

Ocean Apparels Nangtong Tongfeng Co. Ltd

DS-2, 1st Floor, Road 02, Export Processing Zone, Chittagong

(91.776872E, 22.291519N)

21 June 2014



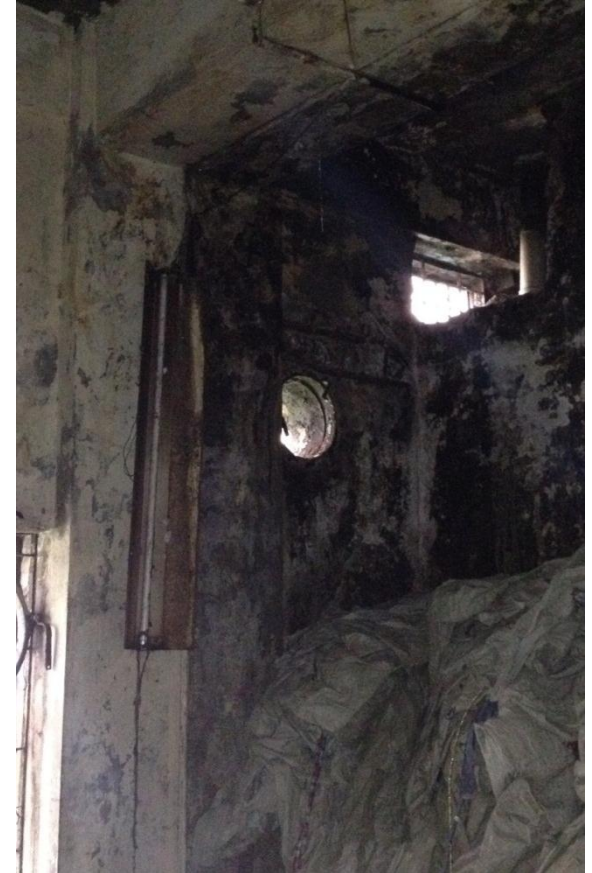
Observations

Observations

Water Ingress Throughout Building

Observations

Standing water and ponding on roof with no adequate drainage system or waterproofing in place.



Extensive water ingress at roof level causing deterioration of structure.
Water ingress causing spalling to beams, slabs and columns throughout structure, particularly on 1st Floor.

Observations

Uncontrolled Storage Loads

Observations

Uncontrolled loading observed on roof and first floor.

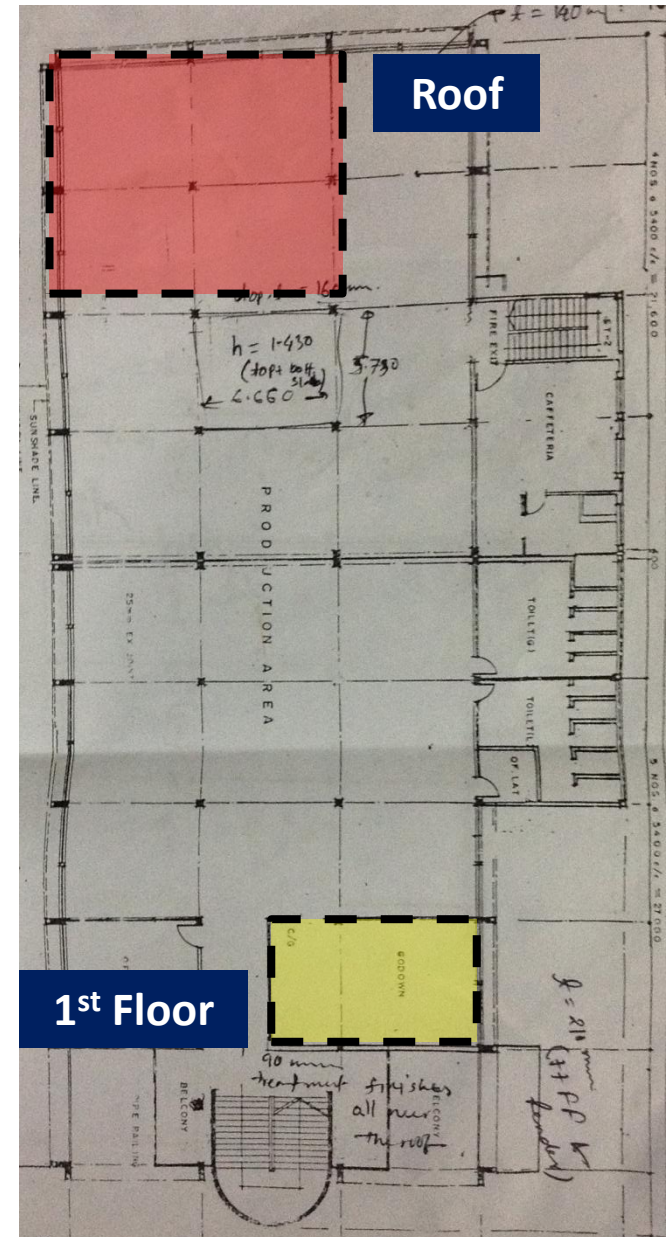
Roof

Unregulated storage observed on roof top. Potential for increased storage in dry season.



First Floor

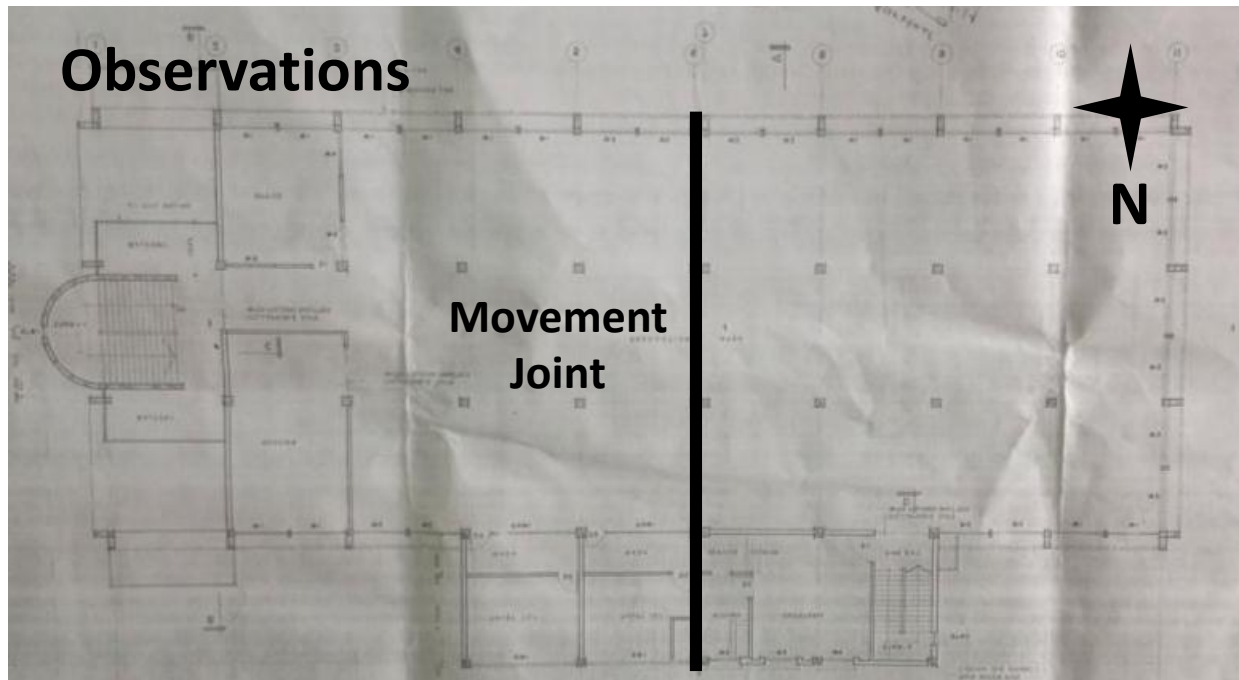
Uncontrolled / unrestricted loading observed on first floor.



Observations

**Movement joint has been
stitched across at roof level**

Observations



Movement joint exist at centre of structure, spanning in the North to South direction.

Expansion joint has been covered with concrete at roof level, inhibiting any expansion.

Joint has been plastered over at lower levels with water ingress due to lack of appropriate water proofing at roof level.



Observations

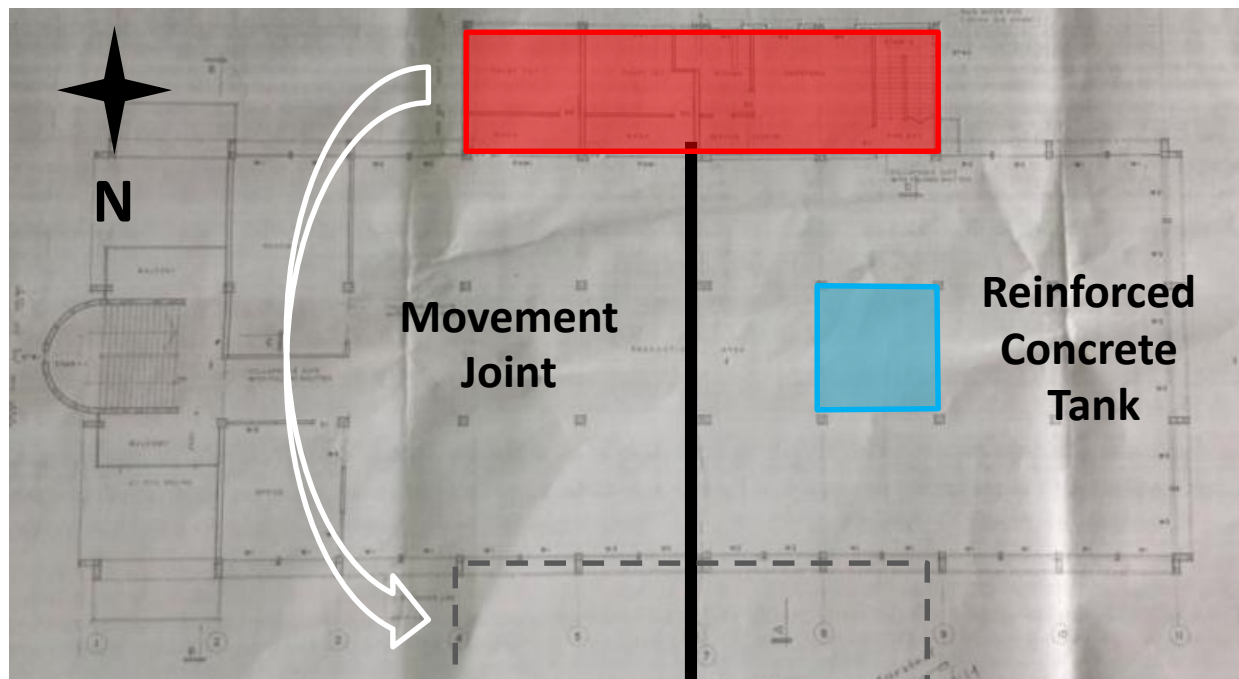
**Inconsistencies between the presented drawings
and the observed structure**

Observations

The structural drawings do not match the current arrangement and orientation of the building, and there are inaccuracies in the drawings.

Drawing provided consist of a plan for adjacent building which is a mirror floor plan of surveyed structure.

Additional RC Water Tank observed on roof of structure with no documentation to show structural design of element.



Drawing Inconsistencies

Priority Actions

Problems Observed

- ITEM 1:** Water ingress through structure throughout
- ITEM 2:** Uncontrolled storage on roof and 1st floor
- ITEM 3:** Movement joint has been stitched across at roof level
- ITEM 4:** Inconsistencies between presented documentation and observed structure

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Water ingress through structure throughout	Install a functional waterproofing membrane and drainage system to the roof slabs throughout	6-months
2	Water ingress through structure throughout	Remove areas of spalling concrete to slabs, beams and columns and reinstate concrete sections appropriately, once the building envelope is water-tight	6-months
3	Uncontrolled storage on first floor and roof	Building Engineer to create and implement load management plan for whole building (Also see Item 4)	6-months
4	Movement joint has been stitched across at roof level	Demolish concrete upstand that straddles movement joint at roof and install an appropriate joint detail that complies with the developed waterproofing strategy (see Item 1)	6-months
5	Movement joint has been stitched across at roof level	Clear the joint of stiff fill at all locations, to fully allow differential movement, and install an appropriate joint cover plate on all floor slabs	6-months
6	Inconsistencies between presented documentation and observed structure	Building Engineer to assess column capacity in location of the RC water tank located on the roof	6-months
7	Inconsistencies between presented documentation and observed structure	Loading plans to be created for all floors (including roof), taking into account the additional load from water storage that was not present on the as-built drawings	6-months