

Kaixi Lingerie Bangladesh Co Ltd

Plot# 183-188 and 189A-193, BEPZA Economic Zone -01, Mirsharai, Chattogram.

(22.741452, 91.471498)

21 April 2025



1. Building Information

Main Production Building: Four storied (G+3) steel building

Security Room 01: Single-storied RC building

Fire Pump Room: Single-storied RC building with basement

Substation & Transformer Room: Single-storied RC building

Solar Substation & Maintenance Room: Single-storied RC building

Generator Room: Single-storied RC building

Security Room 02: Single-storied RC building

Canteen & Childcare Room: Single-storied RC building

Medical Room: Single-storied RC building

Wastage Room: Single-storied RC building

Compressor Room: Single-storied RC building

Smoking Shed: Single-storied steel shed

2. Observations

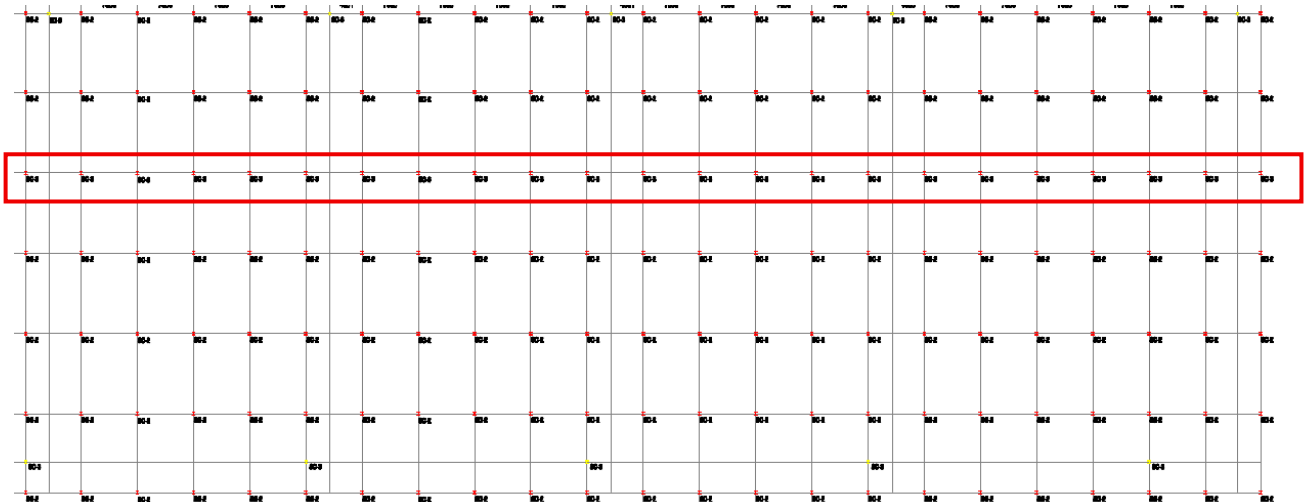
Observation 01: Lack of design documents and load plan (Main Production Building)



Description: As per BNBC, every building or structure designed shall have its design documents prepared under the provisions of Section 1.9. The design document shall include a design report and a set of structural drawings, which shall be prepared in compliance with sections 1.9.2 and 1.9.3 as per BNBC 2020.

The design report and floor load plan were not available at the time of inspection. The building engineer is required to prepare a set of design documents, including a design report, as-built drawings, and a floor load plan, in compliance with BNBC.

Observation 02: Discrepancies in the as-built drawings (Main Production Building)

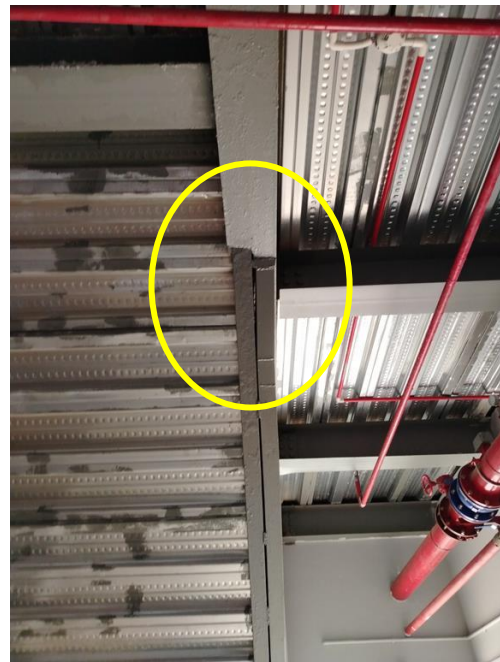


Description: At grid F (highlighted in red in the image above), the drawings specified SC3 columns (Web 300×10, Flange 300×16) from the 1st to 3rd floor; however, SC2 columns (Web 350×10, Flange 350×16) were found in place.

Observation 03: Cut of flange in steel column & beams (Main Production Building)



Cut off the flange in the steel column



Cut out the flange in the steel beam

Description: Flanges were cut in several beams and columns, potentially compromising their structural integrity.

Observation 04: Non-structural elements found unbraced/not anchored (Main Production Building)



Description: Unbraced and unanchored steel storage racks were found on several floors.

Observation 05: Corrosion of steel member (Main Production Building)



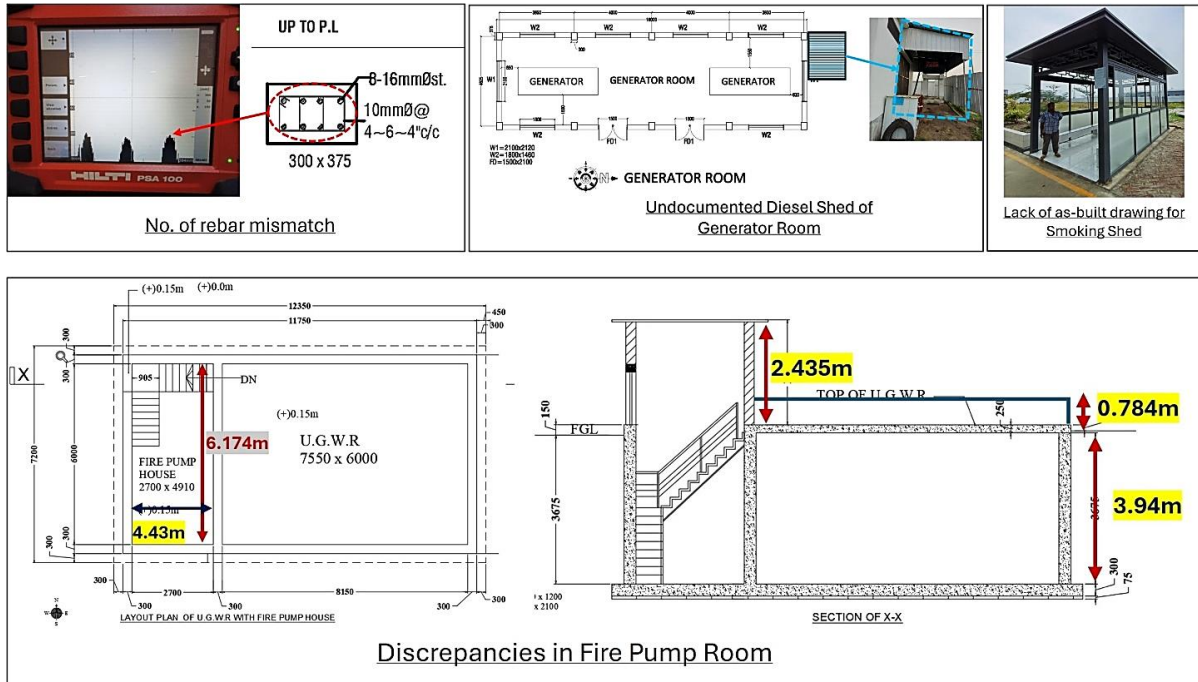
Description: Corrosion was found on steel members at several locations.

Observation 06: Dampness on brick wall (Main Production Building)



Description: Dampness was found on the masonry wall in the toilet area.

Observation 07: Discrepancies in the as-built drawings of all the ancillary structures.



Description: Discrepancies were found in the Fire Pump room regarding the dimension of the structure, elevation of the pump room roof slab, and height from EGL to the top. Also, an undocumented diesel shed adjacent to the Generator Room was found, which is not incorporated in the as-built drawing. Moreover, a mismatch was found in the number of rebars and directional sign of Security Room 01, Substation & Transformer Room, Solar Substation & Maintenance Room, Generator Room, Security Room 02, Canteen & Childcare Room, Medical Room, Wastage Room and Compressor Room. The building engineer is required to survey the whole structure and prepare accurate as-built drawings as per onsite conditions.

3. Action Plan

SL	Observation	Action Plan	Timeline
1.	Lack of design documents and load plan (Main Production Building)	Produce floor live load plan for all floor plates following BNBC requirements and based on column & foundation capacity.	within 6 weeks
2.		The building engineer is required to prepare a set of design documents in compliance with BNBC 2020 based on the floor load plan and in-situ material strength.	within 6 weeks
3.		Carry out suggested remedial works if required	within 6 months
4.	Discrepancies in the as-built drawings (Main Production Building)	The building engineer is required to survey the whole structure and prepare accurate as-built drawings as per onsite conditions.	within 6 weeks
5.	Cut off flange in steel column & beams (Main Production Building)	The building engineer is required to repair the cut portion with a suitable method or check the adequacy of the member for the net area of the flange.	within 6 weeks
6.	Non-structural elements found unbraced/not anchored (Main Production Building)	The factory is required to brace/anchor all non-structural elements (storage racks) to prevent falling during earthquake.	within 6 months
7.	Corrosion of steel members (Main Production Building)	The factory is required to remove the rust and apply anti-corrosive paint to the steel member	within 6 weeks
8.	Dampness on the brick wall (Main Production Building)	The factory is required to repair the dampness with suitable measures.	within 6 weeks
9.	Discrepancies in the as-built drawings of all the ancillary structures.	The building engineer is required to survey the all structure, prepare accurate as-built drawings as per onsite conditions and submit to RSC for review.	within 6 weeks