



## **North Shore at Canton**

Baltimore, MD

### **Final Report**

Lighting Breadth

Beau Menard  
Structural  
Parfitt  
4/05/06

#### **Lighting Analysis:**

An analysis was performed at the parking level of the structure, to assure the quality of lighting. As the parking level is the only public area of the building, a sense of security is needed. Designing the lighting system seemed to be a reasonable solution to the problem. The design of the lighting system was based on both the IES and ASHRAE standards.

Based on the IES code it was found that the average horizontal illuminance for a parking garage, in both the day and night, was 5 foot candles, on the pavement. It was also found that the power density limitations, set by the ASHRAE standards, worked out to be 0.3 watts/ft<sup>2</sup>.

The lighting design program Luxicon was used to determine the luminaries used and how they will be laid out. However I was unable to come up with a satisfactory design. Though the illuminance levels and power density limits could be met, the luminaries did not meet the spacing requirements. A reasonable design could not be made without an in-depth analysis.