

Ratool Apparels Ltd.

Ansar Road , Vangnahati , Sreepur Paurosova , Gazipur 1740

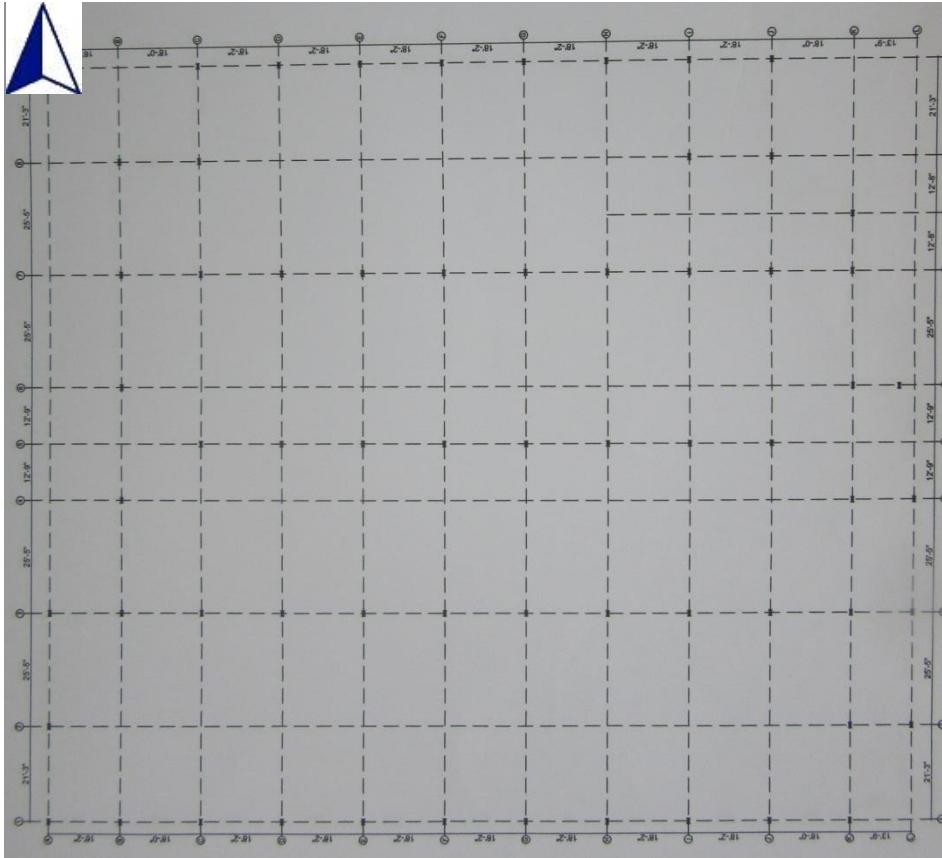
(24.199167N, 90.461111E)

18 April 2015



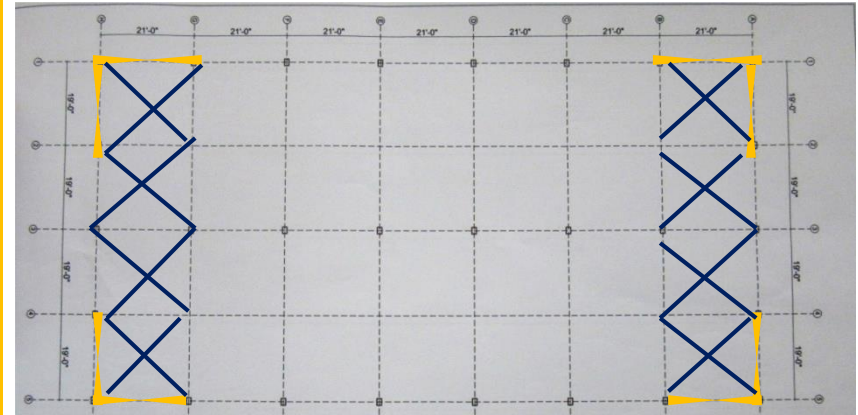
Observations

No-apparent lateral stability system

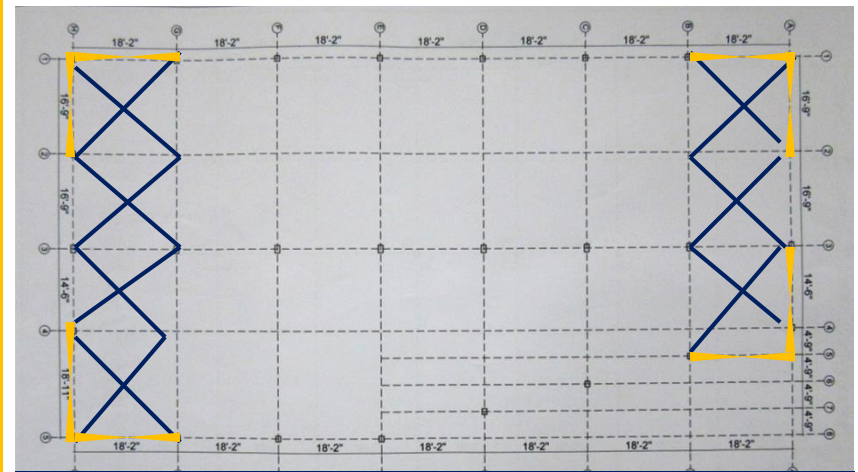


Industrial shed-01

Neither vertical or horizontal bracing were observed in the design or at during the survey as constructed structure.

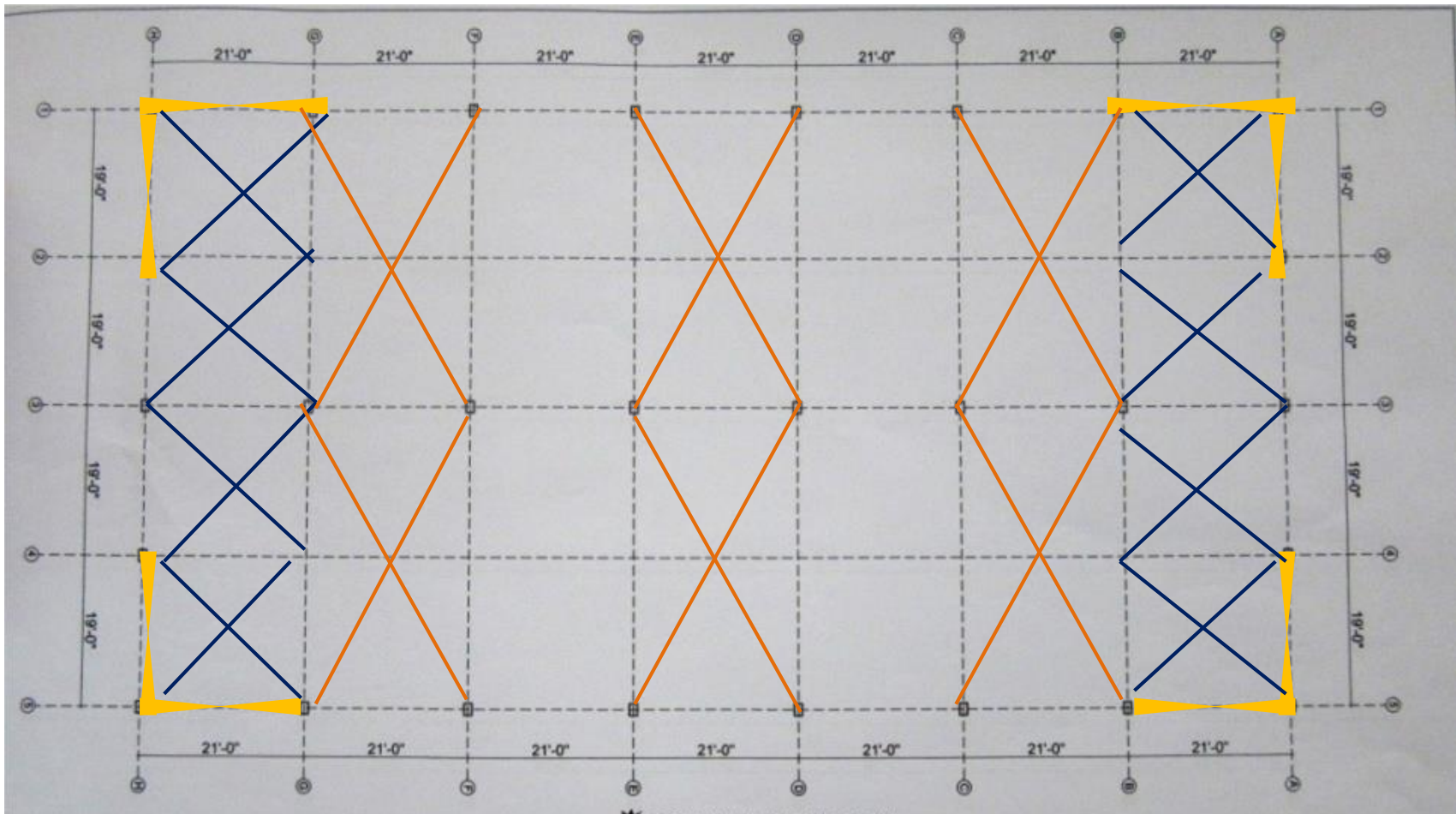


Industrial shed-03



Industrial shed-02

Non apparent lateral stability system. Possible vertical and horizontal bracing could look like the indicated drawings which were not observed on site.



Observed bracing is not on the expected position.



Observed bracing



Apparent logical position of bracing

Apparently non-engineered structural details and connections



Apparently not a full contact of the connection plates.



Missing bolts.



Non-engineered joint.



Missing bolts.



Non apparent transfer of vertical effort to columns due to the absence of steel rib.

Apparently non-engineered bracing connection



The connection of the bracing to the main steel element appears to be non-engineered.

Priority Actions

Problems Observed

General for IS1; IS2; IS3

1. No-apparent lateral stability system (missing bracing).
2. Apparently non-engineered structural details and connections (not a full connection of the plates, missing verticals plate; missing bolts).

Building IS3

3. Apparently non-engineered bracing connection.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	No-apparent lateral stability system (missing bracing)	Building Engineer to investigate the lateral stability of the buildings. Code adequacy to be ensured.	6-months
2	No-apparent lateral stability system (missing bracing)	Eventual remedial works to be defined.	6-months
3	No-apparent lateral stability system (missing bracing)	Make any structural alterations as advised by Building Engineer.	6-months
4	Apparently non-engineered structural details and connections (not a full connection of the plates, missing vertical plates; missing bolts)	Building Engineer to survey the connection details in the as built structure.	6-months
5	Apparently non-engineered structural details and connections (not a full connection of the plates, missing vertical plates; missing bolts)	Code adequacy to be ensured.	6-months
6	Apparently non-engineered structural details and connections (not a full connection of the plates, missing vertical plates; missing bolts)	Complete any structural alterations as advised by Building Engineer. Omissions to be eliminated.	6-months
7	Apparently non-engineered bracing connection	Building Engineer to survey the bracing connection details in the as built structure.	6-months
8	Apparently non-engineered bracing connection	Code adequacy to be ensured.	6-months
9	Apparently non-engineered bracing connection	Complete any structural alterations as advised by Building Engineer.	6-months