

Thanbee Print World Ltd. and Parkway Packaging & Printing PLC

Sardagonj, Kashimpur, Gazipur-1349
(23.978112, 90.304102)
20 August 2025

Structural Inspection Report



1. Building Information

1. Building-1 (Production Building; Block-A),
2. Building-2 (Office Building; Block B & D),
3. Building-3 (Utility Building; Block-C),
4. Building-4 (Bandhan Building; Block-E),
5. Building-5 (RMS Room),
6. Building-6 (Storage Shed-1; Block-F),
7. Building-7 (Storage Shed-2; Block-G),
8. Building-8 (Guard Room),
9. Building-9 (Thanbee Print World Extension Building),
10. Building-10 (ETP Building),
11. Building-11 (Gate & RMS Room),
12. Building-12 (Wastage Store Shed),
13. Building-13 (Diesel Storage Room).

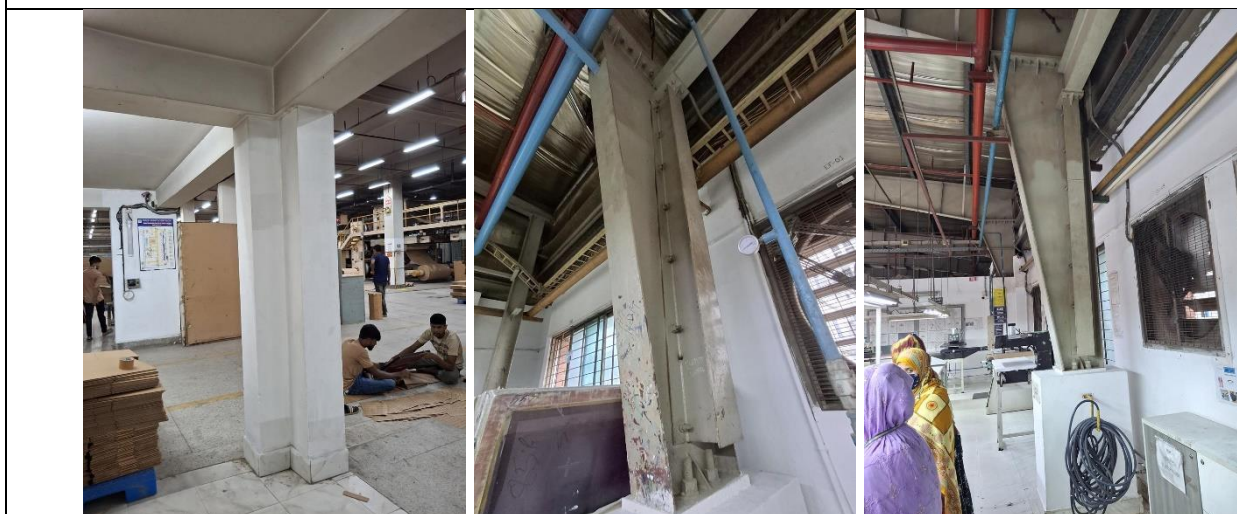
2. Observation

Observation 01: Incomplete design report [Building 1: Production Building (Block-A)]



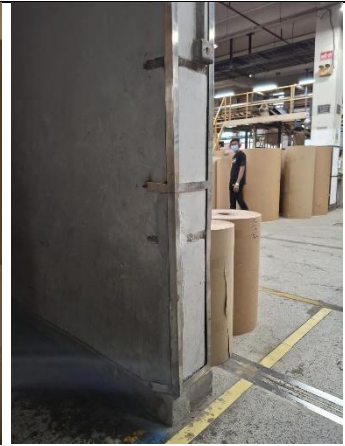
Description: A design report was available onsite. The design report did not cover all the adequacy checks as per BNBC 1.9.1. The building engineer is required to revise the design report following BNBC 1.9.1 based on as-built member sizes & in-situ material strength and submit to RSC for detailed review against lateral forces.

Observation 02: Mismatch/lack of as-built drawing [Building 1: Production Building (Block-A)]



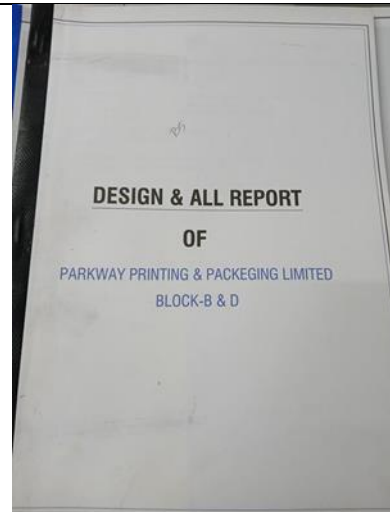
Description: L-shaped column found below mezzanine floor instead rectangular column, portal bracing details not provided in the drawings, and a RC column found around 2.1 m high on the 2nd floor, where the drawing shows 1 m for all typical RC columns. The building engineer is required to survey the structure and prepare accurate as-built drawings with all necessary connection details.

Observation 03: Forklift impact on beam and surface damage [Building 1: Production Building (Block-A)]



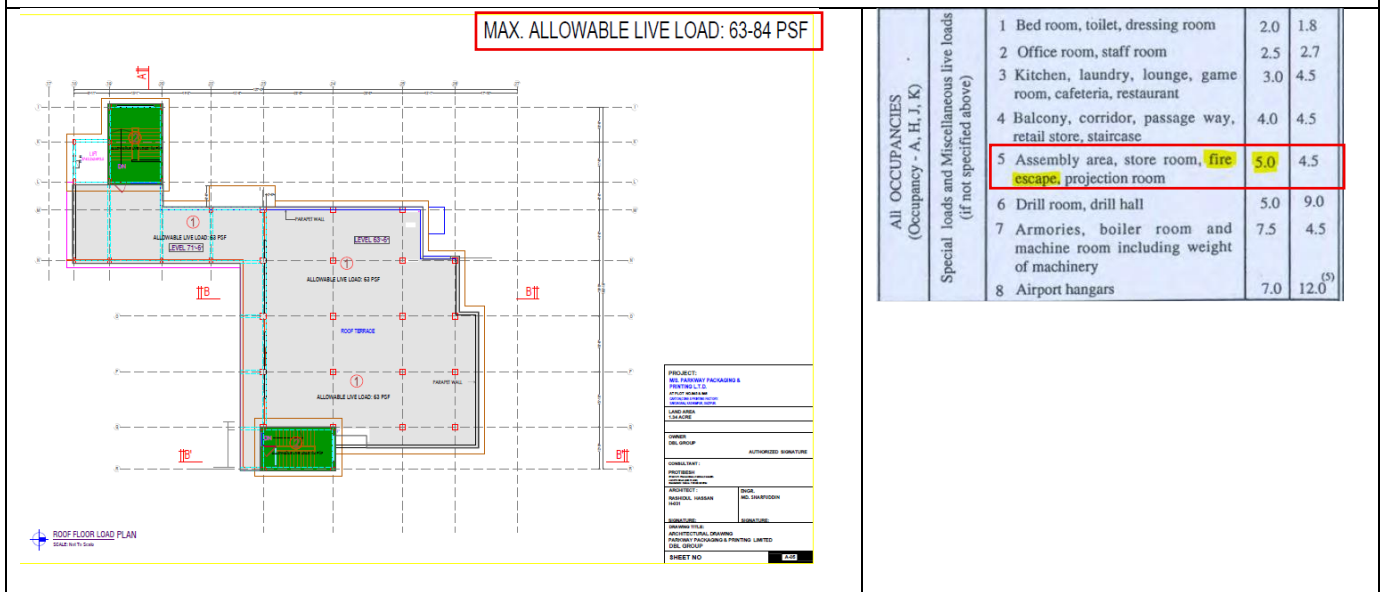
Description: Beam damage was found due to the impact of forklifts. Also, a sign of impact was observed on columns. Repair the damage to the beam and take precautionary measures to prevent further impact.

Observation 04: Inconsistencies in the EA report (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))



Description: The response modification coefficient (R value) was considered as 8 for IMRF; however, no calculation or justification was provided. Moreover, no irregularity check was provided. The building engineer is required to address the inconsistencies in the revised EA report and submit the revised EA to RSC.

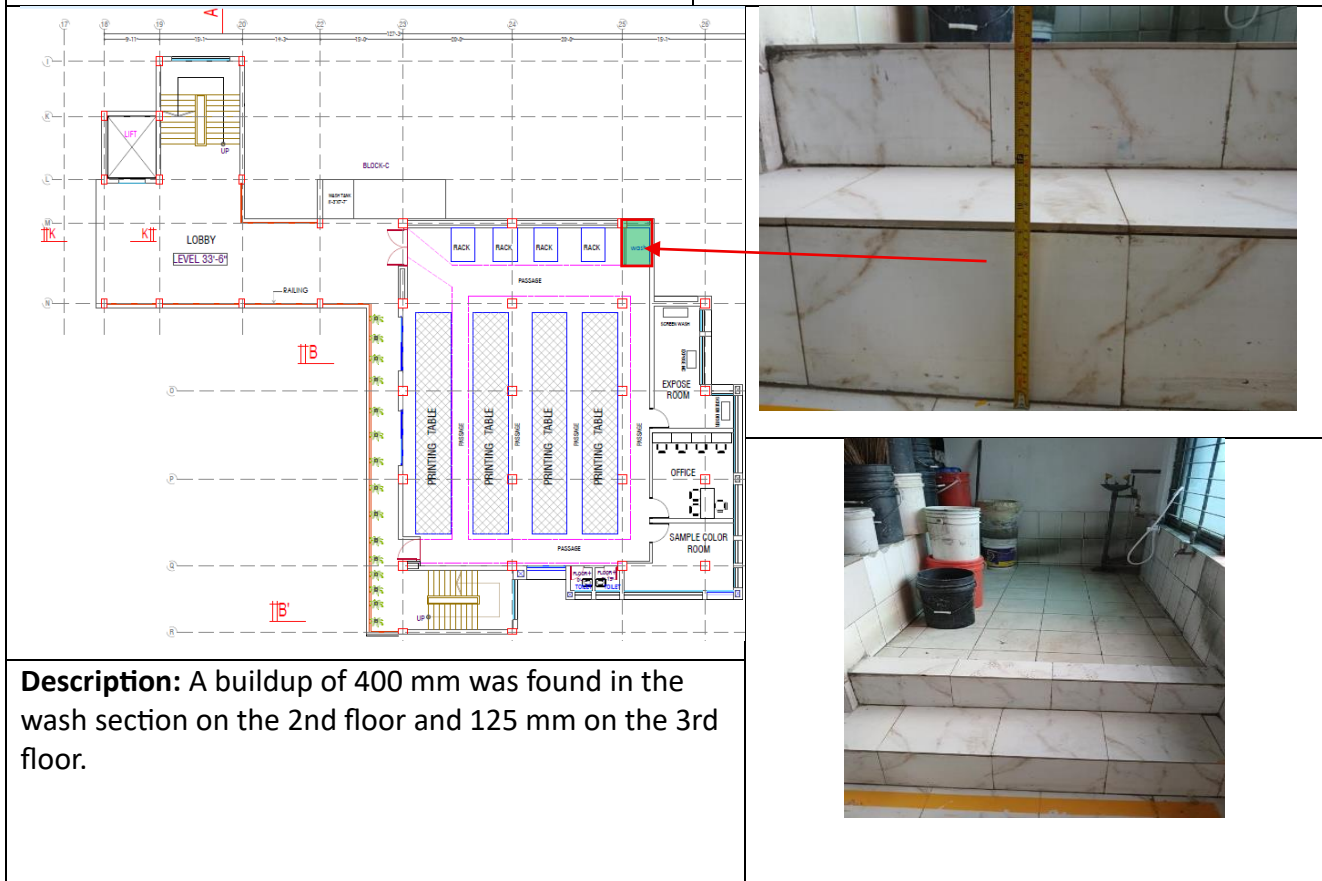
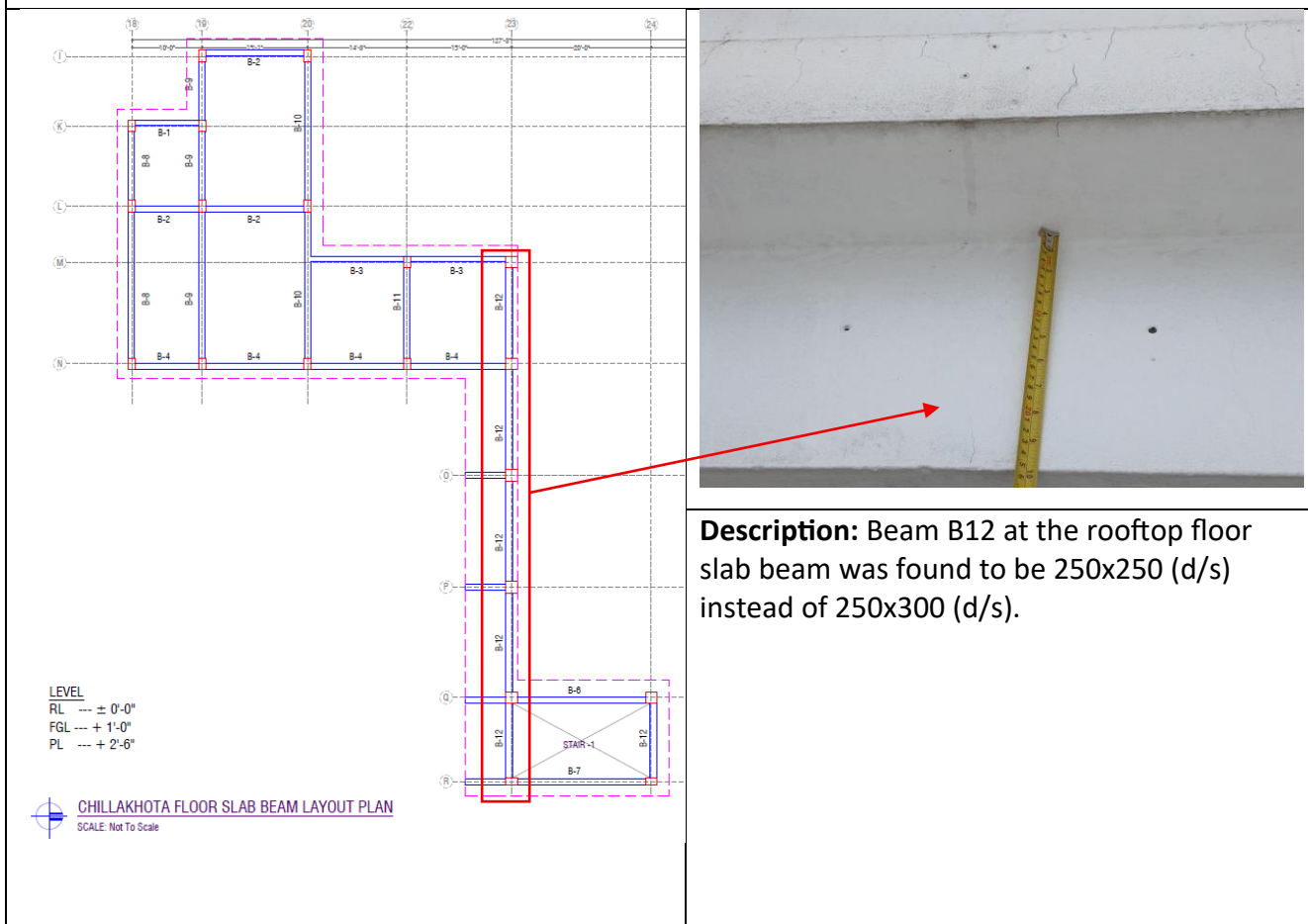
Observation-05: Load plan does not comply with BNBC requirements (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))

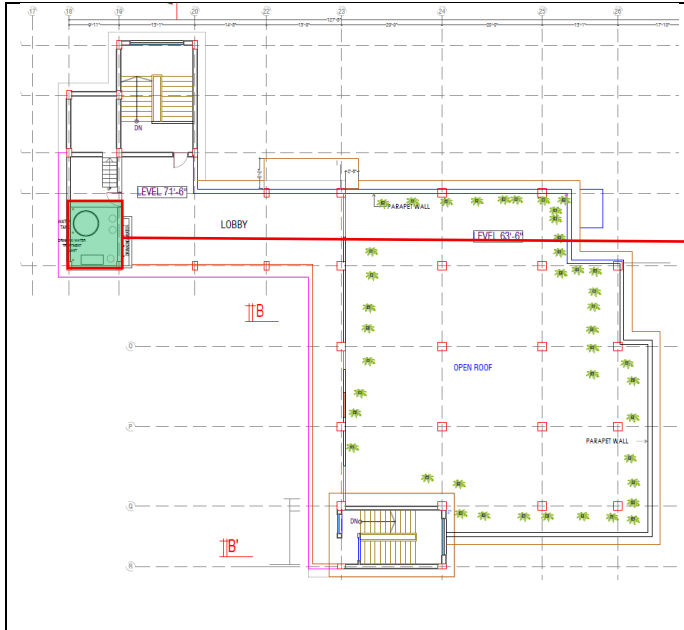


Description: There are two staircases in the building. According to BNBC, the minimum floor live load for staircases used as fire escapes is 5.0 kN/m². However, the stairs have been designed for a live load of only 4.0 kN/m² (84 psf).

The building engineer is required to revise the load plan and associated design documents to ensure compliance with BNBC requirements.

Observation-06: Mismatch/Lack of information in as-built drawing (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))





Description: A roof shed was found for the RO plant. No details drawing was prepared. The building engineer is required to survey the structures and prepare a comprehensive as-built drawings.

Observation-07: Dampness on the rooftop slab. (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))



Description: During the inspection, dampness on the rooftop slab was observed. Factory engineer is required to seal the source of water and repair the damp areas with a suitable method.

Observation-08: Columns susceptible to vehicle impact. (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))



Description: Columns at the ground-floor driveway area were found susceptible to vehicle impact. The building engineer is required to provide separate barriers around the column to prevent vehicle impact.

Observation 09: Inconsistencies in the EA report. (Building-3: Utility Building (BLOCK-C))

Report on review comments of Design Report for Parkway Packaging & Printing Ltd. and Thanbee Print world Ltd.

General Information:

1. Factory Name : Parkway Packaging & Printing Ltd. and Thanbee Print world Ltd.
2. Address : Sardagonj, Kashimpur, Gajipur
3. Type of Buildings : Five Storied Production Building **Block C**
4. Year of construction :

Consultant: ASCENT DESIGN & DEVELOPMENT

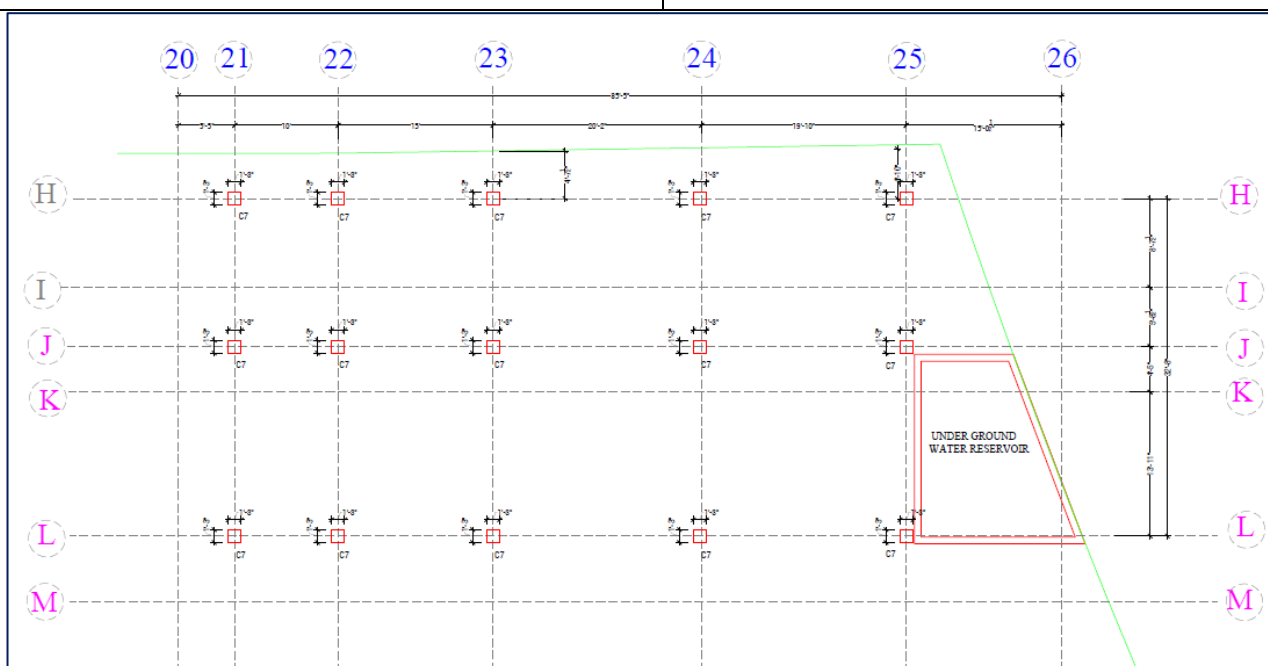
Observation:

- a) Calculation of equivalent core test results as per ACI 562:
a.1) Core Test Result of Building Block C

D.3) Foundation Bearing Capacity Check:

Table: Compliance table for bearing capacity check of isolated column footing

VALUE FROM ETABS ANALYSIS				BEARING CAPACITY CHECK									
Story	Point	Load Combination	FZ (kip)	Footing Type	Footing Size					Bearing Capacity Req. KSF	Bearing Capacity of soil KSF for-2	Bearing Capacity Check	
					a (ft) (mm)	b (ft) (mm)	h (ft) (mm)	Area (sq ft) (sq m)	V (kft) (kN)	depth (ft) (m)			
BASE	33	UNFACTORED	144.00	F15	5.50	5.50	1.00	30.25	30.25	7.50	4.91	5.00	OK
BASE	239	UNFACTORED	243.00	CF4	6.25	11.50	1.50	71.88	107.81	7.50	3.61	5.00	OK
BASE	247	UNFACTORED	185.00	F11	7.50	7.50	1.25	56.25	70.31	7.50	3.48	5.00	OK
BASE	257	UNFACTORED	168.00	F12	7.25	7.25	1.25	52.56	65.70	7.50	3.38	5.00	OK
BASE	265	UNFACTORED	90.00	F14	5.00	5.00	1.25	25.00	31.25	7.50	3.79	5.00	OK
BASE	273	UNFACTORED	90.00	F14	5.00	5.00	1.25	25.00	31.25	7.50	3.79	5.00	OK
BASE	473	UNFACTORED	91.00	F14	5.00	5.00	1.25	25.00	31.25	7.50	3.83	5.00	OK
BASE	481	UNFACTORED	117.00	F12	7.25	7.25	1.25	52.56	65.70	7.50	2.41	5.00	OK
BASE	491	UNFACTORED	165.00	F13	6.50	6.50	1.25	42.25	52.81	7.50	4.09	5.00	OK
BASE	498	UNFACTORED	175.00	F11	7.50	7.50	1.25	56.25	70.31	7.50	3.30	5.00	OK
BASE	505	UNFACTORED	126.00	F15	5.50	5.50	1.00	30.25	30.25	7.50	4.32	5.00	OK



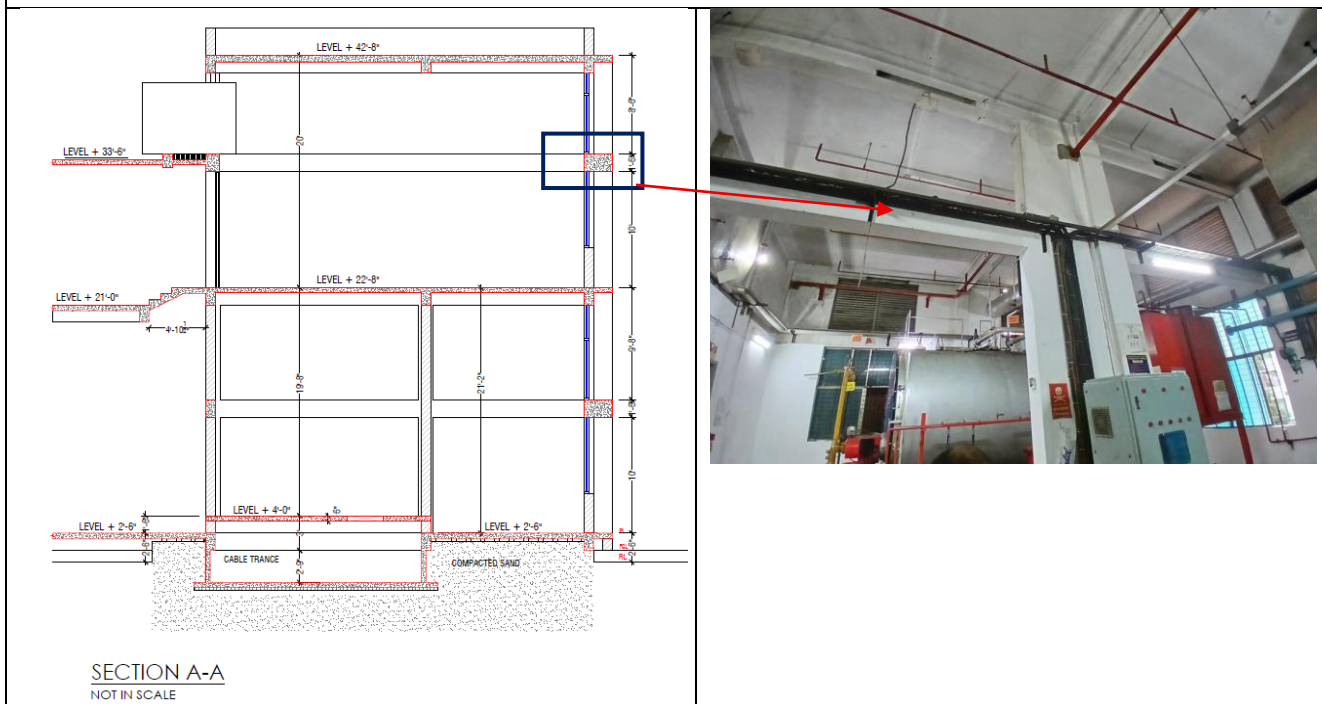
D.2) Column Section Adequacy Check :

Story	ColLine	SecID	DesignOpt	PMMCombo	AsMin	As	PMMRatio	Remarks
GF	C1	CBG18X18	Check	COMB7	3.24	3.00	0.28	-1. OK
GF	C1	CBG18X18	Check	COMB5	3.24	3.00	0.35	-1. OK
GF	C1	CBG18X18	Check	COMB5	3.24	3.00	0.57	-1. OK
FF	C1-1	C15X15	Check	COMB5	2.25	3.00	0.27	-1. OK
FF	C1-1	C15X15	Check	COMB5	2.25	3.00	0.26	-1. OK
FF	C1-1	C15X15	Check	COMB5	2.25	3.00	0.65	-1. OK
SF	C1-2	C15X15	Check	COMB7	2.25	3.00	0.13	-1. OK
SF	C1-2	C15X15	Check	COMB5	2.25	3.00	0.14	-1. OK
SF	C1-2	C15X15	Check	COMB9	2.25	3.00	0.45	-1. OK
SF	C1-3	C15X15	Check	COMB7	2.25	3.00	0.47	-1. OK
SF	C1-3	C15X15	Check	COMB1	2.25	3.00	0.17	-1. OK
SF	C1-3	C15X15	Check	COMB5	2.25	3.00	0.17	-1. OK
FF	C1-4	C15X15	Check	COMB5	2.25	3.00	0.53	-1. OK
FF	C1-4	C15X15	Check	COMB5	2.25	3.00	0.26	-1. OK
FF	C1-4	C15X15	Check	COMB5	2.25	3.00	0.34	-1. OK
GF	C2	CBG18X18	Check	COMB1	3.24	3.00	0.33	-1. OK
GF	C2	CBG18X18	Check	COMB6	3.24	3.00	0.35	-1. OK
GF	C2	CBG18X18	Check	COMB7	3.24	3.00	0.55	-1. OK
FF	C2-1	C15X15	Check	COMB7	2.25	3.00	0.37	-1. OK
FF	C2-1	C15X15	Check	COMB5	2.25	3.00	0.51	-1. OK
FF	C2-1	C15X15	Check	COMB5	2.25	3.00	0.71	-1. OK
SF	C2-2	C15X15	Check	COMB7	2.25	3.00	0.30	-1. OK
SF	C2-2	C15X15	Check	COMB5	2.25	3.00	0.29	-1. OK
SF	C2-2	C15X15	Check	COMB7	2.25	3.00	0.57	-1. OK
SF	C2-3	C15X15	Check	COMB7	2.25	3.00	0.68	-1. OK

Description: In the EA report, the column and foundation adequacy checks do not match the column sizes and IDs shown in the as-built drawings.

The building engineer is required to address the inconsistencies in the revised EA report and submit the revised EA to RSC.

Observation 10: Lack of information in the as-built drawing (Building-3: Utility Building (BLOCK-C))



Description: A tie beam (250 x 450 mm) was found at 10 ft above the floor slab, which details were not shown in the as-built structural drawings.

The building engineer is required to survey the structures and prepare a comprehensive as-built drawings.

Observation 11: Lack of as-built drawings (Building-5 & Building-12)



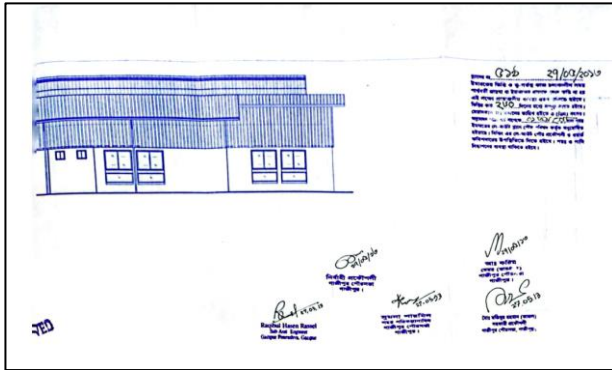
Building-5: RMS Room



Building-12: Wastage Store Shed

Description: As-built structural & architectural drawings were not available for those structures. The building engineer is required to survey the structures and prepare as-built drawings, including foundation details, and necessary connection information.

Observation 12: The design report needs to be revised. (Building-6: Storage Shed-1)



EXECUTIVE SUMMARY

The Proposed Extension Shed-01 of Parkway, Packaging & Printing Ltd. is a single storied steel shed, which is located at Sharganj, Kashimpur, Gazipur.

This structural design report comprises with design methodology, design consideration, evaluation of the structural members such as Foundation, RCC columns, Beams, Steel members etc.

The Structural design of this building is based on the material properties will be used in construction, and the Seismic & Wind provision used as per the requirement of BNBC 2006.

For analysis and design checking of the building, finite element based structural design software package ETABS V17.0.1 software has been used.

Considering BNBC 2006, recommended loads and load combinations, the foundation, RCC beam, columns and steel members are found adequate.

Description: The local authority approval for the Shed-1 was 27-05-2013, but the construction was started in Mar 2021. Also, the design report was prepared considering the BNCB 2006 standard.

The building engineer is required to get new approval from the local authority and revise the design report according to the BNBC 2020 guideline and submit it to RSC for review.

Observation 13: Crack in column & beam. (Building-6: Storage Shed-1)



Description: During inspection, cracks were found on the column and beam in grid 1-J, 5-L, and 5-K. The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.

Observation 14: Trolley impact on column. (Building-6: Storage Shed-1)



Description: During inspection, an impact was found on the RC column. The building engineer is required to provide a column guard around the column to avoid trolley impact.

Observation 15: The design report needs to be revised. (Building-7: Storage Shed-2)

2.3 MATERIAL PROPERTY

The following material properties has been used for the structural design:

- ❖ Yield strength of Rebar, f_y = 72500 lb/in²
- ❖ Compressive strength of concrete, f'_c = 3625 lb/in²
- ❖ Yield strength of structural steel, f_y = 50000 lb/in²
- ❖ Young's modulus of concrete, E_c = 57000 ksi

DESIGN REPORT

1 INTRODUCTION

1.1 SITE

The Proposed Extension Shed-02 of Parkway, Packaging & Printing Ltd. is a single storied steel shed which is located at Shardarganj, Kashimpur, Gazipur.

Table 1-1: Basic information

Information	Description
Building Importance	Category-II
Seismic Zone	Zone-2
Soil Type class	SC (Considering top 30 m layer)
Seismic Design Category (SDC)	C
Basic Structural System	Moment resisting Frame
Frame System (RCC Part)	Intermediate moment Resisting Frame
Frame System (Steel Part)	Ordinary Moment Resisting Frame
Response Reduction factor (RCC), R_w	5
Response Reduction factor (Steel), R_s	3.5
Basic Wind Velocity	66.50 m/sec
Building Enclosure Type	Enclosed
Importance factor, I	1.0
Exposure	A

Description: The steel plate yield strength was considered 50 ksi in the design report, but no test report was found on-site. Also, the Response modification coefficient R value was considered 5.0 (IMRF) for the RCC part, but no justification was provided. Moreover, Seismic Design Category was mentioned as C, but no justification was provided. The building engineer is required to revise the design report and submit it to RSC for review.

Observation 16: Crack in column & beam joint. (Building-7: Storage Shed-2)



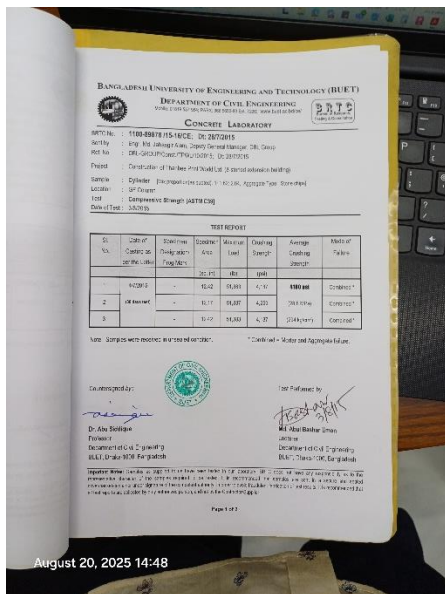
Description: During inspection, cracks were found on several joints of the column and beam. The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.

Observation 17: Trolley impact on column. (Building-7: Storage Shed-2)



Description: During inspection, several impacts were found on the RC column. The building engineer is required to provide a column guard around the column to avoid trolley impact.

Observation 18: Inconsistencies in the assessment report. (Building-9: Thanbee Print World Extension Building)



2 MATERIAL SPECIFICATION:

2.1 CONCRETE

a) TYPE: ALL CONCRETE COMPRESSIVE STRENGTH CONSIDERED AS FOLLOWS:

i) $f'c = 4000$ psi at 28 DAYS CYLINDER STRENGTH FOR STONE CHIPS AGAINST MIXING RATIO = 1:1½2½ (FOR COLUMN & SHEAR WALL)

ii) $f'c = 3500$ psi at 28 DAYS CYLINDER STRENGTH FOR STONE CHIPS AGAINST MIXING RATIO = 1:1½3. (FOR FOOTING & Grade Beam)

iii) $f'c = 3500$ psi at 28 DAYS CYLINDER STRENGTH FOR STONE CHIPS AGAINST 1:1½3 (FOR BEAM, SLAB, STAIR & O.H.W.T.)

iv) $f'c = 2500$ psi at 28 DAYS CYLINDER STRENGTH FOR NORMAL BRICK CHIPS MIXING RATIO 1:2:4 (FOR LINTEL, FALSE SLAB, BOUNDARY WALL, PARAPET, PARKING FLOOR, DROP WALL & U.G.W.R.)

An inadequate number of concrete cylinder test reports were found on site to confirm the design strengths of 4000 psi (Columns) and 3500 psi (beams and slabs).

Drift Check:

1.5.6 Drift and Building Separation

1.5.6.1 Storey Drift Limitation: Storey drift is the displacement of one level relative to the level above or below due to the design lateral forces. Except otherwise permitted in Sec 1.3.4.2(a) calculated storey drift shall include both translational and torsional deflections and conform to the following requirements:

a) Storey drift, Δ , shall be limited as follows:

- $\Delta \leq 0.04h/R \leq 0.005h$ for $T < 0.7$ second.
- $\Delta \leq 0.03h/R \leq 0.004h$ for $T \geq 0.7$ second.
- $\Delta \leq 0.0025h$ for unreinforced masonry structures.

where, h = height of the building or structure.

The period T used in this calculation shall be the same as that used for determining the base shear in Sec 2.5.6. The limits involving R in (i) and (ii) above shall be applicable only when earthquake forces are present.

b) The drift limits set out in (a) above may be exceeded where it can be demonstrated that greater drift can be tolerated by both structural and nonstructural elements without affecting life safety.

Figure: Drift Reference BNBC

For the following building,

$R = 8$

$h = 1755$ in

$T = 1.05$ sec

Response modification coefficient, R value considered as 8 for IMRF, but no calculation/justification is provided for the

Observation-19: Lack of information in the prepared as-built drawings. (Building-9: Thanbee Print World Extension Building)



Description: A roof shed was found for the RO plant. No details drawing was prepared. Building engineer is required to survey the structure and prepare the as-built drawing.

Observation-20: Column Susceptible to trolley impact. (Building-9: Thanbee Print World Extension Building)



Description: Columns are susceptible to trolley impact. Building engineer is required to take necessary action to prevent the trolley from impacting the columns.

Observation-21: Dampness on the ceiling of the 5th floor. (Building-9: Thanbee Print World Extension Building)



Description: During the inspection, dampness on the fifth-floor slab soffit was observed. Factory engineer is required to seal the source of water and repair the damp areas with a suitable method.

Observation-22: Columns susceptible to vehicle impact. (Building-9: Thanbee Print World Extension Building)



Description: Columns at the ground-floor driveway area were found susceptible to vehicle impact. The building engineer is required to provide separate barriers around the column to prevent vehicle impact.

Observation 23: The design report needs to be revised. (Building-10: ETP Building)

Drift Check:

1.5.6 Drift and Building Separation
1.5.6.1 Storey Drift Limitation: Storey drift is the displacement of one level relative to the level above or below due to the design lateral forces. Except otherwise permitted in Sec 1.3.4.2(a) calculated storey drift shall include both translational and torsional deflections and conform to the following requirements:

a) Storey drift, Δ , shall be limited as follows:

i) $\Delta \leq 0.04h/R \leq 0.005h$	for $T < 0.7$ second.
ii) $\Delta \leq 0.03h/R \leq 0.004h$	for $T \geq 0.7$ second.
iii) $\Delta \leq 0.0025h$	for unreinforced masonry structures.

where, h = height of the building or structure.

The period T used in this calculation shall be the same as that used for determining the base shear in Sec 2.5.6. The limits involving R in (i) and (ii) above shall be applicable only when earthquake forces are present.

b) The drift limits set out in (a) above may be exceeded where it can be demonstrated that greater drift can be tolerated by both structural and nonstructural elements without affecting life safety.

Figure: Drift Reference NBC

For the following building,

$R = 8$

$h = 942$ in

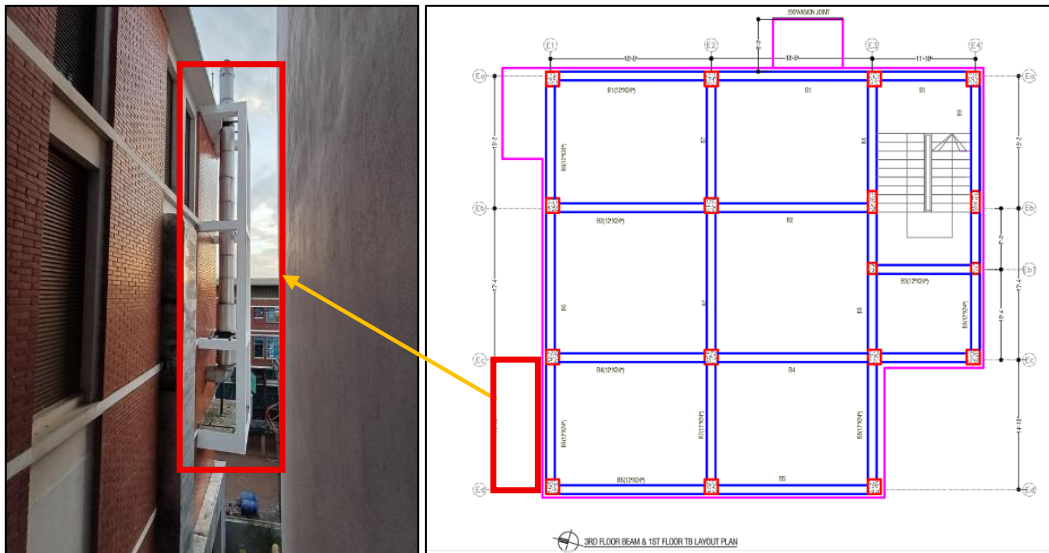
$T = 0.97$ sec

∴ As per NBC the storey drift limitation for this building are-
 $\Delta \leq 0.03h/R \leq 0.004h$

$\Delta \leq 3.5325 \leq 3.768$

Description: The Response modification coefficient R value was considered 8.0 (SMRF) for the building, but no justification was provided. The building engineer is required to revise the design report and submit it to RSC for review.

Observation 24: Discrepancy in the as-built drawings. (Building-10: ETP Building)



Description: During inspection, cantilever beam was found on the north portion of the building. The building engineer is required to update the as-built drawing as per the actual site condition.

Observation 25: Crack in the brick wall. (Building-10: ETP Building)



Description: During inspection, several cracks were found on the brick wall. The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.

Observation 26: Trolley impact on column. (Building-10: ETP Building)



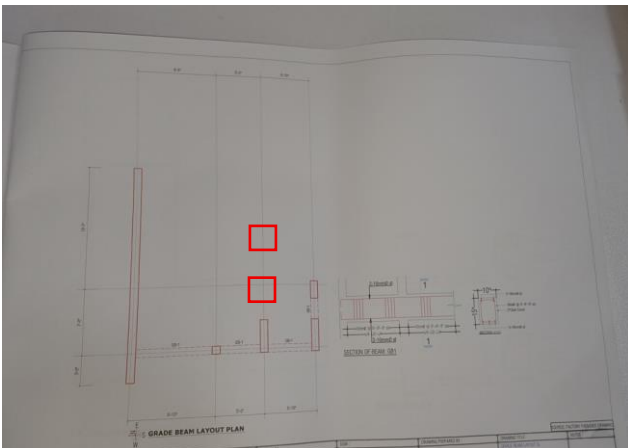
Description: During inspection, several impacts were found on the RC column. The building engineer is required to provide a column guard around the column to avoid trolley impact.

Observation 27: Water ponding on the roof. (Building-10: ETP Building)



Description: During inspection, water ponding was found on the roof. The building engineer is required to improve the drainage system with an adequate slope.

Observation-28: Mismatch found in prepared drawings. (Building-11: Gate & RMS Room)



Description: Column layout and numbers do not match the prepared as-built drawing. Building engineer is required to survey the structure and prepare the as-built drawing.

3. Action Plan:

Item No.	Observation	Action Plan	Timeline
1.	Incomplete design report [Building 1: Production Building (Block-A)]	The building engineer is required to revise the design report following BNBC 1.9.1 based on as-built member sizes & in-situ material strength and submit to RSC for detailed review against lateral forces.	within 6 weeks
2.		Update the floor load plan and actively manage floor loading with the factory building.	within 6 weeks
3.		Carry out necessary remedial work if required.	within 6 months
4.	Mismatch/lack of as-built drawing [Building 1: Production Building (Block-A)]	The building engineer is required to survey the structure and prepare accurate as-built drawings with all necessary connection details.	within 6 weeks
5.	Forklift impact on beam and surface damage [Building 1: Production Building (Block-A)]	Repair the damage to the beam and take precautionary measures to prevent further impact.	within 6 weeks
6.	Inconsistencies in the EA report (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))	The building engineer is required to address the inconsistencies in the revised EA report and submit the revised EA to RSC.	within 6 weeks
7.	Load plan does not comply with BNBC requirements (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))	The building engineer is required to revise the load plan and associated design documents to ensure compliance with BNBC requirements.	within 6 weeks
8.		Implement remediation work if required.	within 6 months
9.	Mismatch/Lack of information in as-built drawing (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))	The building engineer is required to survey the structures and prepare comprehensive as-built drawings.	within 6 weeks
10.	Dampness on the rooftop slab. (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))	Factory engineer is required to seal the source of water and repair the damp areas with a suitable method.	within 6 weeks
11.	Columns susceptible to vehicle impact. (Building-2: OFFICE BUILDING WITH WTP & GENERATOR (BLOCK-B & D))	The building engineer is required to provide separate barriers around the column to prevent vehicle impact.	within 6 weeks

12.	Inconsistencies in the EA report. (Building-3: Utility Building (BLOCK-C))	The building engineer is required to address the inconsistencies in the revised EA report and submit the revised EA to RSC.	within 6 weeks
13.		Implement remediation work if required.	within 6 months
14.	Lack of information in the as-built drawing (Building-3: Utility Building (BLOCK-C))	The building engineer is required to survey the structures and prepare comprehensive as-built drawings.	within 6 weeks
15.	Lack of as-built drawings (Building-5: RMS Room)	The building engineer is required to survey the structures and prepare as-built drawings, including foundation details.	within 6 weeks
16.	The design report needs to be revised. (Building-6: Storage Shed-1)	The building engineer is required to revise the design report according to the BNBC 2020 guideline and submit it to RSC for review.	within 6 weeks
17.		Carry out remedial work if required.	within 6 months
18.	Fresh Permit Requirements as per BNBC. (Building-6: Storage Shed-1)	The building engineer is required to collect fresh permit from the local authority as per BNBC.	within 6 weeks
19.	Crack in column & beam. (Building-6: Storage Shed-1)	The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.	within 6 weeks
20.	Trolley impact on column. (Building-6: Storage Shed-1)	The building engineer is required to provide a column guard around the column to avoid trolley impact.	within 6 weeks
21.	The design report needs to be revised. (Building-7: Storage Shed-2)	The building engineer is required to revise the design report and submit it to RSC for review.	within 6 weeks
22.		Carry out remedial work if required.	within 6 months
23.	Crack in column & beam joint. (Building-7: Storage Shed-2)	The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.	within 6 weeks
24.	Trolley impact on column. (Building-7: Storage Shed-2)	The building engineer is required to provide a column guard around the column to avoid trolley impact.	within 6 weeks

25.	Inconsistencies in the assessment report. (Building-9: Thanbee Print World Extension Building)	Building engineer is required to address the inconsistencies in the design report and submit revised design documents to RSC to complete the review.	within 6 weeks
26.		Carry out the suggested remedial works (if any).	within 6 months
27.	Lack of information in the prepared as-built drawings. (Building-9: Thanbee Print World Extension Building)	Building engineer is required to survey the structure and prepare the as-built drawing.	within 6 weeks
28.	Column Susceptible to trolley impact. (Building-9: Thanbee Print World Extension Building)	Building engineer is required to take necessary action to prevent the trolley impact on the columns.	within 6 weeks
29.	Dampness on the ceiling of the 5 th floor. (Building-9: Thanbee Print World Extension Building)	Factory engineer is required to seal the source of water and repair the damp areas with a suitable method.	within 6 weeks
30.	Columns susceptible to vehicle impact. (Building-9: Thanbee Print World Extension Building)	The building engineer is required to provide separate barriers around the column to prevent vehicle impact.	within 6 weeks
31.	The design report needs to be revised. (Building-10: ETP Building)	The building engineer is required to revise the design report and submit it to RSC for review.	within 6 weeks
32.		Carry out remedial work if required.	within 6 months
33.	Discrepancy in the as-built drawings. (Building-10: ETP Building)	The building engineer is required to update the as-built drawing as per the actual site condition.	within 6 weeks
34.	Crack in the brick wall. (Building-10: ETP Building)	The building engineer is required to investigate the reason for cracks, prepare an investigation report with remedial measures, and repair the cracks accordingly.	within 6 weeks
35.	Trolley impact on column. (Building-10: ETP Building)	The building engineer is required to provide a column guard around the column to avoid trolley impact.	within 6 weeks
36.	Water ponding on the roof. (Building-10: ETP Building)	The building engineer is required to improve the drainage system with an adequate slope.	within 6 weeks

37.	Mismatch found in prepared drawings. (Building-11: Gate & RMS Room)	Building engineer is required to survey the structure and prepare the as-built drawing.	within 6 weeks
38.	Lack of as-built drawings (Building-12: Wastage Store Shed)	The building engineer is required to survey the structures and prepare as-built drawings including foundation details, and necessary connection information.	within 6 weeks

Survey Limitations and Assumptions

This report is about the private and confidential use of RSC for whom it was prepared, together with their professional advisors as appropriate. It should not be reproduced as a whole or in part or relied upon by third parties for any use without the express written permission of RSC.

This report can be used in discussion with the supplier or factory owner as a means to rectify or address any observations made. The report is not comprehensive and is limited to what could be observed during a visual inspection of the building.

This Report is not intended to be treated as a generalized inspection and does not cover the deterioration of structural members through dampness, fungal or insect attack, nor does it deal with problems and defects of a non-structural nature. Other non-structural aspects of the building, such as fire safety, have not been assessed in this survey.

Except as otherwise noted, drains and other services were not viewed or tested during our inspection and are therefore similarly excluded from this Report. We have not inspected any parts of the structure that are covered, unexposed, or inaccessible, and we are therefore unable to report that any such part of the property is free from defect.

External inspection of the façade walls has generally been carried out from ground level only by visual sighting. No opening-up works were carried out (except as noted), and we rely on the Architect's and Engineer's drawings provided for us for our views on concealed parts of the structure and, in particular, foundations. The strengths of materials and components are untested, and we recommend that the factory owners' Building Engineer carry out in situ testing over and above those suggested to satisfy themselves with the material strengths and component details.

Recommendations, where given, are to provide indicative advice only, are not exhaustive, relate solely to identifying key and obvious structural defects as identified in this presentation, and do not take the form of or constitute a specification for works. We take no responsibility for the construction. This report does not interfere with the factory owner's Building Engineers' responsibility for the structural performance of this building. The Building Engineer remains fully responsible for the structural adequacy of the building.

This report does not comment in detail on the future seismic performance of the building and only highlights the fact that the building may experience significant damage or collapse in a seismic event, along with many others in the Dhaka region.

The observations in this report are based on the Engineering Judgement of the lead surveyor/engineer at the time of the survey. We assume in making these observations that no covering up of faults, defects, filling, or plastering over cracking or significant repair work has been carried out by the building owner. Any future alteration or additional work by the building owner will void this report.