

Incredible Fashions Ltd.

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(24.0486433N, 90.2678078E)

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Observations

Uncontrolled loading



- Uncontrolled loading – develop load plan and load heights and implement

High column stresses (when building is completed)

STRUCTURAL DESIGN CRITERIA & MINIMUM REQUIREMENTS

1. GENERAL

- a) FOUNDATION HAS BEEN DESIGNED FOR SIX STORIED COMMERCIAL BUILDING
- b) CONSIDERING LIVE LOAD 130 PSF. AND FOLLOWING BNBC CODE FOR EARTH QUAKE
- c) ALL THE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS.

- d) ANY CONFUSION MUST BE CLARIFIED BEFORE PROCEEDING.

2. CONCRETE:

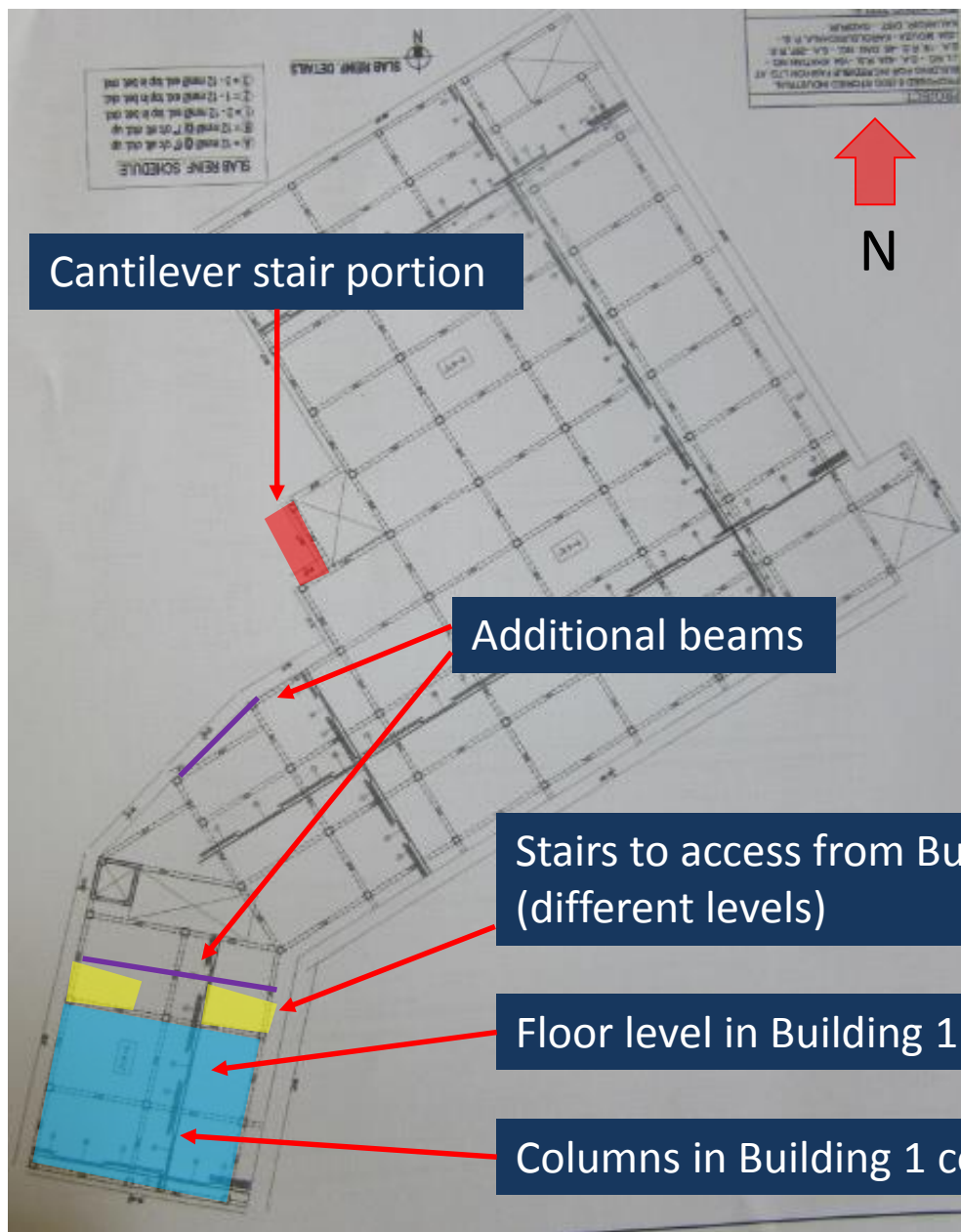
- a) TYPE: CONCRETE COMPRESSIVE STRENGTH

- (i) FOR FOOTING f_c = MINIMUM 3300 PSI (1:1½:3).
- (ii) FOR COLUMNS f_c = MINIMUM 3500 PSI (1:1½:3).
- (iii) FOR SLAB & BEAM f_c = MINIMUM 3500 PSI (1:1½:3)

- b) MINIMUM CYLINDER STRENGTH: BASED ON CYLINDER TEST OF DIAMETER D=150 mm & HEIGHT=300mm.

Live load shown on drawings (130psf) is high and may give rise to column stresses being in excess of recommended values when all floors have been completed and the building is fully occupied.

**Drawings do not represent as constructed
condition at various locations**



Cantilever stair portion

Additional beams

Stairs to access from Building 2 to Building 1
(different levels)

Floor level in Building 1 different level to Building 2

Columns in Building 1 constructed larger than drawn

Priority Actions

Problems Observed

Building 2

ITEM 1: Uncontrolled loading

ITEM 2: Moderate column stress when building is completed to permitted height

Building 1 and 2

ITEM 3: Drawing discrepancies

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Building 2 Uncontrolled loading	Loading plans showing allowable imposed (live) loading on each floor to be developed taking account of the structural capacity of columns, beams and slabs.	6-months
2	Building 2 Uncontrolled loading	Implemented floor loading in accordance with loading plans.	6-months
3	Building 2 High column stresses at completed building height	Factory Engineer to review design, loads and columns stresses for building when completed to full height taking account of existing cylinder strength data for Columns (supplemented with additional cores to be taken from ground floor columns if necessary)	6-months
4	Building 2 High column stresses at completed building height	Amend allowable imposed loads if required.	6-months
5	Building 1 and 2 Discrepancies in drawings	Factory engineer to update drawings to correspond with the as-constructed arrangement	6-months