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ACCORD
on Fire and Building Safety in Bangladesh

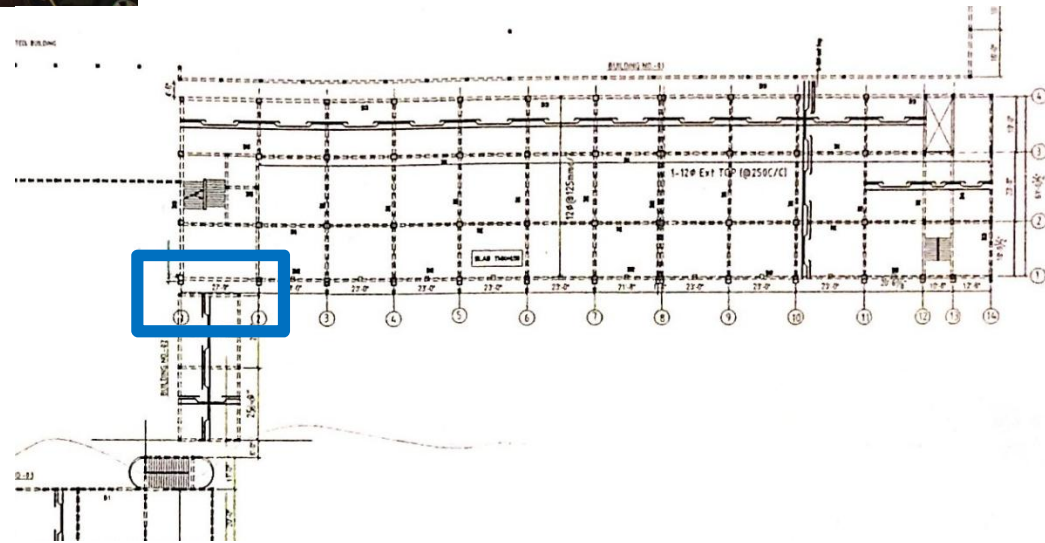


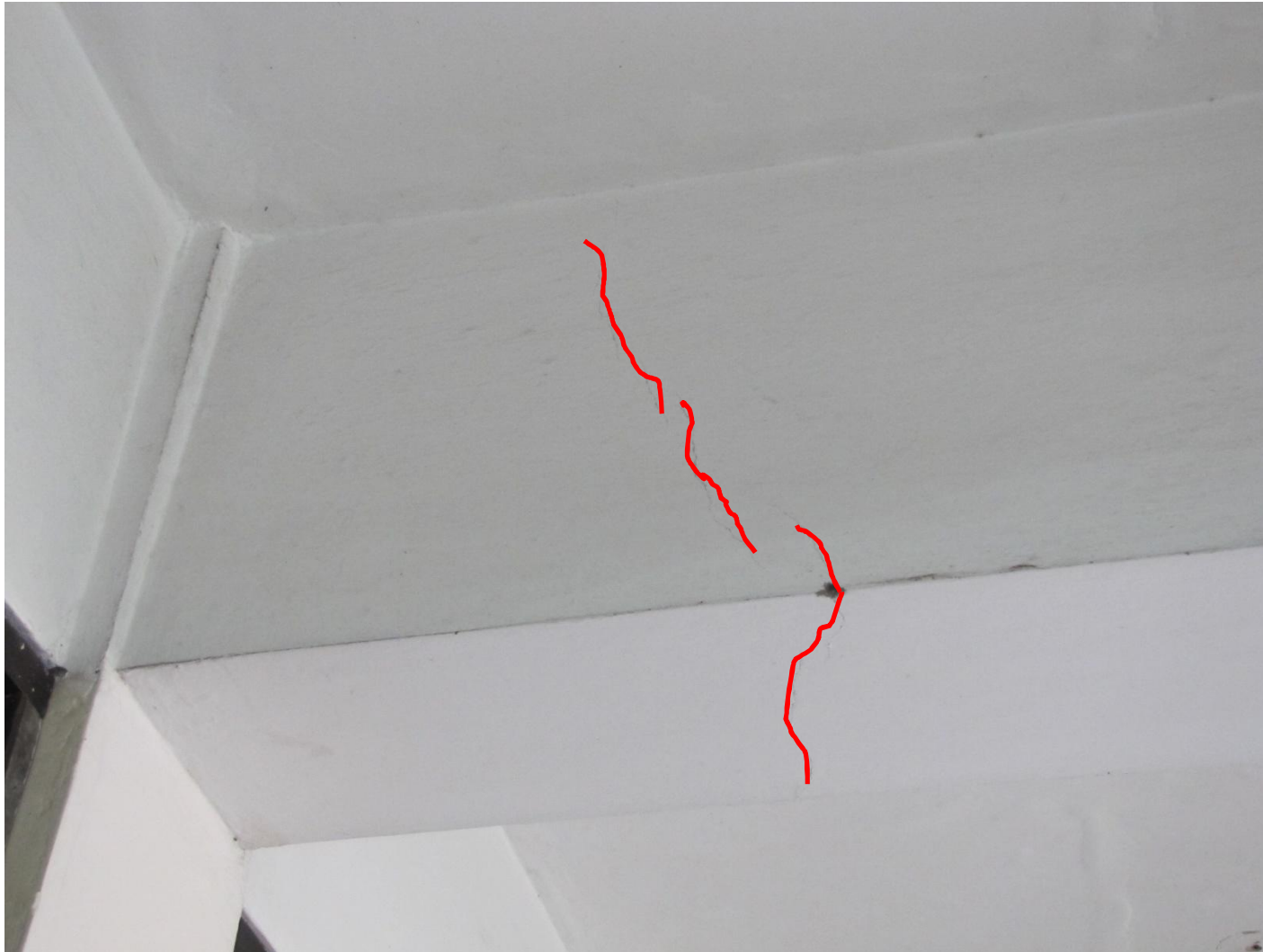
Identified Priority 1 Concerns



1st Priority 1 Concern

Structural and permit drawings do not reflect all existing site conditions.





2nd Priority 1
Concern

Evidence of
overstressing in
Building #3 due
to overloaded
slab.



3rd Priority 1
Concern

Steel plate infill
at lift shaft in
Building #1
appears
inadequate for
applied loading.

Identified Priority 2 Concerns



Priority 2 Concern

Water staining (right) and cracking (above) at roof slab of Building #5 due to water seepage from tank above.



Overall Stability System



The buildings did not feature any core or shear walls. Stability was achieved through sway action between beams and columns and masonry infill walls.

We require that these items be investigated in a Detailed Engineering Assessment.



Water Ingress at Roof Level



No waterproofing membrane was visible on the roof of the building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab beneath the finishes, and cause long-term soaking of the slab.

Priority Actions

Problems Observed Summary

- ITEM 1: Structural and permit drawings do not reflect all existing site conditions.**
- ITEM 2: Evidence of overstressing in Building #3 due to overloaded slab.**
- ITEM 3: Steel plate infill at lift shaft in Building #1 appears inadequate for applied loading.**
- ITEM 4: Water staining and cracking at roof slab of Building #5.**

Item 1 and actions

The structural and permit drawings do not reflect all the existing site conditions. Discrepancies included, but are not limited to, additional concrete room above machine room on roof of building #1, steel roof above 5th floor of building #1, cantilevered roof slab of building #1, the link between buildings #1 and #2, column layout for building #2, the staircase between buildings #2 and #3, and structural drawings for building #4.

Priority 1 (Immediate – Now)

- Review actual existing site conditions and update structural and permit drawings as required.

Priority 2 (within 6 – weeks)

- Not applicable.

Priority 3 (within 6-months)

- Not applicable.

Item 2 and actions

At building #3, shear cracks were observed in the beams under the roof slab. We were informed an additional 100mm waterproofing slab was added to the existing 150mm roof slab. We were not able to confirm this on site, and this was not shown on the structural drawings. As a result of this additional dead weight, the column appears to be overstressed.

Priority 1 (Immediate – Now)

- Remove all storage loading at the 1st and 2nd floors down to 2.0kPa (40 psf) until a Detailed Engineering Assessment can be carried out to determine the load carrying capacity of the columns.
- No persons to access roof slab (0kPa) until the DEA can be carried out.

Priority 2 (within 6 – weeks)

- Not applicable.

Priority 3 (within 6-months)

- Not applicable.

Item 3 and actions

At building #1, the steel checkered plate infill in the lift shaft at the 1st, 2nd, and 3rd floors appears inadequate for the applied loading. Excessive deflection was noted, as well as poor steel detailing. At the time of the inspection, storage loading was applied to the steel checkered plate.

Priority 1 (Immediate – Now)

- Remove all loading (persons and storage) down to 0kPa until an engineering assessment can be carried out on the load carrying capacity of the steel checkered plate.

Priority 2 (within 6 – weeks)

- Not applicable.

Priority 3 (within 6-months)

- Not applicable.

Item 4 and actions

At building #5, water staining and cracking was observed in the roof slab. The water cooling equipment on the roof appears to be leaking and accumulating at a low point against the parapet. This water is percolating through the slab.

Priority 1 (Immediate – Now)

- Not applicable.

Priority 2 (within 6 – weeks)

- Repair leak at water cooling unit and properly drain roof with adequately sloping surface and weeping holes.

Priority 3 (within 6-months)

- Repair roof slab.