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AUDIT REPORT

PART 1

REF. RCCPL - ICICI BANK / SALEMABAD / AR - 008

DATE - 2022-12-20

PROJECT: SALEMABAD BRANCH

CLIENT: ICICI BANK LTD.

While visiting the site (SALEMABAD Branch, Ajmer Region) we observed a few points on various aspects as listed in the attached observation sheet in detail and submitted here our views/opinion in brief & in elaborated form with visual aids (where ever necessary) to M/S ICICI Bank Ltd, for their needful. We feel that this report will help ICICI BANK to take necessary Corrective/Preventive measures timely, and where ever required take appropriate decisions on the relocation, remodeling, or necessary rectification works etc.

At most of the branches/audit locations, the problems are observed due to improper terrace treatment, bad workmanship & poor plumbing connections. Basic construction norms are ignored. Salemabad branch was built/constructed on a बावड़ी and while construction DPC/plinth beams are seems not designed well or not executed therefore all settlement cracks are developing.

BUILDING TITLE: RENTAL | ~~OWNED~~ | LEASED

MAJOR OBSERVATIONS & ANALYSIS:

1. The building is affected badly by settlement cracks. Particularly the store and vault room areas are affected more with huge cracks & seepages. This is a serious safety concern for staff & customers. Although the building may not collapse however walls are not intact due to huge cracks and therefore not safe. It is suspected that wall bases are not strong enough and perhaps the plinth beams are not provided or are under-designed.
2. In a few places, floors are also seen settled down. This means proper compaction was not done below the floors. Normal procedure is after compaction of earth soling shall be done and above soling there will be PCC for 4-5 inches thick well compacted and then flooring is done with adhesive or on bedding material. But it is suspected here. The building is constructed on a well/बावड़ी. And the settlement is most likely due to inadequate compaction.
3. Major seepage areas are the BM room, Server room & few other areas. Seepage is coming from the ground and side walls as well in skirting areas.
4. All major cracks are observed at the junction lines of columns and beams with masonry. In some places, these cracks are at the lintel level also. But overall in the building RCC components are seen as not intact with masonry work.
5. In the pantry & toilet areas due to huge cracks in the wall's corner, the tiling work is also cracked.
6. Due to the huge cracks at the junction of masonry and RCC components, which are through and through the wall and hence surface rainwater from the external surface directly enters into the wall and causes inside seepage.
7. Due to regular seepages and poor construction quality, the plaster near the BM room is disintegrated and lost its bonding with the walls and among its own material.
8. Few windows are closed with masonry work without breaking the joints with the adjacent wall masonry this causes cracks in the plaster done at the old and new masonry of window closure. perhaps the chicken mesh or fiber mesh is also not provided at the junction.
9. The battery and server room area are badly affected due to heavy seepages and cracks in the walls. These cracks are mostly due to settlement and seepages from the ground.
10. RCC members were not observed affected due to cracks & seepages. Masonry work is more affected. This all happened mostly due to inadequate & improper technical supervision when the construction was done. Basic construction sequences are not followed.
11. The peripheral walls of the building were observed as not being treated properly and not being maintained well. Near the wall, vegetation growth was seen & small plants are also grown. This causes moisture in the roots always which results in seepage inside the building walls.

RECOMMENDATION:

1. IF IT IS POSSIBLE PLEASE THINK OF RELOCATION, IF NOT THEN THE FOLLOWING MAJOR RECTIFICATIONS CAN BE TAKEN UP.
2. IT IS ADVISED TO GO FOR RECTIFICATION OF WALLS & CRACKS. A SMALL PART OF THE AFFECTED WALL AT FLOOR LEVEL NEEDS TO BE BREAK OPEN AND CHECK THE PLINTH BEAM

STATUS FOR DECIDING THE FURTHER COURSE OF ACTION.

3. CRACK THERAPY IS ADVISED FOR AFFECTED AREAS WHEN THE PLINTH BEAM STATUS IS FOUND OK. AND IF THE PLINTH BEAM STATUS IS NOT OK THEN ENTIRE WALLS WILL NEED TO BE DISMANTLED & A PROPER WALL BASE HAS TO BE MADE (Either Plinth Beam or proper foundation for walls) & THEREAFTER RECONSTRUCTION (Masonry & Plaster) OF WALL WILL BE NEEDED.
4. CLOSED WINDOWS & OTHER EXTERNAL SURFACE OF WALLS CAN BE APPLIED WITH RMP (Ready Mix Plaster) & INTERNAL WALL SURFACES ALSO. MESH APPLICATION AT JOINTS IS A MUST.
5. L-SHAPE WATERPROOFING IS ADVISED AT THE JUNCTION OF WALLS AND FLOORS RAW (SLAB or PCC Below Flooring) SURFACE FOR PREVENTING SEEPAGES IN THE WALLS FROM THE GROUND.

PREVENTIVE MEASURES:

Following preventive measures are recommended to reduce the threat to structural stability and save the cost of maintenance & improve the quality of work in the future, where relocation is not planned.

1. Standardizing the Type of Maintenance Related Problems & Solutions for a better & quick understanding of IFMs & Vendors.

2. Making an Operation Manual with the help of Industry Expert Designed Methodologies, Guide Lines & Check Lists, etc.

3. Clear Guide Lines on UGWT & OHWT Connections & Other Plumbing Work including Rain Water Down Take Piping System.

4. Maintenance Check List & Monitoring of House Keeping Staff's Work more attentively & on a daily basis.

5. Annually one Lecture on Maintenance Related Problems & Solutions by Industry Experts for IFMs & Vendors.

6. Generating a Record of "As Built Building & Services Drawings" for all Branches, ROs, etc. for future reference.

7. Once in a 3 years building audit is advised to reassure the building condition is good.

***CORRECTIVE MEASURES*:**

Following corrective measures are recommended to reduce the risk & in the view of safety of staffs working there, where relocation is not planned.

1. Scrapping out of the entire cracked masonry walls and after the plinth beam or wall foundation status is checked it is to be reassured a proper & technically right wall masonry & plaster is done with adequate foundation below or plinth beam cast.

2. Settled/cracked flooring area needs to dismantle and redone after proper compaction & soling are done underneath the areas. Flooring will be done on grade slab/PCC.

3. The affected internal plaster is to be scrapped out and redone with new plaster with RMP (Ready Mix Plaster) material. If possible kindly take the entire surface for this treatment. Fiber mesh or chicken mesh has to be provided at the junction of masonry & RCC members (columns, beams, slabs etc.)

4. The external plaster is advised to be removed and redone with RMP (Ready Mix Plaster). Where ever necessary fiber mesh or chicken mesh is to be provided at joints in windows' old and new masonry. It is necessary to break the joints of window masonry to avoid cracks in plaster at this junction.

5. OHWT overflow to be planned properly as per the suggested methodology.

***MATERIALS SUGGESTED*:**

1. Tile Adhesives.
2. RMP (Ready Mix Plaster).
3. Waterproof Plaster Material.
4. Fiber Mesh or Chicken Mesh.
5. Waterproofing chemicals.

NOTE:- If any help is needed in getting these materials, we may be contacted. The above materials are prescribed for reference only, however, other companies' similar results-giving products/materials can also be used.

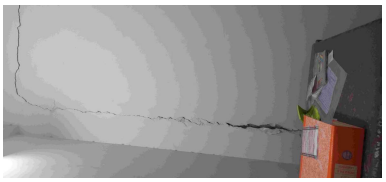
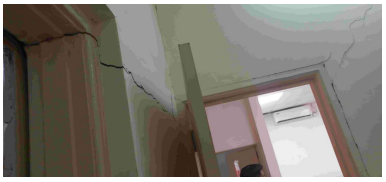
PART 2

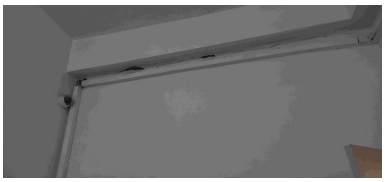
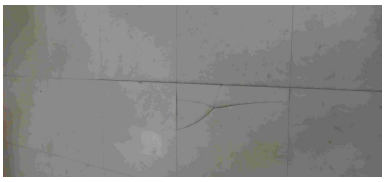
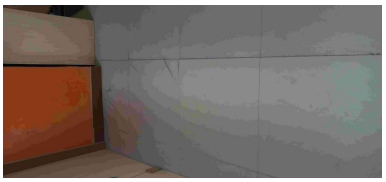
PROJECT OBSERVATION SHEETS

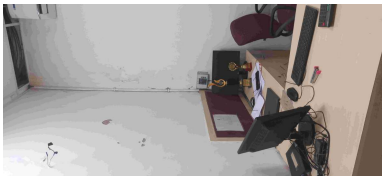
PROJECT: SALEMABAD BRANCH CLIENT: ICICI BANK LTD.

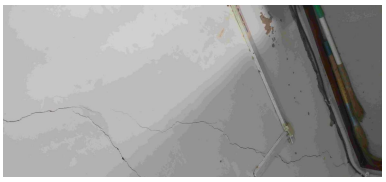
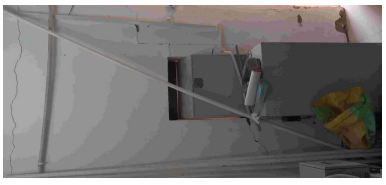
AUDIT OBSERVATION SHEET					
Reference / Rev. No			OBS / 008 (SALEMABAD) / 2022-23	DATED	2022-12-20
S.No.	OBSERVATION POINTS	DATE	CORRECTIVE / PREVENTIVE MEASURES SUGGESTED	PHOTOGRAPHS	STATUS (For Client Only)

1	Major settlement Crack in store room.	2022-12-20	1. Crack therapy can be applied. 2. Or else - Cracks are due to the settlement of the wall bases/plinth beams. Therefore it is advised to first check a small portion of the wall at the bottom level/plinth beam level and if it is observed that settlement is due to the under-designed plinth beam or due to no plinth beam, then the entire wall masonry will have to be removed and redone after providing a proper base to the wall. It can be a properly designed plinth beam or a proper base that has to be made. 3. In case the plinth beam is found intact then crack therapy can be applied.		
2	Settlement crack in store at plinth level. The building is constructed on well/ बावड़ी & it seems that proper bases are not prepared for walls.	2022-12-20	Same as above.		
3	In the storeroom, the huge cracks show the settlement of the wall.	2022-12-20	Same as above.		

4	Vault Room Photo Case - 1, Column & Beam junction crack due to settlement of wall.	2022-12-20	Same as above.		
5	Vault Room Photo Case - 2, Lintel level cracks due to inadequate bearing of lintel & due to settlement of wall.	2022-12-20	Crack therapy is advised.		
6	Vault Room Photo Case - 3, Lintel level cracks due to inadequate bearing of lintel & due to settlement of wall.	2022-12-20	Same as S No. 1.		
7	Vault Room Photo Case - 4, Lintel level cracks due to inadequate bearing of lintel & due to settlement of wall.	2022-12-20	Same as S No. 1.		
8	Vault Room Photo Case - 5, Due to so many building cracks building has become very weak/जर्जर.	2022-12-20	Relocation is advised.		
9	Pantry corner Crack from top to bottom.	2022-12-20	Crack therapy can be applied if major rectification work has not been opted for.		

10	Severe cracks have developed. building is not safe to work in.	2022-12-20	Relocation is advised.		
11	Skirting level seepage is seen & it is likely due to poor plumbing in the pantry sink area.	2022-12-20	Pantry sink-related plumbing can be set right for no leakage/seepage.		
12	Due to cracks development in the walls, the toilet tiling in the corner is also cracked.	2022-12-20	For all common causes the same can be followed as advised. Relocation is the best option.		
13	Outside of the vault room wall showing seepages.	2022-12-20	For all common causes the same can be followed as advised. Relocation is the best option.		
14	Main Lobby area floor settlement due to improper/inadequate compaction below flooring. Case 1	2022-12-20	It is advised to remove the settled tiling area flooring and redo it after good compaction is done for the tiling base.		
15	Flooring settlement case 2.	2022-12-20	It is advised to remove the settled tiling area flooring and redo it after good compaction is done for the tiling base.		

16	Very poor quality plaster is observed near the BM room.	2022-12-20	Scrapping out of the entire affected plaster and redoing with good RMP material is advised.		
17	BM Room area wall seepage, and plaster uprooting is taking place.	2022-12-20	Scrapping out of the entire affected plaster and redoing with good RMP material is advised.		
18	Skirting Area was affected due to excessive seepage.	2022-12-20	L Shaped waterproofing can be done at the junction of the flooring & wall joint, if relocation is not planned.		
19	Not much problems at terrace. Could not be seen due non availability of ladder or staircase.	2022-12-20	Overflow of OHWT can be done properly.		
20	Backside wall condition of bank building.	2022-12-20	All vegetation growth & other scrap materials need to be removed from the wall floor junction all along and a proper gola can be made to not allow water stagnation near the wall.		

21	Window edges and surrounding area wall plaster is also seepage causing inside the building at this wall.	2022-11-25	Window edges and surrounding affected plaster can be removed and redone with the new RMP plaster material after applying the mesh at the joint.		
22	Battery room cum server room. Huge seepage above the skirting level.	2022-12-20	Scrapping out of entire wall plaster for affected areas and then redoing with new RMP material.		
23	Server room case 2 - Cracks in walls.	2022-12-20	Scrapping out of entire wall plaster for affected areas and then redoing with new RMP material after joint treatment.		
24	Server room case 3 - Cracks in walls.	2022-12-20	Scrapping out of entire wall plaster for affected areas and then redoing with new RMP material after joint treatment.		
25	Server room case 4 - Cracks in walls.	2022-12-20	Scrapping out of entire wall plaster for affected areas and then redoing with new RMP material after joint treatment.		
26	Server room case 4 - Cracks in walls.	2022-12-20	Scrapping out of entire wall plaster for affected areas and then redoing with new RMP material after joint treatment.		

CHECK LIST

VISIT DATE: 2022-12-20

PROJECT: SALEMABAD BRANCH CLIENT: ICICI BANK LTD.

S.NO	OBSERVATION POINTS FOR SITE INSPECTION	RATING SCALE	RATING	DETAILED DESCRIPTION	LOCATION	REMARK
1	Visual Inspection of Over all Building from Structure Stability Point of View	10	3	It was told that the building is constructed on a well (बावड़ी). Most of the walls are settling down showing huge cracks in walls. It is also suspected that perhaps the plinth beams are not constructed or not designed properly.	Locker Side Area is more affected.	
2	External Side Observation, if any	10	4	Not OK.	Exterior Side	
3	Observation on Foundation	10	3	It is an RCC building but the plinth beam seems not designed well or not constructed, therefore walls are settling down.	Store & Vault Room Area	
4	Settlement Cracks in Walls	10	2.5	Only wall part is being seen settling down in this pic. This indicates that either plinth beam is not cast or under designed in this RCC structure.		
5	Settlement Cracks in floors	10	3	Two - three locations floor is seen settling down. This also happens due to improper compaction & soling below the floor PCC.	Main Hall Banking Area.	
6	Moisture / Dampness Visibility in Ceiling Areas	10	3.5	YES, It is seen in a lot of places as shown in the photographs.	Store & Vault Room Area	
7	Moisture / Dampness Visibility in Walls Areas	10	3	YES, in A lot of places it is observed.	Mostly in Store/Record Room & Vault Room	

8	Moisture / Dampness Visibility above Skirting Areas.	10	3	YES, In a lot of places.	Store & Vault Room Area + Banking Area also.	
9	Check for Plaster Strength (Intact or not) - Lighting Hammering Action.	10	3	Mostly the plaster is being deteriorated due to continuous seepage & cracks development.		
10	Visible Up Rooting in Floors, If Any	10	4	YES, In one - two locations in the main banking area hall.	Main Hall Banking Area.	
11	Visible Up Rooting in Ceiling Areas Plasters, If Any	10	7	Not seen		
12	Visible Up Rooting in Walls Areas Plaster, If Any	10	4	YES, At a lot of places, mostly in cracked areas.		
13	Visible Concrete Deterioration in Slabs, If Any			Not Seen.		
14	Visible Concrete Deterioration in Beams, If Any			Not Seen.		
15	Visible Concrete Deterioration in Columns			Not Seen.		
16	Visible Cracks / Deterioration in Stone Patti Roofs, If Any			NA. This is an RCC building.		
17	Visual Stability Check for Projections / Partitions if any (Horizontal).	10	7	Not seen.		
18	Visual Stability Check for Parapet Walls, if any.			The terrace could not be checked/inspected due to the non-availability of access.		
19	Water Leakage through RCC Column / Beam / Slab, if any			NO		

20	Water leakage through Masonry Structure	10	4	YES, In a lot of places where seepage is seen in the walls as per photographs.		
21	Over Head Water Storage Tanks & Plumbing Connection Status.			Could not be seen closely due to non-availability of access/staircase/ladder. But this is a common problem at most of the locations. But it seems the over flow is not planned.		
22	Plumbing Connection Status in general			OK, In the toilet area.		
23	Terrace Area Checking in general			Due to the non-availability of access/staircase/ladder, the terrace could not be seen.		

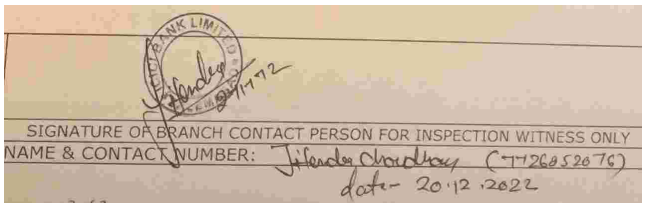
TOTAL RATING SCALE : 140

TOTAL RATING : 54

RATING INDEX: 0.39

RECOMMENDATION : 1. There is major rectification work is needed including checking of plinth beams. 2. Dismantling the cracked walls and redoing after treatment of settling cause, which is most likely plinth beam related. 3. Then redoing the plaster with RMP material. 4. Wherever needed the floors also to be dismantled then proper compaction below flooring shall be done before redoing of flooring work. 5. Or else relocation is advised.

SIGNATURE OF AUDITOR



SIGNATURE OF BRANCH CONTACT PERSON FOR INSPECTION WITNESS ONLY

JITENDRA CHOUDHARY

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