Knit Radix Ltd.

Shasongaon,Enayetnagar,Fatulla
(23.625139, 90.470706)

09th January 2017

ACCORD
on Fire and Building Safety in Bangladesh

Observations

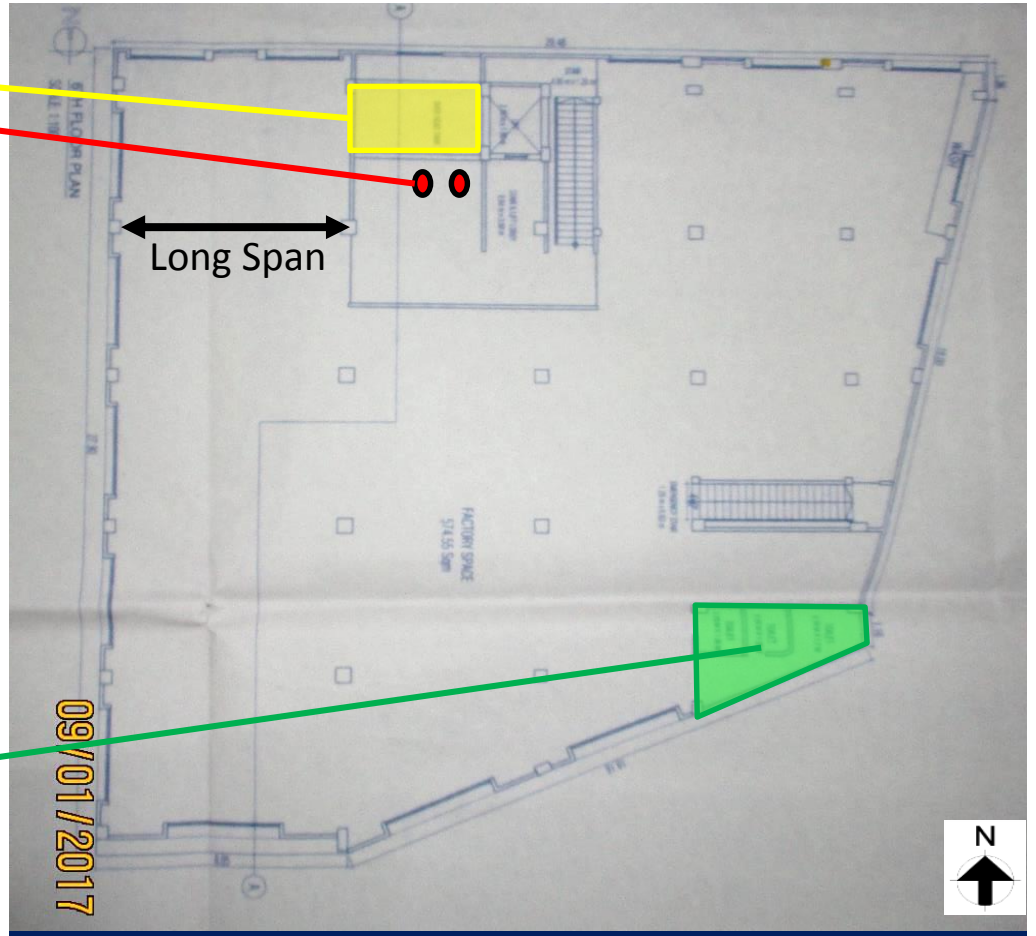
Column to be stressed above normal design limits

Observations: Factory Building

R.C.C & 2 nos. of Plastic water tank

Toilet build up in several floor.

Cursory calculations indicate that the working stress of the ground floor columns are at a level that requires design review.



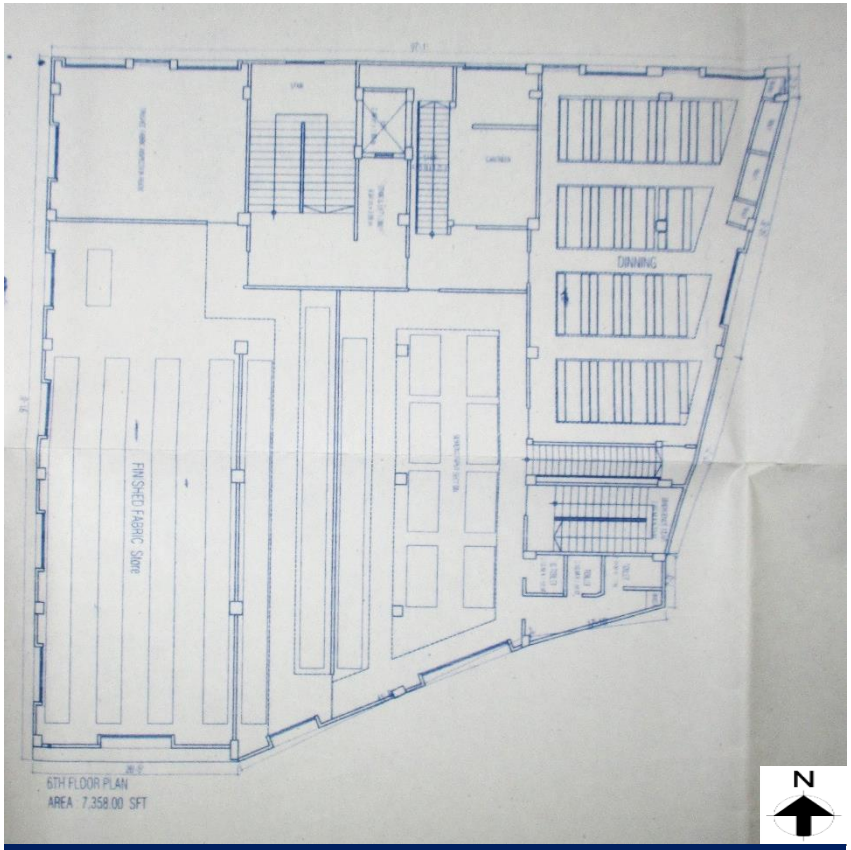
Layout Plan

Observations: Factory Building

ACCORD on Fire and Building Safety in Bangladesh

Discrepancies between provided drawings and on site condition

Observations: Factory Building



Layout plan

Steel beam size and thickness did not match with provided drawings as shown by red marking.

On-site measurement

SCHEDULE OF SUB BEAM

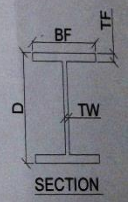
NAME	D (mm)	TW (mm)	BF (mm)	TF (mm)
SUB BEAM	225	5	100	6

SCHEDULE OF COLUMN

NAME	D (mm)	TW (mm)	BF (mm)	TF (mm)
C-1 TO C-6	250	6	150	8

SCHEDULE OF MAIN BEAM

NAME	D (mm)	TW (mm)	BF (mm)	TF (mm)
MB-05 MB-06	475-300	6	150	8
MB-01 TO MB-04	300	6	150	8
MB-07 TO MB-17	300	6	150	8



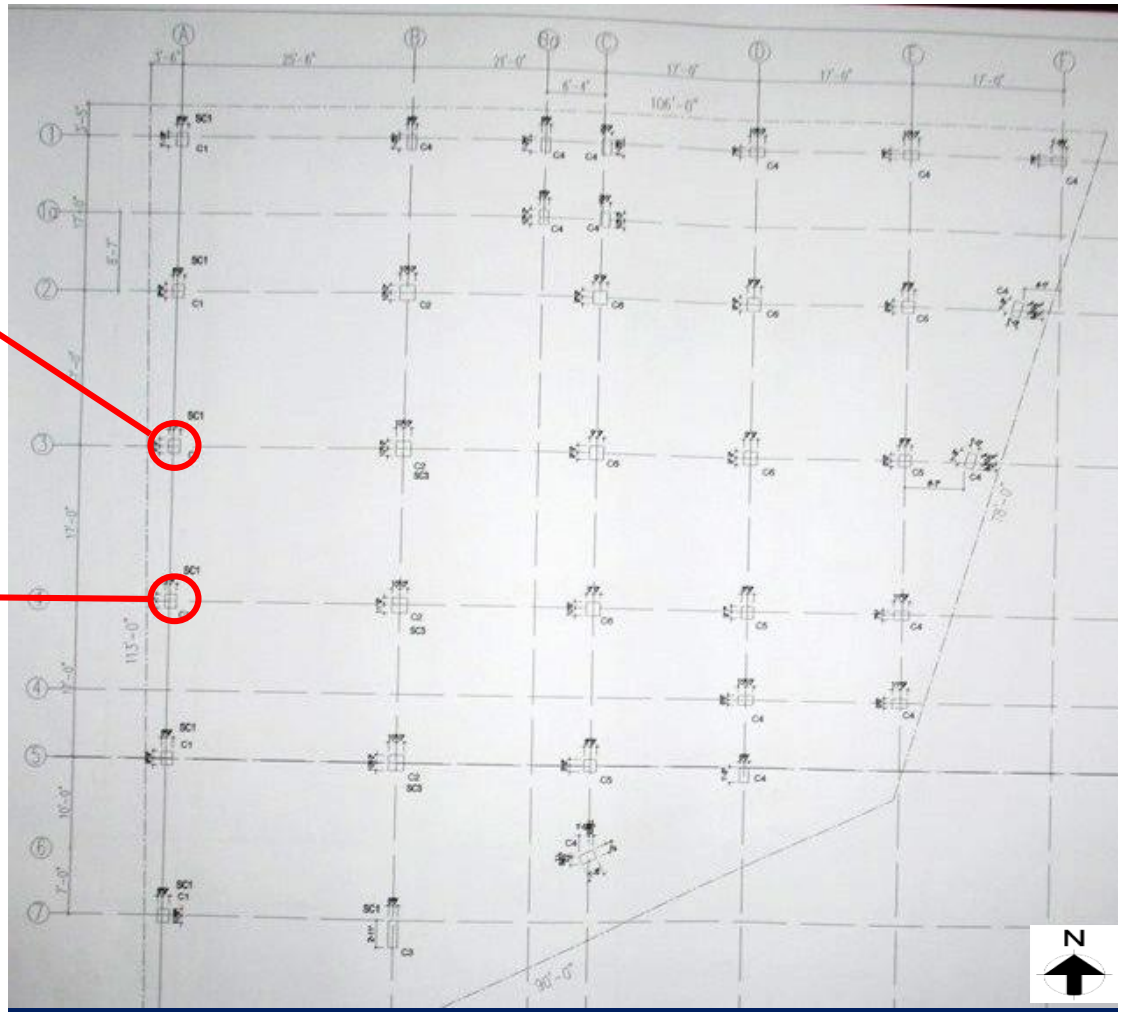
Observations: Factory Building

ACCORD on Fire and Building Safety in Bangladesh

Columns susceptible to vehicle impact

Observations: Factory Building

Impact protection not provided to columns at loading –unloading area. Columns are susceptible to impact loading from vehicles.



Column Layout

Observation – Factory Building

Problems Observed

Factory Building:

Item-1: Column to be stressed above normal design limits.

Item-2: Discrepancies between provided drawings and on site condition.

Item-3: Columns susceptible to vehicle impact.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Column to be stressed above normal design limits	Factory Engineer to review design, loads and columns stresses.	**6-weeks**
2	Column to be stressed above normal design limits	Verify in-situ concrete stresses by 100mm dia. cores from min. 4 no. column from ground floor level.	**6-weeks**
3	Column to be stressed above normal design limits	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	**6-weeks**
4	Column to be stressed above normal design limits	Make any structural alterations as advised by Building Engineer.	**6-months**
5	Column to be stressed above normal design limits	Continue to implement loading plan.	**6-months**
6	Discrepancies between provided drawings and on site condition	Building Engineer to survey as-built structure and prepare accurate as-built survey information for steel part.	**6-weeks**
7	Columns susceptible to vehicle impact	Install a barrier to prevent vehicle impact in column.	**6-weeks**