

Shomahar Sweaters Ltd. (10349)

A-99/1, Baktarpur, Kaliakoir, Gazipur.

(+24.057104N, 90.229836E)

03.June.2014



Identified Priority 2 Concerns

1st Priority 2 Concern



In addition, there is no lateral stability provided by the masonry infill walls due to their position (in front of the columns).

No lateral stability system was apparent in the North/South direction. Moment frame system was observed in the East/West direction.



2nd Priority 2 Concern



Structural drawings provided for the main building are inaccurate and incomplete. In addition, structural drawings were not available for the various ancillary buildings.

12.0 RECOMMENDATIONS:

On the basis of aforesaid conclusions, the following Recommendation are suggested for Industrial Building locates at North Boktarpur, Chandra, P. S.- Kaliakoir, Gazipur.

A) SHALLOW FOUNDATION:

The average bearing capacity of the Shallow Foundation as Isolated column footings at a depth of 7 ft measured from EGL particularly at and around the bore holes may be considered in the following way:

- To be considered 1.60 Tsf (F.S=2.5) for BH-1& BH-5 Only.
- To be considered 1.50 Tsf (F.S=2.5) for BH-2 Only.
- To be considered 1.70 Tsf (F.S=2.5) for BH-3 & BH- 4Only

The foundation depth for the main steel building is shallower then what was recommended in the soils report.

Soils report recommends a footing depth of 7 feet, however the structural drawings indicate a footing depth of only 5 feet.

Identified Priority 3 Concerns

1st Priority 3 Concern



No loading plans
were made
available for the
main building

Overall Stability System



The building did not feature any core or shear walls. Stability was achieved through sway action between beams and columns and masonry infill walls.

We require that these items be investigated in a Detail Engineering Assessment

Water Ingress at Roof Level



No waterproofing membrane was visible on the roof of the building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab beneath the finishes, and cause corrosion of the reinforcing steel.

Priority Actions

Problems Observed Summary

- ITEM 1: (Priority 2) No lateral stability system was apparent in the North/South direction. A moment frame system was observed in the East/West direction.**
- ITEM 2: (Priority 2) Structural drawings provided for the main building are inaccurate and incomplete. In addition, structural drawings were not available for the various ancillary buildings.**
- ITEM 3: (Priority 2) The foundation depth for the main steel building is shallower than what was recommended in the soils report.**
- ITEM 4: (Priority 2) The steel roof trusses in the Winding Shed are not supported at the panel point, but rather somewhere along the bottom chord of the truss.**
- ITEM 5: (Priority 3) No loading plans were made available for the main building.**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Priority 2 - No lateral stability system was apparent in the North/South direction. A moment frame system was observed in the East/West direction.	A Structural Engineer is to complete a Detailed Engineering Assessment of the lateral resisting system in both directions.	6-weeks
2	Priority 2 - No lateral stability system was apparent in the North/South direction. A moment frame system was observed in the East/West direction.	Implement recommendations from DEA.	6-months
3	Priority 2 - Structural drawings provided for the main building are inaccurate and incomplete. In addition, structural drawings were not available for the various ancillary buildings.	Structural Designer to review existing conditions and revise both sets of structural drawings to complete one full/accurate set of record drawings.	6-weeks
4	Priority 2 - Structural drawings provided for the main building are inaccurate and incomplete. In addition, structural drawings were not available for the various ancillary buildings.	Structural Designer to assess any discrepancies between structural drawings and existing conditions.	6-months
5	Priority 2 - The foundation depth for the main steel building is shallower than what was recommended in the soils report.	Structural Design Engineer to determine actual existing footing depths and cross-reference with soils report to ensure sufficient bearing capacity.	6-weeks
6	Priority 2 - The foundation depth for the main steel building is shallower than what was recommended in the soils report.	Revise drawings and/or provide recommendations based on findings.	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Priority 2 - The steel roof trusses in the Winding Shed are not supported at the panel point, but rather somewhere along the bottom chord of the truss.	A Detailed Engineering Assessment is required for the steel roof trusses in the Winding Shed.	6-weeks
8	Priority 2 - The steel roof trusses in the Winding Shed are not supported at the panel point, but rather somewhere along the bottom chord of the truss.	Implement recommendations from DEA.	6-months
9	Priority 3 - No loading plans were made available for the main building.	Produce loading plans based on manufacturer's design parameters.	6-weeks
10	Priority 3 - No loading plans were made available for the main building.	Post and manage loading plans.	6-months