BECKER STRUCTURAL ENGINEERS

Field Report #4 No. 3604

Project:	Casco Bay PG – Stair/Elevator Tower Restoration
Project #:	WO 3604
Date/Time:	March 15, 2016, 11:00 a.m.
Observers	Joshua Martin-McNaughton, Author (BSE), Tim Rich (KISC)

I visited the site to review the progress of the work and to check for general conformance with the design intent of the drawings and specifications for this project. The weather at the time of this visit was raining and 40 degrees F.

The following observations were made:

1. At grade level at the underside of level 2 at the exposed slab the vertical reinforcement needs to be epoxied and doweled into the slab, reference Section 7/S8. See photo below.

2. KISC has begun to prep the interior walls for painting by grinding down the repair areas and removing the existing paint down to bare CMU block. See photo above.

3. KISC has shored the 5th floor wood framed roof and begun the demolition of the 5th floor west lobby wall. See photo below. KISC will tooth in the CMU masonry at the "T" intersection between the south wall and elevator door wall. The scope of wall rebuild will extend until sound masonry is found. Reinforced bond beams will be installed at all new wall rebuild areas and steel plate banding will lap the bond beams.

4. Trash and paper bags were observed in some of the CMU cells at the demolished 5th floor lobby wall. No vertical reinforcement was observed at the demolished areas with the exception of short 1 foot long bars that the laborers found in ungrouted cells.

5. BSE reviewed the "T" wall intersection conditon with KISC where the existing masonry is not toothed into one another at levels 1-4. KISC to reference Detail E/S8.

6. BSE noted that a minimum of one vertical reinforced cell needs to be installed above the elevator and stairs doors at each level. This is to allow for the steel plate banding to be bolted through grouted and reinforced cells at a consistent interval.

7. The curtain wall at the east side of the tower has been removed. It was assumed that a steel beam was installed at the curtain wall header but no beam was observed. It does appear that there is a CMU lintel at this location but the continuity of the reinforcement cannot be verified without demolition and temporarily supporting the masonry above. BSE recommends to install two 6x3 1/2x3/8 angles (long leg vertical) with minimum 6 inch bearing each end. Since the bearing areas do not rest on a full size block the angle bearing should be grouted solid. This additional steel will require a change order as it was not an anticipated condition. KISC please provide pricing for this.

8. KISC will need to build out the jamb of the curtain wall with an 8" wide CMU block full height of the curtain wall in order for the use of standard size curtain wall. The additional block is to be tied back to the existing CMU with masonry ties or galvanized pins.

9. The elevator shaft concrete roof slab does not appear to have consistent bearing along the four supporting sides. See photo below. BSE to provide a sketch for bearing and attachment of the roof slab to the CMU walls.

10. KISC is continuing to grout the vertical reinforcement within the stair and lobby interior. See adjacent photo.

11. BSE requested that the sloped roof beams coming in at the second level be grouted solid between the bearing plate and CMU.

12. BSE observed doweling of the vertical reinforcement into the foundation.

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