

AST Knitwear Ltd

Plot: 3/1, East Chandon, Joydebpur, Gazipur
(+23.994761N, +90.407653E)

06 October 2013

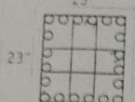
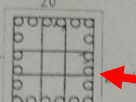
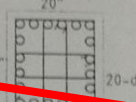
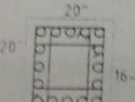
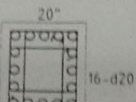
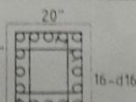
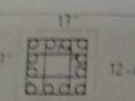
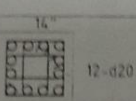
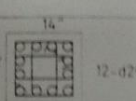


Building Observations

**As built columns at ground level smaller than
shown on permit drawings**

COLUMN SCHEDULE (COL. RATIO-1:1.5:3) (COVERING= 1.5")

INDEX

NO	BELOW GL	GR TO 2nd FL	3rd TO 5th FL
C1	23"  20-d20 D10 @ 6" c/c STR	20"  20-d20 D10 @ 6" c/c STR	20"  20-d16 D10 @ 6" c/c STR
C2	20"  16-d20 D10 @ 6" c/c STR	20"  16-d20 D10 @ 6" c/c STR	20"  16-d16 D10 @ 6" c/c STR
C3	17"  12-d20 D10 @ 7" c/c STR	14"  12-d20 D10 @ 7" c/c STR	14"  12-d20 D10 @ 7" c/c STR

Typical column size
according to drawings:
20" x 20" (500mm x 500mm)

Typical column size as
measured:
15" x 15" (380mm x 380mm)

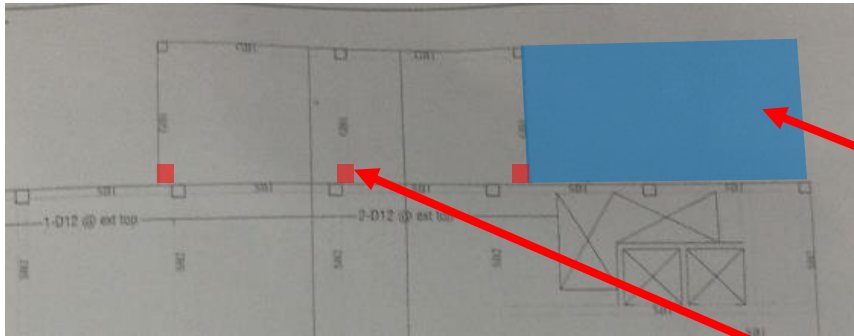


Create loading plan for all
floors

Provide calculations
showing loading and design
of columns as constructed

As built columns at ground level
smaller than shown on permit
drawings

**No permit for the additional 3 story annex office building
5 story annex building not built as shown on permit drawings**



3-Storey Annex not on structural drawings

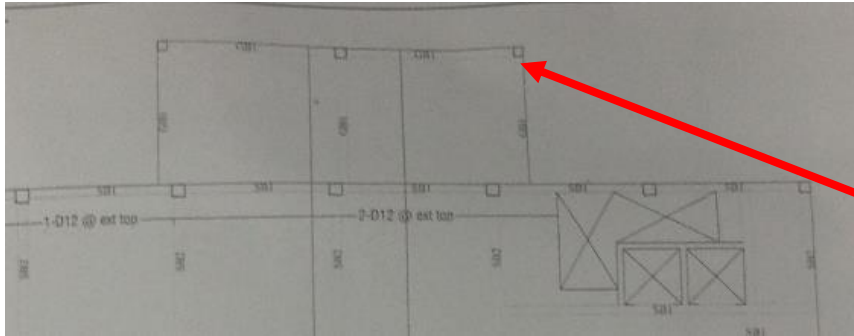


5-Storey Annex constructed as separate structure, with double column line not shown on permit drawings

Provide calculations showing loading and design of slabs, beams, columns and footings as constructed

**No permit for the additional 3 story annex office building
5 story annex building not built as shown on permit drawings**

Loose concrete at roof level of 5-story annex



Plaster is cracked on roof and is falling hazard



Mitigate source of water damage to prevent future cracking

Repair spalling render at this location.

Loose concrete at roof level of 5-story annex

**Loading on cantilever balconies
too heavy in places**



Cantilever balconies used for uncontrolled storage

Building engineer to create controlled loading plan for all floors

Designate where storage can and cannot be placed

Ensure loading on cantilever balcony slab are within structural design limits



Loading on cantilever balconies too heavy in places

Water causing damage and corrosion



Building generally showing signs of water damage on facade

Building engineer to confirm damage is not structural

Sources of water to be identified, leaks to be repaired, drainage roof drainage system to be installed / improved



Water damage occurring

Elevator lift core filled with bags of fabric for storage



Entire lift core used for heavy storage

This is a potential fire hazard

Building engineer to confirm whether the core has slabs at each floor level or open core all the way up

Either find alternative storage area, or provide floor level slabs within core to carry the load and provide fire separation

Material storage within lift core

Priority Actions

Problems Observed

1. Column strengths and As built columns at ground level smaller than shown on permit drawings
2. No permit for the additional 3 story annex office building, and 5 story annex building not built as shown on permit drawings
3. Loose concrete at roof level of 5 story annex
4. Loading on cantilever balconies too heavy in places
5. Water causing damage and corrosion
6. Elevator lift core filled with bags of fabric for storage

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Column strengths and As built columns at ground level smaller than shown on permit drawings	Factory Engineer to review design, loads and columns stresses	6-weeks
2	Column strengths and As built columns at ground level smaller than shown on permit drawings	Verify insitu concrete stresses either by cores or existing cylinder strength data for 4 typical columns at Ground Level	6-weeks
3	Column strengths and As built columns at ground level smaller than shown on permit drawings	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	No permit for the additional 3 story annex office building, and 5 story annex building not built as shown on permit drawings	Provide calculations showing the structural adequacy of all beams, slabs, columns and footings of the east side additions, taking into account the loading plans and as-built structure including additions beyond the original design.	6-months
5	Loose concrete at roof level of 5 story annex	Mitigate source of water damage at roof	6-months
6	Loose concrete at roof level of 5 story annex	Repair roof plaster	6-months

Item No.	Observation	Recommended Action Plan	Recommended Timeline
7	Loading on cantilever balconies too heavy in places	Building Engineer to create controlled loading plans for all floors designating where storage can be placed and can not be placed.	6-months
8	Loading on cantilever balconies too heavy in places	Ensure loading on west side cantilever slab are within limits	6-months
9	Water causing damage and corrosion	Engineer to inspect water damaged structure including the exterior and verify no structural damage has occurred. Install or repair roof drainage system.	6-months
10	Elevator lift core filled with bags of fabric for storage	Non-structural comment: Remove all bags of fabric and any other flammable material from lift core.	6-weeks