P.A Knit Composite (Extension)

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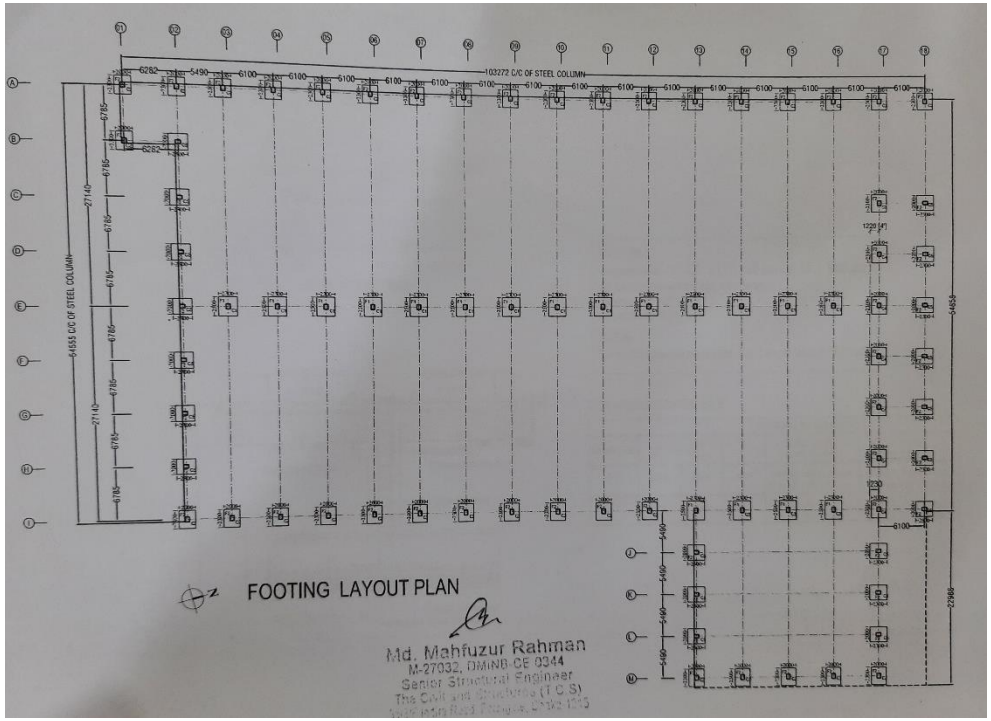
(24.29018, 90.39146)
12th, 25th October & 29th November 2021

RSC RMG SUSTAINABILITY COUNCIL

Observations

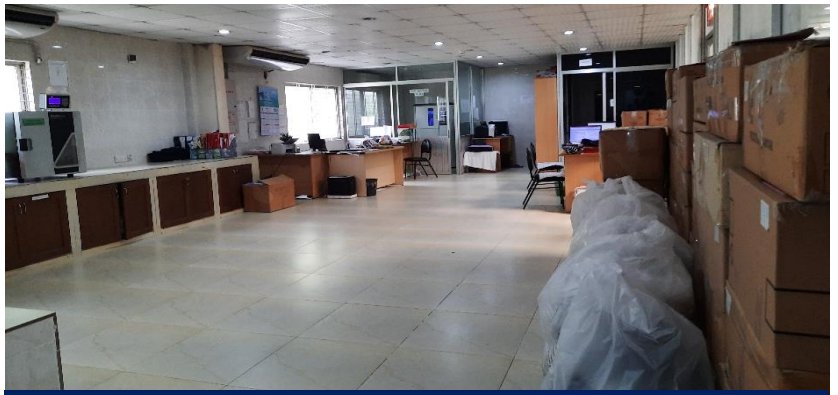
Stress in foundation exceeds normal design limit

Observation: Building-1 (Dyeing Shed 2)



FOOTING SCHEDULE

Footing No	L mm	S mm	T	STEEL FOR LONG DIREC.	STEEL FOR SHORT DIREC.
F1	2500	2300	450	D16 @ 150 C/C bott. D16 @ 150 C/C top	D16 @ 150 C/C bott. D16 @ 150 C/C bott.
F2	2300	2000	400	D16 @ 160 C/C bott. D16 @ 160 C/C top	D16 @ 160 C/C bott. D16 @ 160 C/C top



Floor Loading

This building was constructed between May 2014 and October 2015. Soil test report was not available for the structure.

Cursory calculation indicates that footings are stressed above normal design limit considering 3 kPa floor live load (mezzanine) and minimum allowable bearing capacity 2 ksf (BNBC Ch-3, Table -6.3.5). The building engineer is required to review design, load, column & footing stress.

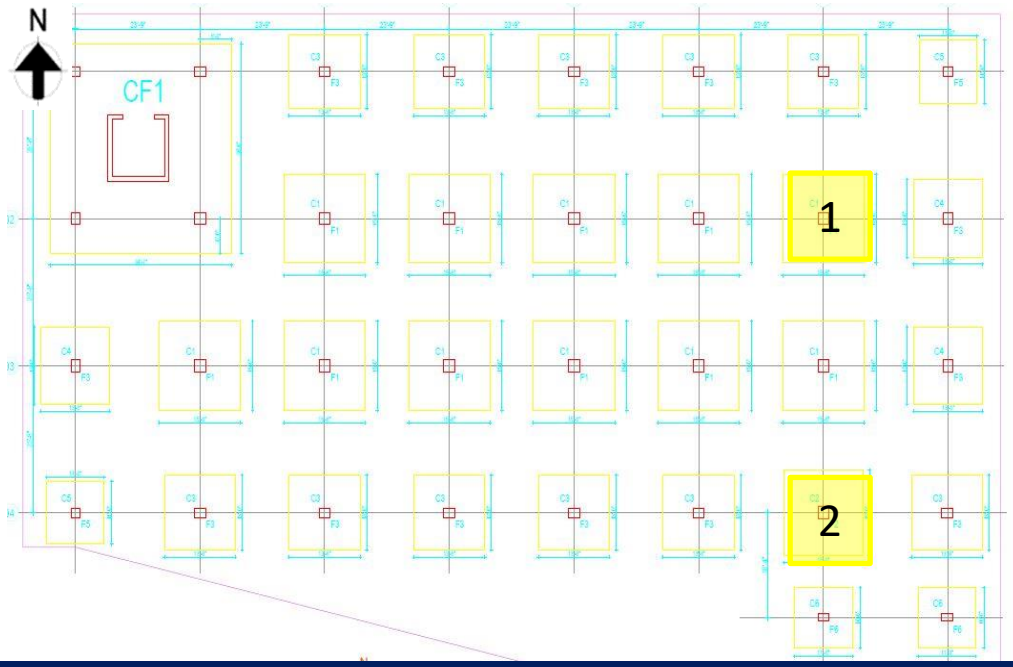
Table 6.3.5
Presumptive Values of Bearing Capacity for Lightly Loaded Structures*

	Type of Material	Safe Bearing Capacity, kPa
1.	Soft Rock or Shale	440
2.	Gravel, sandy gravel, silty sandy gravel; very dense and offer high resistance to penetration during excavation (soil shall include the groups GW, GP, GM, GC)	400**
3.	Sand (other than fine sand), gravelly sand, silty sand; dry (soil shall include the groups SW, SP, SM, SC)	200**
4.	Fine sand; loose & dry (soil shall include the groups SW, SP)	100**
5.	Silt, clayey silt, clayey sand; dry lumps which can be easily crushed by finger (soil shall include the groups ML, MI, SC, MH)	150

Observation: Building-1 (Dyeing Shed 2)

Stress in column and foundation exceeds normal design limit

Observations: Building-5, Building-7

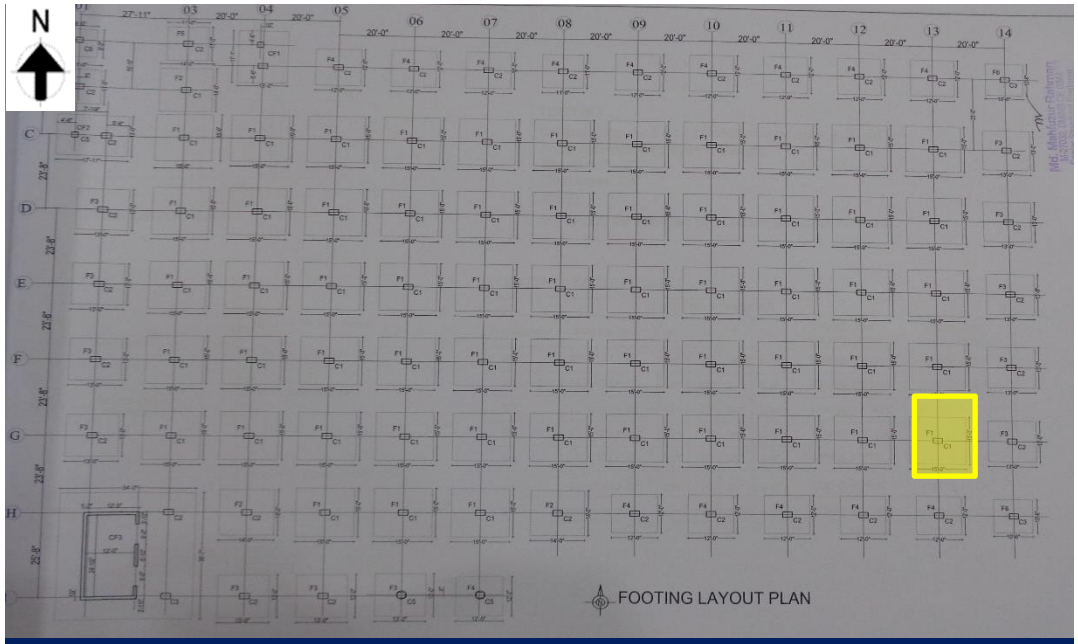


Stressed column/foundation layout

Typical floor live load

Cursory calculation indicates that stress exceeds the normal design limit for both columns & foundations in marked location-1 and only for column at marked location-2 considering the floor live load (7 kPa for first & second floor, 4 kPa for typical floors as per load plan), minimum concrete strength based on aggregate type and allowable soil bearing capacity 20 T/m2. Building engineer is required to review the design, loads and column/foundation stresses based on in-situ concrete strength.

Observations: Building-5 (Printing Building)



Stressed column/foundation layout

Typical floor live load

Cursory calculation indicates that stress in column and foundation exceeds the normal design limit at the marked location considering the floor live load 6 kPa for typical floors (mentioned on slab layout), minimum concrete strength based on aggregate type and allowable soil bearing capacity 14 T/m2. Building engineer is required to review the design, loads and column/foundation stresses based on in-situ concrete strength.

Observations: Building-7 (Garments Building-2)

Design Report needs to be prepared

Observations: Building- 3,5,7,8,9,10,11,13,20&21

West elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-3 (Security Building)

North-east view

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-5 (Printing Building)

Front view

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-7 (Garments Building-2)

North view

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-8 (Knitting Building)

West-south Elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-9 (Sample Building)

North-east view

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Observations: Building-10 (New Dining & Store Building)

South-east elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-11 (ETP-Biological)

East-North elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-13 (Medical Center Building)

East-North elevation

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Observations: Building-20 (Dyeing Finishing Unit Shed)

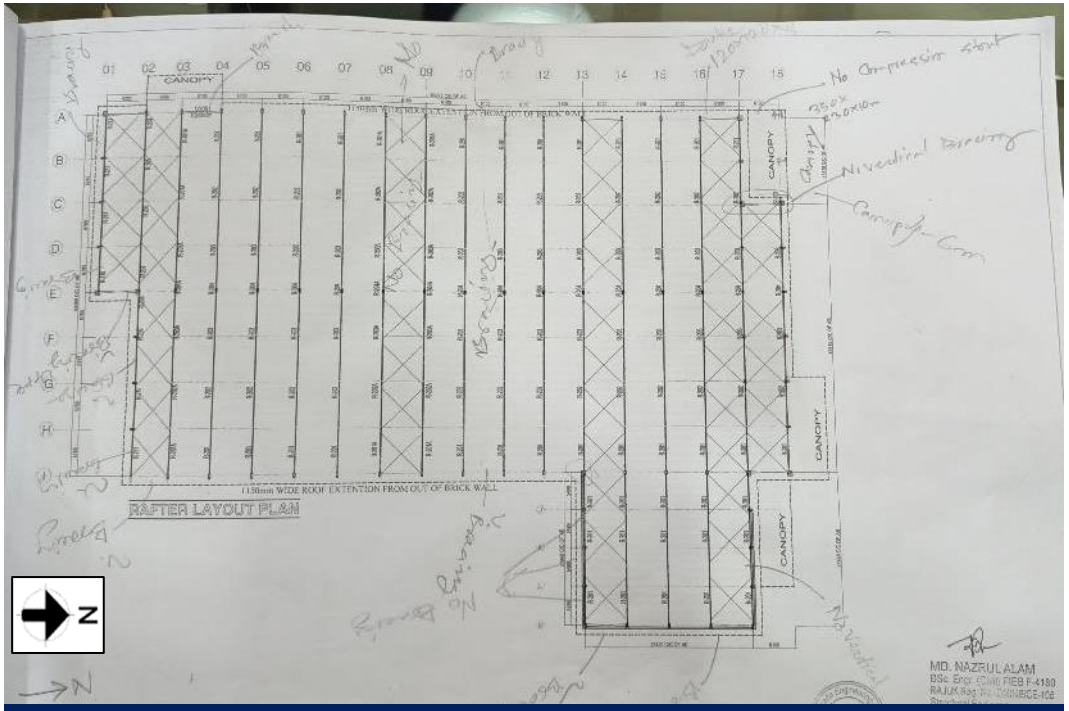
South elevation

As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, only as-built drawing was available, but no design report was available which is required to be prepared in compliance with section 1.9.1.1 (part-6, BNBC).

Observations: Building-21 (Dormitory Building)

Lack of lateral stability

Observation:



Bracing Layout

No compression member at grid 17~18

lateral load transfer media observed discontinued in roof. Also, bracing system are found mismatch with bracing layout. As part of Engineering Assessment (EA) building engineer is required to check the stability system of the Building and design the size & position of necessary compression element accordingly.

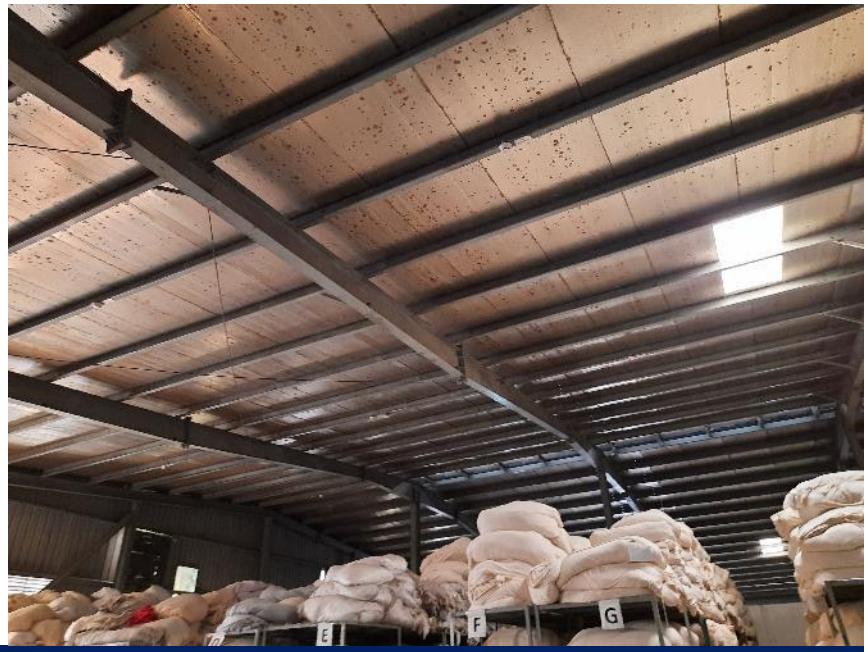
Bracings are found mismatch with layout

Observation: Building-1 (Dyeing Shed 2)

No compression strut, Vertical bracing discontinued and missing roof cable bracing one side

lateral load transfer media observed discontinued. Also, bracing system has no compression member. As part of Engineering Assessment (EA) building engineer is required to check the stability system of the Building and design the size & position of necessary compression element accordingly.

Observation: Building-2 (Utility Shed)



No compression strut/ lateral load transfer media at the roof level

No lateral load transfer media observed in roof. Also, bracing system has no compression member. As part of Engineering Assessment (EA) building engineer is required to check the stability system of the Building and design the size & position of necessary compression element accordingly.

Observation: B-16 Pre-fabricated Godown Shed

Wall/roof bracing provided at only one bay

No load transfer media provided; wall/roof bracing not provided at rest of the bays

No load transfer media is provided from frame to frame along long direction. In addition, wall/roof bracing is provided only at one bay but not provided at rest of the bays. Therefore, lateral stability system along long direction is incomplete. Building engineer is required to check the lateral stability of the shed against the lateral loading.

Observations: Building-20 (Dyeing Finishing Unit Shed)

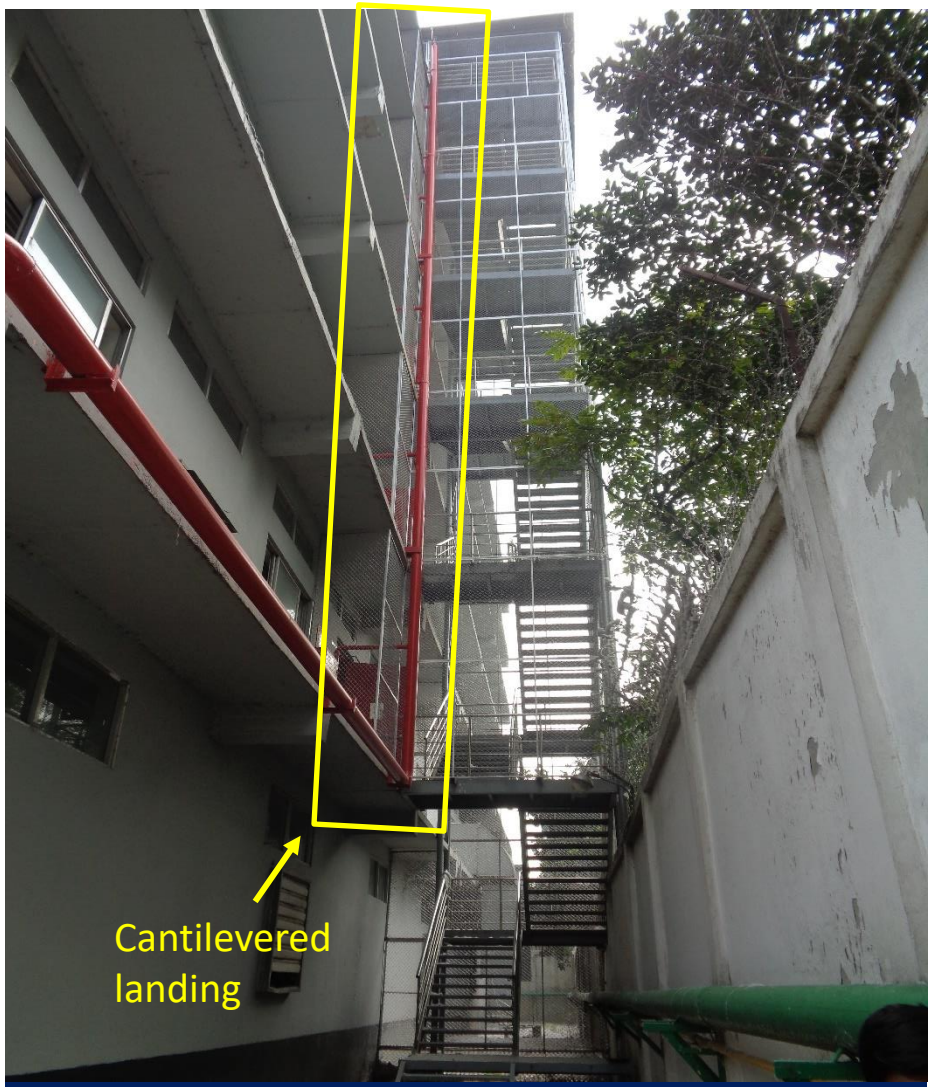
Lack of lateral stability of steel stair

Observation:

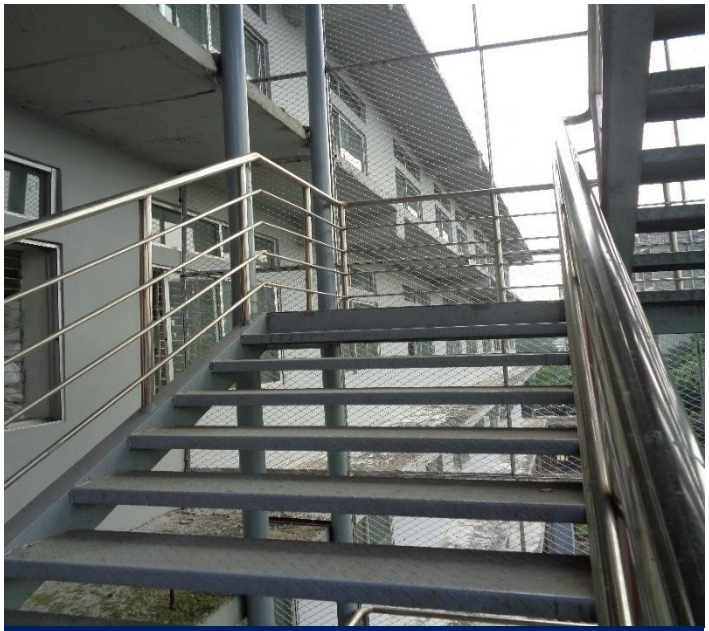
No bracing system provided

External steel stair was found at north side of the Building. The stair structurally connected with this building and no bracing system is provided for the steel stair to withstand the lateral load. Building engineer is required to check the lateral stability of the steel stair and building against the lateral loading.

Observations: Building-3 (external steel stair)



Steel stair at west side



steel stair at west side

An undocumented steel stair was found at west side of Building-8 which was not shown in drawing. The landing of the stair is cantilevered at one side and bracing is not provided in any floor to withstand the lateral load therefore lateral stability system of this stair is apparently incomplete. Building engineer is required to check the stability of this steel stair for lateral and vertical loadings.

Observations: Building-8 (External steel stair)

No bracing system provided

External steel stair was found at south side of the Building. No bracing system is provided for the steel stair to withstand the lateral load therefore there is no obvious lateral stability system. Building engineer is required to check the stability of this steel stair for lateral and vertical loadings.

Observations: Building-21 (External steel stair)

Loose cable bracing

Observation: Building-1 (Dyeing Shed 2)

Loose cable bracing at roof

Loose cable bracing

Some of the horizontal cable bracings were found loose. The factory is required to tight the bracings for transferring the lateral loads properly.

Observation: Building-1 (Dyeing Shed 2)

Corrosion in steel member

Observation: Building-1 (Dyeing Shed 2)

Corrosion in steel member was observed in several locations. The building engineer to suggest proper remedial measure accordingly.

Corrosion in Bracing

Corrosion in Base Plate

Corrosion in column

Observation: Building-1 (Dyeing Shed 2)

Significant connection gap

Observation: Building-1 (Dyeing Shed 2)

Gap observed in Beam- Column connection

Significant gaps observed at column-beam joint at several locations. Building engineer is required to carry out suitable remedial works.

Observation: Building-1 (Dyeing Shed 2)

Bolt missing in steel connection

Observation: Building-1 (Dyeing Shed 2)

Bolt missing

Bolt missing in several connection joint. Building engineer is required to identify the all locations and install missing bolt accordingly.

Bolt missing

Observation: Building-1 (Dyeing Shed 2)

Apparently inadequate connection of steel stair

Observation: B-4 (Cooling Tower)

Building engineer is required to carry out the member adequacy & stability and implement remediation where required.

Apparently inadequate connection

Apparently inadequate steel member size and no stability system provided.

Steel Stair

Observation: B-4 (Cooling Tower)

Apparently non-engineered connection

Observation: B-4 Cooling Tower (Shed Portion)

Connection of Truss-column

Connection at truss-column-base plate was appeared to be non engineered. Building engineer is required to check the connection for the up-lift pressure of wind.

Connection of base plate

Observation: B-4 (Cooling Tower)

Connections at truss-column and Column-base plate were appeared to be non engineered. Building engineer is required to check the connection for the up-lift pressure of wind load.

Connection of Truss-column

Connection of column base plate

Observation: B-17 (Fire Pump House)

Lack of structural drawings

Observation: B- 6, 12, 14, 15, 16, 17, 18, 19, 20 & 21

Structural drawings were not available for these structure. Building engineer is required to produce as-built drawing reflecting the as constructed condition.

B-6: Scale Building

B-12: Fire Control Building

B-13: Medical Centre Building

B-14: Sub Chemical Store

B-15: RMS Room

B-16: Godown Shed

Observation: B-6, 12, 13, 14, 15, 16

Structural drawings were not available for these structure. Building engineer is required to produce as-built drawing reflecting the as constructed condition.

B-17: Fire Pump Shed

B-18: ETP Sludge M/C Room

B-19: ETP Chemical Tin Shed

B-20: Dyeing Finishing Unit Shed

B-21: Dormitory Building

Observations: B-17,18,19,20,21

Lack of information and inconsistencies in as-built drawing

Observation: Building-1 (Dyeing Shed 2)

Separated RC chemical Store

No structural drawings details were found for the mezzanine floor. Undocumented extension was observed at Northwest corner. Also, connection details were not available in the provided drawings.

Moreover, a separate single storied chemical building was found inside the shed.

Layout Plan

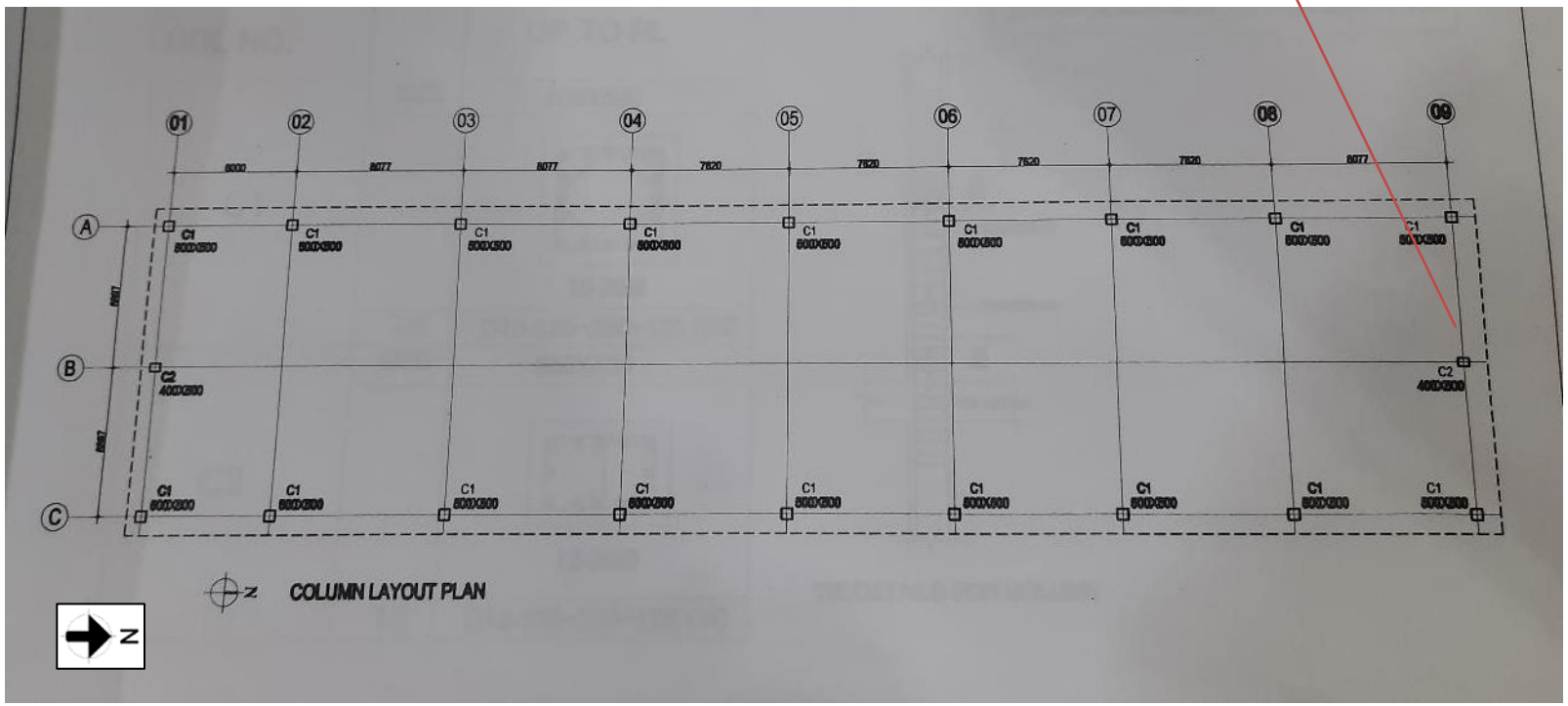
Undocumented extension

Mezzanine Floor

Observation: Building-1 (Dyeing Shed 2)

Architectural of the shed were not found. Also, connection details and sectional details of Grid 9 were not available in provided drawings.

Section of Grid 9



Observation: Building-2 (Utility Shed)

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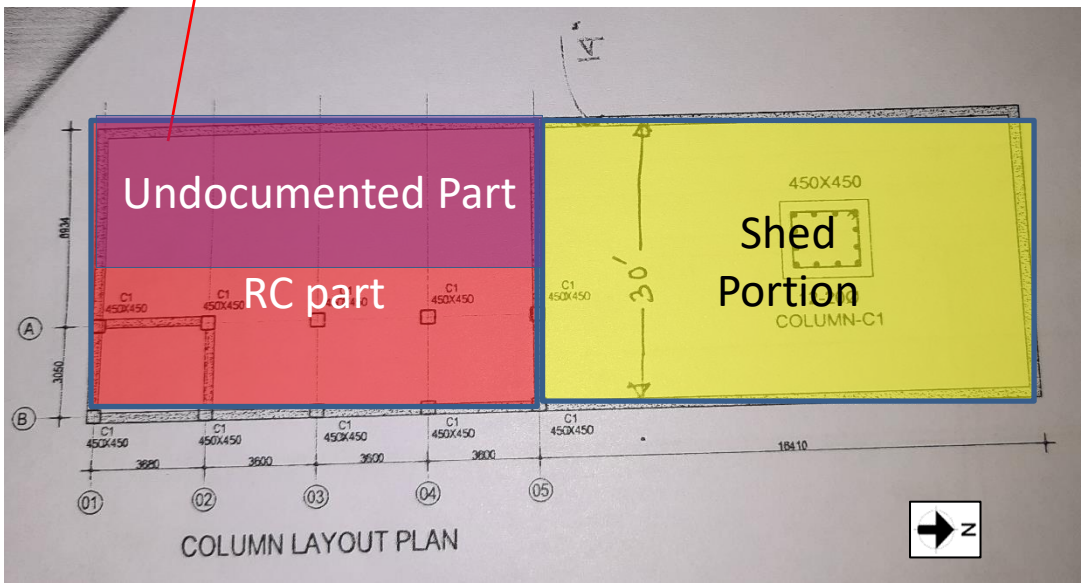
Undocumented RC Part

Structural drawings were found incomplete for RC part. No drawing details were available for the shed portion. Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.



Shed

Observation: B-4 Cooling Tower

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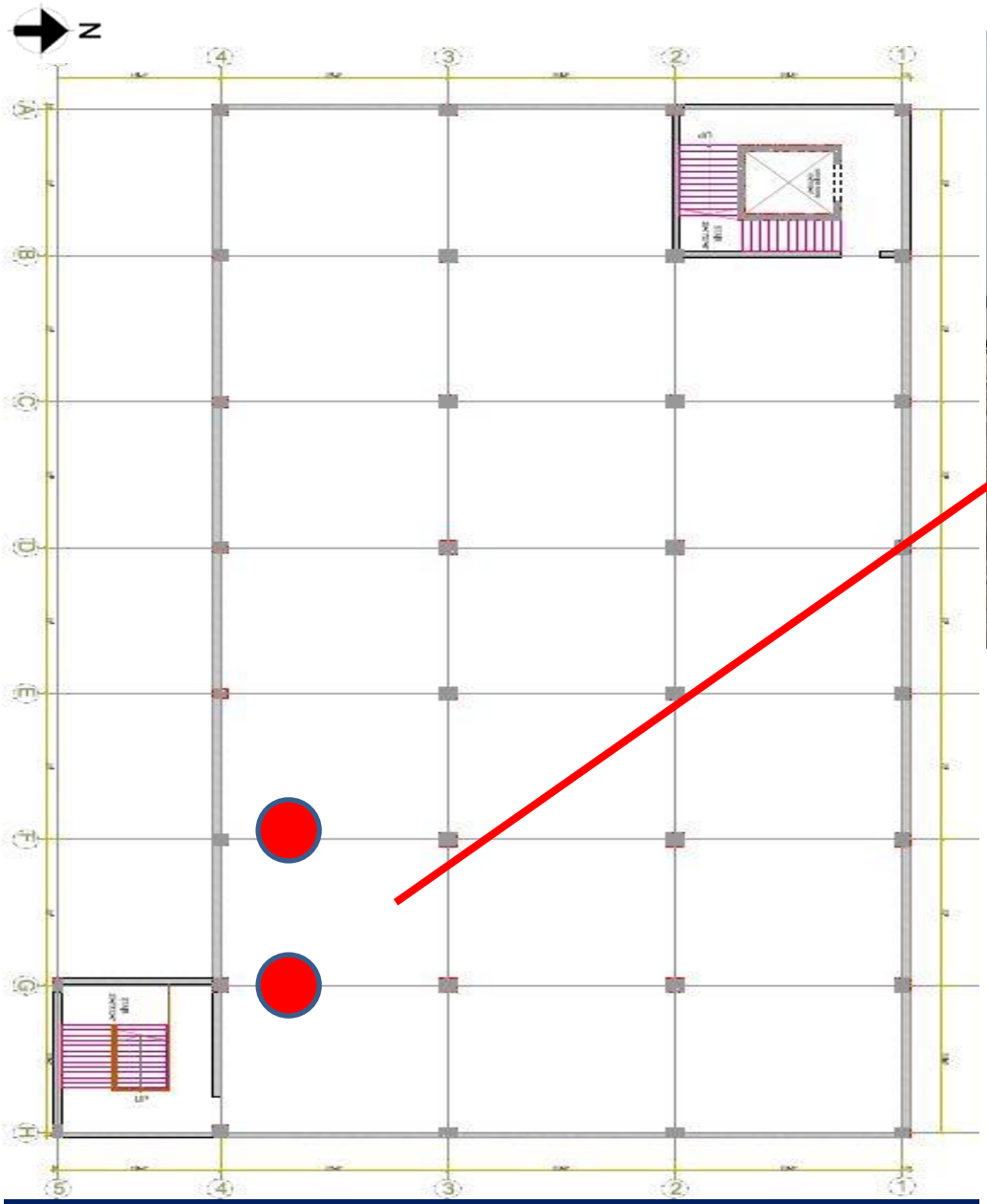
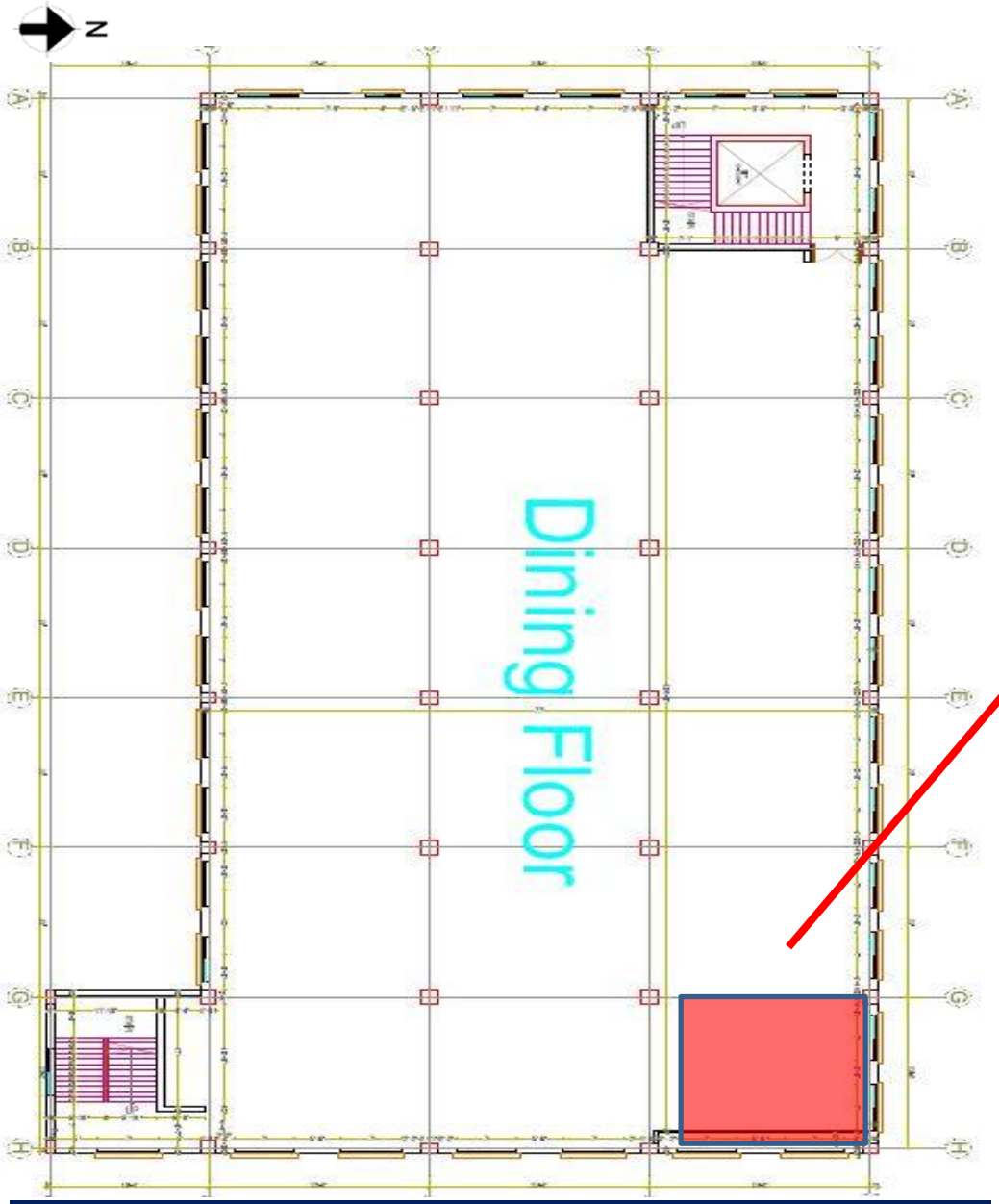


Roof layout

Plastic water tank (5000 liter each)

Two plastic water tank having capacity of 5000 litre each found on roof slab which were not shown in roof layout. Building engineer is required to update the as-built drawing as well as check the capacity of roof beam-slab considering the point load.

Observations: Building-5



Third floor layout

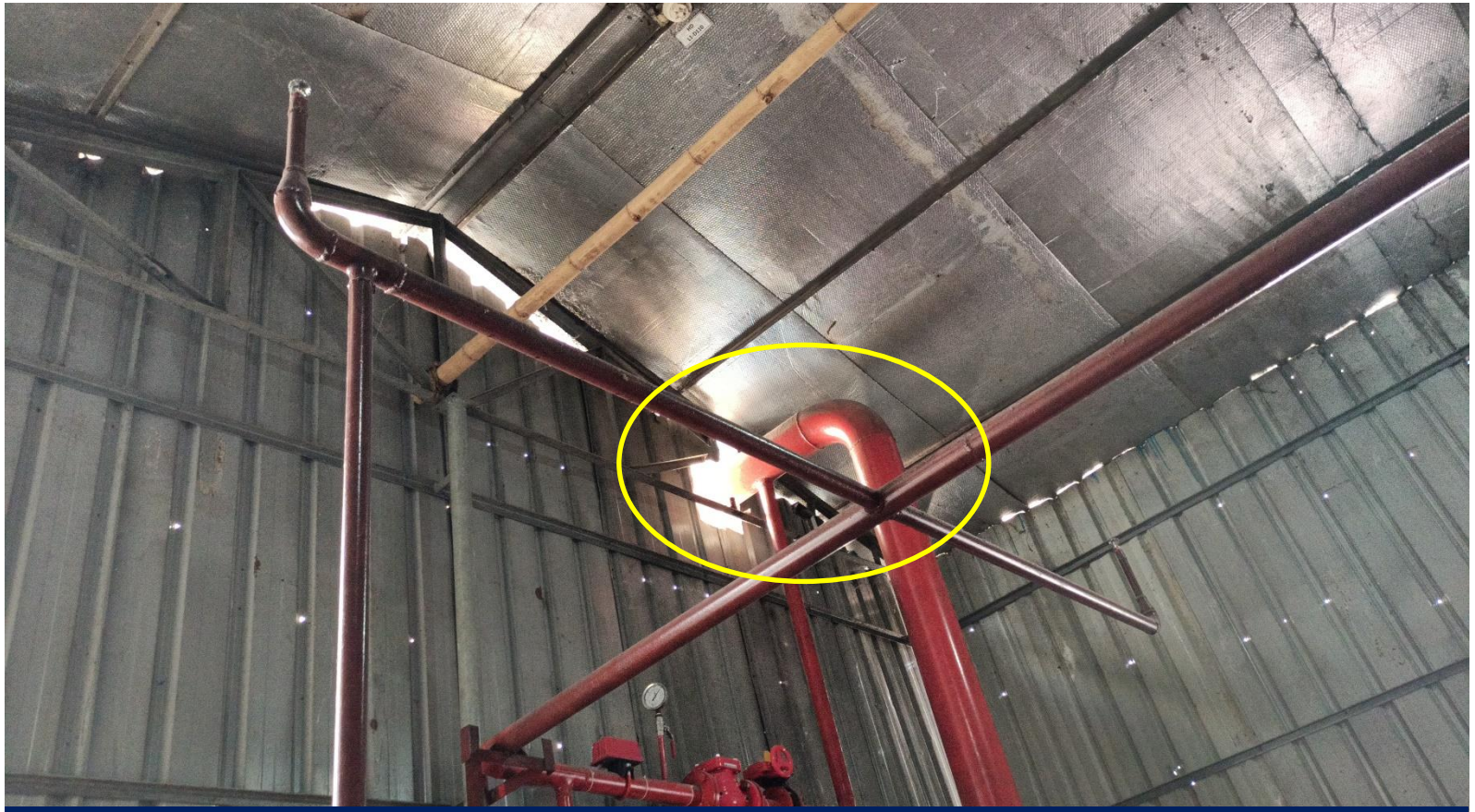
Toilet area not shown in drawing

Undocumented toilet area found at third floor which was not shown in as-built drawing. Building engineer is required to update the as-built drawing.

Observations: Building-5

Discontinuous truss member

Observation: B-17: Fire Pump House



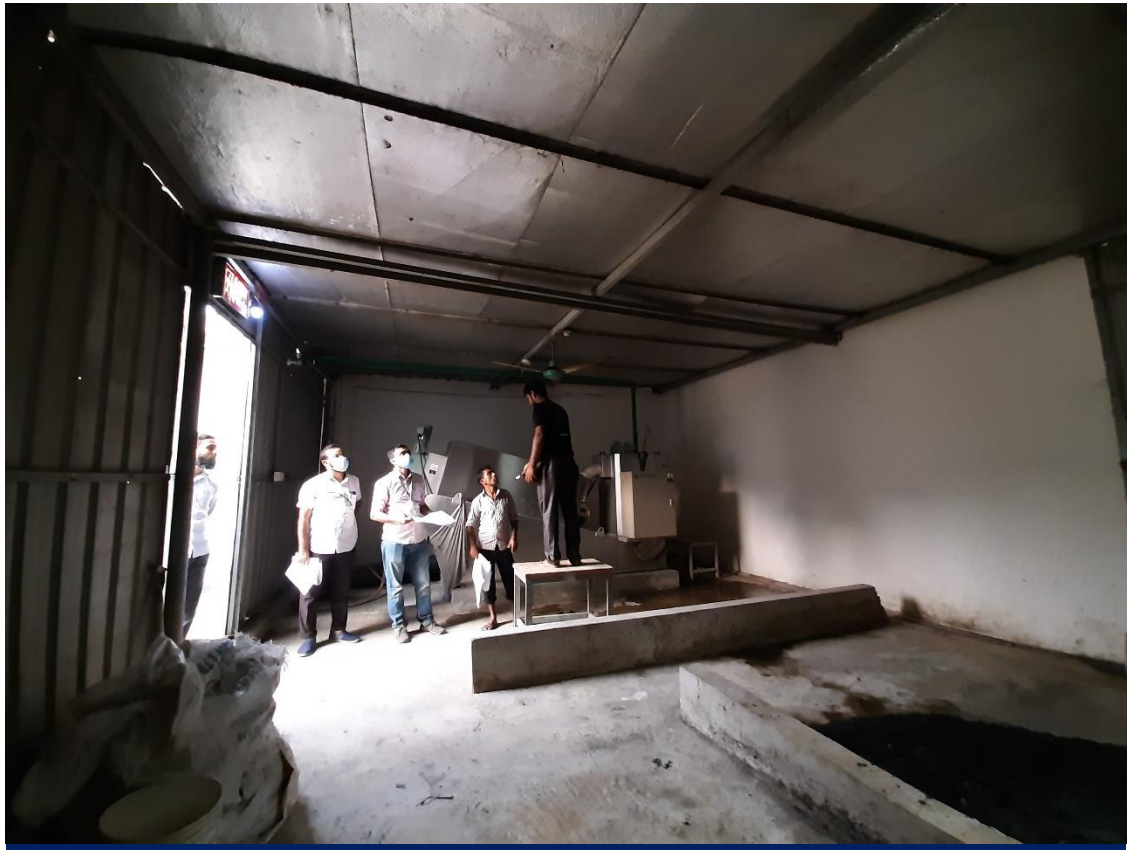
Discontinuous truss member

Diagonal truss member has been cut down due to fire hydrant discharge pipe. Building engineer is required to repair the truss frame with suitable method.

Observation: B-17: Fire Pump House

Apparently non engineered shed

Observation: Building-18,19



No clear load path and poor connection

This structure is apparently non engineered. Factory is required to ensure that the lateral load path is proper and connections for uplift force is adequate; otherwise replace the shed with engineered structure.

Observation: Building 18 (ETP sludge M/C room)

No clear load path with poor connection

This structure is apparently non engineered. Factory is required to ensure that the lateral load path is proper and connections for uplift force is adequate; otherwise replace the shed with engineered structure.

Observation: Building 19 (ETP Chemical)

Lack of lateral stability

Observation: Building-21

No bracing system/load transfer media provided

No load transfer media provided from frame to frame along long direction. In addition, no roof bracing system is provided therefore there is no obvious lateral stability for this shed. Building engineer is required to check the lateral stability of the shed against the lateral loadings.

Observations: Building-21

Problems Observed

Building-1,5,7:

Item-1: Stress in foundation exceeds normal design limit

Building-5,7:

Item-2: Stress in column exceeds normal design limit

Building-3,5,7,8,9,10,11,13,20,21:

Item-3: Design report needs to be prepared

Building-1,2,16,20:

Item-4: Lack of lateral stability

Building-3,8,21:

Item-5: Lack of lateral stability of steel stair

Building-1:

Item-6: Loose cable bracing

Item-7: Corrosion in steel member

Item-8: Significant connection gap

Item-9: Bolt missing in steel connection

Building-4:

Item-10: Apparently inadequate connection of steel stair

Problems Observed

Building-4,17:

Item-11: Apparently non engineered connection

Building-1,2,4,5:

Item-12: Lack of information and inconsistencies in as-built drawing

Building-6,12,13,14,15,16,17,18,19,20,21:

Item-13: Lack of structural drawing

Building-17:

Item-14: Discontinuous truss member

Building-18, 19:

Item-15: Apparently non engineered shed

Building-21:

Item-16: Lack of lateral stability of roof shed

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Stress in foundation exceeds normal design limits (Building-1: Dyeing Shed 2)	As part of Detail Engineering Assessment (DEA) Building engineer is required to review design, load & footing stress.	6-weeks
02	Stress in foundation exceeds normal design limits (Building-1: Dyeing Shed 2)	Prepare soil investigation report for the structure.	6-weeks
03	Stress in foundation exceeds normal design limits (Building-1: Dyeing Shed 2)	Produce and actively manage a set of floor loading plan within the factory building considering foundation, column and floor capacity.	6-weeks
04	Stress in foundation exceeds normal design limits (Building-1: Dyeing Shed 2)	Carry out remedial works as per DEA recommendations.	6-months
05	Stress in foundation exceeds normal design limits (Building-1: Dyeing Shed 2)	Implement floor load plan.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
06	Lack of lateral stability (Building-1: Dyeing Shed 2)	As part of Engineering Assessment (EA) building engineer is required to check the stability system of the Building and design the size & position of necessary compression elements accordingly.	6-weeks
07	Lack of lateral stability (Building-1: Dyeing Shed 2)	Implement remedial actions where necessary.	6-months
08	Lack of information and inconsistencies in as-built drawing (Building-1: Dyeing Shed 2)	The building engineer to survey the structure and prepare as-built structural drawings with clear connection details.	6-weeks
09	Loose cable bracing (Building-1: Dyeing Shed 2)	The building engineer to check the bracing and tighten it properly.	6-weeks
10	Corrosion in steel member (Building-1: Dyeing Shed 2)	The building engineer to investigate the reason of corrosion and suggest proper remedial measure accordingly.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
11	Corrosion in steel member (Building-1: Dyeing Shed 2)	Repair the corroded steel members and take necessary measures to prevent further corrosion as per engineer's suggestion.	6-months
12	Bolt missing in steel connection (Building-1: Dyeing Shed 2)	Building engineer is required to identify the all locations and install missing bolt accordingly.	6-weeks
13	Lack of lateral stability (Building-2: Utility Shed)	As part of Engineering Assessment (EA) building engineer is required to check the stability system of the Building and design the size & position of necessary compression elements accordingly.	6-weeks
14	Lack of lateral stability (Building-2: Utility Shed)	Implement remedial actions where necessary.	6-months
15	Lack of information and inconsistencies in as-built drawing (Building-2: Utility Shed)	The building engineer to survey the structure and update the as-built drawings accordingly.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
16	Design report needs to be prepared (Building-3: Security Building)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
17	Design report needs to be prepared (Building-3: Security Building)	Implement any remediation work if required.	6-months
18	Lack of lateral stability of external steel stair (Building-3: Security Building)	Building engineer is required to check the lateral stability of the steel stair and building against the lateral loading.	6-weeks
19	Lack of lateral stability of external steel stair (Building-3: Security Building)	Implement any remediation work if required.	6-months
20	Lack of information and inconsistencies in as-built drawing (Building-4: Cooling Tower)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
21	Apparently non-engineered connection (Shed) (Building-4: Cooling Tower)	Building engineer is required to check the connection of the steel shed for the up-lift pressure of wind.	6-weeks
22	Apparently non-engineered connection (Shed) (Building-4: Cooling Tower)	Complete implementation of remedial works if required.	6-months
23	Apparently inadequate connection of steel stair (Building-4: Cooling Tower)	Building engineer is required to carry out stress & stability check of the steel stair.	6-weeks
24	Apparently inadequate connection of steel stair (Building-4: Cooling Tower)	Implement remediation work where necessary.	6-months
25	Stress in column and foundation exceeds normal design limit (Building-5: Printing Building)	Building engineer is required to review the design, load, column and foundation stresses based on in-situ concrete strength.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
26	Stress in column and foundation exceeds normal design limit (Building-5: Printing Building)	Verify in-situ concrete strength by taking minimum 4 concrete cores (100mm diameter) from lower tier of the buildings.	6-weeks
27	Stress in column and foundation exceeds normal design limit (Building-5: Printing Building)	Produce and actively manage a set of floor loading plan within the factory building considering foundation, column and floor capacity.	6-weeks
28	Stress in column and foundation exceeds normal design limit (Building-5: Printing Building)	Implement any remediation work if required.	6-months
29	Design report needs to be prepared (Building-5: Printing Building)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
30	Design report needs to be prepared (Building-5: Printing Building)	Implement any remediation work if required.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
31	Stress in column and foundation exceeds normal design limit (Building-7: Garments Building-2)	Building engineer is required to review the design, load, column and foundation stresses based on in-situ concrete strength.	6-weeks
32	Stress in column and foundation exceeds normal design limit (Building-7: Garments Building-2)	Verify in-situ concrete strength by taking minimum 4 concrete cores (100mm diameter) from lower tier of the buildings.	6-weeks
33	Stress in column and foundation exceeds normal design limit (Building-7: Garments Building-2)	Produce and actively manage a set of floor loading plan within the factory building considering foundation, column and floor capacity.	6-weeks
34	Stress in column and foundation exceeds normal design limit (Building-7: Garments Building-2)	Implement any remediation work if required.	6-months
35	Stress in column and foundation exceeds normal design limit (Building-7: Garments Building-2)	Implement load plan.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
36	Design Report needs to be prepared (Building-7: Garments Building-2)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
37	Design Report needs to be prepared (Building-7: Garments Building-2)	Implement any remediation work if required.	6-months
38	Design report needs to be prepared (Building-8: Knitting Building)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
39	Design report needs to be prepared (Building-8: Knitting Building)	Implement any remediation work if required.	6-months
40	Lack of lateral stability of external steel stair (Building-8: Knitting Building)	Building engineer is required to check the stability of steel stair for vertical and lateral loads.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
41	Lack of lateral stability of external steel stair (Building-8: Knitting Building)	Produce as-built drawing of the steel stair.	6-weeks
42	Lack of lateral stability of external steel stair (Building-8: Knitting Building)	Implement any remediation work if required.	6-months
43	Design report needs to be prepared (Building-9: Sample Building)	Building engineer is required to prepared the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
44	Design report needs to be prepared (Building-9: Sample Building)	Implement any remediation work if required.	6-months
45	Design report needs to be prepared (Building-10: New Dining & Store Building)	Building engineer is required to prepared the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
46	Design report needs to be prepared (Building-10: New Dining & Store Building)	Implement any remediation work if required.	6-months
47	Design report needs to be prepared (Building-11: ETP-Biological)	Building engineer is required to prepared the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
48	Design report needs to be prepared (Building-11: ETP-Biological)	Implement any remediation work if required.	6-months
49	Design report needs to be prepared (Building-13: Medical Center Building)	Building engineer is required to prepared the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
50	Design report needs to be prepared (Building-13: Medical Center Building)	Implement any remediation work if required.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
51	Lack of structural drawing (Building-13: Medical Center Building)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks
52	Lack of lateral stability (Building-16: Pre-fabricated Godown Shed)	Building engineer is required to check the stability system of the building and design the size & position of necessary compression elements accordingly.	6-weeks
53	Lack of lateral stability (Building-16: Pre-fabricated Godown Shed)	Implement remedial actions where necessary.	6-months
54	Lack of structural drawing (Building-16: Pre-fabricated Godown Shed)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks
55	Apparently non-engineered connection (Building-17: Fire Pump House)	Building engineer is required to check the connection of the steel shed for the up-lift pressure of wind.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
56	Apparently non-engineered connection (Building-17: Fire Pump House)	Complete implementation of remedial works if required.	6-months
57	Discontinuous truss member (Building-17: Fire Pump House)	Building engineer is required to repair the truss frame with suitable method.	6-weeks
58	Lack of structural drawing (Building-17: Fire Pump House)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks
59	Lack of structural drawing. (Bbuilding-6, 12, 14, 15, 18 & 19)	Building engineer is required to produce full set of as-built drawing reflecting the as constructed condition.	6-weeks
60	Apparently non engineered shed (Building-18,19)	Building engineer is required to ensure that the lateral load path is proper, and connections are adequate for uplift force; otherwise replace the shed with engineered structure.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
61	Lack of lateral stability (Building-20: Dyeing Finishing Unit Shed)	Building engineer is required to check the lateral stability of the structure against the lateral loadings.	6-weeks
62	Lack of lateral stability (Building-20: Dyeing Finishing Unit Shed)	Implement remedial actions where necessary.	6-months
63	Design report needs to be prepared (Building-20: Dyeing Finishing Unit Shed)	Building engineer is required to prepare the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
64	Design report needs to be prepared (Building-20: Dyeing Finishing Unit Shed)	Implement any remediation work if required.	6-months
65	Lack of structural drawing (Building-20: Dyeing Finishing Unit Shed)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks

Item No.	Observation	Recommended Action Plan	Recommended Timeline
66	Design report needs to be prepared (Building-21: Dormitory Building)	Building engineer is required to prepared the design report in compliance with section 1.9.1.1 (part-6, BNBC).	6-weeks
67	Design report needs to be prepared (Building-21: Dormitory Building)	Implement any remediation work if required.	6-months
68	Lack of structural drawing (Building-21: Dormitory Building)	Building engineer is required to produce full set of as-built drawing with connection details which reflects the as constructed condition.	6-weeks
69	Lack of lateral stability of the roof shed (Building-21: Dormitory Building)	Building engineer is required to check the lateral stability of the structure against the lateral loadings.	6-weeks
70	Lack of lateral stability of the roof shed (Building-21: Dormitory Building)	Implement remedial actions where necessary.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
71	Lack of lateral stability of external steel stair (Building-21: Dormitory Building)	Building engineer is required to check the lateral stability of the steel stair.	6-weeks
72	Lack of lateral stability of external steel stair (Building-21: Dormitory Building)	Implement any remediation work if required.	6-months