

Crown Wears (Pvt.) Ltd. (Extension)

Jamirdia, Masterbari, Bhaluka, Mymensingh.
(24.300775, 90.384717)
04 and 20 March 2025

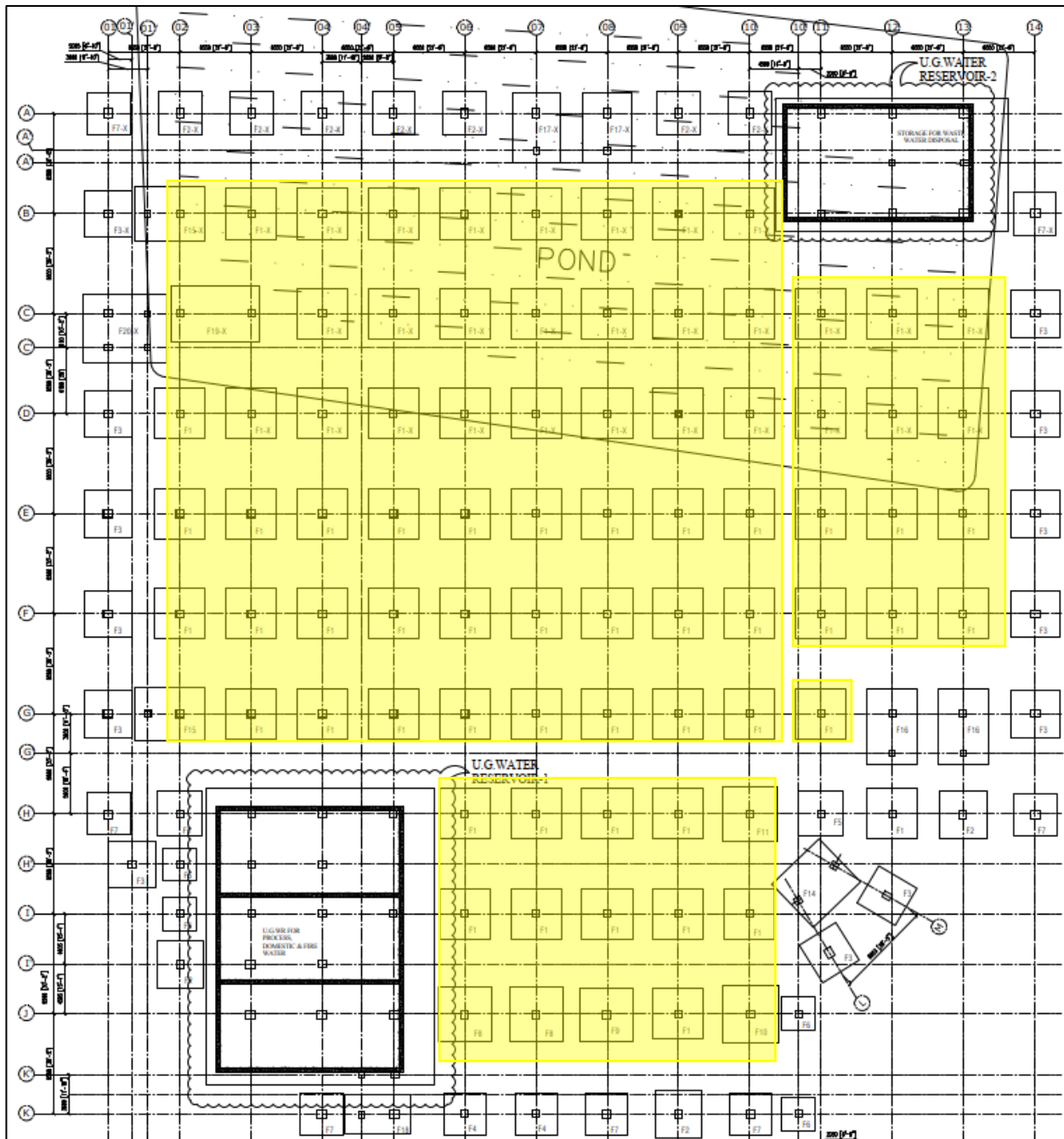


1. Building Information

1. Building-5
2. Building-6
3. Generator Shed-2
4. Fire Pump Room-2
5. Dining Shed
6. Boiler & Compressor Shed-2
7. Leftover Go-Down
8. Substation Building-2
9. Warehouse Shed-1
10. Warehouse Shed-2
11. ETP Sludge Store.

2. Observation:

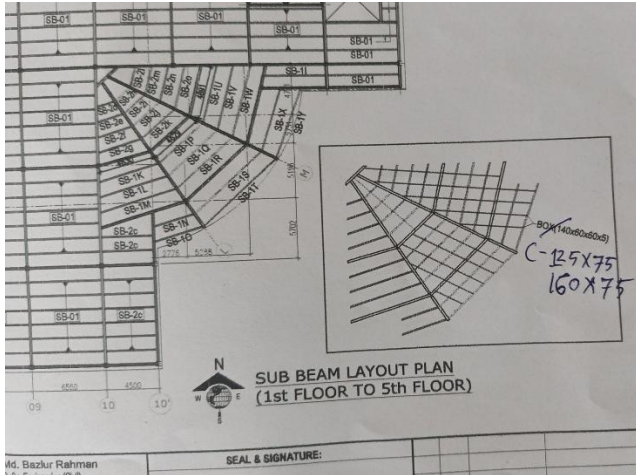
Observation-01: High stress in the foundation exceeds the normal design limit. [Building-5]



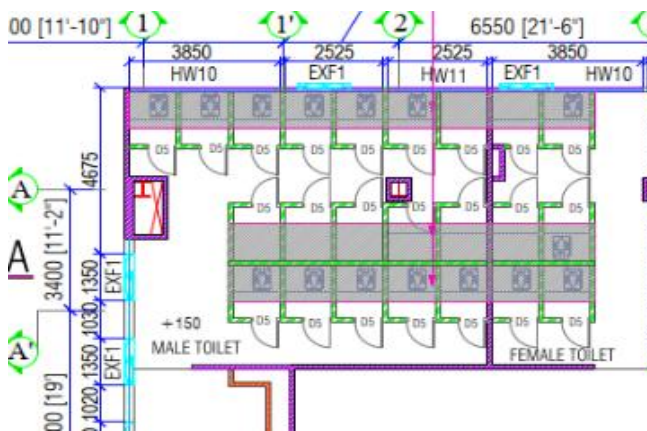
Description: The cursory calculation indicates that foundations are highly stressed above the normal design limit at the March locations considering the observed live load of 3 kPa for the typical production area & 6 kPa for the store area, design strength of concrete & re-bar and bearing capacity from the provided geotechnical investigation report.

The building engineer to review the design, loads and column stresses in the area identified above. A detailed engineering Assessment of the Factory is to be commenced. Produce and actively manage a loading plan for all floor plates within the factory considering floor capacity and foundation capacity. Detail Engineering Assessment to be completed. Continue implementing the load plan.

Observation-02: Lack of information and discrepancy between the provided drawing and site condition. [Building-5]



Sub-beam sections and sizes do not match the provided drawing



Additional floor raises were found in the toilet zone which were not mentioned in the drawing.

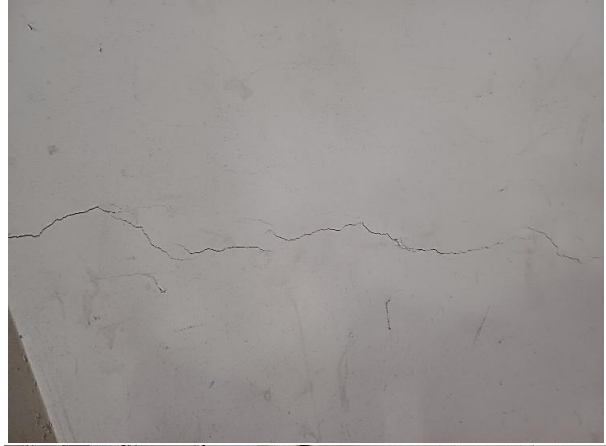
Description: During the inspection, discrepancies and lack of information were observed between the provided drawing and on-site conditions. The building engineer is required to survey the whole structure and update the drawing reflecting actual on-site condition.

Observation-03: Lack of height Marking in the storage area. [Building-5]



Description: Load restriction height Marking was not provided in the storage areas. The factory is required to provide load restriction height Marking in the storage areas as per the floor loading capacity and compliance requirement.

Observation 04: Crack on the brick wall. [Building-5]



Description: During the inspection, the diagonal crack was observed on several locations of the brick wall. The building engineer is required to investigate the cracks and produce an investigation report including reasons for cracks and repair methodology. The factory is required to repair the cracks as per the recommendation of the investigation report.

Observation 05: Dampness on masonry wall. [Building-5]



Description: Dampness on the masonry wall was observed. The building engineer is required to investigate the reason for dampness & cracks; and repair it following suitable method.

Observation 06: Corrosion on steel members. [Building-5]



Description: Corrosion was observed on steel members. The building engineer is required to provide rust-proof paint on steel members.

Observation 07: Lack of design report. (Building 6)



Description: As per BNBC, every building or structure designed shall have its design documents prepared per 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 is required to be prepared in compliance with section 1.9.1 (part 6, BNBC).

Observation 08: Lack of load management program. (Building – 6)



Description: During the inspection, dedicated storage was found on the 1st floor and heavy loading (10,000-liter water tank) was found on the ground floor. But, no load plan, no load height Marking & no load management program was found for Building – 6. The building engineer is required to post the load plan, and load height marking, and maintain loading accordingly.

Observation 09: Dampness in the brick wall. (Building – 6)



Description: During inspection, dampness was found on the brick wall. The building engineer is required to repair dampness with a suitable method.

Observation 10: Exposed rebar on the 2nd floor (existing roof). (Building – 6)



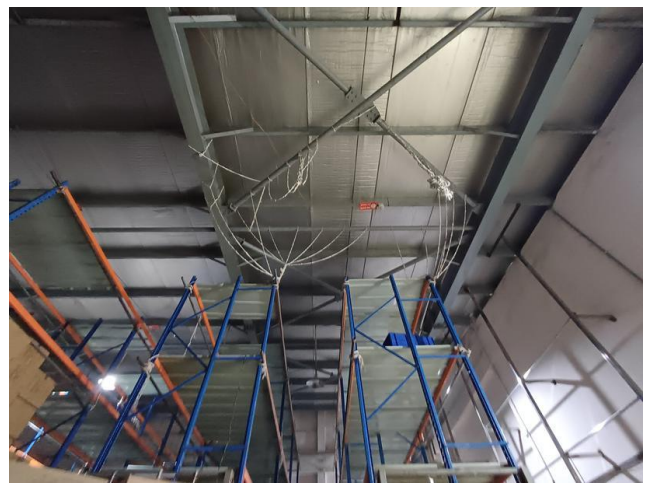
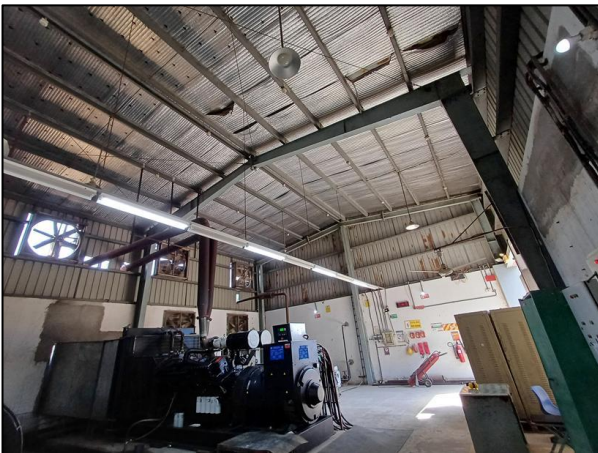
Description: Corrosion was observed on exposed rebars. The building engineer is required to provide rust-proof paint on exposed rebars.

Observation 11: Construction debris on the 2nd floor (existing roof). (Building – 6)



Description: Construction debris was found on the 2nd floor. The building engineer is required to remove the construction debris.

Observation 12: Lack of lateral stability. (Generator Shed – 2, Boiler & Compressor Shed – 2, Leftover Go-Down, Warehouse Shed – 1, and Warehouse Shed – 2)



Description: No lateral load transfer media (compression strut) is provided to transfer and resist the lateral load. Also, vertical bracing was found incomplete in the Boiler & Compression Shed – 2. The building engineer is required to check the lateral stability of the shed and prepare an Engineering Assessment (EA) report as per 1.9.1 BNBC.

Observation 13: Lack of lateral stability and inadequate member size. (Dining Shed).



Description: During the inspection, load transfer media along the long direction was found missing. Also, member sizes & their connections were found to be inadequate. The building engineer is required to prepare a safety check report along with the connection and member adequacy and propose remediation accordingly.

Observation 14: Lack of credible as-built drawing. (Boiler & Compression Shed – 2, Fire Pump Room – 2, Leftover Go-Down, and Sub-station Building – 2)



Description: During inspection, the as-built drawing was not matched with the on-site condition. Moreover, the as-built drawing was incomplete. The building engineer is required to update the as-built drawing which reflects the credible on-site condition.

Observation 15: Corrosion on steel member. (Generator Shed – 2, Boiler & Compression Shed – 2)



Description: During the inspection, corrosion was found in the steel member. The building engineer is required to remove the corrosion and provide anti corrosive coating to the steel members.

Observation 16: Dampness in the brick wall. (Generator Shed – 2, Fire Pump Room – 2)



Description: During the inspection, dampness was found on the brick wall in Generator Shed -2 and slab soffit in Fire Pump Room – 2. The building engineer is required to repair dampness with a suitable method.

Observation 17: Connection gap. (Boiler & Compression Shed – 2)



Description: During the inspection, the connection gap was found on the Boiler & Compression Shed – 2. The building engineer is required to survey the whole structure & repair the connection gap where necessary.

Observation 18: Exposed rebar. (Fire Pump Room – 2)



Description: During inspection, the exposed rebar was found on the roof slab. The building engineer is required to apply anti-rust proof coating on exposed rebar.

Observation 19: Lack of design report. (Sub-Station Building – 2)



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 is required to be prepared in compliance with section 1.9.1 (part 6, BNBC).

Observation 20: Distorted bracing on steel racks (Warehouse Shed – 2).



Description: Distorted bracing was found on steel racks at a few locations. The building engineer is required to replace the distorted bracing of steel racks.

Observation 21: Undocumented steel canopy. (Warehouse Shed – 1)



Description: During inspection, an adjacent canopy was found at the north side of the warehouse shed – 1. The canopy was structurally connected to the main shed. No detailed drawing was found on-site. The building engineer is required to check the lateral stability of the shed and prepare an Engineering Assessment (EA) report considering the adjacent canopy.

3. Action Plan:

Item No	Observation	Action Plan	Timeline
1.	High stress in the foundation exceeds the normal design limit. [Building-5]	The building engineer to review the design, loads and foundation stresses in the area identified above.	within 6 weeks
2.	High stress in the foundation exceeds the normal design limit. [Building-5]	A Detail Engineering Assessment of the Factory to be commenced.	within 6 weeks
3.	High stress in the foundation exceeds the normal design limit. [Building-5]	Produce and actively manage a loading plan for all floor plates within the factory considering floor capacity and foundation capacity.	within 6 weeks
4.	High stress in the foundation exceeds the normal design limit. [Building-5]	Detail Engineering Assessment to be completed.	within 6 months
5.	High stress in the foundation exceeds the normal design limit. [Building-5]	Continue implementing the load plan.	within 6 months
6.	Lack of information and discrepancy between the provided drawing and site condition. [Building-5]	The building engineer is required to survey the whole structure and update the drawing reflecting actual on-site condition.	within 6 weeks
7.	Lack of height Marking in the storage area. [Building-5]	The factory is required to provide load restriction height Marking in the storage areas as per the floor loading capacity and compliance requirement.	within 6 weeks
8.	Crack on the brick wall. [Building-5]	The building engineer is required to investigate the cracks and produce an investigation report including reasons for cracks and repair methodology.	within 6 weeks
9.	Crack on the brick wall. [Building-5]	The factory is required to repair the cracks as per the recommendation of the investigation report.	within 6 weeks
10.	Dampness on masonry wall. [Building-5]	The building engineer is required to investigate the reason for dampness & cracks; and repair it following a suitable method.	within 6 weeks
11.	Corrosion on steel members. [Building-5]	The building engineer is required to provide rust-proof paint on steel members.	within 6 weeks
12.	Lack of design report. (Building 6)	The building engineer is required to prepare in compliance with section 1.9.1 (part 6, BNBC).	within 6 weeks

13.	Lack of design report. (Building 6)	Implement remediation work if required.	within 6 months
14.	Lack of load management program. (Building – 6)	The building engineer is required to prepare the load plan & implement the management program (posting, Marking, maintaining).	within 6 weeks
15.	Dampness in the brick wall. (Building – 6)	The building engineer is required to seal the source of water and repair dampness with a suitable method.	within 6 weeks
16.	Exposed rebar on the 2 nd floor (existing roof). (Building – 6)	The building engineer is required to provide rust-proof paint on exposed rebars.	within 6 weeks
17.	Construction debris on the 2nd floor (existing roof). (Building – 6)	The building engineer is required to remove the construction debris.	within 6 weeks
18.	Lack of lateral stability. (Generator Shed – 2)	The building engineer is required to check the lateral stability of the structure and suggest suitable remedial measures.	within 6 weeks
19.	Lack of lateral stability. (Generator Shed – 2)	Implement remediation work if required.	within 6 months
20.	Lack of lateral stability. (Boiler & Compressor Shed– 2)	The building engineer is required to check the lateral stability of the structure and suggest suitable remedial measures.	within 6 weeks
21.	Lack of lateral stability. (Boiler & Compressor Shed– 2)	Implement remediation work if required.	within 6 months
22.	Lack of lateral stability. (Leftover Go-Down)	The building engineer is required to check the lateral stability of the structure and suggest suitable remedial measures.	within 6 weeks
23.	Lack of lateral stability. (Leftover Go-Down)	Implement remediation work if required.	within 6 months
24.	Lack of lateral stability. (Warehouse Shed – 1)	The building engineer is required to check the lateral stability of the structure and suggest suitable remedial measures.	within 6 weeks
25.	Lack of lateral stability. (Warehouse Shed – 1)	Implement remediation work if required.	within 6 months
26.	Lack of lateral stability. (Warehouse Shed – 2)	The building engineer is required to check the lateral stability of the structure and suggest suitable remedial measures.	within 6 weeks
27.	Lack of lateral stability. (Warehouse Shed – 2)	Implement remediation work if required.	within 6 months
28.	Lack of lateral stability and inadequate member size. (Dining Shed).	The building engineer is required to prepare a safety check report along with the connection and member adequacy and propose remediation accordingly.	within 6 weeks

29.	Lack of lateral stability and inadequate member size. (Dining Shed).	Implement remediation work if required.	within 6 months
30.	Lack of credible as-built drawing. (Boiler & Compression Shed – 2,	The building engineer is required to update the as-built drawing for the structure which reflects the actual on-site condition.	within 6 weeks
31.	Lack of credible as-built drawing. (Fire Pump Room – 2,)	The building engineer is required to update the as-built drawing for the structure which reflects the actual on-site condition.	within 6 weeks
32.	Lack of credible as-built drawing. (Leftover Go-Down)	The building engineer is required to update the as-built drawing for the structure which reflects the actual on-site condition.	within 6 weeks
33.	Lack of credible as-built drawing. (Sub-station Building – 2)	The building engineer is required to update the as-built drawing for the structure which reflects the actual on-site condition.	within 6 weeks
34.	Corrosion on steel member. (Generator Shed – 2, Boiler & Compression Shed – 2)	The building engineer is required to remove the corrosion and provide anti-corrosive coating to the steel members.	within 6 weeks
35.	Dampness in the brick wall. (Generator Shed – 2, Fire Pump Room – 2)	The building engineer is required to repair the dampness with a suitable method.	within 6 weeks
36.	Connection gap. (Boiler & Compression Shed – 2)	The building engineer is required to survey the whole structure & repair the connection gap where necessary.	within 6 weeks
37.	Exposed rebar. (Fire Pump Room – 2)	The building engineer is required to apply anti-rust proof coating on exposed rebar.	within 6 weeks
38.	Lack of design report. (Sub-Station Building – 2)	The building engineer is required to prepare in compliance with section 1.9.1 (part 6, BNBC).	within 6 weeks
39.	Lack of design report. (Sub-Station Building – 2)	Implement remediation work if required.	within 6 months
40.	Distorted bracing on steel racks (Warehouse Shed – 2).	The building engineer is required to replace the distorted bracing of steel racks.	within 6 weeks
41.	Undocumented steel canopy. (Warehouse Shed – 1)	The building engineer is required to check the lateral stability of the shed and prepare an Engineering Assessment (EA) report considering the adjacent canopy.	within 6 weeks
42.	Undocumented steel canopy. (Warehouse Shed – 1)	Implement remediation work if required.	within 6 months