

January 24, 2007

Tim Levine  
The Olympia Companies  
280 Fore Street, Suite 202  
Portland, ME 04101

Re: Custom House Square, 300 Fore Street  
Portland, ME

**Structural Observations**

Dear Mr. Levine,

Per your request, I visited the above referenced site yesterday, January 23, 2007, to perform a structural observation between the hours of 11:15 a.m. and 12:15 p.m. The temperature was approximately 25 degrees and it was partly cloudy. Dan Chipman (superintendent) of Wright-Ryan Construction, Inc, allowed access to the site. The following is a brief summary of my findings:

**Progress:**

***Concrete Foundation:***

The concrete foundation work, including, but not limited to foundation walls, grade beams, pile caps, piers and footings has been completed.

As reflected in previous test reports prepared by SW Cole (testing agency), concrete cylinder compression tests revealed lower compressive strengths than required by the project specifications. At the time of the visit, a representative of the testing agency utilized a Windsor probe to test areas of concrete wall, where test cylinders had been taken from during the concrete placement. Initial testing revealed positive results. Our office will evaluate the concrete strengths upon receipt of the extent of the testing results from SW Cole.

***Concrete floor slabs:***

The reinforced structural slab on grade beams and pile caps has been completed at the lower level floor. The first floor slab on deck had been placed the day prior to my arrival. Heat was supplied underneath and curing blankets were installed over the slab at the time of the visit.

As discussed on site with Dan, the 4" thickness of slab must be maintained at all areas of the concrete slab placement on deck. Dan was cautioned with regard to the use of the previously used laser screed for the placement of the first and second floors. Leveling the floors can potentially lead to increased concrete depth at midspan of beams and decks, thus increasing deflection as the depth/deflection issue can continuously compound itself. As discussed, a dipstick, or other means of measurement, must be

utilized to ensure that the placement of 4" of concrete is maintained throughout the floor. Dan informed me that on the previous placement at the first floor level, concrete thicknesses of 4" were maintained throughout and the total concrete order did not exceed calculated values at preceding placements.

**Structural Steel Framing:**

Structural steel and composite steel floor deck framing has been completed at the first floor. Composite steel deck was nearly complete on the completed structural steel framing at the second floor framing. The structural steel erector was in the process of completing the third floor structural steel at the time of the visit.

Per discussions with Dan, preliminary ultrasonic moment weld testing had produced positive results. In accordance with the previously established testing frequency, approximately 25% of the welded connections had been completed at each of the first two floors. In the event that future tests performed yield deficient results, further testing will be determined at that time.

**Items to be addressed by the Contractor:**

1. Continue to ensure that the required slab thickness on future slab on deck placements is not exceeded utilizing a dip stick or alternative means.
2. Forward a copy of all testing reports to our office through the architect for review.

**Comments:** The site was found to be clean and well organized. Construction quality to date has met or exceeded expectations and has been in accordance with the intent of the construction documents.

Please feel free to contact our office if you should have any questions.  
Best regards,



**Matthew LaBrecque, P.E.**  
Structural Engineer

Cc: Randy Alred, Dan Chipman, Craig Hill – Wright-Ryan  
Jim Loft, Matt Wirth – Pro Con Inc.