



Mayc's Garments Ltd.

House No. 18/19, Road no. 1, Block –KHA, Section-6, Mirpur, Dhaka.
(23.805996 N, 90.367568 E)

2nd April 2018

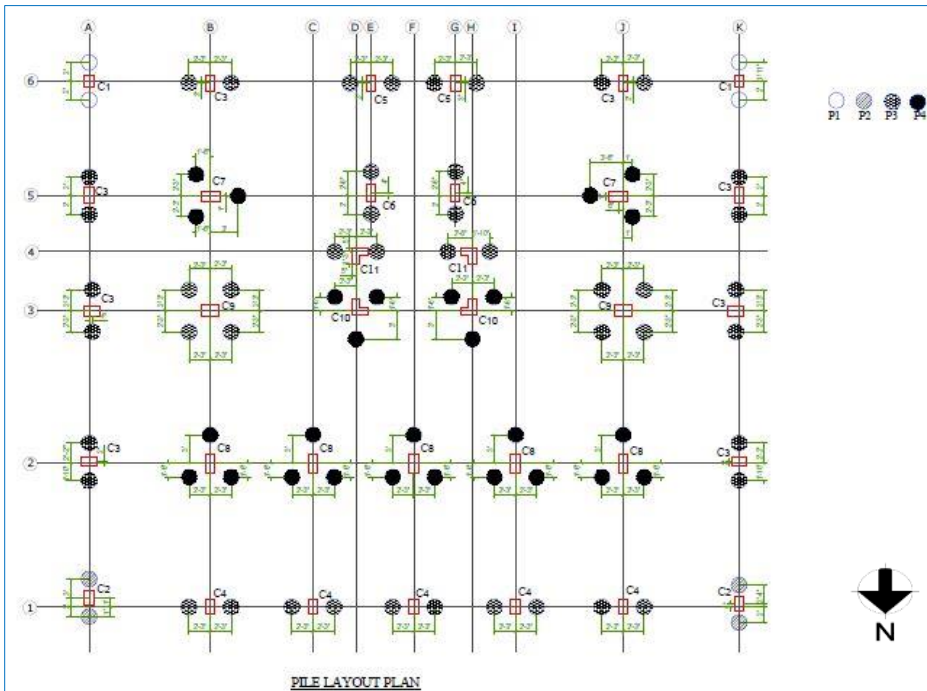




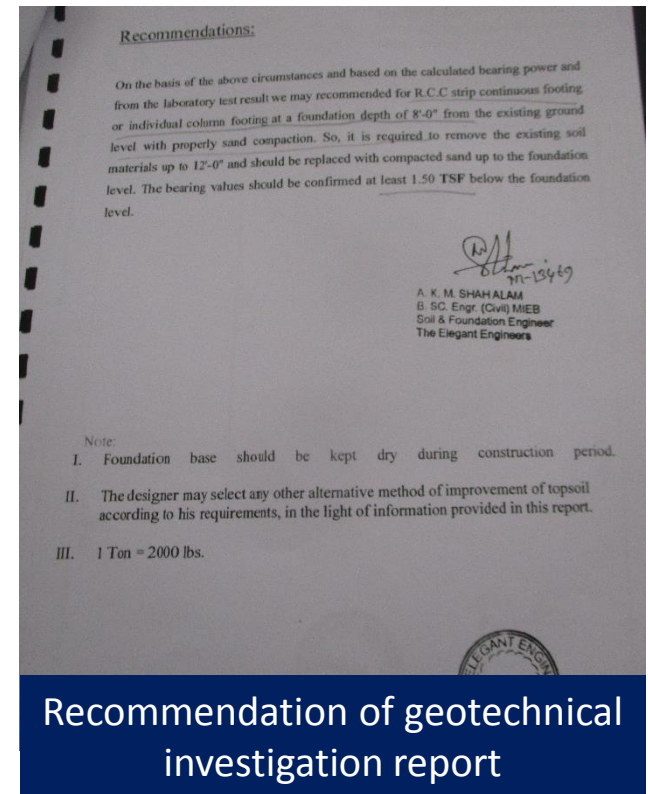
Observations



Design check required for the foundation system



Foundation layout plan



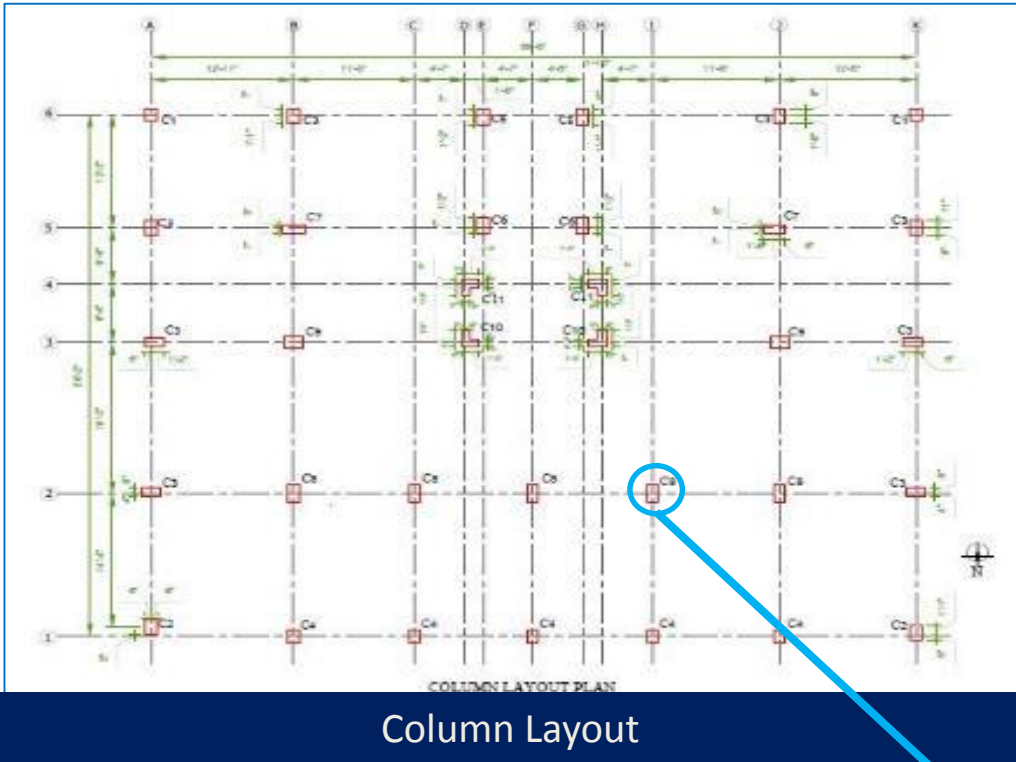
Recommendation of geotechnical investigation report

As per soil test report, R.C.C. strip footing or individual column footing was recommended. But during inspection, pile foundation was observed on structural drawing of the building. No recommendation was found on soil test report regarding pile bearing capacity.

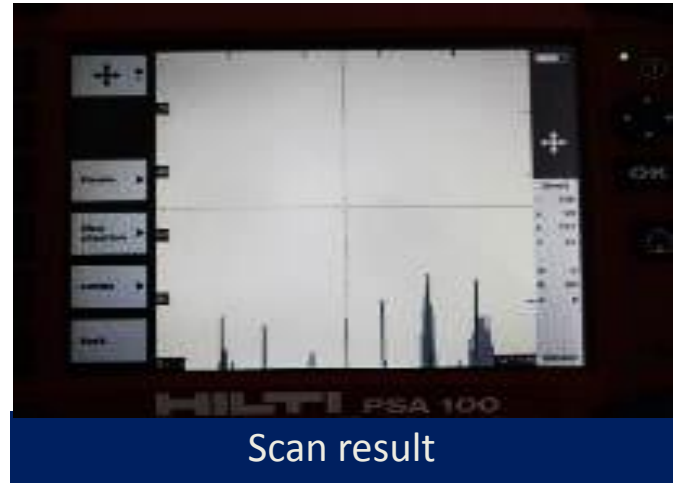
Cursory calculation indicates that pile appears to be stressed above normal design limits. Factor of safety (FoS) is less than the minimum requirement of BNBC. Factory engineer is required to review the adequacy of pile considering actual bearing capacity of soil and comply with BNBC.



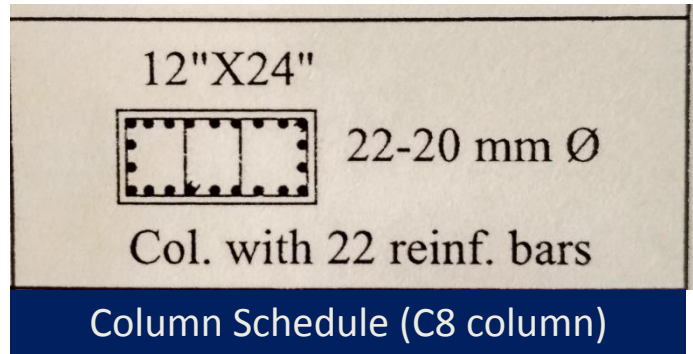
Discrepancy between provided drawing and on-site condition



Column Layout



Scan result



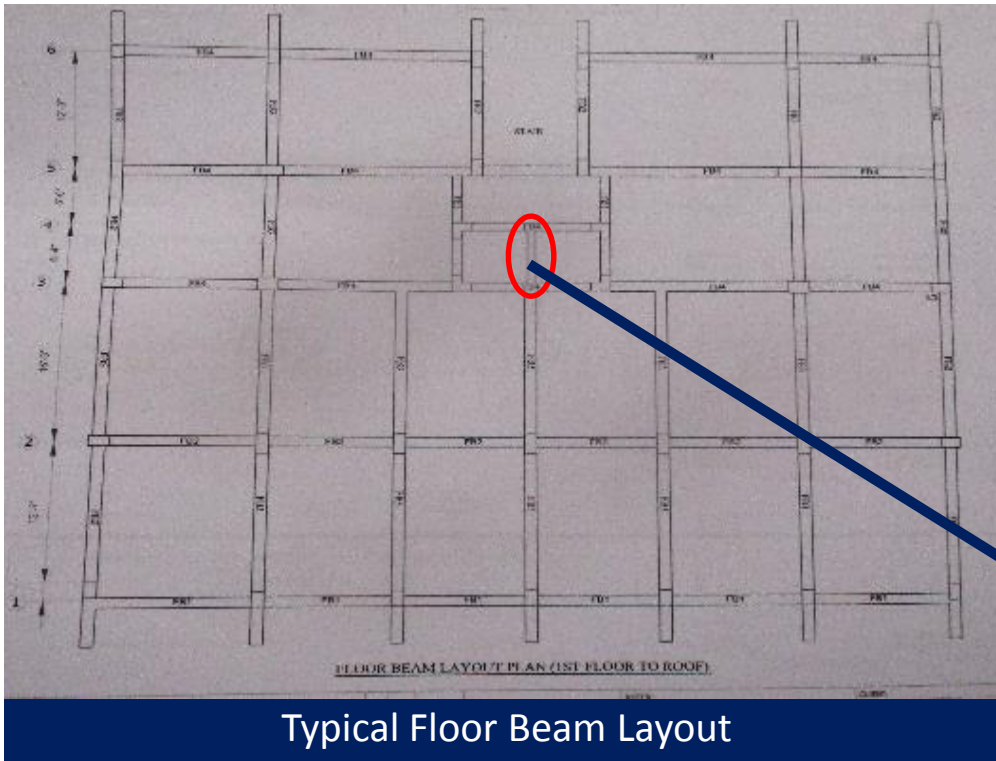
Column Schedule (C8 column)

Nos. of rebar in all C-8 type column at basement level does not match with provided column schedule. 16 nos. of rebars were found by ferro scan where as 22 nos. rebars were shown in column schedule.

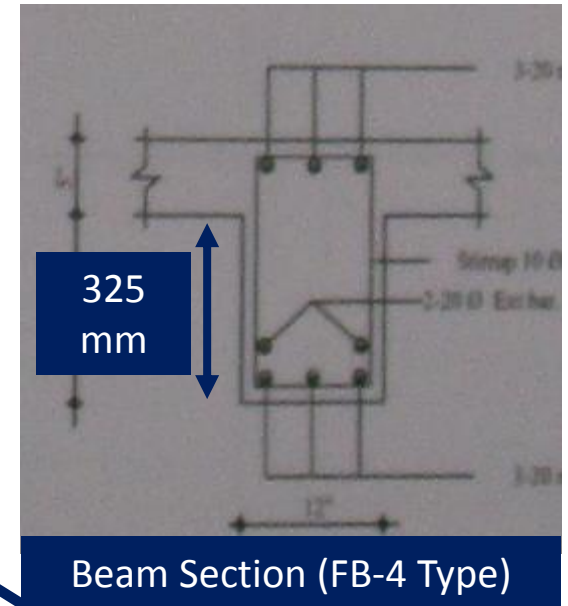


C8 column

Observations: Factory Building

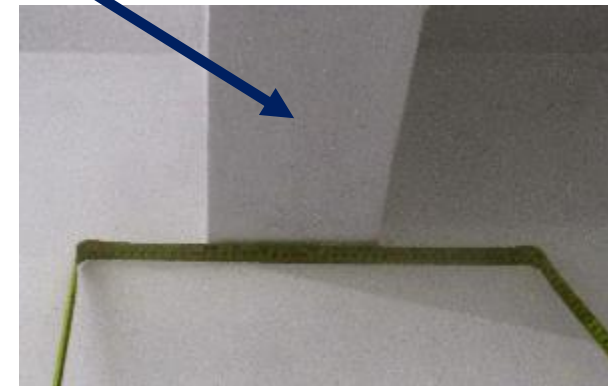


Typical Floor Beam Layout



Beam Section (FB-4 Type)

The width of marked FB-4 type was found less than the provided drawing section in every floor. Factory is required to revise As Built drawing as per actual condition.



The width of the marked FB-4 type beam was observed 150 mm instead of 325 mm.

7 Observation : Factory Building



Prepared engineering assessment and load plan are required to be verified



Detailed Engineering Assessment Report for the Industrial Building of "Maye's Garments Limited"

Project type: 8-Storey Industrial Building
Location: Plot No. 18-19, Road No. 01, Block: Kha, Section: 06, Seapara Parkana, Mirpur, Dhaka, Bangladesh
Client: Maye's Garments Ltd.



Assessed by:-

Engr. Hilten Das
B.Sc. in Civil Engineering (BUET)
IEB, Member No: 20668



Submitted by

Address: House No- 986, Ground Floor, Road: 3L, DOHS, Mirpurkhali, Dhaka. Telephone: +880-1733536282, +880-1973536282. E-Mail: onarcoconsult@gmail.com

Engineering assessment report



Core cutting location



Core cutting location

CONCRETE TEST REPORT

Project Name: Maye's Garments Limited Building

Client: Maye's Garments Ltd.

Location: Plot No. 18-19, Road No. 01, Block: Kha, Section: 06, Seapara Parkana, Mirpur, Dhaka, Bangladesh

Assessed by: Engr. Hilten Das

Submitted by: Onarco

Sl. No.	Location	Cylinder Diameter (mm)	Cylinder Height (mm)	Compressive Strength (MPa)		Cylinder Age (Days)	Cylinder Condition	Remarks
				Tested	Design			
1	1st Floor Column	150	300	18.5	20.0	28	Good	Sample No: 1
2	2nd Floor Column	150	300	18.5	20.0	28	Good	Sample No: 2
3	3rd Floor Column	150	300	18.5	20.0	28	Good	Sample No: 3
4	4th Floor Column	150	300	18.5	20.0	28	Good	Sample No: 4
5	5th Floor Column	150	300	18.5	20.0	28	Good	Sample No: 5
6	6th Floor Column	150	300	18.5	20.0	28	Good	Sample No: 6

NOTE: - The above test results are based on the test results of the samples tested in the laboratory. The test results are subject to the accuracy of the test results. The test results are subject to the accuracy of the test results.

Original core test report

An Engineering Assessment (EA) has been prepared following BNBC for the eight (B+G+6) storied factory building. Core has been taken from columns for the evaluation of concrete strength. The concrete strength was used for all reinforced concrete members (Columns, beams, slab). However, core cutting location has been verified in the time of inspection. Factory is required to submit the revised EA to Accord for further review.

9 Observation : Factory Building



Loading on 3rd floor packing section



Loading on 2nd floor cutting section

Factory designated consulting firm has prepared a load plan considering 5kpa maximum allowable floor loading for 2nd & 3rd floor storage areas.

During inspection, no over loading was observed and FoS calculation for internal column was found satisfactory considering 3 kpa allowable floor live loading for existing structure.

Factory is required to maintain the floor live load 3 kpa until prepared load plan reviewed by Accord.

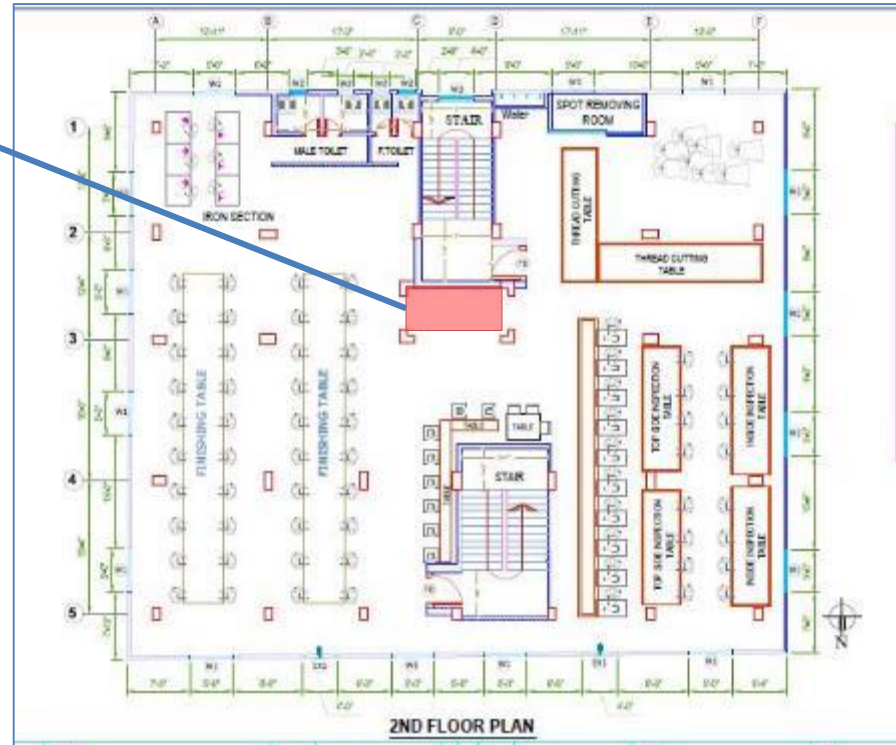


Slab opening covered by steel sheet



Slab opening covered by steel sheet

Slab opening was found on GF to 3rd floor slab which was covered by steel sheet supported by angle. Factory is required to replace the steel sheet as per engineer's recommendation.



2nd floor plan



Steel sheet poorly connected with RC slab by welding

Observation : Factory Building



Water ponding and stacking of construction material on roof



Standing water on roof



Standing water on roof

Water ponding was found at roof of the factory building. Also stacking of construction materials found on roof. Factory is required to remove the construction materials from roof and improve water drainage system to avoid water clogging.



Stacking of construction materials



Priority Actions



Problems Observed

Factory Building:

Item 1: Design check required for the foundation system.

Item 2: Discrepancy between provided drawing and on-site condition.

Item 3: Prepared engineering assessment and load plan are required to be verified.

Item 4: Slab opening covered by steel sheet

Item 5: Water ponding and stacking of construction material on roof.



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	(Factory Building) Design check required for the foundation system	Factory Engineer to review design, loads and footings stresses.	6-weeks
2	(Factory Building) Design check required for the foundation system	Produce and actively manage a loading plan for all floor plates within the factory, giving consideration to floor, column and foundation capacity.	6-weeks
3	(Factory Building) Design check required for the foundation system	Complete implementation of any remedial works deemed necessary by the reviewed design.	6-months
4	(Factory Building) Discrepancies between provided drawings and on site condition	Building Engineer required to prepare As –Built drawings reflecting the actual condition.	6-weeks
5	(Factory Building) Prepared engineering assessment and load plan are required to be verified	Maintain 3 Kpa load on all floors until verified the load plan.	6-weeks
6	(Factory Building) Prepared engineering assessment and load plan are required to be verified	Complete the review of Engineering Assessment along with load plan with Accord.	6-weeks
7	(Factory Building) Prepared engineering assessment and load plan are required to be verified	Carry out strengthening works if required.	6-months
8	(Factory Building) Prepared engineering assessment and load plan are required to be verified	Continue to implement the accepted load plan.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
9	(Factory Building) Slab opening covered by steel sheet	Factory is required to replace the steel sheet as per engineer's recommendation.	6-weeks
10	(Factory Building) Water ponding and stacking of construction material on roof	Factory is required to improve water drainage system to avoid water clogging.	6-weeks
11	(Factory Building) Water ponding and stacking of construction material on roof	Remove construction materials from roof top.	6-weeks