

## Ocean Gate Garage – Transportation Memorandum

Date: June 13, 2017  
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Location: 48-72 Brown Street, Portland, Maine

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### **Existing Conditions**

The site is a 0.90 acre parcel located at 48-72 Brown Street and comprised of two parking lots: an Upper Lot (accessed from Casco Street) and a Lower Lot (accessed from Brown Street and Cumberland Avenue).

The Lower Lot has space for approximately 65 vehicles to park. There are driveway openings to both Brown Street and Cumberland Avenue that accommodate both entering and exiting traffic. Brown Street allows only northbound traffic, and so the Brown Street driveway accommodates left turns in and left turns out. Cumberland Avenue allows eastbound and westbound traffic, and there are currently no restrictions on particular turning movements in or out of the parking lot.

The Upper Lot has space for 27 vehicles to park, as well as a drive-through bank ATM kiosk. There are two driveway openings onto Casco Street, one of which accommodates entering and exiting traffic, and one of which accommodates exiting traffic only (for the drive-through ATM). Because Casco Street is a two-way street, both left and right turns in and out of the lot are accommodated.

### **Proposed Development**

The proposed development consists of a five-level parking garage with a total of 205 standard spaces (9' wide), 48 compact spaces (8' wide), and 4 handicap accessible spaces. The redevelopment will be confined almost entirely to the Lower Lot only.

The lower level is not connected to the upper levels, and will provide 21 standard parking spaces, 32 compact spaces, and 2 accessible spaces. It will have driveway openings on Brown Street and Cumberland Avenue; however, unlike the existing lot, the Cumberland Avenue driveway opening will allow for entering traffic only. The proposed building will restrict sightlines to/from traffic exiting from Brown Street, and because the driveway opening on Cumberland Avenue is

only approximately 25' from the intersection of Brown Street and Cumberland Avenue, it was decided in preliminary discussions with Tom Errico that precluding exiting traffic on Cumberland would be safest. As such, the width of the driveway opening will be reduced from 27' to 16'. Both the Cumberland Avenue and Brown Street entrances will provide ADA-accessible routes to/from the garage.

The upper levels of the garage will be accessible from the existing Upper Lot, which has a two-way driveway opening onto Casco Street. The upper levels will have 184 standard parking spaces, 16 compact spaces, and 2 accessible spaces. The entrance/exit to the garage itself will include a 5' sidewalk that will allow for an accessible pathway to the garage from the lot and from the adjacent buildings.

### **Estimated Trip Generation**

The first level of the proposed garage, which has entrances from Brown Street and Cumberland Avenue and an exit onto Brown Street, is not expected to generate an increase in trips to/from the project site because it will provide seven fewer parking spaces than the existing lot. It is also expected that the distribution of trips over the course of the day and throughout the adjacent street network will be much the same as the existing conditions.

Because the proposed garage will introduce parking supply, but not additional development that would generate trips (such as office space or residences), it is not expected that the garage will generate a significant number of new motor vehicle trips. However, because the upper levels of the garage represent an increase in parking supply, the garage will likely result in a redistribution of trips.

In order to estimate the additional trips to/from the project site (Casco Street access, in particular), it is assumed that the garage will largely serve the adjacent office space. Based on the 9<sup>th</sup> edition of the *ITE Trip Generation Manual*, traffic associated with office space tends to exhibit peaks that coincide with those of the adjacent street network. If it is also assumed that the upper levels of the garage are empty at 5 AM and full by 10 AM (202 parking spaces), then based on a typical hourly traffic distribution for home-based work trips<sup>1</sup>, the proposed garage would result in an additional 76 trips during the peak hour (7 AM – 8 AM). Home-based work trips tend to exhibit a higher peak in the AM.

Given the diffuse nature of urban trips and the wide variety of land uses in close proximity to the site, it is expected that the surrounding street grid will be able to efficiently absorb this traffic with minimal impact.

### **Traffic Crashes**

Based on data from 2013-2015, the most recent three-year analysis period, the nearest high crash location is Oak Street between Congress Street and Shepley Street (9 crashes; CRF: 4.87). All 9 crashes were identified as rear-end or sideswipe crashes, and all resulted in property damage

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<sup>1</sup> NCHRP Report 365: Travel Estimation Techniques for Urban Planning  
<https://ntl.bts.gov/lib/21000/21500/21563/PB99126724.pdf>

only. While this location does not interface directly with the project site, it is possible that the traffic to/from the Brown Street Garage may result in a small increase in traffic on Oak Street, as motorists coming from Congress Street may use it to access Shepley Street and then the Upper Lot. However, given the relatively low severity of the crashes and the modesty of the additional traffic resulting from this project, it is not expected that this project will exacerbate the situation on Oak Street.

### **Bicycle Parking**

Because the parking garage is providing motor vehicle parking that is not required in conjunction with a residential or non-residential use, providing bicycle parking is not strictly required, as per the Site Plan ordinance. Regardless, the applicant is proposing to include a bicycle rack inside the garage on the first level to provide sheltered bicycle parking for 9 bicycles, as well as three bicycle racks (which will accommodate a total of 6 bicycles) on the sidewalks of Brown Street and Cumberland Avenue, in accordance with City standard details. Furthermore, the adjacent office building owned by the applicant, located on the corner of Brown and Cumberland and accessible from the Upper Lot, has indoor bicycle parking for a large number of bicycles.