

Yasin Knittex Ind. Ltd. (Extended Building)

South Panishail zerani bazar, BKSP, Gazipur, Dhaka

(23.990045, 90.259785)

23 January 2024



1. Building Information

- I. Single Storied Batch Shed**
- II. Single Storied Washing and Boiler Shed**

2. Observation

Observation-1: Inconsistencies in as-built drawings. (Batch Shed)

COLUMN SCHEDULE				
NO. OF COLUMN	COLUMN SIZE		PL TO GROUND FLOOR TOP	TIE
	BELOW GB	UP TO PL		
C-01		 GB	 10"x15" brick co	
C-02	13"x18"	 6-16mmØ	 4"Ø ms pipe	10mm Ø @6"c/c Strip



Column schedule

Steel column (I joist)

Description: Structural sectional details and connection details were not found in the provided as-built drawings. Moreover, steel pipe has been shown instead of I joist.

Observation-2: Lack of lateral stability and connection adequacy. (Batch Shed)



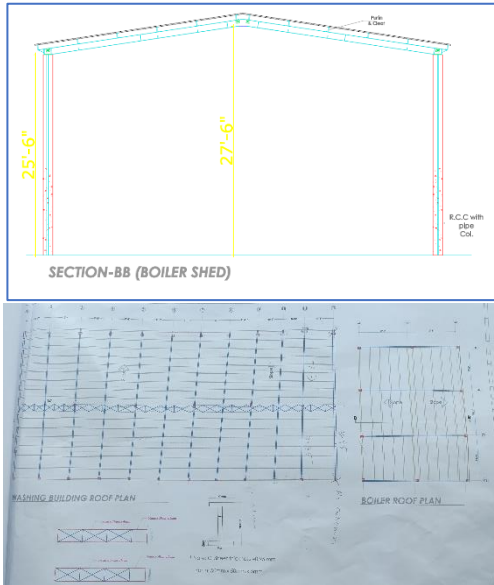
Roof truss and column connection



Steel angle connected with brick walls

Description: Lack of lateral stability system (strut and bracing), apparent inadequate members and non-engineered connection was observed. The building engineer is required to check the member, connection & stability system of the structure and suggest proper alternatives accordingly.

Observation-3: Lack of information and mismatches in as-built drawings. (Washing and Boiler Shed)



Roof layout and section



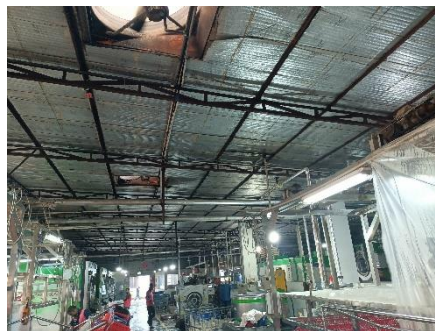
Steel framing

Description: Structural sectional details and connection details were not found in the provided as-built drawings. Also, column and truss layout not fully matched. Rafter sizes (boiler) were not mentioned.

Observation-4: Lack of lateral stability and connection adequacy. (Washing and Boiler Shed)



Connection



Truss and rafter frame



Description: Lack of lateral stability system (strut and bracing), apparent inadequate members and non-engineered connection was observed. The building engineer is required to check the member, connection & stability system of the structure and suggest proper alternatives accordingly.

Observation-5: Corrosion on steel section. (Washing and Boiler Shed)



Corrossion on steel truss



Corrossion on steel truss

Description: Severe corrosion was observed on steel members (steel truss). The building engineer is required to remove the corrosion and provide rust-proof coating on all steel members to protect from corrosion.

Observation-6: Connection gap and bolt missing in baseplate. (Washing and Boiler Shed)



Connection gap



Bolt missing

Description: Building engineer is required to survey the whole structure and identify the locations of the connection gaps and suggest proper remediation. Also, install the missing bolts where necessary.

3. Action Plan:

Observation	Action Plan	Timeline
Inconsistencies in as-built drawings. (Batch Shed)	The building engineer is required to prepare the as-built drawings with complete structural details.	within 6 weeks
Lack of lateral stability and connection adequacy. (Batch Shed)	The building engineer is required to check the member, connection & stability system of the structure and suggest proper alternatives accordingly.	within 6 weeks
Lack of lateral stability and connection adequacy. (Batch Shed)	Implement remediation work if required.	within 6 months
Lack of information and mismatches in as-built drawings. (Washing and Boiler Shed)	The building engineer is required to prepare accurate as-built drawings with complete structural details.	within 6 weeks
Lack of lateral stability and connection adequacy. (Washing and boiler Shed)	The building engineer is required to check the member, connection & stability system of the structure and suggest proper alternatives accordingly.	within 6 weeks
Lack of lateral stability and connection adequacy. (Batch Shed)	Implement remediation work if required.	within 6 months
Corrosion on steel section. (Washing and Boiler Shed)	The factory is required to remove the corrosion and provide rust-proof coating on all steel members to protect from corrosion.	within 6 weeks
Connection gap and bolt missing in baseplate. (Washing and Boiler Shed)	The building engineer is required to survey the whole structure and identify the locations of the connection gaps and suggest proper remediation. Also, install missing bolts where necessary.	within 6 weeks