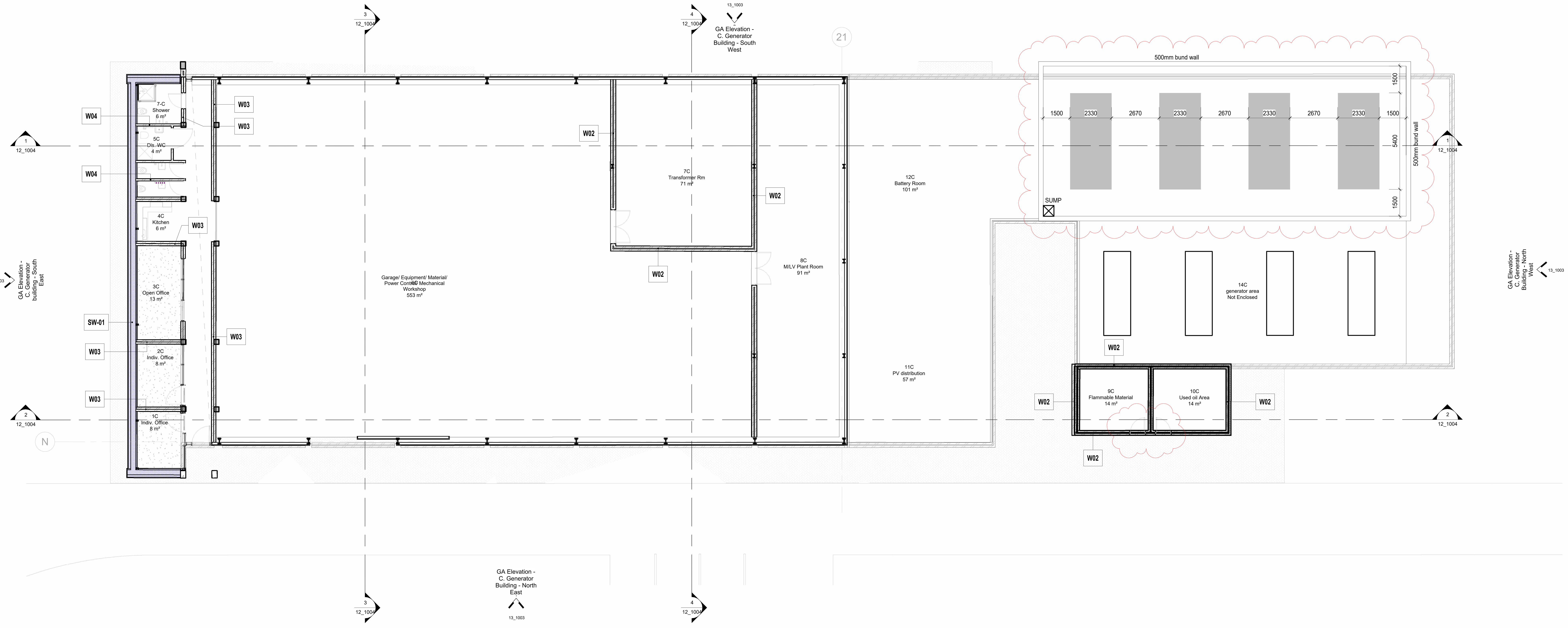


C. Generator Building - GA Plan - Ground

3 — 1 : 100

C. Generator Building - GA Plan - Roof Plan

2 — 1 : 100

Autodesk Docs://SANSA Matjiesfontein/SMFN-SVA-AR-M3.rvt

Room Schedule GEN Building

Number	Name	Area
1C	Indiv. Office	8 m²
2C	Indiv. Office	8 m²
3C	Open Office	13 m²
4C	Kitchen	6 m²
5C	Dis. WC	4 m²
6C	Garage/ Equipment/ Material/ Power Control/ Mechanical Workshop	553 m²
7-C	Shower	6 m²
7C	Transformer Rm	71 m²
8C	M/LV Plant Room	91 m²
9C	Flammable Material	14 m²
10C	Used oil Area	14 m²
11C	PV distribution	57 m²
12C	Battery Room	101 m²
13C	diesel storage	171 m²
14C	generator area	Not Enclosed

ROOF AND INSULATION LEGEND

GENERAL EXTERNAL HORRIZONTAL AND VERTICAL

RF-01	**Safintra Saflok 700 - 0.53mm thick ColorPlus**, colour to be, **"Raincloud"** C.1.S finish with standard backing coat G550 interlocking roof sheeting with **AZ150** spelter to both sides fixed to Lamdaboard packers on 135mm factorylite foil facing upwards on Sisalation fixed over steel purlins at internal spans as per engineer's specifications using **SAFLOK 700 clips** screw fixed to steel purlins secured with Safintra approved wafer head fastener, all in accordance with manufacturer's recommendations. The roof sheeting shall be double-interlocking concealed-fix **SAFLOK 700** profile roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified **ZincAL 0.53mm steel**. A certificate verifying compliance shall be issued by the manufacturer, Safintra Roofing. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41.5mm. Two stiffening ribs are incorporated in each pan.
RF-02	**Safintra** SUNLOCK (Suntuf 10000) **- 1.0-1.25mm thick** interlocking roof sheeting installed above purlins Install Palram Sunlok Suntuf 10000 Polycarbonate sheeting in colour Opal, over Safintra Polyslider– high wind load clips to receive a saddle washer and 14 x 22mm stitching fastener including side stitching of 500mm centres in a staggered formation between metal roof sheeting, all in accordance with manufacturer's instructions.
RF-03	**Safintra Saflok 700 - 0.53mm thick ColorPlus**, colour to be, **"Raincloud"** C.1.S finish with standard backing coat G550 interlocking roof sheeting with **AZ150** spelter to both sides fixed to packers over steel purlins at internal spans as per engineer's specifications using **SAFLOK 700 clips** screw fixed to steel purlins secured with Safintra approved wafer head fastener, all in accordance with manufacturer's recommendations. The roof sheeting shall be double-interlocking concealed-fix **SAFLOK 700** profile roll-formed in continuous lengths and cut to length by a pneumatic cut-off process from certified **ZincAL 0.53mm steel**. A certificate verifying compliance shall be issued by the manufacturer, Safintra Roofing. The profile shall be roll formed with 4 ribs and centres not exceeding 233mm and a cover width not exceeding 700mm. The male rib is to include spurs to ensure a double interlocking action with adjacent sheets. The minimum sheet depth will be 41.5mm. Two stiffening ribs are incorporated in each pan.
CRF-03	Concrete flat roof with upstands per structural engineers documentation. To receive 30mm – 100mm screeds to fall to fullbores To receive two layers Torch-on waterproofing (3mm+4mm) on bitumen primer, turned up by 300mm at upstands, with membrane reinforced cementitious counterflashing taking over top of upstands. Upstand beams to plastered to receive waterproofing. Refer to waterproofing specifications. Waterproofing to come with 10 year workmanship and product warranty. To receive 60mm Isoboard insulation below slab soffit.

ROOF GUTTER LEGEND

GUTTER

Gutter Type 01	*Steel gutter to typical detail. Powdercoated to match roof sheeting with matching 110mm dia. Downpipes where indicated. End of sheeting cranked to drip. Install Polycloser and sealed with Polyurethane.*
Gutter Type 02	*Steel gutter to typical detail. Powdercoated to match roof sheeting with matching 110mm dia. Downpipes where indicated. End of sheeting cranked to drip. Install Polycloser and sealed with Polyurethane.*
Gutter Type 03	*Valley Gutter to match roof sheeting and pitch. End of sheeting cranked to drip. Install Polycloser and sealed with Polyurethane.*
Gutter Type 04	*Purpose made box gutter. End of sheeting cranked to drip. Install Polycloser and sealed with Polyurethane.*
Gutter Type 05	*Steel gutter to typical detail. Powdercoated to match roof sheeting with matching 110mm dia. Downpipes where indicated. End of sheeting cranked to drip. Install Polycloser and sealed with Polyurethane.*

ROOF FLASHING LEGEND

FLASHING

FL-01	Description: Standard Ridge Flashing to match Roof sheeting and pitch with polycloser and polyurethane sealant.
FL-02	Description: Standard Sidewall Flashing to match roof sheeting, together with matching metal counterflashing
FL-03	Description: Standard Headwall Flashing to match roof sheeting, together with matching standard metal counterflashing. Along with Polycloser and sealed with Polyurethane.
FL-04	Description: Standard Barge Flashing to match roof sheeting.
FL-05	Description: Custom Headwall Flashing plate bent into shape fixed to steel purlins to match roof sheeting, Along with Polycloser and sealed with Polyurethane.
FL-06	Description: Standard Back Flashing to match roof sheeting

SAFLOK 700 FLASHING

Flashings specifications shall be to Safintra Roofing standards and fixed to the sheeting with F10 Bracket Flashing slider clip at apex where roof sheets are 30m or longer, to obviate any direct fixing perforations. The F10 clip is positively fixed. Prior to flashings being fixed, all troughs at the apex shall be stop-ended to the full depth of the sheet in order to prevent any penetration of wind driven water. The trough shall be lipped at the eaves end to form a drip. Barge flashing flanges shall be fixed to the F10 clip where necessary. All these operations must be performed with special tools available from Safintra Roofing. Please consult the Safintra Technical Department for assistance.

DOWNPIPES LEGEND

DP-01	Roof Discharge Downpipe 110Ø metal downpipe to match roof sheeting, installed against brick wall. Shoe to discharge water onto surface.Refer to the civil engineers documentation for the invert levels and connection details into the subsoil drainage system
DP-02	Roof to concrete roof Discharge Downpipe 110Ø metal downpipe to match roof sheeting, installed against brick wall. Shoe to discharge water onto concrete roof surface.
DP-03	Downpipe on vertical sheeting Discharge 110Ø metal downpipe to match roof sheeting, installed against roof sheeting to portal frame steel structure. Shoe to discharge water onto surface
FB-01	Fullbore Outlet at Flat Roof Saint-Gobain Rain-Flo 90 Degree Flat Grate fullbore with uPVC adaptor. To be fully waterproofed with torch on onto surrounds of full bore. With Dome grate for preventing leaves and stones from clogging the fullbore. 90 degree horizontal outlet, connected to class 6 uPVC pipe in slab. Cast-in 110Ø class 6 uPVC pipe in column, with elbow and bend to connect to sub-surface drainage system as designed by the civil engineer. Refer to the civil engineers documentation for the invert levels and connection details into the subsoil drainage system.
SC-01	Scupper Outlet Drain - Discharged into hopper box rainhead - taken externally down wall Cast-in 110Ø class 34 uPVC pipe fixed to wall, with elbow and bend to surface discharge.

NOTES

- The design on this drawing is copyright and remains the property of SVA International (Pty) Ltd. Reg. No 2011/137280/07
- All work to be carried out in strict accordance with local authority requirements, National Building Regulations, and the S.A.B.S.standards.
- This drawing may not be scaled. Only figured dimensions and levels may be used.
- All relevant details, levels, and dimensions must be checked on site before commencement of work. Any discrepancies to be reported to the Architects office immediately

REVISIONS

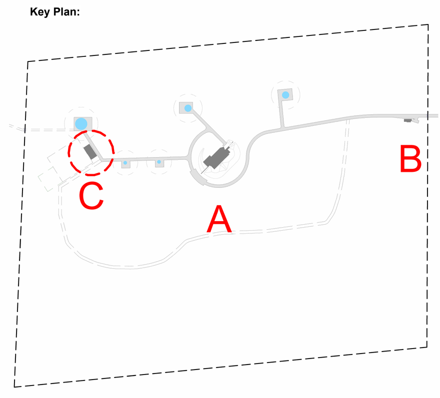
Rev	Date	Issued by	Description
A	2024-08-08		For information
B	2024-11-04		For Tender
C	2024-11-25		For Tender

Part (A. Main building, B. Gatehouse or C. Generator building)

16A-1

Room number — Room instance

Key Plan:



Signatures:
Engineer:

Signatures:
Architect:

FOR TENDER

CONSULTANTS

Project Manager

Quantity Surveyor

Structural Engineer

Civil Engineer

Mechanical Engineer

Electrical Engineer

Wet & Fire Services Engineer

Interior Designer

Landscape Architect

Lighting Specialist

Client

SANSA SOUTH AFRICAN NATIONAL SPACE AGENCY

Project
SANSA - Matjiesfontein

Drawing
GA Plan - C. Generator Building - Ground Floor and Roof Plan

Drawing No.	Revision No.
SMFN-SVA-AR-DR-11_1004	C

Project No.	Scale	Size	Date	Drawn
C15415.00	As indicated	A0	2024-11-25	Author

SVA LEAD BUILD DESIGN

8th Floor, The Link, 19 D.F. Malan St, Cape Town City Centre, Cape Town, 8001
Tel +27 21 421 4276 |
email: sva-ct@svarchitects.com

Date & Time printed: 09/12/2024 11:35:00