Meghna Knit Composite
Meghna Dresses Ltd

Gilarchala, Sreepur, Gazipur, Dhaka
(+24.1861ºN, 90.4254ºE)

3 November 2013

ACCORD on Fire and Building Safety in Bangladesh

ARUP

2013 Soils Report

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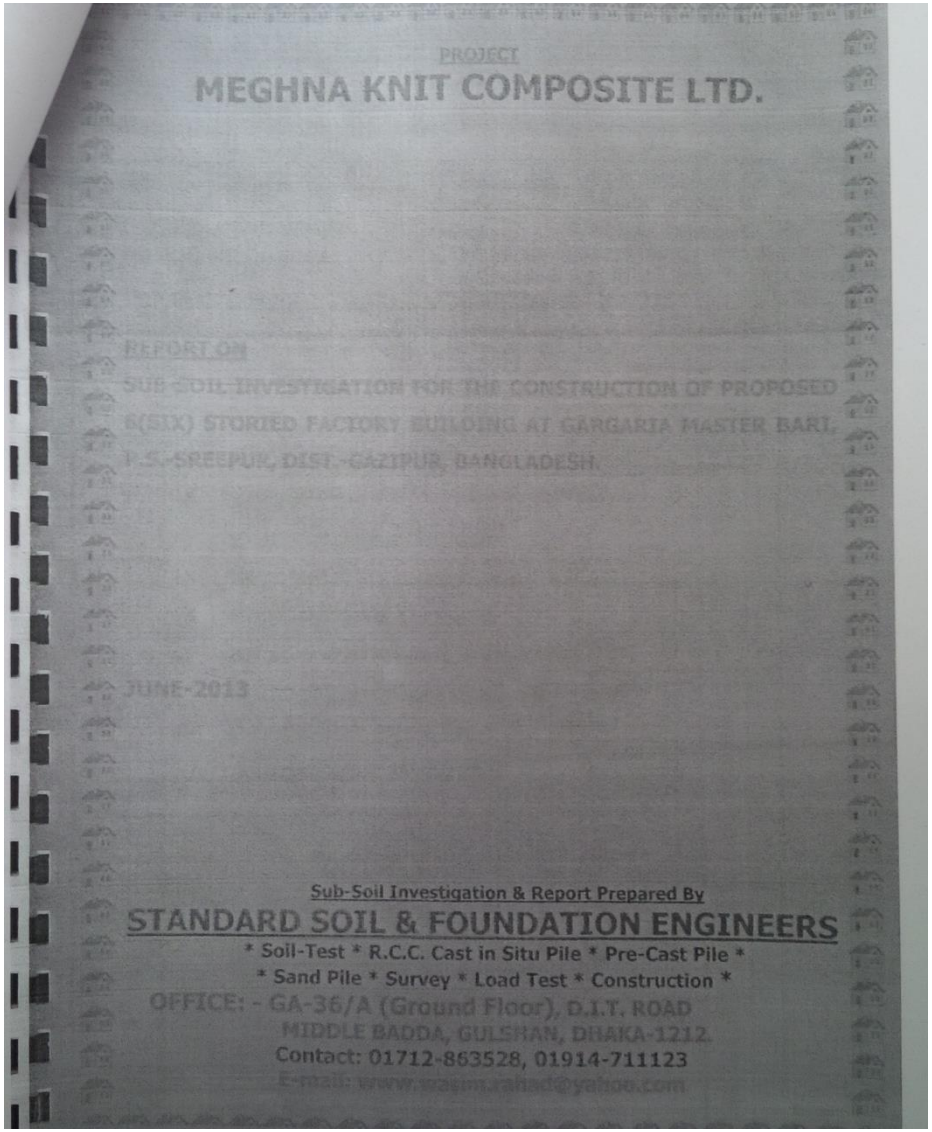

2013 Soils Report provided – Recommendations and assumptions within the report must be reviewed by Building Engineer to ensure that these have been considered in the design calculations for the building foundations

Soils Report

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Cracking to beams and slab on soffit of 3rd floor

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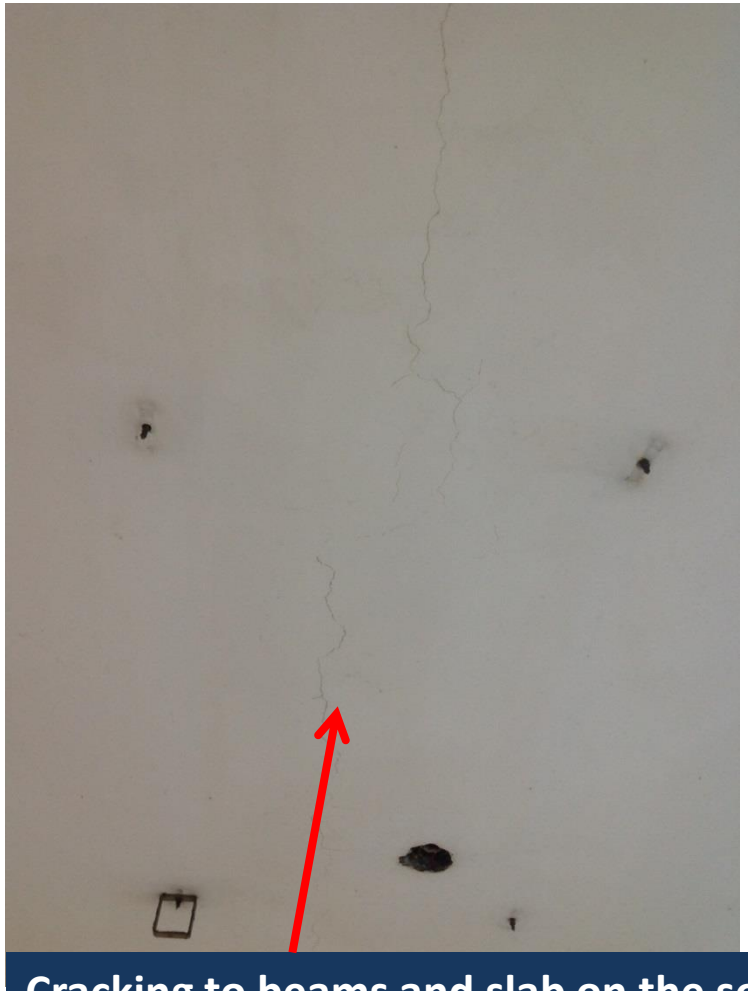

Cracking to beams and slab on the soffit of the third floor (investigation required to confirm if cracking is within plaster only)

Beam & Slab Cracks

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Localised dampness and effects on building fabric

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Water damage to underside of roof slab with no visible signs of cause on roof level

Dampness to Building Fabric

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Ponding of water on roof in localised areas

Dampness to Building Fabric

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Water damage to wall behind WC and shower area on 4th Floor

Dampness to Building Fabric

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Spalling of Plaster Render

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Spalling of plaster render above window on South Elevation – 1st Floor

Spalling of Plaster Render

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Check on column loads and design required- for all internal building columns

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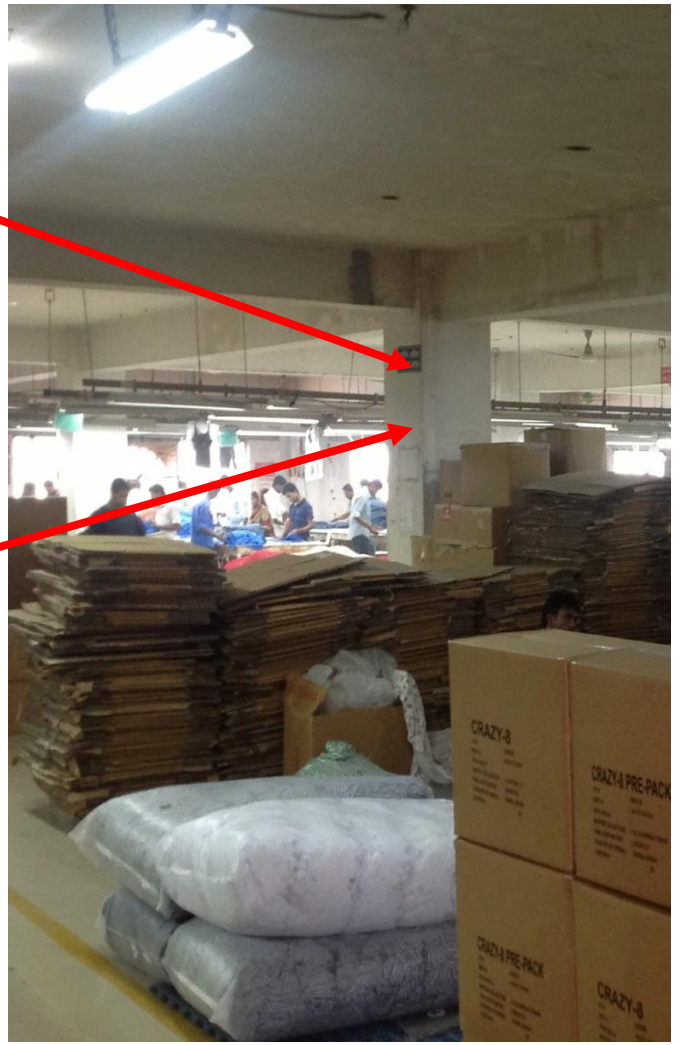
Cursory calculations indicate that column sizes may be smaller than required by code for the applied dead and live load, assuming typical aggregate concrete strength

Engineer to verify insitu concrete strength & reinforcement and perform detailed calculations to code to prove column size and (if required) :

- Reduce loads by vacating floors and removing addition structures
- Reinforce columns



Check on column loads and design required

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Dyeing Building stability system to be checked

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Vertical stability system to steel frame seems incomplete in Dyeing building – some end bays are missing bracing or have incomplete bracing.

Dyeing Building stability system: Check required

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Priority Actions

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Problems Observed

1. Building Engineer to carry out check on column loads and design- for all building internal columns

2. Hairline Cracks in beams and slabs on soffit of 3rd floor

3. Localised dampness

4. External spalling over window

5. 2013 Soils Report - Design check required

6. Steel bracing in Dyeing Building

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Verify column design and concrete strengths for all internal columns within the factory	Factory Engineer to review design, loads and columns stresses in area identified above.	6-Weeks
2	Verify column design and concrete strengths for all internal columns within the factory	VVerify insitu concrete stresses either by cores or existing cylinder strength data for all internal columns within the factory.	6-Weeks
3	Verify column design and concrete strengths for all internal columns within the factory	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-Months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
4	Soils Report carried out in 2013.	Building Engineer to review Soils Report to confirm that the geotechnical design criteria have been fully complied with in the original design of the factory.	6-Months
5	Hairline cracks in beams and slab on soffit of 3rd floor	Sections of plaster finish to beams and slab to be removed to investigate if cracks penetrate the building structure.	6-Weeks
6	Hairline cracks in beams and slab on soffit of 3rd floor	Building Engineer to carry out design check on beams and slabs to confirm that these cracks are non-structural.	6-Months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Hairline cracks in beams and slab on soffit of 3rd floor	Building Engineer to prepare Allowable Floor Loading Plans	6-Months
8	Localised dampness - water causing damage.	Building Engineer to inspect water damaged structure including the exterior and propose a suitable repair.	6-Months
9	Spalling of plaster over 1st floor window on South elevation.	Building Engineer to inspect spalling of plasterwork over the window and to propose a suitable repair.	6-Months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
10	Spalling of plaster over 1st floor window on South elevation.	Repair works to be carried out	6-Months
11	Dyeing Building - Vertical steel bracing- some end bays are missing bracing or have incomplete bracing.	Building Engineer to review design of vertical stability bracing to steel structure for code compliance. Installation of additional vertical bracing to be proposed if required.	6-Months