

Consumer Knitex (CMT Bangladesh) Ltd.

Dhamsur, Bhaluka, Mymensingh; Dhaka, Bangladesh

(24.368167N, 90.37511E)

14 May 2014



Observations

Non-engineered structures



No drawings for the childcare building were presented and in general the structure appears to be non-engineered. The main issues observed were:

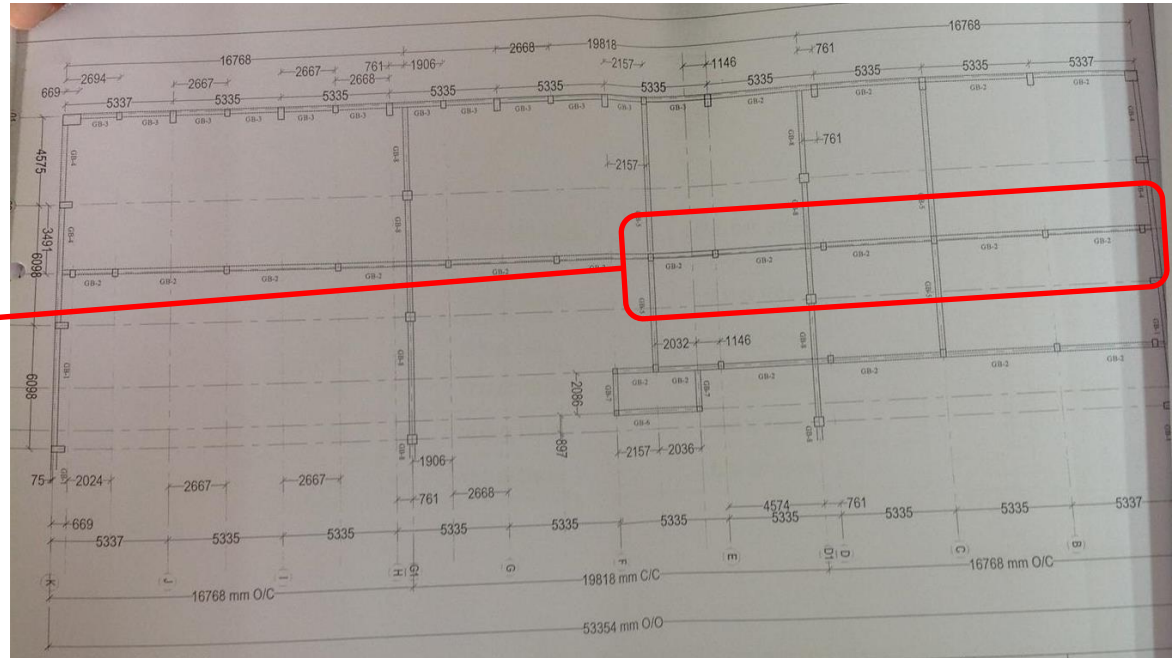
- Perimeter walls and columns acting as cantilevers, no foundation details presented.
- Overall stability of roof system not clear due to false ceiling.
- Adequacy of connection detail between roof truss and perimeter columns/walls.
- Section sizes used in roof system to be clarified.



The lookout post located on the southern perimeter of the building appears to be non-engineered.

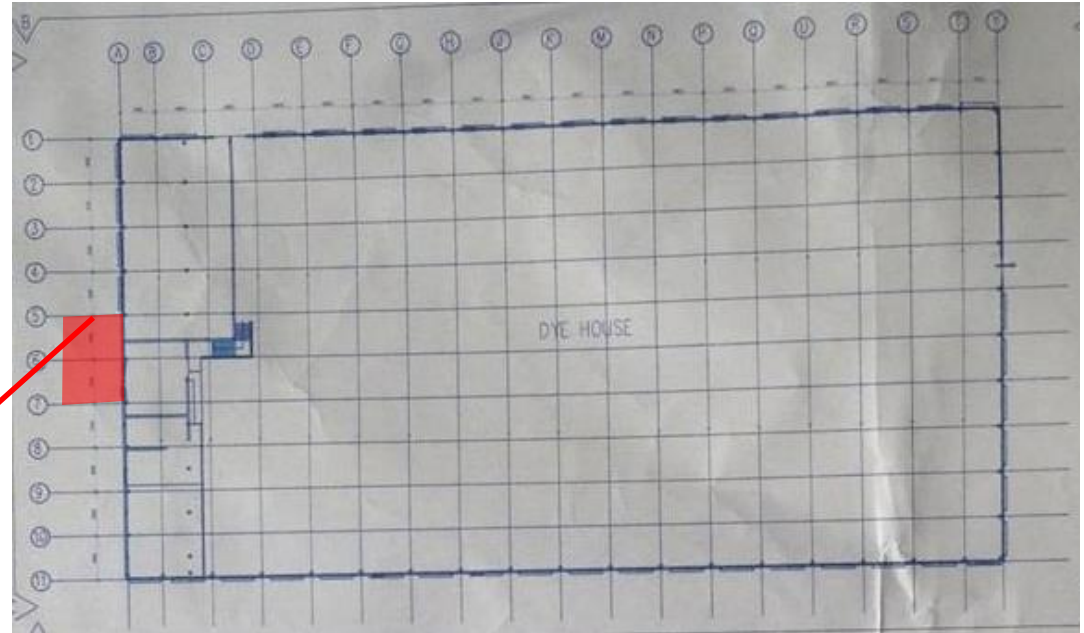
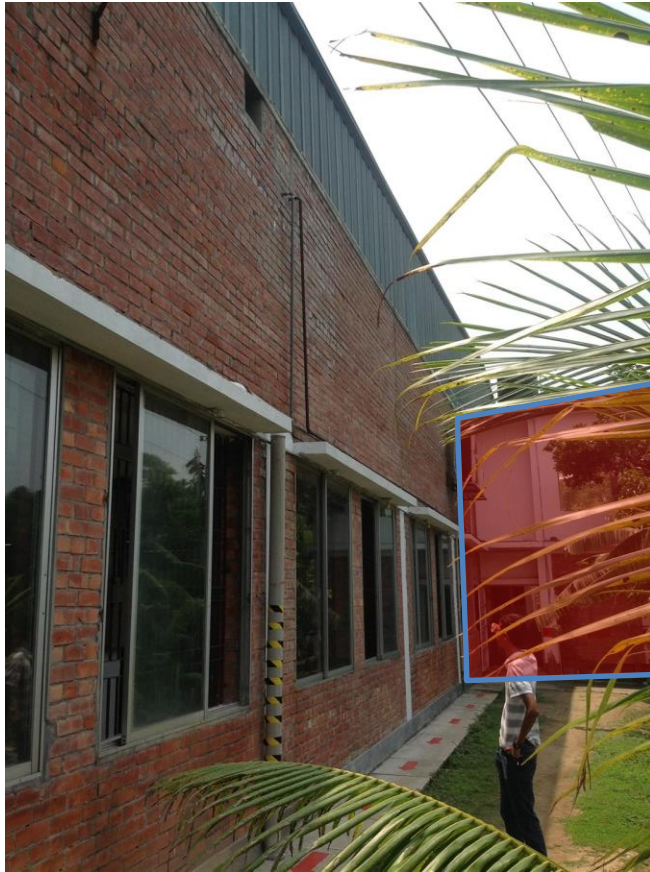
The building structure is connected to the support columns by welding the floor to the column's exposed rebar.

Documentation discrepancies



Inconsistencies observed between design drawings and what was constructed.

Additional line of beams and columns provided to mezzanine structure on south west side of building which were not shown on the structural drawings.



A toilet block was observed at the south west gable end of the dye house structure. This building was not present on either the structural or the permit drawings.

Flexural cracking in admin. building



Beam

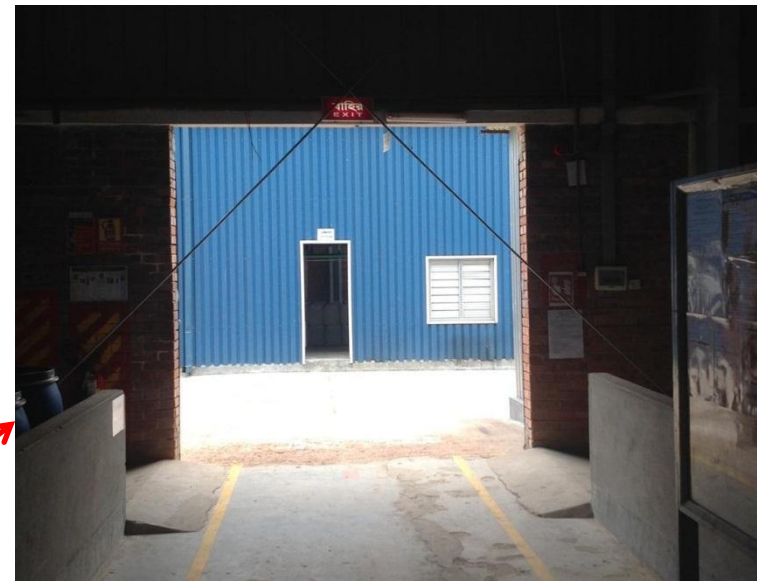


Soffit of roof slab

Hairline cracking was observed on the soffit of the roof slab and supporting beams in the administration building. The size and location of the cracks is consistent with flexural cracking.

Administration building

Exposed bracing in utility building



In the utility building, bracing was observed in a doorway on the southern side of the building. This bracing obstructs the upper corners of the opening and could cause a collision with a fork truck.

Fire protection



Single storey steel frame



Soffit of metal deck floor (Knitting house)

In each of the steel buildings there was no evidence of fire protection.

Priority Actions

Problems Observed

ITEM 1 – Structural stability of non-engineered structures.

ITEM 2 – Discrepancies between the Dye house built structure and design drawings.

ITEM 3 – Flexural cracking in Administration building.

ITEM 4 – Exposed bracing in Utility building.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Structural stability of childcare building and lookout post (located along southern perimeter)	Structural Engineer to survey existing childcare building and propose any strengthening/remedial works if necessary. As-built drawings for the structure to be produced.	6-months
2	Structural stability of childcare building and lookout post (located along southern perimeter)	Structural Engineer to survey the lookout post, in particular how the building structure is connected to the columns and propose any strengthening/remedial works if necessary.	6-months
3	Discrepancies between the Dye house built structure and design drawings.	Structural engineer to review existing structure and update the drawings to reflect as-built design.	6-months
4	Flexural cracking in Administration building	Building engineer to monitor cracking, should cracks increase in size or length, Engineer to undertake detailed checks of strength and capacity and propose remedial works if necessary.	6-months
5	Exposed bracing in Utility building.	Structural Engineer to propose alternative bracing configuration which does not obstruct door opening whilst maintaining building stability.	6-months