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AUDIT REPORT

PART 1

REF. RCCPL - AXIS BANK PROPOSED BRANCH DIDAWANA / AR - 030

DATE - 2024-03-16

PROJECT: DIDWANA BRANCH (PROPOSED) for AXIS BANK LTD,

CLIENT: AXIS BANK LTD,

While visiting the site (Proposed DIDAWANA Branch, DIDAWANA) 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 AXIS

Bank Ltd, for their needful. We feel that this report will help AXIS BANK to take necessary Corrective/Preventive measures in time, if they opt to take this premise for banking business., & wherever required to take appropriate decisions on the remodeling, or necessary rectification works, etc.

Most of the observation points are on huge seepages in the basement walls & floors. Bad workmanship & ignorance in construction processes were observed. Basic construction norms are not followed. This is an old building constructed around 20 years back (as per the details given by landlord).

BUILDING TITLE: PROPOSED RENTED

MAJOR OBSERVATION & ANALYSIS:

1. The building has three side roads. Normally the road slope is kept away from the building, but here water is accumulating near the building wall & road junction keeping the edge always in moist conditions. The water enters in the ground from the untreated joint and causes seepages in the basement's periphery walls in the three roadsides. Drain points/Chambers for rainwater & other plumbing lines are not properly designed & constructed causing to percolate this water into the ground adjacent to building walls in the basement. Which results in regular seepages in the masonry walls. And this phenomenon further causes loosing the bonding strength of internal plaster.
2. The RCC roof slab for the strong room is resting on the masonry walls in the basement for the proposed strong room. Only at the strong room entry gate right side the RCC column was found (perhaps this was constructed to take the strong room door hinged load). But in scanning the surface & on physically conducted the desructive test only nominal reinforcement steel was found in the RCC column & this indicates that the RCC column was not designed properly by the structure engineer.
3. Based on the Results of different conducted tests in the proposed strong room (Rebound Hammer, USPV, Carbonation, Surface Resistance, Half Cell Potential, Scanning the Surface etc.), the following interpretations are being made:
4. (a) For the entire strong room only one RCC column was found at the main entry right side. And the concrete strength was worked out equals to M42. So this OK.
5. (b) All other four side walls were found made of masonry & no RCC was found. The concrete strength test results also show less than M25. There were no steel rods found in the walls.
6. (c) The slab was cut open to take the lockers out of the basement strong room by the previously running bank (this information was given by landlord), however, dismantling & recasting of roof slab impressions were visible.
7. (d) The roadside wall in the strong room & other areas of the basement were observed with huge seepages, deteriorating the internal plaster.
8. (e) In the proposed strong room flooring was done with marble tiles & water was observed coming from floor tiling joints stagnated on the floor. This means the hydrostatic pressure is high below the strong room flooring due to water accumulation.
9. It was observed that one sump was made below the staircase area in the basement and it was found with partly filled up with water. That means water is flowing below the flooring and getting collected in the sump. And electrical wiring near the sump shows that the dewatering pump was being used.

10. The rainwater & other plumbing piping systems were observed not designed correctly nor installations done properly, which allows the water to free flow on the walls and ground/broken chambers to enter into joints building walls & road.

11. On the front & rear sides - Chhajjas/Balcony slabs, beams are observed with water leakage - seepage & cracks as well. This means water is entering into the slab/beams and causing rusting of steel. This is mostly happening due to water entry in these RCC components from balcony flooring joints, drain points etc. & if not treated timely then will result in major refurbishment & will involve a huge rectification cost in the near future.

12. In the all the toilet areas the tile flooring is not provided with epoxy grouting so the water seepages through the tiling joints is suspected at any time.

13. On the both sides of the main entry to the premises two planters were observed as dust/rubbish/water catching/stagnation points. This water poured in the planters ultimately percolates deep into the basement wall causing seepages in the strong room roadside wall in the basement.

RECOMMENDATION:

1. LOOKING INTO THE OVERALL CHECKPOINTS & OBSERVATION POINTS, IT IS ADVISABLE TO NOT TAKE THIS BUILDING FOR RUNNING BANKING BUSINESS IN THE PRESENT CONDITIONS. BUILDING WILL PROMPT FOR REGULAR MAINTAINANCES. THE EXCESSIVE SEEPAGE IN THE PROPOSED STRONG ROOM MAY HAVE ADVERSE IMPACT ON THE LOCKERS & CONTENTS (CURRENCY NOTES & OTHER ITEMS) IN THE STRONG ROOM IN THE CONTINIOUS MOIST CONDITIONS. SECONDLY, ACCORDING TO OUR KNOWLEDGE STRONG ROOM MUST HAVE RCC SHEET OF DESIGNATED THICKNESS WITH THE DESIGNATED GRADE OF CONCRETE IN ALL AROUND SURFACES INSIDE THE STRONG ROOM (WALLS, CEILING, FLOORING etc.), BUT THIS PREMISES DOES NOT HAVE ALL THESE EXCEPT RCC SLAB IN ROOF.
2. HOWEVER, IF AXIS BANK DECIDES TO TAKE THIS PROPERTY FOR BANKING BUSINESS, THEN THE STRONG ROOM FLOOR & WALLS SHALL BE REDESIGNED AS PER RBI NORMS & SHALL BE CONSTRUCTED UNDER STRICT TECHNICAL SUPERVISION.
3. THE ABOVE OBSERVATIONS & ANALYSIS POINTS IN LINE WITH THE POINTS IN THE OBSERVATION SHEET SHALL BE READ & UNDERSTOOD THOROUGHLY TO DECIDE THE ACTION PLAN FOR RECTIFICATION WORK.
4. A LOT OF RECTIFICATION WORK IS NEEDED IN THE BUILDING AS MENTIONED IN THE OBSERVATION SHEET POINTS. SO IF THE BANK IS STILL WILLING TO TAKE THIS PREMISE FOR BANKING BUSINESS THEN THESE CORRECTIONS SHALL BE CARRIED OUT ALL UNDER STRICT TECHNICAL SUPERVISION.
5. IN ORDER TO STOP WATER ENTRY FROM GROUND/ROAD LEVEL INTO THE BASEMENT WALLS, A WELL DESIGNED/WELLTREATED/WATERPROOFED NALLI CAN BE PLANNED/PROVIDED AT THE JOINT WHERE CONCRETE ROAD & BUILDING WALLS MEET EACH OTHER.
6. FROM THE SURFACE OF THE SEVERELY SEEPAGE AFFECTED BASEMENT WALLS ENTIRE PLASTER SHALL BE SCRAPPED OUT & THEN REDONE WITH RMP/WATERPROOF PLASTER MATERIAL & ON LESS SEEPAGE AFFECTED INTERNAL WALL PLASTER SURFACE CAN BE APPLIED WITH CRYSTALLINE WATERPROOFING PRODUCT.
7. THE ENTIRE RAINWATER DOWN-TAKE PIPING/PLUMBING SYSTEM IS ADVISED TO BE SET RIGHT CORRECTLY OR REPLACED BY A WELL DESIGNED SYSTEM.
8. BOTH SIDE PLANTERS AT THE MAIN ENTRY TO THE PREMISE SHALL BE CLOSED PERMANENTLY FOR NO WATER ENTRY THROUGH THESE PLANTERS INTO BASEMENT WALLS, & IF REQUIRED FLOWER POTS CAN BE PLACED ON THE CLOSED PLANTERS.
9. MAIN SOURCE OF WATER ENTRY INTO BASEMENT WALLS - THE JUNCTION OF OPPOSITE SLOPED CONCRETE ROAD & BUILDING WALL JOINT ALL ALONG THE PERIPHERY OF THE BUILDING IN THREE

ROADSIDE EDGES. A PROPER & WELL DESIGNED/WELL TREATED/WATERPROOFED NALLI CAN BE BUILT UP ALONG THESE EDGES TO TAKE AWAY THE WATER FROM THE BUILDING WALL.

10. ON THE FRONT & REAR SIDE CHHAJJA/BALCONY PROJECTIONS CRACKS SHALL BE TREATED PROPERLY TO AVOID MAJOR REFURBISHENT IN THE COMING TIME.
11. RAIN WATER & OTHER PLUMBING DRAIN WATER CHAMBERS IN THE REAR SIDE AT ROAD LEVEL SHALL BE PROPERLY DESIGNED & EXECUTED TO STOP WATER ENTRY IN THE BASEMENT WALLS THROUGH THESE BROKEN/DAMAGED CHAMBERS.
12. IN THE TOILET AREAS TILING JOINTS IN THE FLOORS SHALL BE PROVIDED WITH EPOXY GROUTING.
13. RAINWATER, PLUMBING & VENT PIPES IN THE SHAFTS & AT OUTER PLACES SHALL BE REPAIRED/REFIXED PROPERLY. KEEPING THE PIPES AT LEAST 2" AWAY FROM WALLS.
14. THE CRACKS IN WALLS & SLABS WHEREVER OBSERVED SHALL BE TREATED WITH THE SUGGESTED CRACK THERAPY.
15. A WINDOW ALTHOUGH CLOSED FROM THE OUTSIDE WAS OBSERVED IN THE BASEMENT OPPOSITE THE STRONG ROOM IS AN UNDESIRED THING IN THE BASEMENT. THIS SHALL BE PERMANENTLY CLOSED TO ENSURE MORE SAFETY OF THE STRONG ROOM.

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.

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.

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, if this premises is opted to take 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 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 the lack of technical supervision at the time of construction, therefore at least the rectification work should be carried out under strict technical supervision ONLY.
2. RCC walls & floor for the proposed strong room can be cast as per the design given in lines with the RBI norms.

3. Scrapping out of the entire internal plaster of affected wall areas for strong room & other periphery areas walls, which are roadside walls & redone using the RMP material after the water source is closed.
4. Other rectifications as advised in respective areas of the building and shown with photographs in the observation sheets pointwise, shall be taken up.
5. Water accumulation needs to be totally stopped at the junction of the building wall & concrete road with immediate effect at the road level.
6. All toilet tile flooring is advised for epoxy grouting.
7. In the basement walls, where lesser seepages are there, can be treated from the negative side using crystalline products for waterproofing the surface. This product actually generates crystals when comes in contact with water or moisture, which move slowly towards the source of the water & in the long run closes the capillaries permanently.

***SPECIALIZED MATERIALS SUGGESTED*:**

1. Crack Seallers
2. RMP (Ready Mix Plaster) Materials.
3. Crystallization Water Proofing Material.
4. Epoxy Grouting Material.
5. Cement
6. Sand
7. Ready Mix Concrete
8. Sika Rustoff - 100 (Rust Remover)
9. Sikatop Armatec - 108 Plus (Anti Corrosive Coating)
10. Sikadur - 32 LP (Structural Bonding)
11. Sika - Monotop 122 F (PMM - Polymer Modified Mortar

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*:**

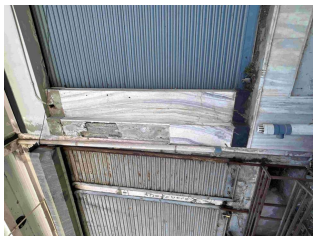
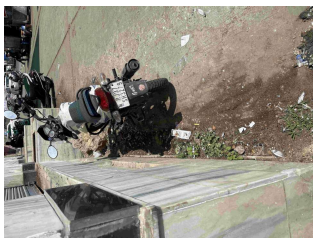
RMP PLASTER THERAPY, RCC MEMBERS STRUCTURAL REPAIR (REFURBISHMENT) | CRACK THERAPY A (FOR PUTTY & PLASTER LEVEL CRACKS) | EPOXY GROUTING | RAINWATER DOWN TAKE PIPES PLANNING |

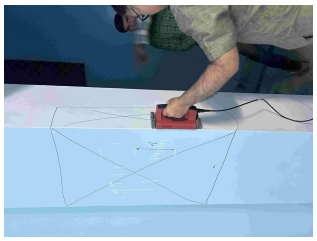
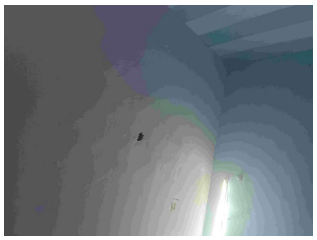
Note:- The test report for different tests conducted at the site is enclosed herewith for reference as and when needed.

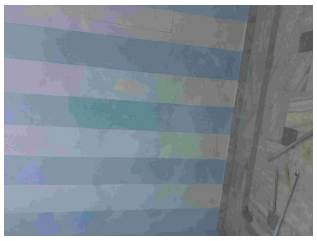
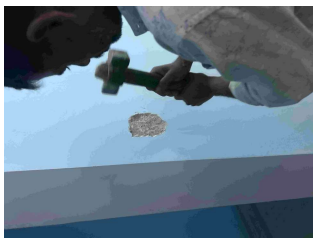
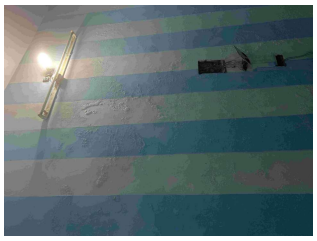
PROJECT OBSERVATION SHEETS

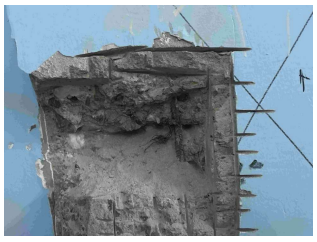
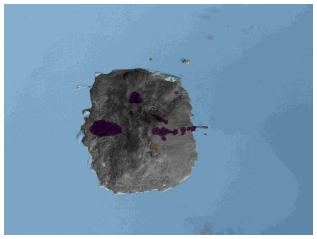
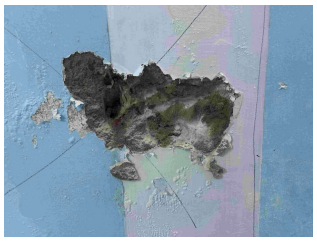
PROJECT: DIDWANA BRANCH for AXIS BANK LTD, CLIENT: AXIS BANK LTD,

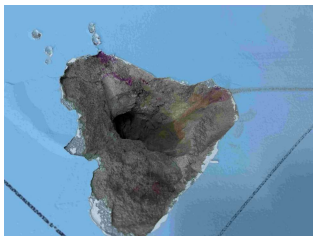
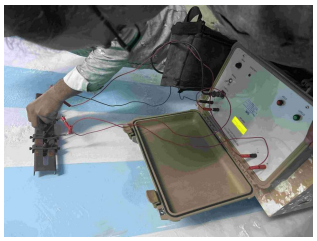
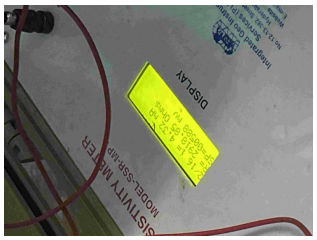
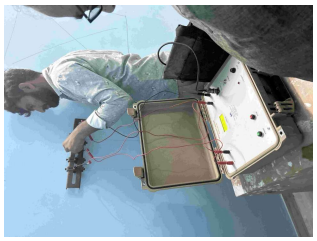
AUDIT OBSERVATION SHEET					
Reference / Rev. No			OBS / 030 (AXIS BANK DIDAWANA PROPOSED BRANCH) / 2023-24	DATED	2024-03-16
S.No.	OBSERVATION POINTS	DATE	CORRECTIVE / PREVENTIVE MEASURES SUGGESTED	PHOTOGRAPHS	STATUS (For Client Only)
1	Outside the building junction of building wall and road is observed with water accumulation,	2024-03-16	1. A well treated/waterproofed nalli can be provided through out he periphery of the building in 3 roadsides at the junction of the concrete road & building wall. 2. L shape waterproofing from earlier existed Nalli bottom to wall till plinth level. 3. A proper gola shall be made at the junction of the building wall & RCC road in such a way that water does not enter from the junction.		
2	Rear side junction of ground out side & building wall observed with drain pipe covered in porous concrete.	2024-03-16	First thing to be done is the chamber shall be treated well, so that water does not enter in the basement walls. And secondly, the entire process as advised in S No. 1 shall be done.		

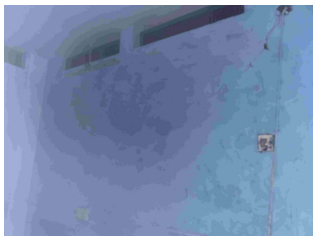
3	Improper drainage system is observed rear side of building as above point but second location.	2024-03-16	1. The plumbing system to be set right. 2. Chamber rectification/repairing properly.		
4	Rainwater down take piping system to be set right.	2024-03-16	The entire rainwater plumbing system needs to be set right.		
5	Rear side drainage system ???	2024-03-16	The entire plumbing system needs to be set right.		
6	Front side corner - this area is always seems causing seepage below in basement.	2024-03-16	The same process is advised as suggested in S No. 1.		
7	Strong room entry right side column scanning operation is in process.	2024-03-16	Please check the attached report for more details.		

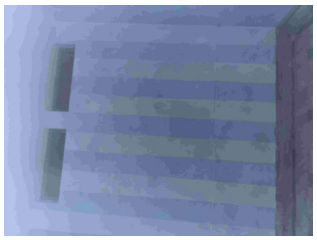
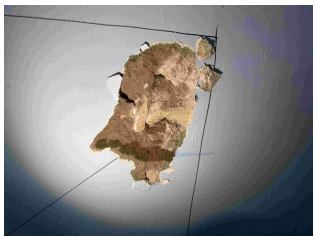
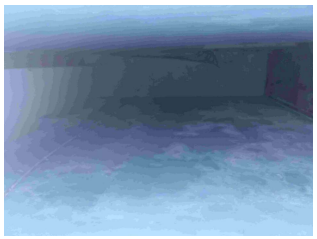
8	Scanning the right side of the column.	2024-03-16	Please check the attached report for more details.		
9	This is the Ceiling portion where cutout was made in the slab in order to take the lockers out from the strong room in the basement to the ground floor by the earlier tenant SBI. This is as per the information given by the land ord Mr. Khushi Khan. The RCC slab was cut & after taking the lockers out, the slab cutout was once again cast with RCC & closed. This might have definitely weakened the slab.	2024-03-16	This area is advised to apply for testing against strength, grade of concrete & proper construction joint treatment.		

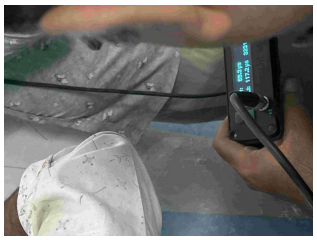
10	Moisture was observed in the strong room wall in basement. This is likely to be due to seepage from out side road wall junction.	2024-03-16	The Water seepage/leakage source shall be closed and the following treatments are advised. 1. The Junction of the wall & concrete road shall be treated in such a way that water can not enter through this joint. Refer the methodology 001. 2. A proper gola can be made at the junction in such a way that the road slope is away from the building wall, presently water is accumulating at the wall & road junction & causing water entry through the joint..		
11	Strong room another side testing preparation - removing the plaster layer (destructive test).	2024-03-16	Please check the attached report for more details.		
12	The roadside wall of the strong room in the basement was observed the huge seepage. This water is entering from outside road level through junction of road & wall.	2024-03-16	Crystalline waterproofing compound/product brush application is advised after the treatment suggested in S No. 10 is done.		

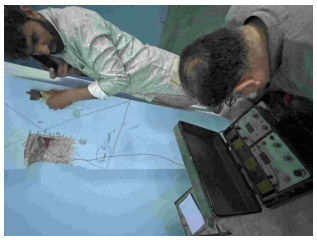
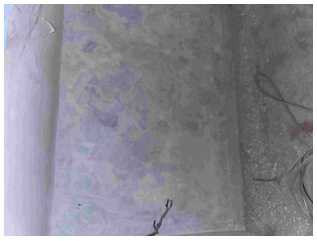
13	Road side entire wall seepage …. same wall different location.	2024-03-16	Treatment from outside + crystalline application as advised in S No. 10.		
14	In the column 8/10 mm rods vertical & 8 mm stirrups were observed in the destructive test as shown in the photograph. And around at 8” c/c spacing approximately was observed. This is a column at the entry of the strong room at the right side of the strong room entry & perhaps was cast at a later stage without any planning/design.	2024-03-16	It is advised to get the column designed by the structural engineer & then properly executed, if AXIS bank decides to take this premises for banking business.		
15	It is a chemical test on the strong room entry's left side wall plaster & the colour shows good strength of plaster here on this wall.	2024-03-16	The attached test report may be reffered for more detail. It is to be noted that this is a partition wall so no seepage is observed.		
16	The roadside wall is weaker due to excessive seepage, no violet colour is observed. The colour test has failed on this wall.	2024-03-16	It is advised for: 1. Checking & closing of the water entry from the roadside at ground level. 2. Scrapping out of entire affected internal plaster & then redoing with RMP.		

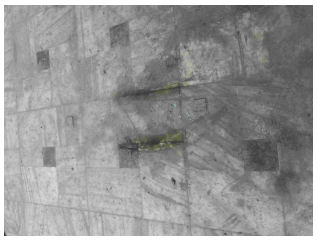
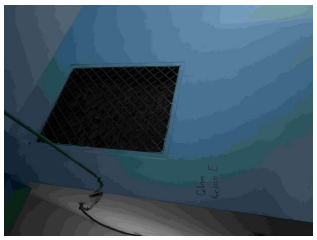
17	This is not the roadside wall. The brick wall is observed with plaster done on this, however, on this wall also colour test is failed, which shows the poor strength of the plaster.	2024-03-16	The entire plaster of this wall is advised to be scrapped out and then redone with RMP.		
18	Resistivity test 01 …. on the roadside wall in the proposed strong room in the basement. And as per the report, results are failed.	2024-03-16	Please refer the report for more details.		
19	Resistivity test 02 …. on the roadside wall.	2024-03-16	Please refer the report for more details.		
20	Resistivity Test 03 ..... on the left side wall from the strong room entry side.	2024-03-16	Please refer the report for more details.		
21	Ground floor at the main entry at both sides, planters were observed, probably one source of basement seepage is this one.	2024-03-16	It is advised to treat both planters with a proper & well designed waterproofing system.		

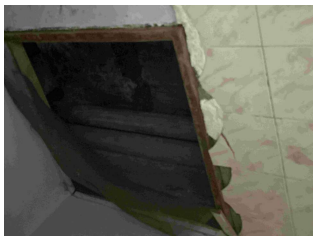
22	Other side planter.	2024-03-16	Same as above.		
23	Resistivity test 04 ..... on the RCC column side wall at strong room entry right side.	2024-03-16	Please refer the report for more details.		
24	In the REAR ROAD SIDE wall room no. 3 in the basement. Water entry from ground level road & building wall junction is causing huge seepage.	2024-03-16	As advised in S No. 10.		
25	Resistivity Test 05 ..... on the strong room roadside wall second location.	2024-03-16	Please refer the report for more details.		
26	In the basement this is room number 01 the other side road side wall seepage.	2024-03-16	Same as advised in S No. 10.		

27	In the basement this is room number 01 the front side road side wall seepage.	2024-03-16	Same as advised in S No. 10.		
28	The Chemical Test on the strong room left side wall plaster strength is not good as colour is not changing.	2024-03-16	After treating the water leakage/seepage source from out side as suggested in S No. 10 the entire wall plaster shall be scrapped out and redone with RMP material + Crystalline Water Proofing Product Application is advised.		
29	Basement side road side wall parallel to staircase showing huge seepage due to road & wall junction point water entry.	2024-03-16	Same as Above in S No. 28.		
30	USPV Test 01 ..... on the strong room walls.	2024-03-16	Please refer the report for more details.		
31	USPV Test 02 ..... Another one set of raedings o the other wall.	2024-03-16	Please refer the report for more details.		

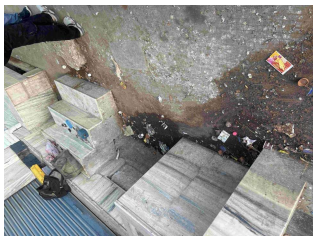
32	USPV Test 03 ..... On the left side of wall of main entry to strong room.	2024-03-16	Please refer the report for more details.		
33	USPV Test 04 ..... In side the strong room on front road side wall.	2024-03-16	Please refer the report for more details.		
34	Half Cell Potential Test 01 (First Set of Readings) ..... On the RCC column at strong room entry right side.	2024-03-16	Please refer the report for more details.		
35	The scanning test was conducted on all walls in the strong room in basement & it was observed that except one RCC column at strong room entry right side there is no RCC member including the walls. Then destructive teat was conducted where wall surfaces were cut opened. And it was observed that all walls are masonry walls.	2024-03-16	In case the RCC wall is MUST in the strong room walls then casting of RCC wall & Floor can be got designed & planned the execution. NOTE:- If the RCC wall/Floor casting is opted then technical supervision for right construction is very very ESSENTIAL.		

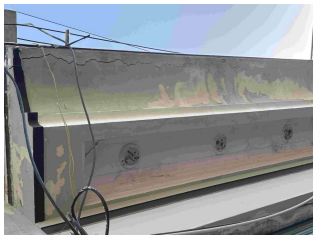
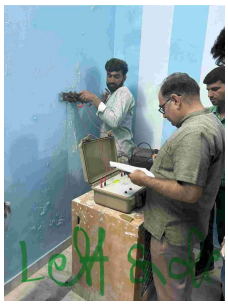
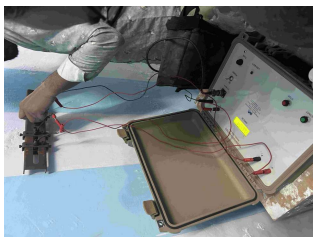
36	Half Cell Potential Test 02 Second Set of Readings) ..... On the RCC column at strong room entry right side.	2024-03-16	Please refer the report for more details.		
37	This is a sump under staircase first flight & showing water filled up and also was being used as dust bin as well, means under the basement floor water is flowing, which is causing seepage through floor tiling joints in thje string room. This water is collected in this sump, perhaps for dewatering. Under the floor flowing water is a serious matter, this water also rises up with capillary action in the walls some times.	2024-03-16	If the major rectification is not opted then installation of one sump pump is advised for dewatering the seepage water as and when needed. This system can be designed for automation also. Or else the source of water shall be closed/blocked once for all.		
38	At staircase mid landing the rear side road side wall showing huge seepages.	2024-03-16	As advised in S No. 28.		
39	The rear side road side wall surface near the sump below continuing till basement floor showing huge seepages.	2024-03-16	Same as Above.		

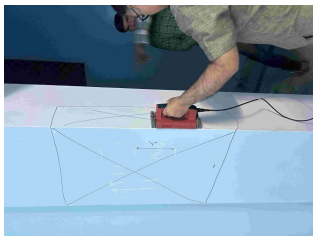
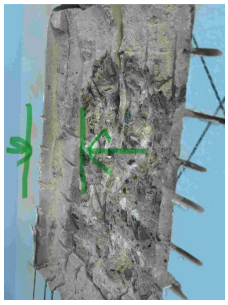
40	Basement strong room floor was observed with seepage water coming from flooring/tiling joints. This is a serious issue. It seems water is flowing under flooring in bedding material and due to hydrostatic pressure coming up through flooring joints.	2024-03-16	If it is opted to go ahead with accquiring this property then well designed RCC floor & walls can be planned in strong room & regular dewatering shall be ensured from sump, which will help in maintaining the hydrostatic pressure also under the flooring.		
41	In the basement room number 03 a ceiling seepage & a crack was observed. This room also has rear side road side wall and showing the seepages.	2024-03-16	As advised in S No. 28.		
42	This is a window in the basement area from other premises closed with brick work from other side & MS grill from basement side. Seems not safe from strong room point of view.	2024-03-16	If possible this window can be packed once for all with proper packing both side.		
43	Ground Floor toilet floor is observed without epoxy joints & likely to cause seepage issues in upcoming time.	2024-03-16	It is advised to have epoxy grouting in the toilet area tiling joints, so that water seepages through these tiling joints will not take place and dampness will not be caused due to this reason in surrounding areas.		

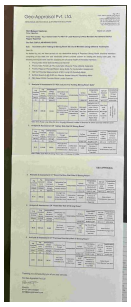
44	Same thing another toilet back side of first toilet.	2024-03-16	Same as above.		
45	BM Room toilet area also same problem.	2024-03-16	Same as above.		
46	BM Room toilet inside plumbing shaft showing the rainwater & other pipes - leakages/seepages are most likely. These piping systems are not installed properly & needs to be systematically rectified.	2024-03-16	It is advised to follow the prescribed methodology for this piping system while rectifying them. A separate methodology may be asked if AXIS Bank decides to take up the rectification.		
47	Ground floor ceiling seems does not have any problem apprentally.	2024-03-16	As on the visual inspection of the ceiling without opening the false ceiling there seems no problem.		
48	The premises main entry left side rolling shutter jambs are broken/damaged & need to be replaced/rectified.	2024-03-16	If AXIS Bank decides to take up the repairing work then the broken part of the jambs will have to be removed and new jambs shall be fixed properly.		

49	From the road main entry side lintel level seepages are observed. This is due to the water entry from above balcony area. It can be due to the improper drain point of the balcony or may be due to broken joints of tiling/flooring, from where the water enters into below tiling/flooring area and causing seepages as shown in the photo.	2024-03-16	The above balcony needs to be checked for both above explained points. And based on the actual conditions the corrective preventive measures shall be designed when the bank decides to take up the rectification work.		
50	Same thing on the other side.	2024-03-16	Same as above.		
51	Road side road level and building wall junction is poor causing water seepage in the basement strong room road side wall. Moreover, the slope of the concrete road is towards the building wall, which is not correct. The road water gets accumulated at the building wall junction and then percolates to cause seepages in the basement strong room on the road side stone masonry wall.	2024-03-16	It is advised to have a proper waterproofing system designed and executed at the building wall & concrete road junction along the entire periphery of the building exposed to roadsides. When the bank decides to take up this rectification work then the specifically designed methodology may asked.		

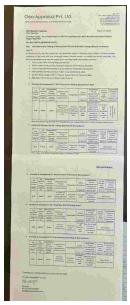
52	Same location from other angle.	2024-03-16	Same as above.		
53	A hole in the building wall was observed as shown in the photo. This hole allows the rain & other surface water from the wall to enter in the wall & in the basement as well. This is causing huge seepages in the basement wall near the staitcase.	2024-03-16	It is advised to close/patch up the hole with immediate effect.		
54	Rear side plumbing points are poor causing seepage/ leakage in the basement rear side road side walls. The spillover water & leakage from the broken piping system, directly flows on the road and enters into the road and building wall junction causing seepages in the basement walls.	2024-03-16	1. The entire plumbing system for rainwater and other drain pipes coming from needs to be rectified properly. All pies should remain 2" away from the wall & fixed in the straight line/verticality. At the same time at ground level a proper chamber should be made for further diverting the water to public drain. 2. And secondly, the proper waterproofing is advised at the road & building wall junction as per the methodology designed for this purpose.		

55	The rear side ground roof level balcony is showing the crack, and there are likely seepages at the lintel level also. The cracked portion may fall down any time if the rectification is not done timely.	2024-03-16	The crack shall be treated properly as per the crack therapy as specified in the methodology designed for this.		
56	Rear side road side rain water down take pipes are not fixed properly. Through joints/cracks seepage is likely.	2024-03-16	More or less same as P No. 54.		
57	Resistivity Testing procedure in process.	2024-03-16	Please refer the report for more details.		
58	Resistivity Test on left side of wall in process.	2024-03-16	Please refer the report for more details.		
59	Resistivity Test procedure on the road side wall in process.	2024-03-16	Please refer the report for more details.		

60	USPV Testing is in process on the RCC column at the right side of the main entry of the strong room in the basement.	2024-03-16	Please refer the report for more details.		
61	The scanning Test is in process at the right side of the main entry to the strong room. 8 MM steel longitudinal main column rods & stirrups also 8 MM at 180 MM c/c were observed. 8 MM steel is normally considered as nominal reinforcement steel ONLY & which is not adequate for the location & particularly in the strong room door holding column.	2024-03-16	In case the bank opts the premises then this door holding column also will need to be recast with other side walls and flooring of the strong room.		
62	When there was no RCC found in the walls all around in the strong room then the destructive test was conducted on all side walls & at the main entry right side column also in order to have confirmation on the existance of steel rods. And then finally it was concluded that there is no RCC walls & nor any steel rods in the walls.	2024-03-16	In case the bank opts the premises then this door holding column also will need to be recast with other side walls and flooring of the strong room.		

63	Almost fulltime moist conditions at the junction of road & building wall. This accumulated water in this area gradually enters into the basement walls to cause seepage & moist conditions in the basement walls.	2024-03-16	After closing the source of water entry from the roadside the entire internal plaster is advised to be scrapped out and redone with RMP.		
64	Test Report from GEO-APPRAISAL	2024-03-16	Please refer the report for more details.		

65	Rebound Hammer & Ultrasonic Pulse Velocity Tests were conducted for strenth checking on the following locations. 1. RCC Column for holding the Strong Room Gate - 8 MM steel main rods with 8 MM rings @ 180 MM c/c were observed. And the average value of the rebound hammer & USPV test is observed 42.303 N/Sq. MM (M42). 2. Gallery Side wall of Strong Room - It was observed there is no RCC wall rather it is made of masonry & rebound hammer & USPV average values are 20.303 N/Sq. MM (M20). 3. Right Side Partition Wall of Strong Room - This wall is also observed made of masonry not RCC & average rebound & RSPV values are 19.562 N/Sq. MM (M19). 4. Frontal Road Side Wall of Strong Room - This wall is also made of masonry not RCC & average rebound & RSPV values are 21.61 N/Sq. MM (M21). 5. Left Side Boundary Wall of the premise/Strong Room - This wall is also made of masonry not RCC & average	2024-03-16	In case the AXIS bank opts to take the premises for banking business then the bank may need to cast the RCC wall & floor inside the building for the strong room.		

	rebound & RSPV values are 18.747 N/Sq. MM (M18).				
66	Carbonation Test through the Phenolphathanein Indicator Solution - 1. On the Strong Room RCC Column - Light Pink Colour on the concrete cover & the dark voliet colour on RCC (Column) was observed. This means NO CARBONATION in RCC but some SOME CARBONATION on the cover. 2. On the Gallery Side Wall - Very Light Pink Colour to No Colour was observed. This means CARBONATION exists in the mortar cover. 3. Strong Room Partition Wall in the Right Side - Very Light Pink Colour to No Colour was observed. This means CARBONATION exists in the mortar cover. 4. Strong Room Road Side Wall - No colour observed. That means CARBONATION exists in the mortar cover. 5. Strong Room Left Side Wall, which is the Boundary Wall also - No colour observed. That means CARBONATION exists in the mortar cover.	2024-03-16	Carbonation means the mortar or RCC cover started deterioration/disintegration of cover/plaster. And therefore needs to be scrapped out entirely and redone with RMP after the water seepage source is closed.		

67	Surface Resistance Test - 1. On the Strong Room Entry Gate Column - Negligible Steel Corrosion in the Upper Column Region & Low to Moderate steel corrosion in the lower column region. 2. On the Gallery Side Wall of the Strong Room - High Risk of Steel Corrosion, if embedded in the masonry wall. 3. On the Right Side Partition Wall of the Strong Room - High Risk of Steel Corrosion, if embedded in the masonry wall. 4. On the Road Side Masonry Wall of the Strong Room - High Risk of Steel Corrosion, if embedded in the masonry wall. 5. On the Left Side Wall of the Strong Room, which is the boundary wall also - High Risk of Steel Corrosion, if embedded in the masonry wall.	2024-03-16	There is no RCC wall all around the strong room, so if the bank decides to take the premises then may go for RCC walls all around and the RCC floor as well, as per bank norms.		

68	Half Cell Potential Test - 1. On the RCC Column of the Strong Room Entry - Test values show the possibility of steel corrosion less than 10%. This means column steel is in good condition, which was verified by the physical destructive test at the site. 2. On the Gallery Side Wall of the Strong Room - Rebars are absent in the masonry wall. There is no RCC in the walls. 3. On the Right Side Partition Wall of the Strong Room - Rebars are absent in the masonry wall. There is no RCC in the walls. 4. On the Road Side Wall of the Strong Room - Rebars are absent in the masonry wall. There is no RCC in the walls. 5. On the Left Side Wall of the Strong Room, which is the boundary wall also - Rebars are absent in the masonry wall. There is no RCC in the walls.	2024-03-16	There is no RCC wall all around the strong room, so if the bank decides to take the premises then may go for RCC walls all around and the RCC floor as well, as per bank norms.		

PART 3

CHECK LIST

VISIT DATE: 2024-03-16

PROJECT: DIDWANA BRANCH (PROPOSED) for AXIS BANK LTD,

CLIENT: AXIS BANK LTD,

S.NO	OBSERVATION POINTS FOR SITE INSPECTION	RATING SCALE	RATING	DETAILED DESCRIPTION	LOCATION	REMARK
1	Site History	10	4	This is an old building constructed around 20 years back (As per the information given by landlord Mr. Khushi Khan).	Ward No. 06, Didawana.	
2	Visual Inspection of Overall Building from Structure Stability Point of View.	10	4	Based on the visual inspection of the structure stability point of view it seems there is no immediate threat to structure stability except due to huge seepages, where surface plaster is dis-intigrating & loosing the bonding.	Seepages are on all road side walls in basement.	
3	External Side Observation, if any	10	3	The Road & building wall junction is not treated properly throughout the peripherial length of the building on three sides.	Outside the building on Road Side.	
4	Observation of Foundation.			The Foundation was not visible		
5	Settlement Cracks in Walls.	10	5	Not Observed.		
6	Settlement Cracks Floors.	10	4	Not Observed.		
7	Moisture / Dampness Visibility in Ceiling Areas.	10	3	YES, It is observed in basement room number 03 & 01.		
8	Moisture / Dampness Visibility in Wall Areas.	10	2	YES, All three Road Side Walls were observed with huge seepages in the entire basement.	Basement	
9	Moisture / Dampness Visibility above Skirting Areas.	10	3	YES, In basement areas it was observed in plenty.	Basement	

10	Check for Plaster Strength (Intact or not) - Lighting Hammering Action.	10	4	It was observed OK in other than seepage affected wall areas.	Basement	
11	Floors - Visible Up Rooting, If Any	10	5	Not observed in general, but in the proposed strong room area there was water seepage was observed coming from joints of floor marble flooring tiles.	Basement	
12	Plaster - Visible Up Rooting in Ceiling Areas, If Any	10	3	Yes, it was observed in room number 03 & roadside wall & ceiling joints in the basement.	Basement	
13	Plaster - Visible Up Rooting in Walls Areas, If Any.	10	2	Yes, it was observed in all the seepage affected walls.	Basement	
14	Visible Concrete Deterioration in Slabs, If Any.	10	5	Not Observed.	Basement	
15	Visible Concrete Deterioration in Beams, If Any.	10	5	Not Observed.	Basement	
16	Visible Concrete Deterioration in Columns, if any.	10	5	Not Observed.	Basement	
17	Any Refurbishment is needed in Columns/Beams/Slabs/Other RCC elements.	10	6	NO	Basement	
18	Visible Cracks / Deterioration in Stone Patti Roofs, If Any.			NA	Basement	
19	Visual Stability Check for Parapet Walls, if any.			Terrace access could not be given, so it could not be checked.	Terrace.	
20	Visual Stability Check for Projections / Partitions if any (Horizontal).	10	3	Road Side outer balcony/chhajjas were observed with cracks & seepage indications.	Outside ground roof level.	
21	Water Leakage through RCC Column / Beam / Slab, if any.			NO	Basement & Ground Floor.	

22	Water leakage through Masonry Structure.			YES, In roadside walls in the basement.	Basement	
23	Over head Water Storage Tanks & Plumbing Connection Status.			Access was not given so the terrace could not be inspected.	Terrace	
24	Plumbing Connection Status in Toilets/Pantry Area.	10	2	Very Poor.	GF Toilet Areas.	
25	Rainwater Downtake Piping System Status.	10	2	Very Poor.	Outside/Road Side.	
26	Any Vegetation Causing Moisture/Cracks.	10	2	Two planters at both sides of the main entry from road are objectionable. These may cause seepage in the basement front side road side wall.	Outside/Road Side.	
27	Terrace Area Checking in General.			No access was given, so could not be inspected although needed.	Terrace.	
28	Visual Inspection of Overall Building from Structure Stability Point of View.	10	4	Based on the visual inspection of the structure stability point of view it seems there is no immediate threat to structure stability except due to huge seepages, where surface plaster is dis-intigrating & loosing the bonding.	Seepages are on all road side walls in basement.	
29	Observation on sagging check for RCC slabs, if any.	10	4	Not Observed.		
30	Observation on RCC columns buckling or crack, if any.	10	5	Not Observed.		
31	Observation on Cold Joints in concrete structure, if Any.			NO		
32	Observation on concrete honey combing, if Any.			Not Seen.		

33	Observation on Hairline Cracks in Slabs and slab soffits, if Any.			NO		
34	Observation on exposed steel reinforcement due to insufficient concrete cover.	10	4	Not Seen.		
35	Observation on column misalignment due to bad formworks during casting.			Not Seen.		
36	Position of under ground water tank & observation on this.	10	2	UGWT access was not given, so it could not be inspected. However, There was a sump with partly filled water observed in the basement. That indicates that water is running below the flooring in the basement.	Basement.	
37	Position of over head water tank & observation on this.			Since terrace access was not given, therefore it could not be checked up.	Terrace.	
38	General Basement Observation from inside.	10	2	At all the three sides, roadside walls were showing huge seepages. This is due to improper treatment of joint between road & building walls.	Basement	
39	Basement Observation from outside.	10	2	Basement ventilators are closed but the road & wall junction was not treated properly.	Basement	

40	Observation on NDT Rebound Hammer Test. This test is also normally done in complementary to the USPV test for better result.	10	1	NDT Rebound Hammer Test was conducted and the results are as per the report. For except the right side RCC column for all other walls values are coming less than M25. These walls are not made of RCC. These are masonry walls.	Basement Proposed Strong Room	
41	Observation on NDT USPV Test. This test is done in comp entry of the rebound hammer test for better results.	10	1	NDT USPV Test was conducted and the results are as per the report. For except the right side RCC column for all other walls values are coming less than M25. These walls are not made of RCC. These are masonry walls.	Basement Proposed Strong Room.	
42	Observation on NDT Concrete Half Cell Potential & Resistivity Test.	10	1	NDT Concrete Half Cell Potential & Restivity Test was conducted and the results are as per the report. However, except the right side RCC column (where less than 10% probability of steel corrosion) in all other walls steel rods were absent.	Basement Proposed Strong Room	

43	Observation on Concrete Scanning Test.	10	1	The Concrete Scanning Test was conducted and the results are as per the report. However, RCC was found only in the column right side of the strong room entry. All other walls are made of masonry only no concrete & steel was observed.	Basement Proposed Strong Room	

TOTAL RATING SCALE : 310

TOTAL RATING : 99

RATING INDEX: 0.32

RECOMMENDATION : AS PER RECOMMENDATIONS MADE IN AUDIT REPORT PART

SIGNATURE OF AUDITOR

SIGNATURE OF BRANCH CONTACT PERSON FOR INSPECTION WITNESS ONLY

KULDEEP SINGH SHEKHAWAT (AVP & BM) - NISHANT JI (IFM)

7665017321, 8890023826