

CENTURY CITY  
7446

Telephone : (021) 551-4303  
Facsimile : (021) 551-6814  
E-mail : [consult@dsv.co.za](mailto:consult@dsv.co.za)

DSV filing ref : CM0769/Y  
Form print date : 2026/04/23

## HVAC AND FIRE INSTALLATION

## SCHEDULE OF DRAWINGS AND TRANSMITTAL FORM

**Issue date**

[illegible]

Distribution	Attention
Derek Kock and Associates	D Kock
	P Van Huyssteen

[illegible]

Please return the **PINK** copy to **DSV Consulting Engineers**

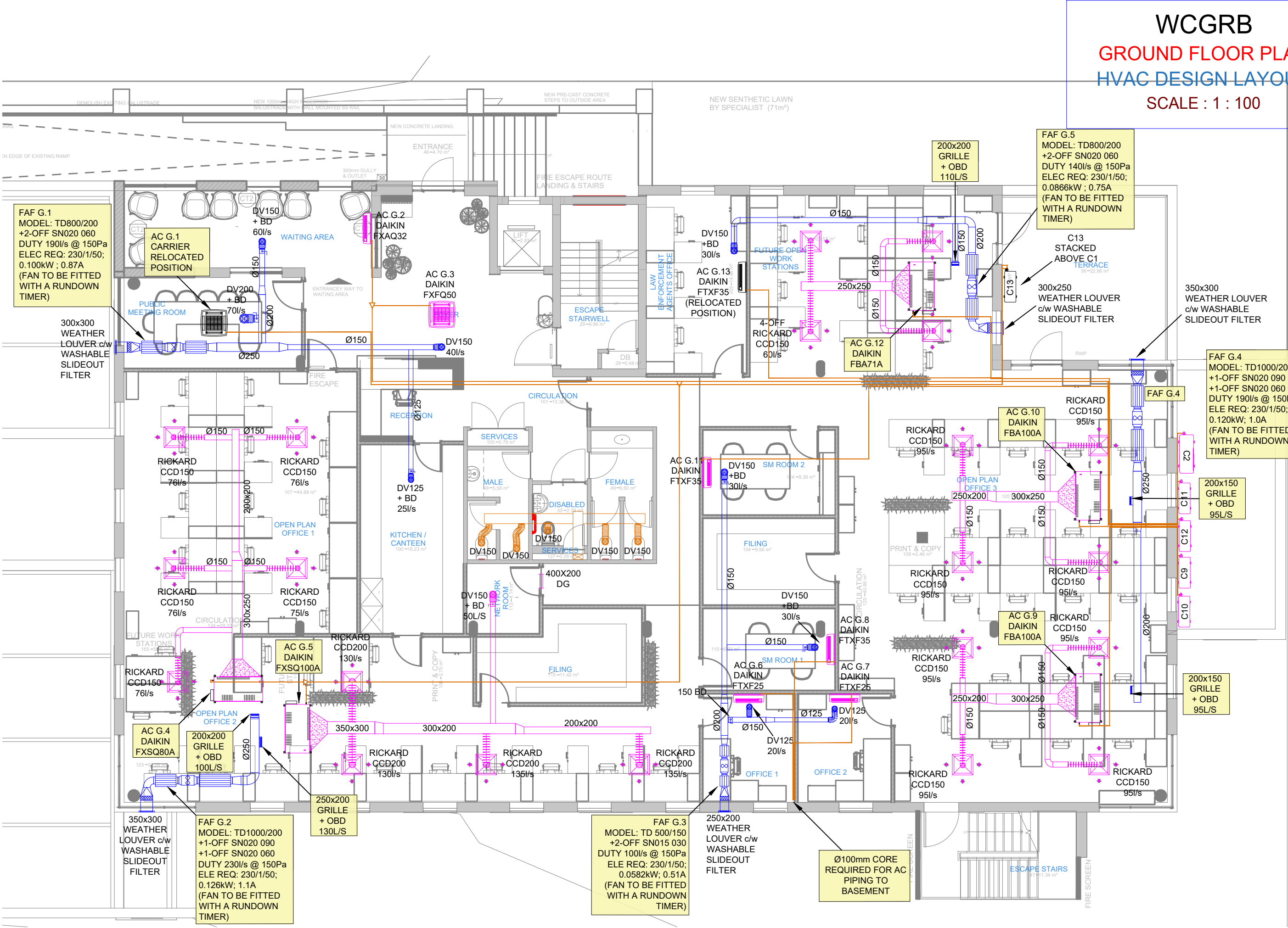
**Copies :** PP = Paper Print: EE = Electronic by E-mail: ED = Electronic on Disk

SCHEDULE OF FRESH AIR SUPPLY					
ROOM	AREA (m²)	No. Ppl	F/A Req'd @ 7.5 l/s	F/A Req'd @ 2 Air Changes (2.6m C/H)	Design F/A l/s
WAITING AREA	17	8	60	25	60
FOYER	27	1	8	39	40
MEETING ROOM	14	9	68	21	70
OPEN PLAN OFFICE 1	50	12	90	73	100
OPEN PLAN OFFICE 2	64	15	113	93	125
KITCHEN CANTEN	16	3	23	24	25
OFFICE 1	8	1	8	12	20
OFFICE 2	8	1	8	12	20
SM ROOM 1	9	4	30	13	30
SM ROOM 2	9	4	30	13	30
LAW ENFORCEMENT	15	3	23	22	30
FUTURE WORKSTATION	36	9	68	52	110
OPEN PLAN OFFICE 3	88	21	158	128	190
TOTAL	361	92		733	850

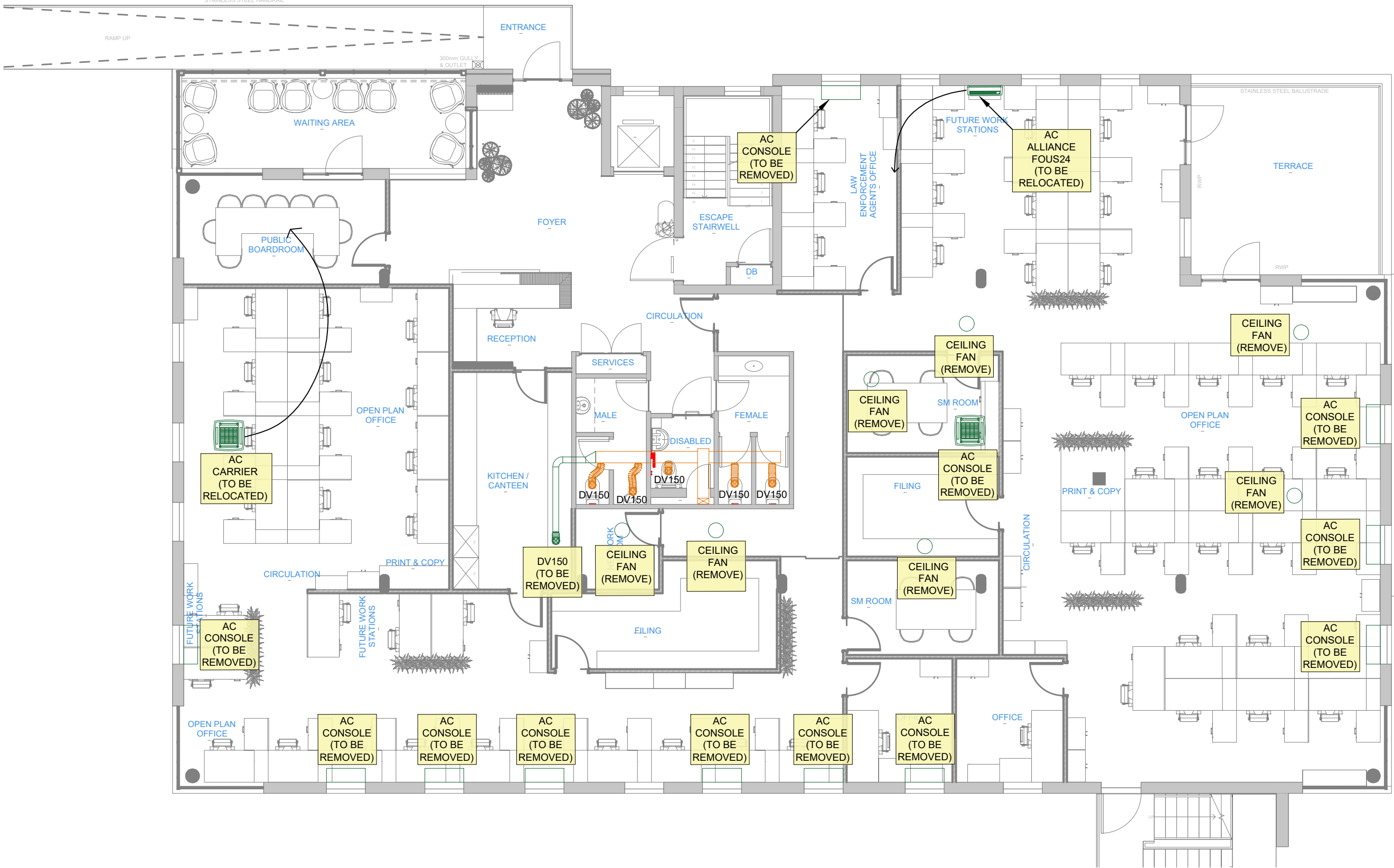
AC SELECTION - (STAND ALONE UNITS)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power supply
ACG.1	CARRIER (UNKNOWN)	-x-x-	- kW	- A	- A	1	-
ACG.6	DAIKIN FTXF25E	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
ACG.7	DAIKIN FTXF25E	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
ACG.8	DAIKIN FTXF35E	283x770x225	3.5 kW	9.3 A	16 A	1	OUTDOOR
ACG.9	DAIKIN FBA100	245x1400x800	11.2 kW	21.8 A	25 A	1	OUTDOOR
ACG.10	DAIKIN FBA100	245x1400x800	11.2 kW	21.8 A	25 A	1	OUTDOOR
ACG.11	DAIKIN FTXF35E	283x770x225	3.5 kW	9.3 A	16 A	1	OUTDOOR
ACG.12	DAIKIN FBA71	245x1400x800	8.0 kW	17.5 A	20 A	1	OUTDOOR

AC SELECTION - (2 PIPE VRV C2)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power supply
ACG.2	DAIKIN FXAQ32A	290x795x266	3.6 kW	0.4 A	16 A	1	INDOOR
ACG.3	DAIKIN FXFQ50A	245x700x800	5.6 kW	0.8 A	16 A	1	INDOOR
ACG.4	DAIKIN FXSQ80A	245x1000x800	9.0 kW	1.0 A	16 A	1	INDOOR
ACG.5	DAIKIN FXSQ100A	245x1000x800	11.2 kW	1.5 A	16 A	1	INDOOR
C2	DAIKIN RXYSQ10	283x770x225	28.0 kW	22 A	25 A	3	OUTDOOR

FAN SELECTION							
Label	Type/ Model	SIZE / Ø	Kwatts	V / Ph / Hz	Current	Total Pressure	Duty
FAF 1	TD 800/200 (OR APPROVED EQUAL)	200Ø	0.100kW	230 / 1 / 50	0.87 amps	150 Pa	190 l/s @ 150 Pa
FAF 2	TD 1000/200 (OR APPROVED EQUAL)	200Ø	0.126kW	230 / 1 / 50	1.1 amps	150 Pa	230 l/s @ 150 Pa
FAF 3	TD 500/150 (OR APPROVED EQUAL)	150Ø	0.0582kW	230 / 1 / 50	0.51 amps	150 Pa	100 l/s @ 150 Pa
FAF 4	TD 1000/200 (OR APPROVED EQUAL)	200Ø	0.120kW	230 / 1 / 50	1.0 amps	150 Pa	190 l/s @ 150 Pa
FAF 5	TD 800/200 (OR APPROVED EQUAL)	200Ø	0.0866kW	230 / 1 / 50	0.75 amps	150 Pa	140 l/s @ 150 Pa



WCGRB  
GROUND FLOOR PLAN  
HVAC RELOCATE/REMOVAL LAYOUT  
SCALE : 1 : 100



PROJECT  
WESTERN CAPE  
GAMBLING AND RACING BOARD

MECHANICAL INSTALLATION

TITLE  
GROUND FLOOR

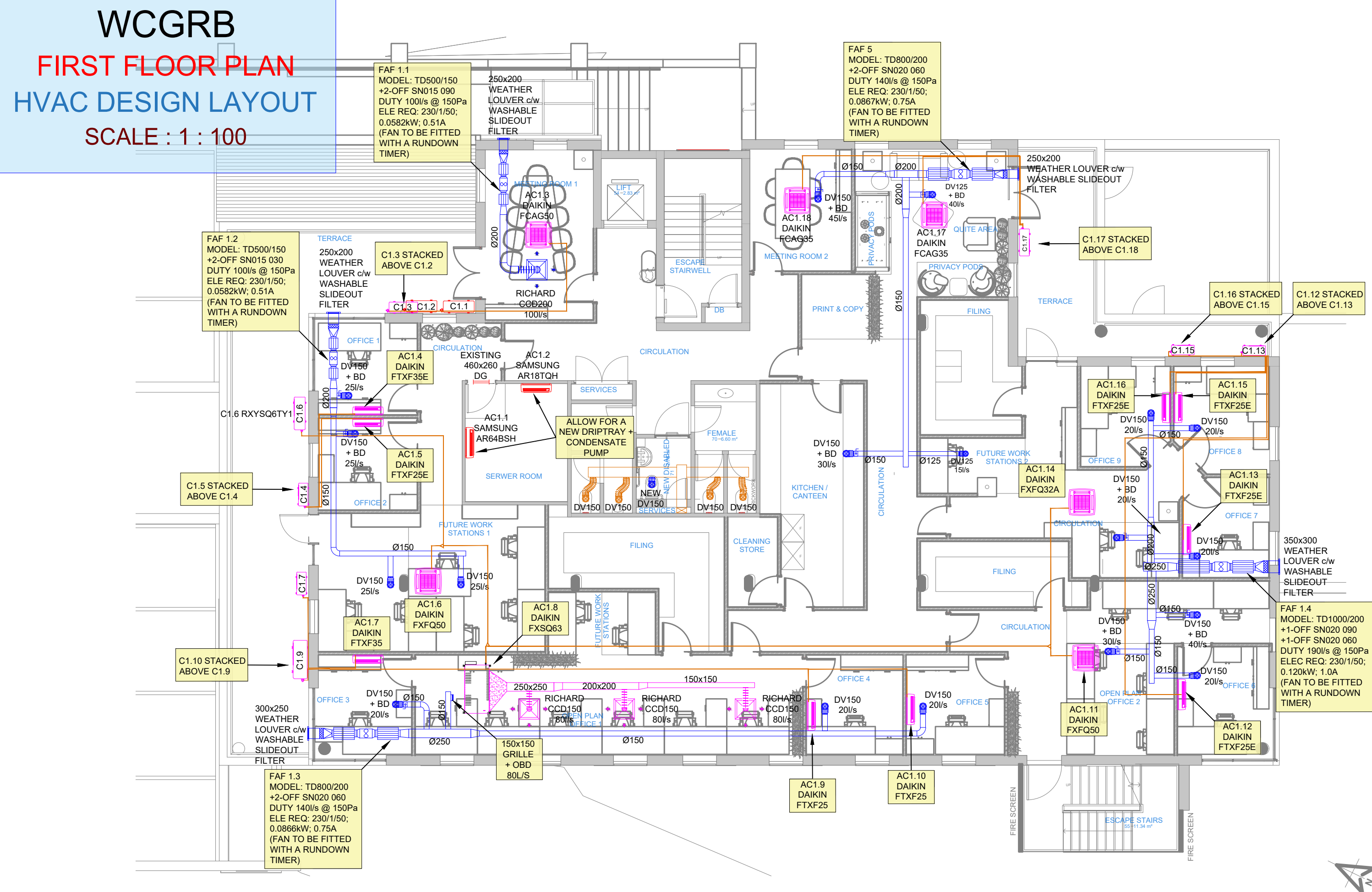
HVAC LAYOUT

Designed Outwerp	RS	Scale Skaal	1:100
Drawn By Geteken	AM	Date Datum	APRIL 2026
Checked Nagesien	RS	Date Datum	
Approved Goedgekeur		Date Datum	
DSV Dwg No. Tek Nr.	CM0769/Y1	Rev. Wys.	
Your Dwg No. U Tek Nr.			
ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS			
Date Datum	REV. Wys.	Initial Voort.	Description Beskrywing
27/06/25	A	AM	FOR INFORMATION
04/07/25	B	AM	FOR INFORMATION
11/07/25	C	AM	FOR INFORMATION
17/07/25	0	AM	FOR TENDER
27/08/25	1	AM	FOR COUNCIL SUBMISSION
22/04/26	2	NB	FOR TENDER

EQUIPMENT LEGEND	
	Existing Equipment
	New Fresh Air
	New A/C
	Relocate/ Remove (Original Position)
	Relocated HVAC (New Position)

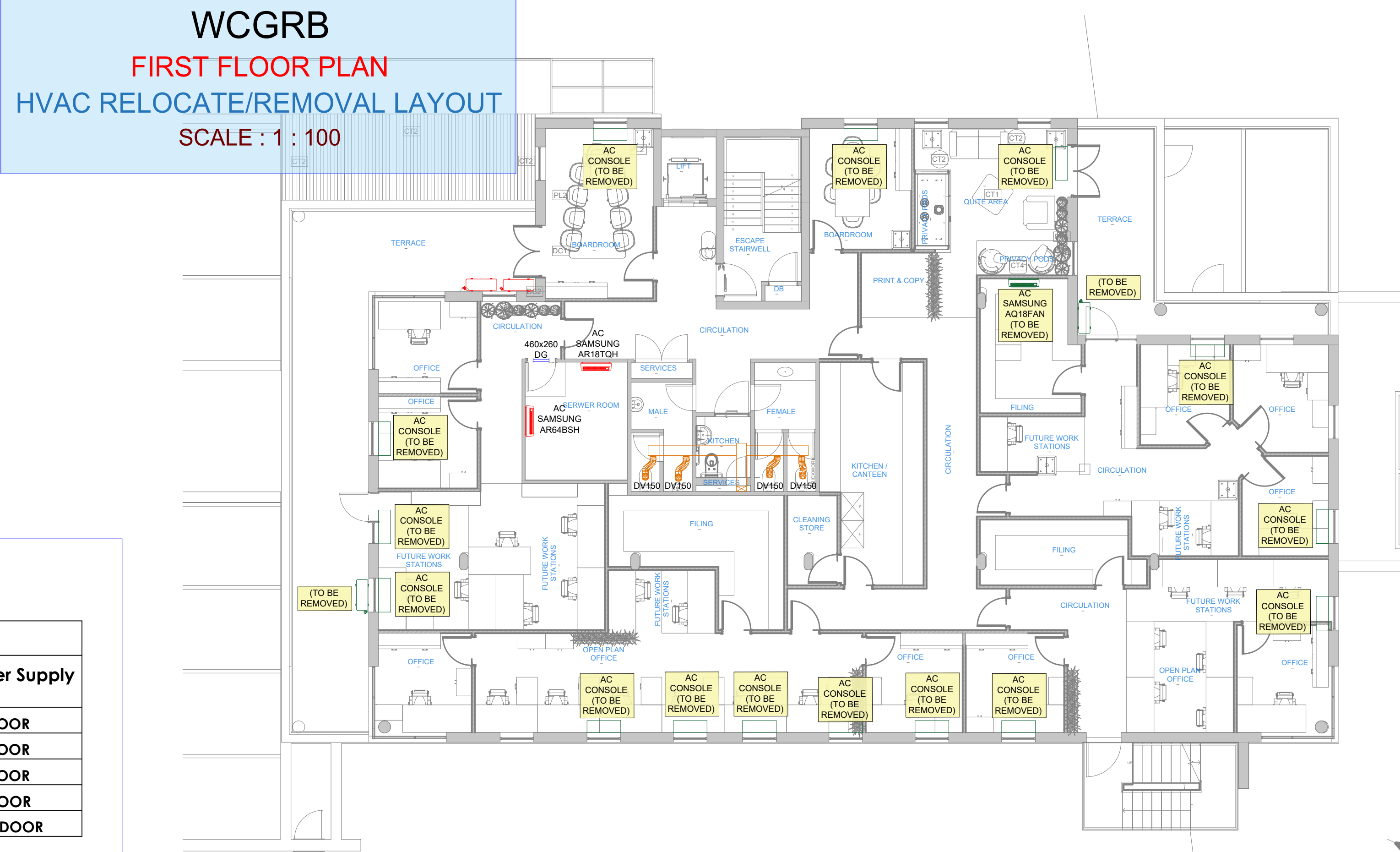


SCHEDULE OF FRESH AIR SUPPLY					
ROOM	AREA (m <sup>2</sup> )	No. Ppl	F/A Req'd @ 7.5 l/s	F/A Req'd @ 2 Air Changes (2.6m C/H)	Design F/A l/s
MEETING ROOM 1	16	9	68	24	100
OFFICE 1	8	1	8	12	20
OFFICE 2	8	1	8	12	20
FUTURE WORKSTATION 1	27	6	45	39	50
OFFICE 3	8	1	8	12	20
OPEN PLAN OFFICE 1	38	8	60	55	70
CANTEEN	18	3	23	26	30
OFFICE 4	8	1	8	12	20
OFFICE 5	8	1	8	12	20
OPEN PLAN OFFICE 2	21	7	53	31	80
OFFICE 6	9	1	8	13	20
OFFICE 7	7	1	8	11	20
OFFICE 8	8	1	8	12	20
OFFICE 9	7	1	8	11	20
CIRCULATION	14	2	15	21	30
FUTURE WORKSTATION 1	5	1	8	8	15
QUITE AREA	15	5	38	22	40
PRIVACY POD	2	1	8	3	10
MEETING ROOM 2	10	6	45	14	45
TOTAL	237	57	479		670



AC SELECTION - (STAND ALONE UNITS)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power supply
AC1.3	DAIKIN FCAG50B (OR APPROVED EQUAL)	204x840x840	5 kW	14.21 A	16 A	1	OUTDOOR
AC1.4	DAIKIN FTXF35E (OR APPROVED EQUAL)	286x770x225	3.3 kW	9.3 A	16 A	1	OUTDOOR
AC1.5	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.7	DAIKIN FTXF35E (OR APPROVED EQUAL)	286x770x225	3.3 kW	9.3 A	16 A	1	OUTDOOR
AC1.9	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09A	16 A	1	OUTDOOR
AC1.10	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.12	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.13	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.15	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.16	DAIKIN FTXF25E (OR APPROVED EQUAL)	286x770x225	2.5 kW	8.09 A	16 A	1	OUTDOOR
AC1.17	DAIKIN FCAG35B (OR APPROVED EQUAL)	204x840x840	3.5 kW	10.92 A	13 A	1	OUTDOOR
AC1.18	DAIKIN FCAG35B (OR APPROVED EQUAL)	204x840x840	3.5 kW	10.92 A	13 A	1	OUTDOOR

AC SELECTION - (2-PIPE VRV)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power Supply
AC1.6	DAIKIN FXFQ50A (OR APPROVED EQUAL)	204x840x840	5.6 kW	0.4 A	16 A	1	INDOOR
AC1.8	DAIKIN FXSQ63A (OR APPROVED EQUAL)	245x1000x800	7.1 kW	0.9 A	16 A	1	INDOOR
AC1.11	DAIKIN FXFQ50A (OR APPROVED EQUAL)	204x840x840	5.6 kW	0.4 A	16 A	1	INDOOR
AC1.14	DAIKIN FXFQ32B (OR APPROVED EQUAL)	204x840x840	3.6 kW	0.3 A	16 A	1	INDOOR
C1.6	DAIKIN RXYSQ6TY1 (OR APPROVED EQUAL)	1345x900x320	15.5 kW	14.1 A	16 A	3	OUTDOOR



PROJECT WESTERN CAPE  
PROJECT GAMBLING AND RACING BOARD

## MECHANICAL INSTALLATION

TITLE FIRST FLOOR

## HVAC LAYOUT

signed twerp	RS	Scale Skaal	1:100
awn By teken	AM		

geprüft gelesen	RS	Date Datum	APRIL 2026
--------------------	----	---------------	------------

proved edgekeur	Date Datum
--------------------	---------------

SV	Dwg No. Tek Nr.	CM0769/Y2	Rev. Wys.
----	--------------------	-----------	--------------

Four Dwg No.	
Tek Nr.	

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS

Item	REV. Wks.	Initial Vori.	Description Beskrywing
	A	AM	FOR INFORMATION
	B	AM	FOR INFORMATION
	0	AM	FOR TENDER
	1	AM	FOR COUNCIL SUBMISSION
	2	NB	FOR TENDER


## EQUIPMENT LEGEND

- |   |   |
|---|---|
|  | Existing Equipment                      |
|  | New Fresh Air                           |
|  | New A/C                                 |
|  | Relocate/ Remove<br>(Original Position) |
|  | Relocated HVAC<br>(New Position)        |

ALLOW FOR ALL  
MIDWALL SPLIT UNITS  
TO BE FITTED WITH  
CONDENSATE PUMPS

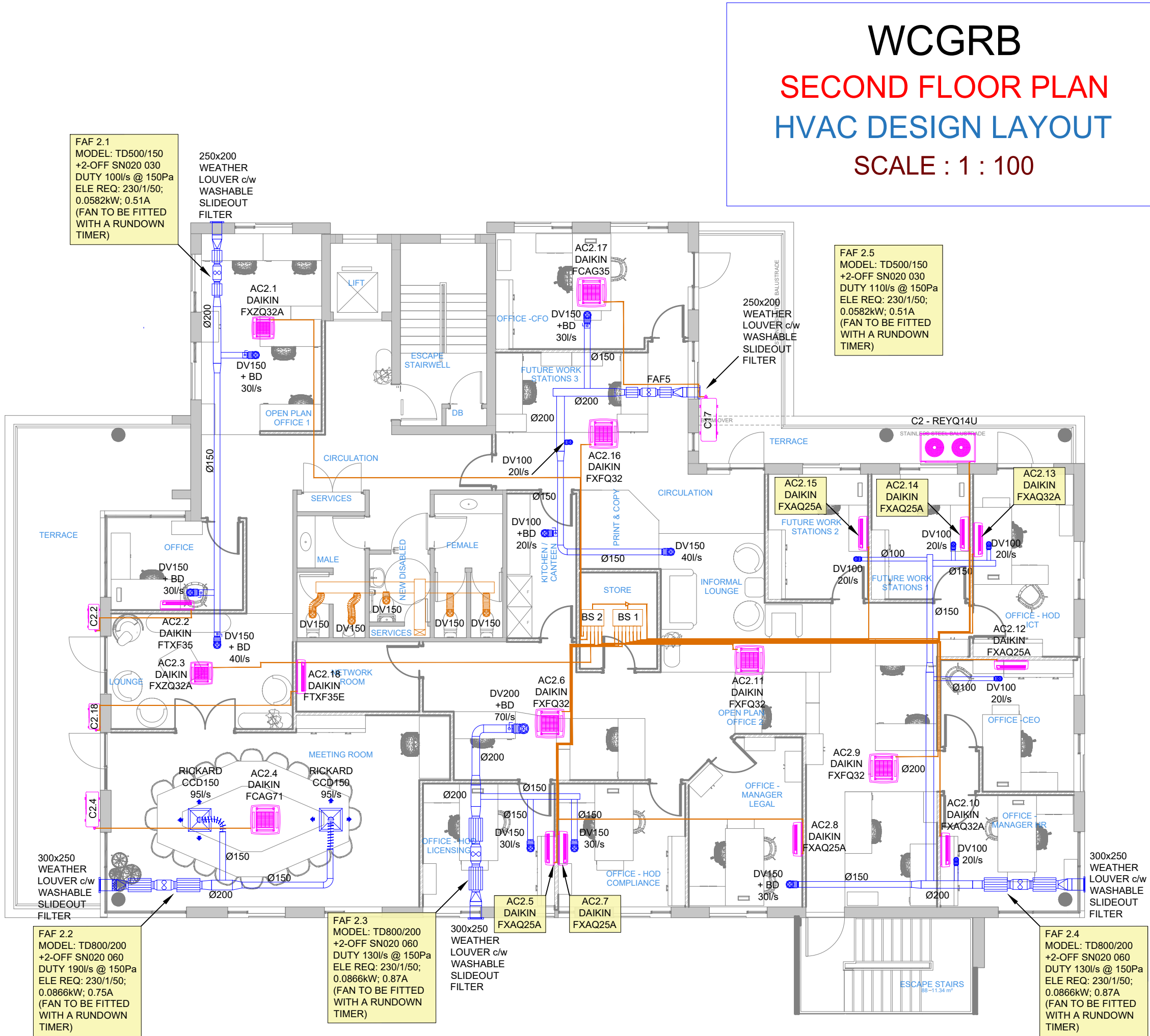


SCHEDULE OF FRESH AIR SUPPLY					
ROOM	AREA (m²)	No. Ppl	F/A Req'd @ 7.5 l/s	F/A Req'd @ 2 Air Changes (m C/H)	Design F/A l/s
OPEN PLAN OFFICE 1	16	4	30	24	30
OFFICE	8	2	15	12	30
LOUNGE	14	4	30	21	40
MEETING ROOM	40	20	150	58	190
OFFICE-HOD LICENSING	11	2	15	16	30
OFFICE-HOD COMPLIANCE	11	2	15	16	30
OFFICE MANGER	12	3	23	18	30
OPEN PLAN OFFICE 2	48	7	53	70	70
OFFICE MANGER HR	11	2	15	16	20
OFFICE CEO	11	2	15	16	20
OFFICE HOD ICT	12	2	15	18	20
FUTURE WORKSTATIONS 1	8	1	8	12	20
FUTURE WORKSTATIONS 2	8	1	8	12	20
INFORMAL LOUNGE	13	5	38	19	40
FUTURE WORKSTATIONS 3	11	2	15	16	20
OFFICE CFO	15	2	15	22	30
CANTEEN	7	2	15	11	20
TOTAL	256	63		511	660

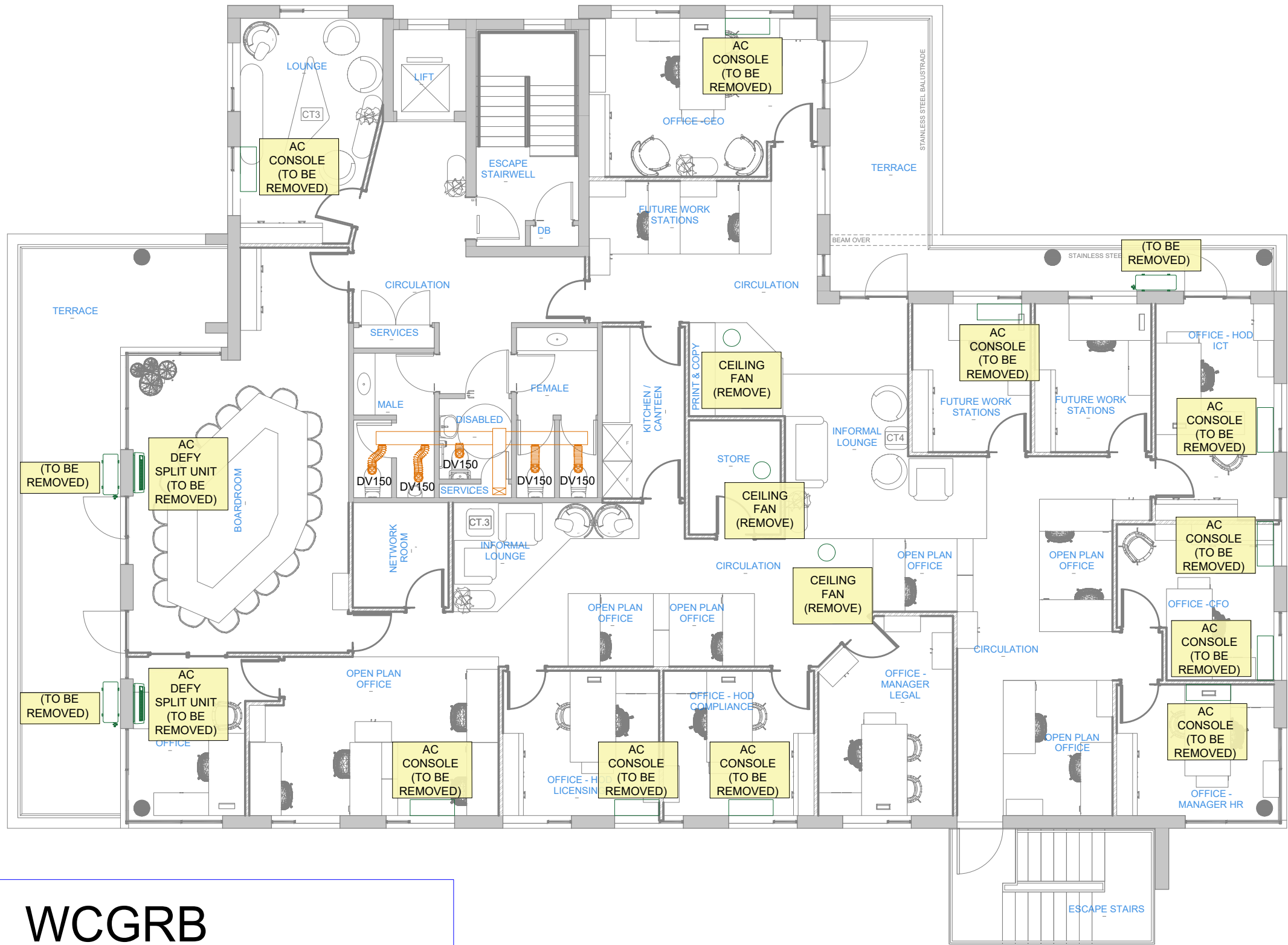
AC SELECTION - (STAND ALONE UNITS)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power supply
AC2.2	DAIKIN FTXF35E (OR APPROVED EQUAL)	286x770x225	3.3 kW	9.3 A	16 A	1	OUTDOOR
AC2.4	DAIKIN FCAG71B (OR APPROVED EQUAL)	204x840x840	6.8 kW	17.4 A	20 A	1	OUTDOOR
AC2.17	DAIKIN FCAG35B (OR APPROVED EQUAL)	204x840x840	3.5 kW	10.92 A	13 A	1	OUTDOOR
AC2.18	DAIKIN FTXF35E (OR APPROVED EQUAL)	286x770x225	3.3 kW	9.3 A	16 A	1	OUTDOOR

NOTE:  
BS 1 CONNECTS TO AC 2.5; 2.7;  
2.8; 2.10; 2.12; 2.13; 2.14; 2.15  
BS.2 CONNECTS TO AC 2.1; 2.3;  
2.6; 2.9; 2.11; 2.16

AC SELECTION - (3-PIPE VRV C2)							
LABEL	TYPE / MODEL	Size Indoor (H x W x D)	TCC (kW)	Max Op. Amps	RECOMMENDED CIRCUIT BREAKER	Phase	Power Supply
AC2.1	DAIKIN FXZQ32A (OR APPROVED EQUAL)	260x575x575	3.6 kW	0.4 A	16 A	1	INDOOR
AC2.3	DAIKIN FXZQ32A (OR APPROVED EQUAL)	260x575x575	3.6 kW	0.4 A	16 A	1	INDOOR
AC2.6	DAIKIN FXFQ32B (OR APPROVED EQUAL)	204x840x840	3.6 kW	0.3 A	16 A	1	INDOOR
AC2.5	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.7	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.8	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.9	DAIKIN FXFQ32B (OR APPROVED EQUAL)	204x840x840	3.6 kW	0.3 A	16 A	1	INDOOR
AC2.10	DAIKIN FXZQ32A (OR APPROVED EQUAL)	290x795x266	3.6 kW	0.4 A	16 A	1	INDOOR
AC2.11	DAIKIN FXFQ32B (OR APPROVED EQUAL)	204x840x840	3.6 kW	0.3 A	16 A	1	INDOOR
AC2.12	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.13	DAIKIN FXAQ32A (OR APPROVED EQUAL)	290x795x266	3.6 kW	0.4 A	16 A	1	INDOOR
AC2.14	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.15	DAIKIN FXAQ25A (OR APPROVED EQUAL)	290x795x266	2.8 kW	0.4 A	16 A	1	INDOOR
AC2.16	DAIKIN FXFQ32B (OR APPROVED EQUAL)	204x840x840	3.6 kW	0.3 A	16 A	1	INDOOR
C2	DAIKIN REYQ10U (OR APPROVED EQUAL)	1685x930x765	28 kW	22 A	25 A	3	OUTDOOR
BS 1	DAIKIN BS8Q14A (OR APPROVED EQUAL)	298x580x430	- kW	0.8 A	15 A	1	INDOOR
BS 2	DAIKIN BS6Q14A (OR APPROVED EQUAL)	298x580x430	- kW	0.6 A	15 A	1	INDOOR



WCGRB  
SECOND FLOOR PLAN  
HVAC RELOCATE/REMOVAL LAYOUT  
SCALE : 1 : 100



PROJECT  
PROJEK WESTERN CAPE  
GAMBLING AND RACING BOARD

MECHANICAL INSTALLATION

SECOND FLOOR

HVAC LAYOUT

Designed Ontwerp	RS	Scale Skaal	1:100
Drawn By Geteken	AM	Date Datum	APRIL 2026
Checked Nagesien	RS	Date Datum	
Approved Goedgekeur		Date Datum	
DSV Dwg No. Tek Nr.	CM0769/Y3	Rev. Wys.	
Your Dwg No. U Tek Nr.			
ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS			
Date Datum	REV. Wys.	Initial Voort.	Description Beskrywing
25/06/25	A	AM	FOR INFORMATION
04/07/25	B	AM	FOR INFORMATION
11/07/25	C	AM	FOR INFORMATION
17/07/25	0	AM	FOR TENDER
27/08/25	1	AM	FOR COUNCIL SUBMISSION
22/04/26	2	NB	FOR TENDER

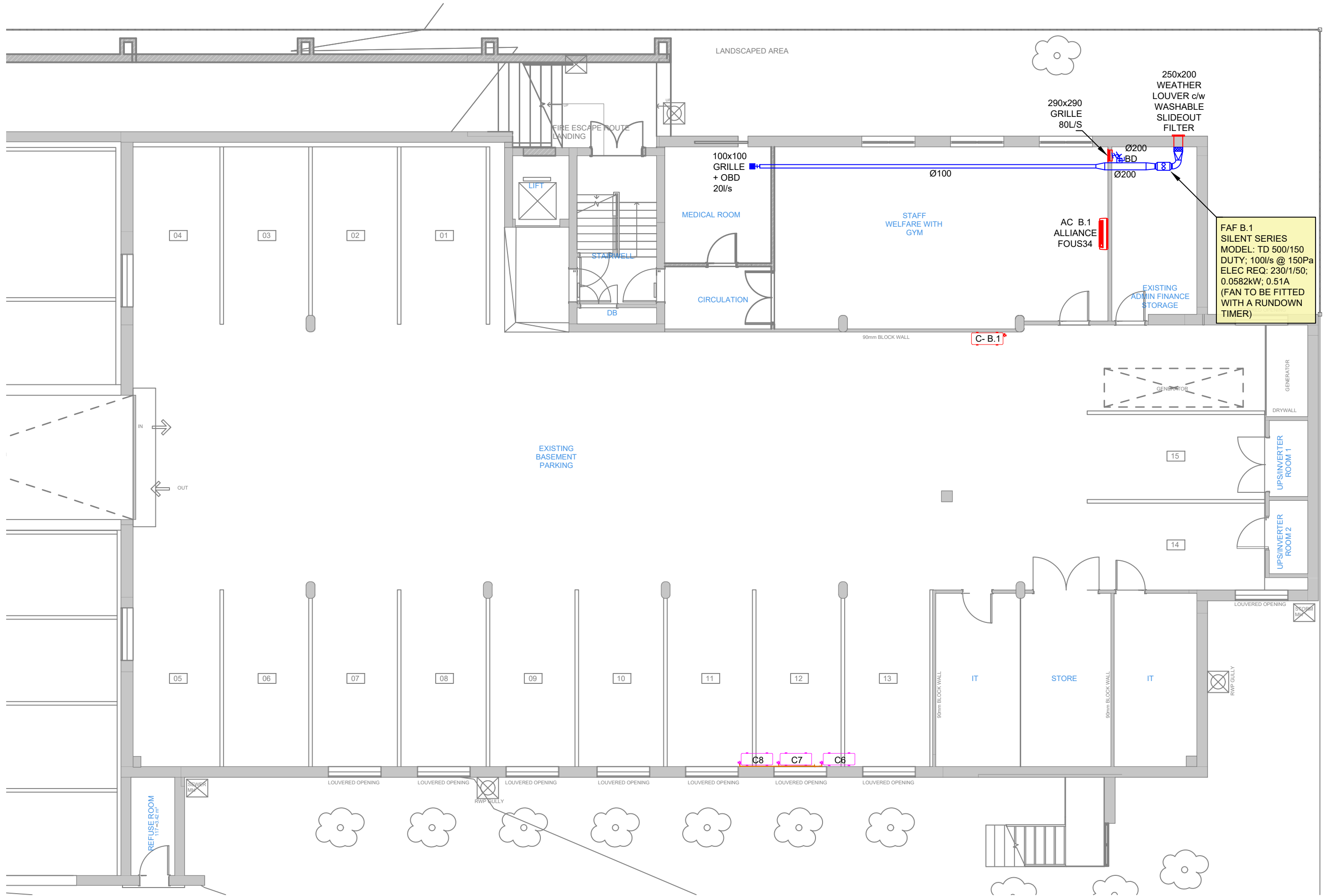
EQUIPMENT LEGEND

- Existing Equipment
- New Fresh Air
- New A/C
- Relocate/ Remove (Original Position)
- Relocated HVAC (New Position)

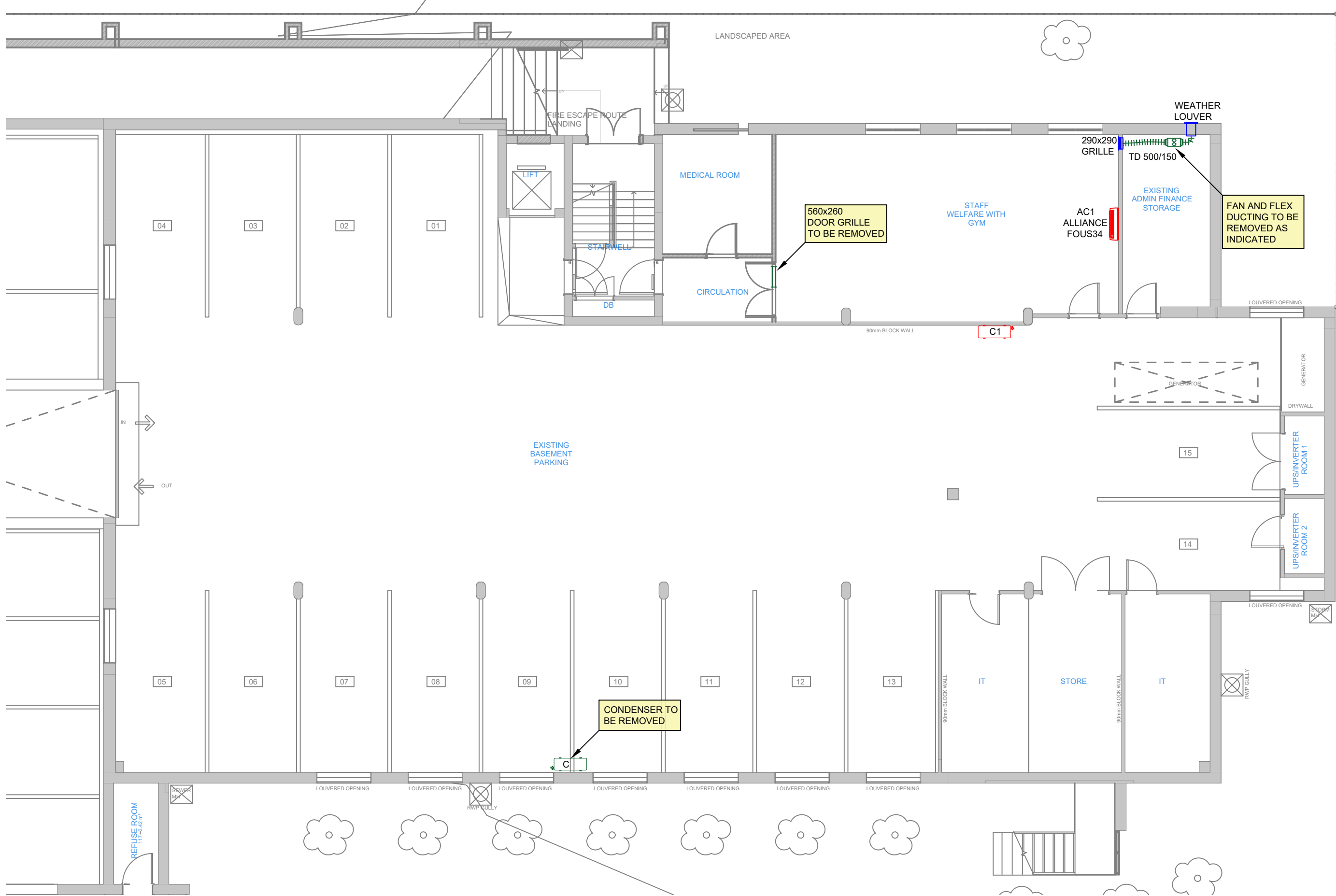


WCGRB  
BASEMENT  
HVAC DESIGN LAYOUT  
SCALE : 1 : 100

SCHEDULE OF FRESH AIR SUPPLY					
ROOM	AREA (m²)	No. Ppl	F/A Req'd @ 7.5 l/s	F/A Req'd @ 2 Air Changes (m C/H)	Design F/A l/s
STAFF GYM	48	6	45	70	80
MEDICAL ROOM	10	2	15	15	20
TOTAL	58	8	85		100



WCGRB  
BASEMENT  
HVAC RELOCATE/REMOVAL LAYOUT  
SCALE : 1 : 100

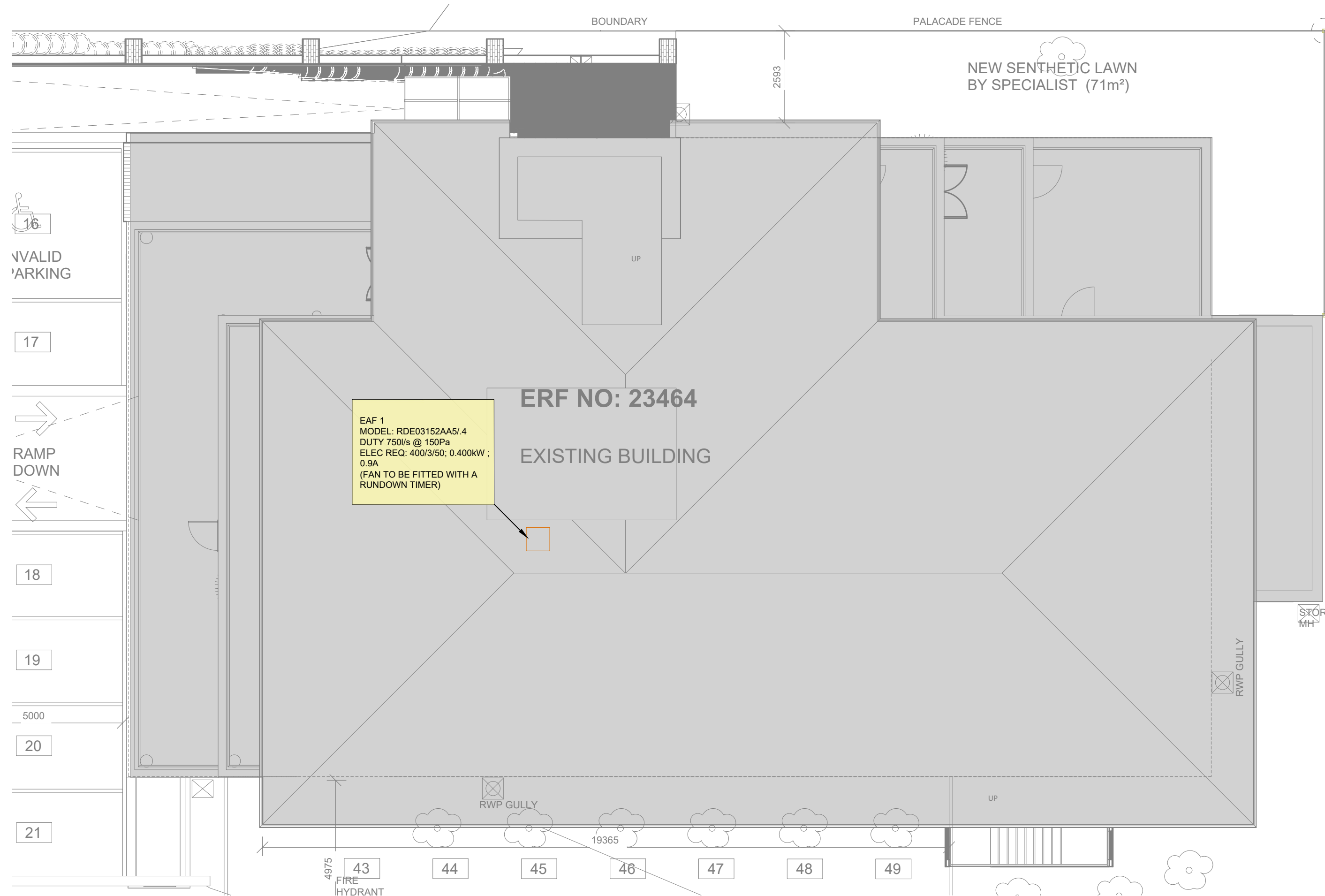


Date Datum	Rev. Wys.	Initial Voort.	Description Beskrywing
27/06/25	A	AM	FOR INFORMATION
11/07/25	B	AM	FOR INFORMATION
17/07/25	0	AM	FOR TENDER
27/08/25	1	AM	FOR COUNCIL SUBMISSION

EQUIPMENT LEGEND	
	Existing Equipment
	New Fresh Air
	New A/C
	Relocate/ Remove (Original Position)
	Relocated HVAC (New Position)

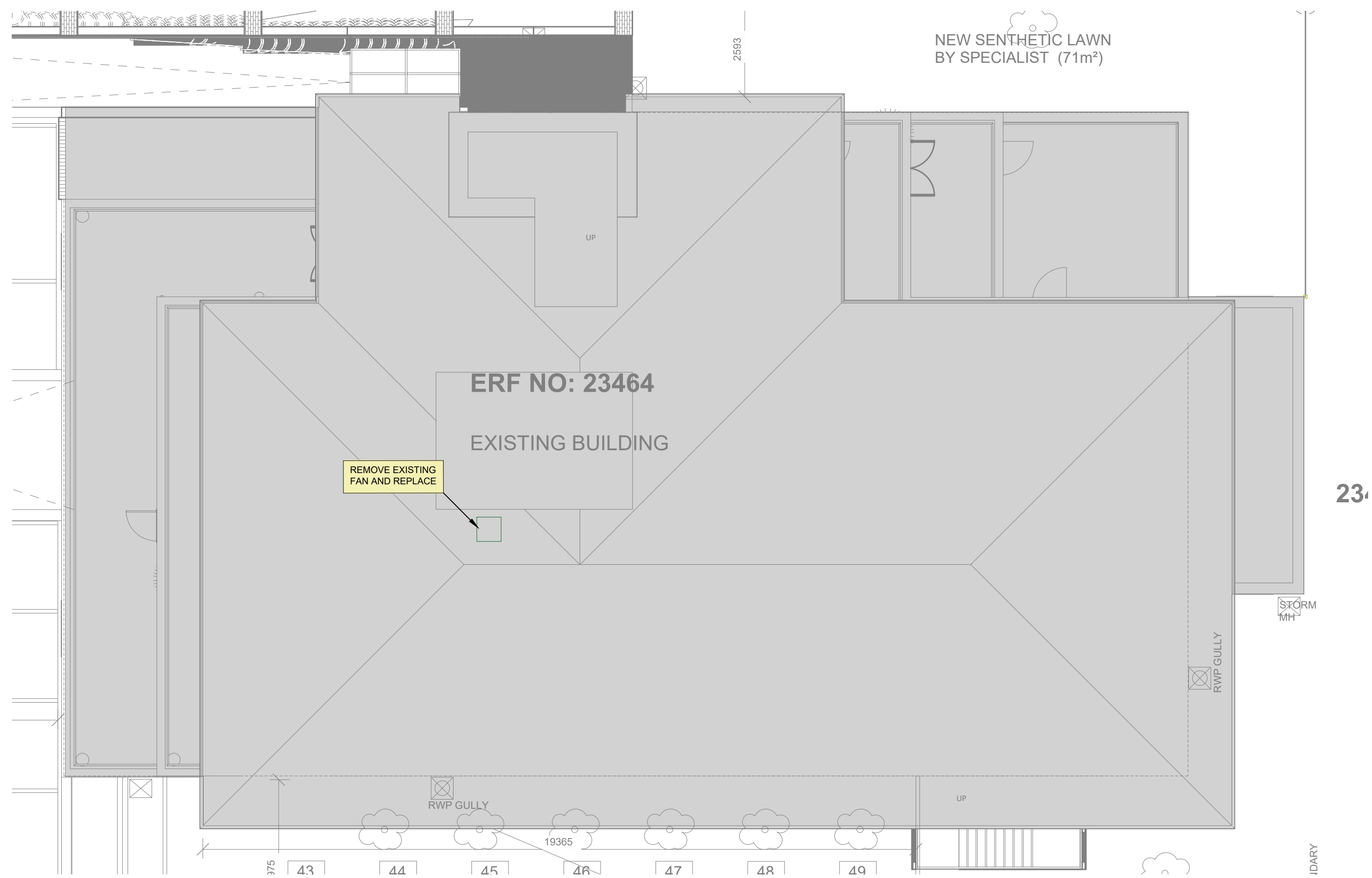


WCGRB  
ROOF PLAN  
HVAC DESIGN LAYOUT  
SCALE : 1 : 100



SCHEDULE OF TOILET EXTRACTION EAF283			
ROOM	NO. TOILETS	COUNCIL REQ 25U/S /TOILET	DESIGN @ 50 L/S /TOILET
GROUND FLOOR	5	125 L/S	250 L/S
FIRST FLOOR	5	125 L/S	250 L/S
SECOND FLOOR	5	125 L/S	250 L/S

WCGRB  
ROOF PLAN  
HVAC RELOCATE/REMOVAL LAYOUT  
SCALE : 1 : 100



DSV

## CONSULTING ENGINEERS

 (021) 551-4303  
 (021) 551-6814  
 38, CENTURY CITY, 7446  
 e-mail : [consult@dsv.co.za](mailto:consult@dsv.co.za)

UNIT F8  
 CENTURY SQUARE  
 CENTURY CITY  
 7446

PROJECT  
PROJEK

WESTERN CAPE  
GAMBLING AND RACING BOARD

## MECHANICAL INSTALLATION

TITLE  
TITEL

## HVAC LAYOUT

Designed Ontwerp	RS	Scale Skaal 1:100
Drawn By Getekene	AM	
Checked Nagesien	RS	Date Datum APRIL 2026
Approved Goedgekeur		Date Datum

DSV Dwg No. Tek Nr.	CM0769/Y5	Rev. Wys.
------------------------	-----------	--------------

Your Dwg No.	
U Tek Nr.	

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT NO 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS

Date Datum	REV. Wys.	Initial Voorl.	Description Beskrywing
1/07/25	A	AM	FOR INFORMATION
23/04/26	0	AM	FOR TENDER


### EQUIPMENT LEGEND

	Existing Equipment
	New Fresh Air
	New A/C
	Relocate/ Remove (Original Position)
	Relocated HVAC (New Position)



WCGRB  
FIRE DESIGN LAYOUT  
SCALE : 1 : 100

PROJECT  
WESTERN CAPE  
GAMBLING AND RACING BOARD

FIRE INSTALLATION

TITLE  
GROUND FLOOR

FIRE SERVICES LAYOUT

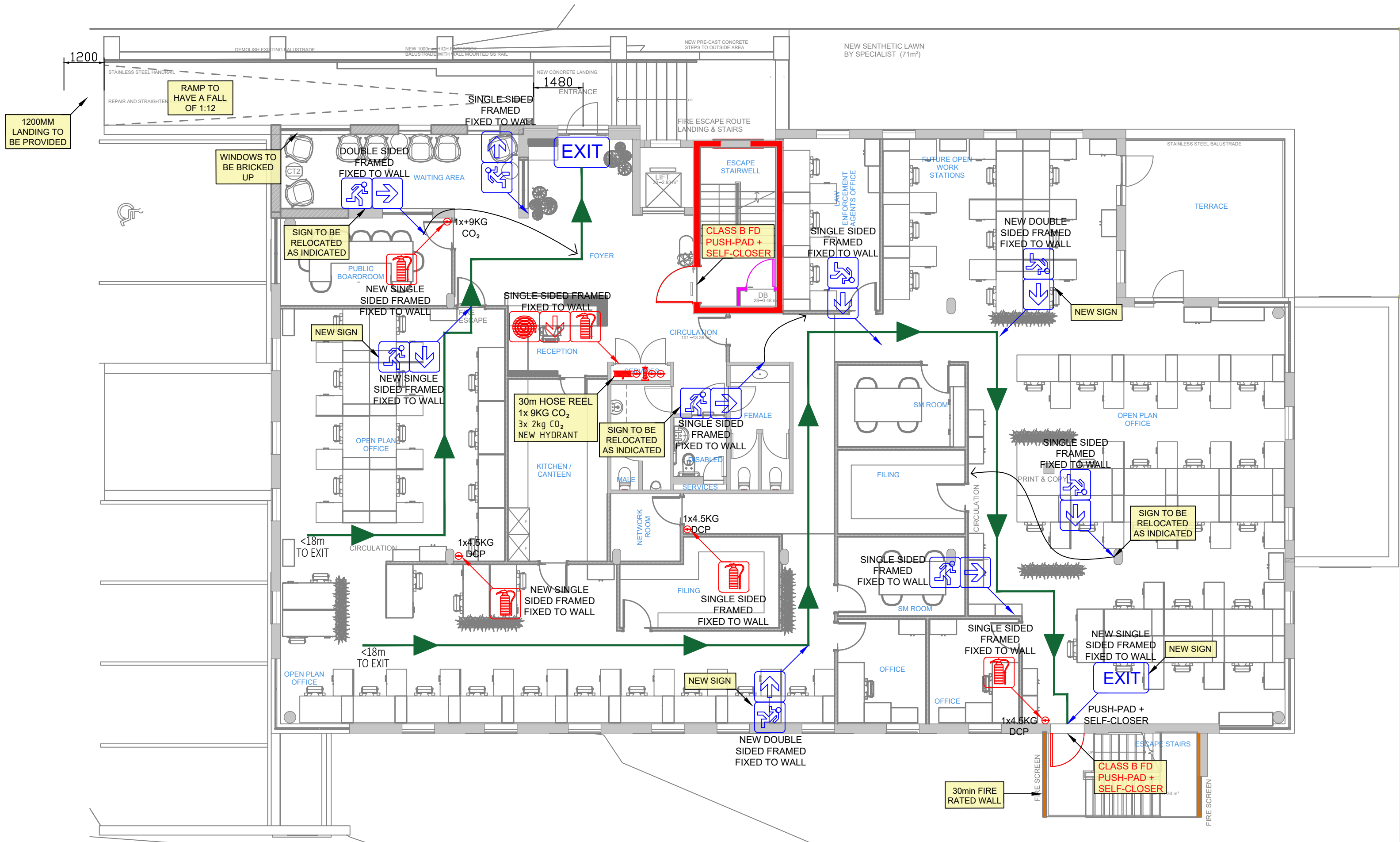
Designed Ontwerp	RS	Scale Skaal	1 : 100
Drawn By Geteken	AM	Date Datum	JUNE 2025
Checked Nagesien	RS	Date Datum	
Approved Goedgekeur		Date Datum	
DSV Dwg No. U Tek Nr.	CM0769/Y10	Rev. Wys.	
Your Dwg No.			

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS

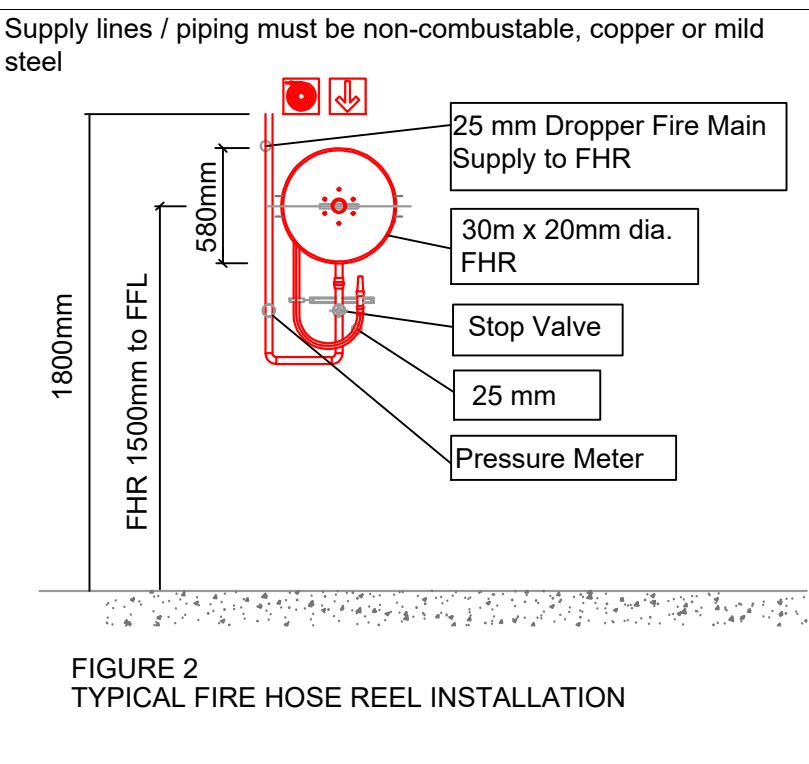
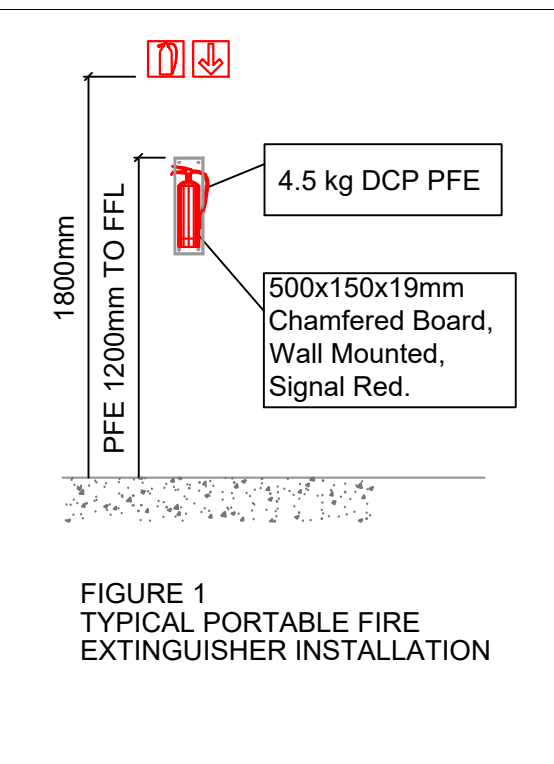
Date Datum	Rev. Wys.	Initial Voort.	Description Beskrywing
28/06/25	A	AM	FOR INFORMATION
11/07/25	B	AM	FOR INFORMATION
17/07/25	0	AM	FOR INFORMATION

FIRE PROTECTION SIGNS AND SYMBOLS

	HR	FIRE HOSE REEL
	FE	FIRE EXTINGUISHER
		ESCAPE DIRECTION OF TRAVEL
	EXIT	ROOM EXIT - PHOTOLUMINESCENT SIGN
	EXIT	ROOM EXIT - 2 HOUR BATTERY BACK UP
	FH	PILLAR FIRE HYDRANT
		FIRE HYDRANT - PHOTOLUMINESCENT SIGN
		FIRE EXTINGUISHER - PHOTOLUMINESCENT SIGN
		FIRE HOSE REEL - PHOTOLUMINESCENT SIGN
		ESCAPE DIRECTION - PHOTOLUMINESCENT SIGN
		DIRECTION ARROW - PHOTOLUMINESCENT SIGN



BUILDING INFORMATION	
AREA	489M²
CLASS OF OCCUPANCY	G1
OCCUPANCY	G1 - OFFICE
POPULATION	92
HOSE REELS REQUIRED	1 PER 500M² (1xHR)
HOSE REELS INSTALLED	1xHR
FIRE EXTINGUISHERS REQUIRED	1 PER 200M² (3xFE)
FIRE EXTINGUISHERS INSTALLED	1x 9kg CO₂ FE 3x 2kg CO₂ FE 3x 4.5kg CO₂ FE
FIRE HYDRANTS REQUIRED	1 PER 1000M² (1xFH)
FIRE HYDRANTS INSTALLED	1xFH



- NOTES:
- Fire design as per SANS 10400-T: 2024:
  - Fire water design as per SANS 10400-W: 2011.
  - Structural stability of 60min as per table 6.
  - Stacking height to be limited to 1.8m.
  - No Sprinkler system required.
  - All insulation installed to be (A2-s1,d0) or better.
  - Partition walls to have a fire rating of 30min.
  - Emergency lighting to be provided along escape route
  - Fire detection in accordance with SANS10139 required (L5).
  - Lift to return to ground floor when detection is triggered.
  - All signage to be SANS approved and Mechanically fixed.
  - Ramp to have a fall of 1:12
  - Ramp to have a 1200mm landing at the top and bottom of ramp.

**FIRE STOPPING GUIDE:**

**FIRE STOPPING CRITERIA:**  
THE FIRE RATING OF FIRE STOPS IS RELATED TO THE STRUCTURAL STABILITY OF A BUILDING. THE FIRE STOPPING CRITERIA IS DETAILED IN SANS 10400:2020 PART 1, TABLE 7. THE TABLE REFLECTS 60 OR 120 MINUTE FIRE STOPPING CLASS A (60MIN) OR CLASS B (120MIN) ACCESS FIRE DOORS TO SERVICE DUCTS/SHAFTS.

FIRE STOPPING MAY BE APPLIED IN EITHER THE VERTICAL PLANE BY VIRTUE OF INSTALLING FIRE RATED ACCESS DOORS TO SERVICE DUCTS/SHAFTS OR IN THE HORIZONTAL PLANE BY SEALING OFF FLOOR TO FLOOR AT SLAB LEVEL BY CAULKING WITH CEMENT/MORTAR MIX OR BY SPECIALIST APPLICATION AS BELOW WITH SUBSEQUENT SANS CERTIFICATION.

**PRODUCTS SUITABLE VIA PYROCOTE (LINK:HTTP:PYROCOTE.CA.ZA) OR SIMILAR:**

- ELECTRICAL CABLE TREATMENT - KBS COATING OR PYROSAFE WB
- PENETRATIONS/SHAFTS - ANY ABS CERTIFIED PRODUCT OR PYROSAFE PANEL SEAL
- STRUCTURAL - TEKROK'S OR C/PYROSAFE

**CEILING/ROOF SPACE:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE BETWEEN A CEILING AND A ROOF COVERING, SUCH SPACE SHALL BE DIVIDED INTO AREA OF NOT MORE THAN 500m² BY MEANS OF NON-COMBUSTIBLE FIRE STOPS WITH A STABILITY AND INTEGRITY RATING OF AT LEAST 20MIN. THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL BE NOT MORE THAN 30M. PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY WHERE SUCH ROOF SPACE AND THE ROOM BELOW ARE PROTECTED BY A FIXED AUTOMATIC FIRE-FIGHTING SYSTEM AND AN AUTOMATIC SMOKE CONTROL SYSTEM (OR BOTH)
- IF ANY COMBUSTIBLE PRODUCTS ARE INSTALLED IN SUCH ROOF SPACE, FOR EXAMPLE COMBUSTIBLE INSULATION, THEN THE AREA FOR NON-COMBUSTIBLE FIRE STOPS SHALL NOT BE MORE THAN 200m² AND THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL NOT BE MORE THAN 20m.

**INACCESSIBLE CONCEALED SPACES:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE WITH A MAXIMUM DIMENSION OF MORE THAN 5m IN ANY BUILDING, SUCH SPACE SHALL:
- BE FIRE-STOPPED WHETHER IT CONTAINS COMBUSTIBLE MATERIAL OR NOT
- WHERE IT IS WITHIN ANY NON-COMBUSTIBLE BUILDING ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 5m MEASURED HORIZONTALLY OR VERTICALLY, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY TO THE CAVITY OF MASONRY CAVITY WALL AND
- WHERE IT IS WITHIN A COMBUSTIBLE ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 3m MEASURED IN BOTH DIRECTIONS

**SERVICE SHAFTS:**

- NOT CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY SECOND STOREY ABOVE THE BOTTOM OF SUCH A SHAFT
- CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY STOREY ABOVE THE BOTTOM OF SUCH SHAFT
- WHERE A VERTICAL SERVICE SHAFT IS USED FOR VENTILATION OR CONTAINS NON-COMBUSTIBLE PLUMBING OR DRAINAGE SERVICES OR IS A NON-COMBUSTIBLE RUBBER CHUTE, NO FIRE STOP SHALL BE REQUIRED WITHIN SUCH SHAFT AND THE DOORS TO SUCH SHAFTS SHALL BE SELF-CLOSING 120min FIRE DOORS
- WHERE A SERVICE PENETRATES A SEPARATING ELEMENT, SUCH SEPARATING ELEMENT SHALL BE FIRE STOPPED WITH A SUITABLE SYSTEM OF THE SAME RATING OF THE ELEMENT IT PASSES THROUGH

**SERVICES IN STRUCTURAL OR SEPARATING ELEMENTS:**

- A SERVICE PIPE, CONDUIT, DUCT, SLEEVE, CABLE OR OTHER EQUIPMENT RECESSED INTO ANY STRUCTURAL OR SEPARATING ELEMENT WHICH IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SET INTO SUCH ELEMENT IN SUCH A MANNER THAT SUCH FIRE RESISTANCE IS NOT REDUCED TO BELOW THE REQUIRED FIRE RESISTANCE
- A SERVICE THAT PENETRATES THROUGH ANY WALL OR FLOOR WHERE SUCH WALL OR FLOOR IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SEALED IN SUCH A MANNER THAT FIRE SHALL NOT PENETRATE SUCH WALL OR FLOOR



WCGRB  
FIRE DESIGN LAYOUT  
SCALE : 1 : 100

DSV

CONSULTING ENGINEERS

(021) 551-4303  
(021) 551-0814  
38, CENTURY CITY, 7446  
e-mail : consult@dsv.co.za

UNIT F8  
CENTURY SQUARE  
CENTURY CITY  
7446

PROJECT  
PROJEK WESTERN CAPE  
GAMBLING AND RACING BOARD

FIRE INSTALLATION

TITLE  
TITEL FIRST FLOOR

FIRE SERVICES LAYOUT

Designed  
Ontwerp RS

Drawn By  
Geteken AM

Checked  
Nagesien RS

Approved  
Goedgekeur

DSV Dwg No.  
Tek Nr. CM0769/Y20

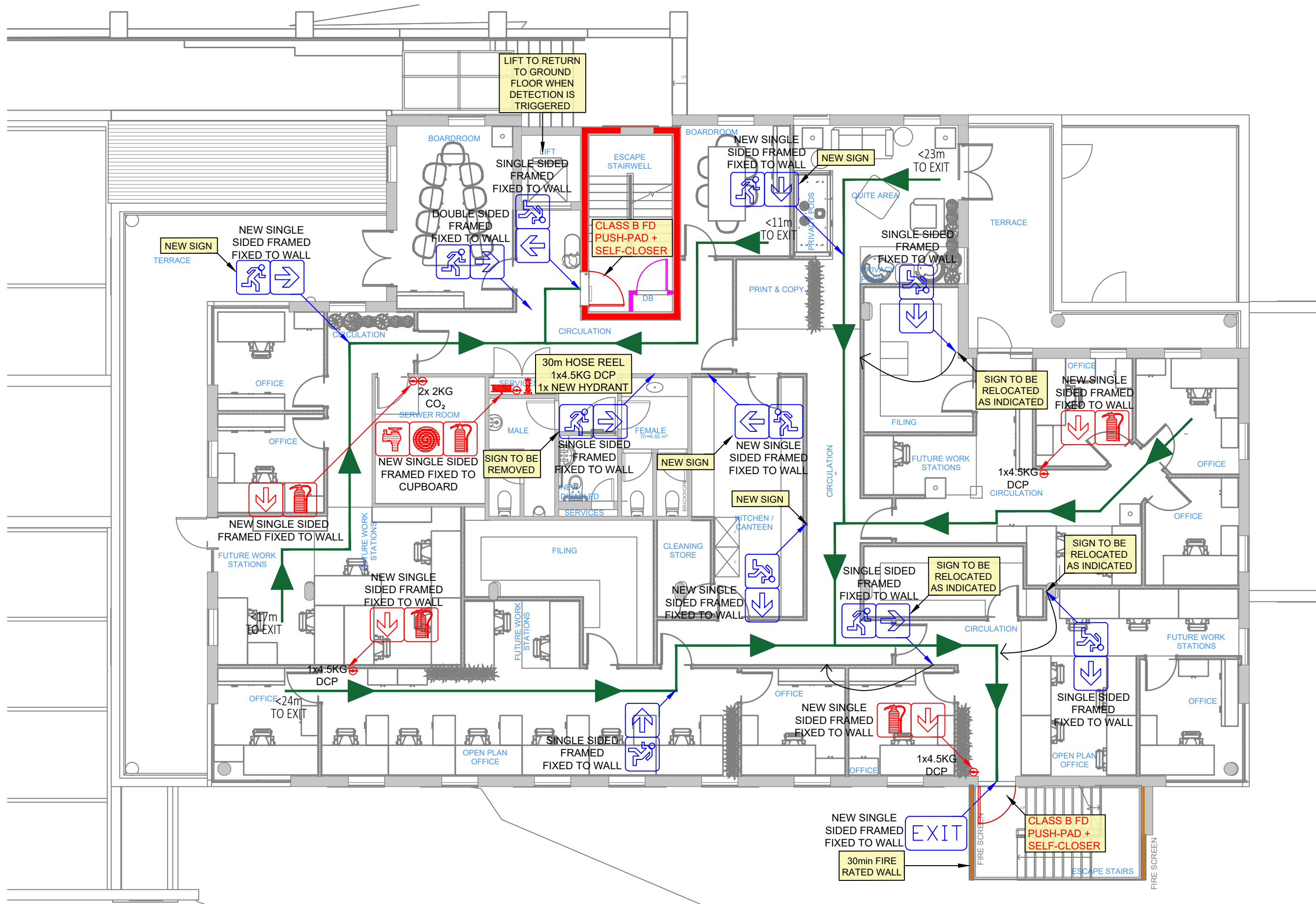
Your Dwg No.  
U Tek Nr.

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT  
MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR  
BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPIING,  
MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN  
PERMISSION OF DSV CONSULTING ENGINEERS

Date Datum	REV. Wys.	Initial Voort.	Description Beskrywing
28/06/25	A	AM	FOR INFORMATION
04/07/25	B	AM	FOR INFORMATION
11/07/25	C	AM	FOR INFORMATION
17/07/25	0	AM	FOR INFORMATION

FIRE PROTECTION SIGNS AND SYMBOLS

- HR FIRE HOSE REEL
- FE FIRE EXTINGUISHER
- ESCAPE DIRECTION OF TRAVEL
- EXIT ROOM EXIT - PHOTOLUMINESCENT SIGN
- EXIT ROOM EXIT - 2 HOUR BATTERY BACK UP
- FH PILLAR FIRE HYDRANT
- FIRE HYDRANT - PHOTOLUMNESCENT SIGN
- FIRE EXTINGUISHER - PHOTOLUMNESCENT SIGN
- FIRE HOSE REEL - PHOTOLUMNESCENT SIGN
- ESCAPE DIRECTION - PHOTOLUMNESCENT SIGN
- DIRECTION ARROW - PHOTOLUMNESCENT SIGN
- 120min FIRE RATED WALL
- 60min FIRE RATED WALL
- 30min FIRE RATED WALL



BUILDING INFORMATION	
AREA	448M <sup>2</sup>
CLASS OF OCCUPANCY	A3
OCCUPANCY	A3 - PLACE OF INSTRUCTION
POPULATION	57 PERSON
HOSE REELS REQUIRED	1 PER 500M <sup>2</sup> (1xHR)
HOSE REELS INSTALLED	1xHR
FIRE EXTINGUISHERS REQUIRED	1 PER 200M <sup>2</sup> (3xFE)
FIRE EXTINGUISHERS INSTALLED	2x 2kg CO <sub>2</sub> FE 4x 4.5kg DCP FE
FIRE HYDRANTS REQUIRED	1 PER 1000M <sup>2</sup> (1xFH)
FIRE HYDRANTS INSTALLED	1xFH

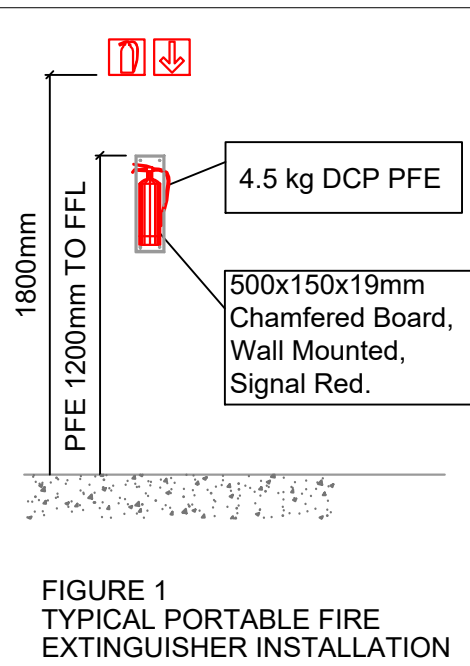


FIGURE 1  
TYPICAL PORTABLE FIRE  
EXTINGUISHER INSTALLATION

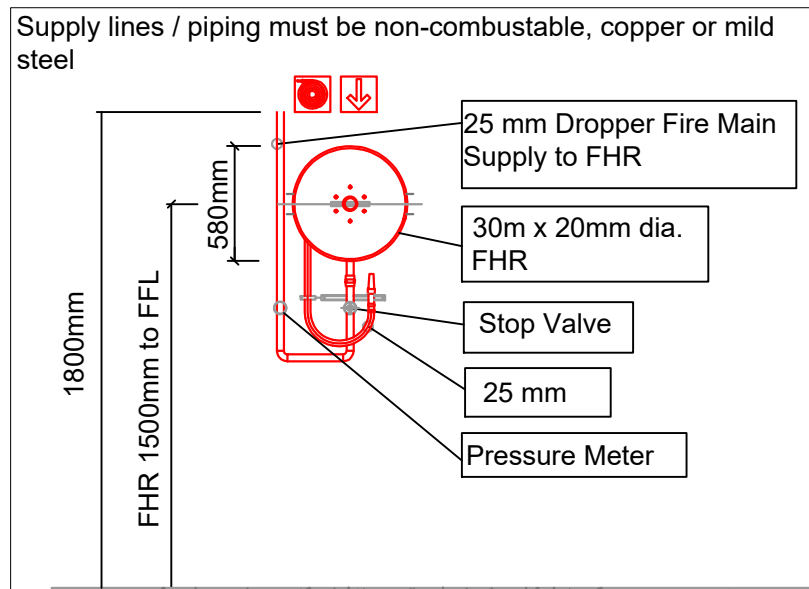


FIGURE 2  
TYPICAL FIRE HOSE REEL INSTALLATION

NOTES:

- Fire design as per SANS 10400-T: 2024: Edition 5.
- Fire water design as per SANS 10400-W: 2011.
- Structural stability of 60min as per table 6.
- Stacking height to be limited to 1.8m.
- No Sprinkler system required.
- All insulation installed to be (A2-s1,d0) or better.
- Partition walls to have a fire rating of 30min.
- Emergency lighting to be provided along escape route
- Fire detection in accordance with SANS10139 required (L5)
- Lift to return to ground floor when detection is triggered.
- All signage to be SANS approved and Mechanically fixed.

FIRE STOPPING GUIDE:

**FIRE STOPPING CRITERIA:**  
THE FIRE RATING OF FIRE STOPS IS RELATED TO THE STRUCTURAL STABILITY OF A BUILDING. THE FIRE STOPPING CRITERIA IS DETAILED IN SANS 10400:2020 PART 1, TABLE 7. THE TABLE REFLECTS 60 OR 120 MINUTE FIRE STOPPING CLASS A (60MIN)OR CLASS B(120MIN) ACCESS FIRE DOORS TO SERVICE DUCTS/SHAFTS.

FIRE STOPPING MAY BE APPLIED IN EITHER THE VERTICAL PLANE BY VIRTUE OF INSTALLING FIRE RATED ACCESS DOORS TO SERVICE DUCTS/SHAFTS OR IN THE HORIZONTAL PLANE BY SEALING OFF FLOOR TO FLOOR AT SLAB LEVEL BY CAULKING WITH CEMENT/MORTAR MIX OR BY SPECIALIST APPLICATION AS BELOW WITH SUBSEQUENT SANS CERTIFICATION

**PRODUCTS SUITABLE VIA PYROCOTE (LINK:HTTP:PYROCOTE.CA.ZA) OR SIMILAR:**

- ELECTRICAL CABLE TREATMENT - KBS COATING OR PYROSAFE WB
- PENETRATIONS/SHAFTS - ANY KBS CERTIFIED PRODUCT OR PYROSAFE PANEL SEAL
- STRUCTURAL - TEKROK'S OR C/PYROSAFE

**CEILING/ROOF SPACE:**

- WHERE ROOF SPACE IS FORMED BETWEEN A CEILING AND A ROOF COVERING, SUCH SPACE SHALL BE DIVIDED INTO AREA OF NOT MORE THAN 500m<sup>2</sup> BY MEANS OF NON-COMBUSTIBLE FIRE STOPS WITH A STABILITY AND INTEGRITY RATING OF AT LEAST 30MIN. THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL BE NOT MORE THAN 3M. PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY WHERE SUCH ROOF SPACE AND THE ROOM BELOW ARE PROTECTED BY A FIXED AUTOMATIC FIRE-FIGHTING SYSTEM AND AN AUTOMATIC SMOKE CONTROL SYSTEM(OR BOTH)

- IF ANY COMBUSTIBLE PRODUCTS ARE INSTALLED IN SUCH ROOF SPACE, FOR EXAMPLE COMBUSTIBLE INSULATION, THEN THE AREA FOR NON-COMBUSTIBLE FIRE STOPS SHALL NOT BE MORE THAN 200m<sup>2</sup> AND THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL NOT BE MORE THAN 20m.

**INACCESSIBLE CONCEALED SPACES:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE WITH A MAXIMUM DIMENSION OF MORE THAN 5m IN ANY BUILDING, SUCH SPACE SHALL:
  - BE FIRE-STOPPED WHETHER IT CONTAINS COMBUSTIBLE MATERIAL OR NOT
  - WHERE IT IS WITHIN ANY NON-COMBUSTIBLE BUILDING ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 5m MEASURED HORIZONTALLY OR VERTICALLY, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY TO THE CAVITY OF MASONRY CAVITY WALL AND
  - WHERE IT IS WITHIN A COMBUSTIBLE ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 3m MEASURED IN BOTH DIRECTIONS

**SERVICE SHAFTS:**

- NOT CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY SECOND STOREY ABOVE THE BOTTOM OF SUCH A SHAFT
- CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY STOREY ABOVE THE BOTTOM OF SUCH SHAFT
- WHERE A VERTICAL SERVICE SHAFT IS USED FOR VENTILATION OR CONTAINS NON-COMBUSTIBLE PLUMBING OR DRAINAGE SERVICES OR IS A NON-COMBUSTIBLE RUBBISH CHUTE, NO FIRE STOP SHALL BE REQUIRED WITHIN SUCH SHAFT AND THE DOORS TO SUCH SHAFTS SHALL BE SELF CLOSING 120min FIRE DOORS
- WHERE A SERVICE PENETRATES A SEPARATING ELEMENT, SUCH SEPARATING ELEMENT SHALL BE FIRE STOPPED WITH A SUITABLE SYSTEM OF THE SAME RATING OF THE ELEMENT IT PASSES THROUGH

**SERVICES IN STRUCTURAL OR SEPARATING ELEMENTS:**

- A SERVICE PIPE, CONDUIT, DUCT, SLEEVE, CABLE OR OTHER EQUIPMENT RECESSED INTO ANY STRUCTURAL OR SEPARATING ELEMENT WHICH IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SET INTO SUCH ELEMENT IN SUCH A MANNER THAT SUCH FIRE RESISTANCE IS NOT REDUCED TO BELOW THE REQUIRED FIRE RESISTANCE
- A SERVICE THAT PENETRATES THROUGH ANY WALL OR FLOOR WHERE SUCH WALL OR FLOOR IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SEALED IN SUCH A MANNER THAT FIRE SHALL NOT PENETRATE SUCH WALL OR FLOOR

PRINT A1



WCGRB  
FIRE DESIGN LAYOUT  
SCALE : 1 : 100

DSV

CONSULTING ENGINEERS

(021) 551-4303  
(021) 551-4814  
38, CENTURY CITY, 7446  
e-mail : consult@dsv.co.za

UNIT F8  
CENTURY SQUARE  
CENTURY CITY  
7446

PROJECT  
PROJEK WESTERN CAPE  
GAMBLING AND RACING BOARD

FIRE INSTALLATION

TITLE  
TITEL SECOND FLOOR

FIRE SERVICES LAYOUT

Designed Ontwerp	RS	Scale Skaal	1 : 100
Drawn By Geteken	AM	Date Datum	JULY 2025
Checked Nagesien	RS	Date Datum	
Approved Goedgekeur		Date Datum	

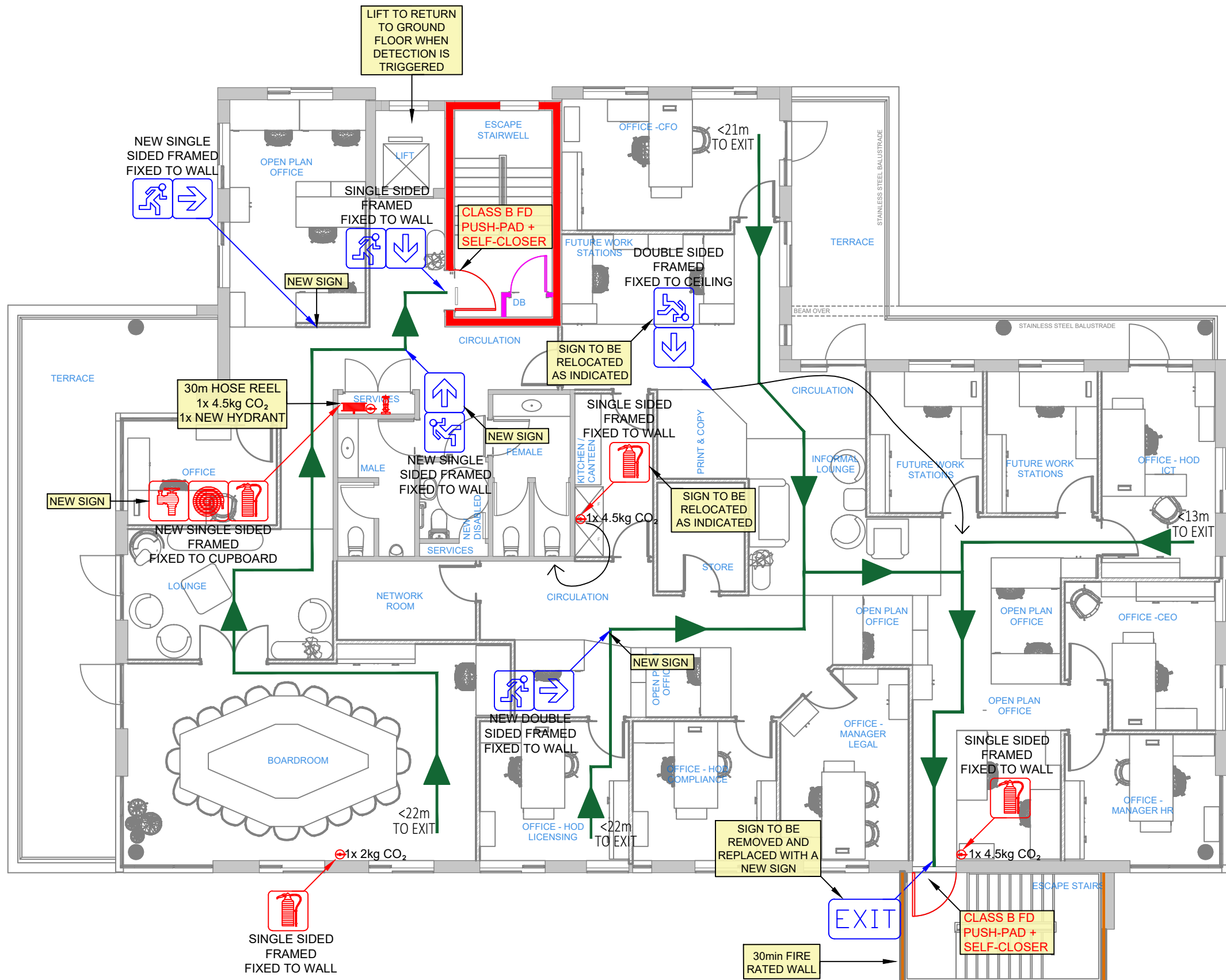
DSV Dwg No. Tek Nr.	CM0769/Y30	Rev. Wys.	
Your Dwg No. U Tek Nr.			

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN PERMISSION OF DSV CONSULTING ENGINEERS

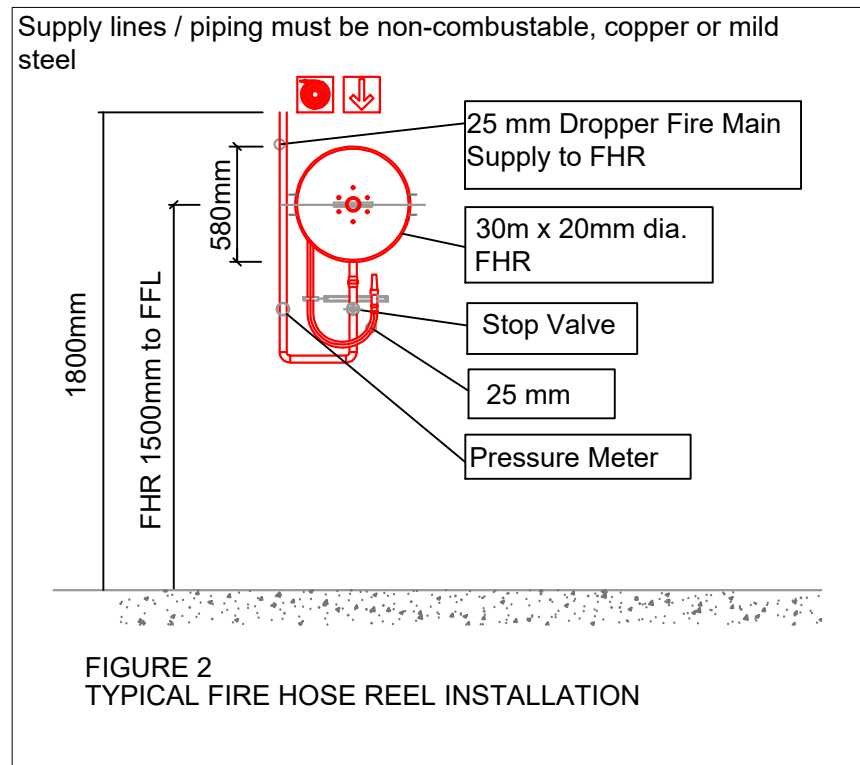
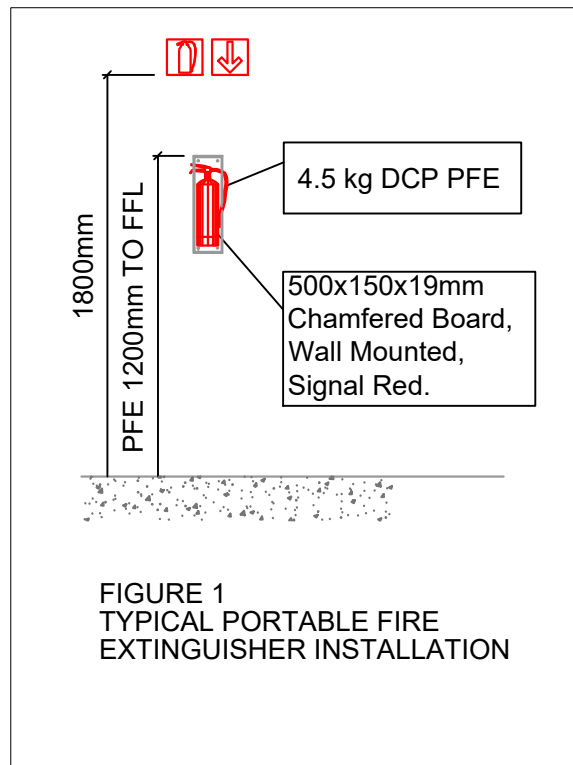
Date Datum	REV. Wys.	Initial Voortl.	Description Beskriving
28/06/25	A	AM	FOR INFORMATION
11/07/25	B	AM	FOR INFORMATION
17/07/25	0	AM	FOR TENDER

FIRE PROTECTION SIGNS AND SYMBOLS

- HR FIRE HOSE REEL
- FE FIRE EXTINGUISHER
- ESCAPE DIRECTION OF TRAVEL
- EXIT ROOM EXIT - PHOTOLUMINESCENT SIGN
- EXIT ROOM EXIT - 2 HOUR BATTERY BACK UP
- FH PILLAR FIRE HYDRANT
- FIRE HYDRANT - PHOTOLUMINESCENT SIGN
- FIRE EXTINGUISHER - PHOTOLUMINESCENT SIGN
- FIRE HOSE REEL - PHOTOLUMINESCENT SIGN
- ESCAPE DIRECTION - PHOTOLUMINESCENT SIGN
- DIRECTION ARROW - PHOTOLUMINESCENT SIGN
- 120min FIRE RATED WALL
- 60min FIRE RATED WALL
- 30min FIRE RATED WALL



BUILDING INFORMATION	
AREA	344M <sup>2</sup>
CLASS OF OCCUPANCY	G1
OCCUPANCY	G1 - OFFICES
POPULATION	63 PERSON
HOSE REELS REQUIRED	1 PER 500M <sup>2</sup> (1xHR)
HOSE REELS INSTALLED	1xHR
FIRE EXTINGUISHERS REQUIRED	1 PER 200M <sup>2</sup> (2xFE)
FIRE EXTINGUISHERS INSTALLED	1x 4.5kg DCP FE
FIRE HYDRANTS REQUIRED	1 PER 1000M <sup>2</sup> (1xFH)
FIRE HYDRANTS INSTALLED	1xFH



NOTES:

- Fire design as per SANS 10400-T: 2024: Edition 5.
- Fire water design as per SANS 10400-W: 2011.
- Structural stability of 60min as per table 6.
- Stacking height to be limited to 1.8m.
- No Sprinkler system required.
- All insulation installed to be (A2-s1,d0) or better.
- Partition walls to have a fire rating of 30min.
- Emergency lighting to be provided along escape route
- Fire detection in accordance with SANS10139 required (L5).
- Lift to return to ground floor when detection is triggered.
- All signage to be SANS approved and Mechanically fixed.

FIRE STOPPING GUIDE:

**FIRE STOPPING CRITERIA:**  
THE FIRE RATING OF FIRE STOPS IS RELATED TO THE STRUCTURAL STABILITY OF A BUILDING. THE FIRE STOPPING CRITERIA IS DETAILED IN SANS 10400-2020 PART 1, TABLE 7. THE TABLE REFLECTS 60 OR 120 MINUTE FIRE STOPPING CLASS (A) (60MIN) OR CLASS (B) (120MIN) ACCESS FIRE DOORS TO SERVICE DUCTS/SHAFTS.

FIRE STOPPING MAY BE APPLIED IN EITHER THE VERTICAL PLANE BY VIRTUE OF INSTALLING FIRE RATED ACCESS DOORS TO SERVICE DUCTS/SHAFTS OR IN THE HORIZONTAL PLANE BY SEALING OFF FLOOR TO FLOOR AT SLAB LEVEL BY CAULKING WITH CEMENT/MORTAR MIX OR BY SPECIALIST APPLICATION AS BELOW WITH SUBSEQUENT SANS CERTIFICATION.

**PRODUCTS SUITABLE VIA PYROCOTE (LINK: HTTP://PYROCOTE.CA.ZA) OR SIMILAR:**

- ELECTRICAL CABLE TREATMENT - KBS COATING OR PYROSAFE WB
- PENETRATION/SHAFTS - ANY KBS CERTIFIED PRODUCT OR PYROSAFE PANEL SEAL
- STRUCTURAL - TEKROK'S OR C/PYROSAFE

**CEILING/ROOF SPACE:**

- WHERE ROOF SPACE IS FORMED BETWEEN A CEILING AND A ROOF COVERING, SUCH SPACE SHALL BE DIVIDED INTO AREA OF NOT MORE THAN 500M<sup>2</sup> BY MEANS OF NON-COMBUSTIBLE FIRE STOPS WITH A STABILITY AND INTEGRITY RATING OF AT LEAST 20MIN. THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL BE NOT MORE THAN 30M, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY WHERE SUCH ROOF SPACE AND THE ROOM BELOW ARE PROTECTED BY A FIXED AUTOMATIC FIRE-FIGHTING SYSTEM AND AN AUTOMATIC SMOKE CONTROL SYSTEM (OR BOTH)

**IF ANY COMBUSTIBLE PRODUCTS ARE INSTALLED IN SUCH ROOF SPACE, FOR EXAMPLE COMBUSTIBLE INSULATION, THEN THE AREA FOR NON-COMBUSTIBLE FIRE STOPS SHALL NOT BE MORE THAN 200M<sup>2</sup> AND THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL NOT BE MORE THAN 20m.**

**INACCESSIBLE CONCEALED SPACES:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE WITH A MAXIMUM DIMENSION OF MORE THAN 5m IN ANY BUILDING, SUCH SPACE SHALL:
  - BE FIRE-STOPPED WHETHER IT CONTAINS COMBUSTIBLE MATERIAL OR NOT
  - WHERE IT IS WITHIN ANY NON-COMBUSTIBLE BUILDING ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 5m MEASURED HORIZONTALLY OR VERTICALLY, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY TO THE CAVITY OF MASONRY CAVITY WALL, AND
  - WHERE IT IS WITHIN A COMBUSTIBLE ELEMENT, BE FIRE-STOPPED NOT LESS THAN EVERY 3m MEASURED IN BOTH DIRECTIONS

**SERVICE SHAFTS:**

- NOT CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY SECOND STOREY ABOVE THE BOTTOM OF SUCH A SHAFT
- CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY STOREY ABOVE THE BOTTOM OF SUCH SHAFT
- WHERE A VERTICAL SERVICE SHAFT IS USED FOR VENTILATION OR CONTAINS NON-COMBUSTIBLE PLUMBING OR DRAINAGE SERVICES OR IS A NON-COMBUSTIBLE RUBBER CHUTE, NO FIRE STOP SHALL BE REQUIRED WITHIN SUCH SHAFT AND THE DOORS TO SUCH SHAFTS SHALL BE SELF-CLOSING 120min FIRE DOORS
- WHERE A SERVICE PENETRATES A SEPARATING ELEMENT, SUCH SEPARATING ELEMENT SHALL BE FIRE STOPPED WITH A SUITABLE SYSTEM OF THE SAME RATING OF THE ELEMENT IT PASSES THROUGH

**SERVICES IN STRUCTURAL OR SEPARATING ELEMENTS:**

- A SERVICE PIPE, CONDUIT, DUCT, SLEEVE, CABLE OR OTHER EQUIPMENT RECESSED INTO ANY STRUCTURAL OR SEPARATING ELEMENT WHICH IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SET INTO SUCH ELEMENT IN SUCH A MANNER THAT SUCH FIRE RESISTANCE IS NOT REDUCED TO BELOW THE REQUIRED FIRE RESISTANCE
- A SERVICE THAT PENETRATES THROUGH ANY WALL OR FLOOR WHERE SUCH WALL OR FLOOR IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SEALED IN SUCH A MANNER THAT FIRE SHALL NOT PENETRATE SUCH WALL OR FLOOR

PRINT A1



WCGRB  
FIRE DESIGN LAYOUT  
SCALE : 1 : 100

DSV

CONSULTING ENGINEERS

(021) 551-4303  
(021) 551-0814  
38, CENTURY CITY, 7446  
e-mail : consult@dsv.co.za

UNIT F8  
CENTURY SQUARE  
CENTURY CITY  
7446

PROJECT  
PROJECT WESTERN CAPE  
GAMBLING AND RACING BOARD

FIRE INSTALLATION

TITLE  
TITLE BASEMENT

FIRE SERVICES LAYOUT

Designed  
Designed Ontwerp RS

Drawn By  
Drawn By Geteken AM

Checked  
Checked Nagesien RS

Approved  
Approved Goedgekeur

DSV Dwg No.  
Tek Nr. CM0769/Y40

Your Dwg No.  
U Tek Nr.

ACCORDING TO THE COPYRIGHT ACT, 1978 (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT  
MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR  
BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING,  
MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT THE WRITTEN  
PERMISSION OF DSV CONSULTING ENGINEERS

Date  
Datum

Rev.  
Wys.

Initial  
Voort.

Description  
Beskrywing

27/06/25 A AM FOR INFORMATION

04/07/25 B AM FOR INFORMATION

11/07/25 C AM FOR INFORMATION

17/07/25 0 AM FOR INFORMATION

FIRE PROTECTION SIGNS AND SYMBOLS

HR FIRE HOSE REEL

FE FIRE EXTINGUISHER

ESCAPE DIRECTION OF TRAVEL

EXIT ROOM EXIT - PHOTOLUMINESCENT SIGN

EXIT ROOM EXIT - 2 HOUR BATTERY BACK UP

FH PILLAR FIRE HYDRANT

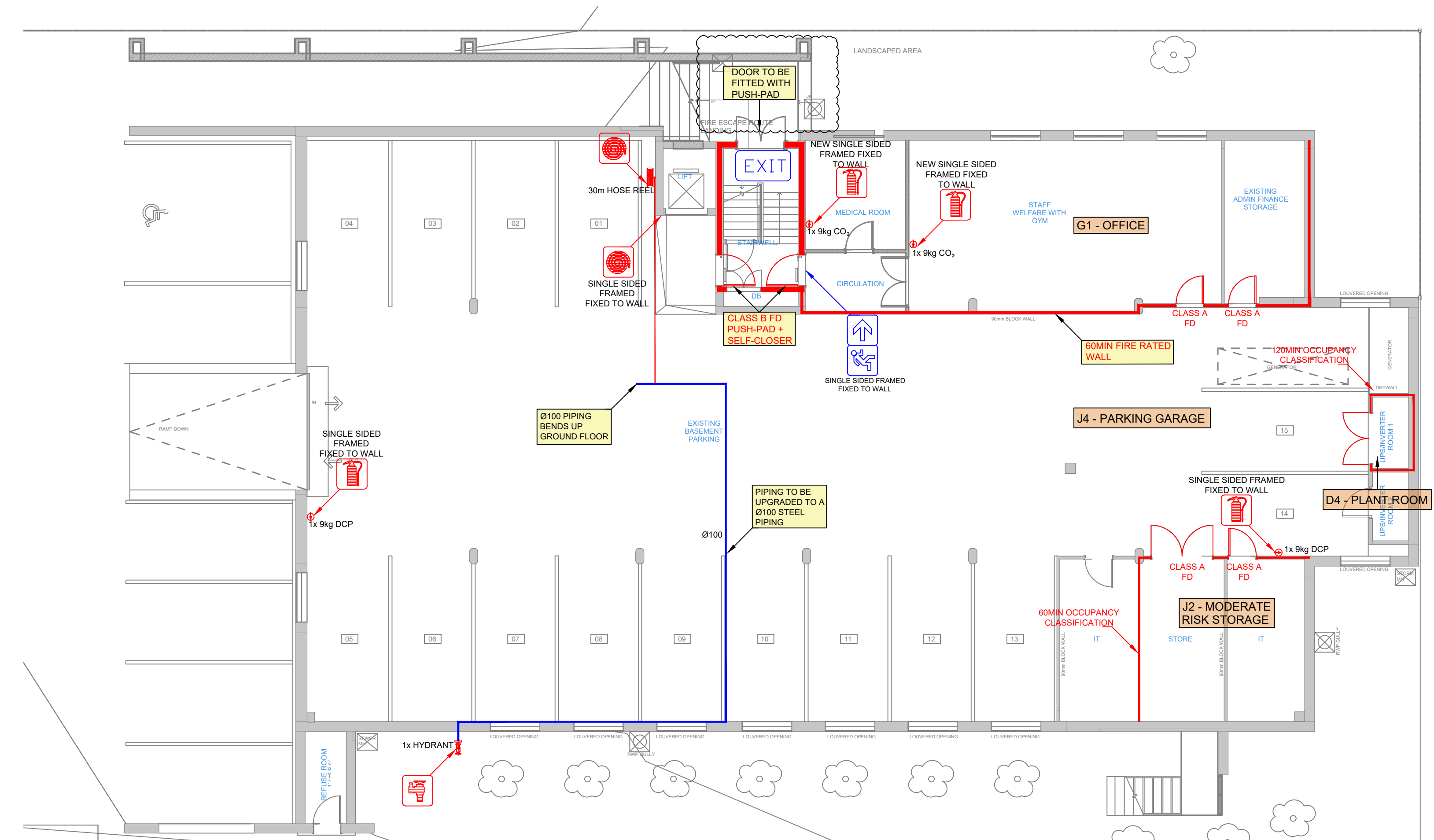
FIRE HYDRANT - PHOTOLUMINESCENT SIGN

FIRE EXTINGUISHER - PHOTOLUMINESCENT SIGN

FIRE HOSE REEL - PHOTOLUMINESCENT SIGN

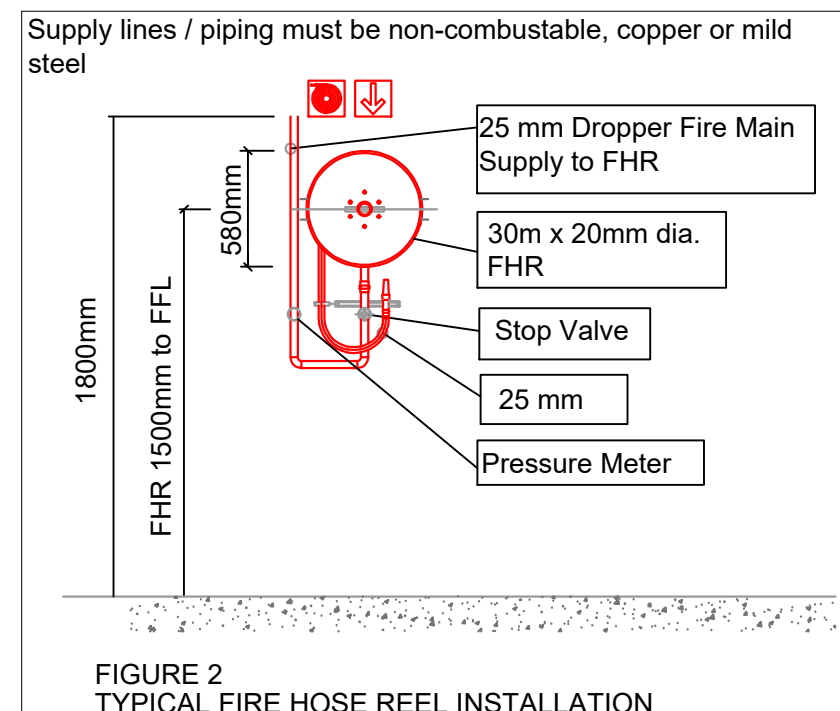
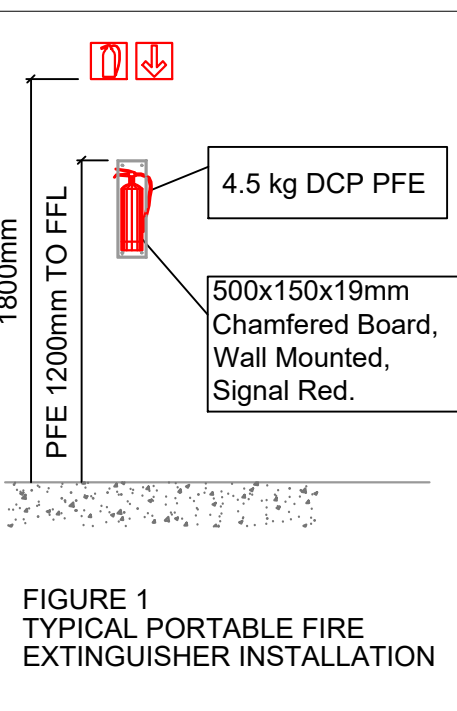
ESCAPE DIRECTION - PHOTOLUMINESCENT SIGN

DIRECTION ARROW - PHOTOLUMINESCENT SIGN



BUILDING INFORMATION	
AREA	76M²
CLASS OF OCCUPANCY	G1
OCCUPANCY	G1 - OFFICES
POPULATION	TBC
HOSE REELS REQUIRED	1 PER 500M² (0xHR)
HOSE REELS INSTALLED	1xHR INSTALLED IN PARKING
FIRE EXTINGUISHERS REQUIRED	1 PER 200M² (1xFE)
FIRE EXTINGUISHERS INSTALLED	2x9kg CO₂ FE
FIRE HYDRANTS REQUIRED	1 PER 1000M² (0xFH)
FIRE HYDRANTS INSTALLED	1xFH EXISTING ON SITE

BUILDING INFORMATION	
AREA	451M²
CLASS OF OCCUPANCY	J4
OCCUPANCY	J4 - PARKING GARAGE
POPULATION	TBC
HOSE REELS REQUIRED	1 PER 500M² (1xHR)
HOSE REELS INSTALLED	1xHR
FIRE EXTINGUISHERS REQUIRED	1 PER 400M² (2xFE)
FIRE EXTINGUISHERS INSTALLED	2x 9kg DCP FE
FIRE HYDRANTS REQUIRED	1 PER 1000M² (1xFH)
FIRE HYDRANTS INSTALLED	1xFH



NOTES:

- Fire design as per SANS 10400-T: 2024.
- Fire water design as per SANS 10400-W: 2011.
- Structural stability of 60min as per table 6.
- Stacking height to be limited to 1.8m.
- No Sprinkler system required.
- All insulation installed to be (A2-s1,d0) or better.
- Partition walls to have a fire rating of 30min.
- Emergency lighting to be provided along escape route
- Fire detection in accordance with SANS10139 required (L5).
- Lift to return to ground floor when detection is triggered.
- All signage to be SANS approved and Mechanically fixed.
- Ramp to have a fall of 1:12
- Ramp to have a 1200mm landing at the top and bottom of ramp.

FIRE STOPPING GUIDE:

**FIRE STOPPING CRITERIA:**  
THE FIRE RATING OF FIRE STOPS IS RELATED TO THE STRUCTURAL STABILITY OF A BUILDING. THE FIRE STOPPING CRITERIA IS DETAILED IN SANS 10400:2020 PART 1, TABLE 7. THE TABLE REFLECTS 60 OR 120 MINUTE FIRE STOPPING CLASS A (60MIN) OR CLASS B (120MIN) ACCESS FIRE DOORS TO SERVICE DUCTS/SHAFTS.

FIRE STOPPING MAY BE APPLIED IN EITHER THE VERTICAL PLANE BY VIRTUE OF INSTALLING FIRE RATED ACCESS DOORS TO SERVICE DUCTS/SHAFTS OR IN THE HORIZONTAL PLANE BY SEALING OFF FLOOR TO FLOOR AT SLAB LEVEL BY CAULKING WITH CEMENT/MORTAR MIX OR BY SPECIALIST APPLICATION AS BELOW WITH SUBSEQUENT SANS CERTIFICATION.

**PRODUCTS SUITABLE VIA PYROCOTE (LINK:HTTP://PYROCOTE.CA.ZA) OR SIMILAR:**

- ELECTRICAL CABLE TREATMENT - KBS COATING OR PYROSAFE WB
- PENETRATIONS/SHAFTS - ANY KBS CERTIFIED PRODUCT OR PYROSAFE PANEL SEAL
- STRUCTURAL - TEKROK'S OR C/PYROSAFE

**CEILING/ROOF SPACE:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE WITH A MAXIMUM DIMENSION OF MORE THAN 50mm IN ANY BUILDING, SUCH SPACE SHALL BE FIRE STOPPED WHETHER IT CONTAINS COMBUSTIBLE MATERIAL OR NOT
- WHERE IT IS WITHIN ANY NON-COMBUSTIBLE BUILDING ELEMENT, BE FIRE STOPPED NOT LESS THAN EVERY 5m MEASURED HORIZONTALLY OR VERTICALLY, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY TO THE CAVITY OF MASONRY CAVITY WALL AND
- WHERE IT IS WITHIN A COMBUSTIBLE ELEMENT, BE FIRE STOPPED NOT LESS THAN EVERY 3m MEASURED IN BOTH DIRECTIONS

**IF ANY COMBUSTIBLE PRODUCTS ARE INSTALLED IN SUCH ROOF SPACE, FOR EXAMPLE COMBUSTIBLE INSULATION, THEN THE AREA FOR NON-COMBUSTIBLE FIRE STOPS SHALL NOT BE MORE THAN 2000mm² AND THE DISTANCE BETWEEN SUCH FIRE STOPS SHALL NOT BE MORE THAN 20m.**

**INACCESSIBLE CONCEALED SPACES:**

- WHERE THERE IS AN INACCESSIBLE CONCEALED SPACE WITH A MAXIMUM DIMENSION OF MORE THAN 50mm IN ANY BUILDING, SUCH SPACE SHALL BE FIRE STOPPED WHETHER IT CONTAINS COMBUSTIBLE MATERIAL OR NOT
- WHERE IT IS WITHIN ANY NON-COMBUSTIBLE BUILDING ELEMENT, BE FIRE STOPPED NOT LESS THAN EVERY 5m MEASURED HORIZONTALLY OR VERTICALLY, PROVIDED THAT THIS REQUIREMENT SHALL NOT APPLY TO THE CAVITY OF MASONRY CAVITY WALL AND
- WHERE IT IS WITHIN A COMBUSTIBLE ELEMENT, BE FIRE STOPPED NOT LESS THAN EVERY 3m MEASURED IN BOTH DIRECTIONS

**SERVICE SHAFTS:**

- NOT CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY SECOND STOREY ABOVE THE BOTTOM OF SUCH A SHAFT
- CONTAINING ANY COMBUSTIBLE MATERIAL SHALL BE FIRE STOPPED AT THE LEVEL OF EVERY STOREY ABOVE THE BOTTOM OF SUCH SHAFT
- WHERE A VERTICAL SERVICE SHAFT IS USED FOR VENTILATION OR CONTAINS NON-COMBUSTIBLE PLUMBING OR DRAINAGE SERVICES OR IS A NON-COMBUSTIBLE RUBBISH CHUTE, NO FIRE STOP SHALL BE REQUIRED WITHIN SUCH SHAFT AND THE DOORS TO SUCH SHAFTS SHALL BE SELF CLOSING 120min FIRE DOORS
- WHERE A SERVICE PENETRATES A SEPARATING ELEMENT, SUCH SEPARATING ELEMENT SHALL BE FIRE STOPPED WITH A SUITABLE SYSTEM OF THE SAME RATING OF THE ELEMENT IT PASSES THROUGH

**SERVICES IN STRUCTURAL OR SEPARATING ELEMENTS:**

- A SERVICE PIPE, CONDUIT, DUCT, SLEEVE, CABLE OR OTHER EQUIPMENT RECESSED INTO ANY STRUCTURAL OR SEPARATING ELEMENT WHICH IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SET INTO SUCH ELEMENT IN SUCH A MANNER THAT SUCH FIRE RESISTANCE IS NOT REDUCED TO BELOW THE REQUIRED FIRE RESISTANCE
- A SERVICE THAT PENETRATES THROUGH ANY WALL OR FLOOR WHERE SUCH WALL OR FLOOR IS REQUIRED TO HAVE A FIRE RESISTANCE, SHALL BE SEALED IN SUCH A MANNER THAT FIRE SHALL NOT PENETRATE SUCH WALL OR FLOOR

PRINT A1