime office peak, dependent upon which parking standard is applied, ITE or City code.

It is understood that off-site spaces in close proximity, on the same easterly side of Forest Avenue will be leased to address the daytime parking shortage. It is also important to note that transportation demand management (TDM) actions will also be utilized to reduce vehicular trips to the site. The site is located on a Metro bus route which will encourage its use. In addition, the building will provide interior bike lockers for both resident and office uses to encourage bicycle commuting. These TDM actions should reduce vehicular trips to the site and the associated daytime parking requirements.

As always, please do not hesitate to contact me if you or the City of Portland have any questions or concerns regarding this parking analysis.



Sincerely,

A handwritten signature in black ink that reads "Diane W. Morabito".

Diane W. Morabito, P.E. PTOE  
President