

Apparels Village Ltd. (11547)

Plot-37, Village:Khagan, Union Parishad: Birulia, Upozilla: Savar, Dist: Dhaka, Bangladesh

(+ 23.875257N, 90.305600E)

18.JUNE.2014



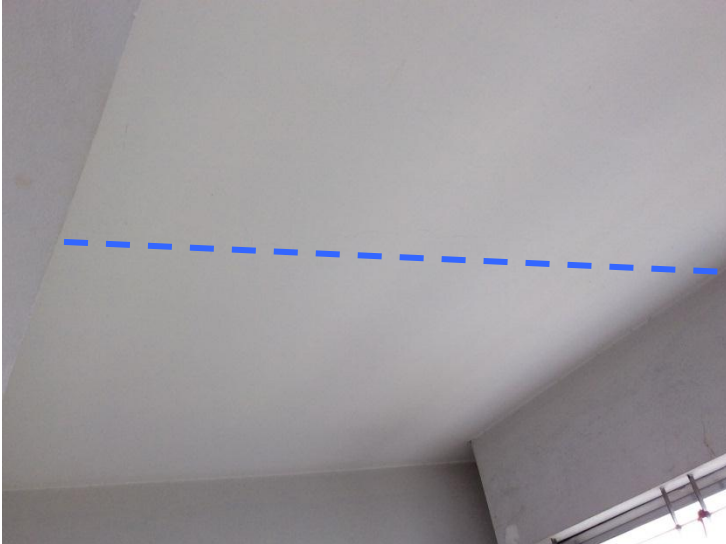
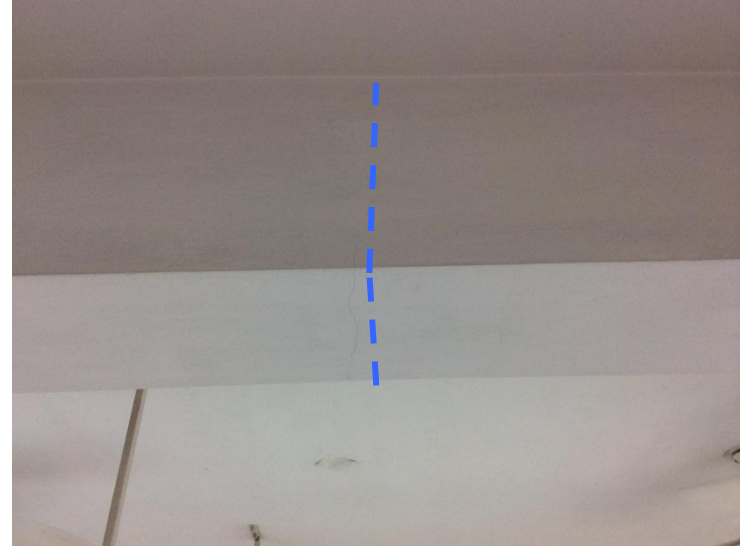
Identified Priority 1 Concerns

(None)

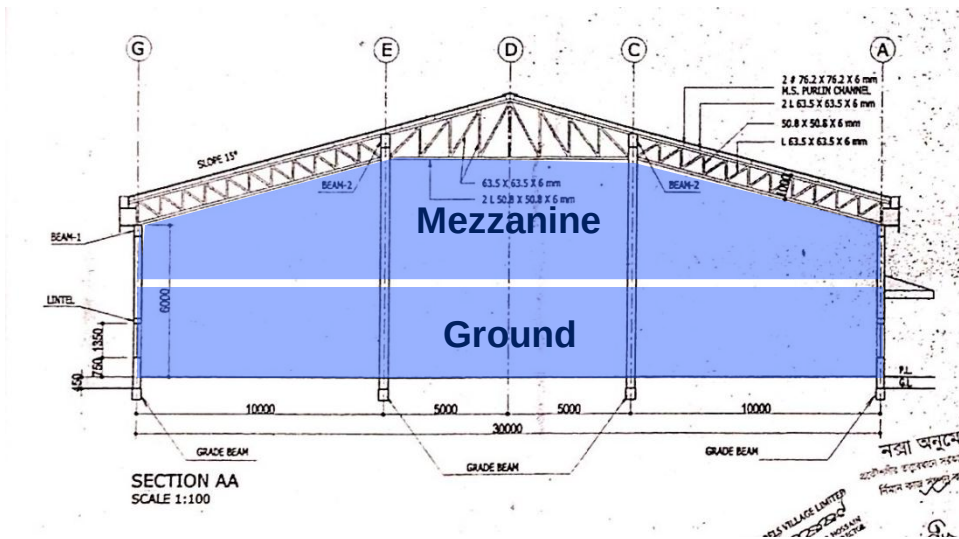
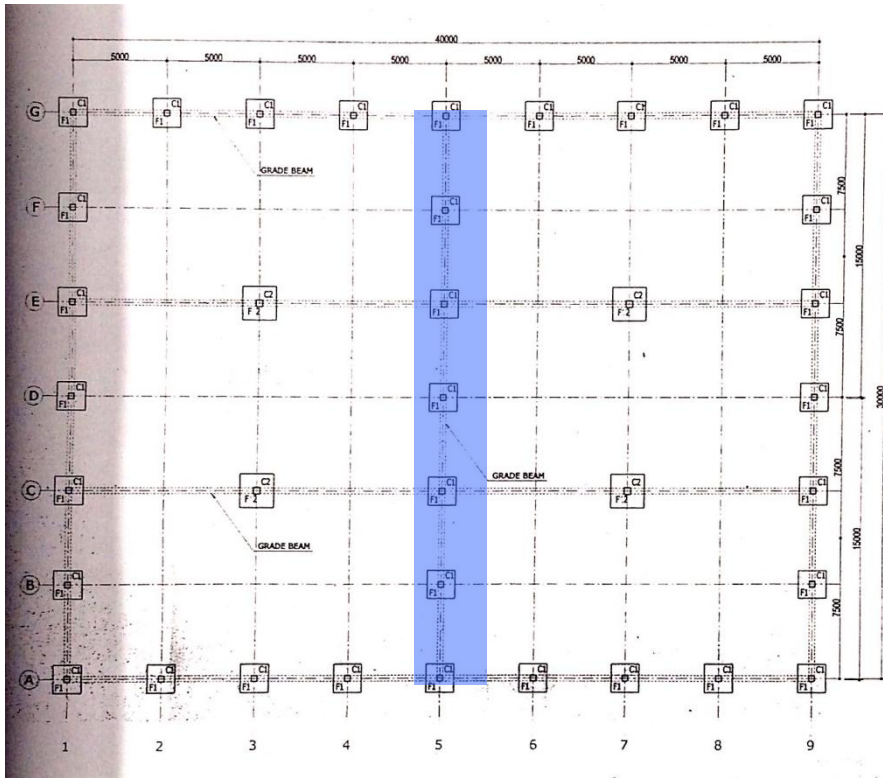
Identified Priority 2 Concerns

- Cracks on beams and slab soffits of Building 1.
- Inadequacies between the drawings of Shed 3 and the actual as-built conditions.
- Structural steel elements supporting lightweight roof of Shed 3 and roof bracing rods of Shed 4 to be checked.
 - Capacity check of roof slab of building 1 supporting cooling tower.

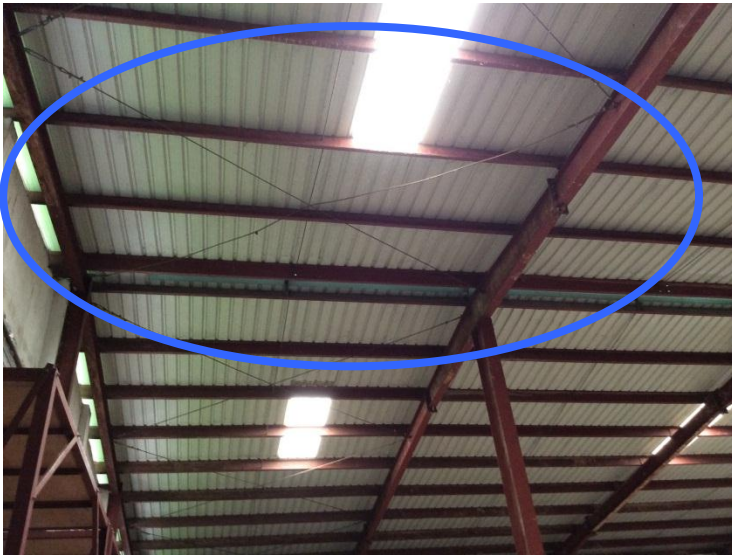
1st Priority 2 Concern



Cracks on beams and slab soffits of Building 1. The cause of cracks should be investigated by appropriate methods.



A mezzanine was added at the middle of Shed 3. This floor is used for offices and a laboratory. The drawings should be updated as early as possible.



Deflection of structural steel elements supporting lightweight roof was noted at Shed 3. And loose roof bracing rods were noted in Shed 4.

There are concerns with a section of roof slab of Building 1, a section that was supporting a cooling tower. A capacity check of the roof slab and related elements should be carried out.



Identified Priority 3 Concerns

- No fireproofing material applied for structural steel elements of Shed 1, Shed 2, Shed 3, Shed 4 and Shed 5 (if required).
- No parapet wall or guardrail present at Building 5.



No fireproofing material was noted on structural steel elements of Shed 1, Shed 2, Shed 3, Shed 4 and Shed 5 (if required).





Guardrails were installed on inner side of Building 5. But there is no guardrail or parapet wall on outer side.

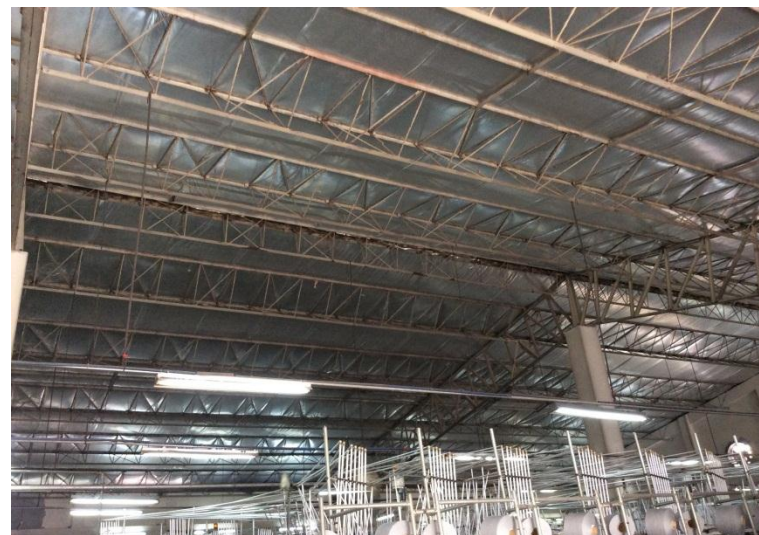
Overall Stability System



Concerns on the stability system for lateral loading. The lateral loading resistance of the RC buildings is provided by moment frame action without any shear walls. Façade brickwork walls lack moment capacity due to their poor connections between columns and beams.

Concerns on the stability system for lateral loading as well as uplift due to wind for roof. Structural steel elements lack moment capacity in the connections.

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



Water Ingress



Water distress was noted on slabs and walls of Building 2. And water ponding was found on the roof slab of Building 1.



Priority Actions

Problems Observed Summary

- | | | |
|---------|--------------|--|
| ITEM 1: | (Priority 2) | Cracks on beams and slab soffits of Building 1. |
| ITEM 2: | (Priority 2) | Inadequacies between the drawings of Shed 3 and the actual as-built conditions. |
| ITEM 3: | (Priority 2) | Structural steel elements supporting the roof of Shed 3 and the roof bracing rods of Shed 4 to be checked. |
| ITEM 4: | (Priority 2) | Capacity check of roof slab of Building 1 supporting cooling tower. |
| ITEM 5: | (Priority 2) | Overall stability system. |
| ITEM 6: | (Priority 3) | Distress due to water ingress of Building 1 and Building 2. |
| ITEM 7: | (Priority 3) | No fireproofing material applied for structural steel elements of Shed 1, Shed 2, Shed 3, Shed 4 and Shed 5 (if required). |
| ITEM 8: | (Priority 3) | No parapet wall or guardrail present at Building 5. |

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Priority 2 - Cracks on beams and slab soffits of Building 1.	The Factory Engineer to investigate the cause of cracks by appropriate methods. The distress found is to be suitably rectified and then repaired.	6-weeks
2	Priority 2 - Cracks on beams and slab soffits of Building 1.	Create loading plans for each floor level. Maintain standards of quality control to ensure that loading plan is correctly followed so that problems do not arise in the future. Maintain and enforce the loading plans.	6-months
3	Priority 2 - Inadequacies between the drawings of Shed 3 and the actual as-built conditions.	Factory Engineer to survey the actual conditions and revise the drawings. Any results of the DEA which affect the structure should be taken on board.	6-weeks
4	Priority 2 - Inadequacies between the drawings of Shed 3 and the actual as-built conditions.	Continue to implement load plan	6-months
5	Priority 2 - Structural steel elements supporting the roof of Shed 3 and the roof bracing rods of Shed 4 to be checked.	Factory Engineer to inspect items in the area identified above and repair with a suitable methods.	6-weeks
6	Priority 2 - Capacity check of roof slab of Building 1 supporting cooling tower.	Factory Engineer to review design, loads and related elements in area identified above to confirm capacity for these items.	6-weeks
7	Priority 2 - Overall stability system.	Request that a Detailed Engineering Assessment of the overall building to be carried out and in particular, stability and foundation aspects should be investigated in detail.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Priority 3 - Distress due to water ingress of Building 1 and Building 2.	Factory Engineer to inspect water damaged structures and repair with a suitable methods.	6-months
9	Priority 3 - No fireproofing material applied for structural steel elements of Shed 1, Shed 2, Shed 3, Shed 4 and Shed 5 (if required).	Fireproofing material for structural steel element is recommended as suggested in BNBC Codes.	6-weeks
10	Priority 3 - No fireproofing material applied for structural steel elements of Shed 1, Shed 2, Shed 3, Shed 4 and Shed 5 (if required).	Maintain standard of quality control and protection of the fire protection.	6-months
11	Priority 3 - No parapet wall or guardrail present at Building 5.	A suitable perimeter parapet wall or guardrail should be constructed along the building perimeter.	6-months