

11 April 2025

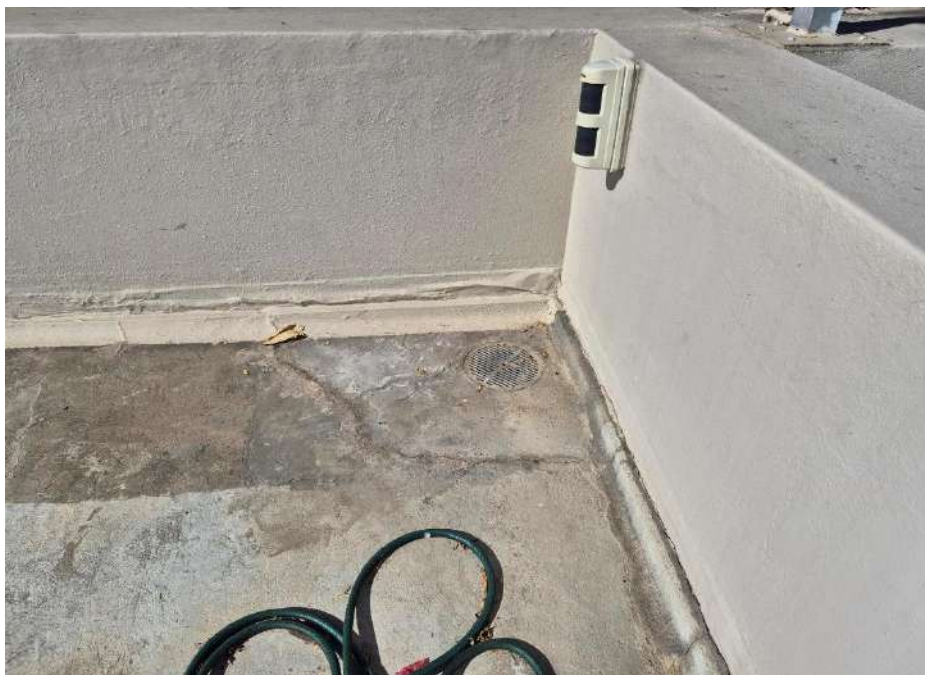
RE: Site report for 'HOUSE NOTH' Leak detection, Property assessment

To whom it may concern. ([TechQ Development appointed Monster Plumbing for assessment](#))

Monster Plumbing attended to the abovementioned residence on the 11th of April 2025, as a follow up inspection to previously conducted leak detection, water dye test, and assessment done by Cape Town Leak Detection & Plumbing, which is a linked company to our group.

Top Floor / Parking / Flower box / Full bores

- The sloped concrete slab joins the initial driveway slab with a surface join, which is not sealed in accordance to suitable water proofing practices to prevent water ingress. A surface sealant on the join has disintegrated, and doesn't match the required processes to prevent water from infiltrating the below structure during rain and exposure to water. The full bores drains are level with the surface, and no channel is present to direct and relieve water from the surface. The water in turn runs down the stair case, and rushes into the front door entrance and adjoining structure to cause considerable and ongoing damages when rain is present.



- Visible cracks are observed on the surface, and represents the failing topping that is flaking off the main structure, causing water to infiltrate the structure on the side and surface. The finishing of the structure does not align with the design specification as outlined by the assessing engineer. Surface membrane and water proofing paint is applied to a low level around the ground level, and the method is not suitable to prevent ingress from occurring as evident on the damages present.



- Water proofing methods appear to be a membrane and paint application only, having observed the inside of the flower box. It would be expected that stagnant water during rain season will infiltrate the structure all around this flowerbox, and cause for water penetration to the surrounding and linking structures below, as was evident during previous site assessments.



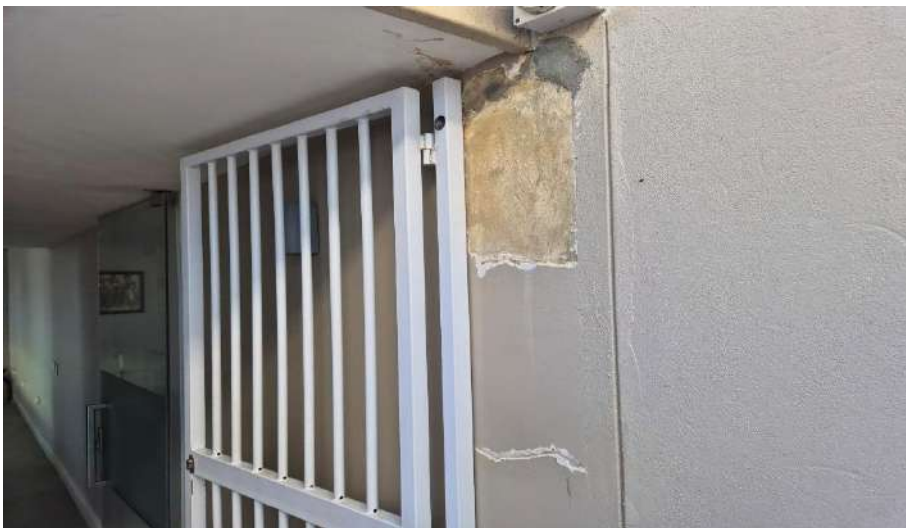
- It would be advised that the flowerbox be opened, soil to be removed from one corner to fully expose the inside, and a formal assessment done as to the corners of the bottom of this structure, to inspect if coving was present on the corners to prevent pressure points on the corners to spread any water accumulation on these sections where it borders vital structures where it transfers moisture into unwanted areas, and showing through onto the inside finishes and compromised plaster surfaces within the building as observed. It would be recommended that professional Cemflex water proofing methods be used in the correct ratio concrete work, to strengthen these exposed areas, and cove the corners to have no pressure points, and complete the surface water proofing with torch on water proofing which can be maintained in the future to prevent water from entering the structures.



Above image shows that no channels are present for water to be directed successfully to the drainage points. The inside of the drainage also doesn't appear to be large enough to accommodate the influx of water expected to accumulate from the collective surface it is supposed to service. The approximate 100mm cement edging incorporated on the borders will in no way channel the water flow away from the structure, nor will it result in the water being directed to the full bores. Water rushes down the pedestrian walk way to the front door entrance.



Below image is representing the damages linked to the water ingress from the above parking area, into the front door area.





Above image is on the left of the front door, beneath the 2nd inactive full bore bordering the flower box above. Distressed plaster surface being separated from the main structure.

Further distressed plaster, paint damages, cracks and defects are noted throughout the inside of the property as will be presented by the consulting engineer in more detail.



As the water ingress infiltrates the structure, it causes damp to rise off the concrete slabs it lands on as indicated above.



Water damage evident on the below structure from the various references made for the above points of water ingress from the drive / parking, and flowerbox.



Alongside the pool installation did we observe compromised concrete work around the pool coping tiles. Water from the lawn area where it borders the pool enters behind the tiles causing water to enter alongside the side of the pool and leaks lower down into the building structure and marine glass found in the below room. There is no visible care taken to create for a reinforced water proofing, and the cement that is present already parted from the installation area of the tiles.



The outside bathroom building is severely damaged due to water ingress from the top of the structure. No acceptable roof provision is present, and the building is filled with rising damp from all levels of the structure. Windows upwards showing severe water damage, from the floor level upwards. The room is constructed in a poor manner and no care observed to prevent water ingress.



The boundary wall is also subjected to severe water ingress from outside walkway causing ongoing damages as per above and below picture.





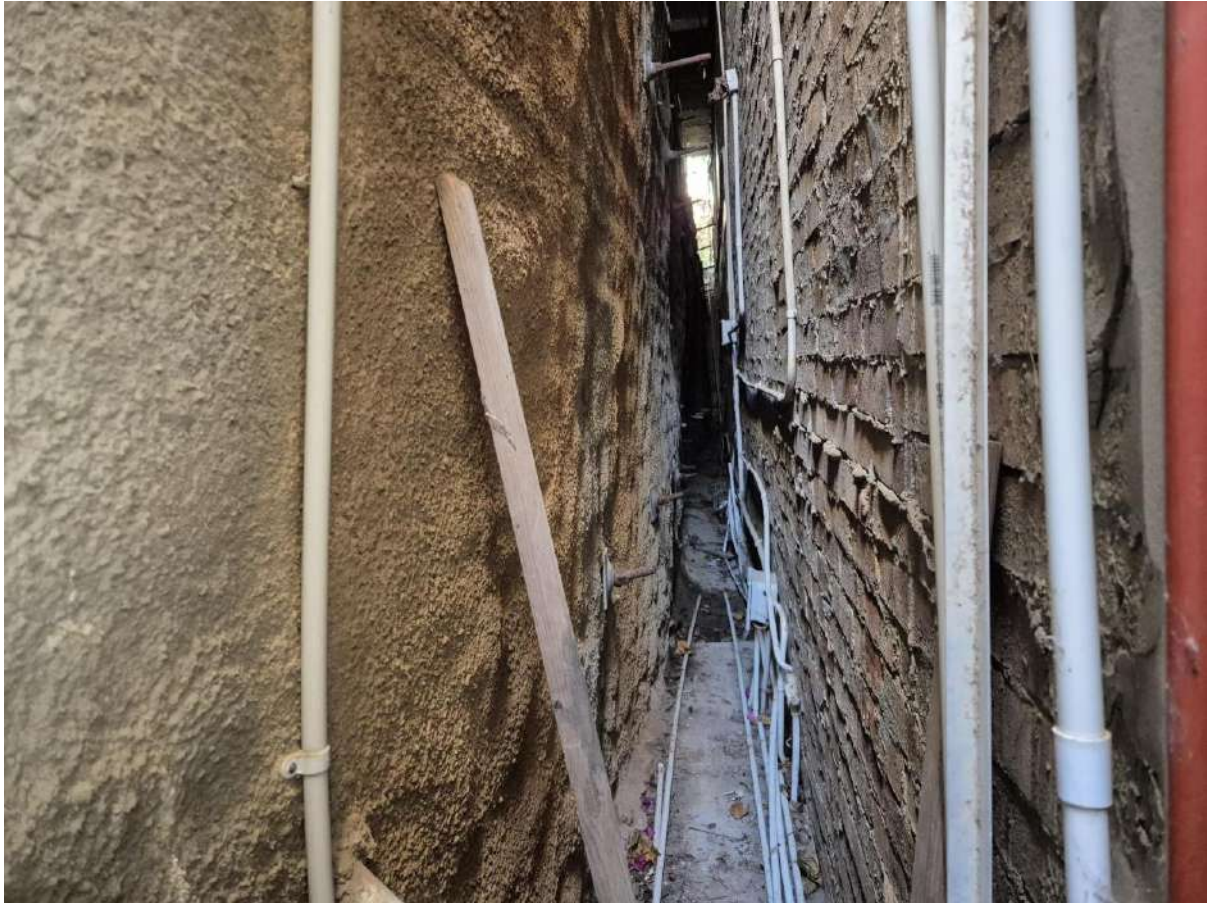
Below image shows the gate to the side access where water flows down during rain, to land on a compromised astro turf / fake lawn area.





The above indicated that the drainage relieve, is higher than the lawn area. The lawn area is based on a compromised compaction, which resulted in the base dropping excessively, and preventing any water relieve from occurring. The water ingress is further compromising the base and water infiltrating the building structure to all surrounding areas causing not just damage, but could cause for structural movement.

Behind the building is a Gunitite structure with relief pipes, but the water draining from the ground is discharging on an area where no run-off is possible, and the water in turn is absorbed by the structure adding to severe damages as per various images provided.



Gunite structure on the left, and no plaster or water proofing on the super structure to prevent water ingress, no drainage for the water being relieved from the natural soil behind the house structure.





Lower bordering neighbor roof is joining irregularly against the wall of the client property. There is a damaged and bent roof sheet causing for pooling, no run off for water, and unfinished wall plaster left to compromise the area, and water can freely access the client's property causing ongoing plaster, pain and structural damages.





Wall area beneath the neighbor with the compromised and irregular roof structure and poor finished plaster work.



The surface below the pool pump has no concrete infill, causing direct water ingress into the bordering room with severe plaster, paint and structural damages.

The storm / rain water directed to this area originates from the walk way with side entrance via the fake lawn area, which the base has been compromised. The water runs down this walkway, with no sufficient full bores, and leaves the water to be absorbed by the structure both vertically, and horizontally leaving major and ongoing damages to occur as can be seen on the below image.





The overall finding is that a very poor completion of project seems apparent, and that no sufficient care was given the underpin area with cement stabilization where it concerns the base on which the fake lawn is based, causing big problems with water flow, soil settlement, resulting in water ingress to the lower part of the building, its foundation and could contribute to movement as a result as can be seen in the structural distress.

Preventing water from infiltrating the building is major concern on all areas from the very top as defined, middle section around pool, and lower around the un-plastered, non-waterproofed area, around the pool, and various areas as defined.

Extensive exploration work is required to expose areas already damages to address and define the exact repairs work needed to stop the water ingress.





The Dye test conducted was absorbed by the structure and not enough volumes could be generated to fully moisturize the structure with the dye to recreate the same extent of the water influx which will occur during winter rains.

It is my opinion and view, that the details in this report will show a repeat and extensive occurrence during the upcoming rain season which will support the findings, and repair suggestion made in this report.




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