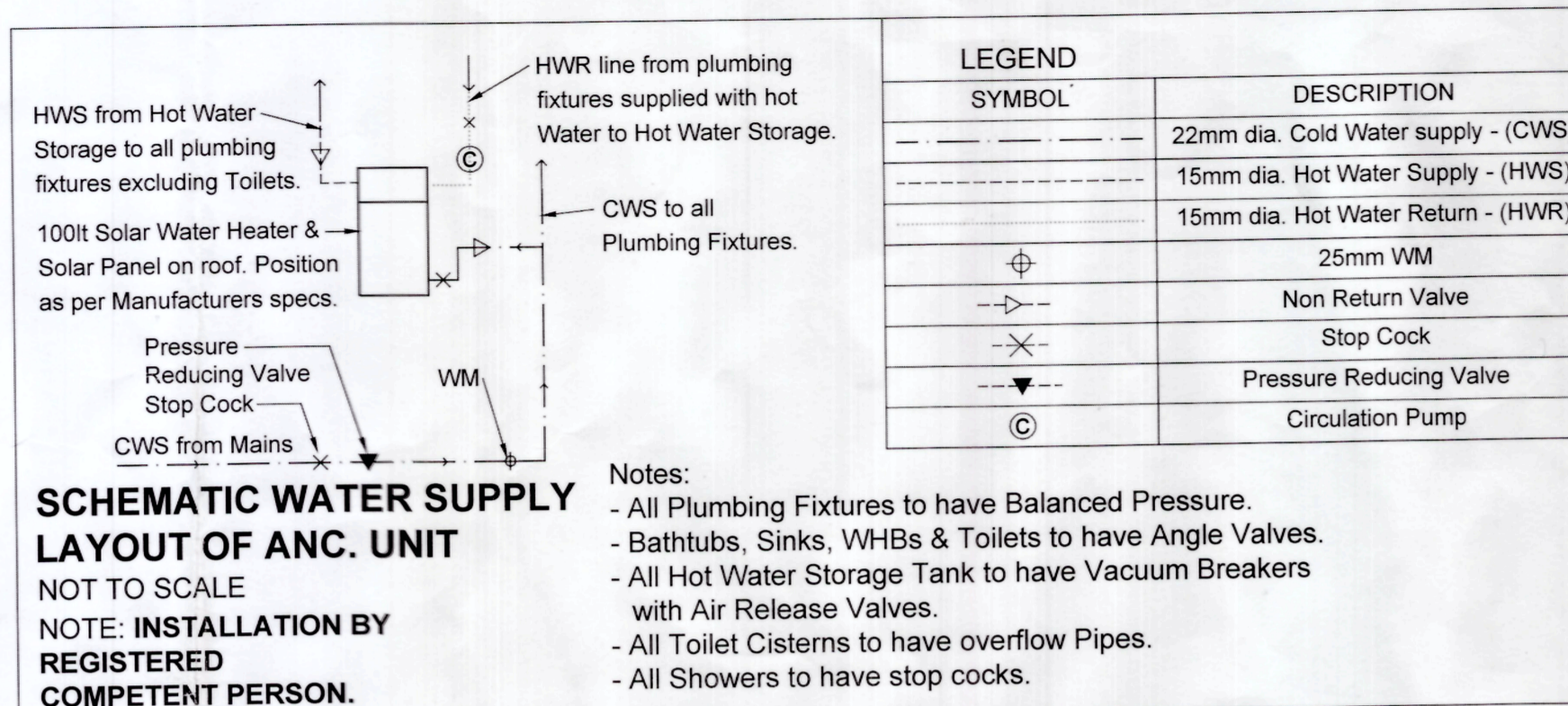


LIGHTING CALCULATIONS - NEW E/S of EX HOUSE			
Occupancy	Class of Occupancy or Building	Energy Demand W/m ²	Energy Consumption kWh/(m ² .a)
Dwelling House	H4	5	5
Affected Area (A.Area): 5,035m²			
Permitted Energy Demand = A.Area x Energy Demand (W/m ²) 5,035m ² x 5W/m ² = 25,175W			
Permitted Energy Consumption = A.Area x Energy Consumption kWh/(m ² .a) 5,035m ² x 5kWh/(m ² .a) = 25,175kWh			
Room / Space	Light Fitting	No. off	Total W
Net Floor Area of Habitable Rooms	9W LED	1	9W
Total Energy Demand (T.E.D.):			9W
Light Usage:	Morning	Evening	Total
Hours:	2	5	7
Total Energy Demand (T.E.D.) = 9W			
Total Consumption (Annual Usage - AU) = Total Hours x 365 Days x T.E.D.			
Total Consumption (AU) = 7 x 365 x 9W = 22995Wh = 22,995kWh			
Total Energy Demand (T.E.D.) compared to Permitted Energy Demand 9W less than 25,175W			
Total Consumption compared to Permitted Energy Consumption 22,995kWh less than 25,175kWh			

LIGHTING CALCULATIONS - ANC Unit			
Occupancy	Class of Occupancy or Building	Energy Demand W/m ²	Energy Consumption kWh/(m ² .a)
Dwelling House	H4	5	5
Affected Area (A.Area): 33,773m²			
Permitted Energy Demand = A.Area x Energy Demand (W/m ²) 33,7726m ² x 5W/m ² = 168,863W			
Permitted Energy Consumption = A.Area x Energy Consumption kWh/(m ² .a) 33,7726m ² x 5kWh/(m ² .a) = 168,863kWh			
Room / Space	Light Fitting	No. off	Total W
Net Floor Area of Habitable Rooms	13W LED	4	52W
Total Energy Demand (T.E.D.):			52W
Light Usage:	Morning	Evening	Total
Hours:	2	5	7
Total Energy Demand (T.E.D.) = 52W			
Total Consumption (Annual Usage - AU) = Total Hours x 365 Days x T.E.D.			
Total Consumption (AU) = 7 x 365 x 52W = 132860Wh = 132,86kWh			
Total Energy Demand (T.E.D.) compared to Permitted Energy Demand 52W less than 168,863W			
Total Consumption compared to Permitted Energy Consumption 132,86kWh less than 168,863kWh			

LIGHTING CALCULATIONS - GARDENER'S CHANGE ROOM & BATH			
Occupancy	Class of Occupancy or Building	Energy Demand W/m ²	Energy Consumption kWh/(m ² .a)
Dwelling House	H4	5	5
Affected Area (A.Area): 11,552m²			
Permitted Energy Demand = A.Area x Energy Demand (W/m ²) 11,552m ² x 5W/m ² = 57,76W			
Permitted Energy Consumption = A.Area x Energy Consumption kWh/(m ² .a) 11,552m ² x 5kWh/(m ² .a) = 57,76kWh			
Room / Space	Light Fitting	No. off	Total W
Net Floor Area of Habitable Rooms	11W LED	2	22W
Total Energy Demand (T.E.D.):			22W
Light Usage:	Morning	Evening	Total
Hours:	2	5	7
Total Energy Demand (T.E.D.) = 22W			
Total Consumption (Annual Usage - AU) = Total Hours x 365 Days x T.E.D.			
Total Consumption (AU) = 7 x 365 x 22W = 56210Wh = 56,21kWh			
Total Energy Demand (T.E.D.) compared to Permitted Energy Demand 22W less than 57,76W			
Total Consumption compared to Permitted Energy Consumption 56,21kWh less than 57,76kWh			



NOTE : MANUFACTURER'S SPECIFICATIONS & DETAILS ARE TO BE STRICTLY ADHERED TO, WHEN INSTALLING. ALL MANUFACTURER'S SPECIFICATIONS TO COMPLY WITH SANS 10400 - PART XA

1: Roof: All roof spaces to be insulated with Isover's 115mm thick flexible non-combustible 80% Glasswool (Aerolite)
Complete roof & ceiling system (sheeting / tiles, insulation, trusses, bracing / purlins & ceiling) combined to achieve a minimum r-value of 2.7m²/K/W

R-Values =
Concrete Roof Tiles = 0,024m²/K/W
Isover Think Pink Aerolite 115mm = 2,88m²/K/W
Gyproc RhinoBoard 6,4mm = 0,03m²/K/W
Total R-Value = 2,934m²/K/W

2: Geysers: All new geysers must be solar paneled. Existing geysers must have geyser blankets achieving a minimum R-Value of 2000.

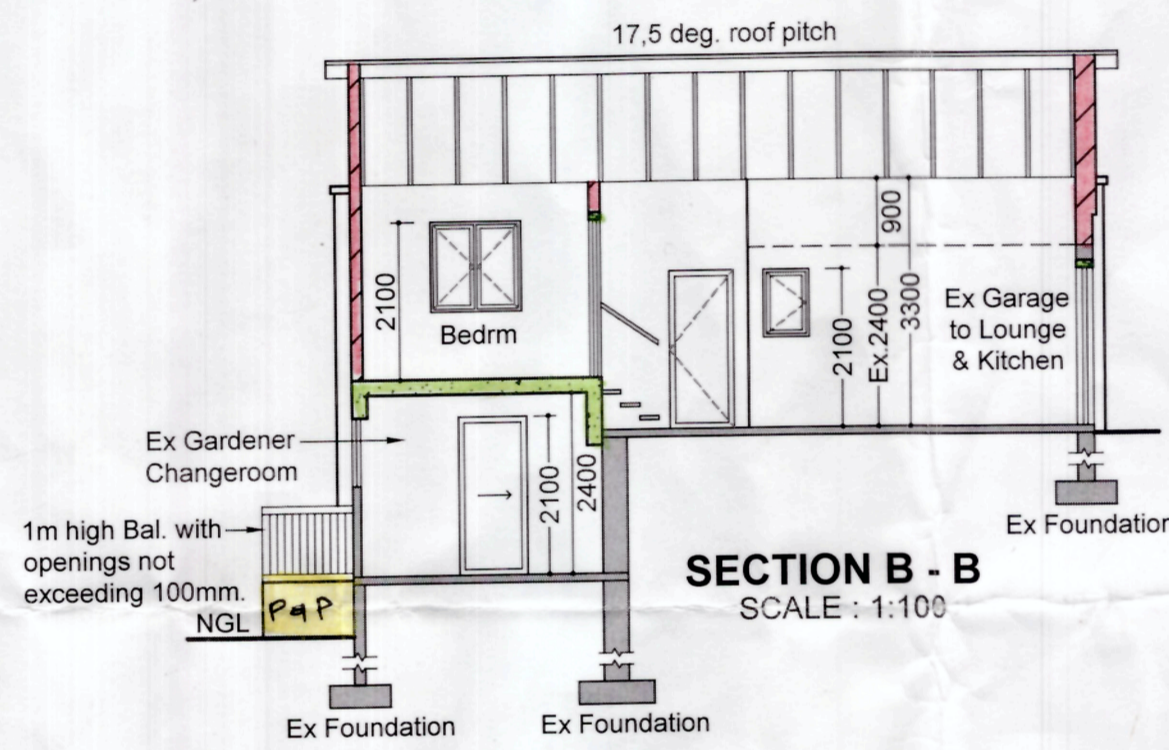
3: Electrical: All distribution boards to be fitted with a timer for all existing and new geysers. Rainwater should be harvested in an attenuation tank for irrigation purposes.

4: Windows : All windows to comply with Part N of SANS10400. All systems to be properly sealed.

5: Hot Water Supply : All internal & exposed hot water supply pipes to be insulated with a material (such as Isover rigid non-combustible light weight "Snap on Pipe" Glasswool Insulation) achieving a minimum R-Value of 1000.

6. All doors to have door seals and draught protection.

7. All External Lighting open to sky, to be solar powered.



NEIGHBORS CONSENT			
NAME & ADDRESS:	TEL NO:	I.D. NO & D.O.B.:	SIGNATURE:
T. MSHENGU, 197 WATSONIA ROAD	0633552007	7002275273083 27 FEB 1970	[Signature]
V. SGOSELAN, 254 WATSONIA RD	0634994788	8610235097064 23 OCT 1986	[Signature]
Z. Sinele, 252 Watsonia	0724125926	7702155721081	[Signature]
R. SIBROGEN, 189 WATSONIA RD	0825009697	808285261082	[Signature]
J.E. BARNARD, 44 Acute Rd	0833033309	530312006084	[Signature]
C.M. DuPlessis, 38 Acute Rd	0826502227	6004115109080	[Signature]

Sheet No: 02/02 Drawing No: 001-01-23

Date: Jan 2023 Revision No: 00

ADDRESS: 193 WATSONIA ROAD

CADASTRAL DESCRIPTION:
PTN 6 of ERF 1884 WENTWORTH

APPLICATION DESCRIPTION: ADDS & ALTS TO EX HOUSE, CONVERSION OF EX GARAGE TO ANC. UNIT & ALTERATIONS TO EX GARDENER CHANGE ROOM

OWNER'S NAME:

CONTACT DETAILS.: 072 768 7891

SIGN: → [Signature]

P. Sathiram - Professional Architectural Technologist (PAT 46591482)
MOLOKO GENERAL SUPPLIES (PTY) LTD REG NO.2017/484164/07 T/A

VIEWPOINT ARCHITECTURAL SERVICES

Contact Number : 067 604 2700
viewpointarchitecturalservices@gmail.com
184 Cardinal Road, Stonebridge, Phoenix, 4068