

Mondol Fabrics Ltd

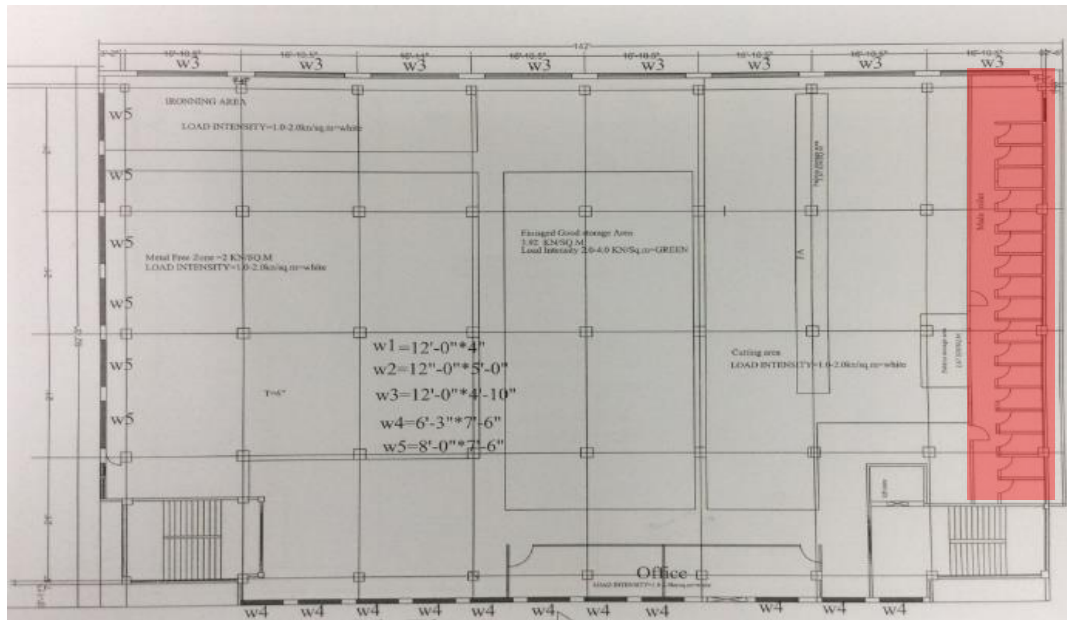
Nayapara, kasimpur, Gazipur
(23.990028N, 90.317336E0)

8th March 2014



Observations

Column Stresses in Toilet Area – North of Building



Cursory calculations indicate that column size appears to be smaller than required by code for the applied live & dead (including floor buildup, brick walls, roof slab over toilets and 2 external walls) live load, assuming typical concrete strength



Toilet Area: Columns supporting weight of walls, floor build up, roof slab & 2 façade walls each level.

Building Engineer to perform detailed calculations and concrete tests to prove column size and if required:

- Reduce loads further by removal of heavy walls and floor build-up
- Carry out strengthening works

Water Damage and Vegetation Growth

Water damage observed throughout. Building should be generally assessed for sources of leaking water

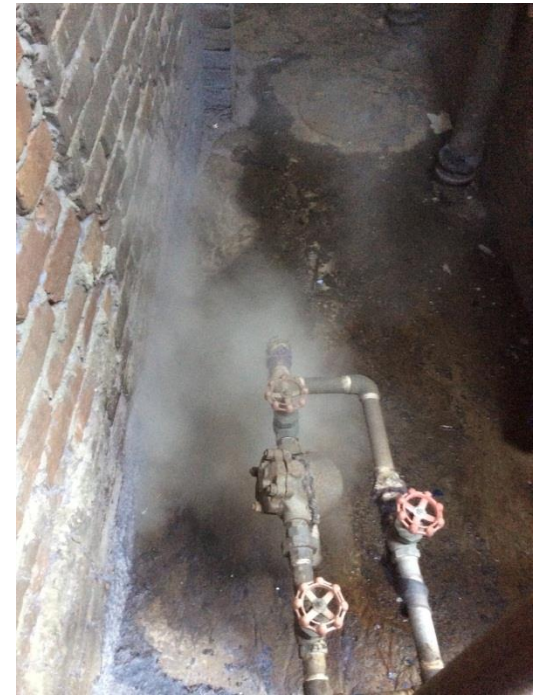


Water damage - General

Leaking water Pipes in toilet areas causing corrosion to structure



Water damage – Toilet Area



Steam rejection causing constant wetting .

Unmanaged leaking water drainage from steam pipes causing corrosion to façade and structure.

Water damage

Light weight Steel Roof Structures

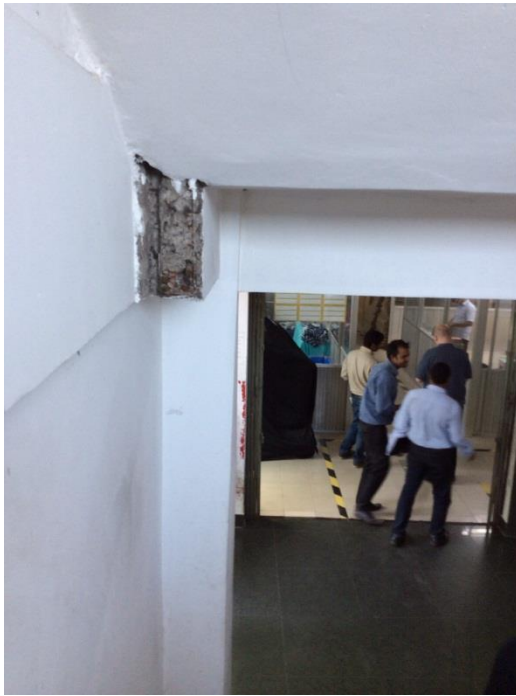


Non-engineered steel roof structure between building 3 and 1 is unlikely to be able to withstand strong wind events.



Corrugated roof sheeting to bridge corroded and in need of repair

Beam in northern Stair Core –Soffit of 4th Floor



Exposed beam appears to have been cut back. Building Engineer to assess and confirm adequacy.

Repair Mortar to be applied to prevent further corrosion of concrete.



Column stresses

Accommodation Building: Low edge protection at Roof Level - Safety Concern



Low Barrier is not suitable for safe edge protection roof slab. Adequate edge protection steel balustrade to be installed on all 4 sides of building or prevent access to the roof



Level 6 Edge Protection

Priority Actions

Problems Observed

1. Column Stresses - toilet area
2. Water damage
3. Non-engineered steel roof structure is unlikely to be able to withstand strong wind events.
4. Beam in North East Stair landing – Soffit of 4th Floor
5. Safety rail in accommodation building

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Column Stresses in toilet area	Building Engineer to review design, loads and columns in the area identified above.	6-weeks
2	Column Stresses in toilet area	Verify insitu concrete stresses from existing cylinder strength data or 100mm diameter cores (taken from non critical area as determined by building engineer)	6-weeks
3	Column Stresses in toilet area	Update load plans with safe design load as determined by building engineer	6-months
4	Water Damage & Vegetation Growth	Roof moisture protection and drainage system to be installed in area where previous roof has been removed	6-months
5	Water Damage & Vegetation Growth	Downpipes to be repaired throughout	6-months
6	Water Damage & Vegetation Growth	Steam-pipes to be repaired throughout	6-months
7	Water Damage & Vegetation Growth	Engineer to inspect water damaged structure including the exterior and propose a suitable repair.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
8	Lightweight Roof Structures	Steel structure should be designed and upgraded to support code vertical and wind loads by the Building Engineer, or alternatively remove.	6-months
9	Beam in North East Stair landing – Soffit of 4th Floor	Building Engineer to inspect beam and confirm that the structure is adequate.	6-months
10	Beam in North East Stair landing – Soffit of 4th Floor	Suitable concrete repair mortar to be applied to prevent deterioration of reinforcement	6-months
11	Safety rail in adjacent building	Install Safety barrier to minimum 1.1m height or restrict access	6-months