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**VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY
TOWER - A OF ARMY WELFARE HOUSING ORGANISATION (AWHO)
AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA**

APRIL 2023



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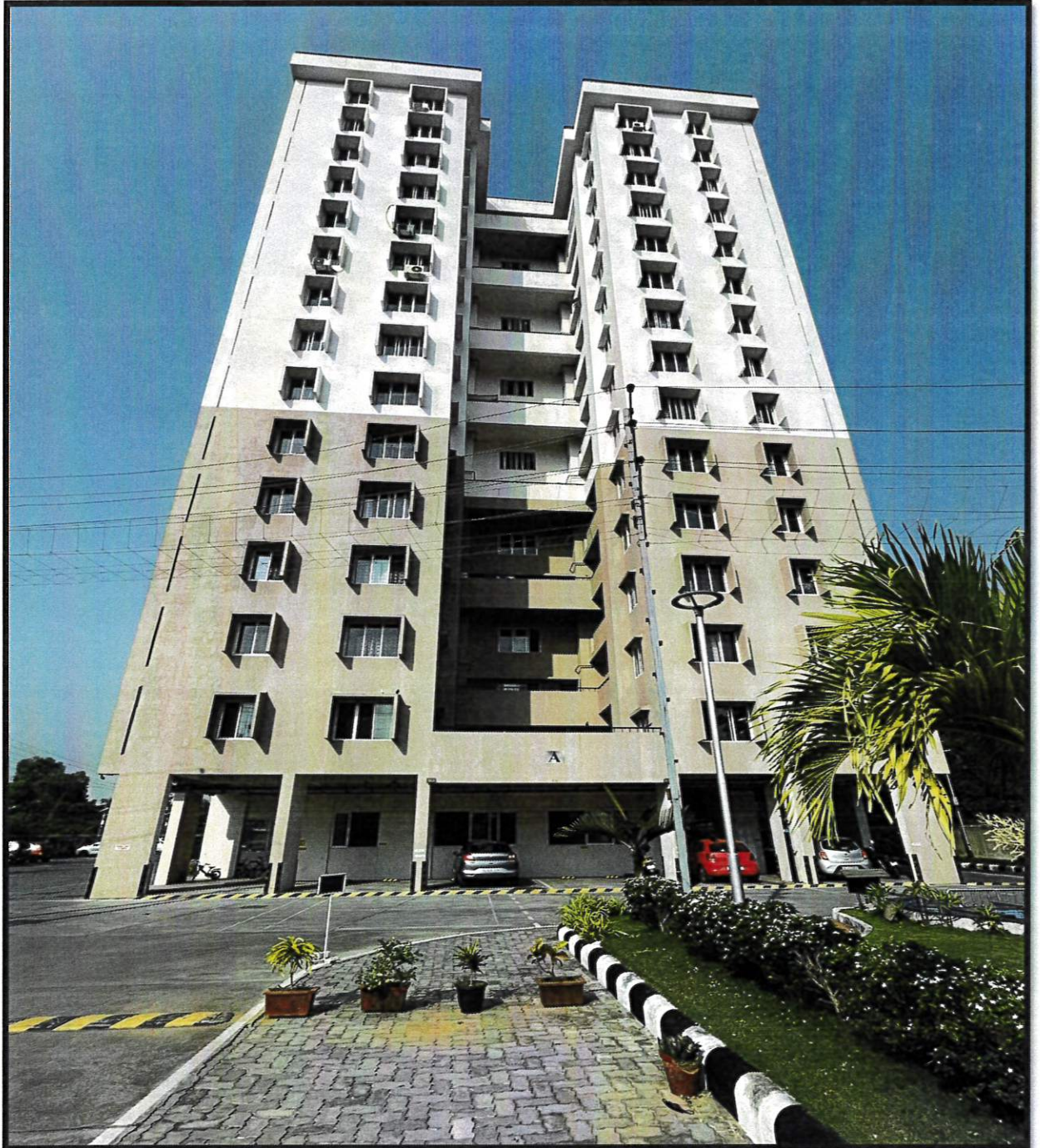
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**VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY
TOWER - A OF ARMY WELFARE HOUSING ORGANISATION (AWHO)
AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA**

APRIL 2023



Report on	:	Visual Inspection of Residential Chanderkunj Army Tower - A of Army Welfare Housing Organisation (AWHO) at Silver Sand Island, Vytilla, Kochi, Kerala
Report for	:	M/s Army Welfare Housing Organization (AWHO) Vytilla, Kochi, Kerala.
Reference	:	Meeting on 13-10-2022
Period of Assessment	:	20 th February 2023 to 24 th February 2023
Assessment carried out under the guidance of	:	Mr. Mohankumar General Manager-South Asia Region-NDT & RR Dr. Shantharaju K Technical Advisor - Design review, NDT & RR Mr. R N Ravishankar Senior Manager – NDT & RR Mr. Avinash J Technical Manager-NDT & RR (PAN INDIA) Mr. Vijay H V Manager – NDT & RR Mr. Girish R Manager – NDT (South) M/s Bureau Veritas (India) Pvt Ltd Bangalore.
Assessment carried out by	:	Mr. Manjunath B S Engineer – Design Mr. Harish M Achari Asst. Manager - NDT Mr. Chethan H R Engineer – NDT Mr. Bibin Joy Engineer – NDT

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Executive - NDT

Mr. Ranjith P Menon
Senior Technician

M/s Bureau Veritas (India) Pvt Ltd,
Bengaluru & Kochi.

**Assessment carried out
in the presence of**

:

Lt. Col. Sidhartha Singhal
Project Director
Army Welfare Housing Organization

Rear Admiral P Ashokan (Retd.)
President

Mr. Jaya Kumar Velloor
Manager

Residential Welfare Association (RWA)
Managing committee, Chanderkunj Army towers
Kochi

**Date of submission of
final report**

:

30th April 2023

CONTENTS

Section	Topics	Page No.
A	INTRODUCTION	06
B	PHYSICAL OBSERVATIONS	06 - 10
C	PREPARATION OF LAYOUTS FOR DISTRESS MAPPING	10
D	INFERENCES	11
E	RESTORATION MEASURES	11 - 12
F	GENERAL RECOMMENDATIONS	12
G	CONCLUDING REMARKS	13
	<i>ANNEXURES</i>	
	SKETCHES	01 - 33
	SPECIFICATIONS	01 - 03
	PHOTOGRAPHS	01 - 15

A. INTRODUCTION

The existing **Army Welfare Housing Organisation “Chanderkunj Army Towers”** residential apartment building located at Silver Sand Island, Vytilla, Kochi, Kerala is a conventional RC framed structure with infilled masonry walls. The residential complex consists of three towers namely A, B, C and Club House.

Tower A comprises of ground plus fourteen upper floors. The residential block was reported to be constructed about 7 years back and since then most of the flats were occupied.

Off late, the concerned authorities of **M/s Army Welfare Housing Organisation (AWHO)** and **Residential Welfare Association (RWA)** were observed distress features such as Cracks, spalling of cover concrete & dampness/damp patches, peeling of paint were observed in RC members in Tower A. Hence, a reference was made to M/s Bureau Veritas India Pvt. Ltd, to visually inspect Tower A and to suggest appropriate restoration /corrective measures.

In response to this, a detailed investigative study was carried out by M/s Bureau Veritas India Pvt. Ltd. from **17th February 2023** and **24th February 2023** by conducting the visual inspection.

B. PHYSICAL OBSERVATIONS

Following are the physical observations made consequent to the detailed inspection of Tower A.

Ground floor (Common areas only):

- No visible signs of settlement in the foundation system were observed in any part of the building.
- Peeling of paint were observed in the RC ceiling slab and beams at few locations.
- Peeling of paint & dampness/damp patches were observed in the masonry walls at a few locations.

(Refer Sketch DWG.REF. No. GL/ GF/ TA-01 & DM/ GF/ TA-01)

First floor:

- Debond of granite cladding around lifts shear wall were observed at most of the locations.
- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0101, A-0103

- Plaster cracks in masonry wall (Window Bottom) were observed at isolated location inside the flat of A-0101.
- Any other major distress features were not observed other than the above mention distress in this floor.

(Refer Sketch DWG.REF. No. GL/ 1F/ TA-02 & DM/ 1F/ TA-02)

Second floor:

- Cracks were observed in RC ceiling slab at few locations inside the flat of A-0203.
- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flat of A-0203.
- Debond of tiles flooring were observed at few of the locations in the flat of A-0203.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0201 & A-0204 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 2F/ TA-03 & DM/ 2F/ TA-03)

Third floor:

- Debond of tiles cladding around toilet wall were observed at a few locations inside the flat of A-0301.
- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flat of A-0301.
- Popping up of granite flooring were observed at a few location entrances of flat A-0301.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0302 & A-0303 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 3F/ TA-04 & DM/ 3F/ TA-04)

Fourth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0401 & A-0403.
- Cracks in masonry wall were observed at isolated locations the flat of A-0401.

- Flat No. A-0402 & A-0404 was not inspected due to non-availability of the occupant.
(Refer Sketch DWG.REF. No. GL/ 4F/ TA-05 & DM/ 4F/ TA-05)

Fifth floor:

- No major distress features were not observed in this floor.
- Flat No. A-0502 & A-0504 was not inspected due to non-availability of the occupant.
(Refer Sketch DWG.REF. No. GL/ 5F/ TA-06 & DM/ 5F/ TA-06)

Sixth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0602 & A-0603.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0601 & A-0604 was not inspected due to non-availability of the occupant.
(Refer Sketch DWG.REF. No. GL/ 6F/ TA-07 & DM/ 6F/ TA-07)

Seventh floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0702 & A-0703.
- Popping up of tiles were observed at a few locations inside the flats of A-0702.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0701 & A-0704 was not inspected due to non-availability of the occupant.
(Refer Sketch DWG.REF. No. GL/ 7F/ TA-08 & DM/ 7F/ TA-08)

Eighth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0803.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0802 & A-0804 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 8F/ TA-09 & DM/ 8F/ TA-09)

Ninth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-0903
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-0902 & A-0904 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 9F/ TA-10 DM/ 9F/ TA-10)

Tenth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flats of A-1003 & A-1004.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-1001 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 10F/ TA-11 & DM/ 10F/ TA-11)

Eleventh floor:

- No major distress features were not observed in this floor.
- Flat No. A-1102 & A-1103 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 11F/ TA-12 & DM/ 11F/ TA-12)

Twelfth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flat of A-1201 & A-1202.
- Popping up of granite flooring were observed at a few location entrances of flat A-1201.
- Cracks in masonry wall were observed at isolated locations inside the flat of A-1201.
- Any other major distress features were not observed other than the above mention distress in this floor.
- Flat No. A-1203 & A-1204 was not inspected due to non-availability of the occupant.

(Refer Sketch DWG.REF. No. GL/ 12F/ TA-13 & DM/ 12F/ TA-13)

Thirteenth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flat of A-1303.
- Cracks in masonry wall were observed at isolated locations inside the flat of A-1303.
- Any other major distress features were not observed other than the above mention distress in this floor.

(Refer Sketch DWG.REF. No. GL/ 13F/ TA-14 & DM/ 13F/ TA-14)

Fourteenth floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at isolated locations inside the flat of A-1401.
- Cracks in masonry wall & separation cracks were observed at isolated locations inside the flat of A-1401 & A-1404.
- Cracks were observed in RC ceiling slab at few locations inside the flat of A-1401.
- Peeling of paint & dampness/damp patches were observed in the masonry wall (Staircase regions) at isolated locations.

(Refer Sketch DWG.REF. No. GL/ 14F/ TA-15 & DM/ 14F/ TA-15)

Terrace floor:

- Peeling of paint & dampness/damp patches were observed in the masonry wall at several locations.
- Peeling of paint & condensation stains were observed in the RC members at few locations.

C. PREPARATION OF LAYOUTS FOR DISTRESS MAPPING.

A detailed distress mapping was carried to prepare the distress layout drawings of the Ground floor to Fifteenth floor.

(Refer Sketch DWG.REF. No. DM/ GF/ TA-01 to DM/ GF/ TA-15)

D. INFERENCES.

Following are the inferences drawn, based on the detailed observations and results of probing tests.

- a. The plaster cracks in masonry walls are mainly due to improper filling of mortar in joints and lean mortar mix provided for joints, which are minor in nature and are not detrimental to safety of structure.
- b. Separation cracks observed are due to dissimilar materials, improper filling of joints / not provided with mesh between masonry and RC members during construction stages. Further, thermal effects caused by expansion and contraction of building have aggravated the cracks.
- c. Peeling of paint and damp patches in masonry walls and could be due to any one or a combination of the following.
 1. Deterioration of water proofing on toilet flooring has lead to leakage and seepage.
 2. Age effect.

E. RESTORATION/CORRECTIVE MEASURES.

Based on the above visual inspection & inferences drawn, appropriate recommendations are made

1. Treatment for cracks in RC Ceiling slab.

- a. All existing plaster/de-bonded cover concrete shall be completely removed by gentle chipping to expose hard / sound concrete.
- b. 'U' groove of 10 mm shall be made along the lift interface/ crack/construction joint. and filled with polymer modified mortar.
- c. 12 mm dia holes, 50/75 mm deep @ 200mm c/c shall be drilled along the crack/joint/ honey-combed surface to fix PVC nozzles for grouting.
- d. 10 mm dia PVC nozzles shall be fixed into the drilled holes using anchor grout as per specification.
- e. 'U' groove shall be filled with polymer modified mortar/ epoxy putty as per standard practice.
- f. Pressure grouting shall be done with a pressure of 3 to 4 Kg/sq.cm using low-viscosity epoxy injection grouting through the nozzles as per specification enclosed. The nozzles shall be cut in flush with the surface and plugged.

(Refer sketch DWG.REF. No.RM-01)

2. **Treatment for separation crack between the junction of RC member & masonry wall.**
 - a. 'U' groove of 12 mm wide 6 mm deep shall be made all along the crack at the interface of masonry wall and RC member junction and cleaned.
 - b. Groove shall be filled with a flexible sealant like Tacksel/Polysulphuide sealant /silicon sealant or any other equivalent.

(Refer sketch DWG.REF. No.RM-02)

3. **Treatment for cracks in Masonry wall.**
 - a. Existing plaster along the crack shall be removed on either side of the crack for a width of about 300 mm (on either side of the wall) and cleaned.
 - b. Mortar joints along the crack shall be deep raked and filled with cement mortar.
 - c. Weld-mesh of size 50 x 50 x 3 mm shall be fabricated and fixed across the crack using 'U' nails.
 - d. Re-plastering the region with CM 1:4 as per standard practice

(Refer sketch DWG.REF. No.RM-03)

4. **Treatment for dampness region of masonry wall.**
 - a. The deteriorated plaster on masonry walls shall be removed by gentle chipping.
 - b. The mortar joints in walls shall be deep raked and re-pointed with CM 1:4 as per the standard practice followed by re-plastering in CM 1:3 mixed with waterproofing plasticizers.

F. GENERAL RECOMMENDATIONS

In addition to the above-mentioned recommended measures, the following are the general recommendations.

- Leakages/seepages/corrosion in any RC member shall be treated immediately without delay.
- Periodic maintenance of the building shall be strictly adhered to for effective functioning and enhancing the life of the structure.

G. CONCLUDING REMARKS

Based on the detailed Physical observations made on the ground floor to fifteenth floor of **Tower A** of the existing “**CHANDERKUNJ**” **Army Towers of Army Welfare Housing Organisation (AWHO) Residential Apartment Building**” located at Silver Sand Island, Vytilla, Kochi, Kerala India as it stands is found to be minor distressed, minor leakages and seepages. However, these functional-related distress features call for appropriate treatment to avoid further deterioration and to improve the durability and longevity of the structure.

On carrying out the recommended remedial measures effectively under the guidance of experienced technical personnel by an experienced agency, the distress in the building will be minimized.

After carrying out the recommended remedial measures effectively it is mandatory to carry out periodic maintenance of the building as per standard practice.

Disclaimer:

The technical information furnished in this report is based on the inspection carried out by M/s. Bureau Veritas India Pvt Ltd. The responsibility of M/s. BVIPL is only to technical content of this report. M/s. BVIPL shall not in any way be responsible for any consequential matters.

CHETHAN H R
Engineer- NDT

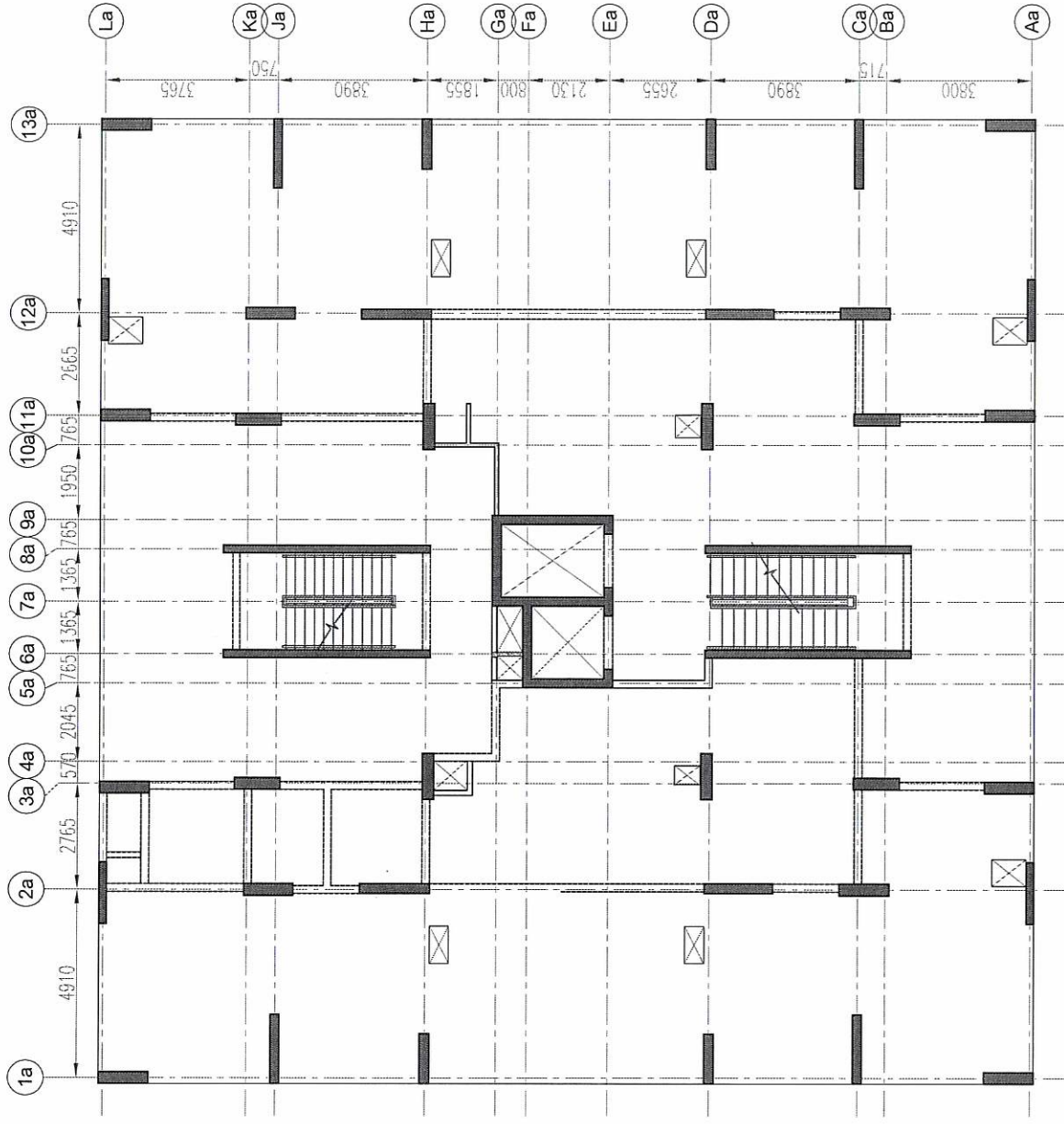
AVINASH J
Technical Manager-NDT & RR
(PAN INDIA)



ANNEXURES

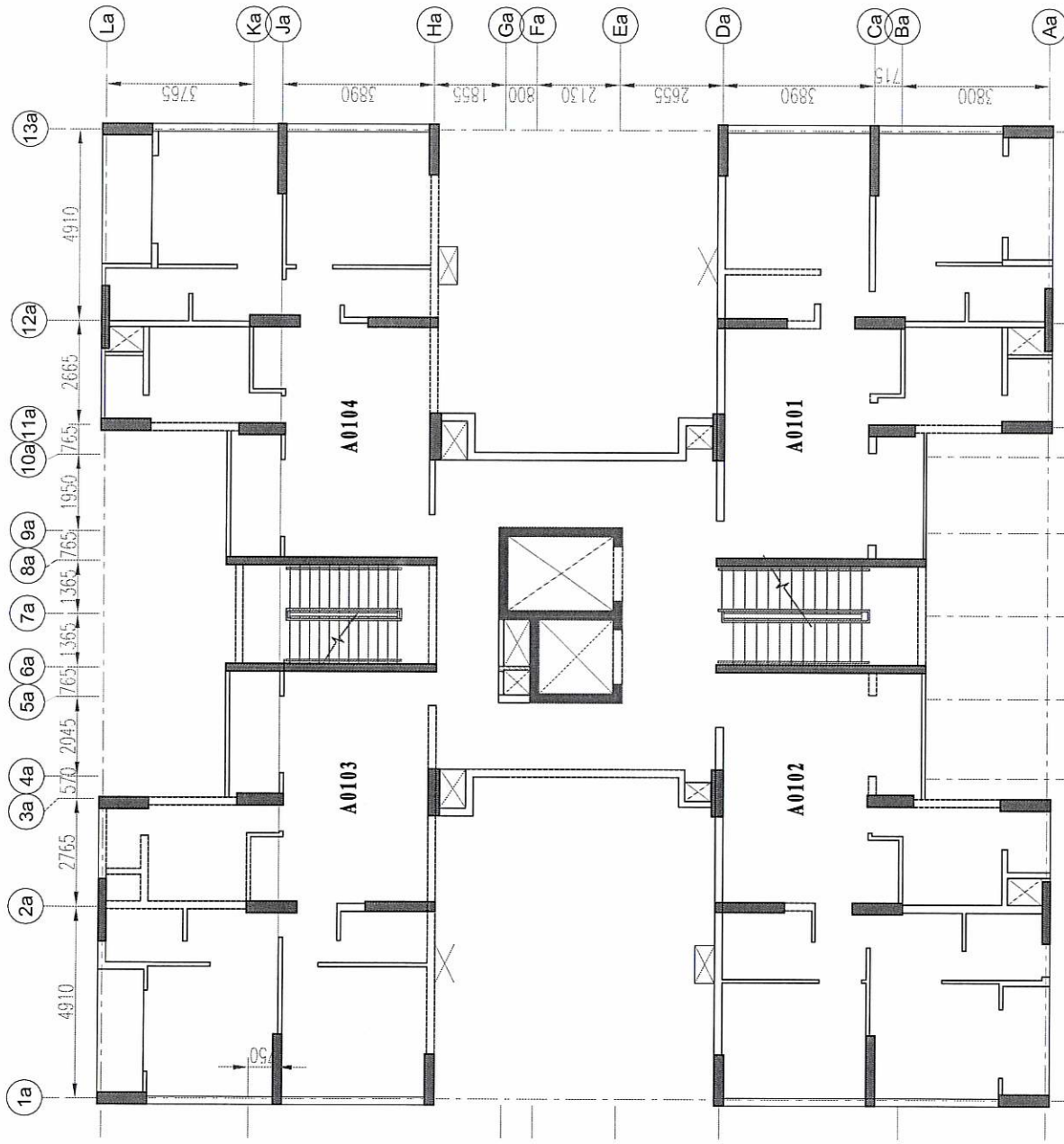


SKETCHES



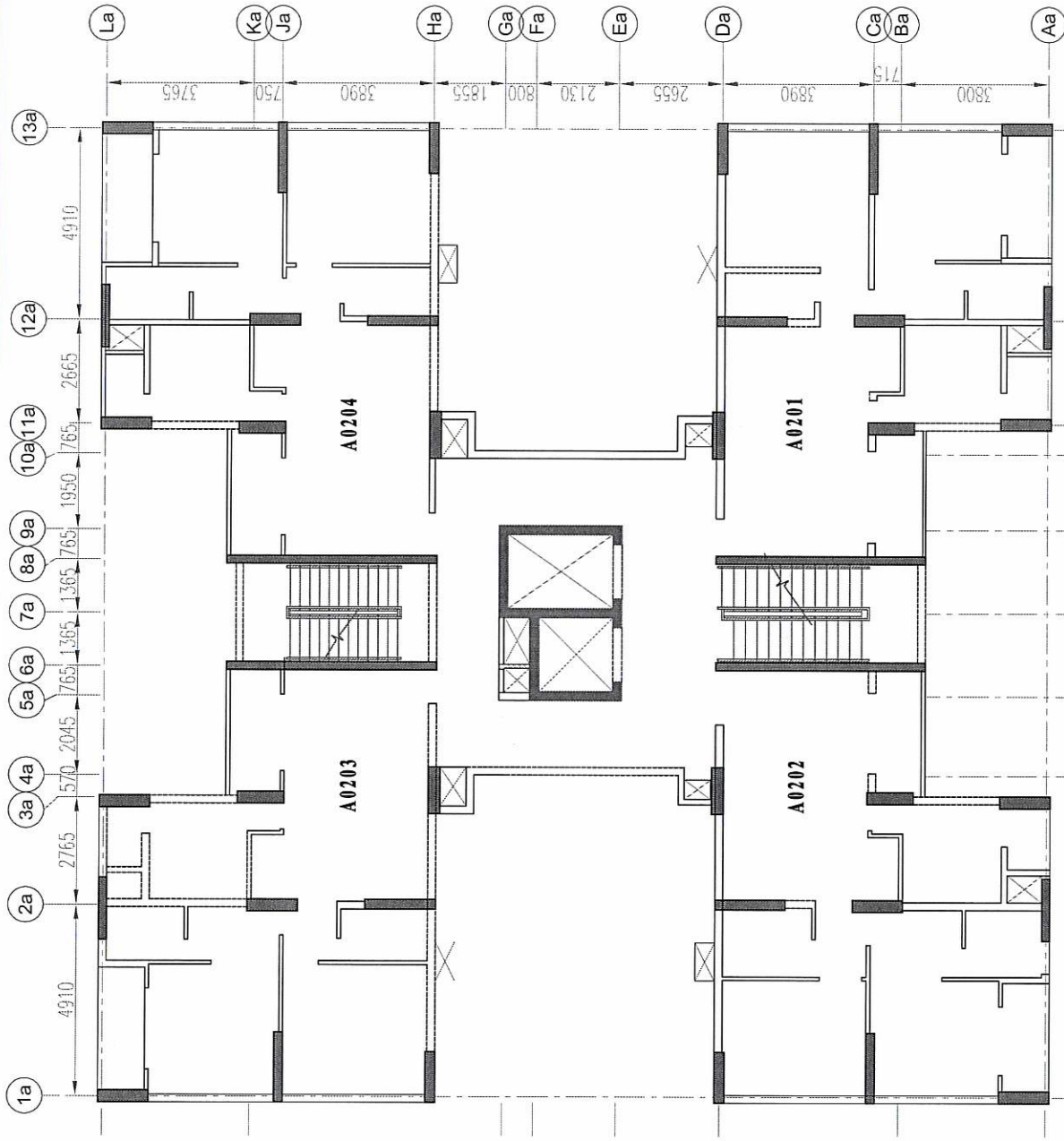
TOWER-A-GROUND FLOOR

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		GENERAL LAYOUT OF TOWER A-GROUND FLOOR						
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA	CONSULTANTS		APPROVED: AJ/Dr.KS		DWG. REF. No : GL/GF/TA-01		REV.No. RO
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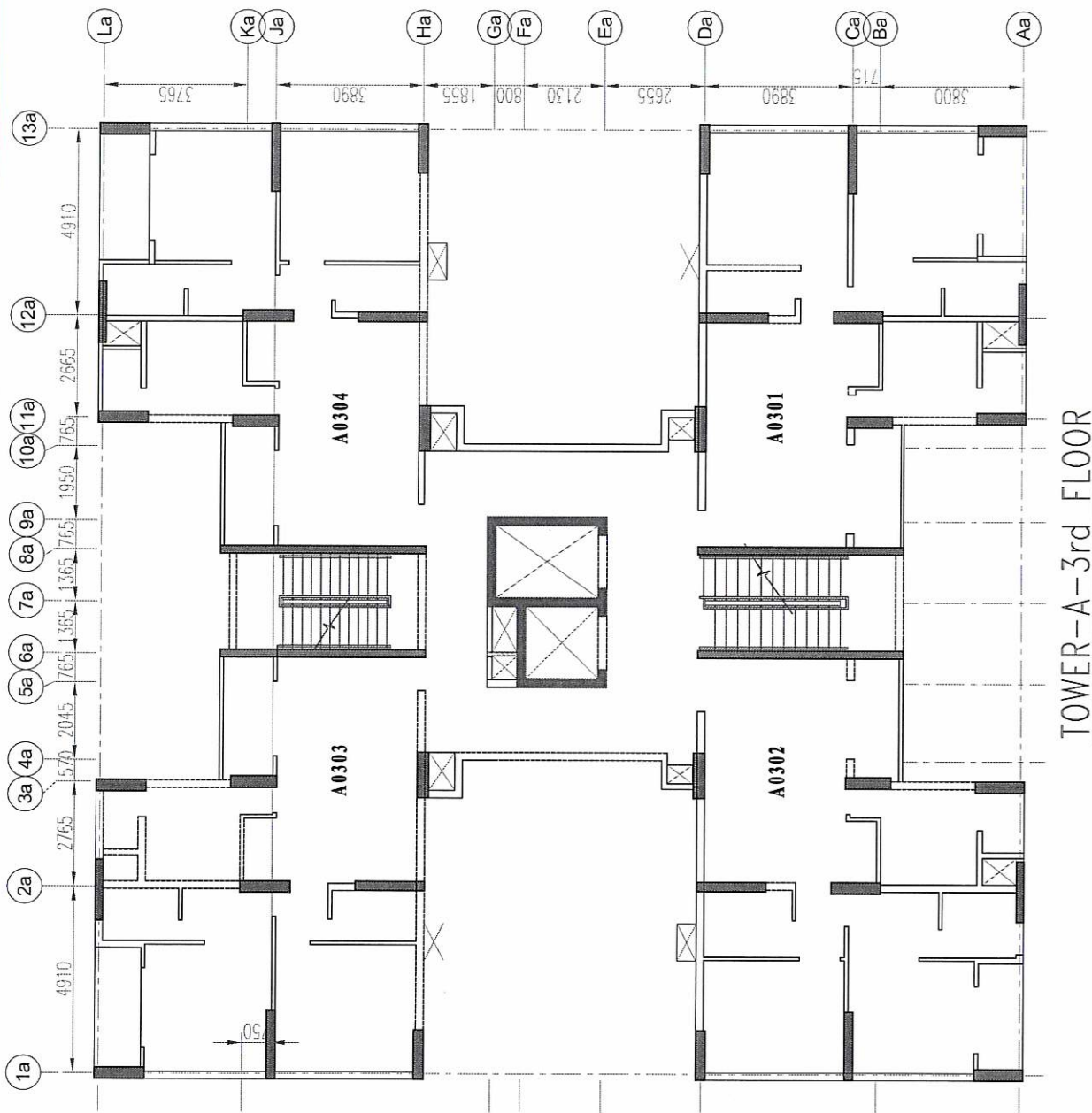
TOWER-A-FIRST FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA	TITLE	<div>GENERAL LAYOUT OF TOWER A-1ST FLOOR</div>					DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
	PROJECT	VISUAL INSPECTION OF RESIDENTIOAL CHANDRUNKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA	CONSULTANTS	<div>BUREAU VERITAS (INDIA) PVT. LTD. # 1030, 13th Cross, Banashankar 2nd Stage, Bangalore - 560 070, Tel : 080-25880200</div> <div>VPR</div>					APPROVED: AJ/Dr.KS	DWG. REF. No : GL/1F/TA-02	REV.No. RO



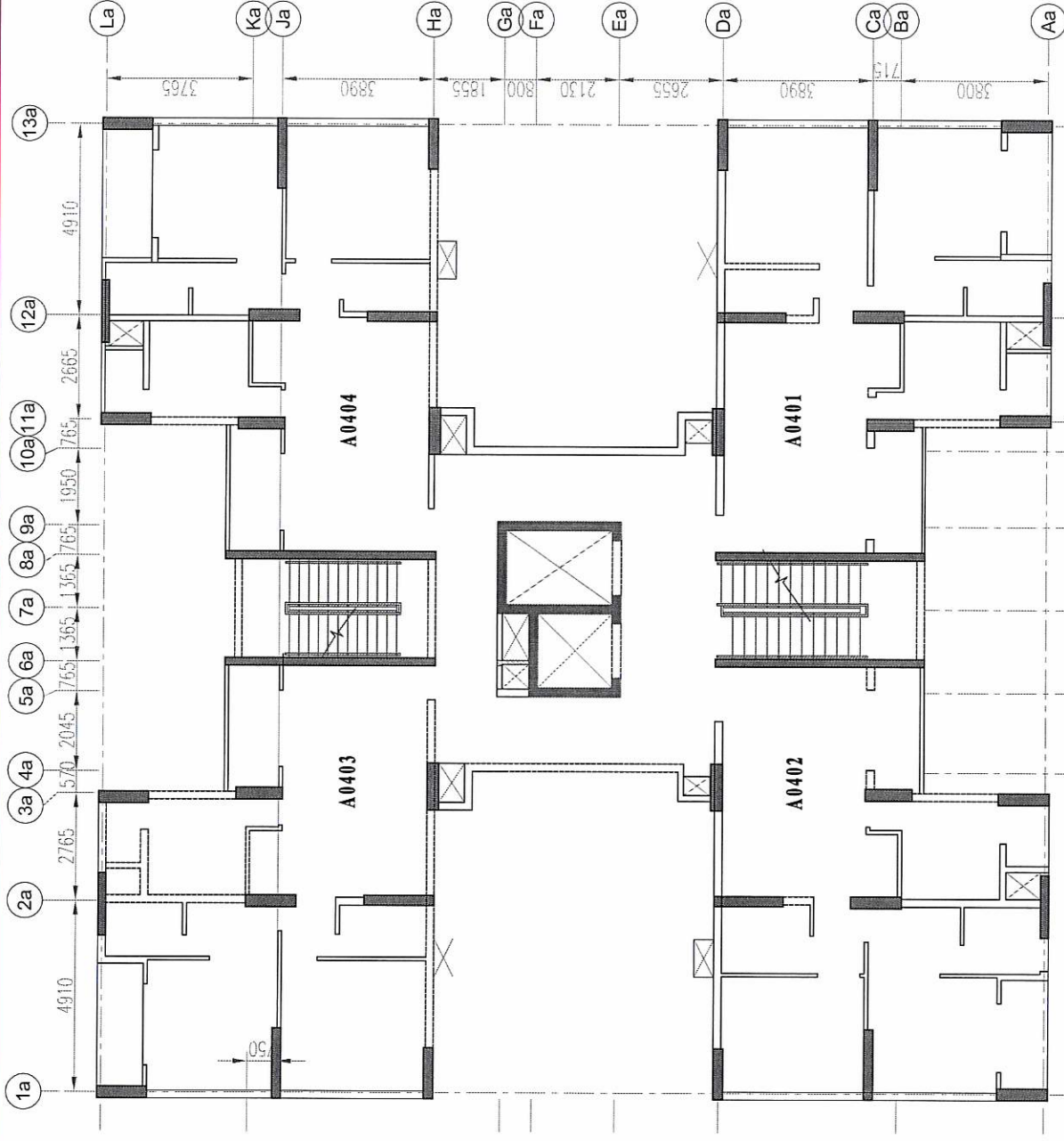
TOWER-A-2nd FLOOR

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TITLE			GENERAL LAYOUT OF TOWER A-2nd FLOOR			
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APPROVED: AJ/Dr-KS			DWG. REF. No : GL/2F/TA-03	CONTRACT NO		
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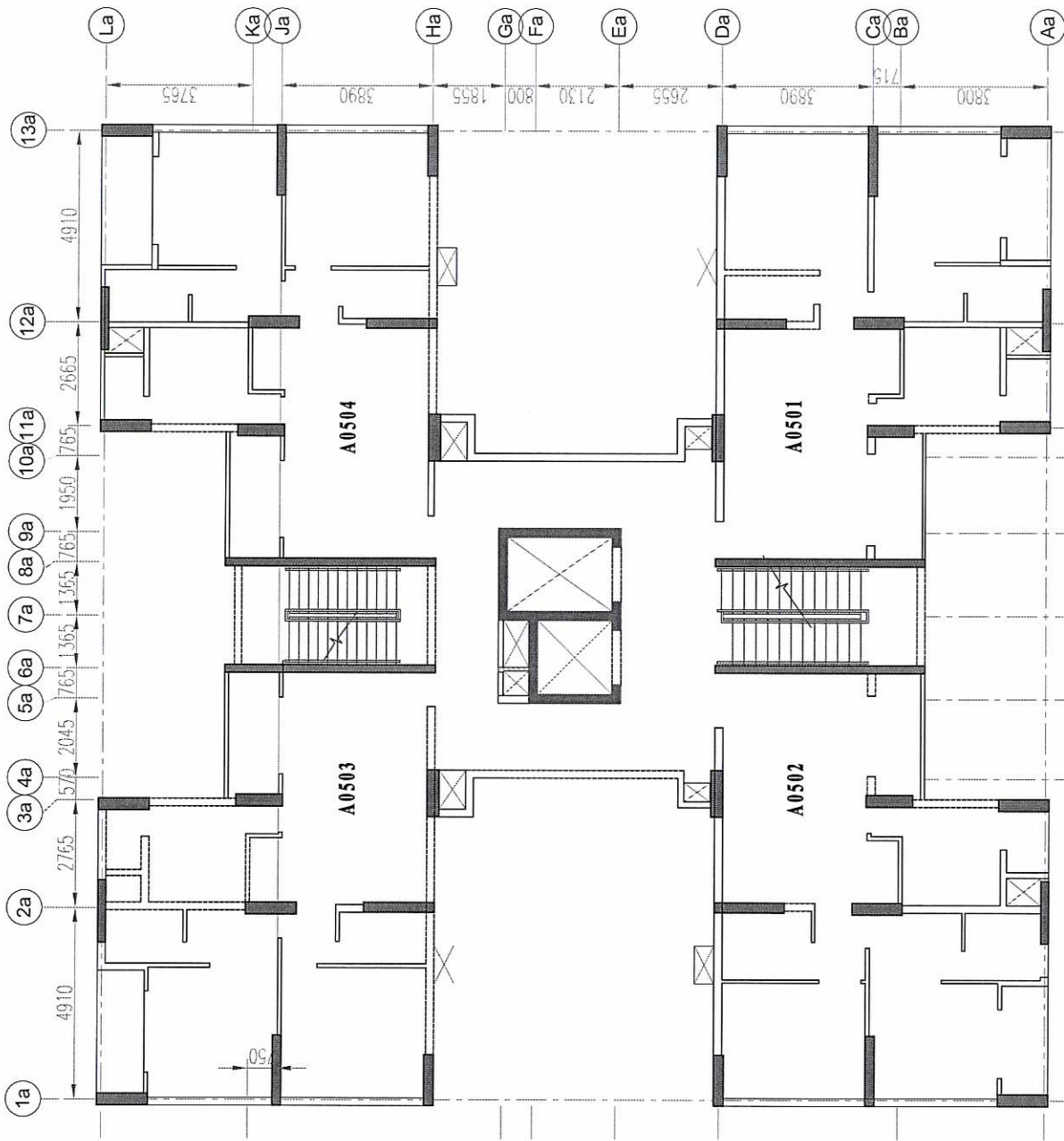
TOWER-A-3rd FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA	TITLE	GENERAL LAYOUT OF TOWER A- 3rd FLOOR					DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
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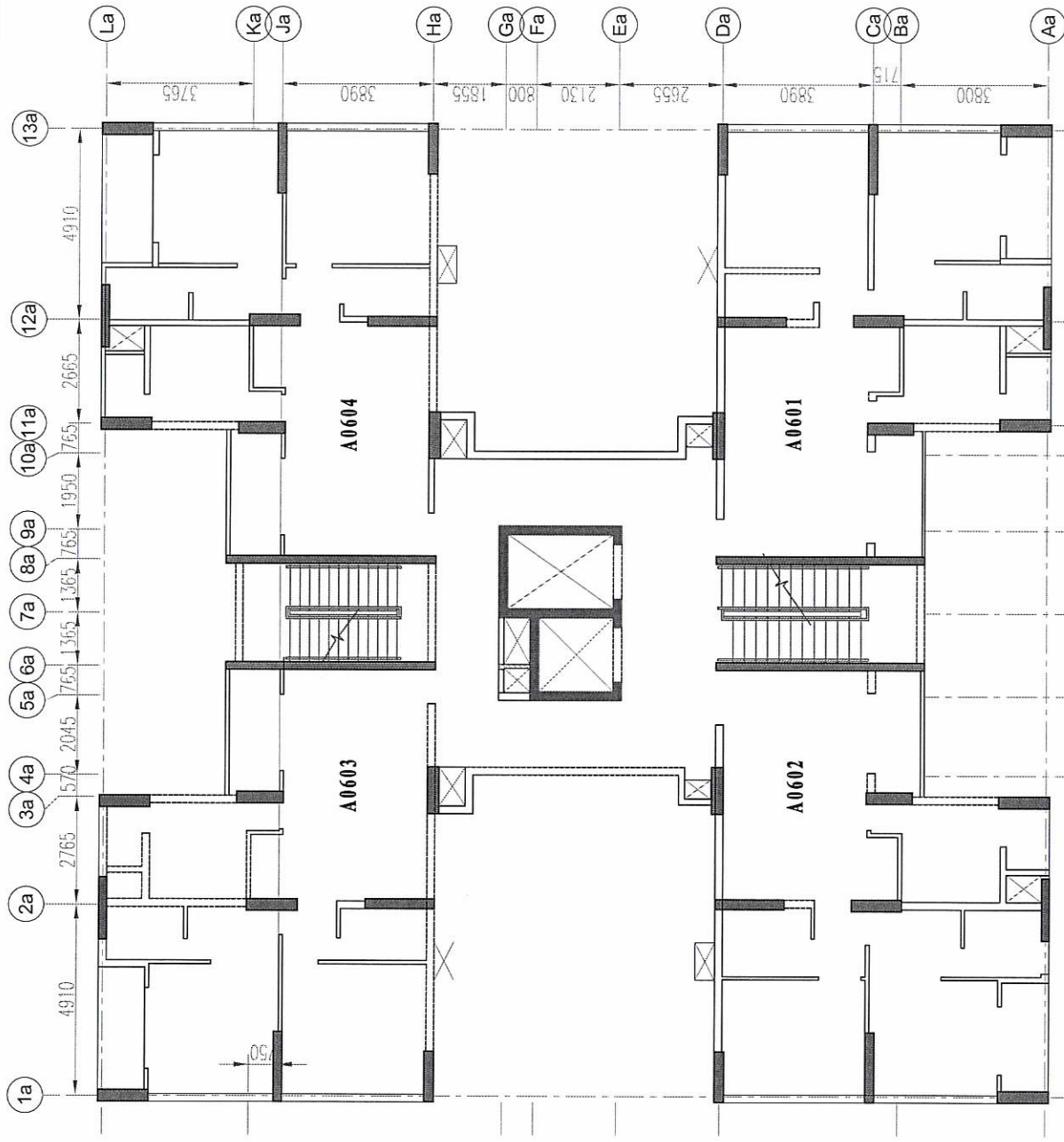
TOWER-A-4th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA	TITLE	<div>GENERAL LAYOUT OF TOWER A- 4th FLOOR</div>					DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
	PROJECT							VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNI ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA			APPROVED: AJ/Dt-KS
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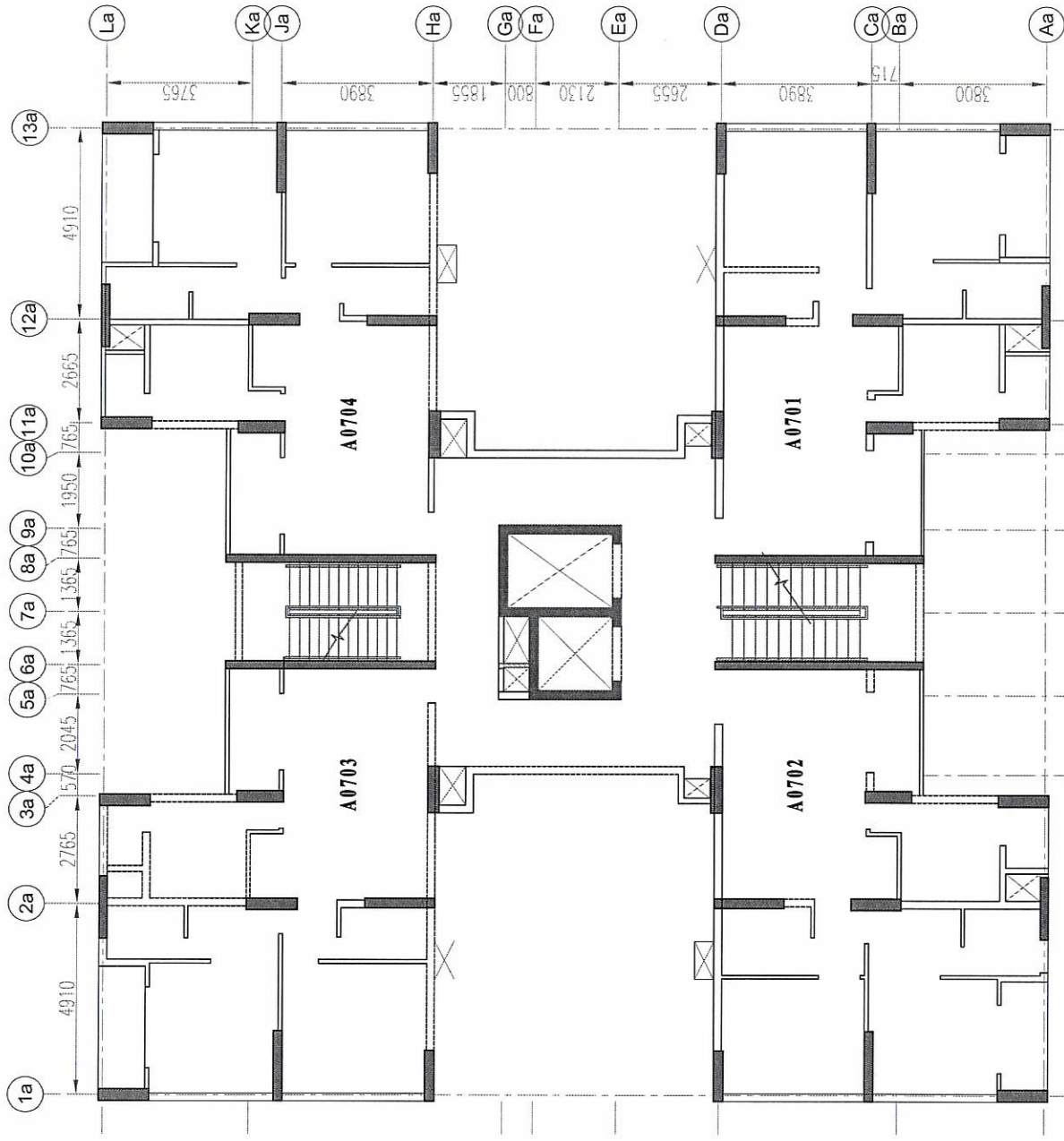
TOWER-A-5th FLOOR

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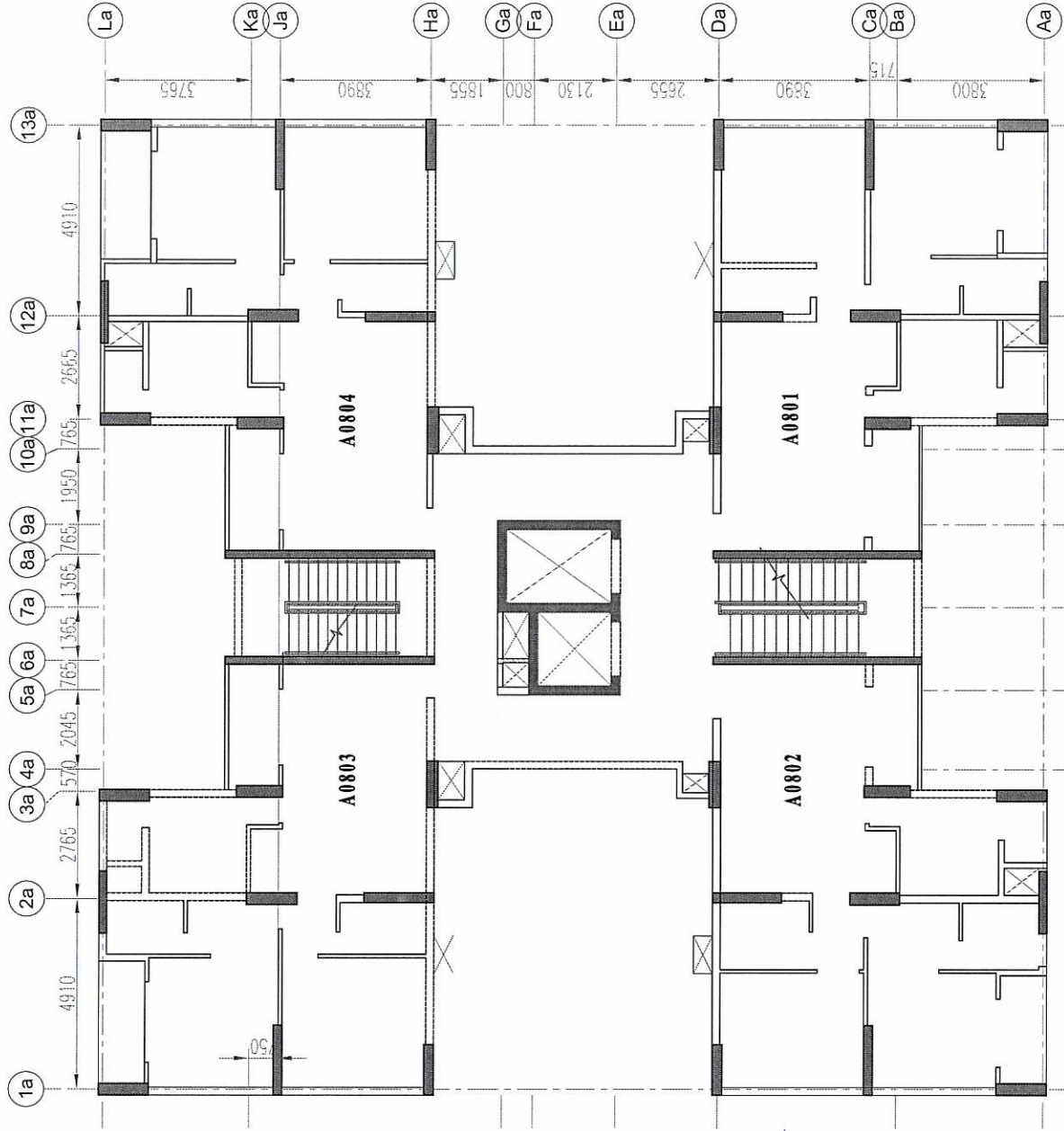
TOWER-A-6th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA	TITLE	GENERAL LAYOUT OF TOWER A- 6th FLOOR										DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023	REV.No. RO								
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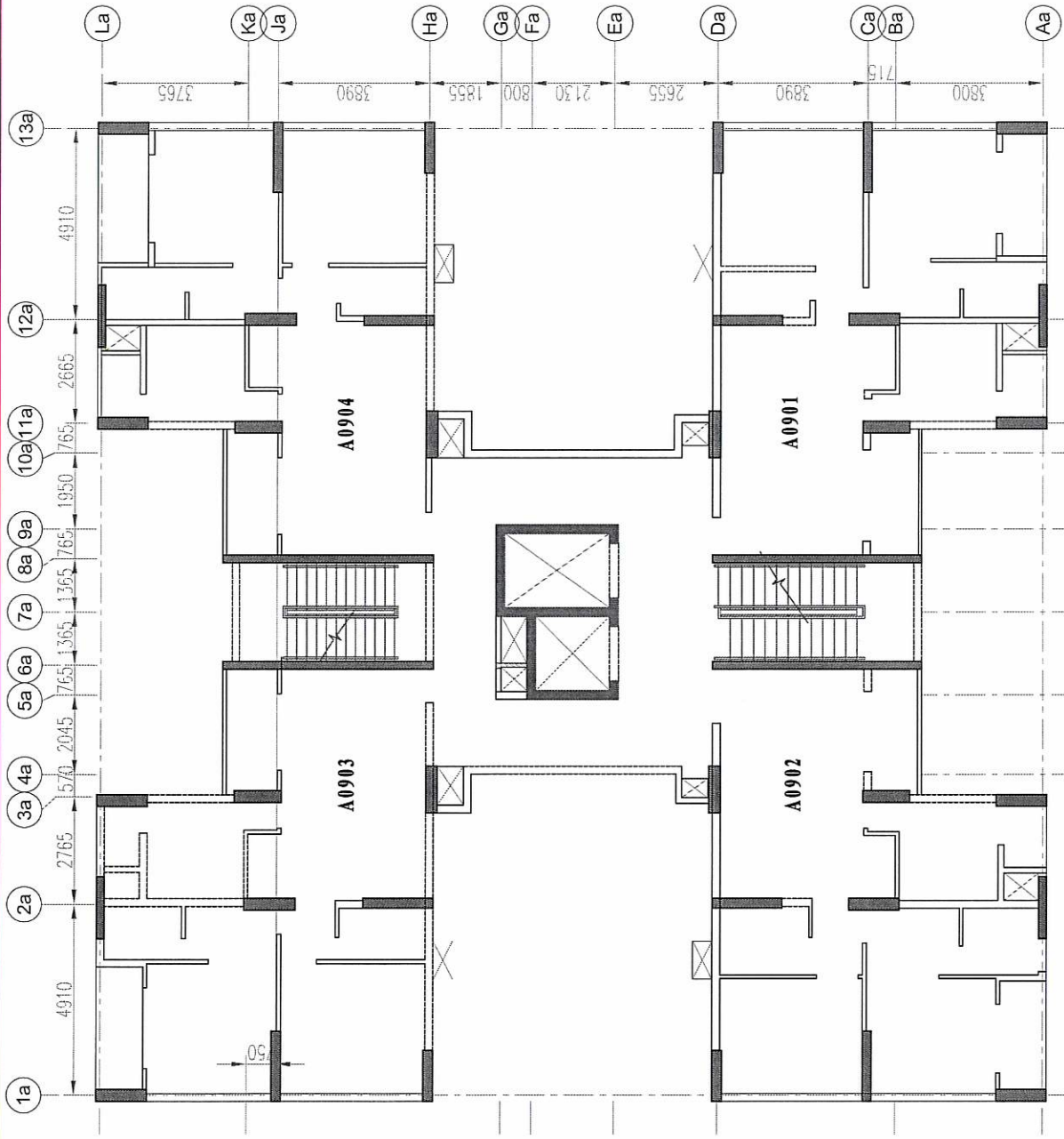
TOWER-A-7th FLOOR

<p>CLIENT M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA</p> <p>PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDRUKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA</p>	<p>TITLE GENERAL LAYOUT OF TOWER A- 7th FLOOR</p>
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<p>SCALE N/T</p>	<p>DATE 24-04-2023</p>
<p>REV.No.</p>	<p>REV.No. RO</p>



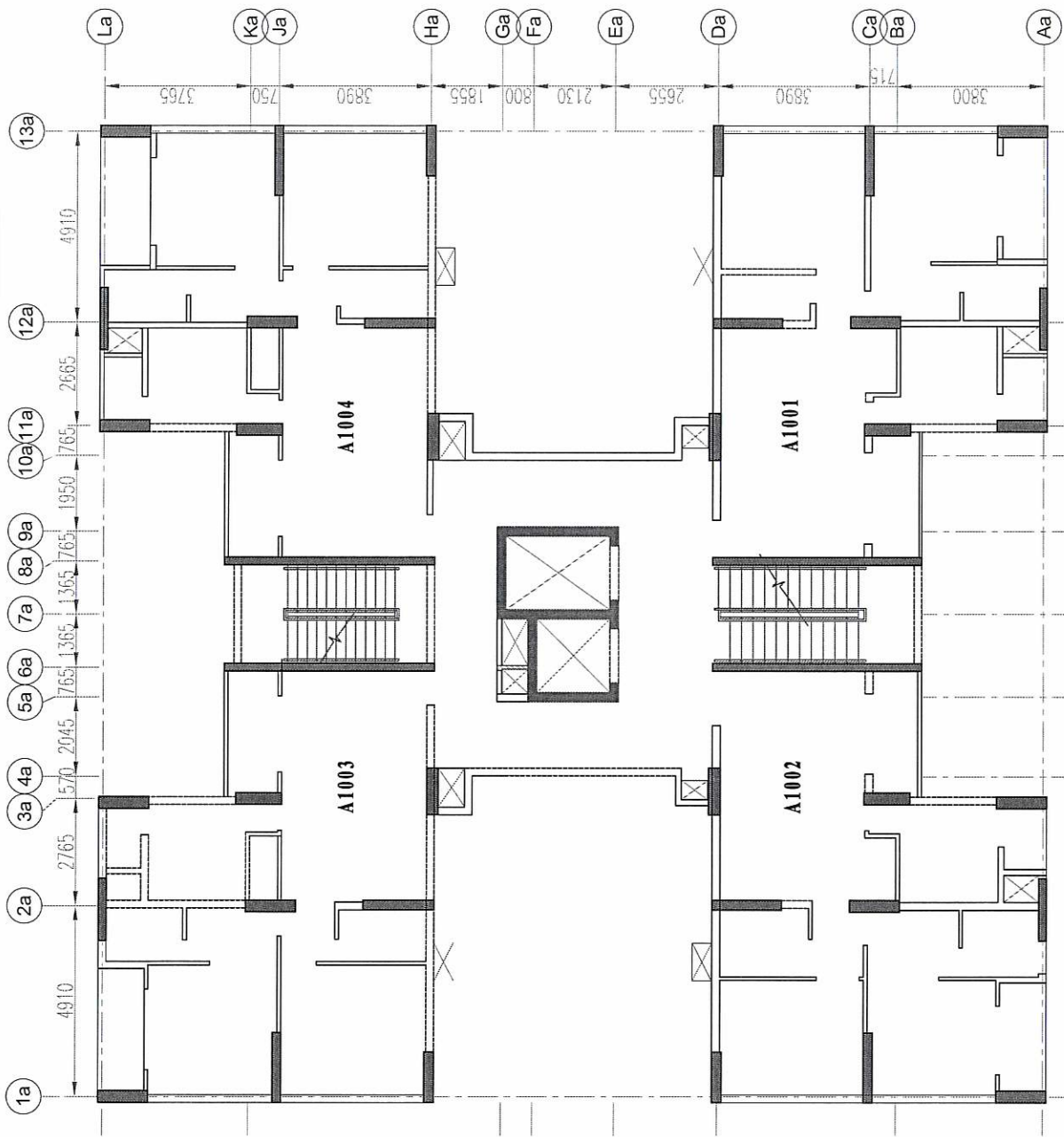
TOWER-A-8th FLOOR

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	VYTHILA, KOCHI, KERALA								
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	ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA								
<div><div>GENERAL LAYOUT OF TOWER A- 8th FLOOR</div><div>BUREAU VERITAS (INDIA) PVT. LTD. # 103/9, 13th Cross, Bengaluru 2nd Stage, Bengaluru - 560 070. Tel. : 080-26980200</div><div>VERITAS CERTIFIED CONSULTANTS</div></div>									
CONTRACT NO 17671143									



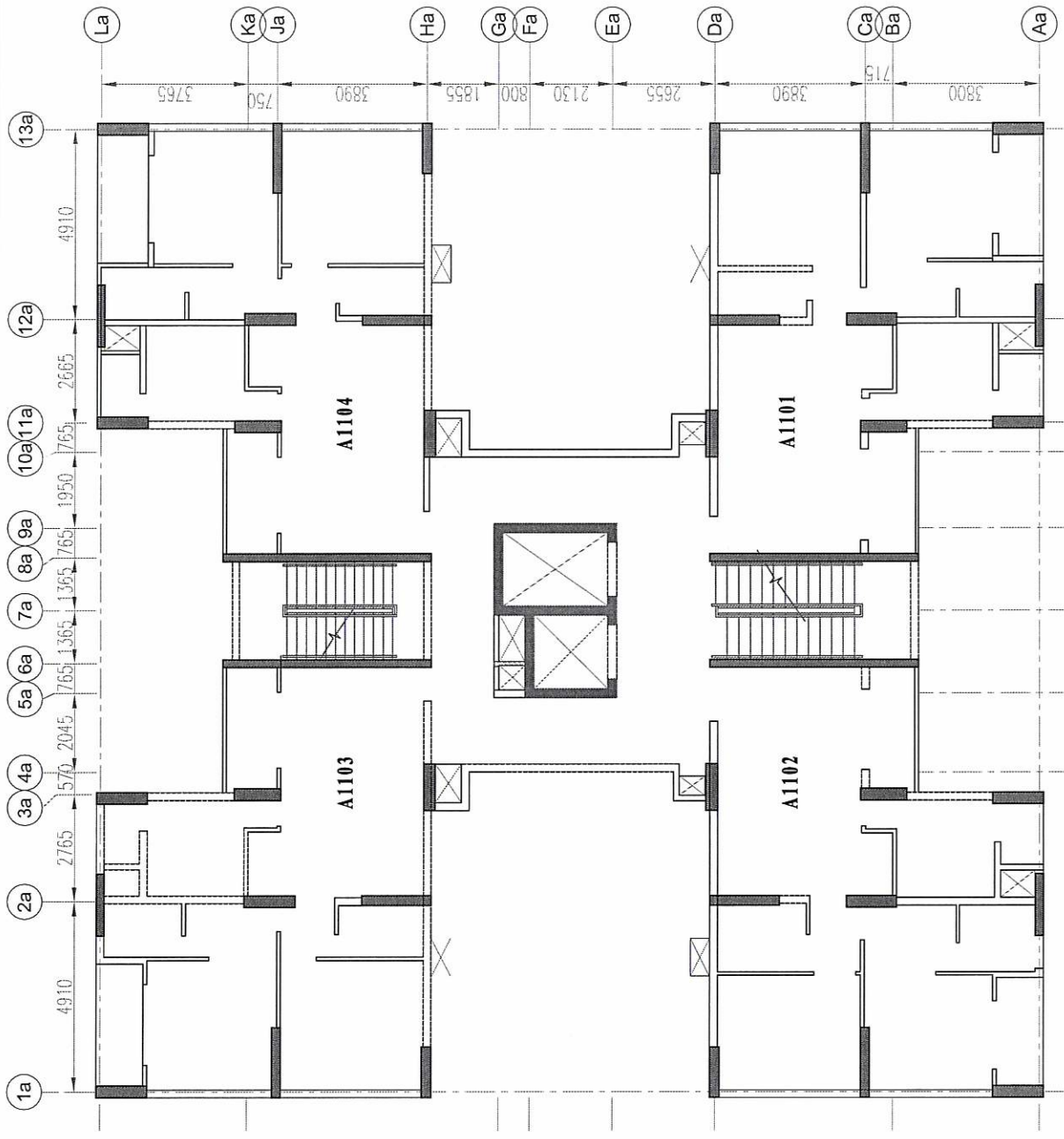
TOWER-A-9th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILLA, KOCHI, KERALA	TITLE	GENERAL LAYOUT OF TOWER A-9th FLOOR									
			PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILLA, KOCHI, KERALA									
			DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023	REV.No. RO					
			CONSULTANTS <div>BUREAU VERITAS (INDIA) PVT. LTD. # 102A, 13th Cross, Banashankari 2nd Stage, Bengaluru - 560 078. Tel. : 080-25880200</div>				APPROVED: AJ/Dr.KS		DWG. REF. No : GL/9F/TA-10		CONTRACT NO 17671143	
			<div>OFFICIAL STAMP</div>									



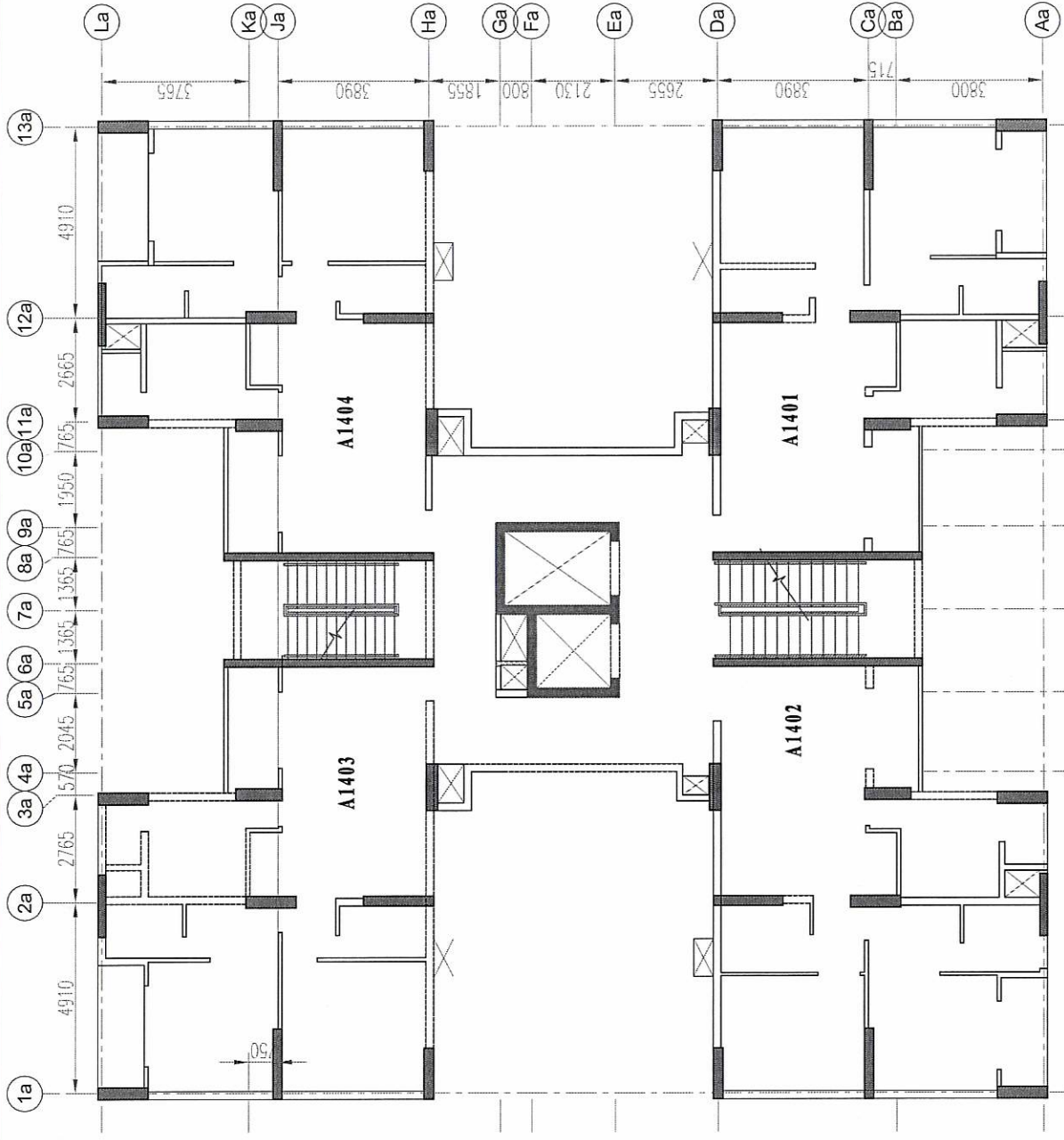
TOWER-A-10th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA	TITLE									
		GENERAL LAYOUT OF TOWER A- 10th FLOOR									
		CONSULTANTS									
		BUREAU VERITAS (INDIA) PVT. LTD. # 100A, 12th Cross, International Tech Park, Bengaluru - 560 075. TEL : 080-25860020									
PROJECT	VISUAL INSPECTION OF RESIDENTIOAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA										
		DRAWN: RSKK	CHECKED: CHR/MBS	NTS		DATE		24-04-2023			REV.No.
			APPROVED: AJ/Dr.KS	DWG. REF. No :GL/10F/TA-11		CONTRACT NO			17671143		
		RO									



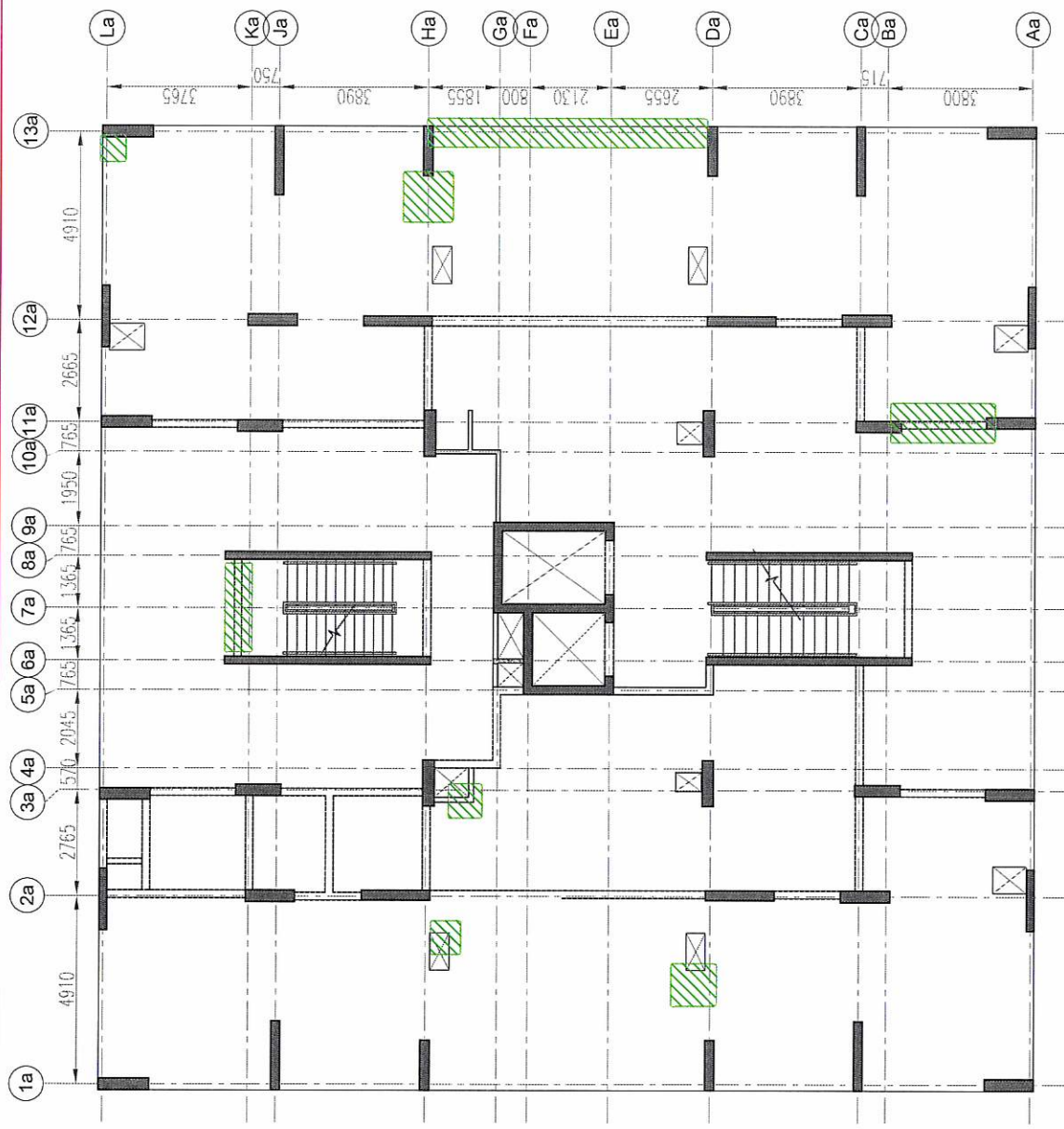
TOWER-A-11th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILLA, KOCHI, KERALA	TITLE	GENERAL LAYOUT OF TOWER A- 11th FLOOR					DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023	
PROJECT	VISUAL INSPECTION OF RESIDENTIOAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILLA, KOCHI, KERALA								APPROVED: AJ/Dt.-KS	DWG. REF. No :GL/11F/TA-12	REV.No. RO	
			CONSULTANTS					BUREAU VERITAS (INDIA) PVT. LTD. # 1530, 15th Cross, Indraprastha Park, 5th Stage, Bangalore - 560 075, INDIA : 080-23060200				CONTRACT NO 17671143



TOWER-A-14th FLOOR

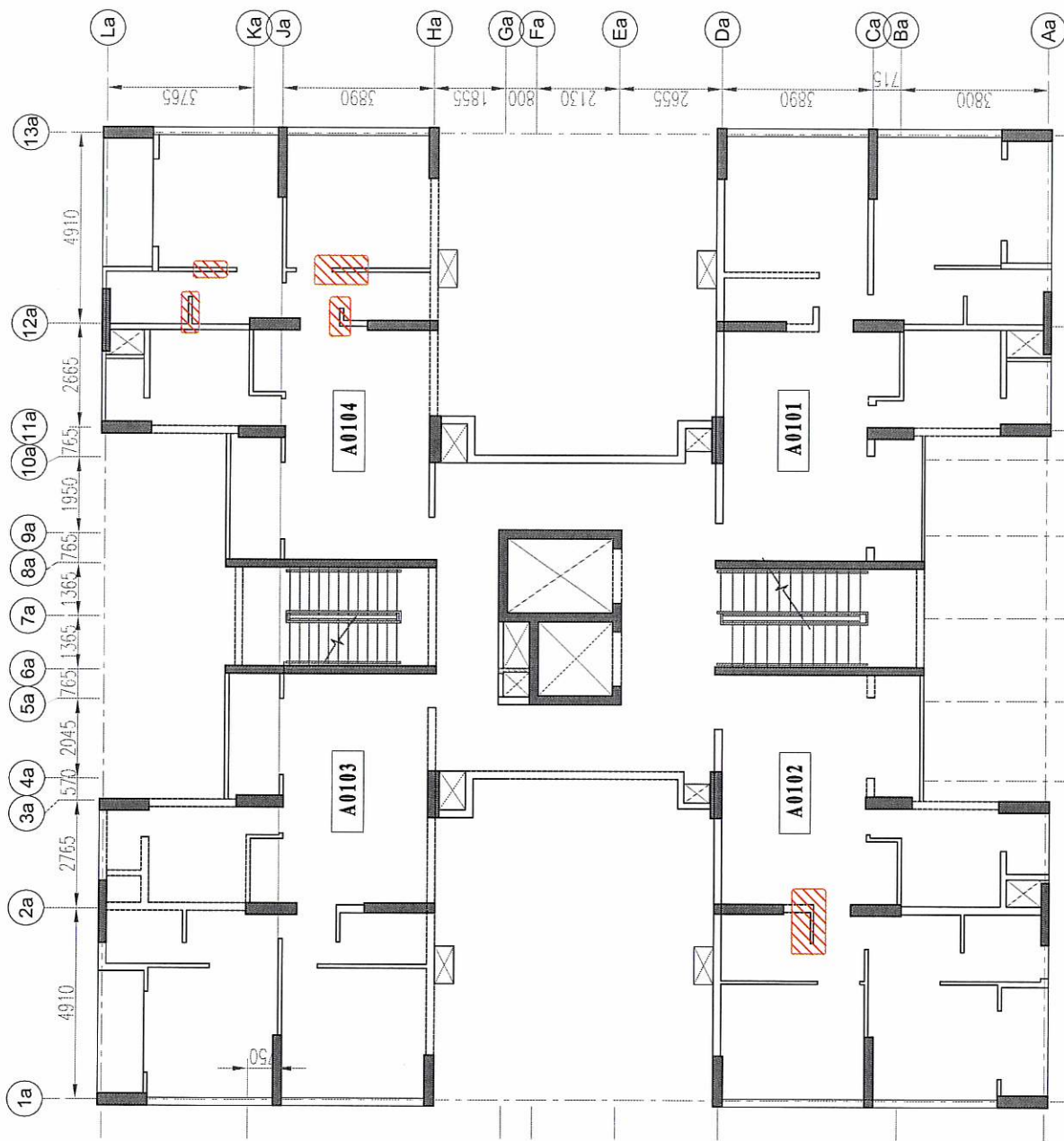
<p>CLIENT M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILLA, KOCHI, KERALA</p>	<p>TITLE</p>	<p>DRAWN: RSKK</p>	<p>CHECKED: CHR/WBS</p>	<p>SCALE NTS</p>	<p>DATE 24-04-2023</p>
<p>PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILLA, KOCHI, KERALA</p>	<p>GENERAL LAYOUT OF TOWER A-14th FLOOR</p>				<p>REV.No. RO</p>
	<p>APPROVED: AJ/Dr.KS</p>				<p>DWG. REF. No :GL/14F/TA-15</p>
	<p>CONSULTANTS BUREAU VERITAS (INDIA) PVT. LTD. f 1030, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070. Tel. : 080-28882000</p>				<p>CONTRACT NO 17671143</p>



TOWER-A-GROUND FLOOR

- LEGEND:**
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNES/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CELLING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

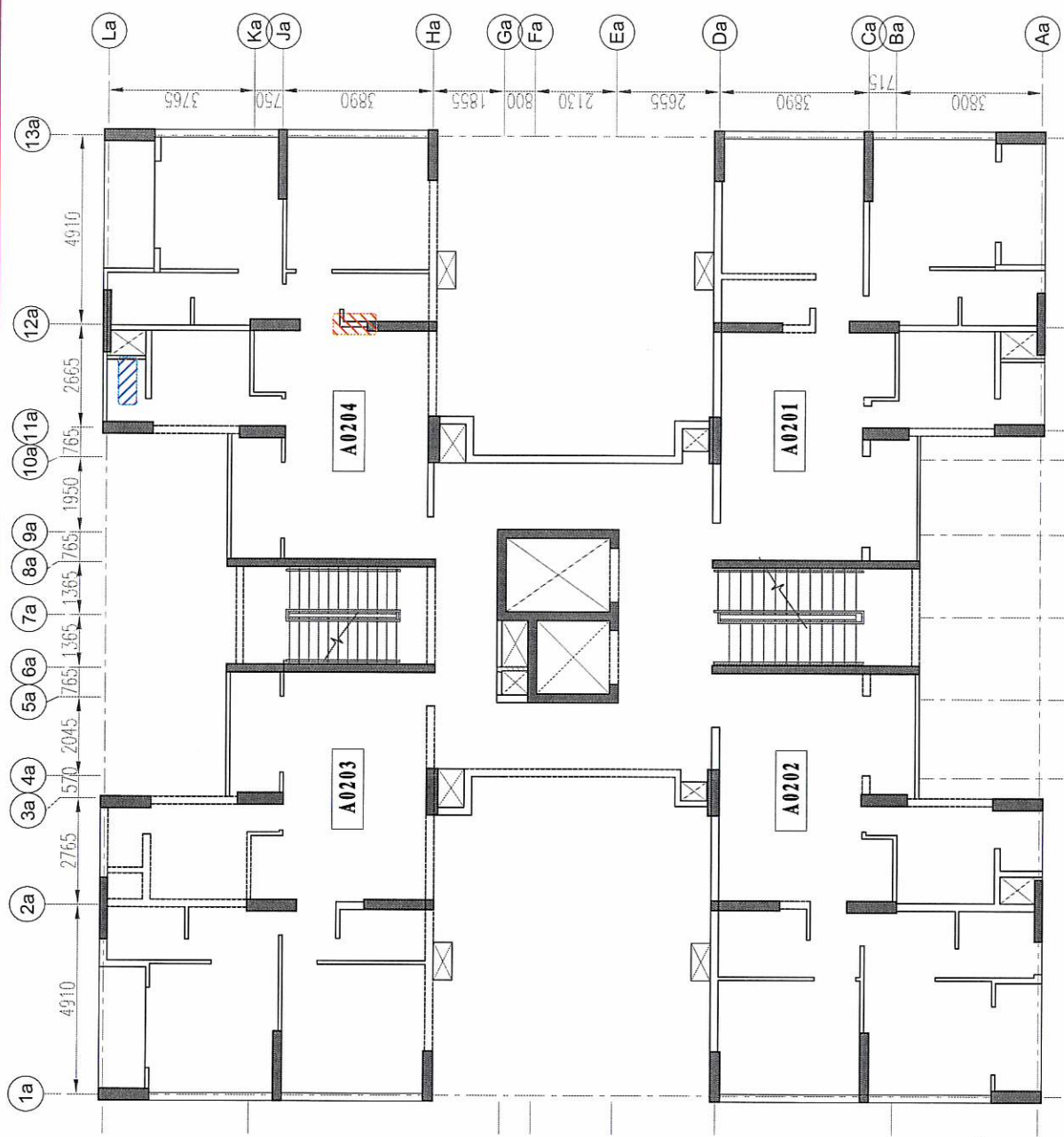
CLIENT M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA		TITLE		DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA		DISTRESS LAYOUT OF TOWER A-GROUND FLOOR		APPROVED: A./Dr.KS	DWG. REF. No : DM/GF/TA-01	CONTRACT NO	REV.No. RO
				BUREAU VERITAS (INDIA) PVT. LTD. # 1020, 11th Cross, Banashankari 2nd Stage, Bengaluru - 560 076. Tel : 080-25860020			
				17671143			



TOWER-A-FIRST FLOOR

- LEGEND:**
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

<div> <div>CLIENT</div> <div>M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA</div> </div>		<div> <div>TITLE</div> <div>DISTRESS LAYOUT OF TOWER A- 1ST FLOOR</div> </div>		<div> <div>DRAWN:</div> <div>RSKK</div> </div>	<div> <div>CHECKED:</div> <div>CH-R/MBS</div> </div>	<div> <div>SCALE</div> <div>NTS</div> </div>	<div> <div>DATE</div> <div>21-04-2023</div> </div>
<div> <div>PROJECT</div> <div>VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA</div> </div>		<div> <div>CONSULTANTS</div> <div> <div>BUREAU VERITAS (INDIA) PVT. LTD.</div> <div> <div>1330, 13th Cross, International 2nd Stage, Bangalore - 560 070.</div> <div>Tel : 080-25980020</div> </div> </div> </div>		<div> <div>APPROVED:</div> <div>AJ/Dt-KS</div> </div>	<div> <div>DWG. REF. No :</div> <div>DM/1F/TA-02</div> </div>	<div> <div>REV.No.</div> <div>RO</div> </div>	<div> <div>CONTRACT NO</div> <div>17671143</div> </div>



- LEGEND:**
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

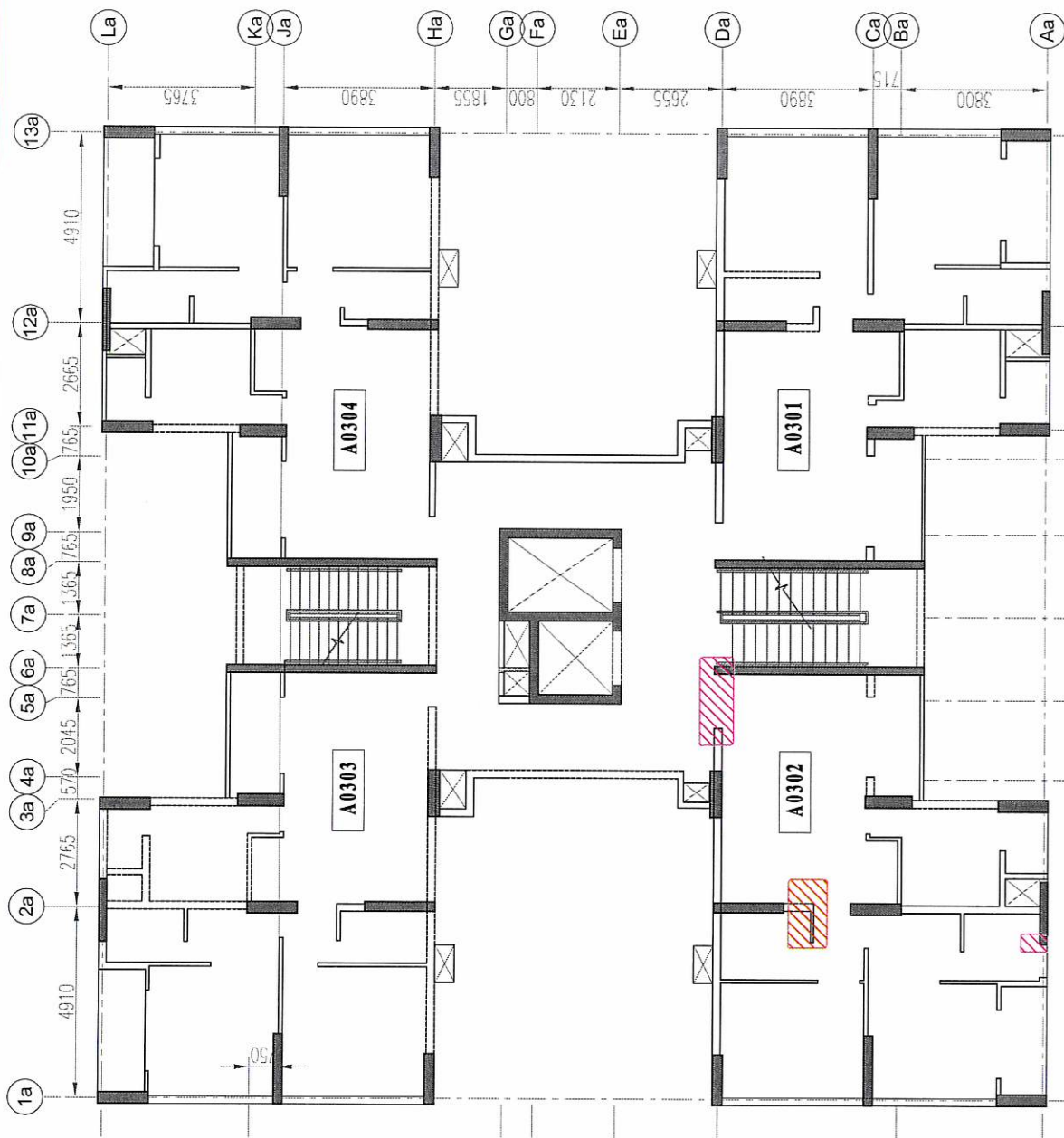
CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO)		DRAWN: RSKK		CHECKED: CHR/MBS		SCALE NTS		DATE 24-04-2023	
	VTILLA, KOCHI, KERALA									
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VTILLA, KOCHI, KERALA				APPROVED: AJ/Dr.KS		DWG. REF. No : DM/2F/TA-03		REV.No. RO	
									CONTRACT NO 17671143	

TITLE

DISTRESS LAYOUT OF TOWER A- 2nd FLOOR

CONSULTANTS

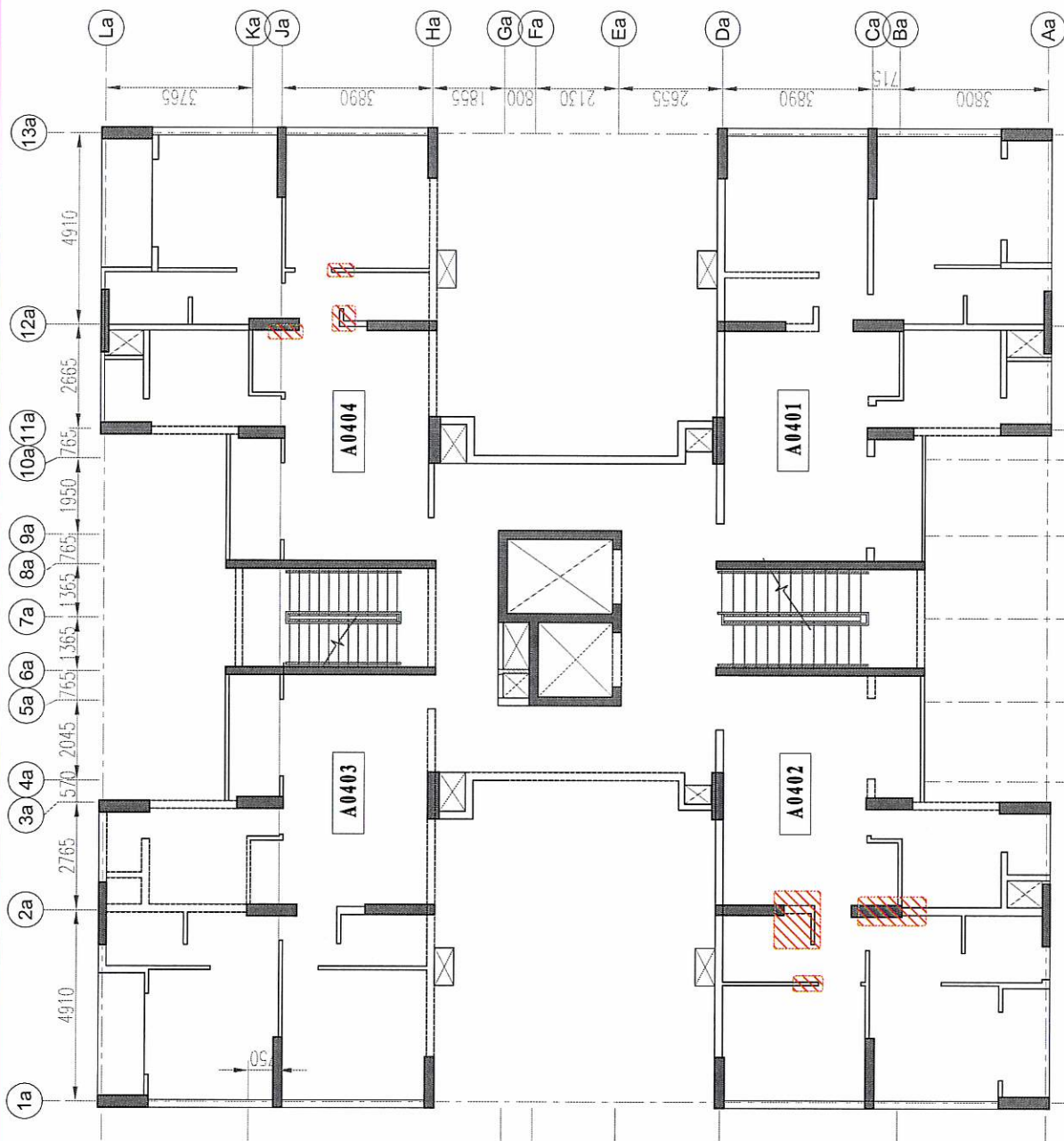
BUREAU VERITAS (INDIA) PVT. LTD.
 f 100A, 13th Cross, Banashankari 2nd Stage, Bengaluru - 560 076, INDIA
 Tel : 080-28580000



- LEGEND:**
- PEELING OF PAINT-SLAB/BELM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CELLING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

TOWER-A-3rd FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA		DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA		APPROVED: A/D:KS	DWG. REF. No : DM/3F/TA-04	REV.No. RO	CONTRACT NO 17671143
TITLE DISTRESS LAYOUT OF TOWER A-3rd FLOOR			CONSULTANTS  BUREAU VERITAS (INDIA) PVT. LTD. # 1020, 13th Cross, International 2nd Stage, Bangalore - 560 075. TEL : 080-25982020			

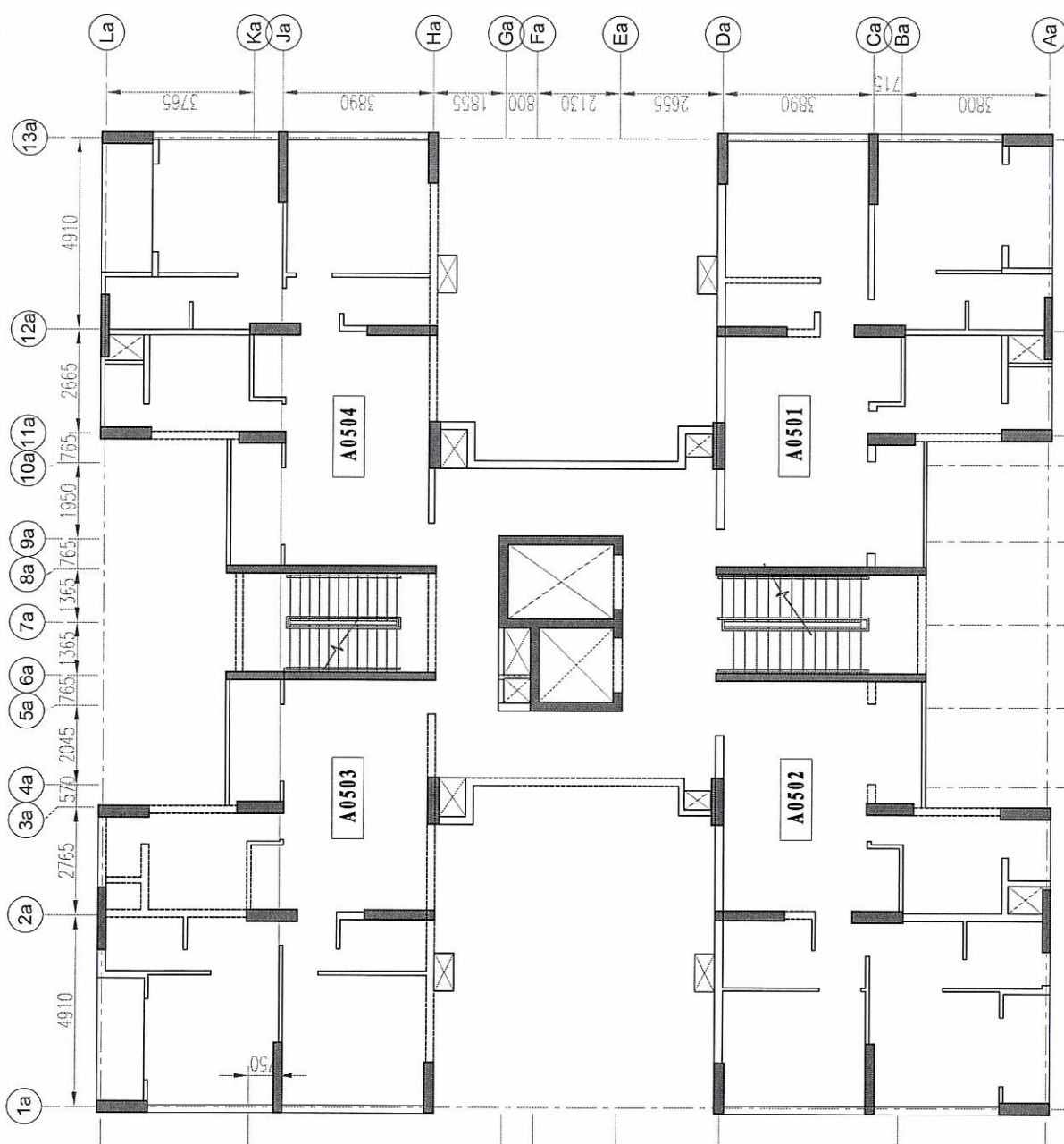


LEGEND:

- PEELING OF PAINT-SLAB/BEAM/WALL
- DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
- CRACKS-CEILING SLAB/MASONRY WALL
- POP-UP OF TILES/WALL TILES

TOWER-A-4th FLOOR

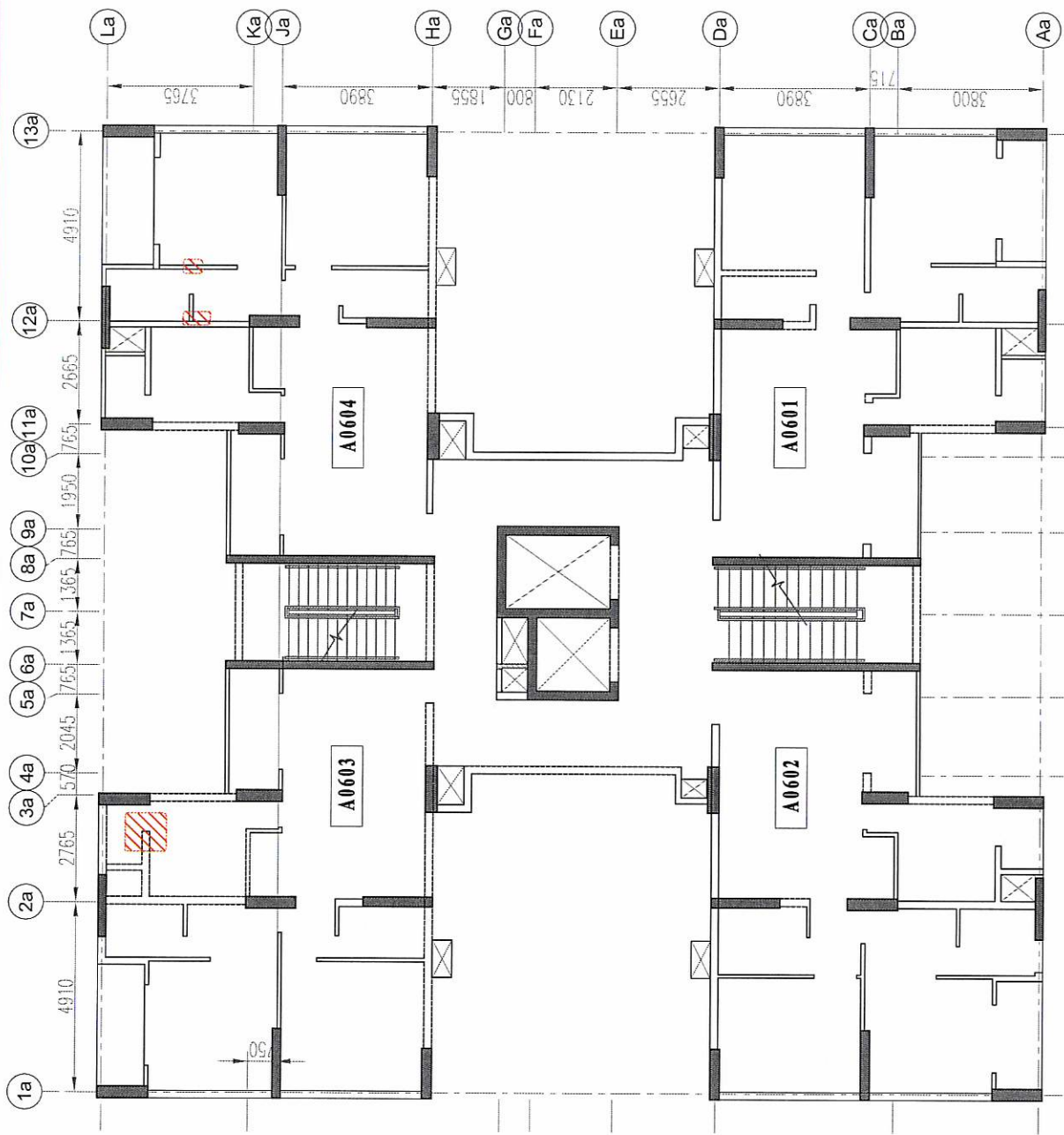
CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA								
	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNI ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA								
PROJECT	CONSULTANTS								
TITLE DISTRESS LAYOUT OF TOWER A- 4th FLOOR			DRAWN:	RSKK	CHECKED:	CHR/MBS	SCALE NTS	DATE 24-04-2023	REV.No. RO
			APPROVED:		AJ/Dt:KS	DWG. REF. No : DM/4F/TA-05		CONTRACT NO	
			<div>BUREAU VERITAS (INDIA) PVT. LTD. # 100A, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070, INDIA : 080-25802000</div> <div>SURVEYOR 17671143</div>						



TOWER-A-5th FLOOR

- LEGEND:
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

CLIENT		M/s ARMY WELFARE HOUSING ORGANISATION (AWHO)		DRAWN: RSKK		CHECKED: CHR/MBS		SCALE: NTS		DATE: 24-04-2023	
PROJECT		VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHL, KERALA		APPROVED: AJ/Dr.KS		DWG. REF. No : DM/5F/TA-06		REV.No. RO		CONTRACT NO 17671143	
CONSULTANTS		BUREAU VERITAS (INDIA) PVT. LTD.		CONSULTANTS		1408, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070, INDIA : 080-25860200		CONSULTANTS		CONSULTANTS	

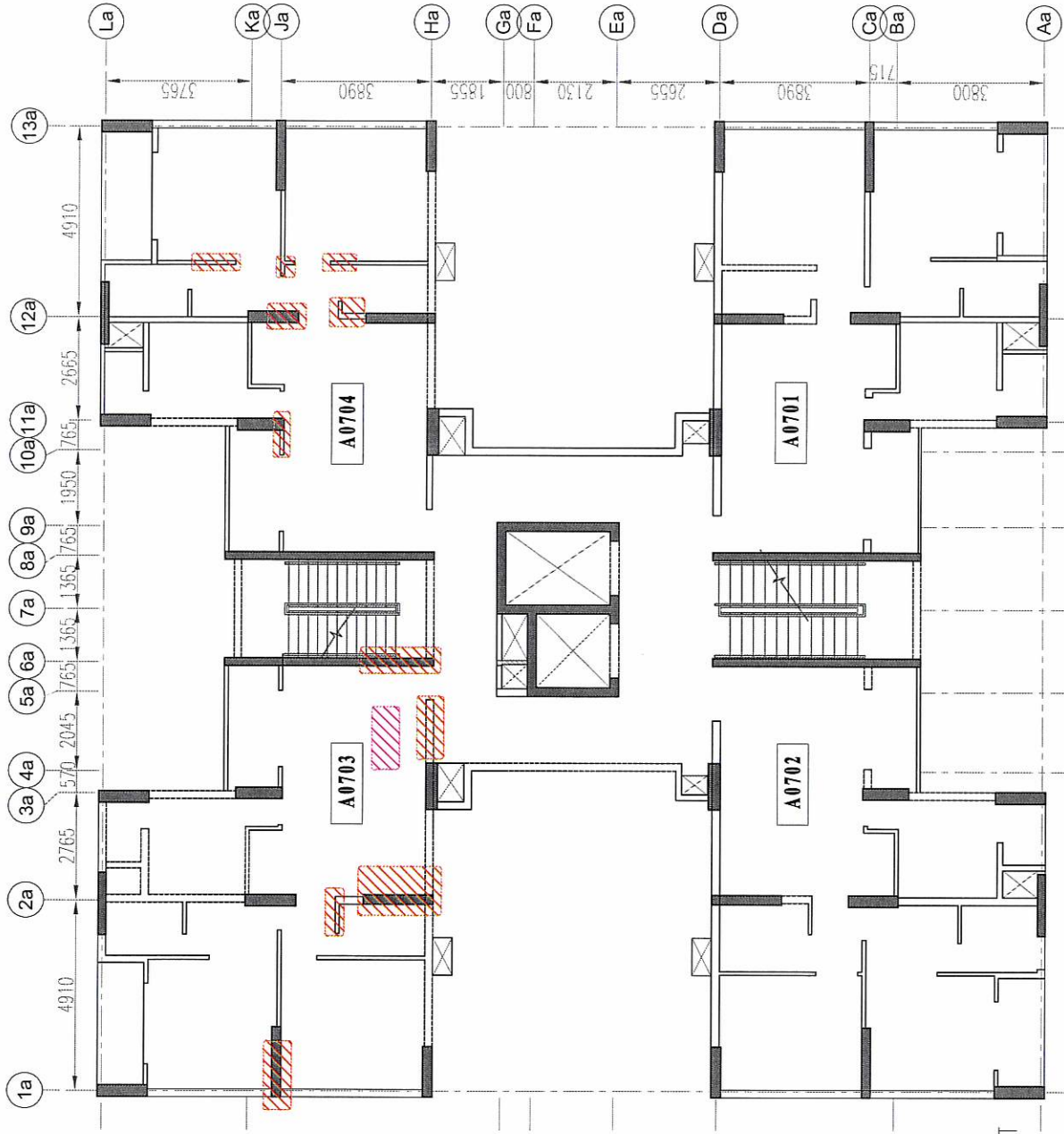


TOWER-A-6th FLOOR


LEGEND:

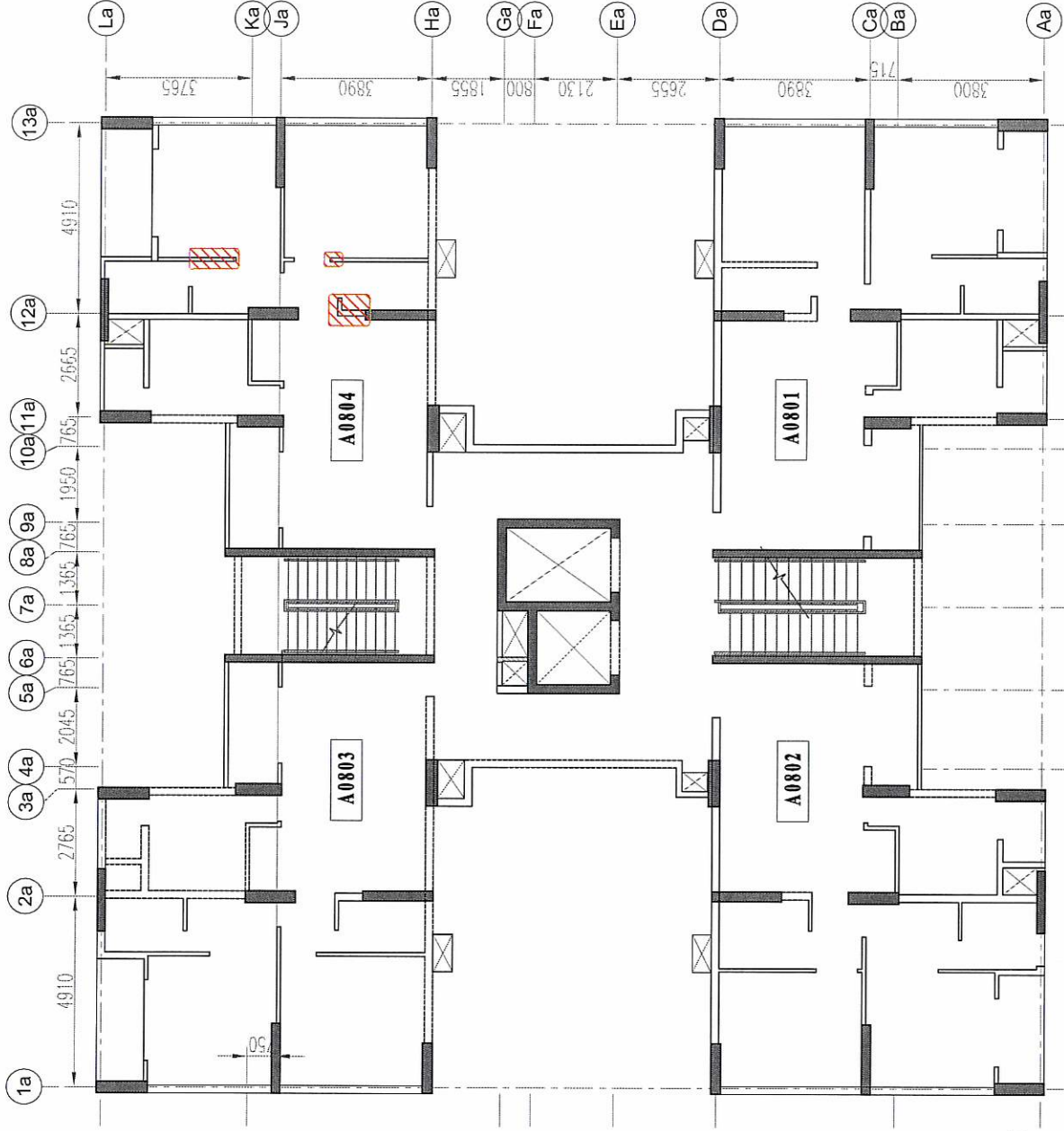
-  PEELING OF PAINT-SLAB/BEAM/WALL
-  DAMPNES/ DAMP PATCHES / PEELING OF PAINT
-  CRACKS-CEILING SLAB/MASONRY WALL
-  POP-UP OF TILES/WALL TILES

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA	DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA	<div> <div>  BUREAU VERITAS (INDIA) PVT. LTD. # 100A, 11th Cross, Bangalore - 560 070, INDIA TEL : 080-26860200 </div> <div> APPROVED: AJ/Dr.KS CONTRACT NO 17671143 </div> </div>			
TITLE		DISTRESS LAYOUT OF TOWER A- 6th FLOOR			



TOWER-A-7th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILLA, KOCHI, KERALA					
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILLA, KOCHI, KERALA					
TITLE			DISTRESS LAYOUT OF TOWER A- 7th FLOOR			
DRAWN: RSKK			CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023	REV.No: RO
			APPROVED: AJ/Dr.-KS	DWG. REF. No : DM/7F/TA-08	CONTRACT NO	
CONSULTANTS			<div>BUREAU VERITAS (INDIA) PVT. LTD. # 1030A, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070, Tel. : 080-25880200</div>			
			<div>BUREAU VERITAS</div>			
			17671143			

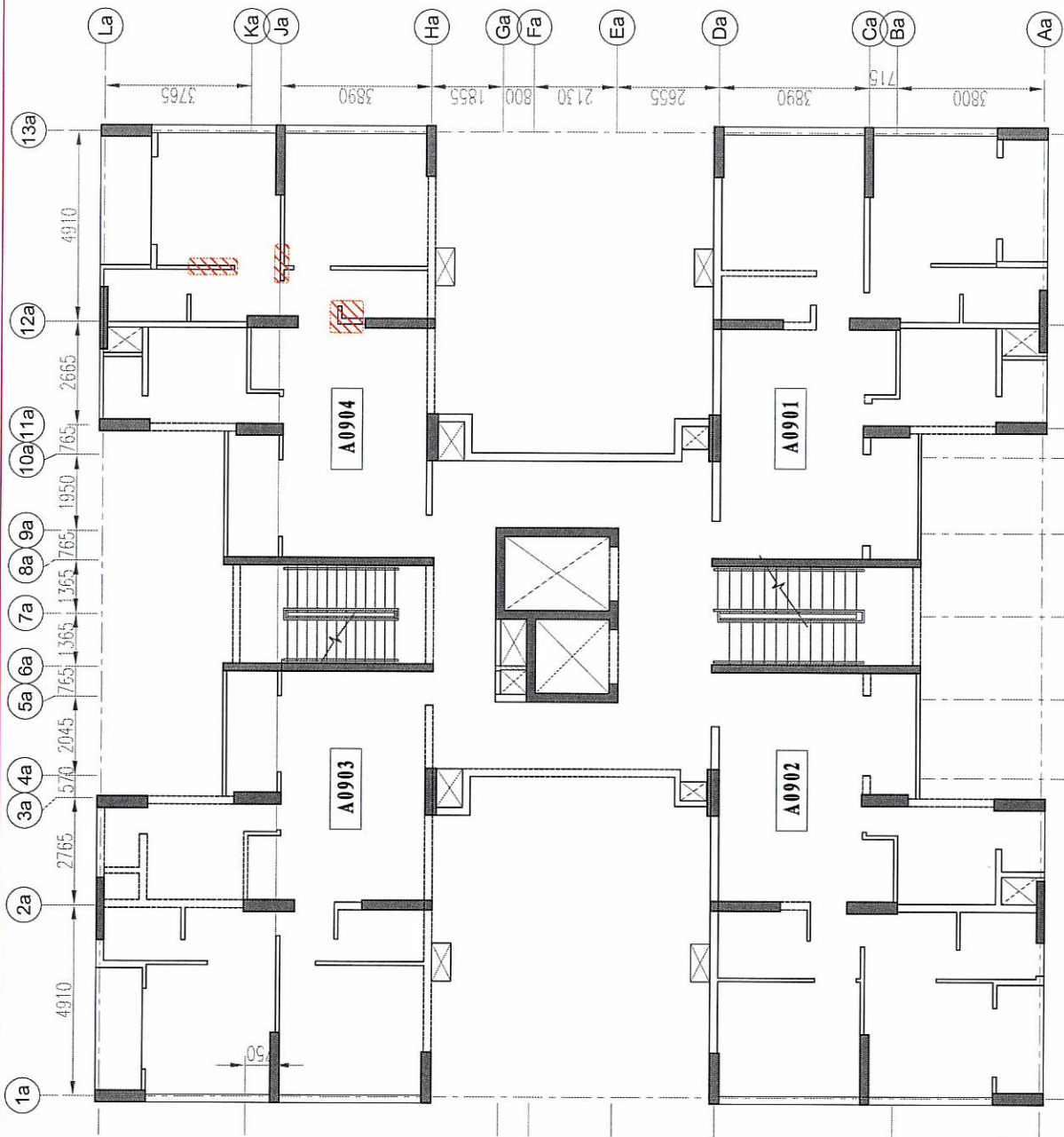


TOWER-A-8th FLOOR

- LEGEND:**
- PEELING OF PAINT-SLAB/BAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

<p>CLIENT M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA</p>	<p>TITLE DISTRESS LAYOUT OF TOWER A-8th FLOOR</p>		<p>DRAWN: RSKK</p>	<p>CHECKED: CHR/MBS</p>	<p>SCALE: NTS</p>	<p>DATE: 24-04-2023</p>
	<p>PROJECT: VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA</p>		<p>APPROVED: A./D.-KS</p>	<p>DWG. REF. No : DM/8F/7A-09</p>	<p>CONTRACT NO 17671143</p>	<p>REV.No. RO</p>

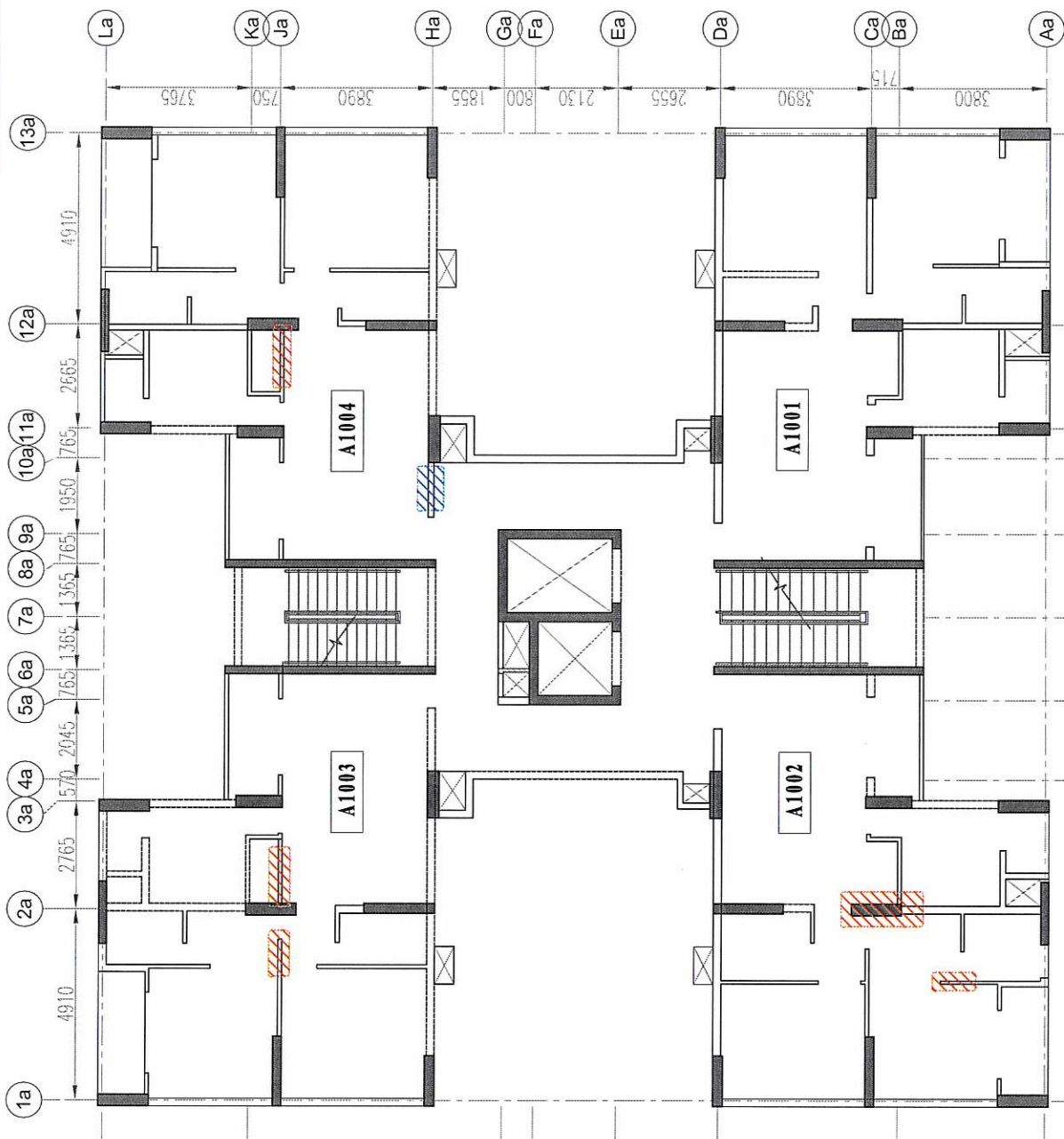




TOWER-A-9th FLOOR

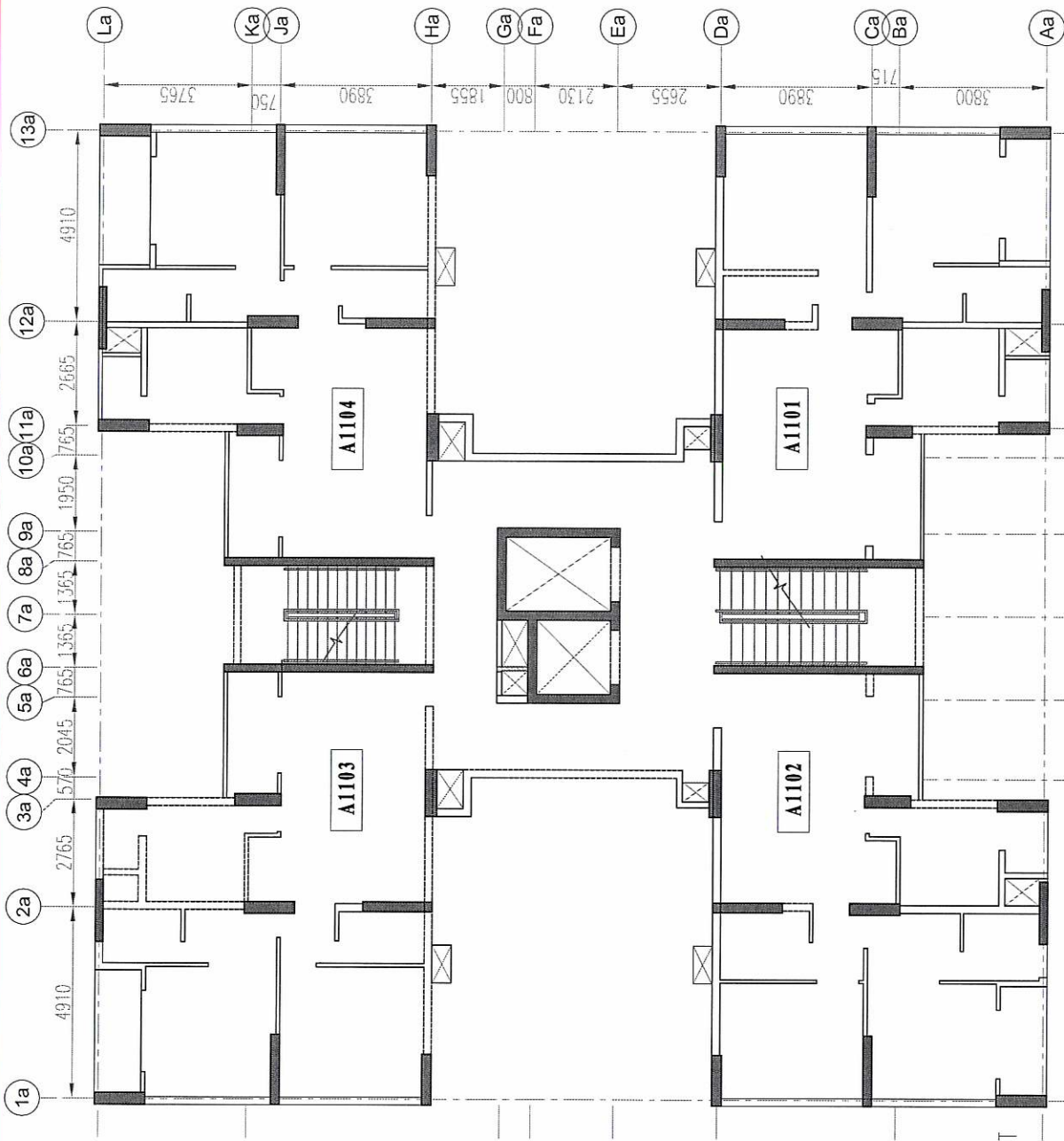
- LEGEND:**
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA	TITLE	DISTRESS LAYOUT OF TOWER A- 9th FLOOR					DRAWN: RSKK	CHECKED: CHR/MBS	SCALE NTS	DATE 24-04-2023
	PROJECT		VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA	CONSULTANTS			BUREAU VERITAS (INDIA) PVT. LTD. # 103A, 13th Cross, Bangalore 2nd Stage, Bangalore - 560 075. Tel : 080-25800200				



TOWER-A-10th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA	TITLE	DISTRESS LAYOUT OF TOWER A- 10th FLOOR					
			DRAWN: RSKK	CHECKED: CHR/MBS	SCALE: NTS	DATE: 24-04-2023	REV.No: RO	
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA	CONSULTANTS	APPROVED: AJ/Dr.KS	DWG. REF. No : DM/10F/TA-11	CONTRACT NO	17671143	REV.No: RO	
			 BUREAU VERITAS (INDIA) PVT. LTD. # 1030, 13th Cross, Brahmahinter 2nd Stage, Bengaluru - 560 070. Tel. : 080-25802000					



TOWER-A-11th FLOOR

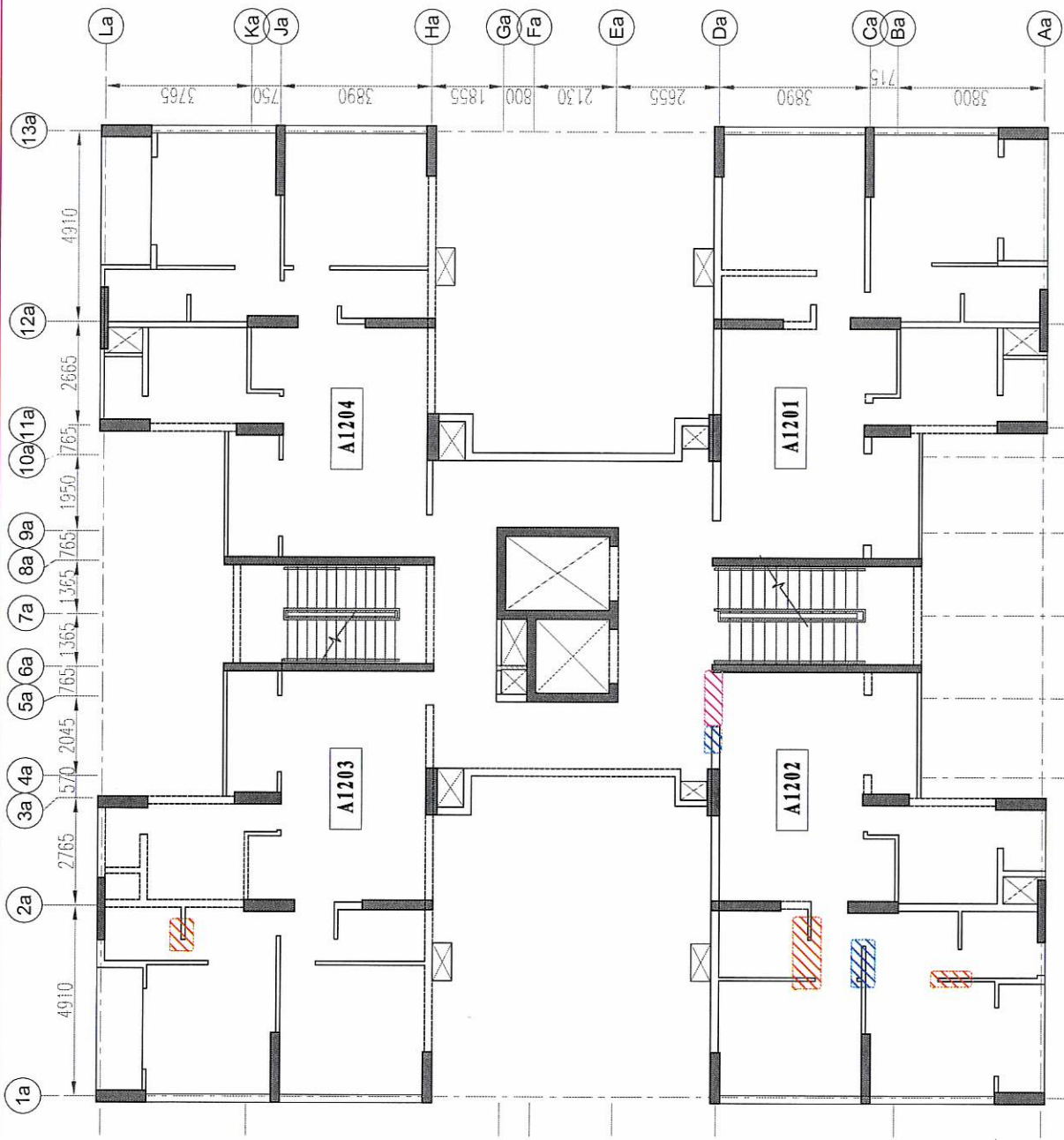
LEGEND:

-  PEELING OF PAINT-SLAB/BEAM/WALL
-  DAMPNES/ DAMP PATCHES / PEELING OF PAINT
-  CRACKS-CELLING SLAB/MASONRY WALL
-  POP-UP OF TILES/WALL TILES

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA					
	PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNI ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA					
TITLE			<div><div>DISTRESS LAYOUT OF TOWER A- 11th FLOOR</div></div>			
DRAWN: RSKK			CHECKED: CHR/MB	SCALE NTS	DATE 21-04-2023	
			APPROVED: AJ/Dt-KS	DWG. REF. No : DM/11F/TA-12	REV.No. RO	
CONSULTANTS			<div><div><div><div>BUREAU VERITAS (INDIA) PVT. LTD. # 102A, 13th Cross, Saranahantari 2nd Stage, Bengaluru - 560 070. Tel. : 080-25990200</div></div><div><div><div>REGISTERED</div><div>MEMBER</div><div>0000000000</div></div></div></div></div>			

DISTRESS LAYOUT OF TOWER A-11th FLOOR

CONSULTANTS
BUREAU VERITAS (INDIA) PVT. LTD.
f 1030, 13th Cross, Bangalore 2nd Stage, Bangalore - 560 070.
Tel : 080-25980200
BUREAU VERITAS



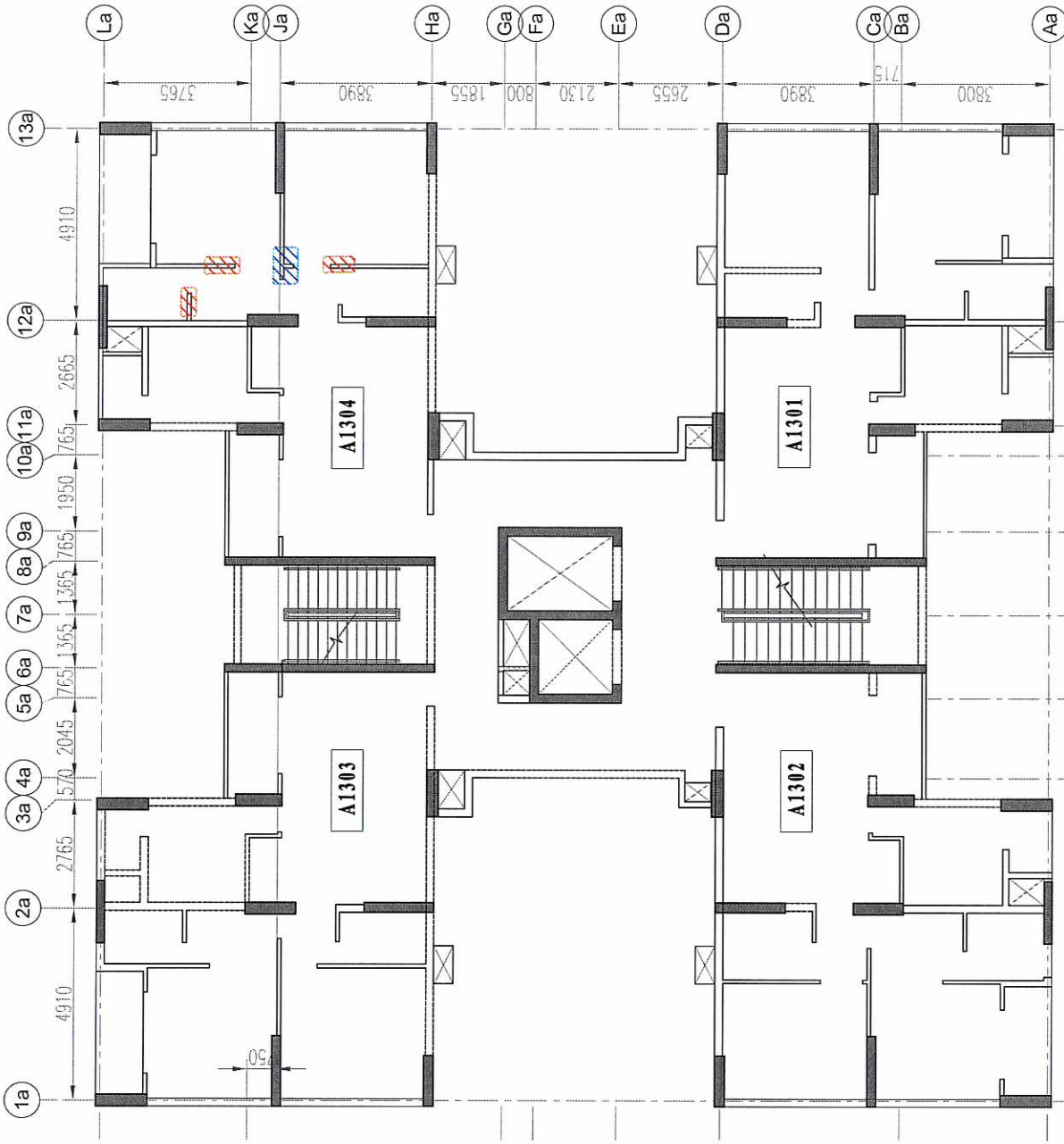
- LEGEND:**
- PEELING OF PAINT-SLAB/BEAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

TOWER-A-12th FLOOR

CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO)		DRAWN: RSKK		CHECKED: CHR/MBS		SCALE		DATE	
	VTILLA, KOCHI, KERALA						N/T'S		24-04-2023	
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VTILLA, KOCHI, KERALA		APPROVED: A/Dr.KS		DWG. REF. No : DM/12F/TA-13		REV.No.		RO	
									17671143	

CONSULTANTS
BUREAU VERITAS (INDIA) PVT. LTD.
100A, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070.
Tel. : 080-28082024

CONTRACT NO



TOWER-A-13th FLOOR

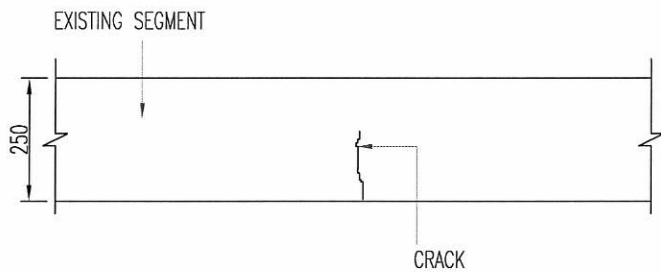
- LEGEND:**
- PEELING OF PAINT-SLAB/BYAM/WALL
 - DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
 - CRACKS-CEILING SLAB/MASONRY WALL
 - POP-UP OF TILES/WALL TILES

CLIENT		M/s ARMY WELFARE HOUSING ORGANISATION (AWHO)		DATE		21-04-2023	
PROJECT		PROJECT VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA		DRAWN:		RSKK	
				CHECKED:		CHR/MBS	
				APPROVED:		AJ/Dr.KS	
				SCALE		NTS	
				DWG. REF. No		DM/13F/TA-14	
				REV.No.		RO	
				CONSULTANTS		BUREAU VERITAS (INDIA) PVT. LTD.	
						1030, 13th Cross, Bangalore - 560 070, INDIA	
						17671143	

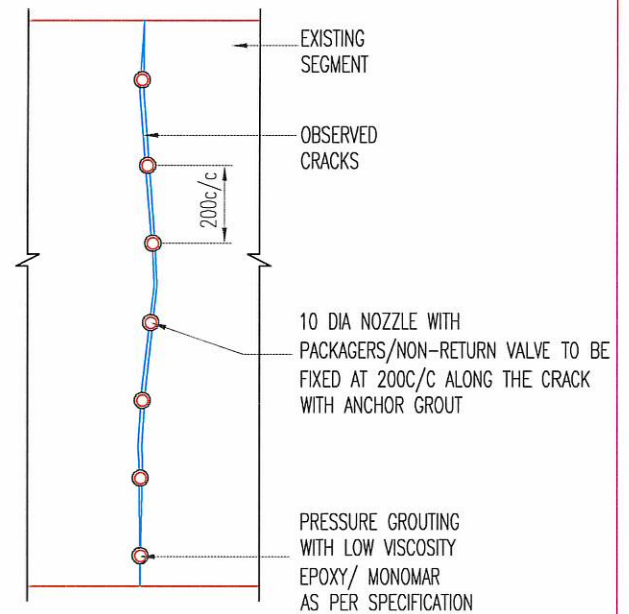
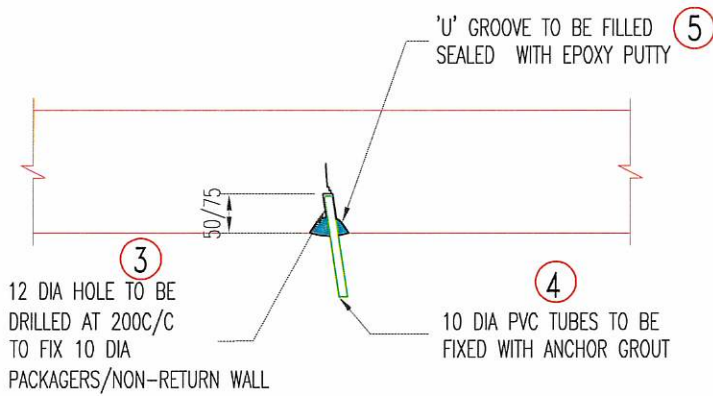
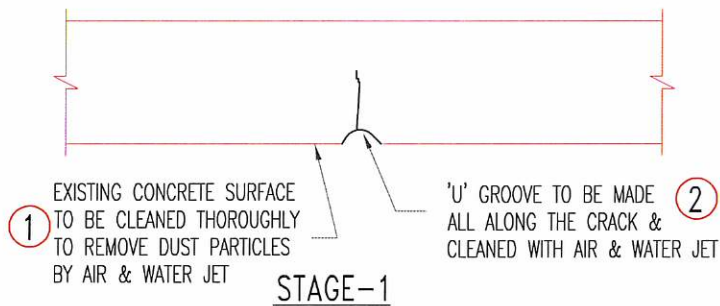


	PEELING OF PAINT-SLAB/BEAM/WALL
	DAMPNESS/ DAMP PATCHES / PEELING OF PAINT
	CRACKS-CEILING SLAB/MASONRY WALL
	POP-UP OF TILES/WALL TILES

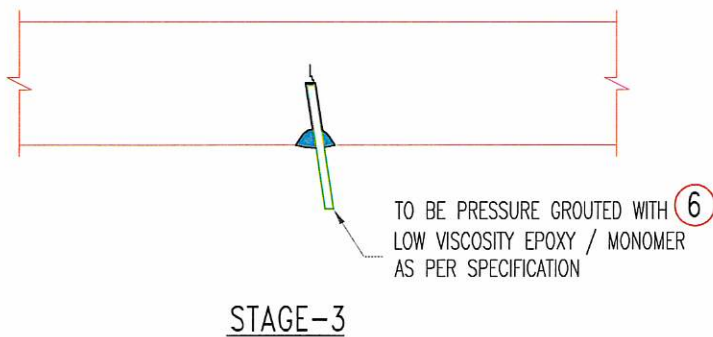
CLIENT	M/s ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTHILA, KOCHI, KERALA	<p>TITLE</p> <p>DISTRESS LAYOUT OF TOWER A- 14th FLOOR</p>	<p>DRAWN: RSKK</p> <p>CHECKED: CHR/MBS</p> <p>SCALE NTS</p> <p>DATE 24-04-2023</p>	<p>REV.No. RO</p> <p>17671143</p>
PROJECT	VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJI ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTHILA, KOCHI, KERALA		<p>DWG. REF. No :DM/14F/TA-15</p> <p>CONTRACT NO</p> <p>17671143</p>	<p>APPROVED: AJ/Dr.KS</p> <p>BUREAU VERITAS (INDIA) PVT. LTD.</p> <p># 1330, 13th Cross, Banashankari 2nd Stage, Bengaluru - 560 070.</p> <p>Tel. : 080-25993000</p> <p>CONSULTANTS</p> <p>  </p>



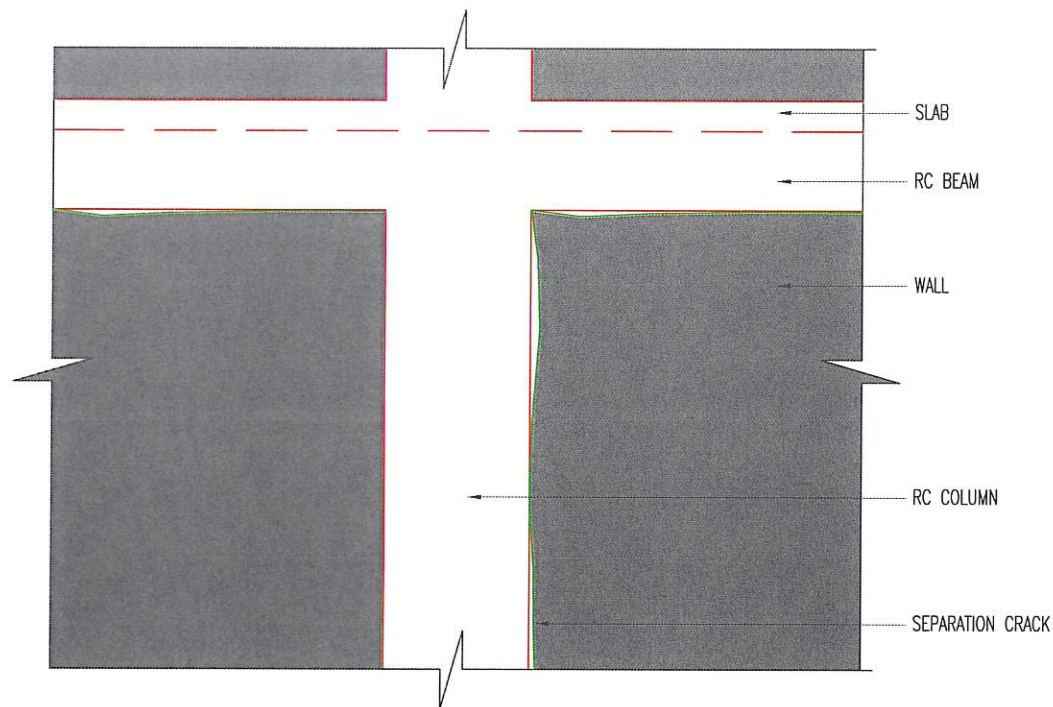
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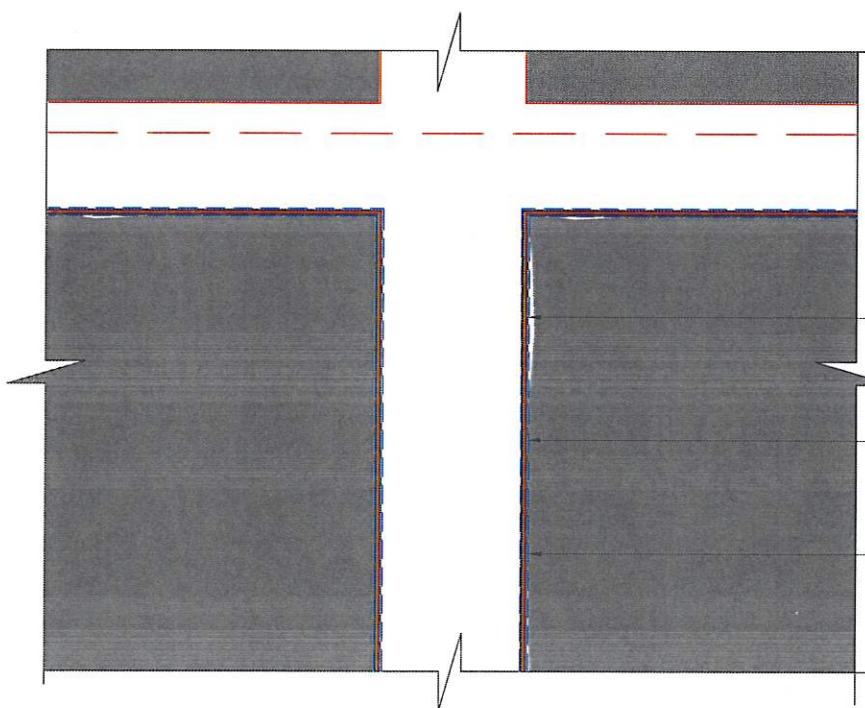
TOP PLAN



TITLE		TREATMENT FOR CRACK IN SLAB IN BOTTOM			
CLIENT		M/S ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA			
PROJECT		VISUAL INSPECTION OF RESIDENTIOAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA			
DATE		REV	DESCRIPTION		
DRAWN:		RSKK	CHECKED:	CHR/MBS	SCALE NTS
DESIGNED:			APPROVED:	AJ	DATE 24-04-2023
CONSULTANTS		BUREAU VERITAS (INDIA) PVT. LTD.			DWG. REF. No. RM/01
		# 1630, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070. Tel. : 080-26980200			REVISION RO
					CONTRACT NO 17671143



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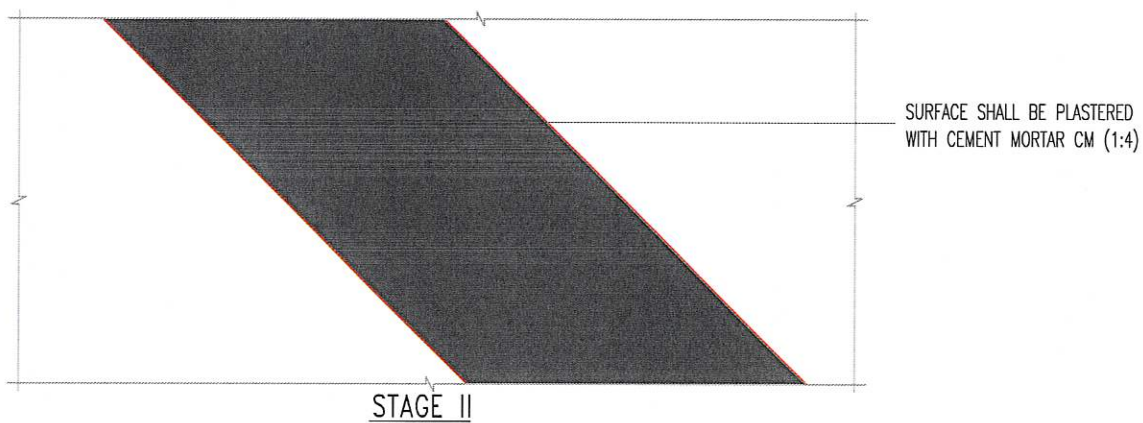
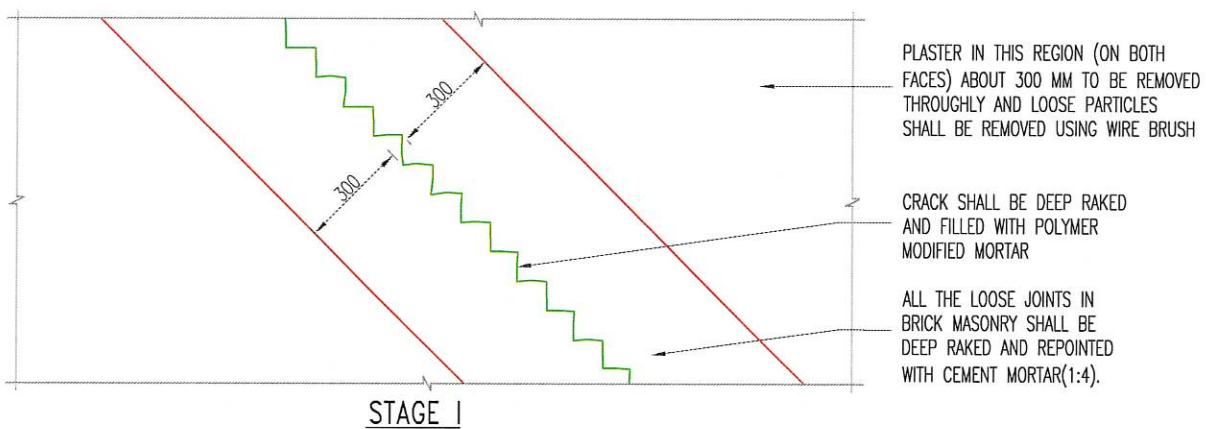
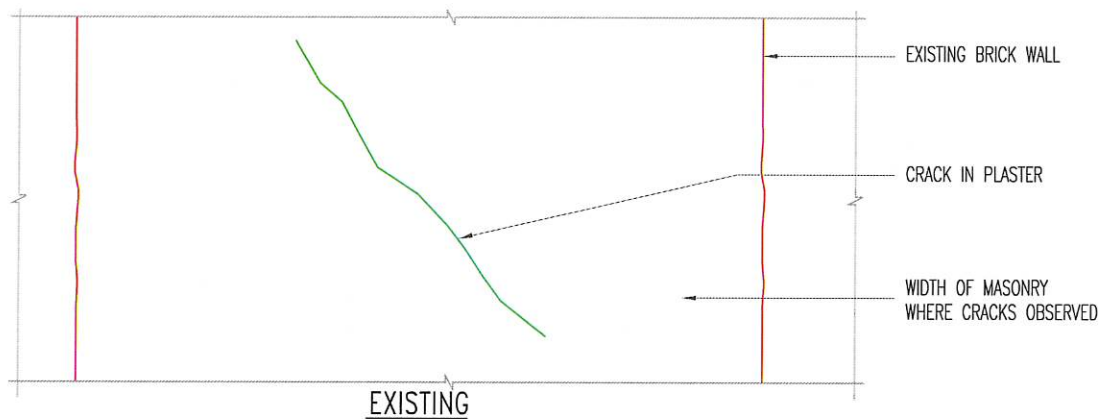
PLASTER IN THIS REGION ABOUT 20MM ON EITHER SIDE OF THE CRACK TO BE REMOVED AND LOOSE PARTICLES SHALL BE REMOVED USING WIRE BRUSH.

'U' GROOVE OF 12mm WIDE AND 6mm DEEP SHALL BE MADE ALL ALONG THE CRACK

GROOVE SHALL BE FILLED WITH FLEXIBLE SEALANT LIKE TACKSEL/POLYSULPHATE SEALANT/SILICON SEALANT OR ANY OTHER EQUIVALENT AS PER MANUFACTURER'S SPECIFICATION

STAGE-1

TITLE					
TREATMENT FOR SEPARATION CRACK					
CLIENT		DATE	REV	DESCRIPTION	
M/S ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA		DRAWN: RSKK	CHECKED: CHR/MBS	SCALE: NTS	DATE: 24-04-2023
PROJECT		DESIGNED:	APPROVED: AJ	DWG. REF. No. RM/02	REV. No. R0
VISUAL INSPECTION OF RESIDENTIAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA		CONSULTANTS		CONTRACT NO	
		BUREAU VERITAS (INDIA) PVT. LTD.		17671143	
		# 1030, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 076. Tel. : 080-26980200			



TITLE		TREATMENT FOR CRACK IN MASONRY WALL			
CLIENT		M/S ARMY WELFARE HOUSING ORGANISATION (AWHO) VYTILLA, KOCHI, KERALA			
PROJECT		VISUAL INSPECTION OF RESIDENTIOAL CHANDERKUNJ ARMY TOWER-A OF ARMY WELFARE HOUSING ORGANIZATION(AWHO) AT SILVER SAND ISLAND, VYTILLA, KOCHI, KERALA			
DATE		REV	DESCRIPTION		
DRAWN:		RSKK	CHECKED:	CHR/MBS	SCALE NTS
DESIGNED:			APPROVED:	AJ	DATE 24-04-2023
CONSULTANTS		BUREAU VERITAS (INDIA) PVT. LTD. # 1030, 13th Cross, Banashankari 2nd Stage, Bangalore - 560 070. Tel. : 080-26980200			DWG. REF. No. RM/03
					CONTRACT NO 17671143
					REVISED R0



SPECIFICATIONS

SPECIFICATION FOR ELASTOMERIC SEALANT FOR SEPARATION CRACK

Type of sealant	: Two part elastomeric waterproof sealant
Tensile strength	: 1.50 to 1.70 N/sq.mm
Elongation	: 600 to 700 %
Movement accommodation	: ± 25 to 40%
Pot life	: Not less than 30 minutes
Full cure	: 7 to 10 days max. (as per manufacturer's specification)
Shore A hardness	: 18 to 23 at 25° C
Pressure resistance	: 6 to 8 m hydrostatic head
Application temperature	
Range	: 10° C to 50° C
Density	: 1.60 to 1.70 Kgs / litre
Solid content	: 100% (Max.)
Resistance of exposure	: Shall not degrade when exposed to Ultra-Violet radiation and weathering
Service condition	: i) Shall be resistant to abrasion ii) Shall be impermeable to water when sealed iii) Shall be non-corrosive type iv) Shall be non-toxic and food grade
Life	: Shall be durable for a minimum period of 5 years (Guarantee period)
Technical reference	: BS - 4254 - 1983 or equivalent
Available sources	: "Masterflex 472/474" from M/s. BASF India Ltd., Bangalore

"Dr. Fixit PU Sealant"
M/s. Pidilite Industries Ltd.

"Nitoseal PU – Polyurethen selant"
"Thioflex 600 – Polysulphide sealant"
"Nitoseal MS 600 – Hybrid Silyl Modified Polyether"
M/s. Fosroc Chemicals (India) Pvt. Ltd., Bangalore

or any equivalent

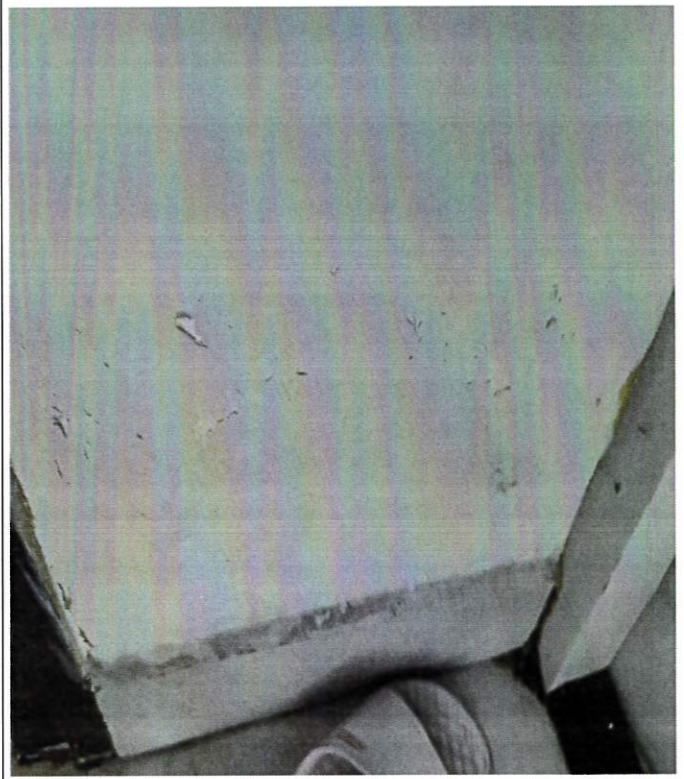
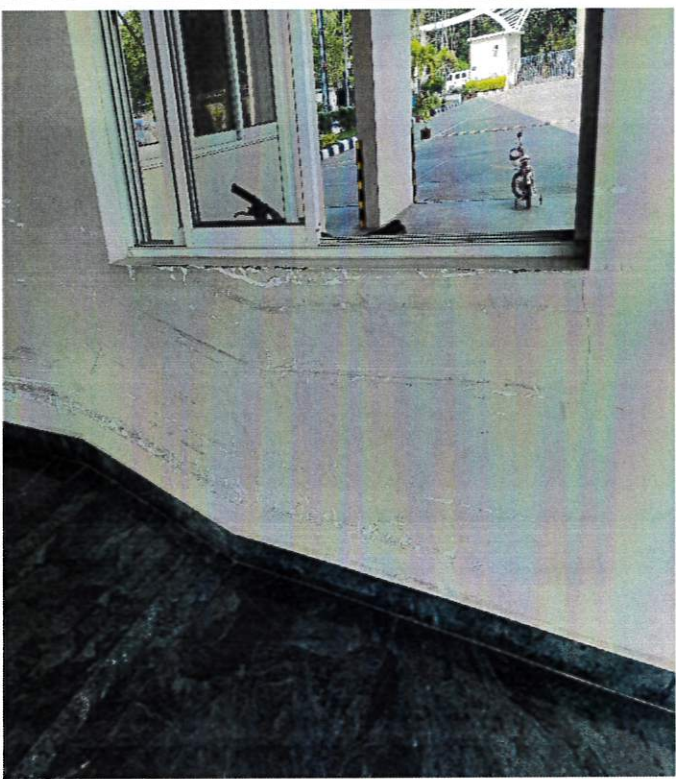
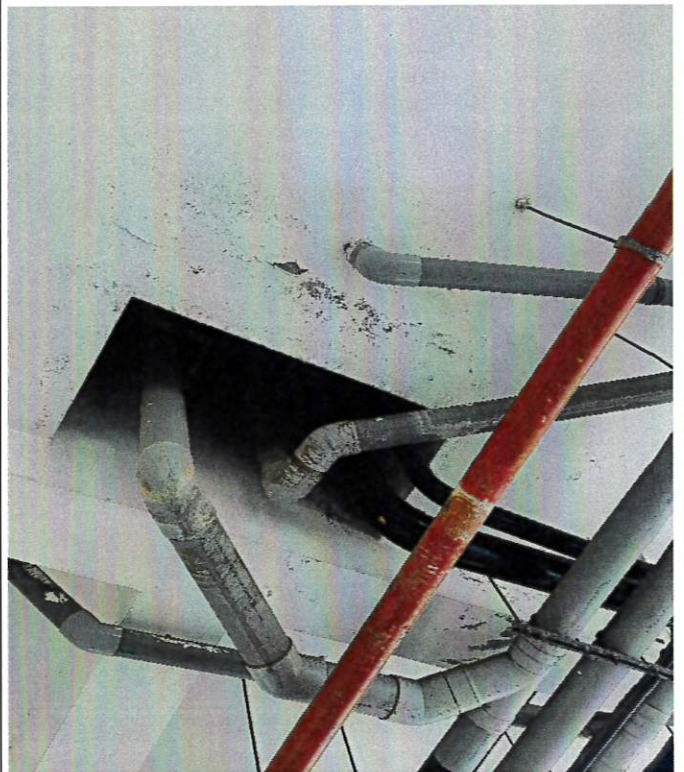
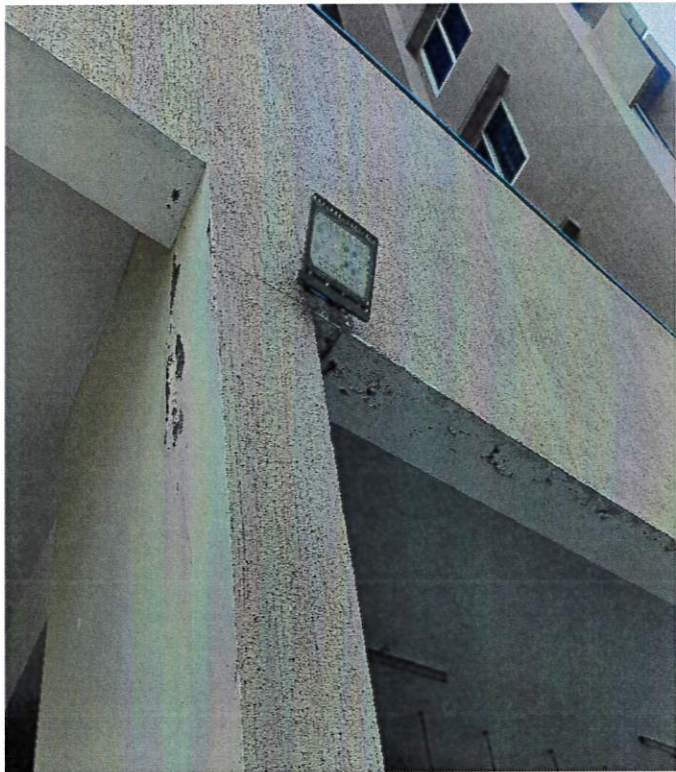
SPECIFICATION FOR
EPOXY INJECTION / GROUTING

Reference	: ASTM - 881 - 87 Type I, Grade I, Class B or C.
Type of Epoxy	: Low viscosity solvent free prepacked resin and hardener, free flow epoxy system after mixing.
Viscosity	: Mix viscosity 800 mPa maximum at 25° C.
Pot life	: Not less than 45 minutes
Compressive strength after 7 days curing at 25° C	: Not less than 75 N/Sq.mm
Injection equipment	: Electrically operated or Compressed air driven injection pump with suitable syringe system, fitted with suitable pressure gauge.
Operating pressure	: 3 – 4 Kg/Sq.cm
Available sources	: “MasterInject 1315” from M/s. BASF India Ltd., Bangalore “Dr. Fixit Epoxy Injection Grout” M/s. Pidilite Industries Ltd. “Quickmast 231” M/s. Don Construction Chemicals India Ltd. “Conbextra EP10” from M/s. Fosroc Chemicals (India) Ltd., Bangalore “KP 250” from M/s. Krishna Conchem Products Pvt. Ltd., Mumbai “Sikadur 52” from M/s. Sika Qualcrete Pvt. Ltd., Bangalore or any equivalent



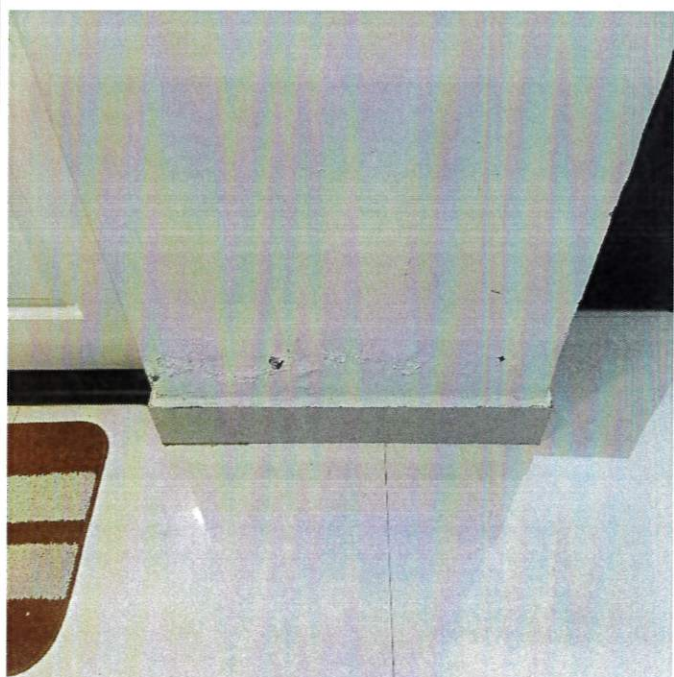
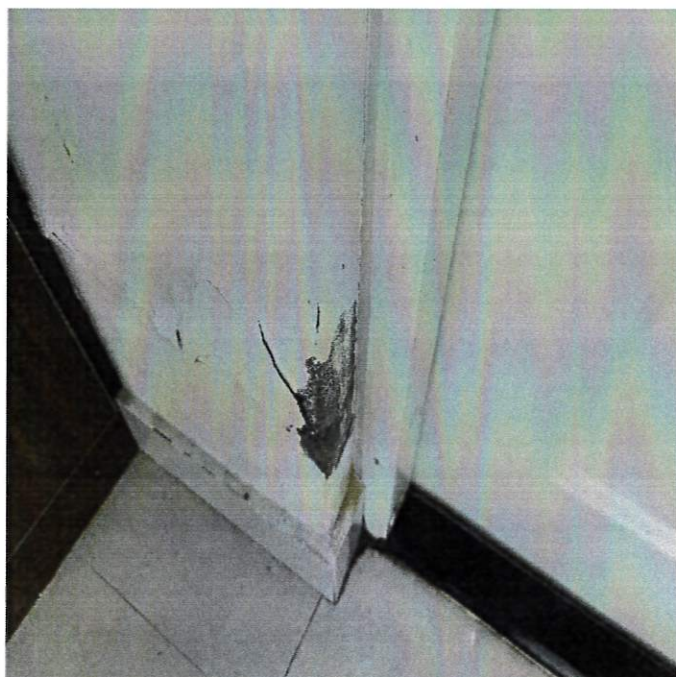
PHOTOGRAPHS

PHOTOGRAPHS



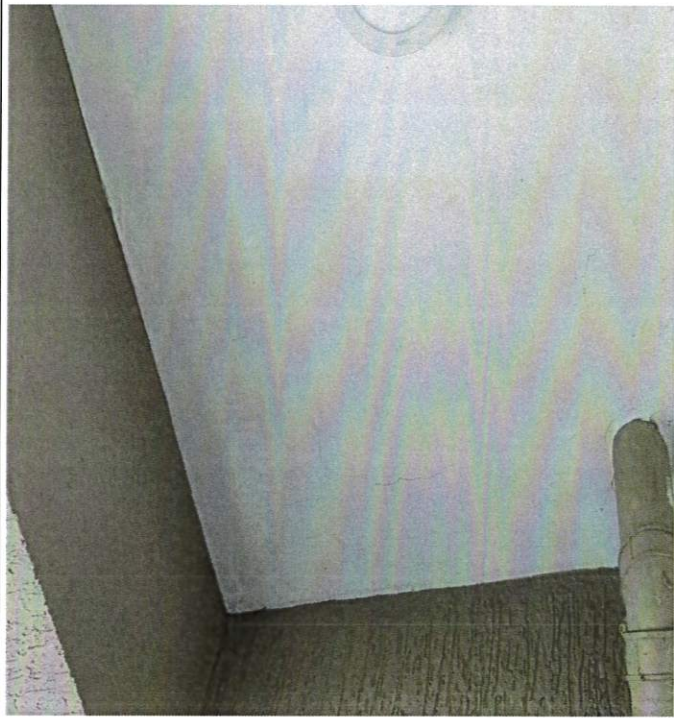
View of dampness/ damp patches/ peeling of paint

PHOTOGRAPHS



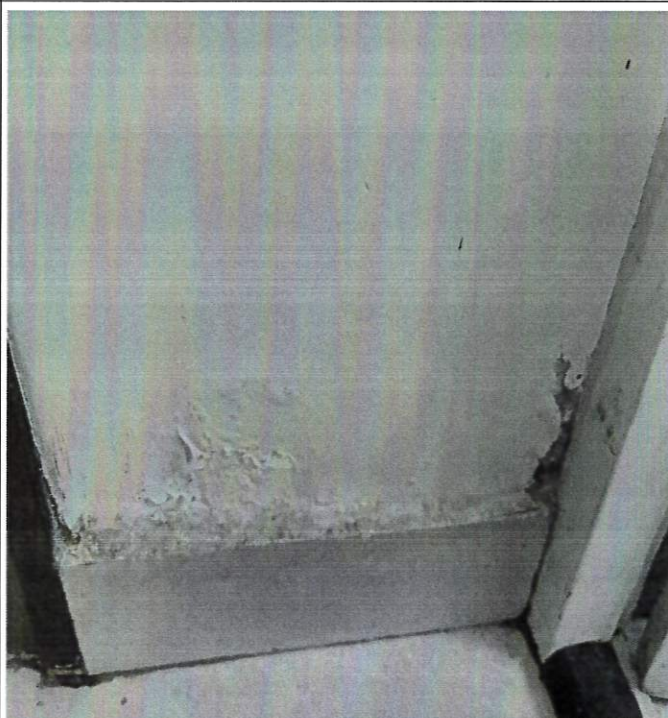
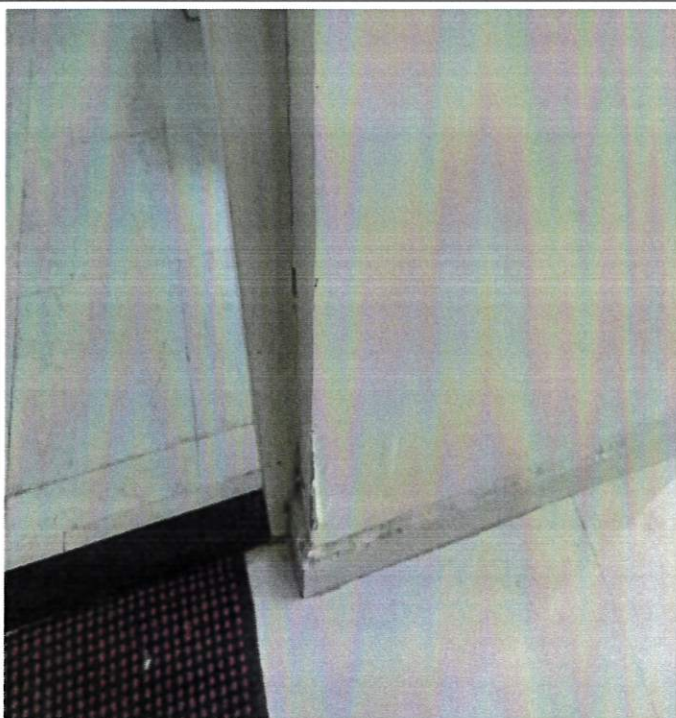
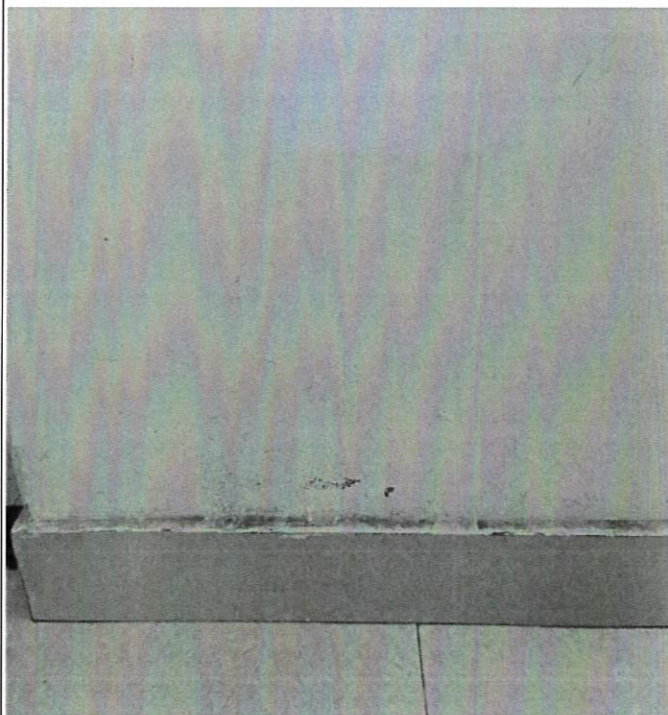
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



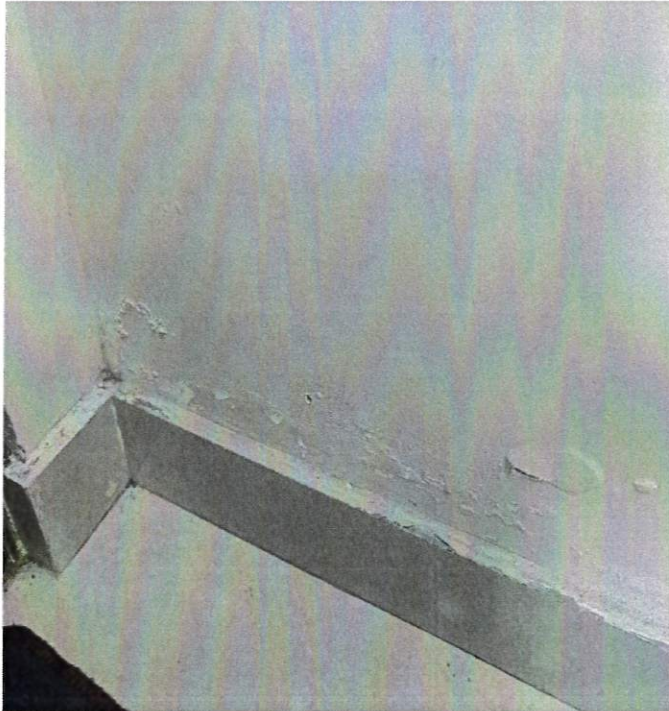
View of Cracks in masonry wall inside the Flats

PHOTOGRAPHS



View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



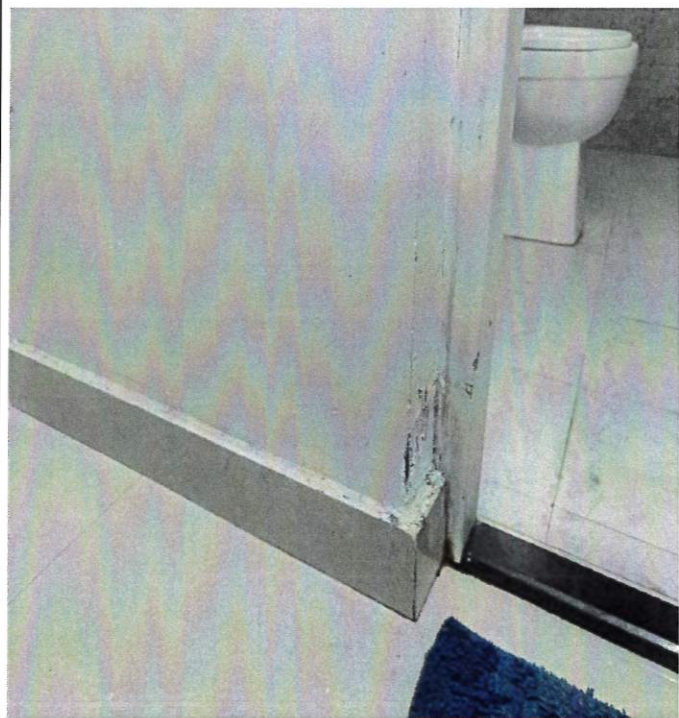
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



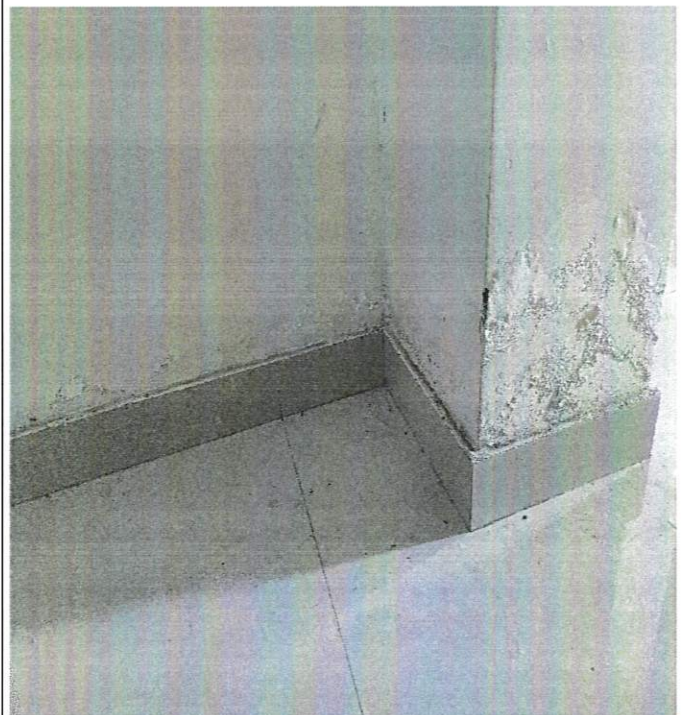
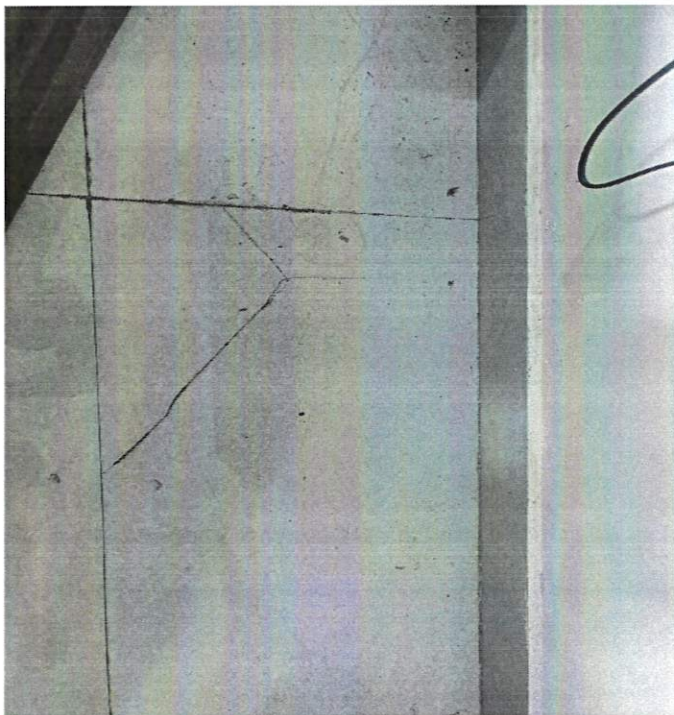
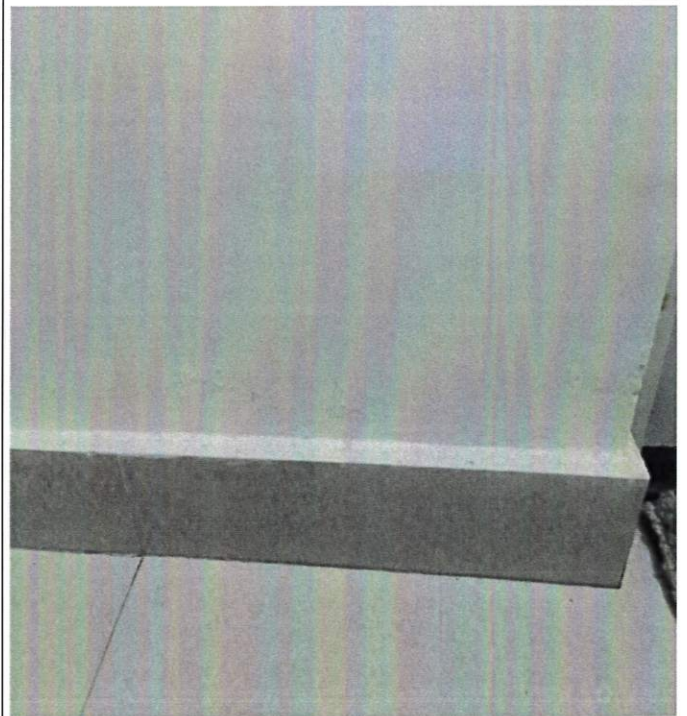
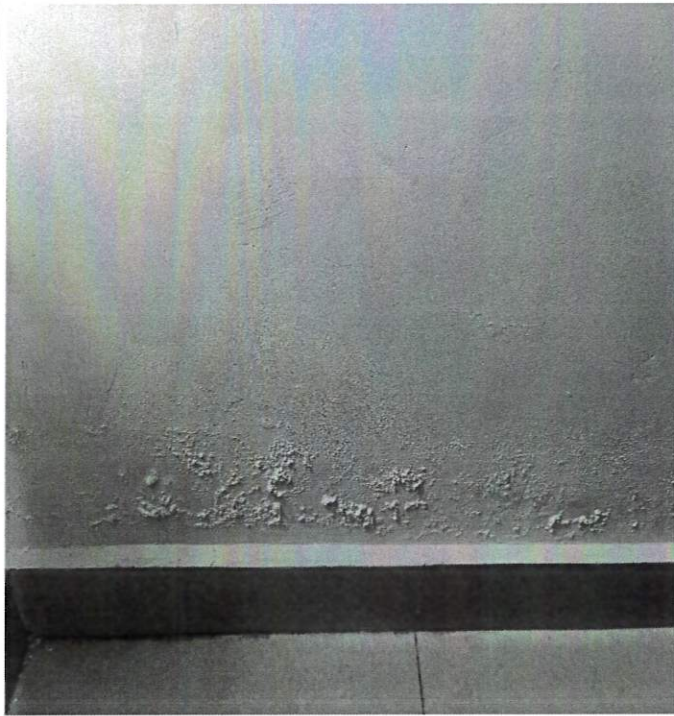
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



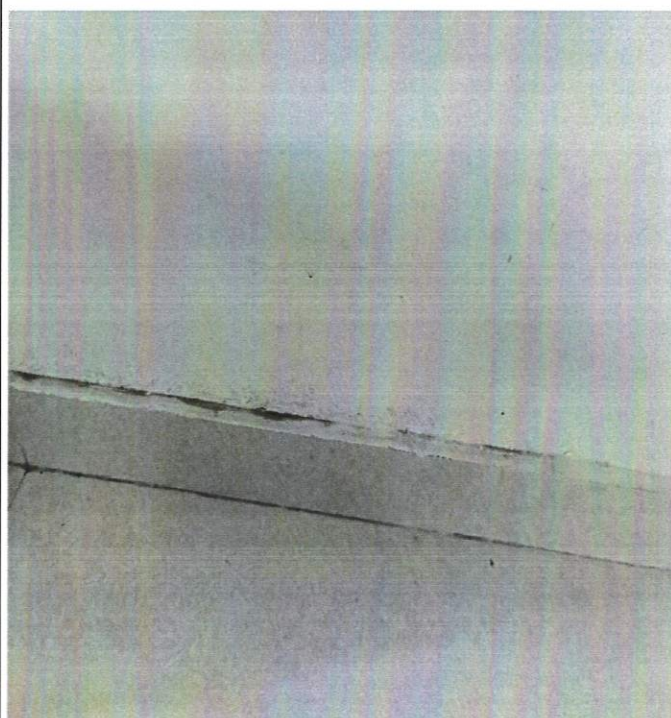
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



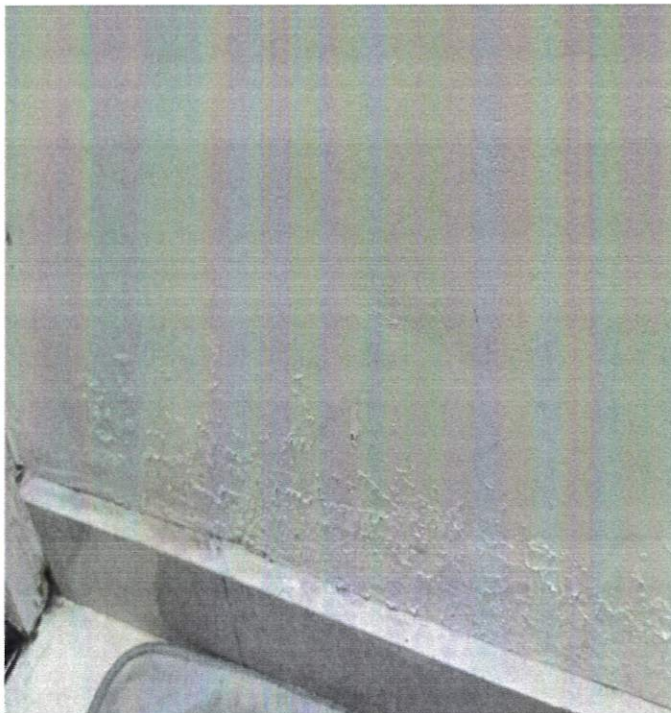
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



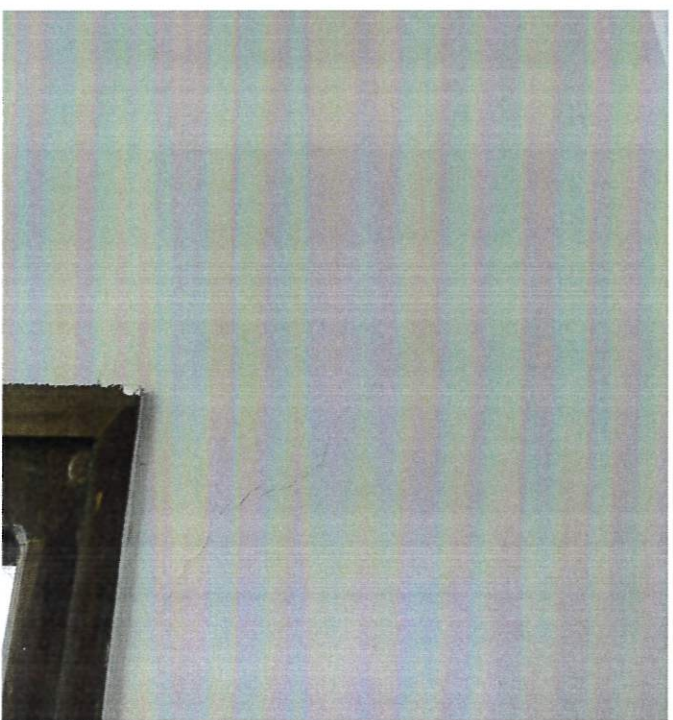
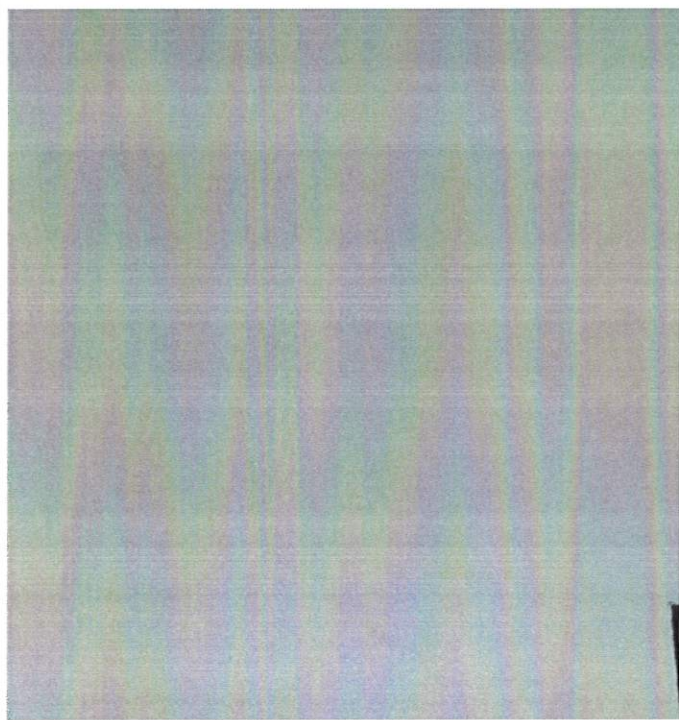
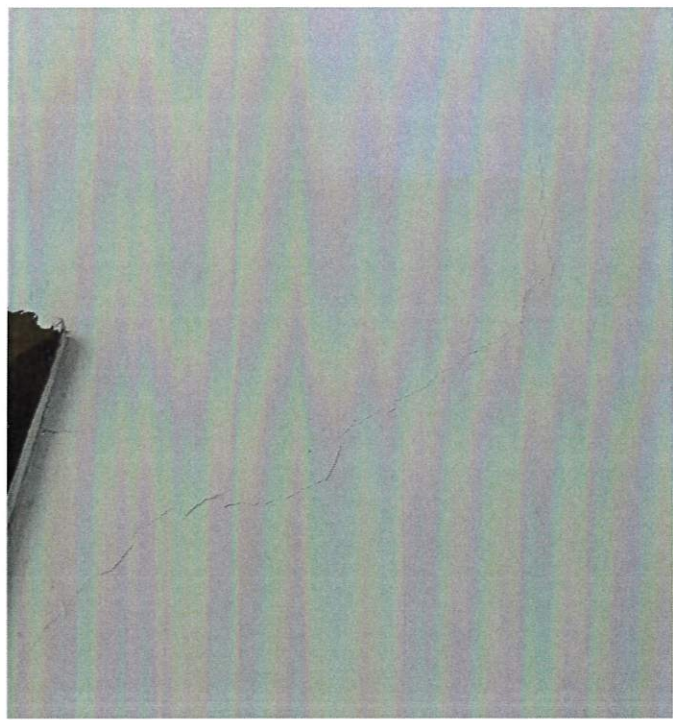
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



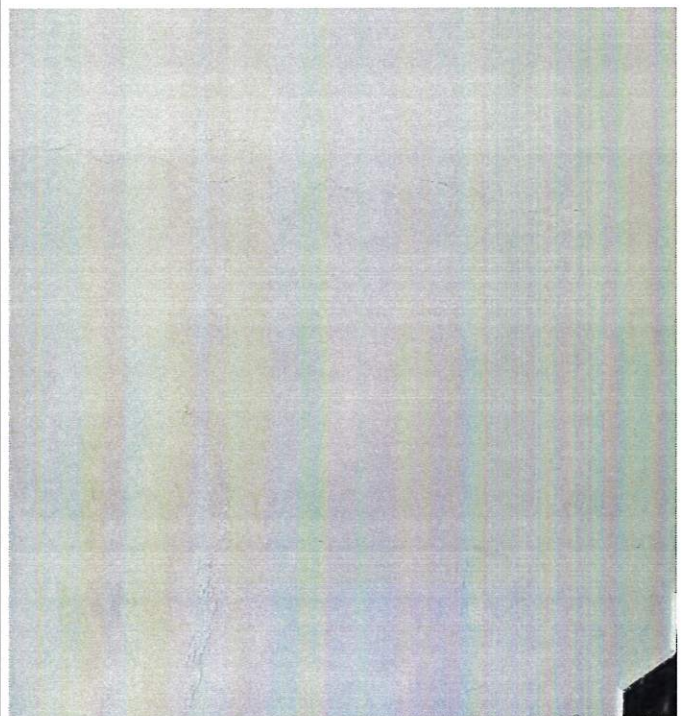
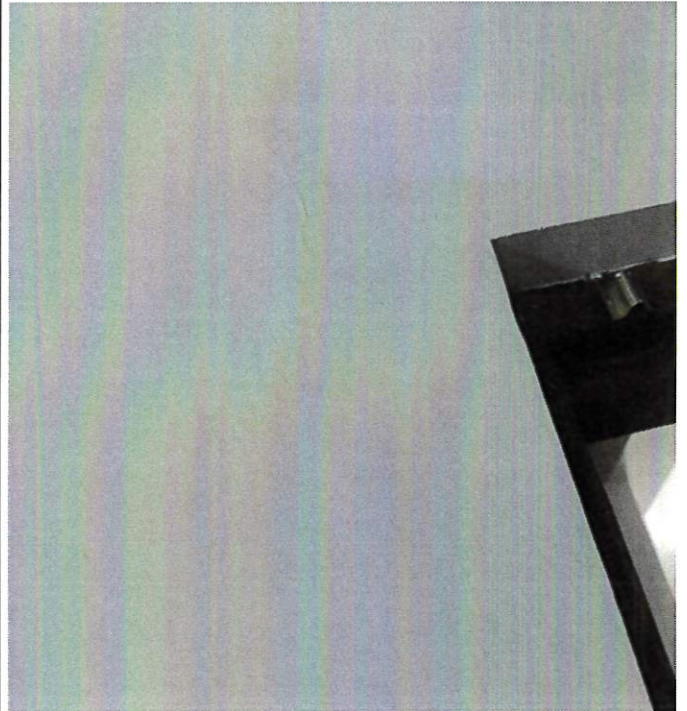
View of dampness/ damp patches/ peeling of paint inside the Flats

PHOTOGRAPHS



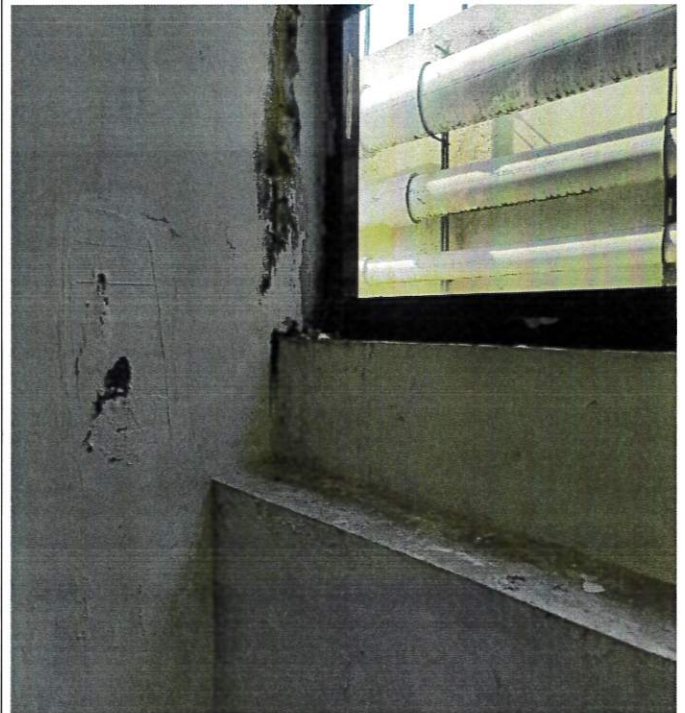
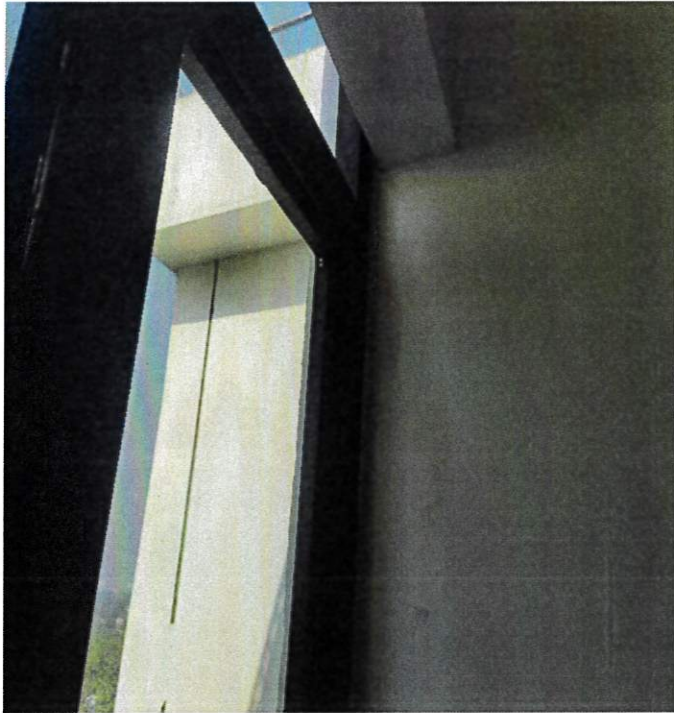
View of cracks in masonry wall

PHOTOGRAPHS



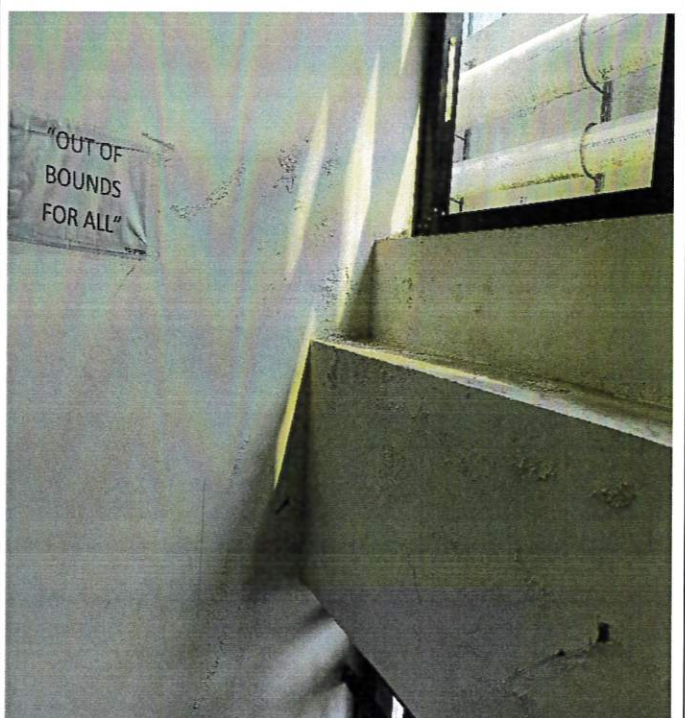
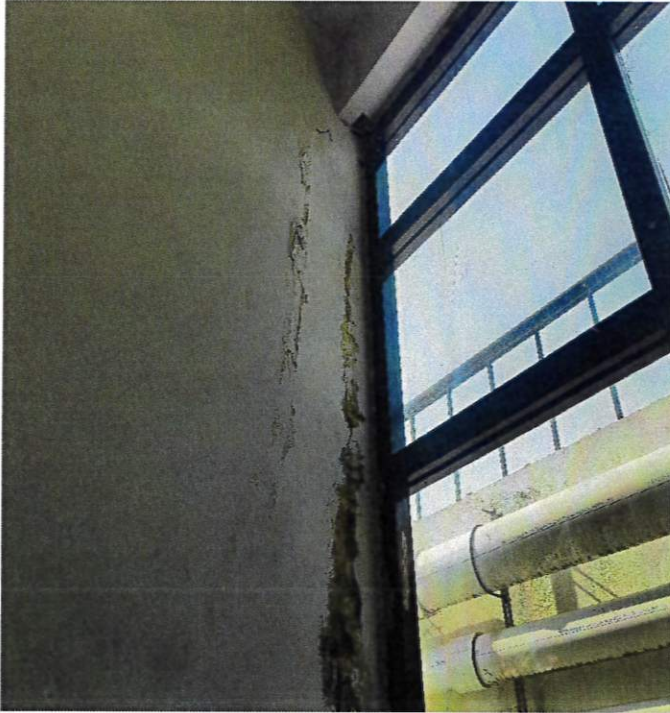
View of cracks in masonry wall

PHOTOGRAPHS



View of cracks in masonry wall

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View of dampness/ damp patches/ peeling of paint