RAJSHREE CONSOLIDATED
CONSULTING PRIVATE LIMITED

No.101, Shakun Elegance, MBS Highway, Kota - 324005
Rajasthan, India

+91 9351715093 | +91 9116634040

rcc.1ho@gmail.com | info@rccpl.org

PROJECT : ICICI BANK ICMC, UDAIPUR

CLIENT : ICICI BANK LTD.

AUDIT REPORT

PART 1

REF. RCCPL - ICICI BANK ICMC, UDAIPUR / ICICI Bank ICMC, UDAIPUR / AR - 035

DATE - 2024-08-02

PROJECT: ICICI BANK ICMC, UDAIPUR

CLIENT: ICICI BANK LTD.

While visiting the site 'ICMC UDAIPUR' we observed a lot of points on various aspects as listed in the attached observation sheet in detail and submitted herewith our views/opinion in brief & in elaborated form with visual aids (wherever, 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 in time & wherever required to take appropriate decisions on the relocation / remodeling, or necessary rectification works, etc.

Most of the observation points are on huge seepages, cracks, bad workmanship & ignorance in construction sequences & processes. Basic construction norms are not followed. This is an old building RCC frame structure at ground floor & bank occupied in 2007 as per bank records (details given by ICMC).

BUILDING TITLE: **RENTED***

MAJOR OBSERVATIONS & ANALYSIS:

1. It is observed that most of the problems are quality related issues, construction work was not done correctly, there was no technical supervision, so the quality, construction sequences and the basic construction norms are not followed. And this is causing the bank recurring exepenses on maintenance in spite of spending the money as per vendor rates. It seems the work is executed at the mercy of the unskilled labours of bank vendors.
2. As built drawings are not available for the buildings at almost all the locations of audit conducted & because of this bank is spending lot of money on the different tests & analysis work.
3. The building floor level inside the premises is on higher side by almost a difference of approximately 2' to 2.5' from level of road out side. So seems to be in safer side from flooding conditions point of view.
4. Tests on floor could not be conducted/done since it was decided by bank at a later stage. However, now these tests will be conducted on floor as additional work.
5. Leakage/seepage incidences are observed at few places due to the poor construction/installation quality. Technically correct supervision perhaps not done at the time of construction/installation. The regular cleaning and house keeping is not done at the mumty part of terrace. The terrace mumty area was found badly affected with huge seepage through cracks developed between masonry wall and slab & other cracks developed in parapet columns & walls.
6. The entire outer wall & inner wall surface of the corridor all around the vault room in basement was observed OK on physical/visual inspection. But on the inspection of prepared surface (exposed surface for conducting tests after removal of plaster) porosity was observed in the vault room concrete wall. This might be due to voids, cracks, seggregation & other problems like inproper compaction etc. at the time of construction, offcourse affecting the strength of the concrete wall.
7. At the terrace area the parapet columns & entire stretch of parapet wall are observed badly cracked (up to the extent of '**RISK**') and is resulting in (1) Rusting inside steel ultimately reducting the strength of the building. When in future if upper floors are planned to construct then this rusted steel of parapet columns will not support as required. (2) Through the cracks developed due to rusted steel the rain water entry in to the parapet column & slab part below column and further rust the steel of column & slab/beams to increase the cracks & more water will enter & the deterioration process will speed up. (3) Severely cracked parapet wall pieces may '**FALL**' any time on parked two wheelers, moving staff (ICMC & Security & other cash carrying indiviudals) at ground floor in the front side.
8. Although the terrace area was observed with good house keeping & cleaning but also observed few severe cracks on the terrace. Already done water proofing treatment layer was observed uprooted allowing the rain water entry in the terrace slab. This will rust the slab/beam steel & cause seepage in side the building. After few years this process may trigger the sequential problems.

9. At some locations cracks were observed in the wall areas at right side of the main entry to ICMC building & in processing room as well. Ignorance for a longer period may cause increase in this problem & other consequential triggering effects ultimately to increase the recurring expenses on maintenance may cause.

10. Flooring damage was observed at few places. Perhaps the type of flooring adopted for these areas was not as correct as needed. For heavy duty normally the industrial flooring (Ironite Flooring/Trimix Flooring/Kota Stone/Heavy duty Tile flooring) is considered. So that damages are minimised.

11. In the walls & ceilings some placaes huge seepages were observed due to water leakages/seepages from other side water sources. And in result the cement plaster is getting spoiled/damaged.

12. Outer & Inner surfaces of cement plastered walls of '**VAULT ROOM**' were observed in '**GOOD CONDITION**'. Means no hollow sound in plastered surface, no disintigration or loosening of bonding etc. But after removal of this cement plaster for exposing the vault room concrete wall, surface of concrete wall was observed with porosity/honeycombing, and this directly affects strength of the concrete wall. The test results are also not uniform, means concrete quality is doubtful.

13. **'NDT Hammer'** Tests & '**USPV'** Tests were conducted on the vault room walls for in total 5 locations. For USPV Test 2 locations - One at both side of vault main entry left side wall & Second on the both sides of vault room main entry right side wall using direct method & at 3 locations - Each on the wall of vault room left, right & rear side on outer surface using indirect method. Normally these tests are conducted to know the quality of concrete and on new/base/fresh concrete surfaces. But here the vault room concrete walls are cement plastered from both side and the concrete surface had to be prepared removing the cement plaster. However, in this way prepared surface does not come as smoothly as desired for the tests some times, so results are likely to be affected.

14. Test Results of '**NDT Hammer'** test are not uniform. The variation is observed from '**19.50 N/sq mm to 40 N/sq mm'**.This indicates the '**QUALITY OF CONCRETE IS NOT CONSISTENT**'. At some places it is '**GOOD**' while at other places it is '**DOUBTFUL/BELOW AVERAGE**' also. This may be due to presence of '**CRACKS, VOIDS & IMPERFECTIONS**' in the concrete and this is most likely due to poor workmenship at the time of casting this concrete. It may be due to improper & inadequate compaction of concrete, improper/inadequate proportion of constituents of concrete. All these **flaws or lackings** are normally observed caused due to **incompetent technical supervision** and when construction sequences are not followed.

15. Test results of '**Ultrasonic Pulse Velocity Test'** are also not uniform & variation is observed from '**1.601 KM/S to 4.253 KM/S'**. This indicates concrete is '**GOOD**' at some places, while '**DOUBTFULL'** at other places as per the results & may be haveing few **internal flaws** or **segregation** at the location caused by poor workmenship at the time of casting of this concrete or there could be micro cracks as well. All these flaws or lackings are normally observed caused due to **incompetent technical supervision** and construction sequences & processes are not followed.

16. In all the toilet areas the tile flooring is not provided with '**EPOXY GROUTING**' with the spacer joints so the water seepages through the tiling joints are suspected travelling below the floor & likely to cause seepages at above skirting areas in other areas in coming time.

17. On the terrace the water proofing treatment done is exposed to wheather not covered with any '**PROTECTIVE LAYER**' so due to wheathering effect & due to man & material movement on the water proofing layer it is getting damaged/worn out, resulting the recurring expenses to the ICICI Bank for maintenances.

18. It was observed in the battery room that internal cement plaster affecting due to acid fumes. The plaster getting disintigrated & loosing the bonding.

LIMITATIONS OF THE TESTS (NDT REBOUND HAMMER & USPV):

1. Observations & analysis on ICICI Bank desired NDT Hammer & USPV tests are lilmited to the test locations ONLY. Because the consistency of the quality of concreting may vary from location to location in the entire pour of concrete due to various reasons (like inadequate compaction, inadequate proportion, bad quality of construction material (raw material), bad workmenship etc.). But here it is assumed that the test results will hold good for other areas also and interpretations & recommendations are made based on the test result's assumed applicability on entire surface areas.

2. The suggested test results (NDT Rebound Hammer & USPV) normally are advised to be conducted on new concrete surface/mother concrete surface for better results. When the cement plastered concrete surface is exposed as a part of surface preparation using the mechanical means (grinder/cutter, hammer, chiseling etc.) then the original concrete surface is likely to damage and hence some times the surface is not achieved as good & smooth as it is desired for the test. And in this way the conducted tests may give unrealistic results/vaules also some times.

RECOMMENDATION:

1. *IT IS ADVISED FOR ALL ICMCs, WHERE THE VAULT ROOM IS LOCATED IN THE BASEMENT OR AT GROUND FLOOR, A 2-2.5' HIEGHT LONGITUDINAL RCC PEDESTALS CAN BE COSTRUCTED FOR UP LIFTING THE ENTIRE ROW OF LOCKERS, AS PER NEED OF THE BANK.*
2. *MOST OF THE PROBLEMS ARE OBSERVED DUE TO THE LACKING IN TECHNICAL SUPERVISION WHILE EXECUTION WAS DONE. ATLEAST NOW FOR RECTIFICATION WORK THE PROPER TECHNICAL SUPERVISION IS ADVISED TO BE ENSURED & IN FUTURE WHILE CONSTRUCTION ITSELF THE TECHNICAL SUPREVISION NEEDS TO BE ENSURED FOR CORRECT EXECUTION. THE EXECUTION OF WORK DURING THE NEW CONSTRUCTION & IN RECTIFICATION WORK AS WELL SHOULD NOT BE LEFT ON THE DISCRETION OF VENDORS OR LABOURS OF VENDORS. IF THE QUALITY IS MAINTAINED THEN IT WILL HELP REDUCING THE MAINTENANCE COST DRASTICALLY.*
3. IT IS ADVISED TO GENERATE/CREAT A RECORD OF AS BUILT DRAWINGS FOR ALL BRANCHES/ROs/ICMCs etc. FOR FUTURE REFERENCE. THIS WILL HELP BANK TO REDUCE COST OF STRUCTURAL ANALYSIS & OTHER BUILDING RELATED ISSUES.
4. IT IS ADVISED TO CONSULT THE INDUSTRY EXPERTS BEFORE CONCLUDING UPON THE TYPE OF TESTS REQUIRED FOR A BUILDING EVALUATION. EXACTLY FOR WHAT PURPOSE/OUTCOME (AS RESULTS) THE TESTS ARE BEING PROPOSED. THIS WILL HELP MORE IN APPROPRIATION OF APPLICABLE TESTS OR DECIDING THE APROPRIATE TESTS.
5. INJECTION GROUTING IS ADVISED IN THE VAULT ROOM CONCRETE WALLS TO OVERCOME THE EFFECT OF POOR TEST RESULTS.
6. THE DAMAGED FLOORING AREAS ARE ADVISED FOR REPLACING THE ENTIRE FLOORING BY HARD FLOORING MATERIAL (KOTA STONE/TRIMIX/IRONITE FLOORING etc.) AS PER NEED OF THE BANK.
7. IT IS ADVISED TO SCRAPOUT THE ENTIRE AFFECTED PLASTER AND REDONE WITH THE RMP MATERIAL, WHEREVER NEEDED.
8. A LOT OF RECTIFICATION WORK IS NEEDED IN THE BUILDING AS MENTIONED IN THE OBSERVATION SHEET POINTS. SO THE BANK IS ADVISED TO TAKE THE RECTIFICATION WORK AS EARLY AS POSSIBLE.
9. REPAIRING OF PARAPET WALL SPECIFICALLY IS ADVISED TO BE TAKEN UP ON SOS BASIS. THE PRESENT CONDITION OF PARAPET WALL AT TERRACE IS **'SEVERE' & 'RISKY'.**
10. REFURBISHMENT IS ADVISED AS PER THE METHODOLOGY SUGGESTED WHEREVER STEEL IS EXPOSED & STARTED RUSTING {TERRACE AREA PARAPET COLUMNS & WALLS (IF REMOVING & NEW CONSTRUCTION IS NOT OPTED)}.
11. IN THE TOILET AREAS TILING JOINTS IN THE FLOORS AND IN WALLS SHALL BE PROVIDED WITH 3 MM SPACER WITH EPOXY GROUTING.
12. THE CRACKS IN WALLS & SLABS WHEREVER OBSERVED SHALL BE TREATED WITH THE SUGGESTED CRACK THERAPY.
13. OHWT ARE ADVISED TO PLAN WITH WELL PLANNED OVERFLOW DESIGNED SYSTEM TO ENSURE NO OVERFLOW & OTHER THAN RAIN WATER ACCUMULATION/STAGNATION TAKES PLACE ON

THE TERRACE.

14. ON THE TERRACE THE WATER PROOFING LAYER NEEDS TO BE PROTECTED WITH A PROTECTIVE LAYER, WHICH CAN BE SCREED CONCRETE OR RICH CEMENT MORTAR PLASTER. THIS WILL REDUCE THE RECURRING EXPENSES ON WATER PROOFING.
15. A PROTECTIVE LAYER (MAY BE CEMENT SHEET OR SOME OTHER SUITABLE ACID FUMES RESISTIVE MATERIAL) IS ADVISED TO PUT AS A BARRIER BETWEEN BATTERIES & PLASTERED WALL SURFACE.

PREVENTIVE MEASURES:

Following preventive measures are recommended generally to reduce the threat to structural stability and save the cost of maintenance & improve the quality of work in any proposed new or old building, where relocation is not planned.

1. A proper building audit shall be conducted by the industry expert before buying or taking any premises on lease. The building shall be evaluated on all necessary parameters related to structural stability, plumbing work, seepages, water leakages, cracks, settlement etc. & shall be ensured of required safety from the end use/business point of view.
2. Standardizing the Type of Maintenance Related Problems & Solutions for a better & quick understanding of IFMs & Vendors.
3. Making an Operation Manual with the help of Industry Expert Designed Methodologies, Guide Lines & Check Lists, etc. so that IFMs will get ready solutions & procedures for different type of problems.
4. A strict quality control in technical supervision while construction/rectification work to ensure the correct construction & construction sequence to minimise the recurring maintanance cost.
5. Clear Guide Lines on UGWT & OHWT Connections & Other Plumbing Works including Rain Water Down Take Piping System.
6. Maintenance Check List & Monitoring of House Keeping Staff's Work more attentively & on a daily basis.
7. Annually one Lecture on Maintenance Related Problems & Solutions by Industry Experts for IFMs & Vendors.
8. Inclusion of some important clauses in the agreement document between land lord & ICICI Bank to ensure the scope of work of landlord in terms of maintanance.
9. Generating a Record of "As Built Building & Services Drawings" for all Branches, ICMCs, ROs, etc. for future reference.
10. Once in a 3 years building audit is advised to reassure the building condition is good & safe to work there.

A set of "AS BUILT DRAWINGS" of the building premise shall be maintained/asked in easy traceability mode for the following streams.

- Architectural Drgs.
- Structural Drgs.
- MEP Services Drgs.
- Networking related Drgs.

***CORRECTIVE MEASURES*:**

Following corrective measures are recommended to reduce the risk & in the view of safety of staffs working there along with customers, if this premises are opted to take on/continue on lease.

1. ALL mentioned checkpoints (in the checklist) and observation points (in the observation sheets) need to be read & well understood for taking the rectification execution work. The execution shall be carried out as per the methodologies suggested & under strict technical supervision. In civil work most of the issues occur at later stages because of lacking of technical supervision at the time of construction, therefore at least the rectification work should be carried out under strict technical supervision ONLY.
2. Scrapping out of the entire internal/external plaster of affected wall/ceiling areas for redone using the RMP material after the water source is closed.
3. Other rectifications as advised in respective areas of the building and shown with photographs in the observation sheets pointwise, shall be taken up.
4. Plumbing/Piping System - vertical pipes to be kept away from wall surface by 2".
5. Water accumulation & continious moist enviornment at terrace & on other areas needs to be totally stopped.
6. As per recommendation longitudinal RCC pedestals may be cast to up lift the lockers by 2-2.5' & accordingly the functional floor level between the two rows of lockers can also be planned accordingly keeping in to the emergency situation in mind.
7. All toilet tile flooring & wall is to be done with epoxy grouting using 3 mm spacer.
8. All AC drains shall be planned properly deciding the designed route & destination.
9. All points as mentioned in the recommendations, shall be attended as per need of the bank.
10. The terrace water proofing system needs to be protected by a protective layer (which can be screed concrete or rich cement mortar or any tiling system) as per need of the bank.
11. The badly damaged terrace parapet wall needs to be removed completely & redone with new construction in strict technical supervision.
12. Refurbishment on terrace parapet cracked coloumns needs to be taken as early as possible.
13. Injection grouting shall be done in the vault concrete wall as per need of the bank seeing the poor results of rebound hammer & USPV tests conducted.

***SPECIALIZED MATERIALS SUGGESTED*:**

1. Crack Seallers
2. RMP (Ready Mix Plaster) Materials.
3. Epoxy Grouting Material.
4. Non shrink grouting material.
5. Epoxy grouting material.
6. Cement
7. Sand
8. Ready Mix Concrete
9. Sika Rustoff - 100 (Rust Remover)

10. Sikatop Armatec - 108 Plus (Anti Corrosive Coating)
11. Sikadur - 32 LP (Structural Bonding)
12. Sika - Monotop 122 F (PMM - Polymer Modified Mortar
13. Injection grouting system & material.
14. Trimix & Ironite Flooring Materials, Kota Stone slabs
15. Anti acid fumes or acid fumes resistant barrier for battery room (Cement Sheet or some thing like this).

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 materials can also be used.

***METHODOLOGY*:**

RMP PLASTER THERAPY | RCC MEMBERS STRUCTURAL REPAIR (REFURBISHMENT) | CRACK THERAPY | EPOXY GROUTING | RAINWATER DOWN TAKE PIPES PLANNING | INJECTION GROUTING | RCC PEDESTAL | SCREED CONCRETE/TILING WITH THERMAL INSULATION VALUES

Note:-

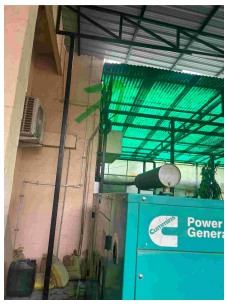
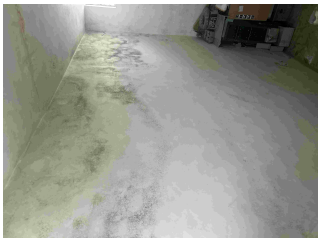
1. The test report for different tests conducted at the site can be submitted as and when needed with in one month of the report submission.
2. If ICICI Bank needs any help in interpretation of recommendations, observation, analysis, corrective - preventive actions, may kindly contact us and we will be happy to help.

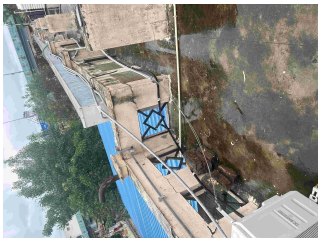
PART 2

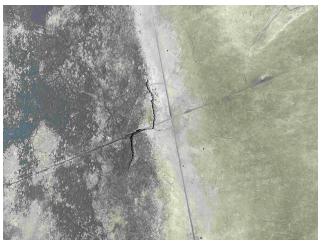
PROJECT OBSERVATION SHEETS

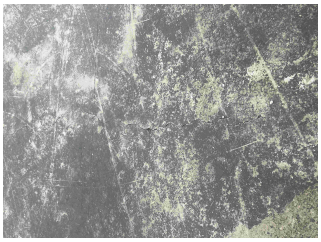
PROJECT: ICICI BANK ICMC, UDAIPUR CLIENT: ICICI BANK LTD.

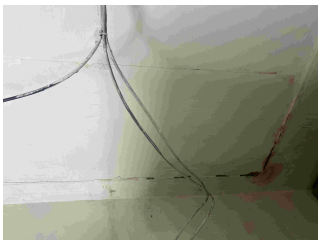
AUDIT OBSERVATION SHEET					
Reference / Rev. No			OBS / 74 (ICICI BANK ICMC, UDAIPUR) / August 2, 2024	DATED	2024-08-02
S.No.	OBSERVATION POINTS	DATE	CORRECTIVE / PREVENTIVE MEASURES SUGGESTED	PHOTOGRAPHS	STATUS (For Client Only)

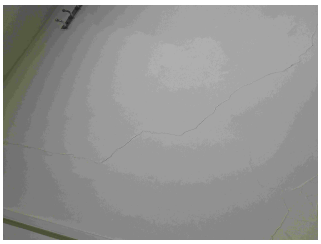
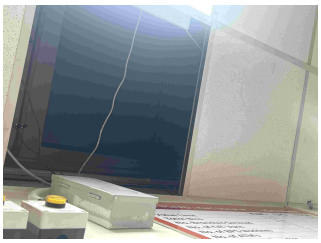
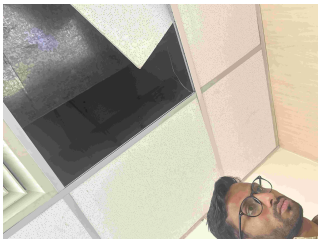
1	Testing point demarcation for point number one on vault room wall.	2024-08-02	After surface preparation test will be conducted.		
2	ICMC Udaipur Main entry. The internal functional floor level is approximately 2' to 2.5' higher from the outside ground/external development area level, which seems to be in good condition.	2024-08-02	Building seems to be in safer side from flooding point of view.		
3	Outside shed arrangement is done nicely. There are very rare chances of rainwater entry on the walls, so there will be no seepages from this point of view.	2024-08-02	This needs to be maintained properly.		
4	This is staircase head room from the outside right side of the building. This area is showing a lot of seepages and cracks in the slab. It seems on the terrace, proper waterproofing or water resistance layer is not provided on the mumty area, which is causing this huge seepage inside.	2024-08-02	Proper Waterproofing treatment/methodology to be used for this. It can be terrace treatment for mumty terrace, which includes a proper slope & batta at edges/corners.		

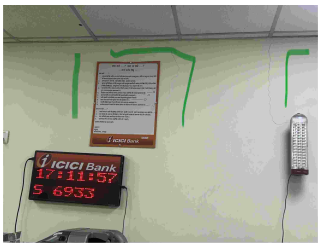
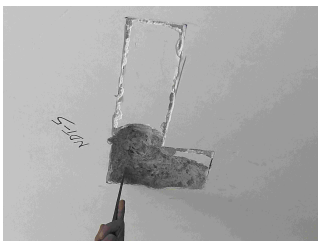
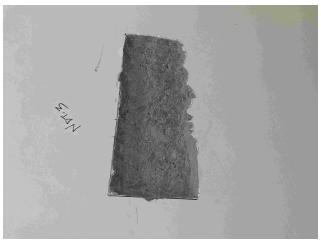
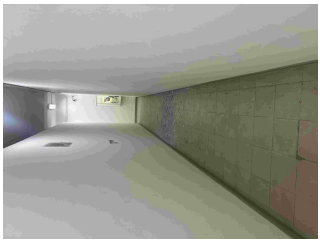
5	Terrace parapet is severely damaged/cracked. This will cause rainwater entry into the parapet and start steel rusting and increase further damage. These rusted steel rods which will ultimately affect the strength of the building. Badly cracked (जर्जर) parapet wall or pieces of wall may fall down in the front side ground floor on some body/parked two wheelers at any time.	2024-08-02	It is advised to remove the entire parapet wall at terrace and construct a new parapet wall.		
6	Parapet columns are getting cracked badly because rainwater is entering into these columns and steel has started rusting and breaking the concrete in the form of developing huge/big cracks. This will further rust the steel of columns & slab/beams & ultimately affect the strength of building.	2024-08-02	1. Refurbishment methodology is advised for these crcaked columns. 2. After refurbishment process is completed, the kota stone therapy on all the parapet columns and parapet wall is advised with projections both side and sloped outside.		

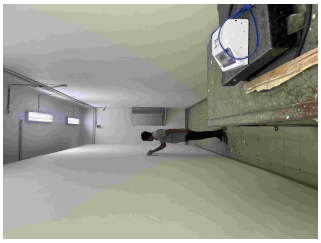
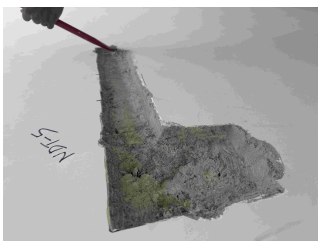
7	The staircase mumty top terrace needs to be treated properly and kept cleaned. Debris put over here causeing the rainwater entry into the slab and inside the building. Huge seepage is visible because of this rainwater entry. At the same time, there is a crack developed between the masonry wall and this roof slab, so through the wall surface also rain water enters from here and causing seepage inside.	2024-08-02	1. Proper terrace treatment is advised as per suggested methodology for this. Proper slope and waterproofing treatment is advised for mumty terrace of mumty. 2. Crack therapy is advised on the walls and terrace, where cracks are developed.		
8	Although in general, the terrace floor looks neat and clean, but at some places, the water proofing layer is being seen uprooted that means rainwater enters from here in the slab below through this gap and it will cause first rusting of slab steels & then cause seepage inside and ultimately will affect the building strength.	2024-08-02	Proper terracet treatment for these cracks need to be applied as early as possible to prevent the situation worsening.		
9	Parapet wall is severely cracked up to the extent that some part of this parapet wall may fall down on the vehicles or staff or somebody at ground floor.	2024-08-02	It is advised to remove entire parapet wall and redone properly in such a way that such cracks do not develop & it remains intact.		

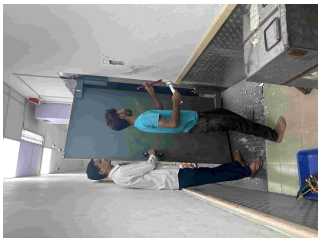
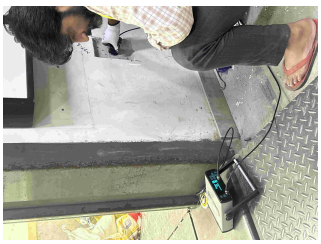
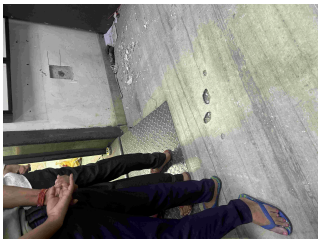
10	Entire parapet wall is cracked severely. This need to be replaced or else it may cause some time some major accident, if some part of this wall is fallen on somebody at ground floor, then the situation will be different.	2024-08-02	It is advised to remove/dismantle entire parapet wall and redone with proper concrete pillars and beams at top.		
11	This is another example of parapet column severely cracked. Now through these cracks rainwater enter inside and rusts the steel. If this column is not treated timely properly then steel will further rust more and in that case this column may not be useful for further construction of upper floors.	2024-08-02	Refurbishment or Removing all cracked material and redone the parapet column casting and then over that Kota stone therapy is advised with projection all around with grooves on lower edge surface.		
12	At some places, the terrace floor is showing longitudinal cracks. Through these cracks rainwater penetrate into the slab and start rusting of steel & at the same time it starts causing seepage inside the building.	2024-08-02	It is advised to do the terrace crack therapy here. However, if we want to get rid of this problem, once for all, then entire terrorist treatment is advised as per the methodology suggested.		

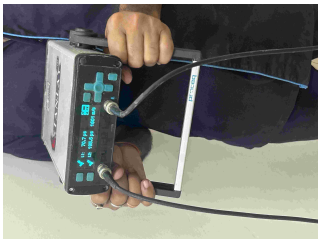
13	Overhead water tanks are not planned properly for overflow of the tank. This causes a regular overflow of the water from these tanks on the terrace regularly on daily basis that means through the surface cracks in the slab water on daily basis enters into the slab, which causes rusting of slab steel and seepage inside.	2024-08-02	A proper overflow of overhead water tanks need to be planned so that this problem resolve once for all.		
14	A vertical crack is observed on the left side of main entry of ICMC Building.	2024-08-02	Crack therapy is advised.		
15	Inside the server room some portion of wall is giving hollow sound. It seems there is a window outside.	2024-08-02	This window needs to be closed from outside in such a way water does not enter.		

16	It is observed that in the toilet block epoxy grouting is not done in the joints. This causes water entry through this joints below the surface and that water travels through the bedding material of the flooring in the entire building and wherever possible it moves up by capillary action in the walls and this results in to seepage problem above skirting areas.	2024-08-02	Epoxy grouting is advised using 3MM spacers in the tiling of floor and walls of all toilets blocks.		
17	In the guard room next to store room a vertical crack is observed in the wall.	2024-08-02	Crack therapy is advised for this location as per the methodology suggested.		
18	This is main entry security room above the grid ceiling situation is very comfortable. There is no leakage, cracks etc.observed in the ceiling.	2024-08-02	No Correction is required here.		
19	In the admin room also after removing the grid ceiling on checking the ceiling no problem observed.	2024-08-02	No Correction is required.		

20	This is processing room wall lengthwise. This wall is outside wall. The other side is plantation and other things in open area. Thess cracks are due to there were ventilators at this place earlier for exhaust but later stage those ventilators were closed. But while closing the ventilators the joint treatment is is not done properly so these edge cracks are developing.	2024-08-02	A proper joint treatment is advised using the fibre mesh or chicken mesh application on the joint of old masonry & new masonry to close the ventilator cut out.		
21	Surface preparation for ultrasonic test and Rebound hammer test is in process.	2024-08-02	Tests conducted & results are as per report.		
22	This is point number four surface preparation is in process for rebound hammer test and ultrasonic test.	2024-08-02	Tests conducted & results are as per report.		
23	This is third location surface preparation for Rebound hammer and ultrasonic tests.	2024-08-02	Tests conducted & results are as per report.		
24	This is corridor all around the vault room.	2024-08-02	No any adverse observation.		

25	This is inside the vault room and the point number one surface preparation is completed for rebound hammer test and ultrasonic test.	2024-08-02	Tests conducted & results are as per report.		
26	This is a hollow portion above the vault room concrete slab. This gap is between the vault room slab & the building slab.	2024-08-02	This gap is safeguarding the vault room from top side also.		
27	This is point number one left side of the vault room surface preparation is over for ultrasonic test and hammer test.	2024-08-02	Tests conducted & results are as per report.		
28	Around 4 feet passage all around the vault room is in good condition as per visual/physical inspection. The thickness of the vault room wall is also around 2 feet concrete.	2024-08-02	OK, Except injection grouting where results are not adequate.		
29	Concrete quality is very poor for the vault room wall, although the thickness is around 2', but it seems proper compaction was not done since lot of porosity is being seen.	2024-08-02	Injection grouting is advised.		

30	Surface preparation is in process on the right side of vault room main entry.	2024-08-02	Tests conducted & results are as per report.		
31	This is inside the vault room right side wall ultrasonic test is being conducted.	2024-08-02	Tests conducted & results are as per report.		
32	Ultrasonic pulse velocity test is being conducted on the other side of the vault room wall.	2024-08-02	Tests conducted & results are as per report.		
33	This is vault room floor observed damaged.	2024-08-02	Floor patch of work is advised for local patch up & removing & redoing of entire floor with hard flooring material (as sufggested in the material list) is advised for permamnent solution. Bank to decide.		
34	Inside the vault room right side, the hammer test is being conducted.	2024-08-02	Tests conducted & results are as per report.		

35	Inside the vault room right side the hammer test is being conducted.	2024-08-02	Tests conducted & results are as per report.		
36	Ultrasonic pulse velocity test is being conducted at point number 3.	2024-08-02	Tests conducted & results are as per report.		
37	Ultrasonic pulse velocity test is being conducted.	2024-08-02	Tests conducted & results are as per report.		
38	Ultrasonic pulse velocity test result for point 3 for record.	2024-08-02	Tests conducted & results are as per report.		
39	Ultrasonic pulse velocity test in being conducted at point number 4.	2024-08-02	Tests conducted & results are as per report.		
40	Ultrasonic pulse velocity test result for point number 4.	2024-08-02	Tests conducted & results are as per report.		

41	Ultrasonic pulse velocity test result for point number 5.	2024-08-02	Tests conducted & results are as per report.		
42	Rebound hammer test at point number 5.	2024-08-02	Tests conducted & results are as per report.		
43	Rebound hammer testing at point number four.	2024-08-02	Tests conducted & results are as per report.		
44	Rebound hammer testing at point number 3.	2024-08-02	Tests conducted & results are as per report.		

PART 3

CHECK LIST

VISIT DATE: 2024-08-02

PROJECT: ICICI BANK ICMC, UDAIPUR CLIENT: ICICI BANK LTD.

S.NO	OBSERVATION POINTS FOR SITE INSPECTION	RATING SCALE	RATING	DETAILED DESCRIPTION	LOCATION	REMARK
1	Site History	10	4	It is a rented building from RCA since 2007 as per bank records.	Udaipur Durga Nursery Road.	

2	Visual Inspection of Over all Building from Structure Stability Point of View.	10	5	Seems OK from GF front side except the Parapet wall at terrace.	Udaipur Durga Nursery Road.	
3	External Side Observation, if any	10	4	Outer area ground level is approximately 24" lower than building inside FFL & so safer side from flooding situation point of view.	Front Side Open Area.	
4	Observation of Foundation.	10	4	Seems OK.	Not Visible from any side.	
5	Settlement Cracks in Walls.	10	3	Only at One Place.	In the Processing Room.	
6	Settlement Cracks in Floors.	10	5	Not Observed.		
7	Moisture / Dampness Visibility in Ceiling Areas.	10	3	Yes.	In staircase head room inside.	
8	Moisture / Dampness Visibility in Wall Areas.	10	3	Yes.	In staircase head room inside & few other locations..	
9	Moisture / Dampness Visibility above Skirting Areas	10	5	Not Observed.		
10	Check for Plaster Strength (Intact or not) - Lighting Hammering Action.	10	3	OK, Except one - two locations.		
11	Visible Uprooting - Floors, If Any.	10	4	Not Observed.		
12	Plaster Visible Uprooting - Ceiling Areas, If Any.	10	4	Not Observed.		
13	Plaster Visible Uprooting - Wall Areas, If Any.	10	3	Not Observed, Except 1-2 locations in Processing Room.		
14	Visible Concrete Deterioration in Slabs, If any.	10	5	Not Observed.		

15	Visible Concrete Deterioration in Beams, If any.	10	5	Not Observed.		
16	Any Refurbishment is needed in Columns/Beams/Slabs/Other RCC elements.	10	5	Not Observed.		
17	Visible Cracks / Deterioration in Stone Patti Roofs, If Any			NA		
18	Visual Stability Check for Parapet Walls, if any.	10	0.25	Serious Matter. Parapet is in 'RISKY' conditions.	Terrace.	
19	Visual Stability Check for Projections / Partitions if any (Horizontal)			NA		
20	Water Leakage through RCC Column / Beam / Slab, if any	10	4	Not Observed.		
21	Water leakage through Masonry Structure	10	3	Yes.	1-2 locations in small areas.	
22	Over head Water Storage Tanks & Plumbing Connection Status	10	2	Overflow is not planned.	Terrace	
23	Plumbing Connection Status in Toilets/Pantry Area.	10	4	OK		
24	Visible Concrete Deterioration in Columns, If any.	10	5	Not Observed.		
25	Rainwater Downtake Piping System Status.	10	4	OK		
26	Any Vegetation Causing Moisture/Cracks.	10	4	Not Observed.		
27	Terrace Area Checking in General.	10	3	Terrace floor was observed with some cracks on horizontal surface in the already done terrace treatment at some locations.	Terrace.	
28	Observation - On sagging for RCC beams, if any.	10	4	Not Observed.		

29	Observation on sagging for RCC slabs, if any.	10	4	Not Observed.		
30	Observation on RCC columns for buckling or crack, if any.	10	4	Not Observed.		
31	Observation on Cold Joints in concrete structure, if Any.	10	4	Not Observed.		
32	Observation on concrete honey combing, if Any.	10	3	Porosity was observed in vault room walls.	Vault Room Walls.	
33	Observation on Hairline Cracks in Slabs and slab soffits, if Any.	10	4	Not Observed.		
34	Observation on exposed steel reinforcement due to insufficient concrete cover.	10	4	Not Observed.		
35	Observation on column misalignment due to bad formworks during casting.	10	4	Not Observed.		
36	Position of under ground water tank & observation on this.			NA. Water Comes by Tanker.		
37	Position of over head water tank & observation on this.	10	2	Placement is OK, However, overflow is not planned properly.	Terrace.	
38	Basement Observation from inside.			NA		
39	Basement Observation from outside.			NA		
40	Observation on NDT Rebound Hammer Test.	10	3	As per the Report.		
41	Observation on NDT USPV Test.	10	3	As per the Report.		
42	Observation on NDT Concrete Half Cell Potential & Resistivity Test.			NA		
43	Observation on Concrete Scanning Test.			NA		
44	Observation on Epoxy Grouting in toilet tiling.	10	2	Not Observed.		

45	Observation on Building Inner Level with reference to the outer road level.	10	5	Inside Building FFL is approximately higher by 24".		

TOTAL RATING SCALE : 380

TOTAL RATING : 140.25

RATING INDEX: 0.37

RECOMMENDATION : As mentioned in the audit report part 1

SIGNATURE OF AUDITOR

SIGNATURE OF BRANCH CONTACT PERSON FOR INSPECTION WITNESS ONLY

Pradeep Shrivastav

9672979311