

International Classic Composite Ltd. (9353)

Naojur, Kodda, Joydebpur, Gazipur, Bangladesh

(23.992889N, 90.356916E)

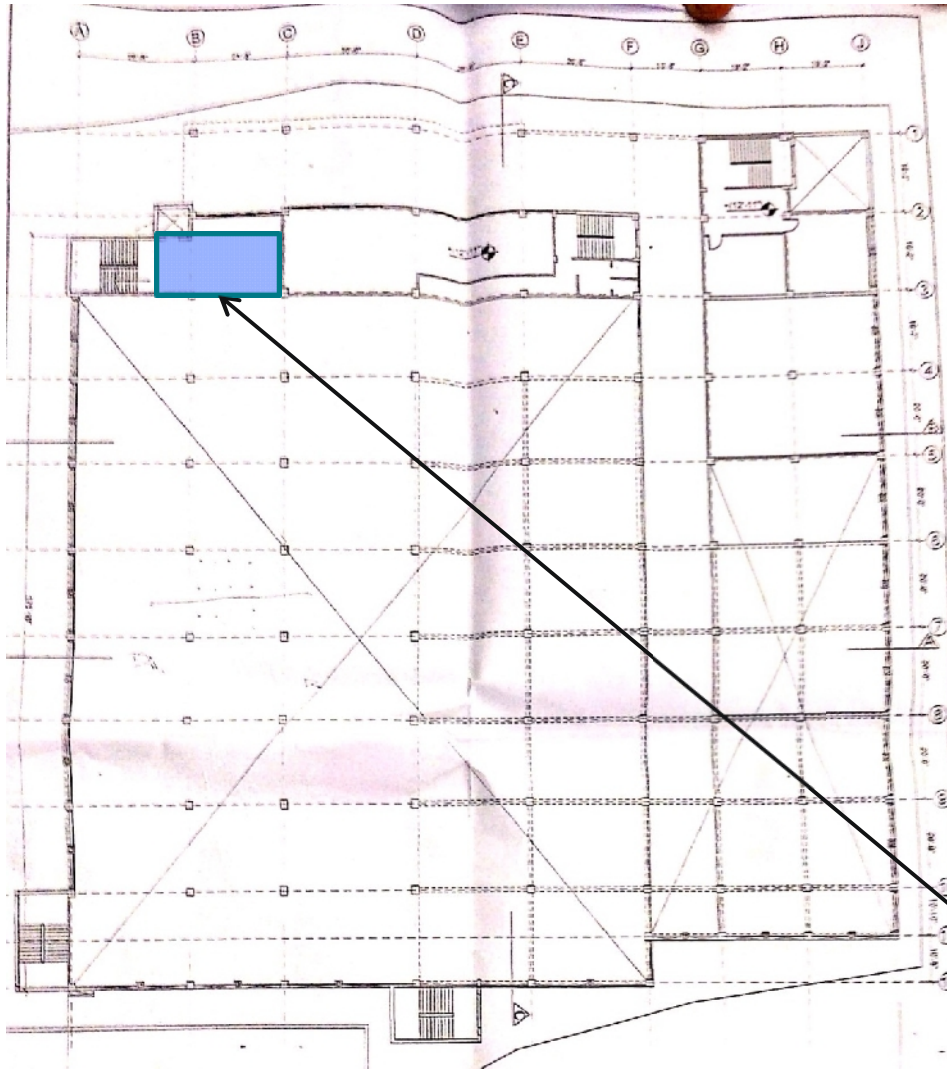
08.MARCH.2014



Site Observations



Connecting bridge on mezzanine floor does not match construction documentation, therefore, capacity check is required for supporting beam



Mezzanine Floor Plan



Bridge connecting with stair landing on mezzanine floor does not match the existing floor plan. Capacity check is required for supporting beam.

Priority 1 Concern



Additional Steel staircase connected with one storey building and waste water treatment plant.

Capacity check for structural element to support this additional load, especially at support connections.

Uncontrolled Heavy Storage Loading



Priority 2 Concern



Uncontrolled heavy water storage loading on roof deck.



Uncontrolled heavy storage on 2nd
& 3rd floors.

Waterproofing material to be applied including rust-proof paint for the exposed reinforcement





An appropriate layer of waterproofing needs to be applied including rust-proof paint for the exposed reinforcement.

Overall Stability System





Concerns on the stability system for lateral loading and seismic loading. Façade brickwork with little capacity; lack of moment capacity in connection between columns and beams.

Further detail engineering assessment is required whether such system can resist the lateral load from wind & earthquake



Water Ingress



There is no evidence of water ingress at the roof level, however, it should be considered as an on-going action to apply waterproofing measures during construction, while the 6th floor acts as a roof level.



Priority Actions

Problems Observed Summary

**ITEM 1: Adequacy of structural element to support additional loads
(connecting bridge on mezzanine floor and additional steel
staircase)**

ITEM 2: Uncontrolled Heavy Storage Loading

ITEM 3: No Waterproofing Material Applied on the Roof Slab

ITEM 4: Stability System and Foundations

Item 1 and actions

Adequacy of Structural Element to Support Additional Load (Connecting Bridge and Additional Steel Staircase)

Priority 1 (Immediate – Now)

- Factory Engineer to review design, loads, for this and connecting bridge on mezzanine floor and additional steel staircase and confirm suitability for such applied loads

Priority 2 (within 6 – weeks)

- Verify in situ concrete stresses either by cores or existing cylinder strength data for affected beams and columns.
- Detail engineering assessment to be completed.
- Produce and actively manage loading plan for all floor plates giving consideration to floor capacity and column capacity

Priority 3 (within 6-months)

- Continue to implement loading plan

Item 2 and actions

Uncontrolled Heavy Storage Loading

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Adopt some sort of signage/staff guidance to ensure that the maximum weight of storage is not exceeded .

Priority 3 (within 6-months)

- Maintain standards of quality control to ensure that storage procedures are correctly followed so that overloading problems do not arise in the future.

Item 3 and actions

No Waterproofing Material Applied on the Roof Slab

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- The existing roof level does not have any waterproofing. This is not a long-term problem as another level is under construction above, however it should be considered as an on-going action to apply temporary waterproofing measures during construction, while the 6th floor acts as a roof level.

Priority 3 (within 6-months)

- Ensure that an appropriate layer of waterproofing is included in the build-up of the final roof level, once construction is complete.

Item 4 and actions

Stability System / Moment Frame Capacity

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Detail engineering assessment to be carried out in particular stability and foundation aspects to be investigated in detail.

Priority 3 (within 6-months)

- None required