



# Southeast Sweaters Ltd. (New)

278/A, Mehernagar, Dobadia, Uttarkhan, Dhaka.

(23.862169N, 90.446609E)

19<sup>th</sup> February 2018



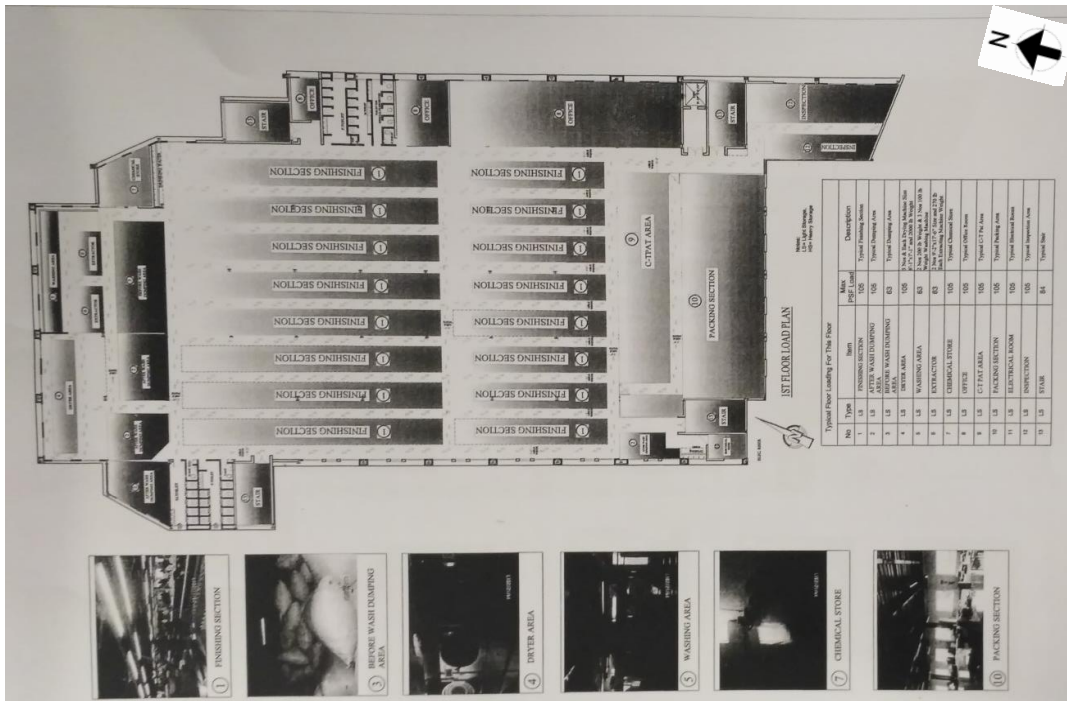


# Observation



**Prepared load plan required to be verified**

**Observation: Garments Factory Building**



1<sup>st</sup> floor washing area



Production area on 2<sup>nd</sup> floor

Load was measured below 2Kpa on every floor and FOS calculation for internal column was found satisfactory considering 3kPa allowable floor live loading.

Factory engineer prepared a load plan for 1<sup>st</sup> to 3<sup>rd</sup> floor considering 5 kPa as allowable load and 3Kpa for 4<sup>th</sup> floor dining area. Factory is required to verify the load plan by ACCORD if factory management intends to maintain the load plan.

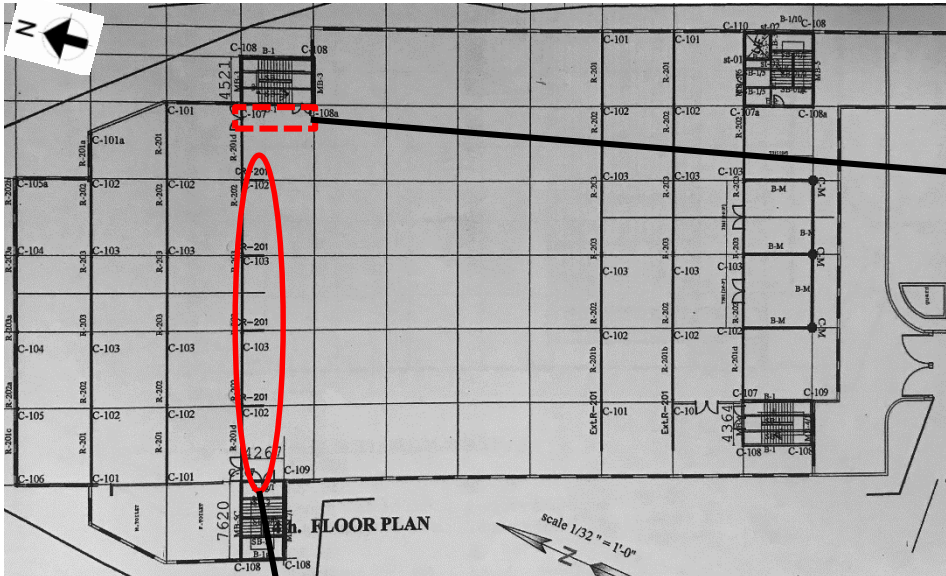
Factory is required to maintain the floor live load 3 kPa until further verification by ACCORD.

## 4 Observation: Garments Factory Building



# Missing information in provided drawing

**Observation: Garments Factory Building**



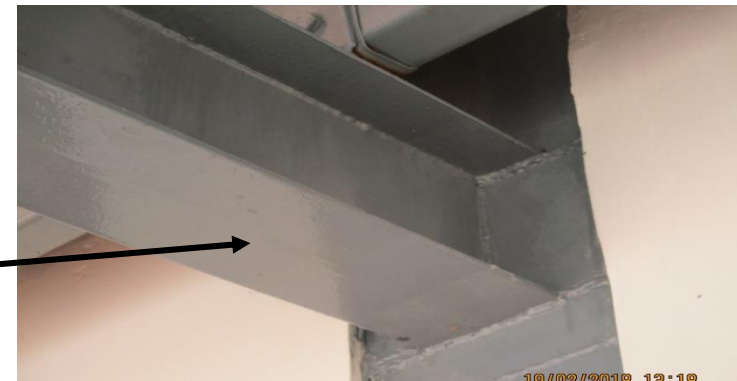
Rafter layout of roof top shed



Extended canopy in front of the stair case did not shown in drawing

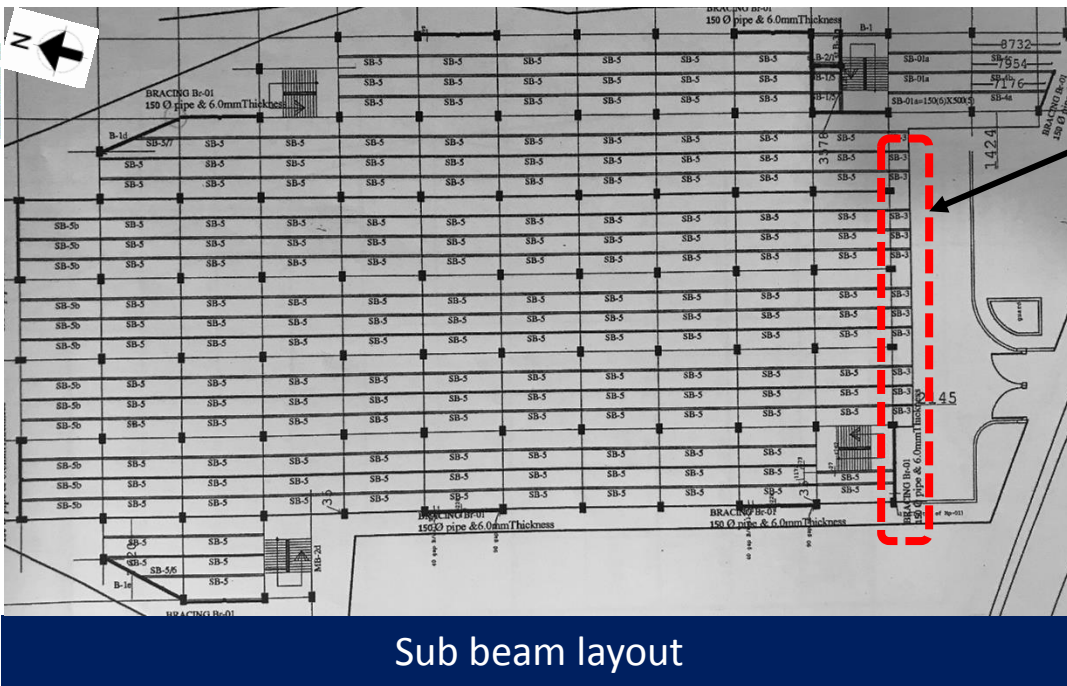


Extended beam of roof top shed was shown as CR-201 section but detail of the beam was not available



The extended beam is welded with the steel column

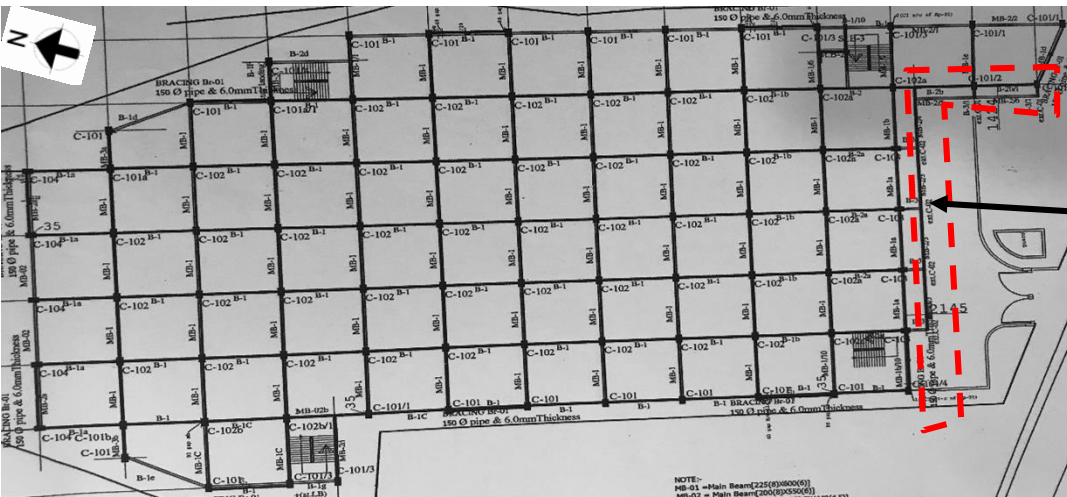
## 6 Observation: Garments Factory Building



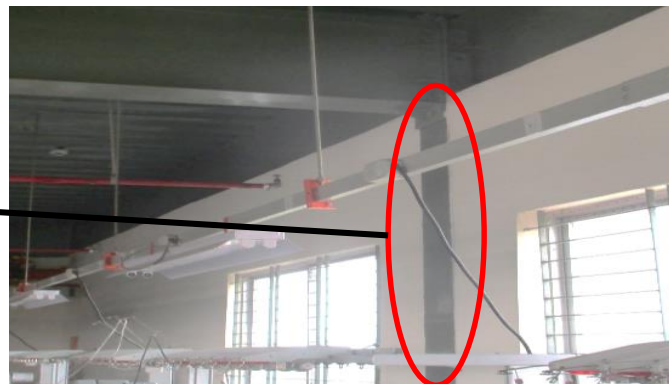
Sub beam layout



Detail of SB-3 type sub-beam was absent in drawing



Column layout for 1<sup>st</sup> to 3<sup>rd</sup> floor



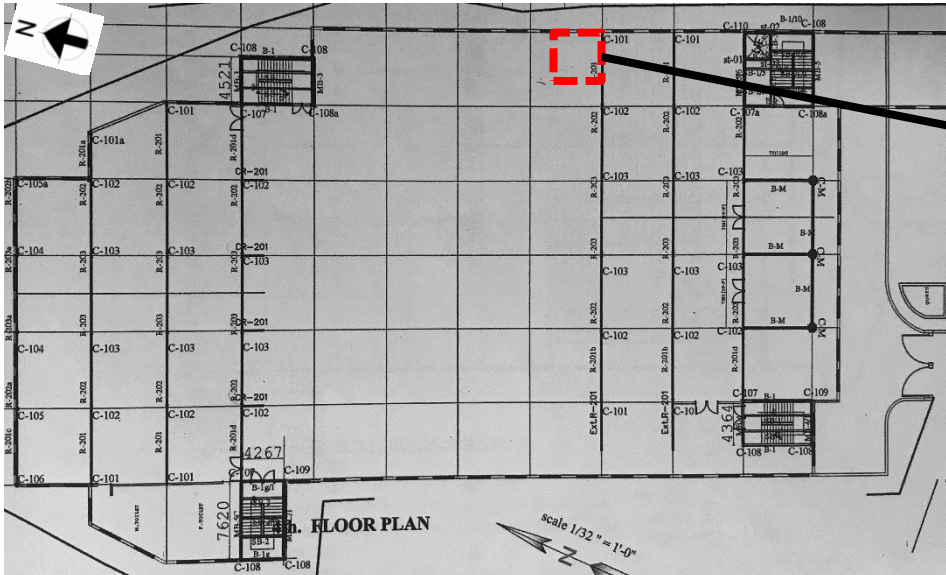
On south side, some non load bearing steel strut was observed and no detail was found in drawing

## 7 Observation: Garments Factory Building



**Lightweight steel structure is appeared to be  
non-engineered**

**Observation: Garments Factory Building**



4<sup>th</sup> floor layout



The undocumented lightweight shed



Internal roof frame

The support condition of roof top shed was vulnerable and non engineered due to poor detailing. The stability system is required to be verified under lateral loads.

## Observation: Garments Factory Building



# Corrosion observed at steel sections

**Observation: Garments Factory Building**



Corrosion observed at main beam under deck slab.



Corrosion was observed at joint of deck slab and steel column of 2nd floor production areas.

Corrosion was observed on steel beam and columns on different locations of 1st and 2nd floor areas. Factory is required to identify the corroded locations and take proper remedial measures.

## Observation: Garments Factory Building



# Columns susceptible to vehicle impact

12 **Observation: Garments Factory Building**

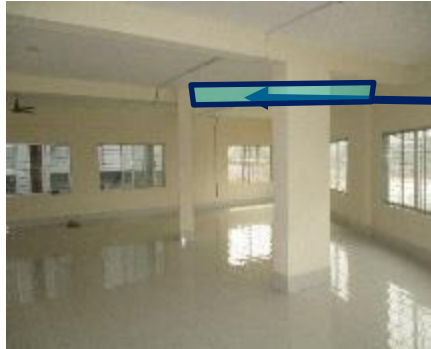


The highlighted columns are susceptible to vehicle impact. Factory is required to take necessary steps to protect the columns from vehicle impact.

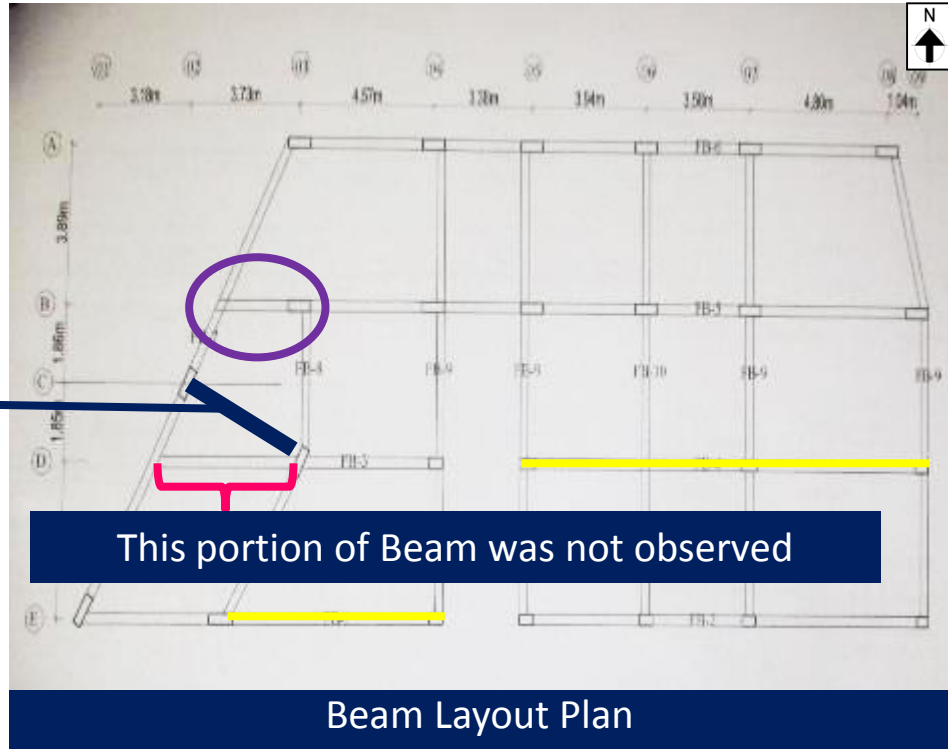


# Discrepancy observed between As built drawing and on site condition

**Observation: Utility Building**



Beam found on the marked location



This portion of Beam was not observed



Down stand observed 250 mm instead of 325 mm

During inspection, Down stand of the all the beams (except the mentioned) was observed 250 mm instead of 325 mm. Factory is required to revise As – Built drawing as per actual condition.

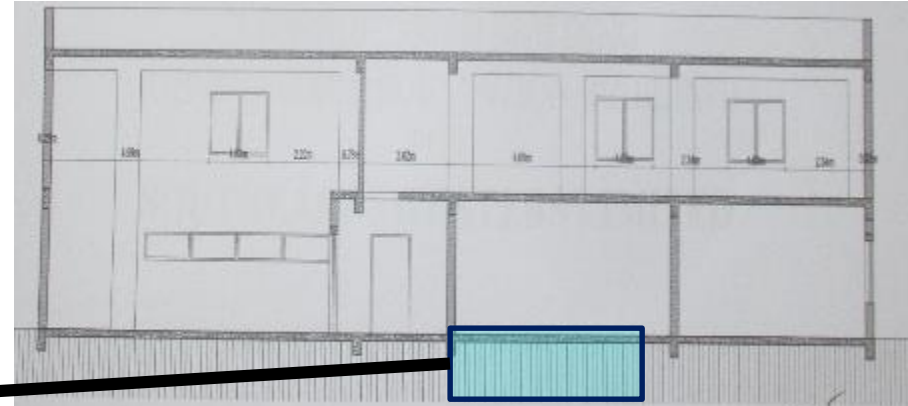


Down Stand of the highlighted (yellow marked) beam was observed 450 mm instead of 325 mm on GF and 1st Floor

# Observation: Utility Building



Pump Room below Ground Floor



Section of Utility Building

During inspection, a pump room was observed on the marked position below ground floor level of the utility Building which was not included in As-Built drawing. Factory is required to update the As-Built drawing as per actual condition.

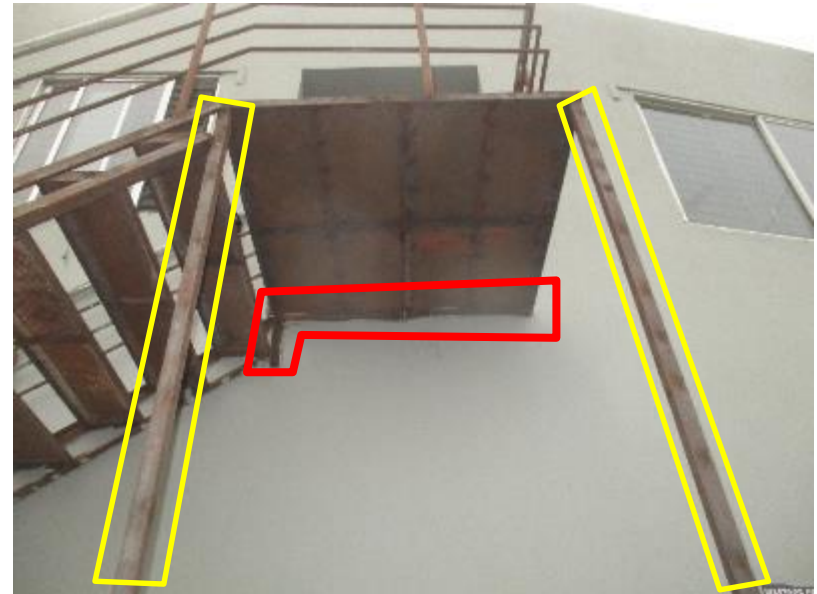
## Observation: Utility Building



**Steel stair appeared to be non engineered**



Steel Stair outside of the utility building



Non- engineered connections and slender columns



Corrosion observed on the stair

The support condition of the steel stair at the east side of the utility Building was appeared to be non-engineered due to poor implementation of connection and slender steel column support. Factory is required to replace the steel stair with a engineered steel stair.

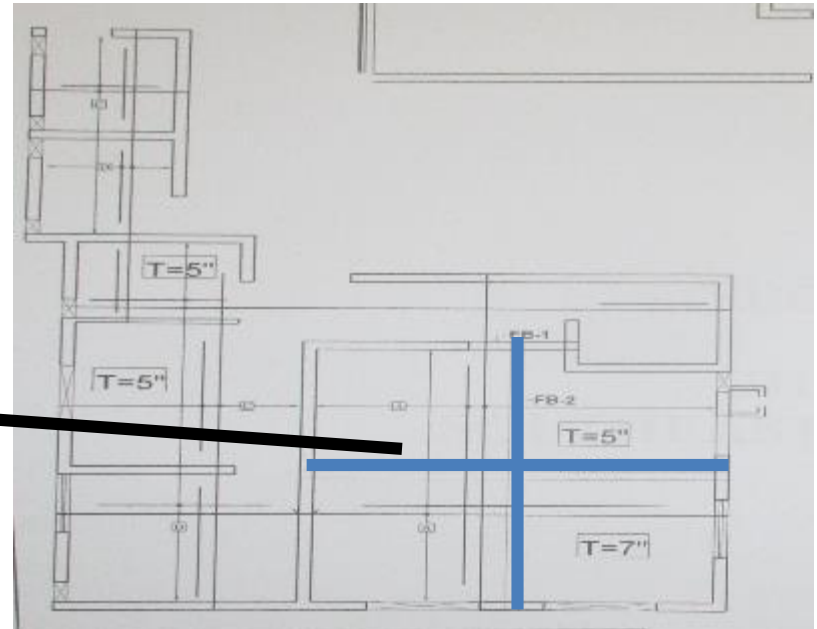


# Discrepancy observed between As built drawing and on site condition

**Observation: Generator and Substation Building**

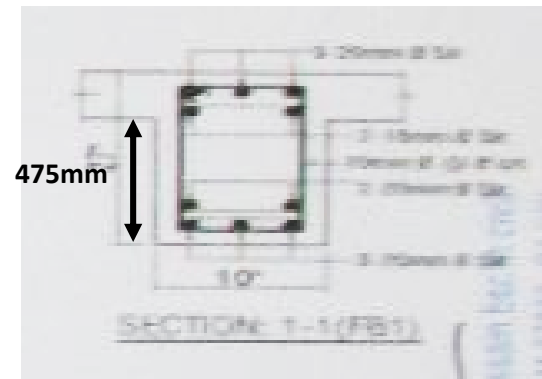


Structural System of Generator room



Slab Reinforcement Plan

Down stand of the roof beam on generator room was observed 300 mm instead of 475 mm. Factory is required to revise the As-Built drawing as per actual condition.



Beam Section on drawing

# Observation: Generator and Substation Building



## Lack of as-built drawing

**Observation: Security Building**



No as-built drawing was observed for the security Building. Factory is required to produce as-built drawing which reflects the actual condition.

## Observation: Security Building



# Problems Observed

## Garments Factory Building :

**Item 1:** Prepared load plan required to be verified

**Item 2:** Missing information in provided drawing

**Item 3:** Lightweight steel structure is appeared to be non engineered

**Item 4:** Corrosion observed at steel sections

**Item 5:** Columns susceptible to vehicle impact

## Utility Building:

**Item 6:** Discrepancy observed between As built drawing and on site condition

**Item 7:** Steel stair appeared to be non engineered

## Generator and Substation Building:

**Item 8:** Discrepancy observed between As built drawing and on site condition

## Security Building:

**Item 9:** Lack of as-built drawing



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	(Garments Factory Building) Prepared load plan required to be verified	Maintain 3 Kpa load on all floors.	6-weeks
2	(Garments Factory Building) Prepared load plan required to be verified	Factory is required to verify the load plan by ACCORD if factory management intends to maintain the load plan (>3Kpa).	6-weeks
3	(Garments Factory Building) Prepared load plan required to be verified	Continue to implement load plan.	6-months
4	(Garments Factory Building) Missing information in provided drawing	Factory engineer is required to survey and produce accurate as-built drawing which reflect the actual condition.	6-weeks
5	(Garments Factory Building) Lightweight steel structure is appeared to be non engineered	Factory engineer to check the adequacy of the lightweight steel roofs under lateral and vertical loading.	6-weeks
6	(Garments Factory Building) Lightweight steel structure is appeared to be non engineered	Carry out remedial works resulting from engineering assessment if necessary.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	(Garments Factory Building) Corrosion observed at steel sections	Factory Engineer to suggest and implement proper remedial measures to protect steel sections from corrosion.	6-weeks
8	(Garments Factory Building) Columns susceptible to vehicle impact	Place protective barrier around susceptible columns.	6-weeks
9	(Utility Building) Discrepancy observed between As built drawing and on site condition	Factory engineer is required to produce accurate As-Built documentation reflecting the actual condition.	6-weeks
10	(Utility Building) Steel stair appeared to be non engineered	Factory is required to replace or check the stability of the stair with proper engineered structure.	6-weeks
11	(Utility Building) Steel stair appeared to be non engineered	Carry out remedial works resulting from engineering assessment if necessary.	6-months
12	(Generator and Substation Building) Discrepancy observed between as-built drawing and on site condition	Factory engineer is required to update as-built documentation reflecting the actual condition.	6-weeks
13	(Security Building) Lack of as-built drawing	Factory required to produce As Built drawings which reflect the actual condition.	6-weeks