THERMAL INSULATION

All exposed pipes to and from the hot water cylinders and central heating systems shall be insulated with pipe insulation material with a thermal resistance, R value in accordance with table 10, to comply SANS 10252-1 part 6.7.5.2 pipe size less than 80mm = R value 1m2.K/W

Hot water vessels and tanks shall be insulated with a material that achieves a minimum R-value of 2, to comply SANS10252-1 part 6.7.5.4

TABLE 10 minimum R-value or pipe insulation

internal Ø of pipe mm	minimum R-value m2.K/W
up to 80	1,00
greater than 80	1,50

Piping to be insulated includes all flow and return piping, cold water supply piping within 1m of the connection to the heating or cooling system and pressure relief piping within 1m of the connection to the piping system. Where possible lengths of pipe runs shall be minimized. SANS 10252-1 part 6.7.5.7

SAFETY TRAYS

Where a storage tank or water heater is installed and a galvanized steel tray is provided, hardwood spacers shall be used to separate the storage tank or heater from the tray. The surface shall be painted with two coats of bitumen paint, SANS 10252-1 part 8.4.4 and shall discharge to the external and is readily visible

SUPPORTS FOR WATER HEATERS

Where a storage tank or water heater is supported by a platform, such platform shall be capable of safely sustaining any loads subjected to it. Be supported to manufactures instruction, and comply with the requirements in SANS 10400-L.
A platform that supports a storage tank, if applicable, be supported on at least 2 load bearing walls or comply to part 8.4.6 SANS 10252-1:2012

HOT WATER PIPING

The length of an unheated pipe [dead leg] conveying water direct from a fixed water heater to a terminal water fitting, or from the point of take off from a hot water circulating system to a terminal water fitting, shall be such that the internal volume of that pipe does not exceed 4L.
The internal volume of pipes and permissible lengths of the 4L volume limit are given in table 19 and recommended limits in table 20. SANS 10252-1 part 7.7

Hot water demand to comply with 4.2.3 - part 7.7.1.1 SANS 10252-1:2010

Lengths and sizes of supply pipes to be in accordance with 7.7.1.2

The length of an unheated pipe [dead leg] conveying water direct from a fixed water heater to a terminal water fitting, or from the point of take-off from a hot water circulating system to a terminal water fitting, shall be such that the internal volume of that pipe does not exceed 4L
See table 19 and 20 - part 7.7.1.3

TABLE 19

type of pipe	nominal Ø mm	internal volume L/m	length of pipe containing 4L m
galvanized mild steel [medium]	15	0,196	20,4
	20	0,356	11,2
	25	0,581	6,9
	32	1,012	4,0
copper class O	15	0,150	26,7
	22	0,330	12,1
	28	0,547	7,3
	35	0,835	4,8
	42	1,232	3,2
	54	2,091	1,9

Table 20 - recommended maximum lengths of dead -leg piping from a storage heater , or from the point of take off from a hot water circulation system to a terminal water fitting

TABLE 20

internal Ø of pipe mm	maximum length of pipe m
up to 19	12
20 to 24	8
25 upwards	3

SANS 10400-XA:2021

hot water supply

TABLE 11 - minimum R-value of pipe insulation

1	2
internal Ø of pipe mm	minimum R-value m2.K/W
≤ 80	1.00
> 80	1.50

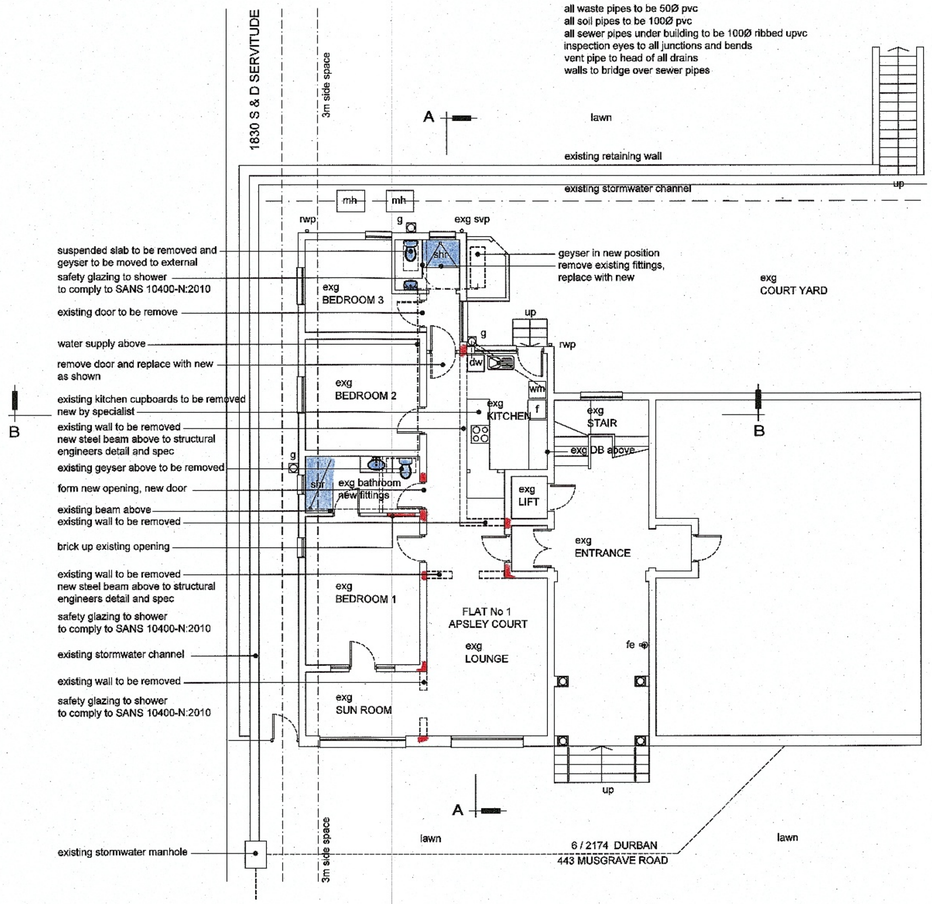
TABLE 10 - Dimensions for flat frameless glass shower enclosures, SANS 10400-N:2010 4.4.6

Toughened safety glass thickness	maximum size of pane m2	
	Doors and panels supporting doors	Fixed panels
6mm	1,5	2,00
8mm	1,5	3,00
10mm	2,1	4,00
This table does not apply to curved glass		

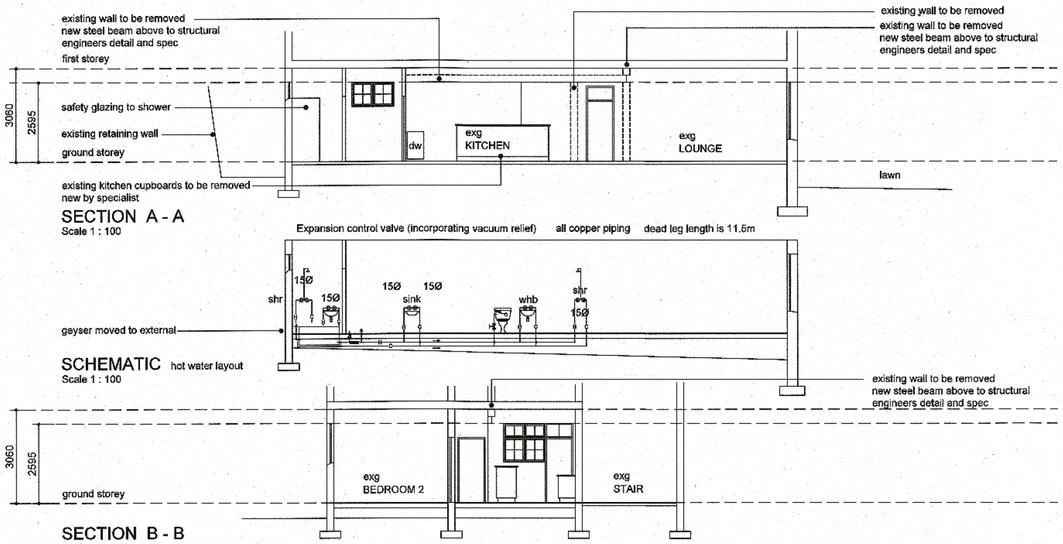
PLUMBING NOTES

all plumbing to comply to SANS 10400-P:2010

all waste pipes to be 50Ø pvc
all soil pipes to be 100Ø pvc
all sewer pipes under building to be 100Ø ribbed upvc
inspection eyes to all junctions and bends
vent pipe to head of all drains
walls to bridge over sewer pipes



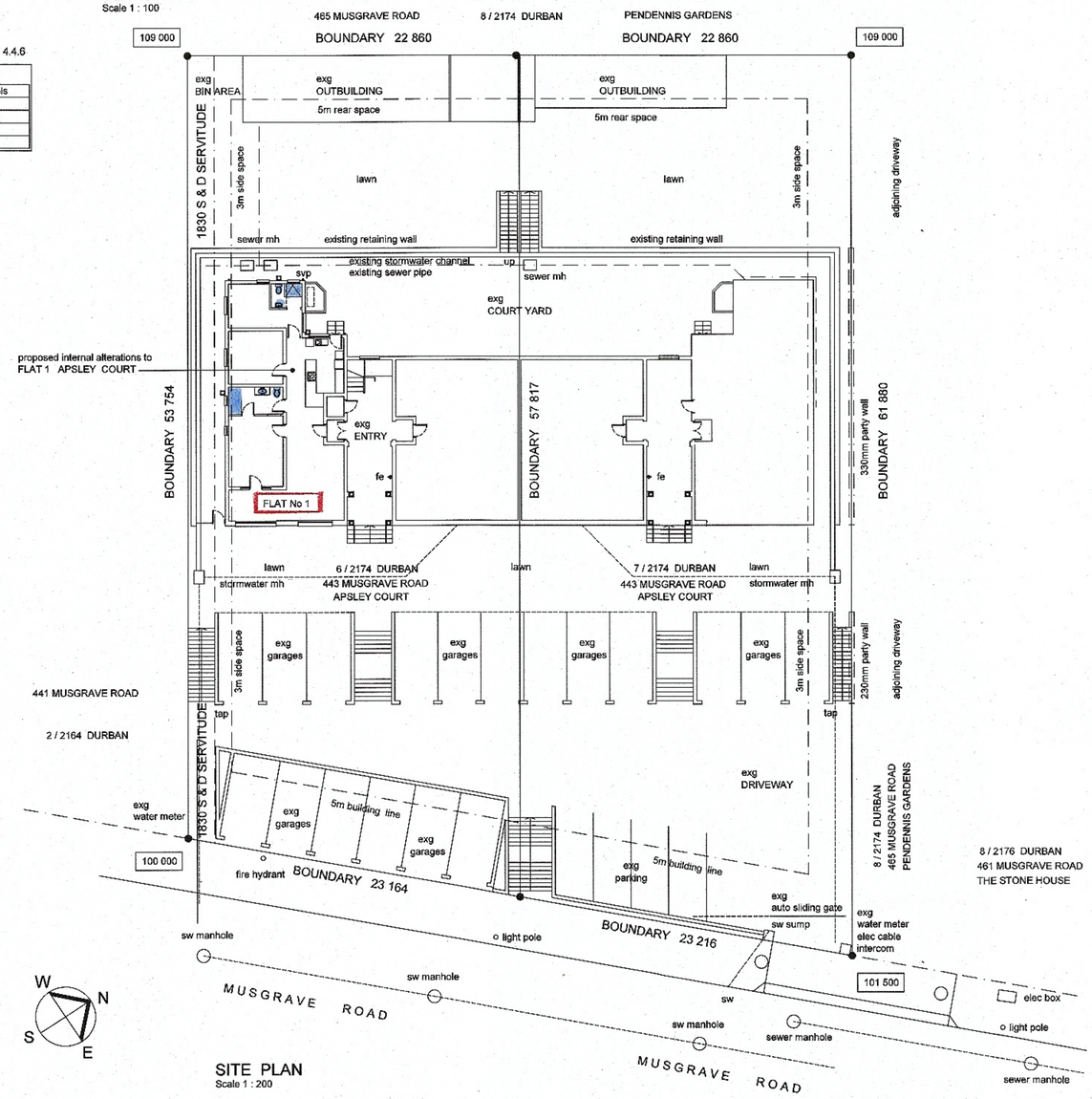
GROUND STOREY PLAN
Scale 1 : 100



SECTION A - A
Scale 1 : 100

SCHEMATIC hot water layout
Scale 1 : 100

SECTION B - B
Scale 1 : 100



SITE PLAN
Scale 1 : 200

GENERAL NOTES

1. This drawing is copyright.
2. Any discrepancies between these drawings and any work on site are to brought to the Architects attention immediately upon discovery and prior to ordering of any components.
3. All building work on this contract must comply in all respects with the South African National Standards 10400 and National Home Builders Registration Council standards as amended.
4. The drawing is not be scaled only figured dimensions are to be used.

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Cell number

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Owner's signature

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drawing

SITE PLAN
GROUND STOREY FLOOR PLAN
ELEVATIONS - SECTIONS

drawing status -

SUBMISSION DRAWING

project -

PROPOSED INTERNAL ALTERATIONS TO FLAT 1 - APSELY COURT
443 MUSGRAVE ROAD - BEREA
PORTION 6 OF LOT 2174 DURBAN AND
PORTION 7 OF LOT 2174 DURBAN FOR
T. HUSS

drawn/checked -	scale -	date prepared -
R.M	1 : 100	12.12.2022
project number -	drawing number -	revision -
HUSS	100	A