FIELD OBSERVATION REPORT Price Structural Engineers, Inc.

Project:3 – Unit ApartmentLocation:62 Cumberland St.; Portland, MEDate:March 29, 2011Time:10:30 PM

Weather:Partly CloudyTemperature:40 deg. F. +/-Contractor:Island CarpentrySite contact:Mike White, Jim Small, Bruce

Project Items to be Observed:

Wood Framing and general progress

Field Observations / Project Status:

- 1. Stair stringers not installed per plans and specs, see below.
- 2. Contractor has proceeded to roof level.
- 3. Joist sizes checked at random locations and in general look acceptable.
- 4. Column spliced between floor levels and needs to be replaced as discussed. See below.
- 5. Stair stringers at ground level are supported at midspan with stub wall which is acceptable.
- 6. Not all beams have hangers. Contractor said that installation is pending.
- 7. Lintel framing looks acceptable at locations that have been completed.
- 8. Some column to beam connectors not yet installed.

Items Needing Correction:

- Steel beam pocket at grid 11/A.9 was placed too low. Contractor shall provide adequate temporary support of steel beam and infill void below beam with solid concrete (f'c = 4000 psi). The temporary shoring shall remain in place until concrete has cured a minimum of 7 continuous days unless 2% accelerator or "high early" concrete is used in concrete mix design which would reduce curing period to 3 days.
- 2. Missing anchor bolts install 3/4" diameter Hilti Kwik bolts with 4" embedment in concrete per Hilti requirements including, but not limited to hole diameter, cleaning of hole and nut tightness.
- 3. Joist and beams hangers missing at some joists and beams.
- 4. Nails missing from some joist and beam hangers.
- 5. Built-up beams with multiple LVL's need to be fastened together with (3) 16d nails at 12" on center at locations where this has not yet been done. Install nails from both sides where (3) LAMS are combined.
- 6. Replace column where it is spliced between 1st and 2nd elevated floors with 5.25"x9.25" VLAM beam (placed vertically) as discussed at jobsite.
- 7. Incorrect stair stringers installed at elevated floors. Add a 1.75"x 6" (w/Fb=3100 psi) VLAM sister (ripped to 6") to each stringer at elevated floors. Fasten with (2) 16d nails at 8" oc,
- 8. Install remaining beam and joist hangers where missing.
- 9. Not all holes in joist, beam and columns connectors have nails. Each hole must have a fastener and it needs to be the fastener size specified for the specific connector.
- 9. Finish installing column to beam connectors where missing.

Corrective action taken:

1.

General:

The purpose of this site visit is to observe the project and generally become familiar with the progress and quality of the Contractor's work and to assess whether the work is proceeding in general conformance with the construction documents regarding the specific items listed within this report. The client has not retained Price Structural Engineers Inc. to make detailed inspections of every structural component, perform structural design or to provide exhaustive or continuous project review.

Price Structural Engineers Inc. shall not, during such visits or as a result of any observations of construction, supervise, direct or have control over Contractor's work nor shall Price Structural Engineers Inc. have authority over or responsibility for the equipment, means, methods, techniques or procedures by the Contractor or health and safety precautions in programs incident to the work of the Contractor. Price Structural Engineers Inc. does not assume responsibility for Contractor's failure to comply with laws, rules, regulations or codes or the Contractor's failure to furnish and perform their work in accordance with the construction documents and does not guarantee the performance of the construction contract by the Contractor.

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Photo #1 – Replace spliced column



Photo # 3 - Nails missing at beam/column connectors



Photo #2 – Missing beam hanger



Photo #4 - Framing at top floor level