



# Shangutex Limited

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(23.884852N, 90.30434E)  
1<sup>st</sup> March 2017

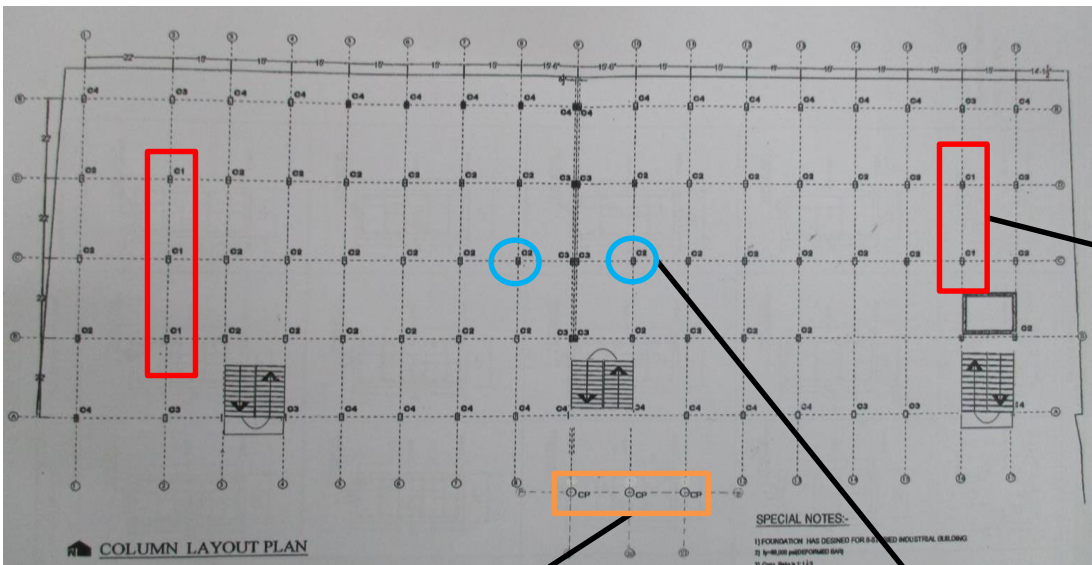




# Observations



**Discrepancy between provided drawings and as-built condition.**



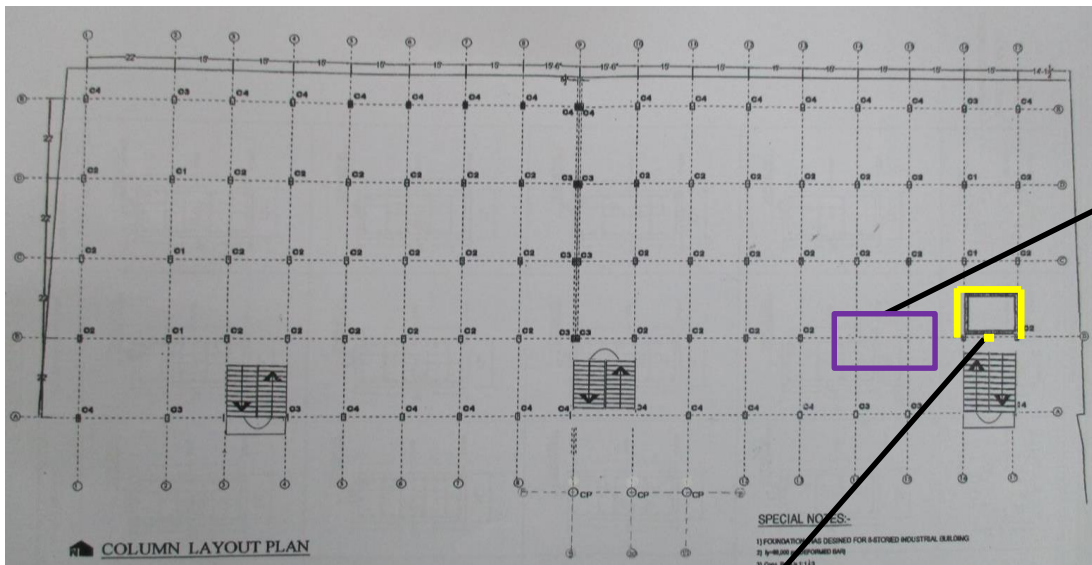
Column schedule shows size of column C1 is 12"x28". On site 12"x26" column was observed.



Column schedule shows 26" diameter circular column but 23" diameter column was observed on site.



For the column C2, rebar number of east part does not match with west part. 22 nos. of rebar were found on east part where 20 nos. on west part.



Column C2 was observed on grid D-14&15 where no columns were shown in drawing



Drawing shows rectangular shaped shear wall but U-shaped shear wall was observed on site. Additional column in front of shear wall opening was also observed.

Factory engineer to be surveyed the structure and update the drawings to as-built conditions.



# Falling hazard on roof



There is no parapet or edge protection on roof



# Columns susceptible to vehicle impact



Columns were suspected to vehicle impact loading. Damaged due to vehicle impact was observed on an exterior porch column.



# Corrosion on rebar's and absence of water proofing membrane on roof



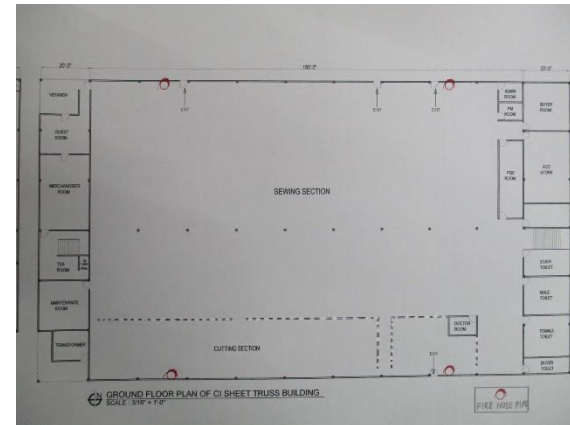
Corrosion was observed on exposed rebars and no water proofing membrane was observed on roof of the building.



# Lack of as-built drawings



As-built structural drawing was not available during inspection. Factory engineer to be prepared as-built structural drawing.



Factory have as-built architectural drawings only.



# Corrosion on slab rebar's and truss member



Corrosion on rebar due to dampness on roof slab was observed



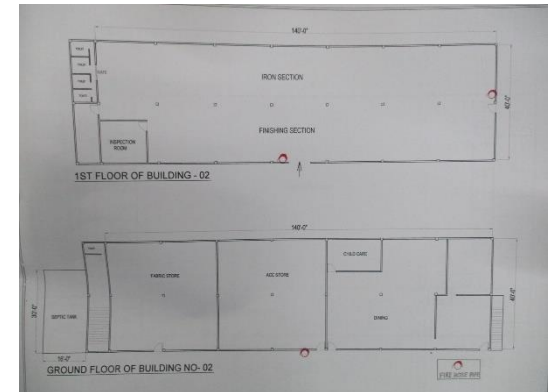
Corrosion on MS angle of truss member was observed



# Insufficient as-built drawings



As-built structural drawing was not available during inspection. Factory engineer to be prepared as-built structural drawing.



Factory have as-built architectural drawings only.



# Dampness on façade walls



Dampness was observed on the exterior walls.



# Non engineered emergency steel stair



Apparently inadequate member sizes and thickness.



Poor connection.



Non engineered emergency steel stair observed at north part of the Building-2. Building engineer is required to check the adequacy of the non-engineered emergency stair .



# Problems Observed

## New Building

- 1: Discrepancy between provided drawings and as-built condition.
- 2: Falling hazard on roof.
- 3: Columns susceptible to vehicle impact.
- 4: Corrosion on rebar's and absence of water proofing membrane on roof.

## Truss Building

- 5: Lack of as-built drawings.
- 6: Corrosion on slab rebar and truss member.

## Building-2

- 7: Insufficient as-built drawings.
- 8: Dampness on facade walls.
- 9: Non engineered emergency steel stair.



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Discrepancy between provided drawings and as-built condition	Building Engineer is required to check the structure and update as-built drawings	6-weeks
2	Falling hazard on roof	Provide edge protection on roof	Immediate - Now
3	Columns susceptible to vehicle impact	Barrier need to be installed surrounding the exterior columns	6-months
4	Corrosion on rebar's and absence of water proofing membrane on roof	Apply proper corrosion proof system on roof	6-months
5	Corrosion on rebar's and absence of water proofing membrane on roof	Provide water proof membrane & proper slopping on roof	6-months
6	Lack of as-built drawings	Building Engineer is required to check the structure and update as-built drawings.	6-weeks



Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Corrosion on slab rebar and truss member	Factory engineer need to be check the ingress of corrosion and suggest proper remedial action accordingly.	6-weeks
8	Corrosion on slab rebar and truss member	Implement repair works suggested by the engineer	6-months
9	Insufficient as-built drawings	Building Engineer is required to check the structure and update as-built drawings	6-weeks
10	Dampness on facade walls	Implement repair works suggested by the factory engineer	6-months
11	Non engineered emergency steel stair	Factory engineer is required to check the adequacy of the emergency steel stair.	6-weeks
12	Non engineered emergency steel stair	Carry out the remedial works as per adequacy check.	6-months