



Big Boss Corporation Ltd. (NEW)

Holding#30 Sharabo, Kasimpur, Gazipur

(23.984659N, 90.282502E)

23th January 2018



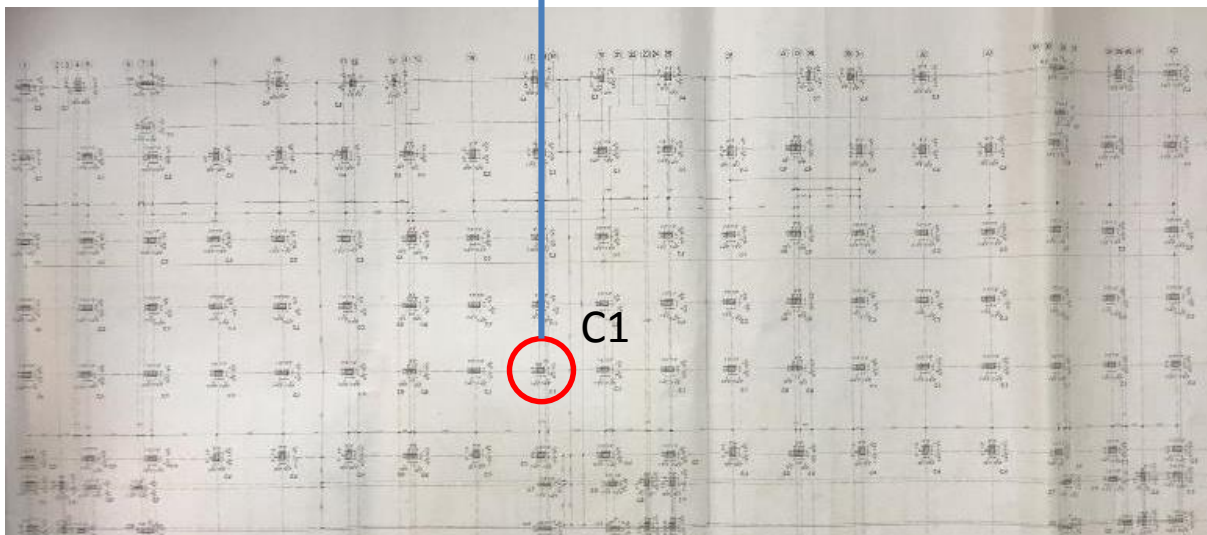


Observations

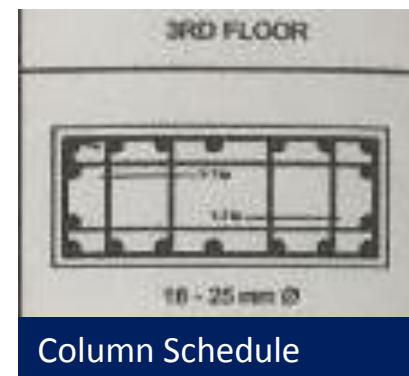
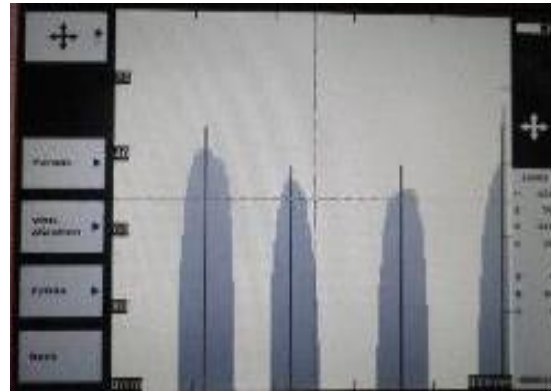
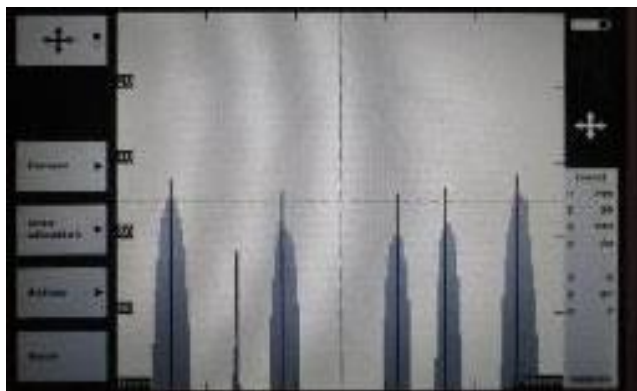


Discrepancies between drawings and on-site observation

Observation: Sewing Building



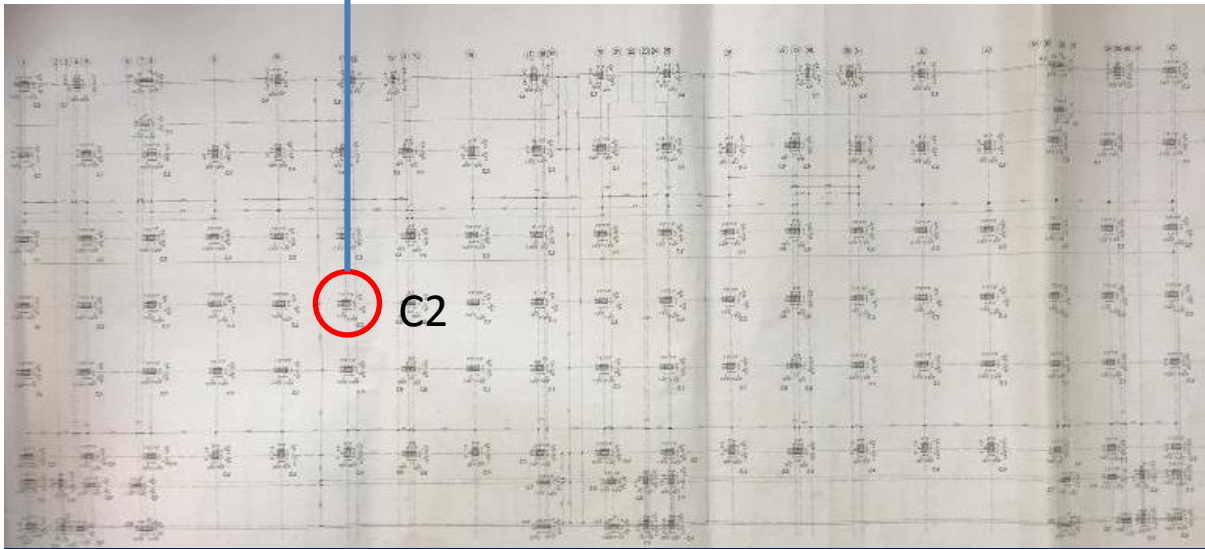
Column Layout Plan



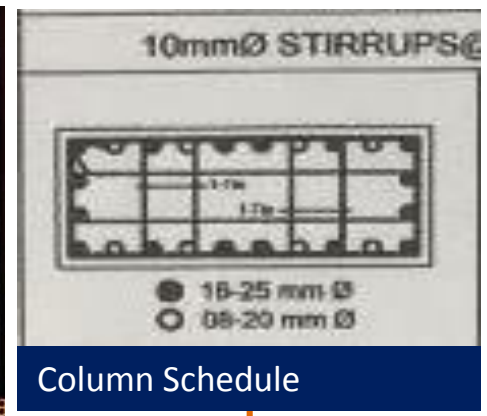
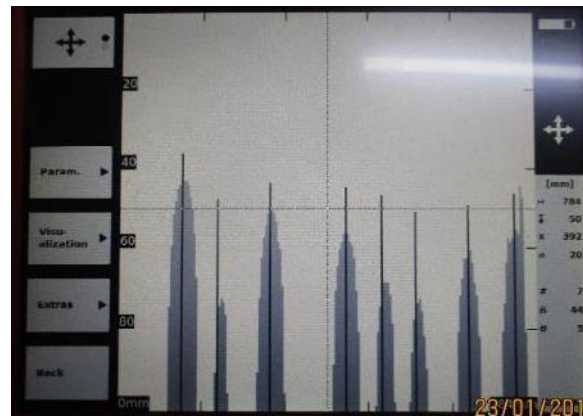
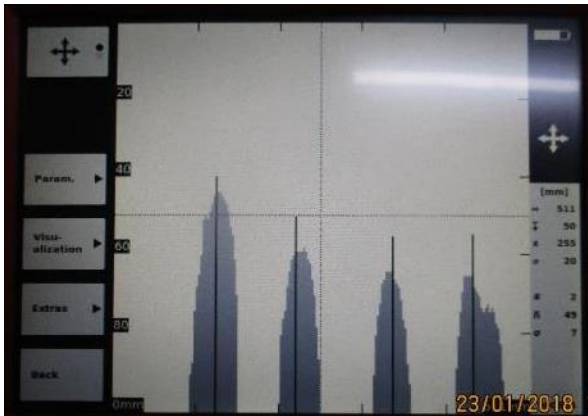
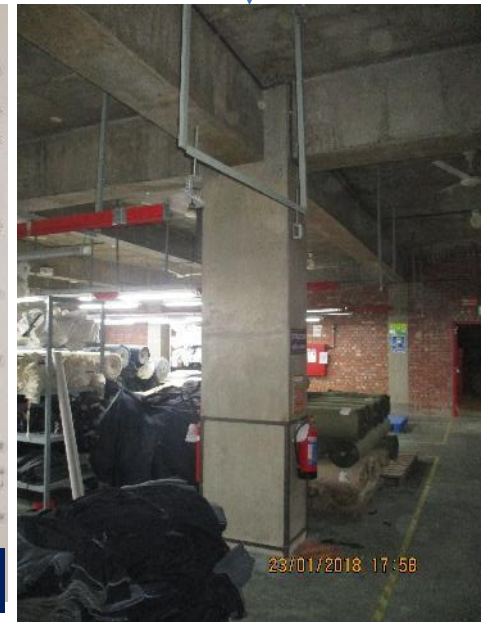
Column Schedule

18 rebars are shown on the drawing in C-1 type column but during inspection 16 rebars were found by ferro scanning.

Observation: Sewing Building



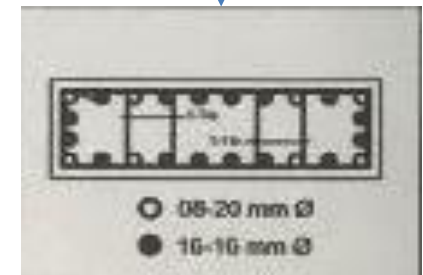
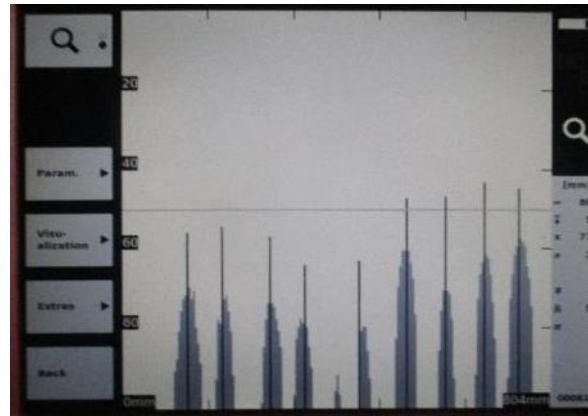
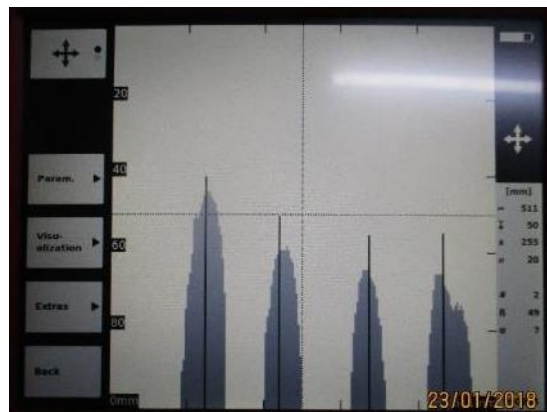
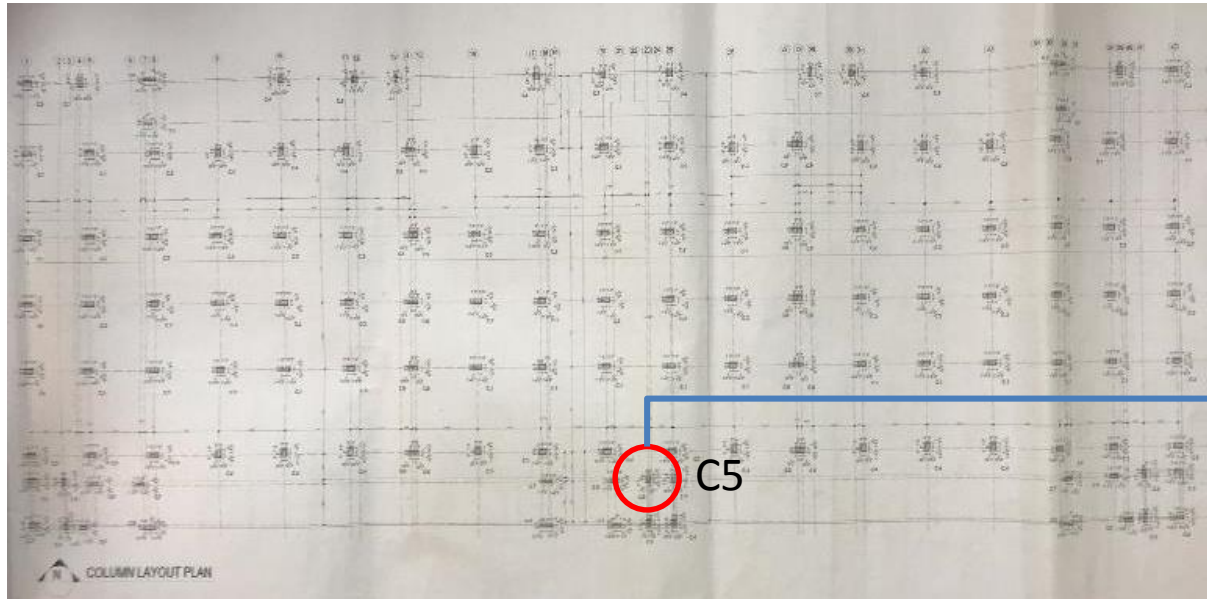
Column Layout Plan



Column Schedule

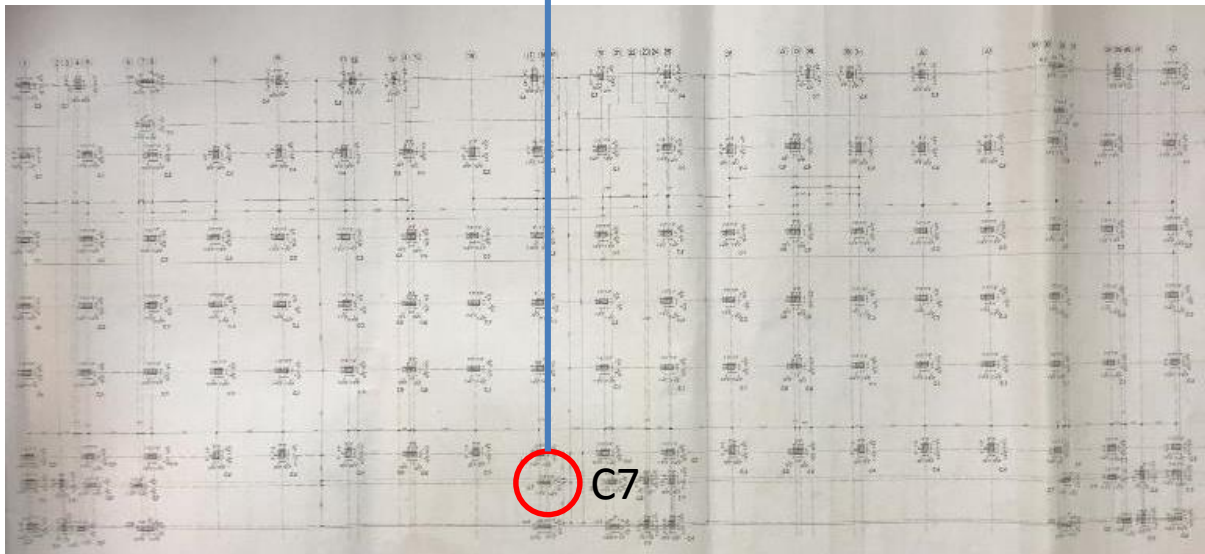
24 rebars are shown on the drawing in C-2 type column but during inspection 20 rebars were found by ferro scanning at 2nd floor.

Observation: Sewing Building

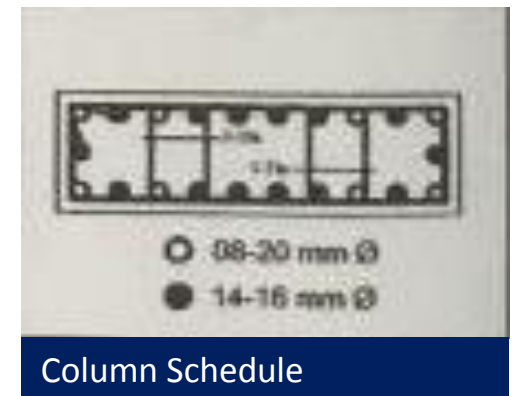
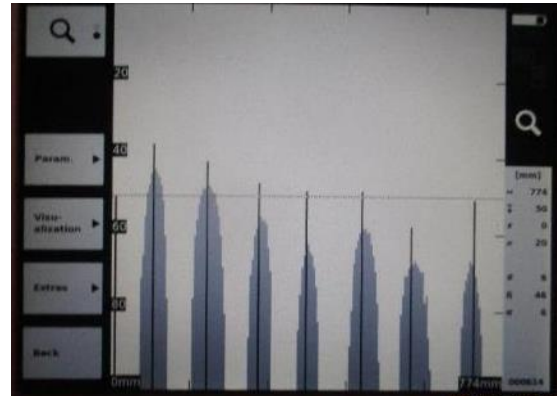
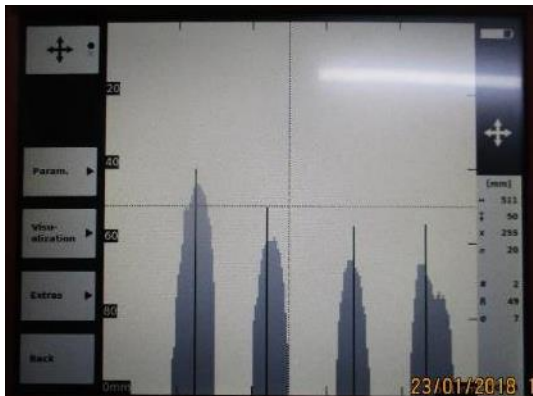


24 rebars are shown on the drawing in C-5 type column but during inspection 22 rebars were found by ferro scanning at 3rd floor.

Observation: Sewing Building



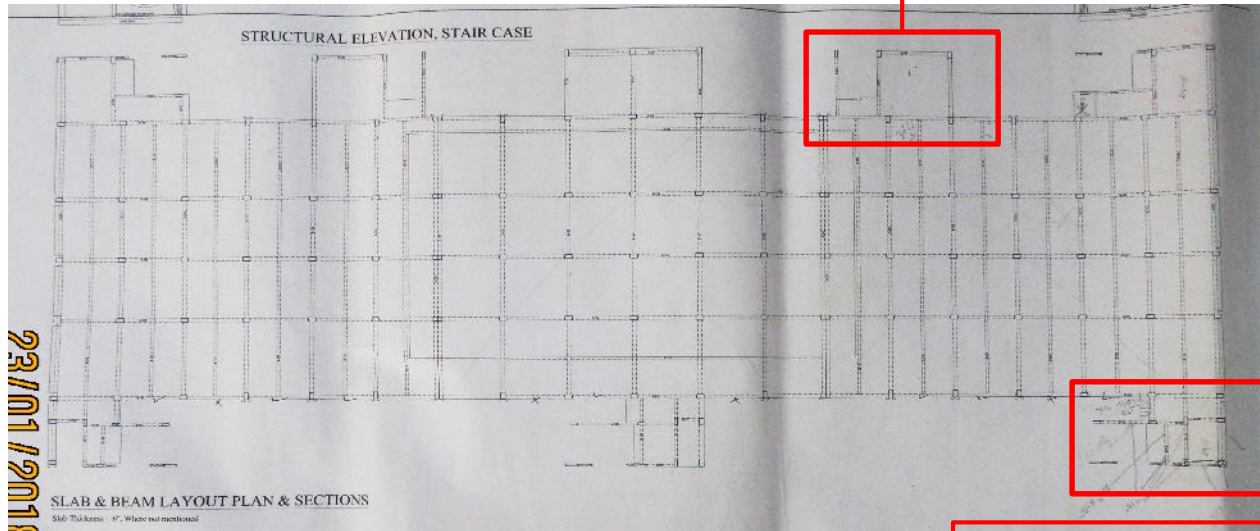
Column Layout Plan



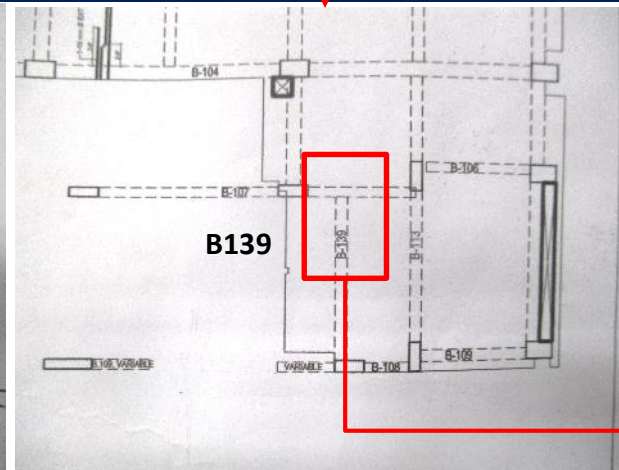
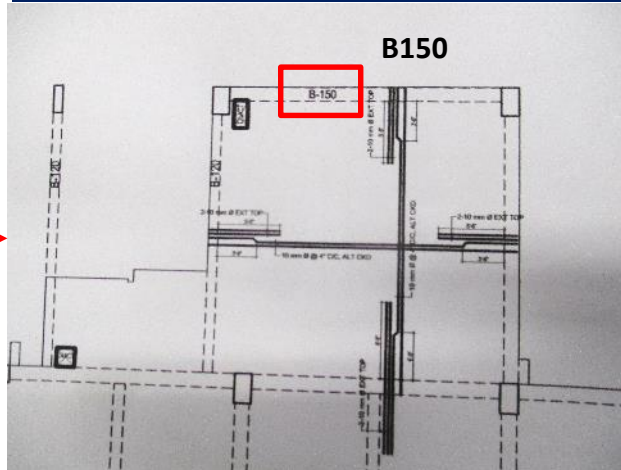
Column Schedule

22 rebars are shown on the drawing in C-7 type column but during inspection 16 rebars were found by ferro scanning at 3rd floor.

Observation: Sewing Building



Beam Layout Plan



In beam layout plan, B-139 and B-150 type beams are shown but no section size and detail was found for these beams in provided drawing.

Observation: Sewing Building



Capacity Check for the customized steel racks

Observation: Sewing Building



Customized steel racking system is used for storage with an upper platform over the double heighted area. A capacity check of steel members is required to be carried out.

Observation: Sewing Building



Corrosion on exposed slab reinforcements

Observation: Sewing Building



Exposed rebar was found on electric duct in every floor and most of the re-bars were subjected to corrosion. Factory is required to take proper remedial measures for preventing the corrosion.

Observation: Sewing Building



Discrepancies between drawings and on-site observation

Observation: Utility Building



Exposed
reinforcements on
the roof

C3		8-16mmØ		8-16mmØ		8-16mmØ
STIRRUP	10mmØ @ 4" c/c		10mmØ @ 4"-8"-4" c/c		10mmØ @ 4"-8"-4" c/c	
C4		8-20mmØ		8-20mmØ		8-20mmØ
STIRRUP	10mmØ @ 4" c/c		10mmØ @ 4"-8"-4" c/c		10mmØ @ 4"-8"-4" c/c	

As built column schedule

In as built drawing the reinforcement size was not matched with on-site condition. For C4 type columns 8-20mm rebars was shown but 4-16mm and 4-20mm rebars were found during on site.

Observation: Utility Building

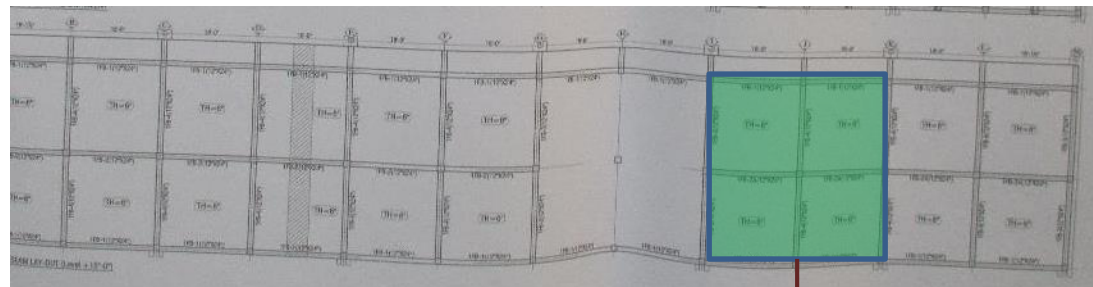


There is a staircase on the southern face of the utility building. Complete structural drawing of this staircase was not available in the provided drawing.

Observation: Utility Building



Double height ground floor location in as built drawings



Real location of double height ground floor



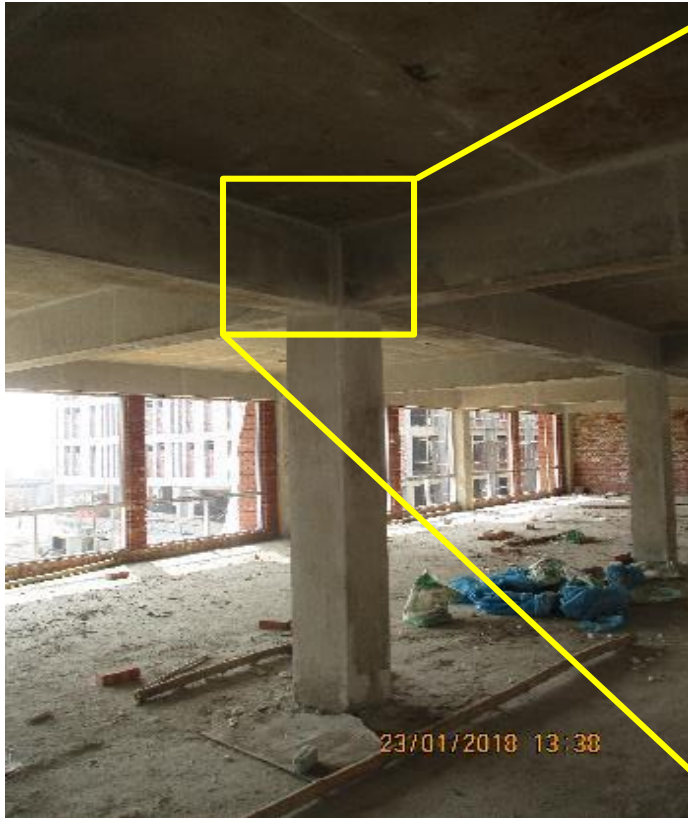
The location of double height column was not matched with the provided drawing.

Observation: Utility Building



Appearance of crack on beam

Observation: Utility Building



Crack was observed on beam in Utility Building. The reason of crack is required to be investigated and take proper remedial measures.

Observation: Utility Building



Water clogging on roof top



Water clogging was observed on rooftop near water tanks position. Also there are several places on roof top for gardening which is responsible for water clogging. A proper drainage system is required to install for preventing the water clogging in future.



Corrosion on roof top exposed reinforcement

Observation: Utility Building



Corrosion was observed on almost all exposed reinforcement of column on roof top. Factory is required to take proper measures to protect rebars from corrosion.

Observation: Utility Building



Problems Observed

Sewing Building

Item 1: Discrepancies between drawings and on-site observation

Item 2: Capacity Check for the customized steel racks

Item 3: Corrosion on exposed slab reinforcements

Utility Building

Item 4: Discrepancies between drawings and on-site observation

Item 5: Appearance of crack on beam

Item 6: Water clogging on roof top

Item 7: Corrosion on roof top exposed reinforcement



Priority Actions



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Discrepancies between drawings and on-site observation (Sewing Building)	Factory engineer is required to survey all the structural elements properly and produce correct as built drawings.	6-weeks
2	Discrepancies between drawings and on-site observation (Sewing Building)	Produce and actively manage a loading plan for all floors.	6-weeks
3	Capacity Check for the customized steel racks (Sewing Building)	Factory is required to carry out the capacity check of the ground floor's racks and maintain loading according to the calculation result.	6-weeks
4	Capacity Check for the customized steel racks (Sewing Building)	Continue to implement loading plan.	6-months
5	Corrosion on exposed slab reinforcements (Sewing Building)	Factory engineer is required to take proper remedial measures to protect rebar from corrosion.	6-weeks



Item No.	Observation	Recommended Action Plan	Recommended Timeline
6	Discrepancies between drawings and on-site observation (Utility Building)	Factory engineer is required to survey all the structural elements properly and produce correct as built drawings.	6-weeks
7	Appearance of crack on beam (Utility Building)	The reason of cracking is required to be investigated and take proper remedial measures.	6-weeks
8	Appearance of crack on beam (Utility Building)	Carry out remedial works as per engineer's advice.	6-months
9	Water clogging on roof top (Utility Building)	Factory is required to implement proper drainage system and other remedial measures to prevent water clogging.	6-weeks
10	Corrosion on roof top exposed reinforcement (Utility Building)	Factory engineer is required to take proper remedial measures to protect rebar from corrosion.	6-weeks