



Meghna Denims Ltd.

07, Kewa, Anser Road, Sreepur, Gazipur, Dhaka, Bangladesh

Co-ordinates: 24.202028N, 90.430625E





Building Information

- Building-1 (RMG Building) (G+4)
- Building-2 (Ancillary Building) (G+4)
- Building-3 (Waste Segregation area) (single-storied)
- Building-4 (Utility-01 (Boiler)) (B+G+1) & (Proposed (B+G+2))
- Building-5 (Utility-02 (Generator)) (single storied)
- Building-6 (Main Gate & Fire Control) (single storied)
- Building-7 (Kitchen) (single storied)
- Building-8 (Workshop and Overhead water tank) (single storied)
- Building-9 (ETP) (single storied)
- Building-10 (Washing Building) (G+1)
- Building-11 (Store building) (G+1)
- Building-12 (Chemical warehouse) (two storied)



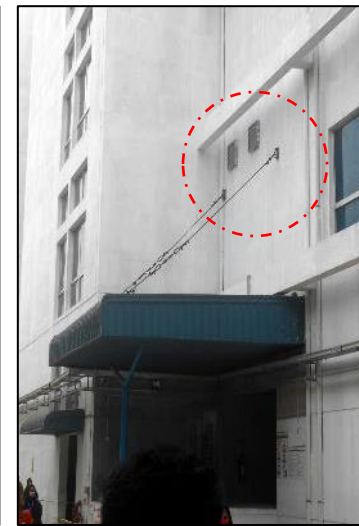
Observations



Missing drawing of the canopy structures



Drawing missing for the canopy structures around the stair area of RMG buildings. The connection of the canopy was not sufficient as well. Cable connection from wall was observed for some canopy.



Canopy structures around the stair



Gap in the Connection to column



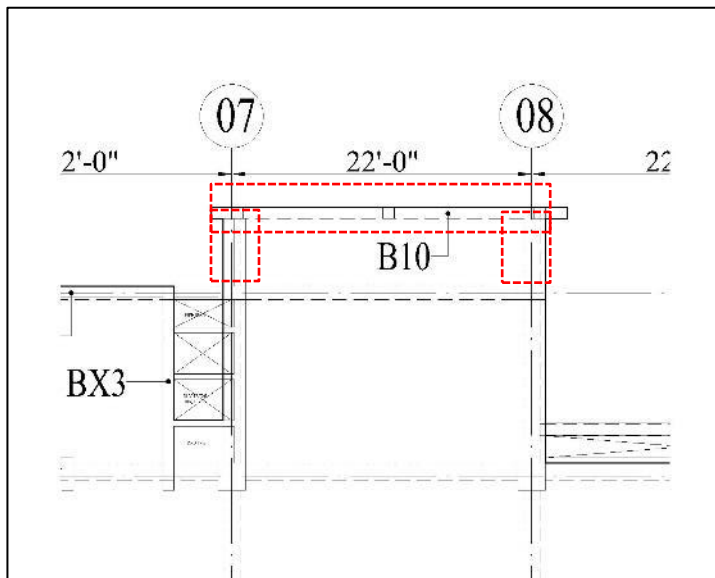
Cable Connection to wall



Discrepancy in the drawing



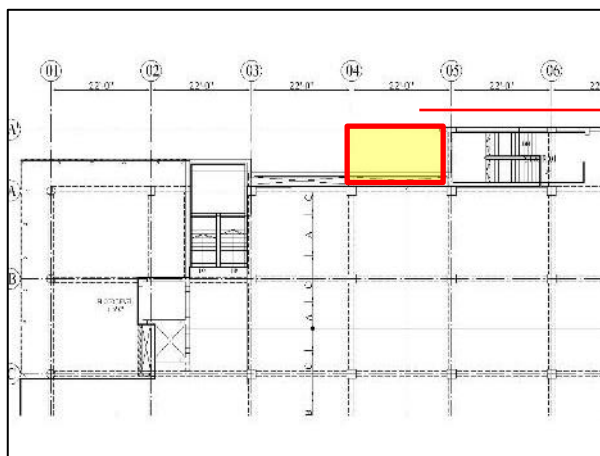
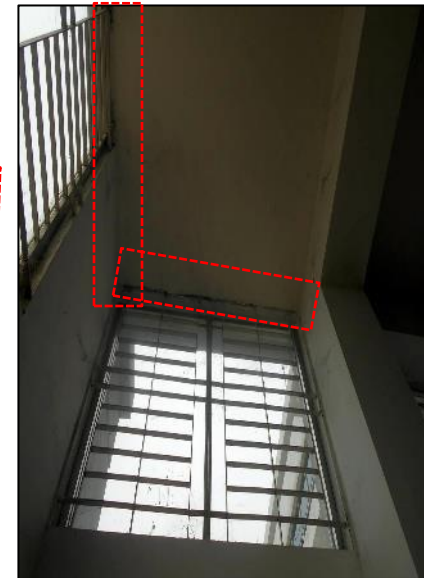
Tie beam elevation info was not available in the drawing. Some Beams on the edge was not found on site though these beams are shown in the drawing. 1st floor slab layout needs minor modification



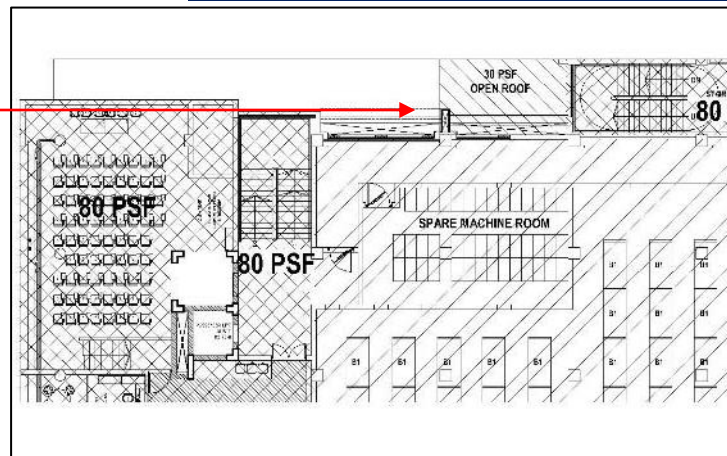
Beam on drawing



Beam missing on site



Slab layout on 1st floor



Slab layout on load plan of 1st floor



Extra slab on 1st floor



**Susceptible to injury due to gap in
expansion joint**

Injury among worker is susceptible due to large gap in the expansion joint



Expansion gap with 2.5 inch was found on 3rd and 4th floor



Expansion/movement gap

Observations: B-01 : RMG Building



Exposed reinforcements on the roof



Exposed rebar on the roof was found corroded.



Corrosion in the column rebar which is exposed to environment.

Observations: B-01 : RMG Building



Free standing water tank without any restrain



Support columns of the water tank



Free standing water tank without any restraint was found on the ground floor. Free standing water tank may susceptible to damage structural components if any vertical load (EQ) incurred.



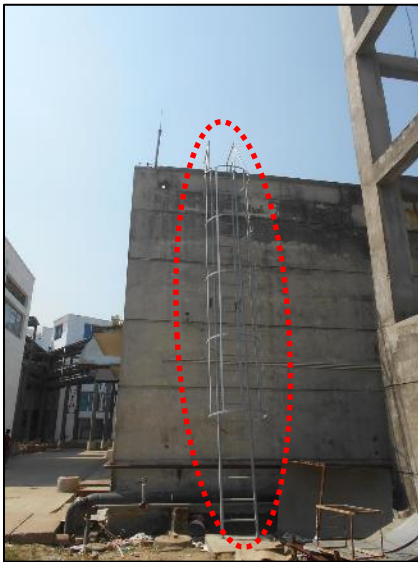
Insufficient parapet wall on roof



Parapet wall found very low in the roof of building 5



Susceptible to falling hazard may incur for this low parapet wall (marked in yellow) .



Ladder to reach the roof



Damaged beam on stair



Damaged beam was found on the external stair of ETP



The stair beam may reach critical stress and fail as the section of the beam is reduced



Location of the damaged beam



Possible vertical extension



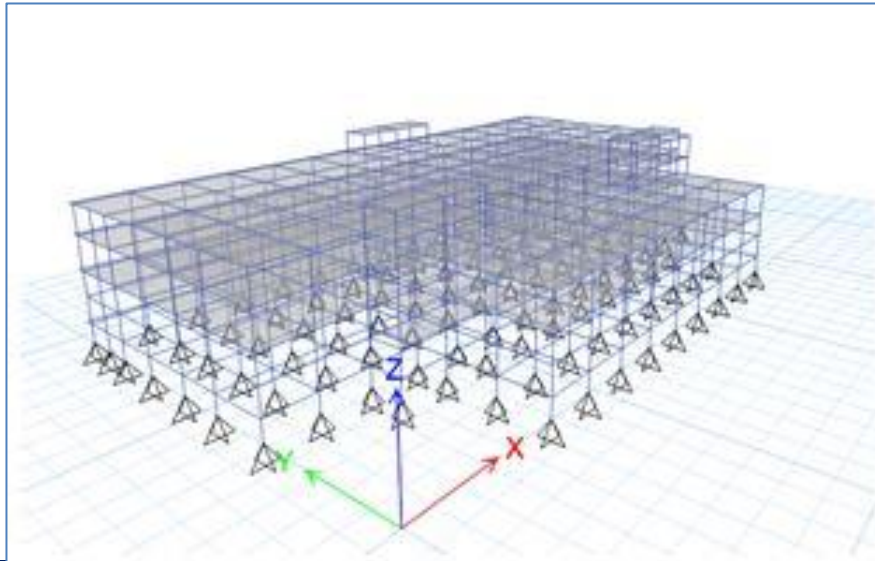
Current roof of factory building

Currently the building is 2 storied. Building owner has a future plan to extend the building vertically up to 3 storey. They have prepared DEA considering 3-storied building. Factory engineer is required to review the Detail Engineering Assessment considering BNBC provision prior to any extension work.

DESIGN REPORT OF PROPOSED 3-STORIED WASHING BUILDING (NORTH SIDE) FOR "UNIGLORY WASHING LIMITED" AT ANSAR ROAD, SHREEPUR, GAZIPUR.

FEBRUARY, 2020

STRUCTURAL CONSULTANT:
ADVANCE ENGINEERING
HOUSE 34/1, ROAD 4,
DHANMONDI, DHAKA.



DEA report prepared for 3-storied structure



Priority Actions



Problems Observed

Building-1

- 01: Drawing missing of the canopy structures.
- 02: Discrepancy in the drawing
- 03 : Susceptible to injury due to gap in expansion joint.
- 04: Exposed reinforcements on the roof.

Building-4:

- 05: Free standing water tank without any restrain.

Building-5:

- 06: Insufficient parapet wall on roof.

Building-9:

- 07 : Damaged beam on stair

Building-10:

- 08: Possible vertical extension.



Problems Observed

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Building 1: Drawing missing of the canopy structures	* Building Engineer to survey the whole structure and prepare accurate as-built drawings.	Within 6 weeks.
02	Building 1: Drawing missing of the canopy structures	* Assess the connection capacity	Within 6 weeks.
03	Building 1: Drawing missing of the canopy structures	* Carry out remedial works as per report recommendation if required.	Within 6 months.
04	Building 1: Discrepancy in the drawing	* Building Engineer to survey the whole structure and prepare accurate as built drawings.	Within 6 weeks.



Problems Observed

Item No.	Observation	Recommended Action Plan	Recommended Timeline
05	Building 1: Susceptible to injury due to gap in expansion joint	*Building Engineer to survey the whole structure and fill the gaps with appropriate materials.	Within 6 weeks.
06	Building 1: Exposed reinforcements on the roof	*Building Engineer to remediate the corroded rebar.	Within 6 months.
07	Building 4: Free standing water tank without any restrain	*Building Engineer to fix the support so that the water tank can withstand vertical loading.	Within 6 weeks.
08	Building 4: Free standing water tank without any restrain	*Carry out remedial works as per report recommendation if	Within 6 months.



Problems Observed

Item No.	Observation	Recommended Action Plan	Recommended Timeline
09	Building 5: Insufficient parapet wall on roof	Building Engineer to provide parapet walls.	Within 6 weeks.
10	Building 9: Damaged beam on stair	Prior any extension work, prepare a Detailed Engineering Assessment (DEA) report of the building and submit. Otherwise, provide consent letter.	Within 6 months.
11	Building 10-11: Possible vertical extension (Washing & Storage building)	In case of extension, factory engineer require to submit the Detailed Engineering Assessment report following BNBC requirements.	Within 6 weeks.