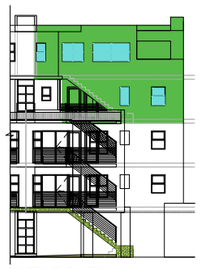
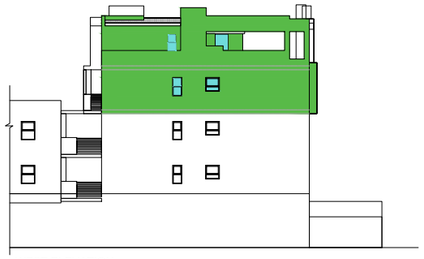
PROJECT SCOPE and INVESTIGATIVE NOTES

ELEVATIONS

SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION

INVESTIGATION NOTES

(5) Crack above window. Signs of water running down wall.

(6) Crack in wall and water ingress result in plaster lifting.

(7) Water ingress and damp caught behind waterproofing.

(8) Patio covered with artificial lawn, no slope to drain water

(9) Crack on wall and signs of water pouring down wall.

(9.1) Crack and water damp on wall.

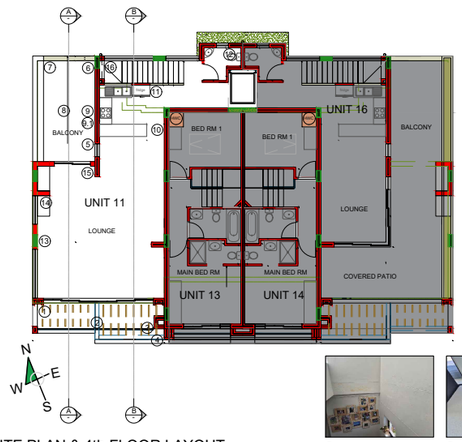
(10) Crack in movement joint and plaster peeling off.

(4) Water damp against wall, no weep holes.

(3) Standing water on patio. No drainpipe or Full-bore

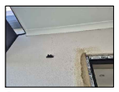
(2) No drainage slope on patio tile floor.

(1) Crack in construction joint and rusted balustrades



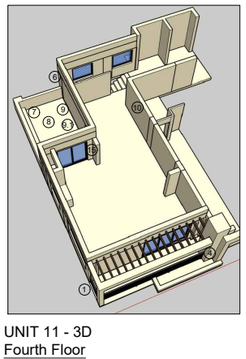
SITE PLAN & 4th FLOOR LAYOUT
SCALE 1:150

(16) Water ingress and damp on Wall along staircase



(15) Crack above door opening.

(14) Water damp in braai area.



UNIT 11 - 3D
Fourth Floor
SCALE 1:100

(11) Crack in concrete ceiling.

(12) Water damp above window result in plaster peeling off.

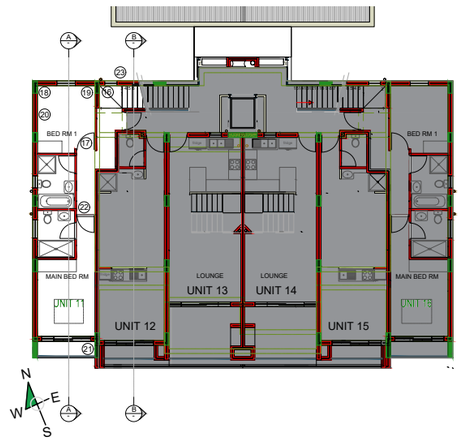
(13) Ceiling cornice comes loose, water damp.

(19) Water ingress from concrete slab above (patio)

(18) Water damp from upstairs concrete slab (patio)

(17) Water damp from upstairs concrete slab (patio)

(16) Water ingress and damp on Wall along staircase



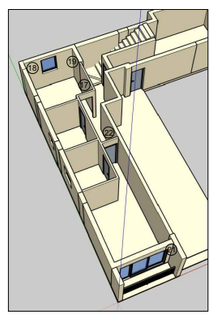
SITE PLAN & 3th FLOOR LAYOUT
SCALE 1:150

(20) Water Ingress on Wall - Covered Braai area patio

(21) Water Ingress on Wall - Covered Braai area patio

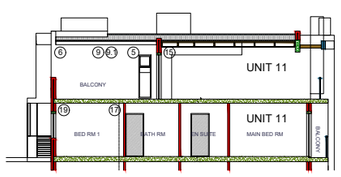
(22) Water Ingress on Wall - Covered Braai area patio

(23) Blocked and non-functional weep holes

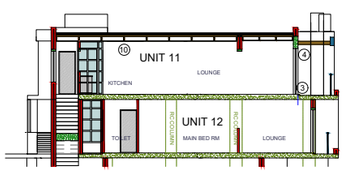


UNIT 11 - 3D
Third Floor
SCALE 1:100

SECTIONS



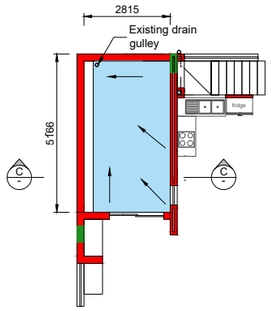
UNIT 11 - SECTION A - A



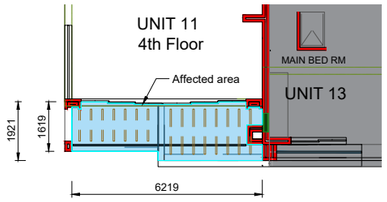
UNIT 11 - SECTION B - B

CONCEPT PROPOSAL : REMEDIAL CONCEPTS

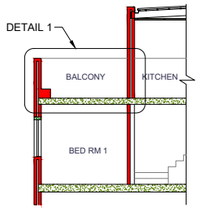
WATERPROOFING and STORMWATER DRAINAGE



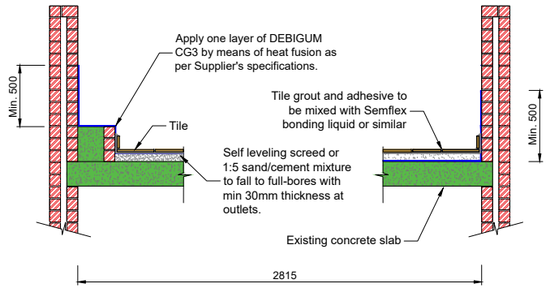
PATIO (North End)
Layout



BALCONY - 4th Floor (South)
Layout

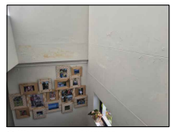


SECTION C - C



DETAIL 1
Waterproofing Detail

WATER DAMP REPAIRS



(10) Water ingress and damp on Wall along staircase

(18) Water damp from upstairs concrete slab (patio)

3D - Bedroom 1

(17) Water damp from upstairs concrete slab (patio)

(19) Water ingress from concrete slab above (patio)

3D - Bedroom 1

Methodology :

1. Identify and Address the Source:

   Leaks: Check for any roof leaks, plumbing leaks, or condensation issues causing the dampness.
   Rising Damp:
   If the dampness is coming from the walls below, it could be rising damp, which requires a different treatment approach.
   Condensation:
   Poor ventilation can lead to condensation, especially in bathrooms and kitchens. Ensure proper airflowWater ingress from concrete slab above (patio)

2. Remove Damaged Materials:

   Mold and Deteriorated Plaster: If mold is present or the plaster is damaged, remove the affected areas.
   Prepare the Surface: Clean the exposed concrete thoroughly and ensure it's dry before applying any new materials.

3. Improve Ventilation:

   Dehumidifier: Use a dehumidifier to draw out moisture from the air and help dry the concrete.
   Fans: Fans can help circulate air and speed up the drying process.
   Ventilation: Ensure proper ventilation in the room, especially in areas prone to dampness like bathrooms.

4. Apply Waterproofing:

   Damp Proof Membrane: For persistent dampness, consider installing a damp-proof membrane on the ceiling.
   Cementitious Crystalline Render: This render forms a waterproof barrier and can be effective in holding back moisture.
   Elastomeric Coatings: These coatings are flexible and can help prevent cracks and water penetration.
   Liquid Membrane: A liquid membrane can be applied to create a seamless waterproof barrier.

5. Other Tips:

   Anti-Mold Paint: If mold is a recurring problem, use anti-mold damp seal paint hat contains fungicidal chemicals.
   Sealants: Use sealants to fill cracks and holes in the concrete, preventing water from entering.
   Regular Maintenance: Regularly inspect your ceiling for signs of dampness and address them promptly.

CRACK REPAIRS

CRACK REPAIR PROCEDURES
Above and under Openings

CRACK REPAIR
Above doors and Openings

1. Verify affected areas with the Engineer and remove plaster with light hand tools.
2. Light chisel opening - 5mm deep of apparent crack.
3. Fix galvanised lath mesh to area with galv. nails, 300mm max centers.
4. Lath metal tightly stretched to reduce waviness.
5. Plaster forced through openings of mesh so the lath is completely encased in the plaster (1:5 mix).
6. Repaint to mach existing.

NOTES:

1. This drawing to be read in conjunction with the following documents.
   * Structural Investigation Report - 8 August 2025
2. No dimensions may be scaled from this drawing.
3. Special care to be taken during all construction operations to not damage or disconnect any services (water, sewer and electrical).

SITE LAYOUT:
House Barnard - Erf 4114, 37 Arum Road, Table View, Cape Town

CLIENT
NATIONAL HOME BUILDERS REGISTRATION COUNCIL
Centennial Place
East Block
Century City Boulevard
Milnerton
Tel: (021) 913 9210
Cell: (083) 475 3546
e-mail: dalitsonn@nhbrc.org.za

PROJECT TITLE
Structural Engineering Investigation Services for Erf 4114, Arum Road, Table View, Cape Town (House Barnard)

DRAWING TITLE
Investigation Notes and Concept Proposed Remedial Detail

Revisions

Date	No.	Description

Reference Drawings

Dwg Number	Description

Drawing Issued for:
(●) Information ( ) Design
( ) Construction ( ) As-built

TechQ Development
Consulting Engineers, Project and Construction Managers
Office Corner, Block C
184 Lancaster Road
Gordon's Bay
7140
Tel: (066) 105 1226
Fax: (086) 474 1937
e-mail: techq.development@outlook.com

NEW DEVELOPMENT		MAINTENANCE	YES
DATE: Aug 2025	DRAWN: SOD	SCALE: AS-SHOWN	CHECKED: MJB
NHBRC SITE CLASSIFICATION:	NA	BEARING CAPACITY	NA

Stand Nr. and locality:
Erf 4114, 37 Arum Road, Table View, Cape Town

ENGINEERING DESIGNS – Structural & Civil services

Designed by:	Drawn:	Checked:
M.J. Badenhorst	SOD	MJB

Competent Person:
MJ Badenhorst (Pr.Tech.Eng)(Pr.CPM)
ECSA # 200270009
NHBRC Code # 601551
Cell: 066 105 1226
meltbadenhorst@outlook.com

Signature:

Drawing number:	Drawing size:	Rev.
HBAR – Struct 01	A1	01

Client Approval:

Signature: