

COMPACTION OF SURFACES
All ground surfaces receiving concrete floors / slab should be compacted to 150mm layers 93% ModAASHTO density before casting concrete.

MORTAR
Mixed proportions to be:
1 cement : 3 sand
(i.e. 1 bag cement : 3 wheelbarrows (37 litres) sand)

BRICKWORK
Super-structure

1. All external walls / partitions to be of clay face brick to SABS quality.
2. All cubic partition walls to be 3 courses above door height.
3. All brickwork above door openings should have brickforce on every course at least on courses.

Air bricks: Standard 230X152mm terra-cotta vermin proofed louvered air grating to be used above all window openings.

2. Timber connections (Hurricane Clips) are required all intercessions between tim rafters and purlins.
3. Sisalation is to be applied interval under all roof surfaces.

PLUMBING

1. Double concrete wash trough to be used.
2. All wash troughs should be connected to the school's water supply system and the waste water should be piped to a soakaway.
3. The soakaway should be as per Engineer's detail and position to be determined.
4. Only 20mm and galvanised pipework should be used as connection from wall to discharge points.

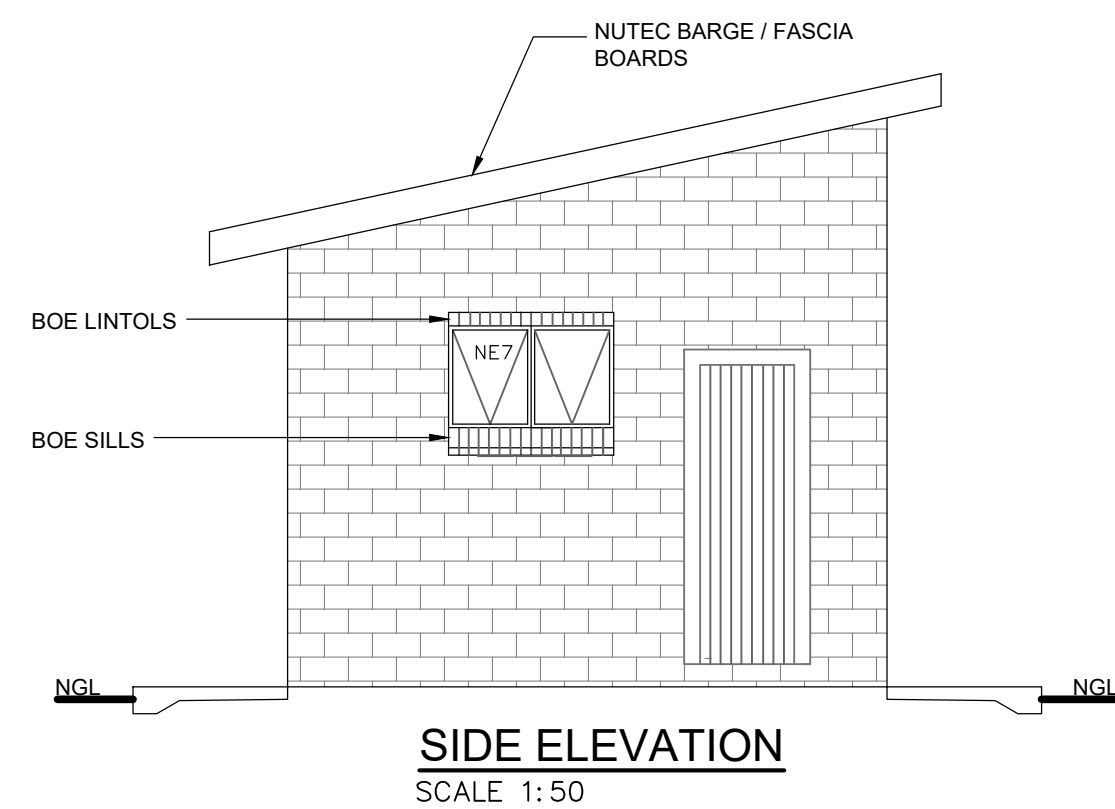
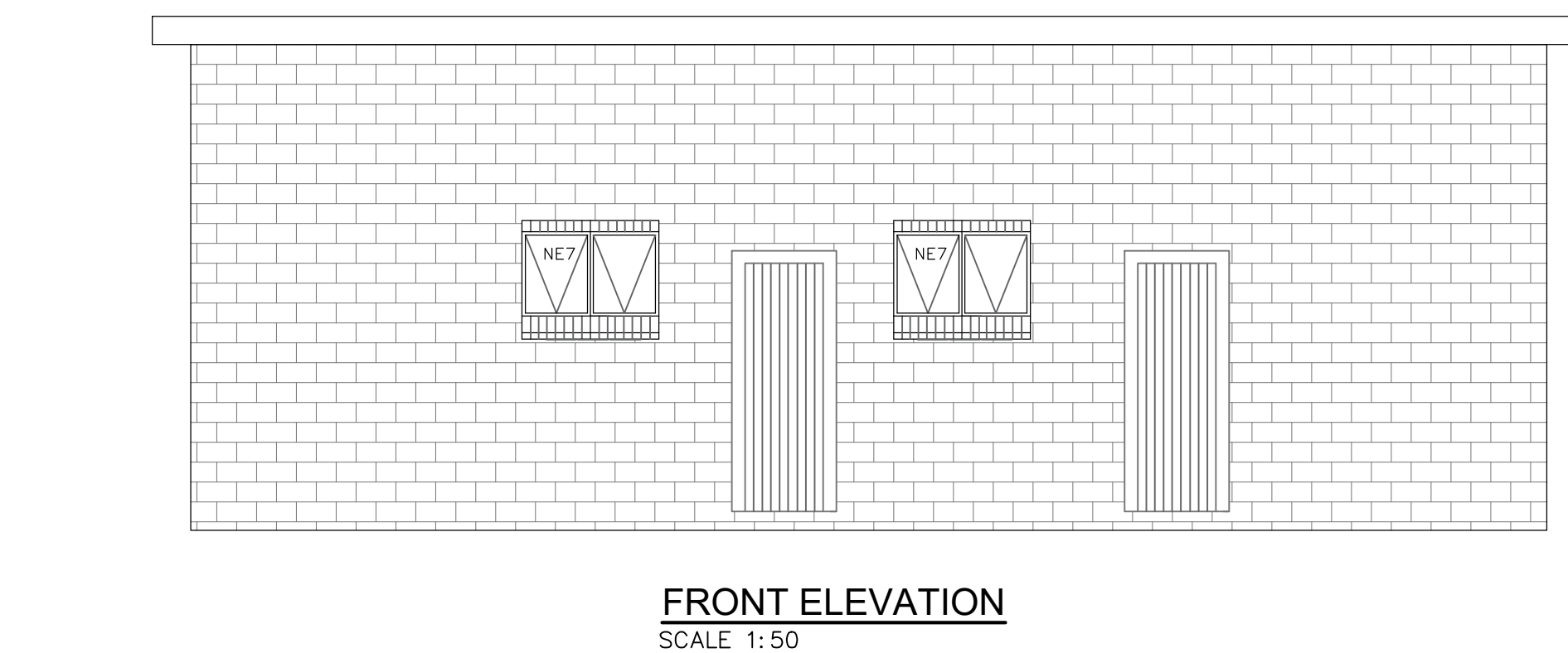
GLAZING

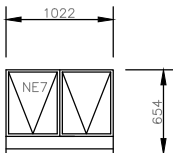
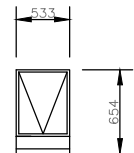
1. 6.28mm obscure safety glass

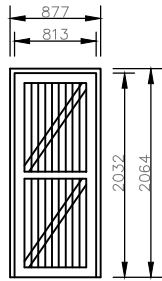
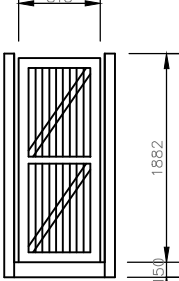
PAINTING

1. All paintwork to comply with SABS and PW371 specification.

2. All steel window and door frames including doors and fascia / barge boards to be discharged points.



WINDOW SCHEDULE		WINDOW SCHEDULE	
			
WINDOW NO.	N2	WINDOW NO.	N1
CATALOGUE	NE7	CATALOGUE	NE1
FRAME	1527 BROWN HIGH STANDARD STEEL WINDOW FRAME	FRAME	825 BROWN HIGH STANDARD STEEL WINDOW FRAME
FRAME FINISH	SPOT PRINING DEFECTS IN PRE-PRIME SURFACE WITH DMC CHROMATE PRIMER & APPLY ONE UNIVERSAL UNDER COAT & TWO COATS EPWFF GOLDEN BROWN GLOSS ENAMEL PAINT ON STEEL	FRAME FINISH	SPOT PRINING DEFECTS IN PRE-PRIME SURFACE WITH DMC CHROMATE PRIMER & APPLY ONE UNIVERSAL UNDER COAT & TWO COATS EPWFF GOLDEN BROWN GLOSS ENAMEL PAINT ON STEEL
GLAZING	6.39mm OBTURSCURE SAFETY GLASS	GLAZING	6.39mm OBTURSCURE SAFETY GLASS
NO. REQUIRED	4	NO. REQUIRED	8

ENTRANCE DOOR (4 No. OFF)		CUBICLE DOOR (4 No. OFF)	
			
FRAME TYPE	SINGLE REBATE STEEL FRAME TO 117.22mm (RIN, 511)	FRAME TYPE	SINGLE REBATE STEEL DOOR FRAME (RIN 520mm FRAME UPGRADE TO 120mm)
FRAME FINISH	PRIME AND PAINT UNDERCOAT AND 2co. FINISHING COATS IN GLOSS ENAMEL, COLOUR TBC	FRAME FINISH	PRIME AND PAINT UNDERCOAT AND 2 COATS- GLOSS ENAMEL - COLOUR TBC
DOOR LEAF	48mm FRAMED LEDGED AND GLAZED FRAME DOOR SIZE 813x2092mm INCLUDING EXTERNAL WEATHER STRIP	DOOR LEAF	48mm FRAMED LEDGED FRAMED DOOR SIZE 813x2092mm (DOOR RASE BY 150mm TO TOP OF FRAME)
LEAF FINISH	UNDER COAT AND MINIMUM 2 COATS GLOSS ENAMEL - COLOUR TBC	LEAF FINISH	UNDER COAT AND MINIMUM 2 COATS GLOSS ENAMEL - COLOUR TBC
LOOK	3 LEVER MORTICE LOCK SET	LOOK	TOILET INDICATOR LOCK
IRONING/KEY	150mm BRASS CARNIB LOCK	IRONING/KEY	150mm CHROME PLATED "Y" TYPE HANDLE 3 NO. 50.05 BRASS UNDES

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Designed:	Drawn
Checked:	Civil Engineer
Structural Engineer	Mechanical Engineer
Electrical Engineer	Co-ordination Engineer

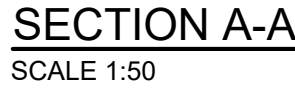
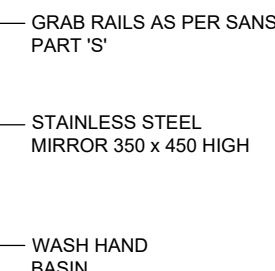
Approved : _____

Project manager Director

<p>Contract Number & Project Description :</p> <p>Contract Number: TMT-LPDE-2019/20-LPCL8-03</p> <p>CONSTRUCTION OF WATER & SANITATION INFRASTRUCTURE AT TSHIMEDZWA PRIMARY SCHOOL AND RALSON TSHIANNE SECONDARY SCHOOL IN LIMPOPO</p>
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Drawing Description :
TSHIMEDZWA PRIMARY SCHOOL: MALE AND FEMALE STUFF TOILETS: PLAN, SECTION AND ELEVATIONS

Scale :	DATE SEP 2022	
Consultant Project Number : SHCE - 066 Drawing Number : TMT-MT-SD54	A1	Revision : 



GENERAL

1. Use dimensions provided and do not scale drawing.
2. All work to comply with SANS, PW371 and SABS.
3. All dimensions, levels and positions to be verified on site prior to construction.
4. All concrete work to be as per Engineer's details and specifications.
5. All brickwork have brickforce at every 3rd course in superstructure.

COMPACTION OF SURFACES
All ground surfaces receiving concrete floors / slab should be compacted to 150mm layers 93% ModAASHTO density before casting concrete.

1. All concrete to be as per Engineer's details and specifications
2. 25 MPa strength concrete to be used throughout construction

Trial Concrete Mixes: Proportions

Concrete Strength at 28 Days 25Mpa:
1 : 2 : 2 (mix proportion by volume)
1 bag cement : 0.08m3 Sand : 0.09m3 Stone (Volume/Bag)
385 kg cement : 820 kg sand : 960 kg stone (Mass/m3)

3. All concrete aprons to be 1000mm wide..

MORTAR
Mixed proportions to be:
1 cement : 3 sand
(i.e.1 bag cement : 3 wheelbarrows (37 litres) sand)

BRICKWORK
Super-structure

1. All external walls / partitions to be of clay face brick to SABS quality.
2. All cubicle partition walls to be 3 courses above door height.
3. All brickwork above door openings should have brickwork on every course at least 3 courses.
4. Air bricks: Standard 230X152mm terra-cotts to be used loured air grating to prevent all window openings.

1. 0.6mm kliplock chromadek roof sheeting

1. All roof timbers to be machined SABS treated wood with three coats of approved wood preservative.

2. Timber connections (Hurricane Clips) are required all intercessions between timber rafters and purlins.
3. Sisalation is to be applied interval under all roof surfaces.

METALWORK

1. All metalwork should be primed before installation.
2. All steel window should have 6x20mm flat bar burglar proofing.
3. All external doors to be fitted with GS painted burglar gates approved by engineer.

PLUMBING

1. Double concrete wash trough to be used.
2. All wash troughs should be connected to the school's water supply system and the waste water should be piped to a soakaway.
3. The soakaway should be as per Engineer's detail and position to be determined on site.
4. Only 20mm and galvanised pipework should be used as connection from wall to the discharge points.

GLAZING
1. 6.28mm obscure safety glass

PAINTING

1. All paintwork to comply with SABS and PW371 specification.
2. All steel window and door frames including doors and fascia / barge boards to be discharge points.

WINDOW NO.	A2
CATALOGUE	NE7
FRAME	1022 x 654mm HIGH STANDARD STEEL WINDOW FRAME.
FRAME FINISH	SPOT PRINING DEFECTS IN PRE-PRIME SURFACE WITH ZINC CHROMATE PRIMER & APPLY ONE UNIVERSAL UNDER COAT & TWO COATS EPWP GOLDEN BROWN GLOSS ENAMEL PAINT ON STEEL
GLAZING	6.28mm OBSCURE SAFETY GLASS
NO. REQUIRED	3

WINDOW NO.	N1
CATALOGUE	NE1
FRAME	533 x 654mm HIGH STANDARD STEEL WINDOW FRAME
FRAME FINISH	SPOT PRINING DEFECTS IN PRE-PRIME SURFACE WITH ZINC CHROMATE PRIMER & APPLY ONE UNIVERSAL UNDER COAT & TWO COATS EPWP GOLDEN BROWN GLOSS ENAMEL PAINT ON STEEL
GLAZING	6.28mm OBSCURE SAFETY GLASS
NO. REQUIRED	8

ENTRANCE DOOR (20" OFF)	
FRAME TYPE	SINGLE REBATE STEEL FRAME TO FIT 2200x800 (21)
FRAME FINISH	PRIME AND PAINT UNDERCOAT AND 2x POWDER COATS IN RALUS EXTERIOR COLOUR (18)
DOOR LEAF	4mm FRAMED GLASS AND BRANDED DOOR ROSE 81x503mm INCLUDING EXTERNAL WEATHER BAR
LEAF FINISH	UNDER COAT AND MINIMUM 2 COATS GLOSS ENAMEL - COLOUR TRC
LOCK	3 LEVER MORTICE LOCK SET
BRONZING	50mm BRASS CABIN LOCK SET

CUBICLE DOOR (7 No. OFF)	
FRAME TYPE	SINGLE REBATE STEEL DOOR FRAME - 60% EMBLEM FRAME (UNDERST 10 TO 10mm)
FRAME FINISH	FRAME AND PAINT (ELECTROCAT AND 2 COATS CUBICLE FINISH COLOUR FIN)
DOOR LEAF	40mm FRAMED GLASS EMBLEMED DOOR SIZE 814x2032mm (DOOR RAISE BY 50mm TO TOP OF FRAME)
LEAF FINISH	UNDER COAT AND MINIMUM 2 COATS GLOSS EMBLEM - COLOUR TECH
LOCK	TOILET INDICATOR LOCK
IRREGULARITY	100mm CHROME PLATED (TOP) HANDLE X 50mm CHROME COLOUR



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Designed:	Drawn
Checked:	Civil Engineer
Structural Engineer	Mechanical Engineer
Electrical Engineer	Co-ordination Engineer

Approved :


Project Manager	
Contract Number & Project Description :	

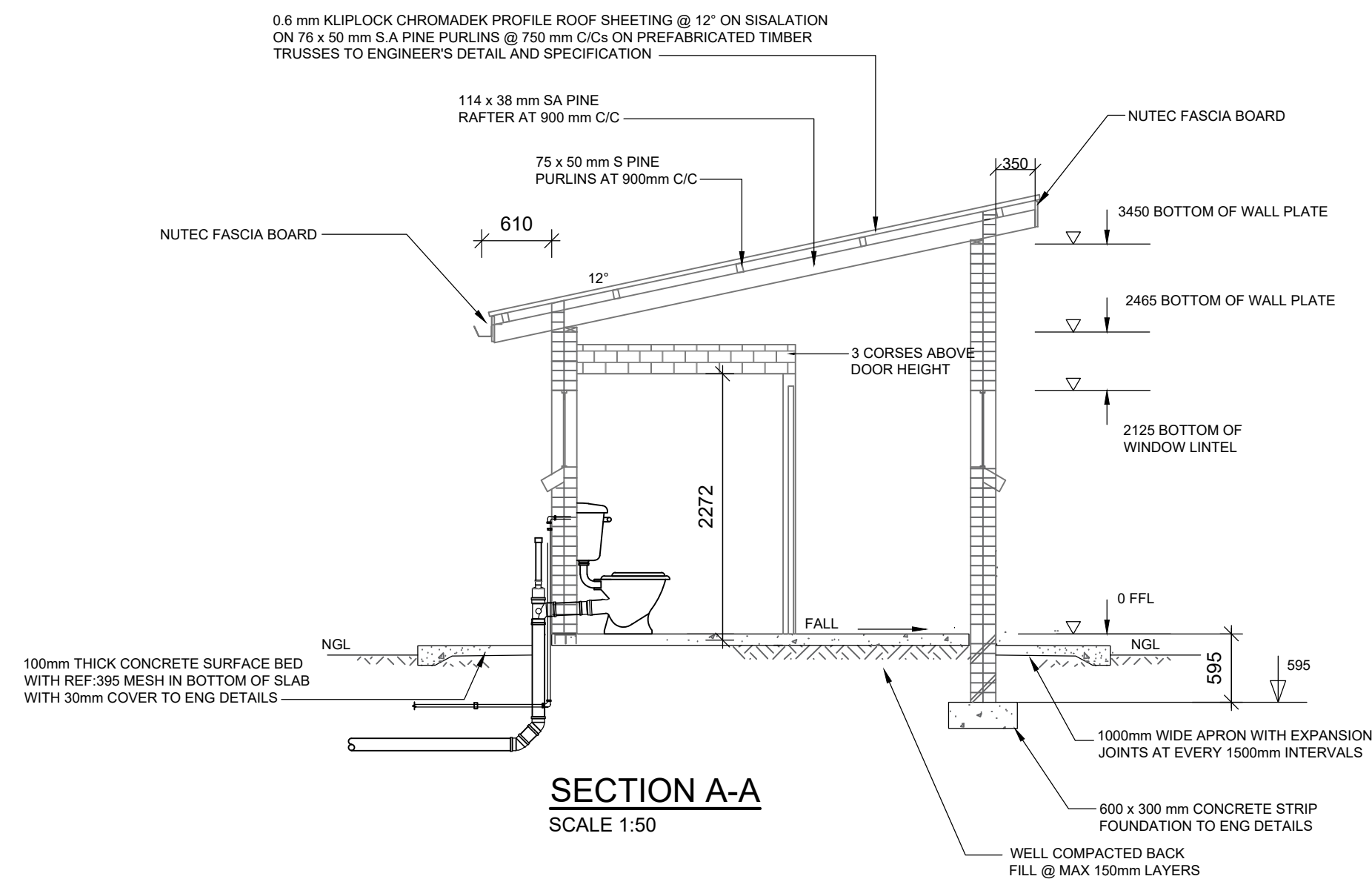
Contract Number: TMT-LPDE-2019/20-LPCL8-03

CONSTRUCTION OF WATER & SANITATION
INFRASTRUCTURE AT TSHIMEDZWA PRIMARY SCHOOL
AND RALSON TSHIANNE SECONDARY SCHOOL IN
LIMPOPO

Drawing Description :

TSHIMEDZWA PRIMARY SCHOOL: FEMALE TOILETS:
PLAN, SECTION AND ELEVATIONS

Scale :	DATE	SEP 2022
Consultant Project Number : SHCE - 066 Drawing Number : TMT-MT-FD8	A1	Revision : 



GENERAL

1. Use dimensions provided and do not scale drawing.
2. All work to comply with SANS, PW371 and SABS.
3. All dimensions, levels and positions to be verified on site prior to construction.
4. All concrete work to be as per Engineer's details and specifications.
5. All brickwork have brickforce at every 3rd course in superstructure.
superstructure.

All ground surfaces receiving concrete floors / slab should be compacted to 150mm layers 93% ModAASHTO density before casting concrete.

1. All concrete to be as per Engineer's details and specifications

Trial Concrete Mixes: Proportions

MORTAR
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Super-structure

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1. 0.6mm kliplock chromadek roof sheeting

ROOF TIMBER / CEILING

1. All roof timbers to be machined SABS treated wood with three coats of approved wood preservative.

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METALWORK

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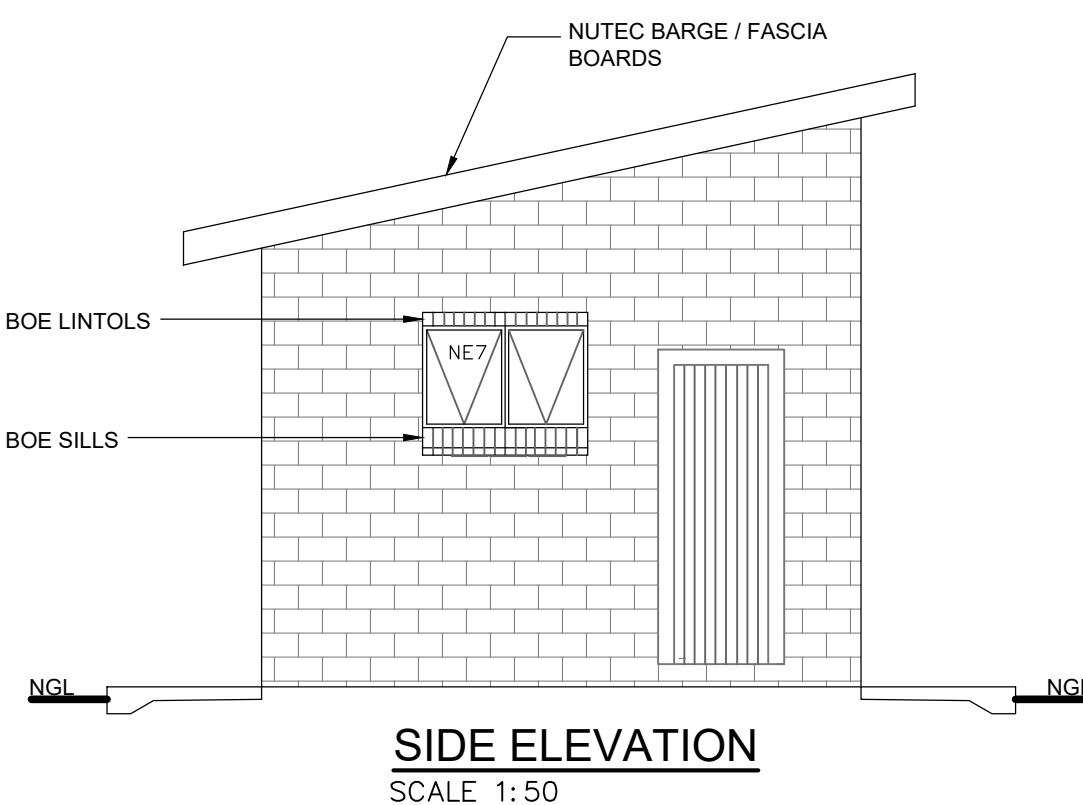
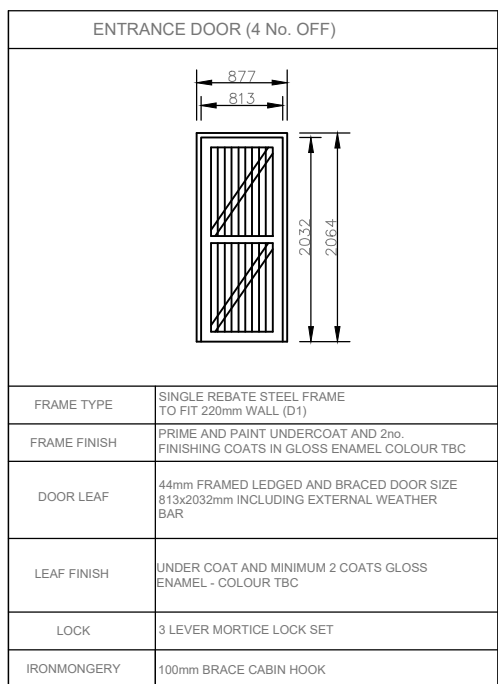
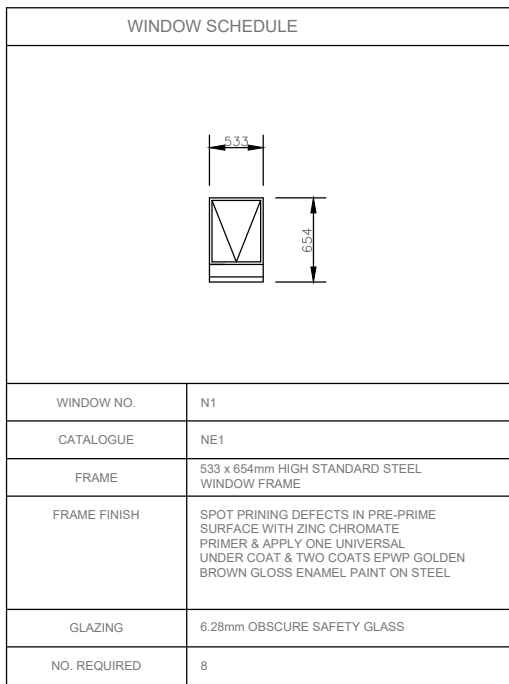
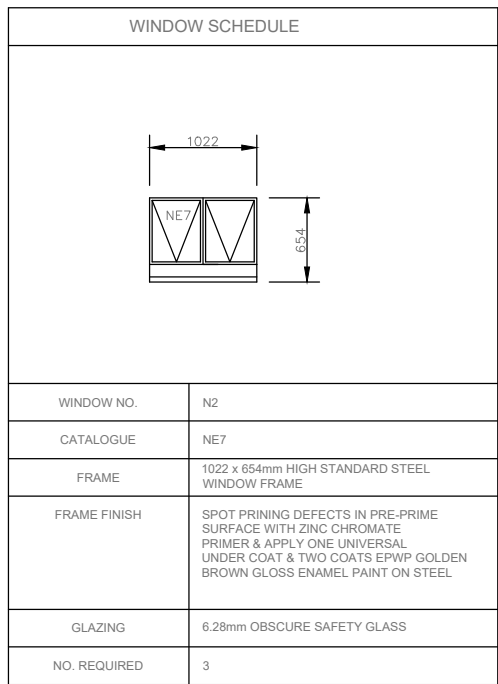
GLAZING

1. 6.28mm obscure safety glass

PAINTING

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LEGEND:	
○	PIPE MARKER
●	ELECTRIC POLE
□	ELECTRIC BOX
⌋	LIGHT POLE
TRF	TRANSFORMER
⊗	ROUNDING EYE
⊙	STAY
●	BOREHOLE
●	TAP
SB	SIGN BOARD
⊙	JOJO - TANK
○	TREE



SITE INFORMATION	
REV.	DESCRIPTION
1	FENCE HEIGHT 1.8m
2	DRILLING OF NEW BOREHOLE AND REFURBISHMENT OF EXITING BOREHOLE
3	DEMOLISHING OF EXISTING TOILETS SEATS
4	NEW INTERLOCKING PAVING BLOCKS

TSHIMEDZWA PRIMARY SCHOOL			AREA
SCHEDULE OF ROOMS			
7 SEATS	FEMALE	FD8&MD4	
1 SEAT	DISABLE FEMALE		
3 SEATS	MALE		
1 SEAT	DISABLE MALE		
5 URINALS	MALE		
2 SEATS	FEMALE	GRD4	
1 SEAT	DISABLE FEMALE		
1 SEAT	MALE		
1 SEAT	DISABLE MALE		
2 URINALS	MALE		
3 SEATS	FEMALE	SD5	
1 SEAT	DISABLE FEMALE		
1 SEAT	MALE		
1 SEAT	DISABLE MALE		
2 URINALS	MALE		

Platform Coordinates and Levels			
Names	X	Y	Z
A	59389.8887	2536115.7720	756,5
B	59376.5387	2536115.7720	756,5
C	59376.5387	2536122.6470	756,5
D	59389.8483	2536122.6885	756,5
E	59429.1921	2536087.8171	745,5
F	59416.9700	2536086.5037	745,6
G	59416.2043	2536093.3359	745,6
H	59428.4422	2536094.7481	745,6
J	59475.2334	2536094.6154	756,5
K	59462.2984	2536094.6154	756,5
L	59462.2642	2536101.4657	756,5
M	59475.2334	2536101.4904	756,5
N	59483.8312	2536115.3780	757,5
O	59472.5491	2536115.4714	757,5
P	59472.4929	2536121.3478	757,5
Q	59483.8541	2536121.3464	757,5

Benchmarks' Coordinates and Levels			
	X	Y	Z
BM1	59447.105	2536079.788	754.024
BM2	59366.816	2536131.962	757.735
BM3	59395.986	2536089.926	752.944
BM4	59483.544	2536166.951	763.961
TSH	59437.493	2536114.952	756.895

TENDER

REV.	DESCRIPTION	DATE	APPR'D
DRG. No.	REFERENCE DRAWING		

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

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Designed:	Drawn
Checked:	Civil Engineer
Structural Engineer	Mechanical Engineer
Electrical Engineer	Co-ordination Engineer
Approved :	
Project manager	Director
Contract Number & Project Description : Contract Number:TMT-LPDE-2019/20-LPCL8-03 CONSTRUCTION OF WATER & SANITATION INFRASTRUCTURE AT TSHIMEDZWA PRIMARY SCHOOL AND RALSON TSHIANNE SECONDARY SCHOOL	
Drawing Description : TSHIMEDZWA PRIMARY SCHOOL PLAN	
Scale : NOT TO SCALE	DATE SEP 2022
Consultant Project Number : SHCE - 066 Drawing Number : TMT-MT-MPSP	Revision : A1