

Ananta Garments Ltd

Ananta Sportswear Ltd

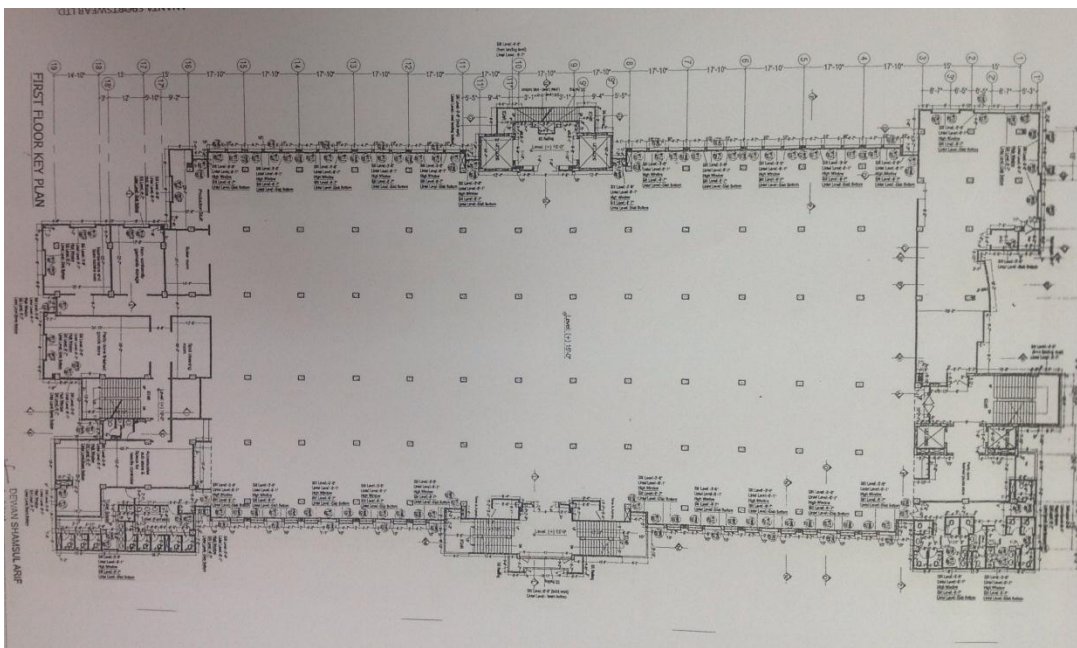
Nischintapur, Ashulia, DEPZ Road, Savar
23.92703N, 90.30931E)

22 March 2014



Observations

Columns appear to be stressed in excess of normal design limits – Building Engineer to verify concrete stresses and in-situ concrete strength



Typical Column Layout



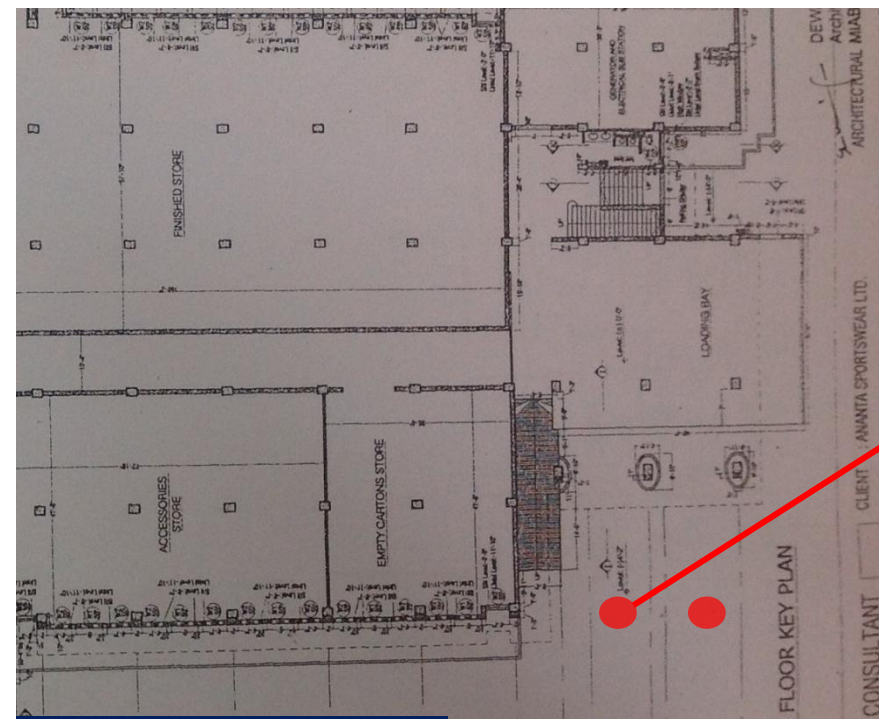
Tested Ground Floor Column

Cursory calculations indicate that the working stress of columns at Ground Floor level are at a high level.

Building Engineer to check that columns have been designed to accommodate loads.

Columns strength

The columns at the delivery entrance to the Building are at risk of being accidentally struck by a vehicle. More substantial Column protection barriers need to be provided



Ground Floor Plan



Delivery Area

2 no. columns at the delivery entrance to the Building are at risk of being accidentally struck by a vehicle.

Building Engineer to check that the columns have been adequately designed for impact loading, and to ensure protection currently provided for impact loading is adequate.



Columns at risk

Column Impact Loading

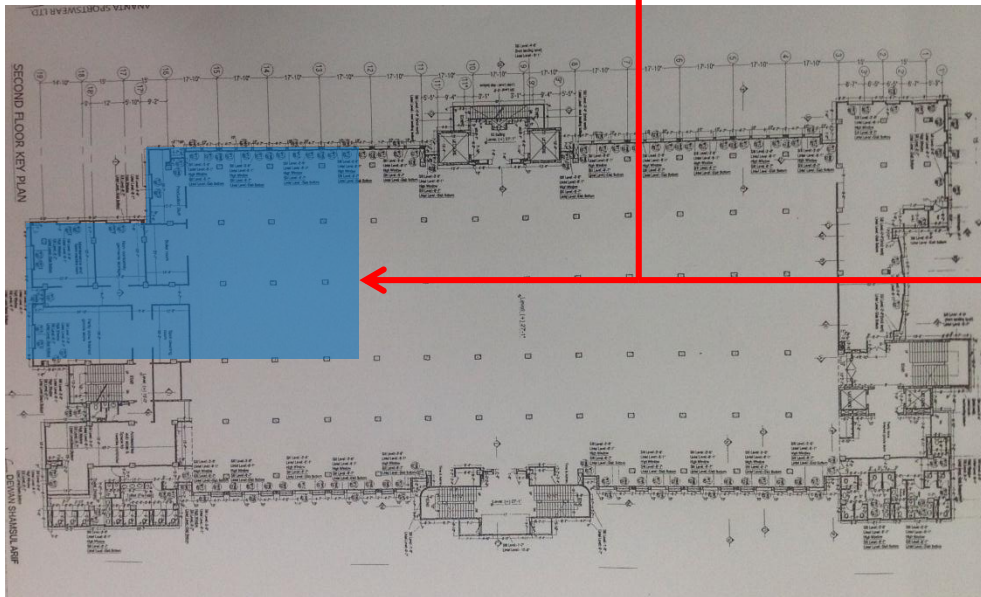
Design Check required for the storage areas as indicated to confirm the capacity of the floor structure



2nd Floor Storage Area

The Storage area to the Second Floor includes distributed loading due to stacking of boxed garments and point loading due to a hanging frame. The Storage area to the First Floor , directly below, includes loading hung from Second Floor slab.

Building Engineer to check that the floor structure has been adequately designed to carry these loads.



Typical Floor Plan



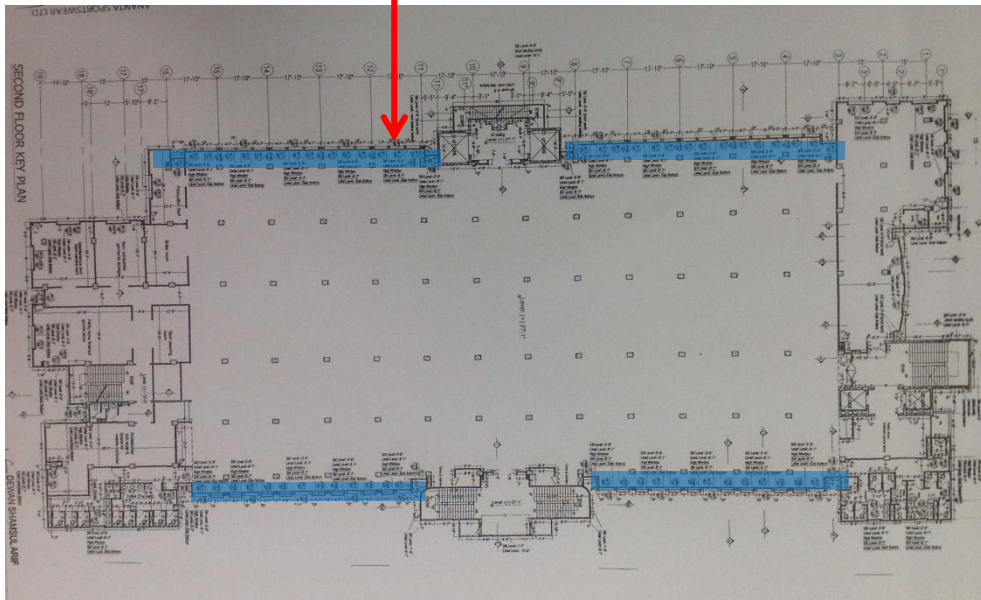
1st Floor Storage Area – Hanging Point Loading

1st & 2nd Floor Storage Area

Design check required for the floor cantilevers at the suspended floor levels to confirm their load capacity to support floor and façade loading



2m cantilevering slab (no down-stand beams)



Typical Floor Plan

There is a slab cantilever to the North and South elevations of the Building above First Floor level.

Building Engineer to check that all the floor cantilevers at the suspended floor levels have the capacity to support the floor and façade loading.



View of Façade at 1st Floor

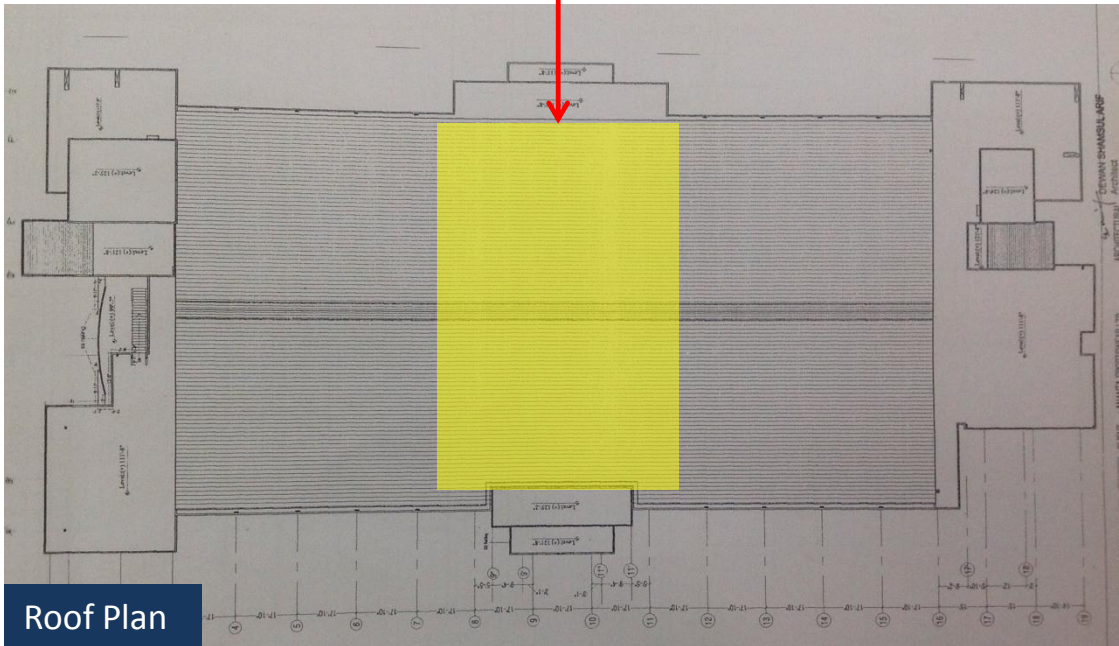
Indicates Cantilever

Design Check required for the light steel roof structures as indicated.

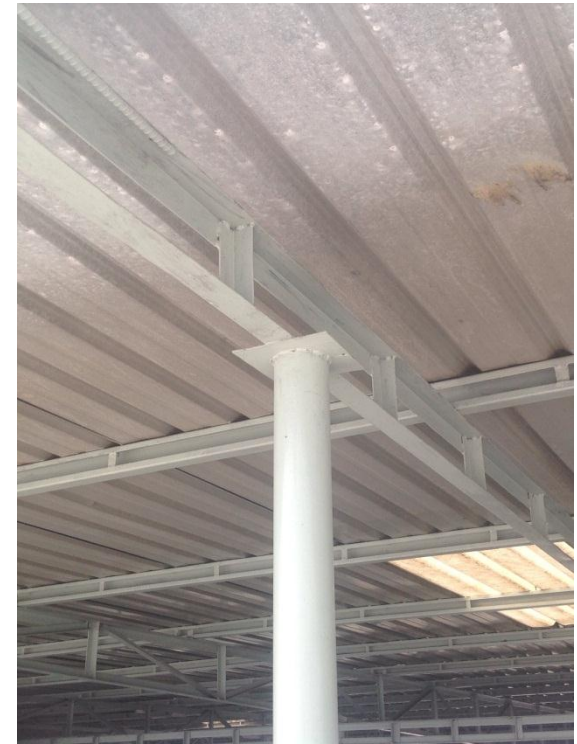


Lightweight Steel Structure

Capacity of Lightweight structure at Roof level to resist lateral loading (wind) to be checked.
All connections to be included in this check.



Roof Plan



Typical connections

Steel roof structure to Roof

11/11/2016

Secondary Buildings

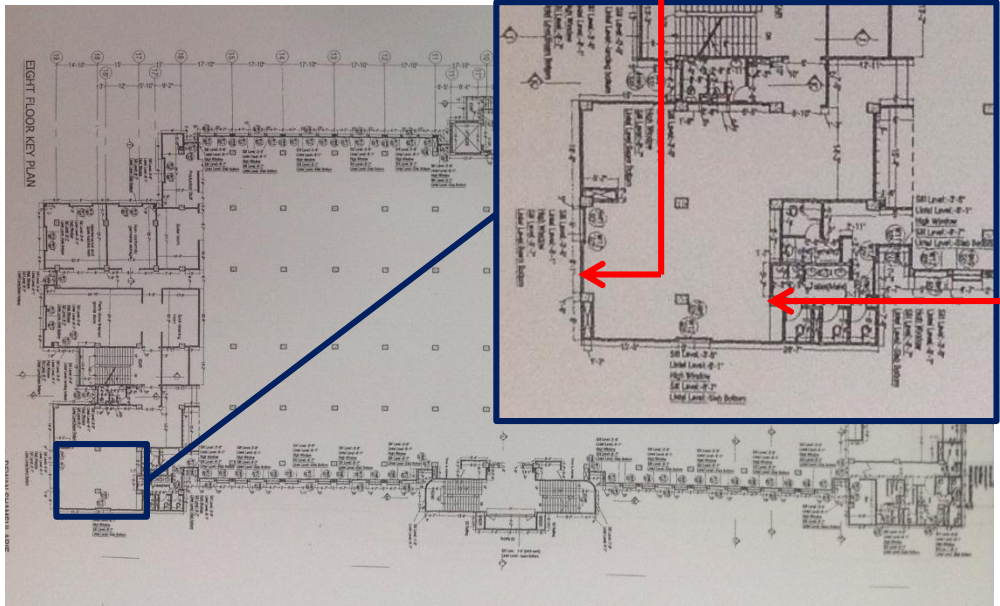


**Building Engineer to investigate the cause
of the local wall cracking at 8th floor level
as indicated**



Cracking to walls at 8th Floor level North-East corner.
Building Engineer to investigate.

Cracking to 8th Floor Washroom



Eighth Floor Plan



Cracking to 8th Floor Washroom

Priority Actions

Problems Observed

ITEM 1: Columns appear to be stressed in excess of normal design limits – Building Engineer to verify concrete stresses and in-situ concrete strength.

ITEM 2: The columns at the delivery entrance to the Building are at risk of being accidentally struck by a vehicle. More substantial Column protection barriers need to be provided.

ITEM 3: Design Check required for the storage areas as indicated to confirm the capacity of the floor structure.

ITEM 4: Design check required for the floor cantilevers at the suspended floor levels to confirm their load capacity to support floor and façade loading.

ITEM 5: Design Check required for the light steel roof structures as indicated.

ITEM 6: Building Engineer to investigate the cause of the local wall cracking at 8th floor level as indicated.

Item No.	Observation	Recommended Action Plan	Priority
1	Columns appear to be stressed in excess of normal design limits – Building Engineer to verify concrete stresses and in-situ concrete strength.	Factory Engineer to review design, loads and columns stresses.	6-weeks
2	Columns appear to be stressed in excess of normal design limits – Building Engineer to verify concrete stresses and in-situ concrete strength.	Verify insitu concrete stresses either by 100mm diameter cores or existing cylinder strength data for cores from 4 columns.	6-weeks
3	Columns appear to be stressed in excess of normal design limits – Building Engineer to verify concrete stresses and in-situ concrete strength.	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity.	6-months
4	The columns at the delivery entrance to the Building are at risk of being accidentally struck by a vehicle. More substantial Column protection barriers need to be provided.	Building Engineer to check that the columns have been adequately designed for impact loading	6-weeks
5	The columns at the delivery entrance to the Building are at risk of being accidentally struck by a vehicle. More substantial Column protection barriers need to be provided.	Suitable column protection barriers to be designed and constructed.	6-weeks
6	Design Check required for the storage areas as indicated to confirm the capacity of the floor structure.	The extent of storage areas and the weight are to be surveyed. The capacity of the floor structure is to be assessed to confirm that the structure is designed to carry these loads.	6-weeks

Item No.	Observation	Recommended Action Plan	Priority
7	Design Check required for the storage areas as indicated to confirm the capacity of the floor structure.	Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity. Loading plans to be put on each factory floor.	6-weeks
8	Design Check required for the storage areas as indicated to confirm the capacity of the floor structure.	Continue to implement the loading plan.	6-months
9	Design check required for the floor cantilevers at the suspended floor levels to confirm their load capacity to support floor and façade loading.	Building Engineer to confirm the capacity of the slab to support the combination of the floor loading and the façade loading.	6-months
10	Design Check required for the light steel roof structures as indicated.	Building Engineer to provide detailed calculations for the single storey structures and the associated light steel roofs. These should confirm their ability to withstand all wind loading pressure, suctions and uplift forces.	6-months
11	Building Engineer to investigate the cause of the local wall cracking at 8th floor level as indicated.	Building Engineer to organise exploratory opening up works to identify the cause. Remedial works to be carried out as appropriate.	6-months