

Hannan Knit & Textiles Ltd. (Extension)

505, Kalmeshor, Board Bazar, National University, Gazipur-1704.

(23.942093, 90.382302)

21 October 2024

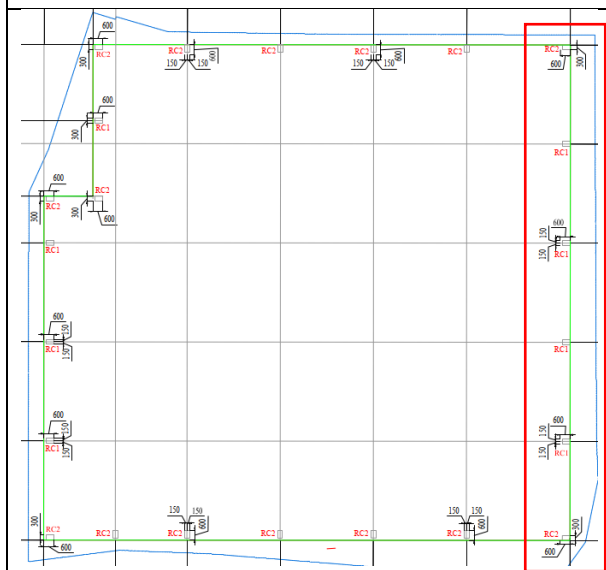


1. Building Information

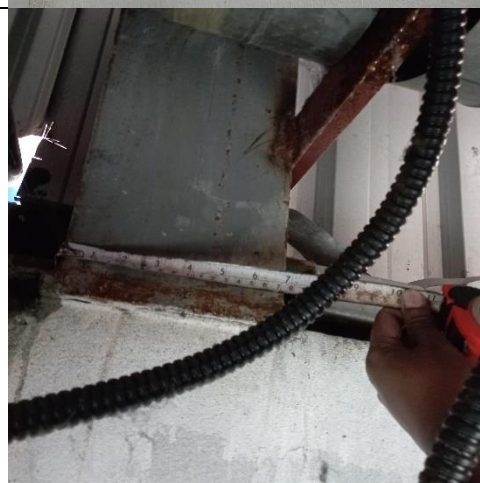
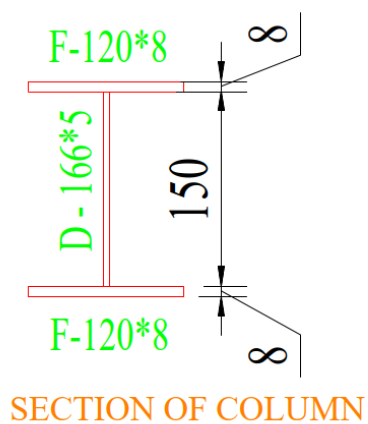
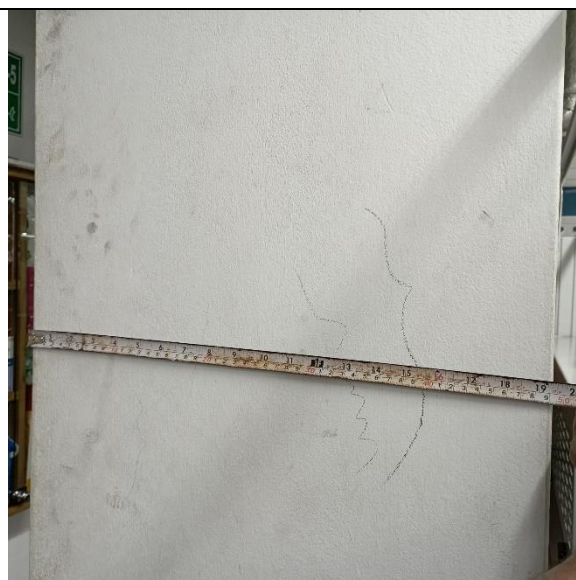
1. **Jacquard Shed:** Single-storied prefabricated self-supported metal sheet roof.
2. **ETP Building:** The building is a (B+G+2) three-storied reinforced concrete building with a basement. The 2nd floor is a shed.
3. **Yarn Storage:** Two-storied (G+1) structure. The ground floor is a reinforced concrete building, and the first floor is a steel shed.
4. **Utility Building:** Two-storied reinforced concrete structure. The first floor is partially shed.
5. **Security & RMS Room:** Single-storied reinforced concrete structure with a pitched roof.

2. Observation

Observation 1: Discrepancy in as-built drawing (Jacquard Shed).



Name	Below G.L	Above G.L
RC-1	350 mm 650 mm 12-20mm Ø Stirrup 10mm Ø @ 150 mm C/C	300 mm 600 mm 10-20mm Ø A. Stirrup 10mm Ø @ 125 mm C/C B. Stirrup 10mm Ø @ 250 mm C/C
RC-2	350 mm 650 mm 10-20mm Ø Stirrup 10mm Ø @ 150 mm C/C	300 mm 600 mm 8-20mm Ø A. Stirrup 10mm Ø @ 125 mm C/C B. Stirrup 10mm Ø @ 250 mm C/C



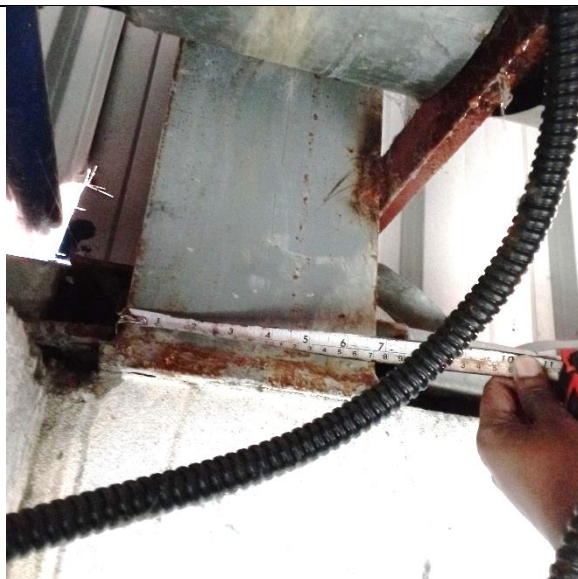
Description: 7 Columns were found instead of 6 columns along grid-7. All RC columns were found 300x 450 instead of 300x600. All steel columns were found F170x W300 instead of F120x W150. The building engineer is required to produce accurate as-built drawings.

Observation 2: Lack of lateral stability (Jacquard Shed).



Description: Metal roof sheeting is only the member to transmit and resist lateral load in both directions. Also, a design report was not available for this structure. The building engineer is required to check the lateral stability of the structure and prepare a set of design reports in compliance with 1.9.1 BNBC.

Observation 3: Corrosion on steel members (Jacquard Shed).



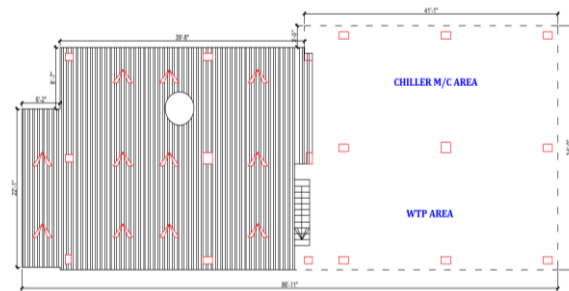
Description: Corrosion was found on steel members at several locations. The building engineer is required to apply rust-proof paint on steel members to prevent corrosion.

Observation 4: Lack of design report (Utility Building).



Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, the design report was not available, which must be prepared in compliance with section 1.9.1 (part-6, BNBC).

Observation 5: Missing information and lack of as-built drawing (Utility Building).



Description: Plastic water tanks (2-2000 liters each) were not shown in the drawings. No structural drawing was available for the shed (east part) and RO plant shed (west part). The building engineer is required to produce an accurate and full set of as-built drawings.

Observation 6: Missing bracing and strut members of RO shed (Utility Building).



Description: Horizontal bracing, vertical bracing, and strut members are absent to transmit and resist the lateral load. The building engineer is required to prepare a remediation plan for the bracing system and install it after getting acceptance from RSC.

Observation 7: Low parapet height at roof (Utility Building).



Description: Parapet height was found only 540mm on the roof. The building engineer is required to increase the parapet height to avoid falling hazard.

Observation 8: Dampness on roof slab (Utility Building).



Description: Dampness was found on roof slab. The building engineer is required to repair the dampness and improve the drainage system on roof slab.

Observation 9: Nonstructural elements not anchored/braced (Utility Building).



Description: Nonstructural elements (plastic water tanks) at the roof level are not anchored/braced. The building engineer is required to anchor/brace all nonstructural elements.

Observation 10: Lack of vertical and lateral Stability of the adjacent steel stair. (Utility Building).



Description: A steel stair was observed adjacent to the Utility Building. The column was found on only one side and the other side was found connected to the building. Also, no bracing system was found to resist the lateral load. The building engineer is required to check the lateral and vertical stability of the steel stairs.

Observation 11: Lack of design report (Yarn Storage).



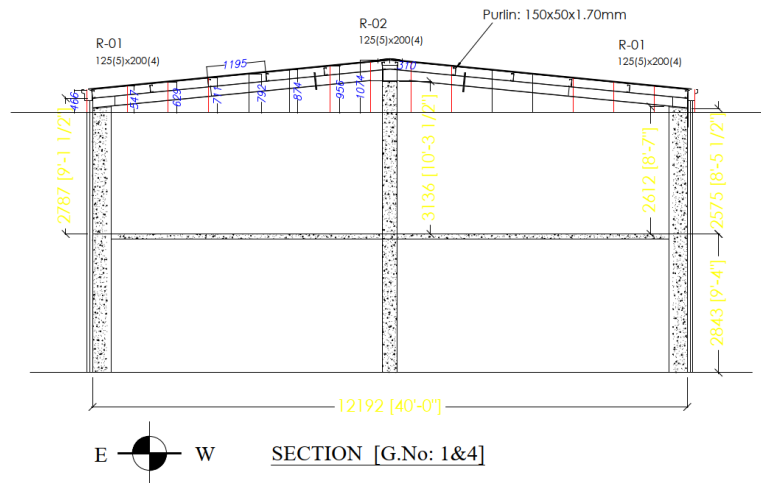
Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, the design report was not available, which must be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observation 12: Lack of lateral Stability of the shed (1st floor) (Yarn Storage).



Description: No bracing system (strut, horizontal, and vertical bracing) was found to transmit and resist the lateral load. The building engineer is required to check the lateral stability of the shed and prepare a remediation plan.

Observation 13: Missing information in as-built drawing (Yarn Storage).



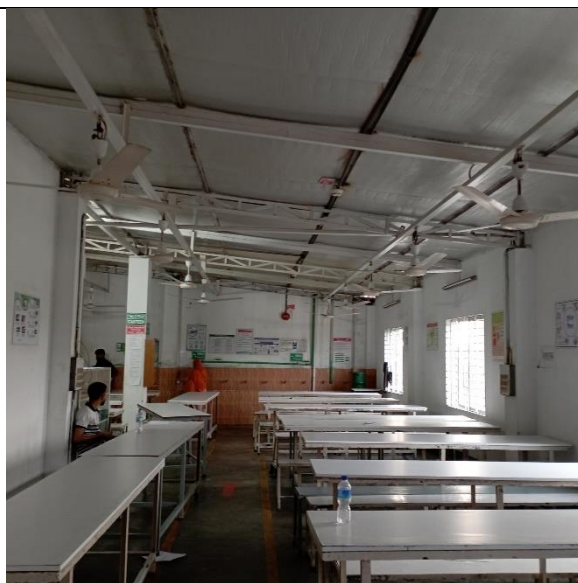
Description: Connection details were not provided as-built drawing. The building engineer is required to produce a full set of as-built drawings.

Observation 14: Lack of design report (ETP Building).



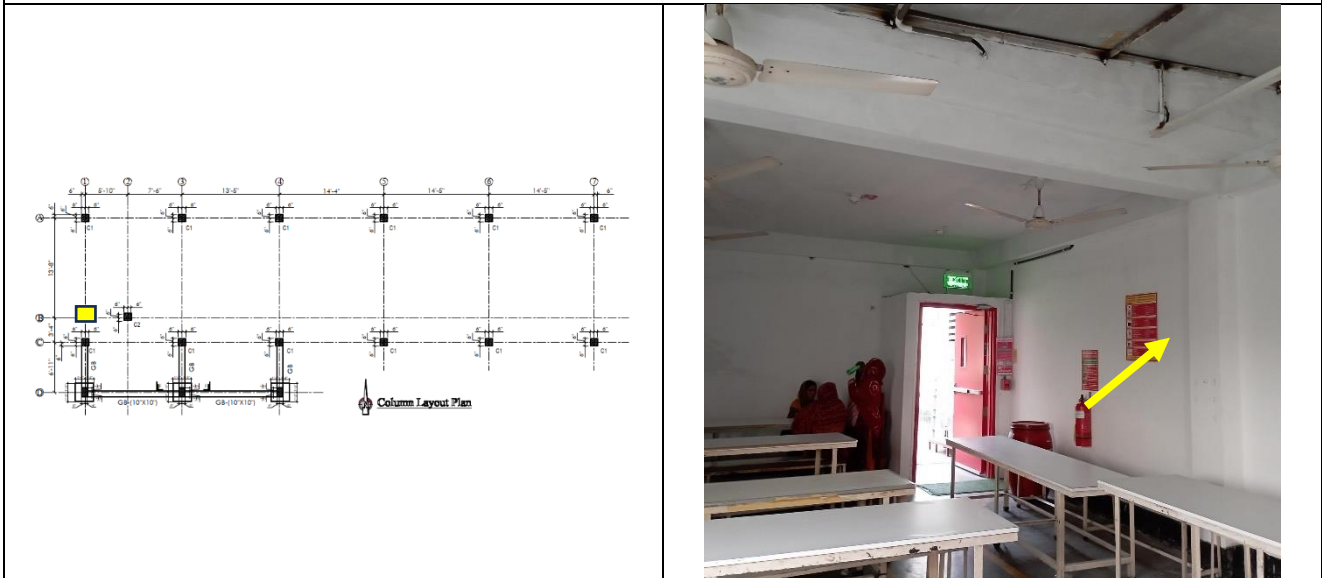
Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, the design report was not available, which must be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observation 15: Lack of lateral Stability of the shed-roof shed (ETP Building).



Description: No bracing system (strut, horizontal, and vertical bracing) was found to transmit and resist the lateral load. The building engineer is required to check the lateral stability of the shed and prepare a remediation plan.

Observation 16: Discrepancy in as-built drawing (ETP Building).



Description: Marked (yellow) column was not shown in column layout. Also, structural drawing of shed was not available. The building engineer is required to produce a full set of accurate as-built drawings.

Observation 17: Lack of vertical and lateral Stability of the adjacent steel stair. (ETP Building).



Description: A steel stair was observed adjacent to the Utility Building. The column was found on only one side and the other side was found connected to the building. Also, no bracing system was found to resist the lateral load. The building engineer is required to check the lateral and vertical stability of the steel stairs.

Observation 18: Lack of as-built drawings (Security & RMS Room).



Description: As built a drawing was not available for this structure. The building engineer is required to produce as-built drawings of the structure.

Observation 19: Dampness on the wall (Security & RMS Room).



Description: Dampness observed on the internal wall. The building engineer is required to identify the damp areas and repair the dampness with a suitable method.

3. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Discrepancy in as-built drawing (Jacquard Shed).	The building engineer is required to produce accurate as-built drawings.	within 6 weeks
2.	Lack of lateral stability (Jacquard Shed).	The building engineer is required to check the lateral stability of the structure and prepare a set of design reports in compliance with 1.9.1 BNBC.	within 6 weeks
3.	Lack of lateral stability (Jacquard Shed).	Implement remediation work if required.	within 6 months
4.	Corrosion on steel members (Jacquard Shed).	The building engineer is required to apply rust-proof paint on steel members to prevent corrosion.	within 6 weeks
5.	Lack of design report (Utility Building).	The building engineer is required to prepare a set of design reports in compliance with 1.9.1 BNBC.	within 6 weeks
6.	Lack of design report (Utility Building).	Implement remediation work if required.	within 6 months
7.	Missing information and lack of as-built drawing (Utility Building).	The building engineer is required to update the as-built drawing.	within 6 weeks
8.	Missing bracing and strut members of RO shed (Utility Building).	The building engineer is required to prepare a remediation plan for the bracing system and install it after getting acceptance from RSC.	within 6 months
9.	Low parapet height at roof (Utility Building).	The building engineer is required to increase the parapet height to avoid falling hazard.	within 6 weeks
10.	Dampness on roof slab (Utility Building).	The building engineer is required to repair the dampness and improve the drainage system on roof slab.	within 6 months
11.	Nonstructural elements not anchored/braced (Utility Building).	The building engineer is required to anchor/brace all nonstructural elements.	within 6 months
12.	Lack of vertical and lateral Stability of the adjacent steel stairs. (Utility Building).	The building engineer is required to check the lateral and vertical stability of the steel stairs.	within 6 weeks
13.	Lack of vertical and lateral Stability of the adjacent steel stairs. (Utility Building).	Implement remediation work if required.	within 6 months

14.	Lack of design report (Yarn Storage).	The building engineer is required to prepare a set of design reports in compliance with 1.9.1 BNBC.	within 6 weeks
15.	Lack of lateral Stability of the shed (1st floor) (Yarn Storage).	The building engineer is required to check the lateral stability of the structure.	within 6 weeks
16.	Lack of lateral Stability of the shed (1st floor) (Yarn Storage).	Implement remediation work if required.	within 6 months
17.	Missing information in as-built drawing (Yarn Storage).	The building engineer is required to update the as-built drawing.	within 6 weeks
18.	Lack of design report (ETP Building).	The building engineer is required to prepare a set of design reports in compliance with 1.9.1 BNBC.	within 6 weeks
19.	Lack of lateral Stability of the shed-roof shed (ETP Building).	The building engineer is required to check the lateral stability of the structure.	within 6 weeks
20.	Lack of lateral Stability of the shed-roof shed (ETP Building).	Implement remediation work if required.	within 6 months
21.	Discrepancy in as-built drawing (ETP Building).	The building engineer is required to update the as-built drawing.	within 6 weeks
22.	Lack of vertical and lateral Stability of the adjacent steel stairs. (ETP Building).	The building engineer is required to check the lateral and vertical stability of the steel stairs.	within 6 weeks
23.	Lack of vertical and lateral Stability of the adjacent steel stairs. (ETP Building).	Implement remediation work if required.	within 6 months
24.	Lack of as-built drawings (Security & RMS Room).	The building engineer is required to produce as-built drawings of the structure.	within 6 weeks
25.	Dampness on the wall (Security & RMS Room).	The building engineer is required to identify the damp areas and repair the dampness with a suitable method.	within 6 weeks