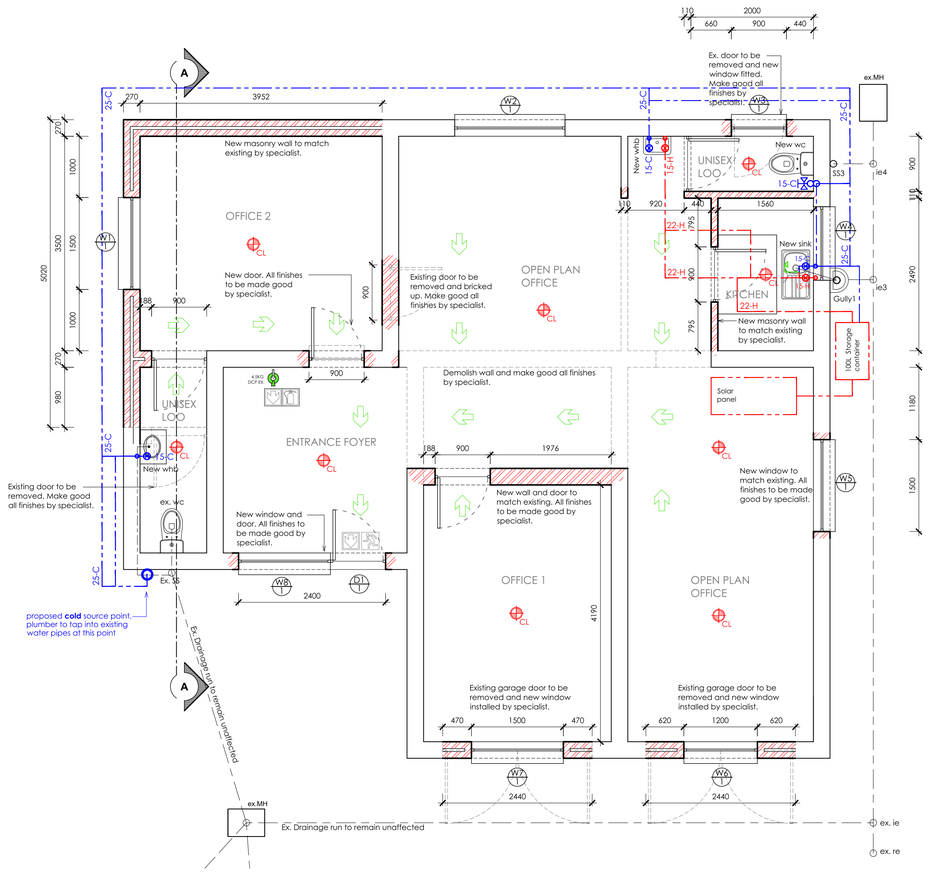

FLOOR PLAN / OFFICE BUILDING 1

Scale : 1:50

FIRE PLAN LEGEND

Smoke Detectors	S
Manual Control Panel	MCP
Signage for direction of fire escape route	
Signage for fire extinguisher	
Fire extinguisher	4.5KG / 9KG DCP FE
Fire blanket	Fire Blanket
Fire escape route	
30m Fire hose reel	30m FHR
Fire hydrant	H

WATER RETICULATION LEGEND

Proposed cold water source point. plumber to tap into existing cold water pipes at this point	
Municipal water connection and stop cock	
Garden tap position	ET
Proposed cold water reticulation	
Proposed hot water reticulation	
Proposed cold water pipe up	
Proposed cold water pipe down	
Proposed hot water pipe down	
Proposed cold water stopcock	
Proposed hot water stopcock	
Proposed cold tap	
Proposed hot tap	
Propsed shower head	

ELECTRICAL LEGEND

	LED Down lighter as per client specification
	Single wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
	Double wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
	Triple wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
2WL	2-way wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
WP	Waterlight wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
DIM	Dimmer wall mounted light switch to be mounted at 1300mm above uffl. (or specified on drawing)
	Double wall mounted plug, top of socket to be 1250mm above uffl (or specified on drawing)
	Double wall mounted plug, top of socket to be 400mm above uffl (or specified on drawing)
WT	Double wall mounted watertight plug, top of socket to be 600mm above uffl (or specified on drawing)
EX	Extractor connection plug (height specified on drawing)
	Blank conduiting boxes (height specified on drawing)
	Periscope plug as per specification.
CL	Ceiling light (Compact Fluorescent)
HP	Hanging pendant light (Compact Fluorescent)
	Main distribution board
	Sub distribution board
PP	Pre-paid Electricity meter
	LED Down lighter as per specification
	Internal LED Wall mounted light
	External LED Wall mounted light

APPLICATION OF SANS 10400-XA (Ed.2)

ZONE 4 - CLASSIFICATION G1 / Offices

		REQUIREMENTS	ACTUAL	STATUS
1	DESIGN	The orientation is in accordance with the requirements of 5.1	EXISTING BUILDING	N/A
2	SHADING	The shading is in accordance with the requirements of 5.2	See **Fenestration** calculations	In order
3	FENESTRATIONS & ROOF LIGHTS	The fenestration is in accordance with the requirements of 5.3	See **Fenestration** calculations	In order

4 FLOOR INSULATION for under floor heating

The floors are in accordance with the requirements of 5.4

5.4.1. Surface bed (Heated)
5.4.2. Suspended (Exposed)
R-value => **1.00**

Under slab (Heated):	mm	W/m.K	R-Val.
Lambdaboard	000	0.024	0.00
Total R-value:	**Req. =>1.0**		**0.00**

N/A

Suspended Floor (Exposed):	mm	W/m.K	R-Val.
Isover Aerolite Insulation	050	0.044	1.14
Total R-value:	**Req. =>1.0**		**1.14**

N/A

5 EXTERNAL WALLS Surface density < 270kg/m²

The external walls are in accordance with the requirements of 5.5

Zone 4:
50mm Cavity wall:
R-value => 1.9

External wall:	mm	W/m.K	R-Val.
Outer Air-film (1/20)	1000	20	0.05
10mm plaster	010	0.75	0.01
110mm Brick	110	0.82	0.13
Air-spaces	1000	6.8	0.15
Cavity (Lambdaboard)	040	0.024	1.67
110mm Brick	110	0.82	0.13
10mm plaster	10	0.75	0.01
Inner Air-Film (1/9.4)	1000	9.4	0.11
Total R-value:	**Req. =>1.9**		**2.26**

In order

6 ROOF & CEILING ASSEMBLY

The roof and ceiling assemblies are in accordance with the requirements of 5.6

Zone: **4**
Direction of Flow: **UP**

3° Metal roof with Horizontal ceiling

3° **PITCH ROOF**	mm	W/m.K	R-Val.
Outer Air-film (1/20)	n/a	n/a	0.05
Metal Roofing sheeting	0.53	53.00	0.00
Air-space & Sisalation	n/a	n/a	0.51
Isover Aerolite insulation	75.0	0.044	1.70
Isover Aerolite insulation	75.0	0.04	1.88
Gypsum Ceiling	6.40	0.17	0.04
Inner Air-Film (1/11.0)	n/a	n/a	0.09
Total R-value:	**Req. =>3.7**		**4.27**

In order

7 BUILDING SEALING

The building sealing is in accordance with the requirements of 5.7

A foam or rubber compressible strip or a fibrous seal to restrict air leakage shall be fitted to each edge of an external door and other such opening that serves a habitable room.

The maximum air leakage for windows and doors shall comply with the requirements of SANS 613.

In order

8 HOT WATER Classification G1 - Offices

The building hot water is in accordance with the requirements of 6.1

m2/ Per person: 15

m2 / Total office: 94.35

Stipulated solar hot water usage: 6 L/p

94.35 / 15 =6.29 Occupancy

Minimum hot water storage:
((6)*1.5) x 6.3 = **56.6** L/p

In order

Solar heater (MJ/day):
(56.6 L * 0.1) = > **5.7** MJ/day
(56.6 L * 0.15) = < **8.5** MJ/day

In order

PIPE INSULATION (hot water pipe)

Internal pipe diameter ≤ 80mm:
Minimum R-value of 1.00

Closed cell elastomeric thermal insulation	mm	W/m.K	R-Val.
	38	0.036	1.06
Total R-value:	**Req. 1.0**		**1.06**

In order

9 LIGHTING Classification G1- Offices

MAXIMUM ENERGY DEMAND

Constant =8 W/m²

94.35 m²
x 8 W/m²
755 W (MAX.)

MINIMUM LUX

Minimum light lux level: 400

The lighting lux is in accordance with the requirements of SANS10114

94.35 m²
x 400 Lux
37740 Min. LUX

INTERIOR LIGHTS:	Qty.	Watts	Lm/W
LED DN Lights:	000	10	80
LED UP/DN Lights:	000	20	160
LED Wall Lights:	000	06	100
Compact Fluo. light:	009	65	75
Fluorescent light:	000	36	79
TOTAL (watts & Lumens):		585	43875

ENERGY DEMAND:

585W / 94.35m²
6.20W/m² =< 8W/m²

LIGHT LUX:

37740 Lumens =< 43875 Lumens

In order

REVISIONS:

GENERAL NOTES:

All dimensions to be checked on site before construction commences. All dimensions are given in millimeters, unless otherwise specified. Contractors to adhere to all local authority's regulations and requirements. Contractors to be a suitably qualified and registered participant in the construction industry as required by Construction Regulation 2014. Drawings to be read in conjunction with the clients OHS (Occupational Health and Safety) file. All work to be done in accordance with the National Building Regulations SANS 10400. Before this drawing is priced it is the contractor's responsibility to ensure he is familiar with the site. All trade names quoted may only be substituted by similar, subject to architect's approval. All materials to be installed in strict accordance with manufacturer's specifications. All conduit work to be SABS approved quality. All light fittings is to be fitted to comply with the relevant code of practice as specified in SANS 10400: Part O. All new work to be made good with existing. This drawing is not to be scaled unless printed by H. Gouws renders. All existing dimensions not to be scaled from drawings but to be checked on site. Any discrepancies shall be reported to the designer immediately and clarified by the architect prior to commencement of work. Top of foundations to be a minimum of 150mm below finished ground level. Minimum 100mm thick concrete surface bed as per Engineers drawings to be on 250 mic, "gunplas" ubs green dpm on 50mm sand blinding layer and on well compacted fill in layers not more than 150mm. SABS Approved "gundle" 375 mic. dpc under all walls, window cills and at changes in floor level. These architectural drawings to be read in conjunction with engineers and consultants drawings, where applicable. All building work to be carried out in accordance with the national building regulations. The contractor is responsible for all site visits by local inspectors and pay all fees in connection therewith. All drainage work to be carried out in accordance with the national building regulations. All roof measurements to be taken on site by roof specialist prior to roof construction. All tile layouts to be confirmed with architect prior to commencing. Levels shown are relative to a benchmark at 100.00 msl at new floor level. Msl is not the actual level but a benchmark to base other heights of the building shown on the drawings. Contractor to keep a full set of latest issued drawings on site. Contractor is responsible for the correct setting out of the building on site with reference to the building line and boundaries. Contractor to take responsibility for all health and safety measures on site.

DRAWING TITLE:

MUNICIPAL SUBMISSIONS

PROJECT TITLE:

ADDITIONS AND ALTERATIONS ON **ERF 100, NEWTON PARK** , PORT ELIZABETH FOR **Renrew Properties LTD PTY**

05 Jun 24
CLIENT SIGNATURE

BLACKHOUND ARCHITECTURE & RENDERING
dewald@blackhoundenterprises.com
072 799 9597 | 072 418 6867
https://blackhoundenterprises.com
Unit 10, The Network, 19 Cactus Rd
Fairview, Port Elizabeth, 6070

05 Jun 24
PROFESSIONAL SIGNATURE

MUNICIPAL INFORMATION:

ERF NO:	**100, Newton Park**
ERF AREA:	1673 sqm
EXISTING AREA:	262 sqm
NEW AREA:	114 sqm
TOTAL AREA:	376 sqm
EX. COVERAGE:	262 sqm 15.66%
NEW COVERAGE:	**114 sqm - 6.81%**
TOTAL COVERAGE:	376 sqm - 22.47%
NEW GARAGES:	0
NEW BATHROOMS:	3
POOL:	NO
BOUNDARY WALLS:	0 M
AGE OF BUILDING:	(2024-1952) = 72 years

PROFESSIONAL ARCHITECTURAL TECHNOLOGIST
DEWALD MATHYS POTGIETER
08:54 am (Africa/Johannesburg) on 05 Jun 2024

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DRAWN BY: DMP
PRINT DATE: 05 Jun 2024
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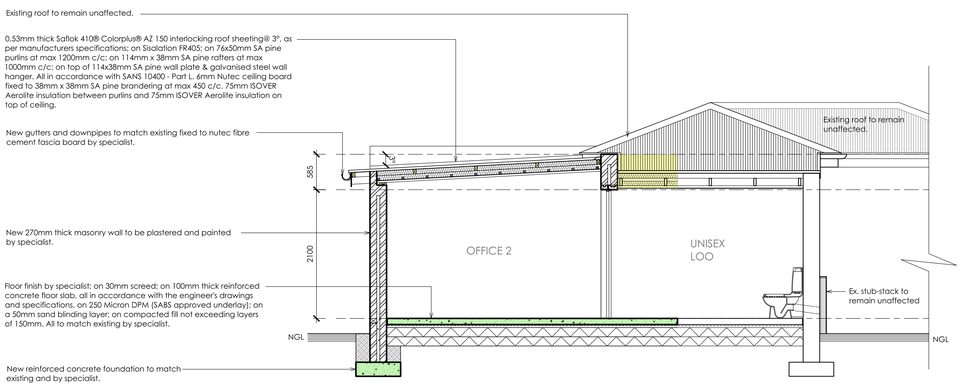

SECTION A-A / OFFICE BUILDING 1

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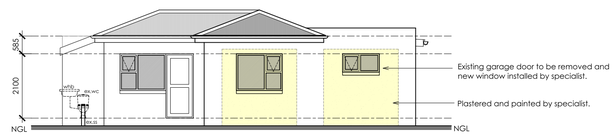

NORTH ELEVATION / OFFICE BUILDING 1

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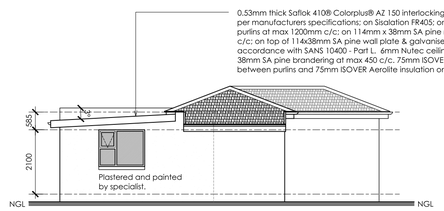

EAST ELEVATION / OFFICE BUILDING 1

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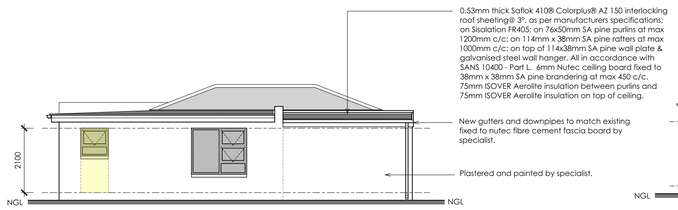

SOUTH ELEVATION / OFFICE BUILDING 1

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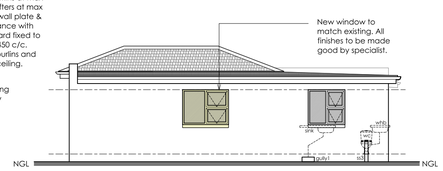

WEST ELEVATION / OFFICE BUILDING 1

Scale : 1:100