

Chaity Composite Ltd.- Annex building

Chotto Shilmondi, Tripurdi, Sonargaon

(23.650150, 90.586212)

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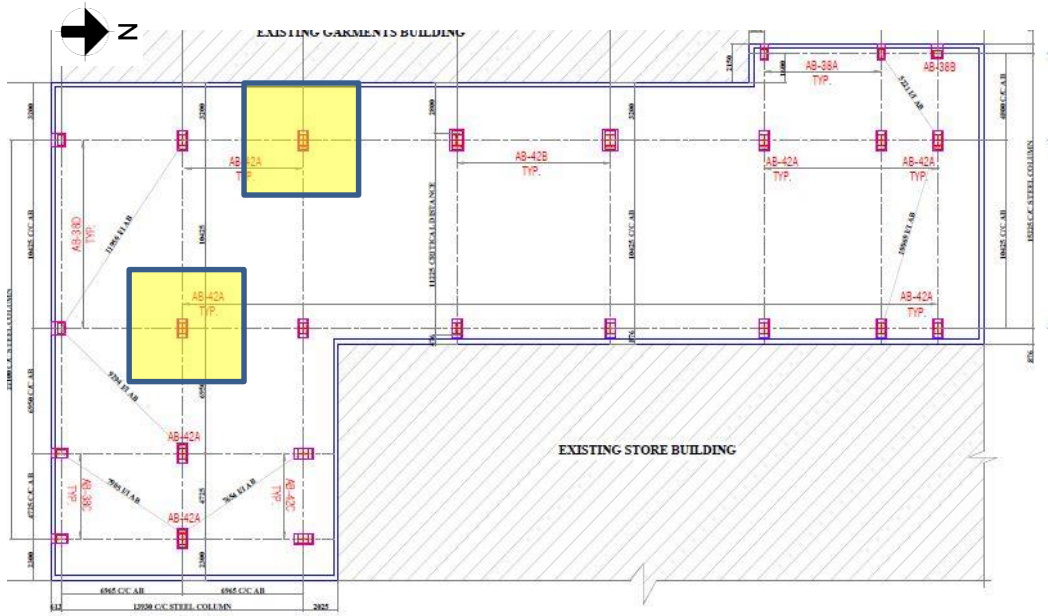


Building Information

1. Annex Building (G+6)

Observations

Column and Footing stressed above normal design limits

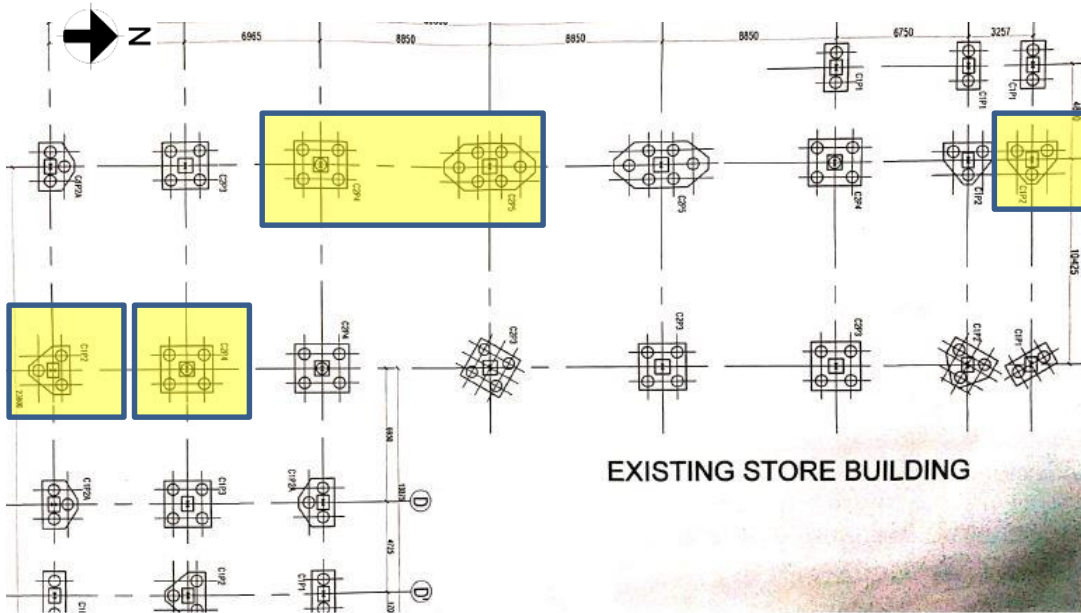


Column Layout plan

Cursory calculation indicates that columns are stressed above normal design limits at the marked locations considering 5 kPa live load on typical floor. Factory Engineer to review design, loads and columns stresses. Also produce and actively manage loading plan according to the floor capacity.



Typical floor loading



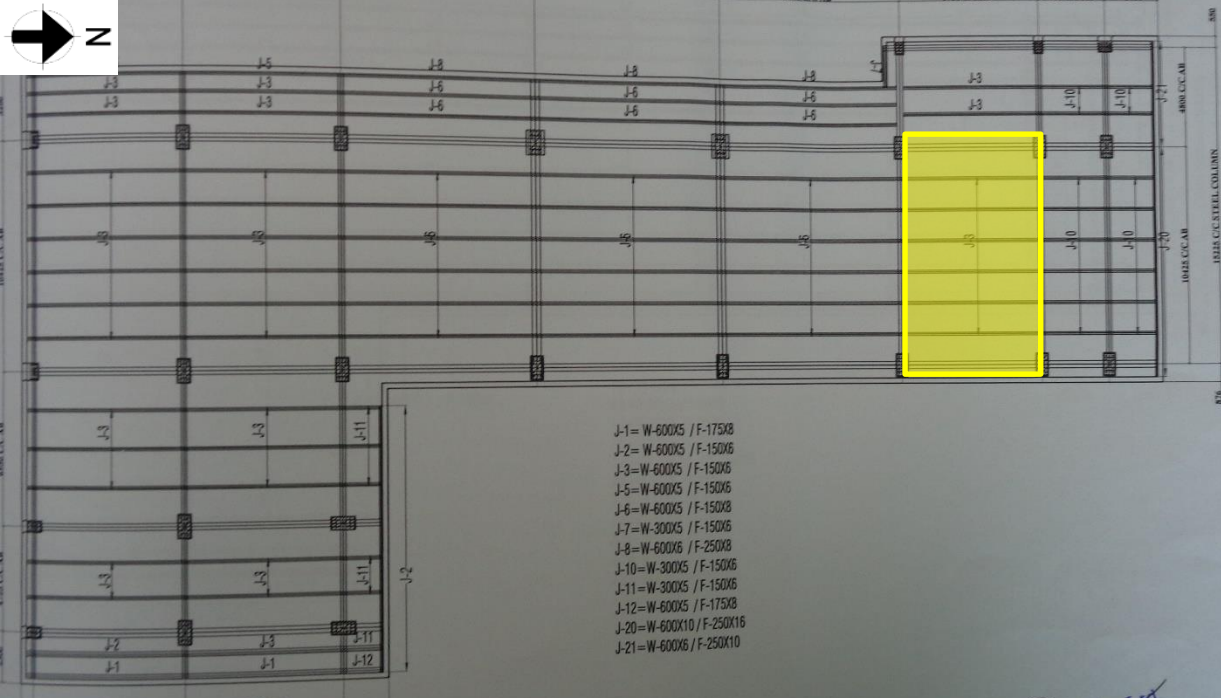
Column Layout plan



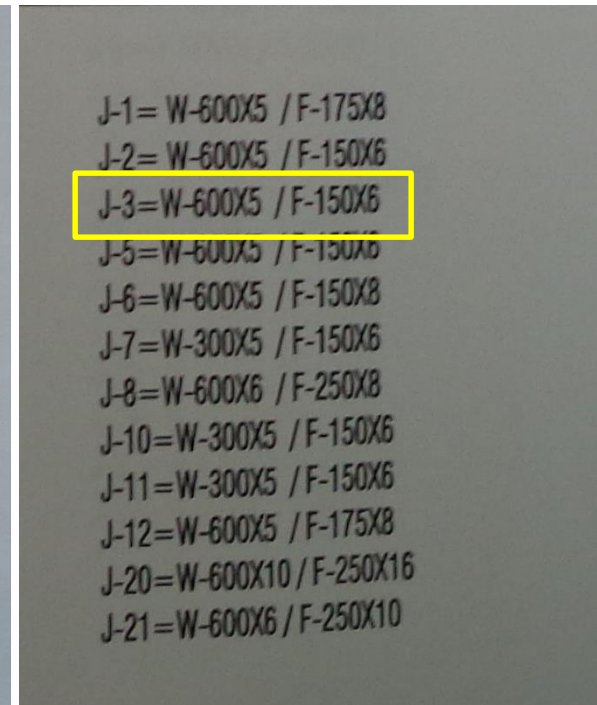
Typical floor loading

Cursory calculation indicates that foundation is stressed above normal design limits at the marked locations considering 5 kPa live load on typical floor. Factory Engineer to review design, loads and columns stresses. Also produce and actively manage loading plan according to the floor capacity.

Discrepancies in as-built drawing with onsite-condition



Typical sub-beam layout



Depth of J-3 shown 600 mm

Depth of sub-beam (J-3) was shown as 600 mm in provided drawing for the marked area but the depth was measured as 500mm for those beams at all floor level. Factory engineer is required to survey the whole structure and update the as-built drawing as per on-site condition.



Depth of J-3 measured 500 mm

Corrosion in steel member



Steel column & I joist corrosion at top floor

Corrosion in steel member was found in various locations. Factory is required to identify the corroded locations and investigate the reason of corrosion and suggest proper remedial measure accordingly.

Problems Observed

Annex Building:

Item 1: Column and foundation stressed above normal design limits.

Item 2: Discrepancies in as-built drawing with onsite-condition.

Item 3: Corrosion in steel member.

Priority Action

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Column and foundation stressed above normal design limits	Factory Engineer to review design, loads, columns and footings stresses.	within 6-weeks
2	Column and foundation stressed above normal design limits	Factory engineer is required to verify the steel members by conducting a tensile strength test.	within 6-weeks
3	Column and foundation stressed above normal design limits	Produce and actively manage a loading plan for all floor plates within the factory, considering floor, column and foundation capacity.	within 6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
4	Column and foundation stressed above normal design limits	Complete implementation of any remedial works deemed necessary by the Engineering assessment.	within 6-months
5	Column and foundation stressed above normal design limits	Continue to implement loading plan.	within 6-months
6	Discrepancies in as-built drawing with onsite-condition	Factory engineer is required to survey the whole structure and update the as-built drawing as per on-site condition.	within 6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Corrosion in steel member	The building engineer to investigate the reason & extent of corrosion and suggest proper remedial measure accordingly.	within 6-weeks
8	Corrosion in steel member	Take necessary measures to prevent further corrosion and repair the corroded steel members as per engineer's suggestion.	within 6-months