

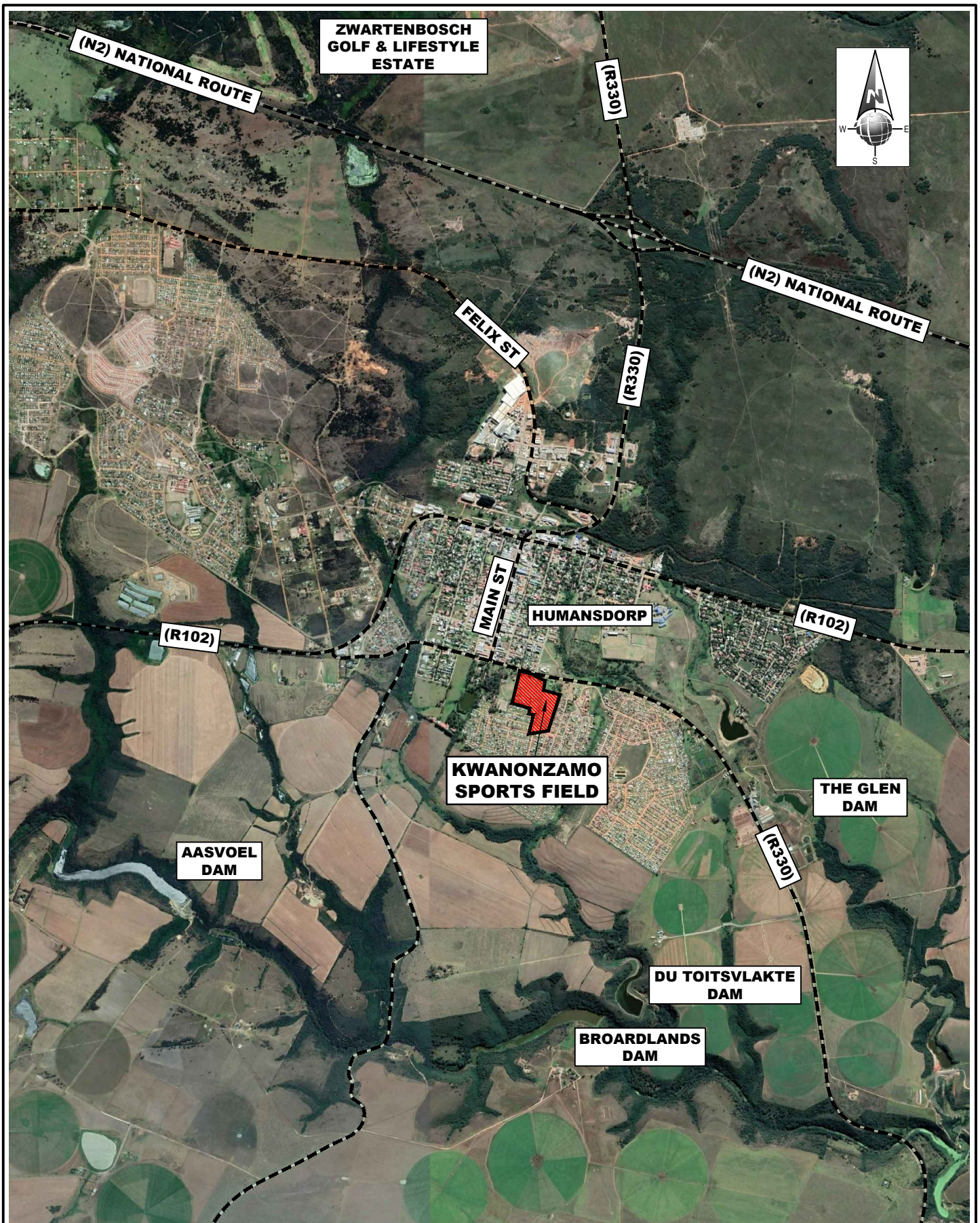


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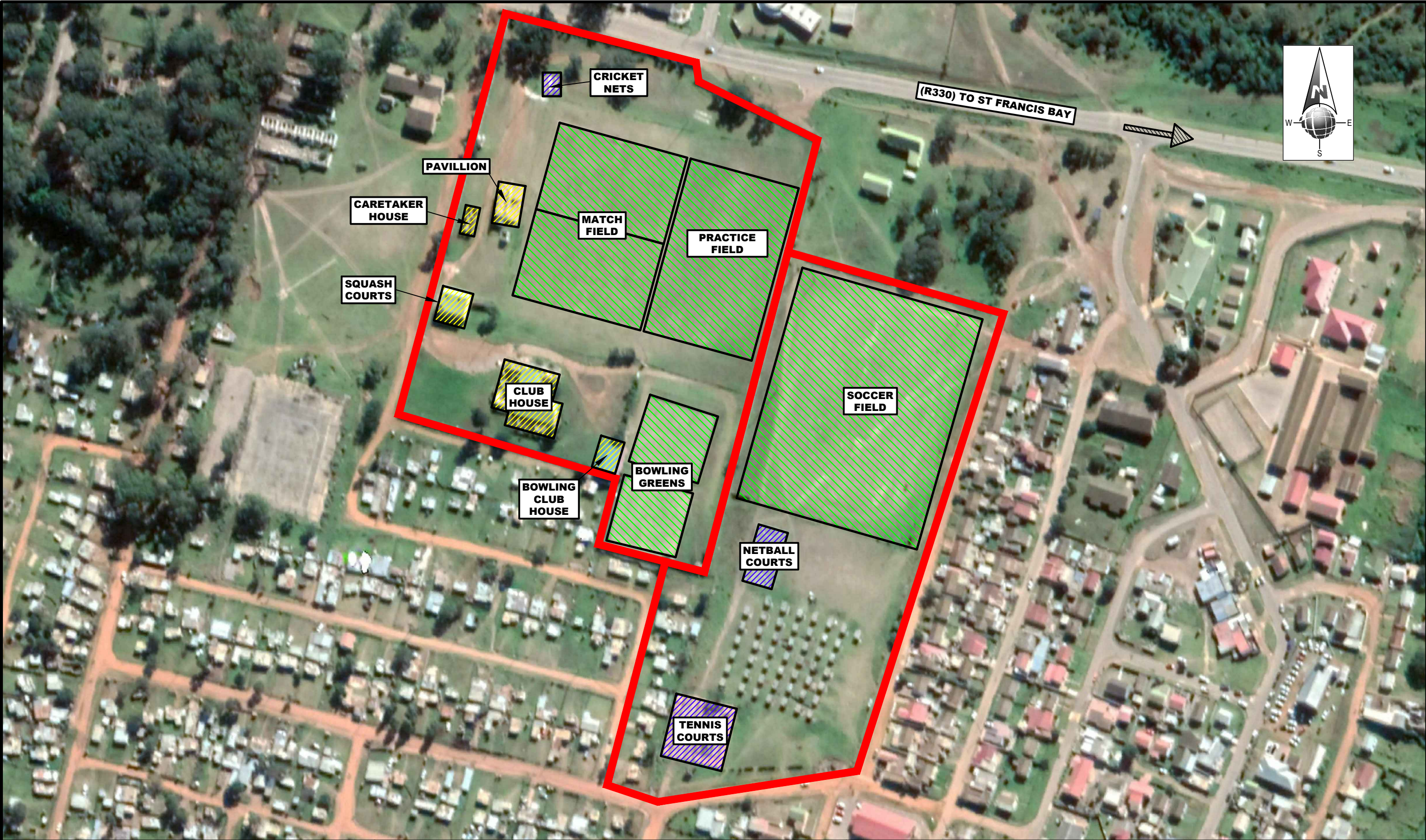
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1		INTERNAL REVIEW	FEB 20
REV.	BY	DESCRIPTION	DATE
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DESIGNED	PV	DRAWN	SM	APPROVED PROJECT MANAGER DIRECTOR
CHECKED	GC	PROCESS ENGINEER	N/A	
CIVIL ENGINEER	LS	STRUCTURAL ENGINEER	N/A	
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A	
MECHANICAL ENGINEER	N/A			

SCALE	NOT TO SCALE
DATE	JAN 2020

KOUGA LOCAL MUNICIPALITY UPGRADING OF KWANONZAMO FACILITY IN HUMANSDORP	
SCHEMATIC LAYOUT	
DRAWING NUMBER	8011/004/GTH/002
A3	REVISION



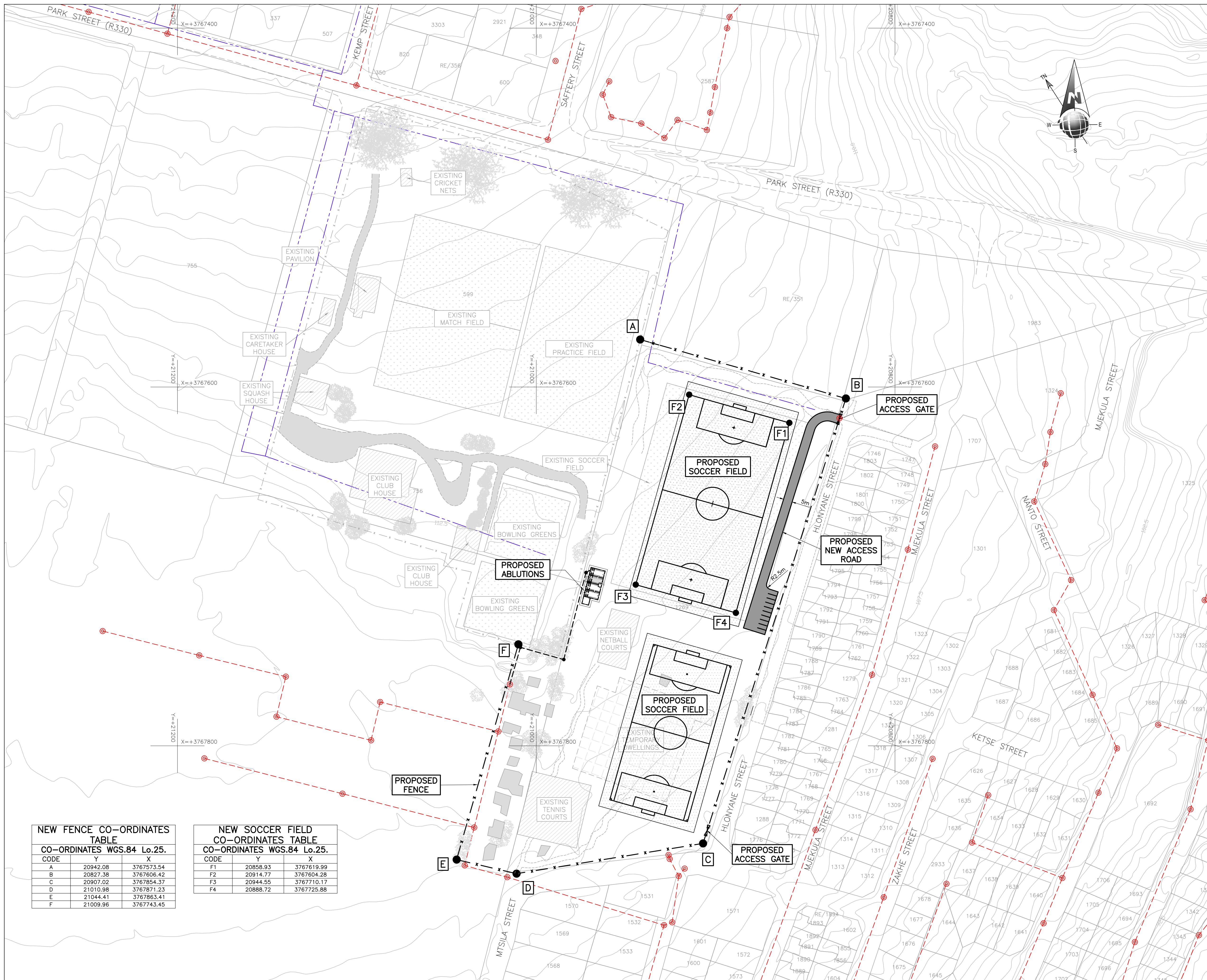
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GLOBAL ENGINEERING SOLUTIONS

P.O. BOX 27158,
GREENACRES, P.E, 6057.
BLOCK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za





NEW FENCE CO-ORDINATES TABLE		
CO-ORDINATES WGS.84 Lo.25.		
CODE	Y	X
A	20942.08	3767573.54
B	20827.38	3767606.42
C	20907.02	3767854.37
D	21010.98	3767871.23
E	21044.41	3767863.41
F	21009.96	3767743.45

NEW SOCCER FIELD CO-ORDINATES TABLE		
CO-ORDINATES WGS.84 Lo.25.		
CODE	Y	X
F1	20858.93	3767619.99
F2	20914.77	3767604.28
F3	20944.55	3767710.17
F4	20888.72	3767725.88

LEGEND
EXISTING
--- EXISTING SEWER LINE
--- EXISTING SEWER MANHOLE
--- EXISTING WATER LINE
--- EXISTING FENCE
--- EXISTING BUILDING/STRUCTURE
--- EXISTING GRAVEL ROAD
--- EXISTING TREE/BUSHES
--- EXISTING FIELDS
--- EXISTING HOUSE/SHACKS

PROPOSED
--- PROPOSED SEWER LINE
--- PROPOSED SEWER MANHOLE
--- PROPOSED WATER LINE
--- PROPOSED FENCE
--- PROPOSED ACCESS ROAD

T1	ISSUED FOR TENDER PURPOSES ONLY	AUG 20
1	INTERNAL REVIEW	FEB 20
REV.	BY	DESCRIPTION
		DATE

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BLOK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

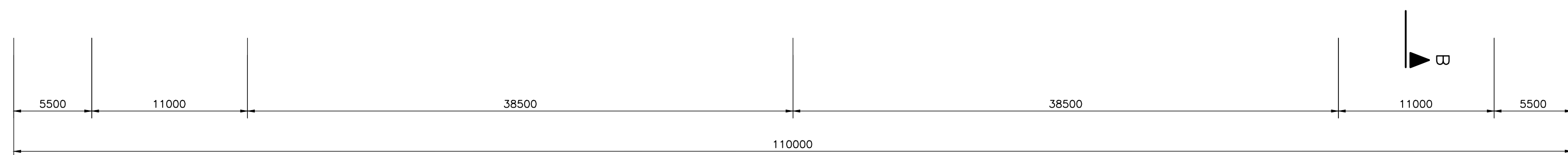
TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za

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INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP
OVERALL LAYOUT

SCALE	1 : 1000	DATE	20/02/2020
DRAWING NUMBER	8011/004/GTH/003	REVISION	T1

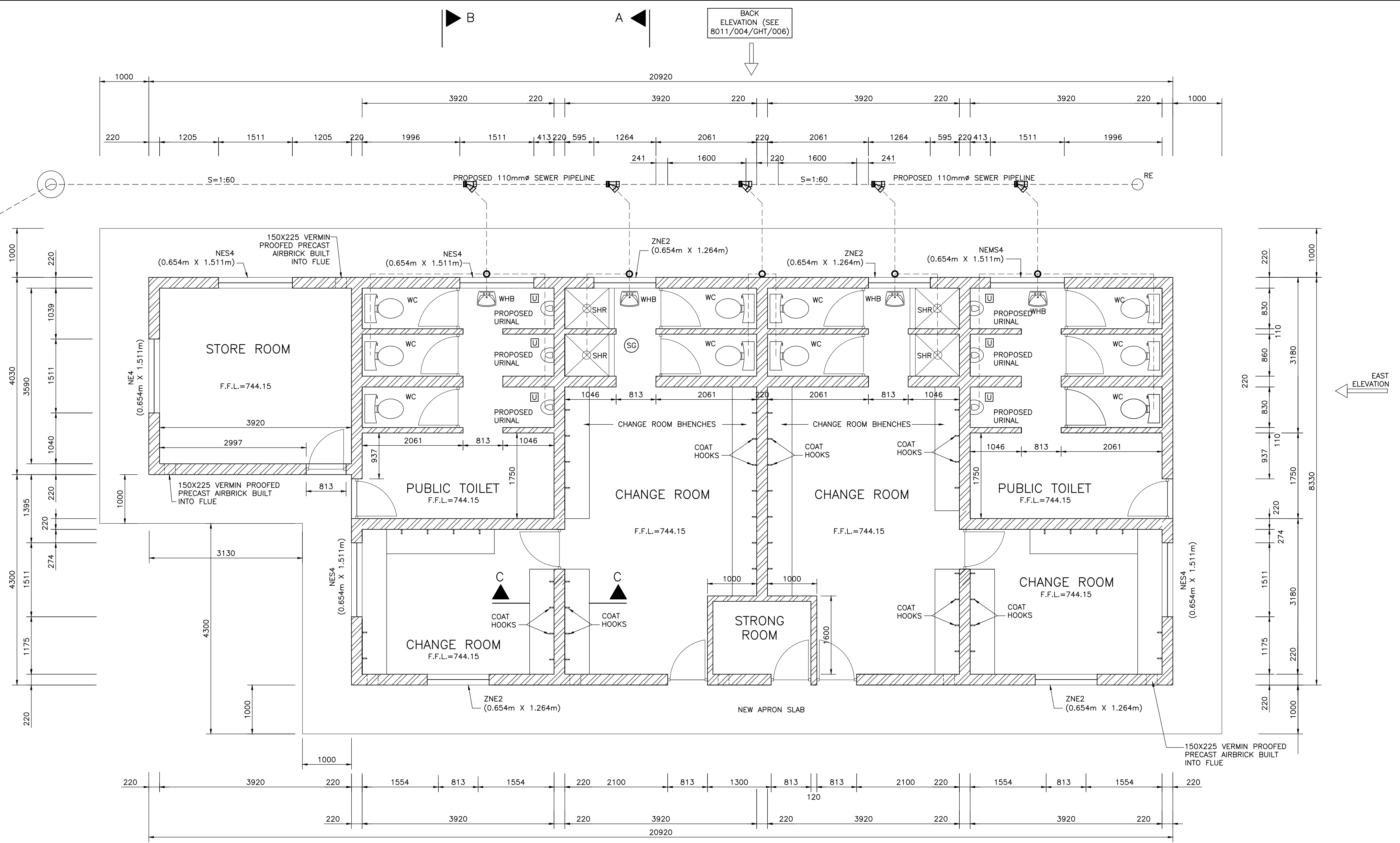


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CHECKED	G.C	PROCESS ENGINEER	N/A
CIVIL ENGINEER	L.S	STRUCTURAL ENGINEER	N/A
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP
LAYOUT PLAN - SOCCER FIELD

SCALE AS SHOWN		DATE 20/02/2020	
DRAWING NUMBER 8011/004/GTH/004		A1	REVISION T1



LEGEND	
	200 LOW PRESSURE SOLAR GEYSER (CLEAN HEAT OR SIMILAR APPROVAL) MOUNTED ON ROOF
	TOILET
	SHOWER
	WASH HAND BASIN
	URINAL
	HAND BASIN
	BRICK-UP EXISTING OPENING
	BREAK OUT OPENING
	EXISTING WALLS
	PROPOSED WALLS

NOTE: SEE NOTES ON DWG 8011/004/GHT/008

T1		ISSUED FOR TENDER PURPOSES ONLY	AUG 20
1		INTERNAL REVIEW	FEB 20
REV.	BY	DESCRIPTION	DATE

008	CHANGE ROOM SURFACE BEDS LAYOUT
007	CHANGE ROOM SECTIONS
006	CHANGE ROOM - ELEVATIONS
DRG. No.	REFERENCE DRAWING
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P.O. BOX 27158,
GREENACRES, P.E. 6057,
BLOCK 1, FIRST FLOOR,
GREENACRES OFFICE PARK,
2nd AVENUE, NEWTON PARK,
PORT ELIZABETH, 6045, RSA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za

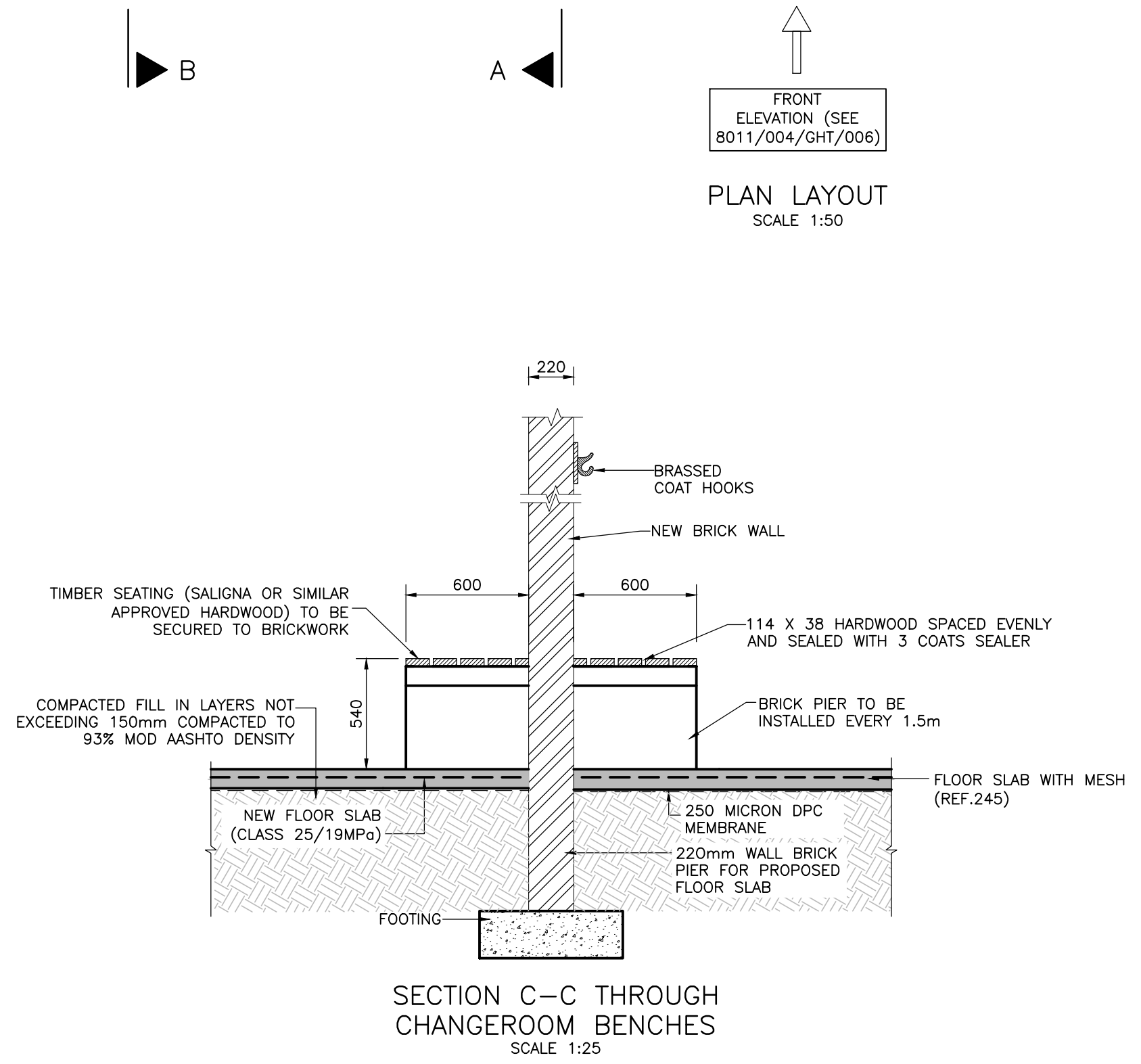
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CHECKED	G.C	PROCESS ENGINEER	N/A
CIVIL ENGINEER	LS	STRUCTURAL ENGINEER	N/A
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP

CHANGE ROOM - PLAN LAYOUT

SCALE	1:500	DATE	FEB 20
DRAWING NUMBER	8011/004/GTH/005	REVISION	A1
			T1

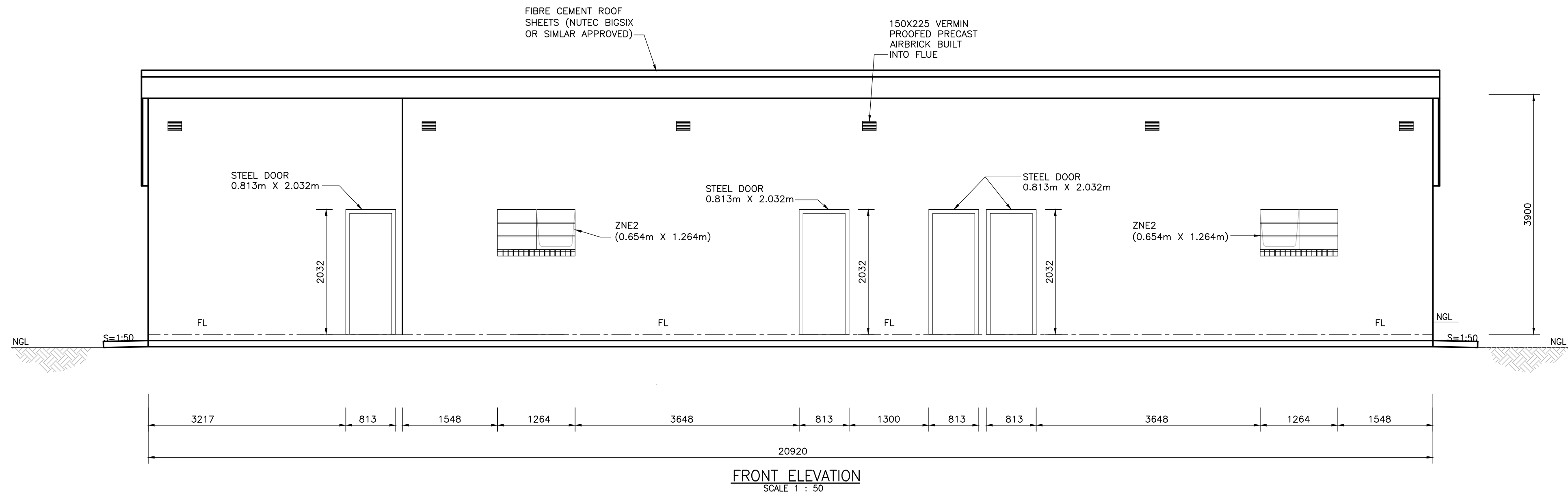


NOTE:
FINAL FLOOR LEVEL TO BE
CONFIRMED ON SITE
BEFORE COMMENCING WITH
CONSTRUCTION WORK.

NOTE
1. REFER TO DWG
8011/004/GHT/008 FOR
SCHEDULE OF FIXTURES AND
FINISHES.

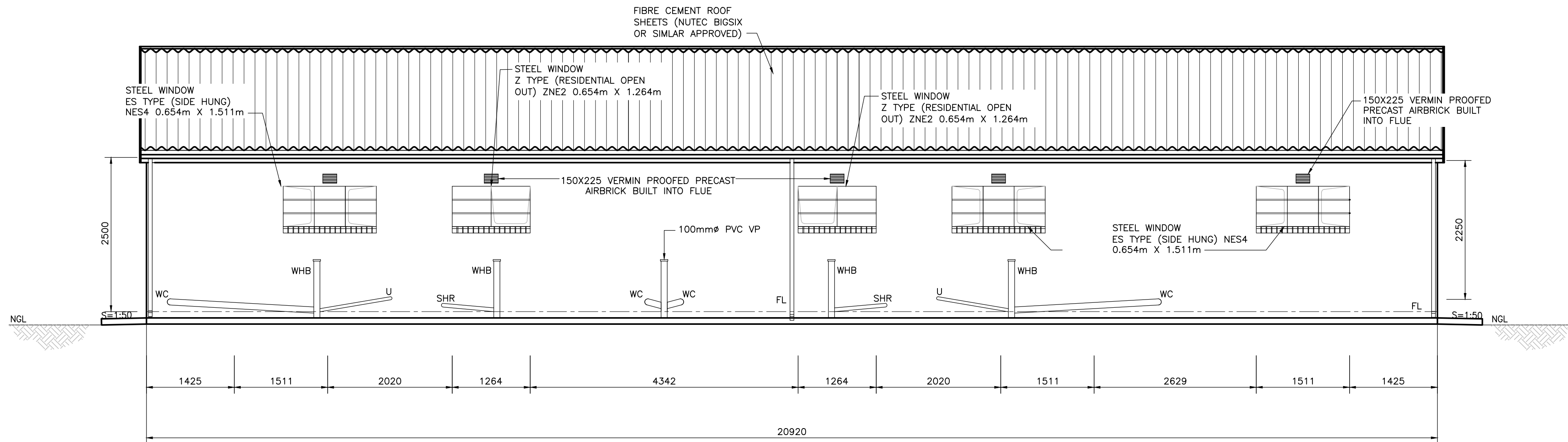
PLAN LAYOUT
SCALE 1:50

SECTION C-C THROUGH
CHANGEROOM BENCHES
SCALE 1:25



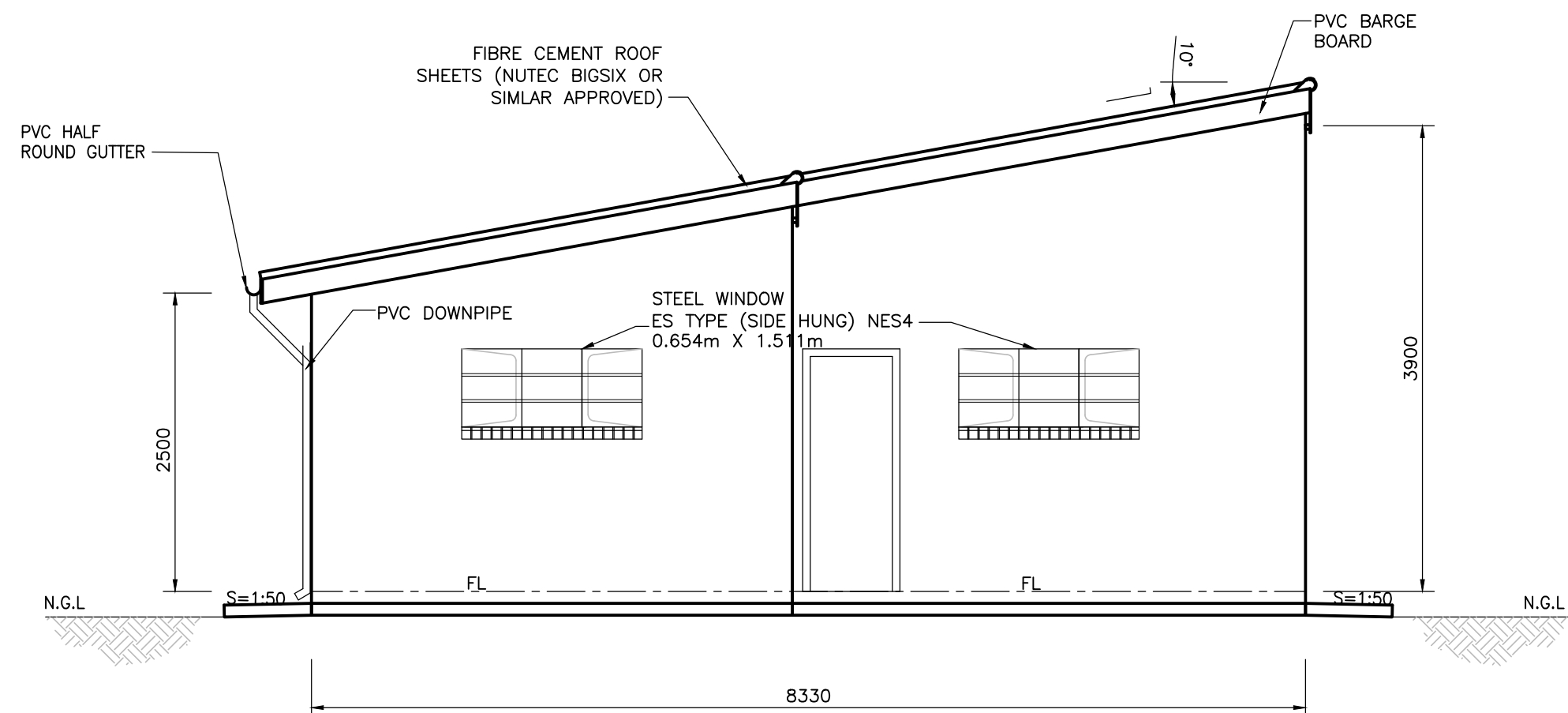
FRONT ELEVATION
SCALE 1 : 50

NOTE:
REFER TO DWG 8011/004/GHT/008
FOR SCHEDULE OF FIXTURES AND
FINISHES.

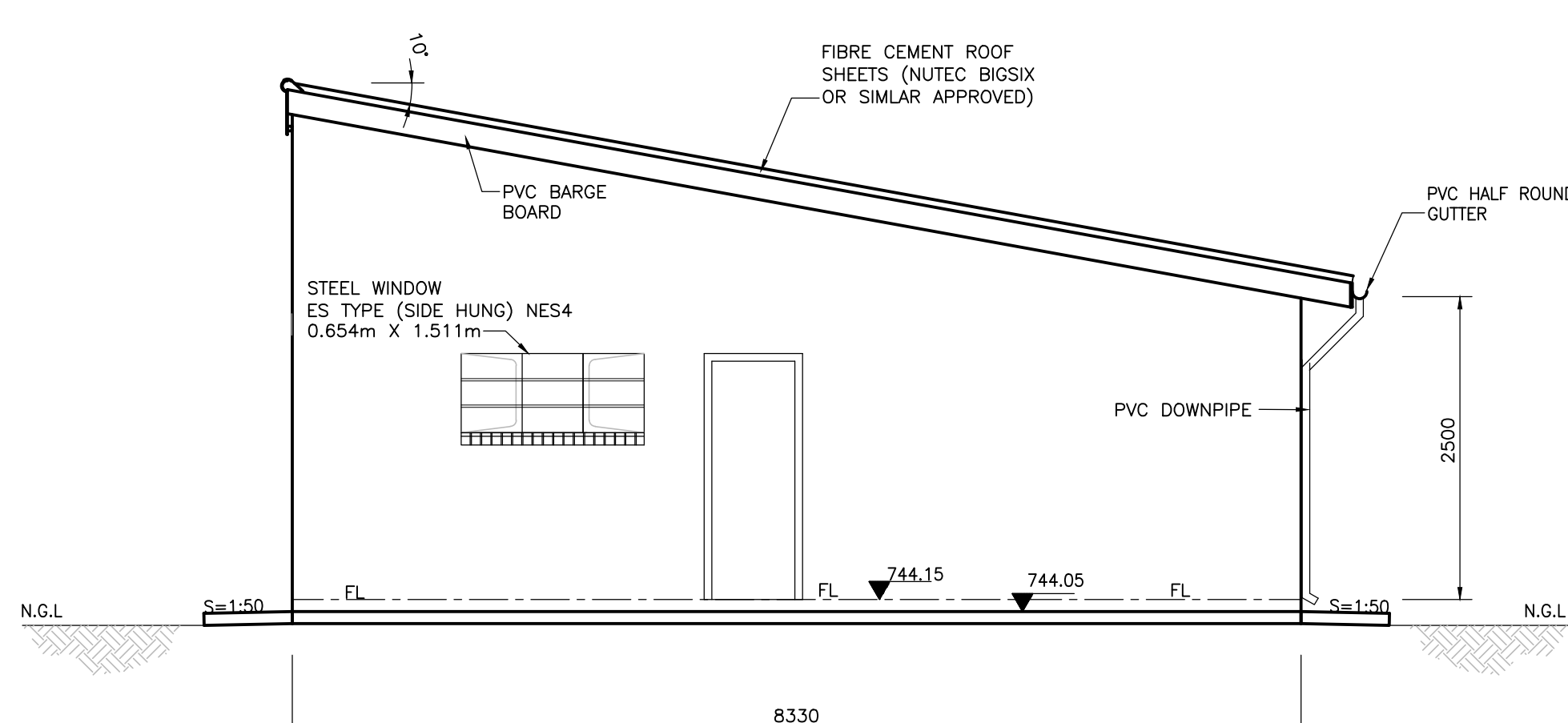


BACK ELEVATION
SCALE 1 : 50

NOTE:
20mm X 5mm HOT DIPPED
GALVANIZED FLAT BAR WELDED TO
STEEL WINDOW @ 200mm SPACING
BEFORE INSTALLATION. WELD SPOT TO
BE PRIMED & PAINTED WITH COLD
GALV PAINT (ZINCIFIXDEK 90 OR
SIMILAR APPROVED)



WEST ELEVATION
SCALE 1 : 50



EAST ELEVATION
SCALE 1 : 50

LEGEND

	200x LOW PRESSURE SOLAR GEYSER (CLEAN HEAT OR SIMILAR APPROVAL) MOUNTED ON ROOF
	TOILET
	SHOWER
	WASH HAND BASIN
	URINAL
	HAND BASIN
	BRICK-UP EXISTING OPENING
	BREAK OUT OPENING

NOTE: SEE NOTES ON DWG 8011/004/GHT/008

REV.	BY	DESCRIPTION	DATE
T1		ISSUED FOR TENDER PURPOSES ONLY	AUG 20
1		INTERNAL REVIEW	FEB 20

008	CHANGE ROOM SURFACE BEDS LAYOUT
007	CHANGE ROOM SECTIONS
005	CHANGE ROOM - PLAN LAYOUT
DRG. No.	REFERENCE DRAWING
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P.O. BOX 27158,
GREENACRES, P.E. 6057,
BLOCK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za



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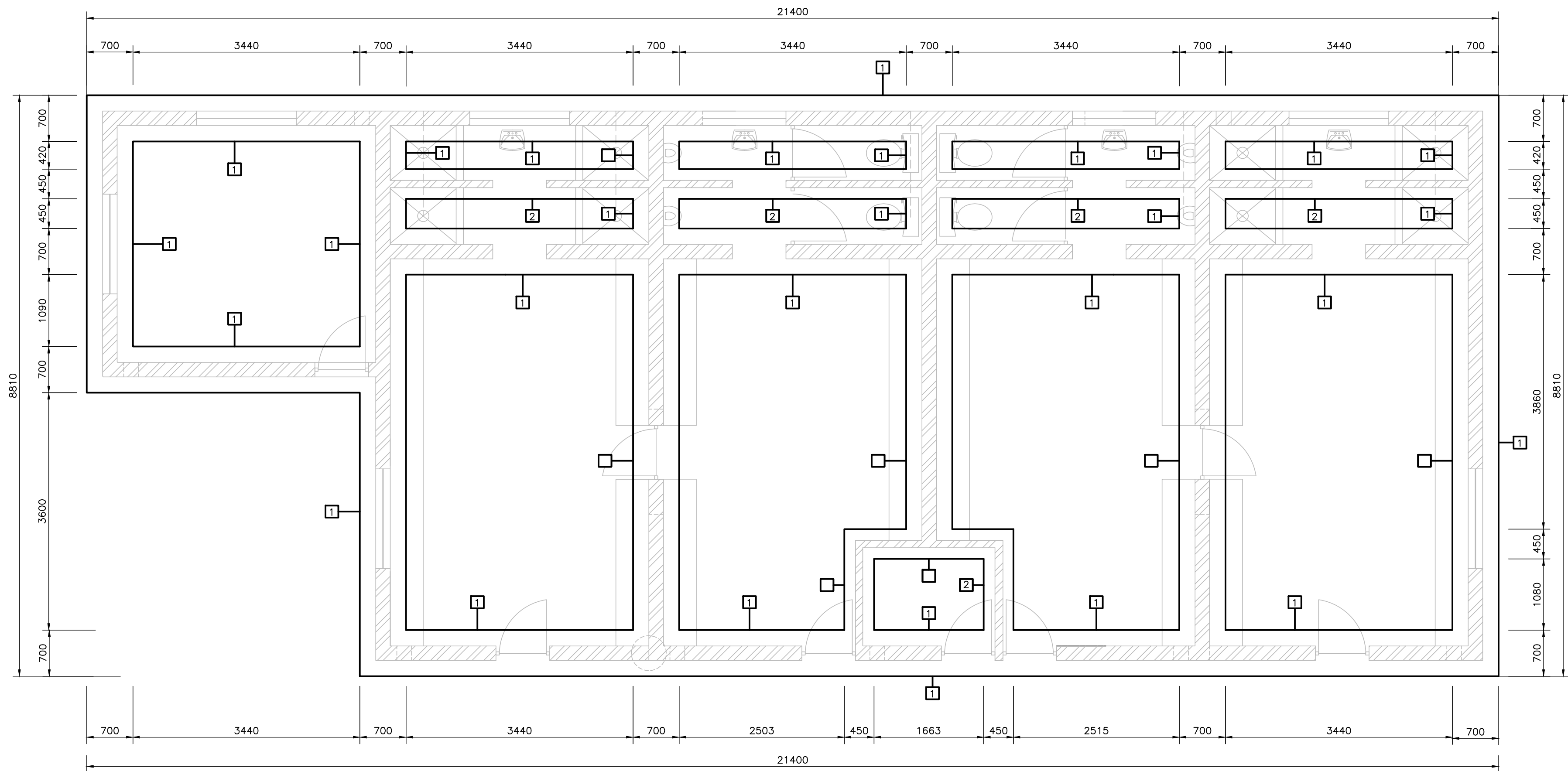
APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY

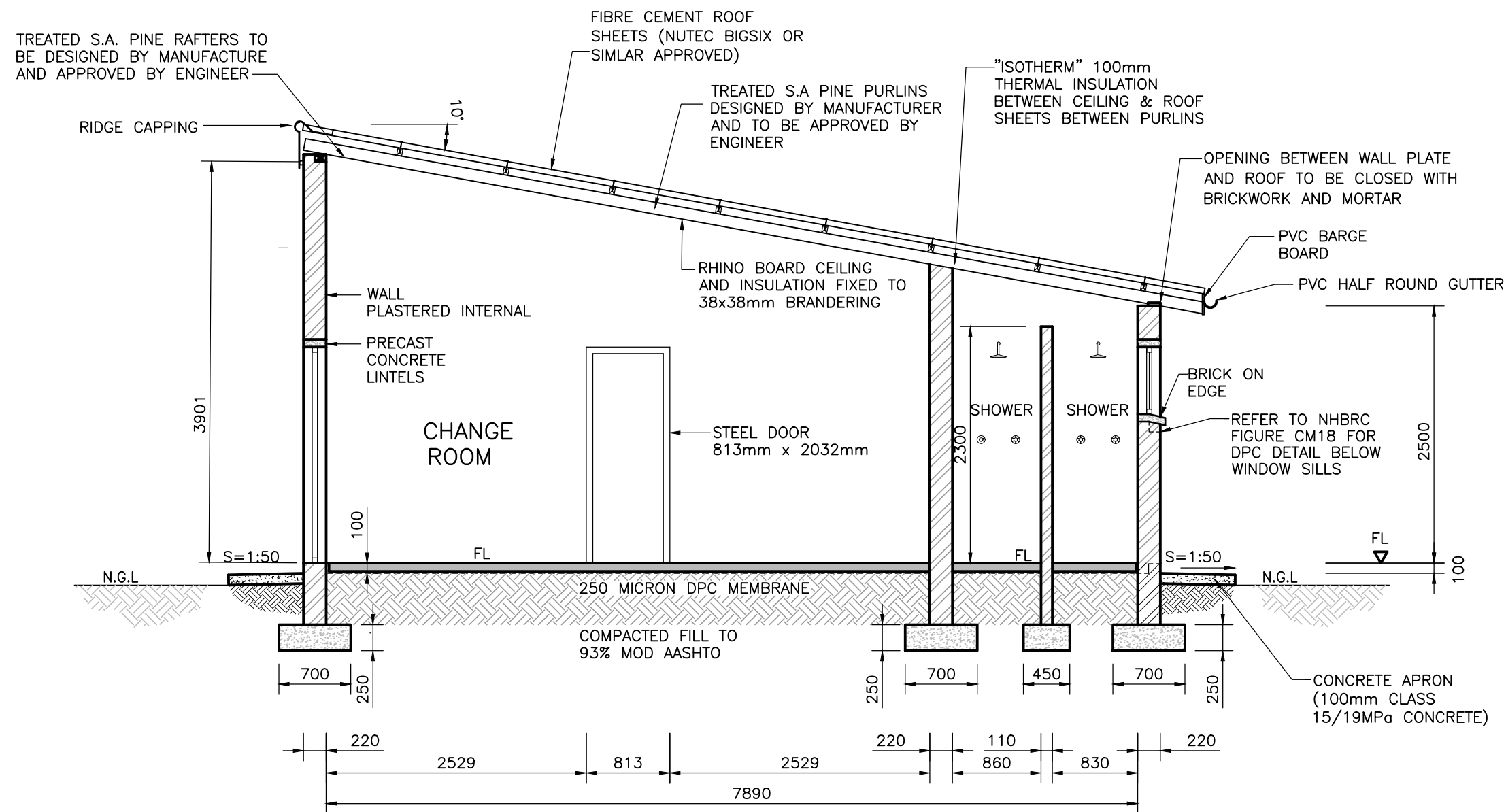
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP

CHANGE ROOM - ELEVATIONS

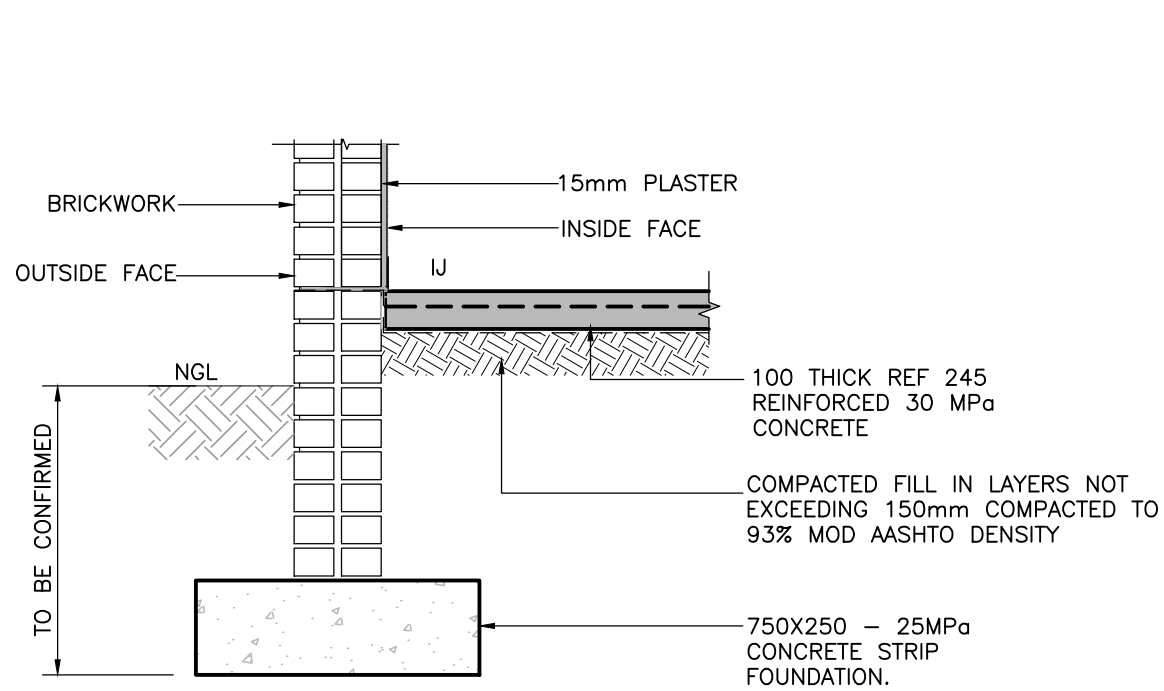
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DRAWING NUMBER	8011/004/GTH/006	REVISION	T1



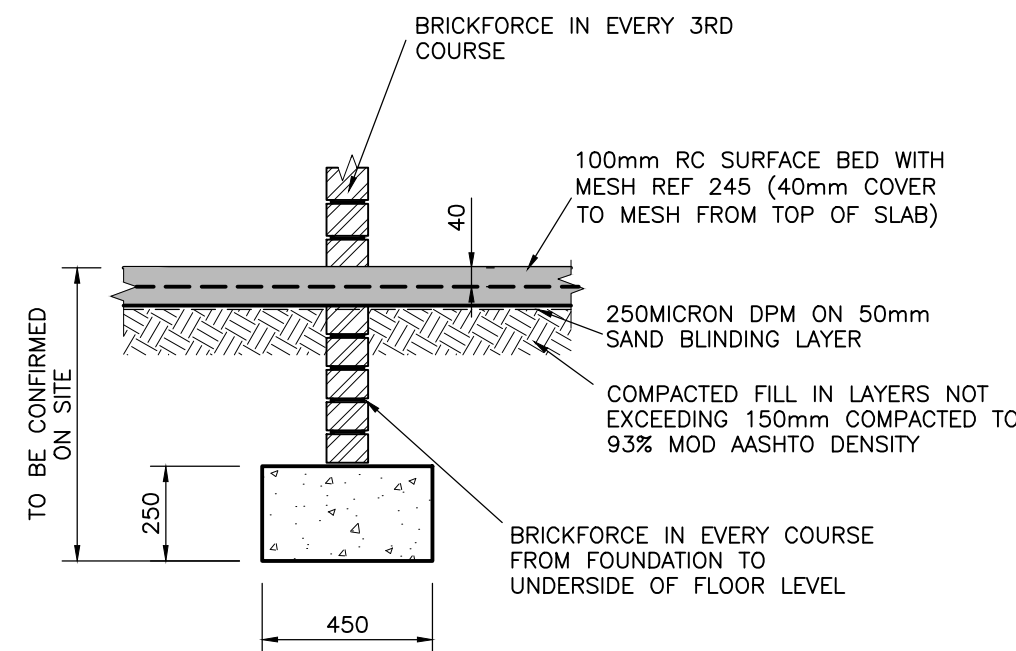
FOUNDATION LAYOUT
SCALE 1:100



SECTION A-A
SCALE 1 : 50

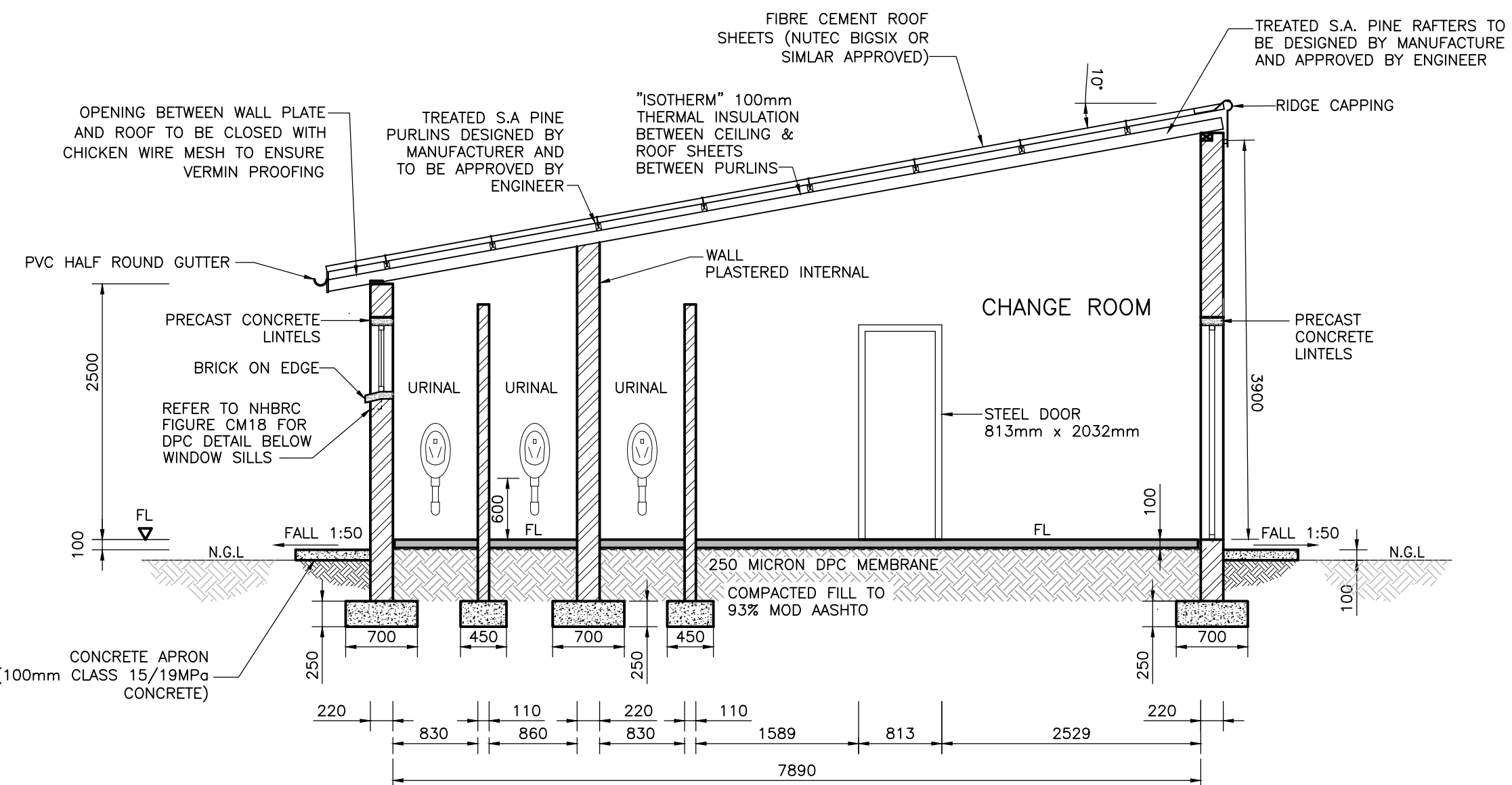


EXTERNAL BRICK WALL &
SURFACE BED JUNCTION
SCALE 1:20



INTERNAL WALL & SURFACE
BED JUNCTION
SCALE 1:20

FOUNDATION LEGEND	
TYPE	DESCRIPTION
1	700x250mm STRIP FOUNDATION
2	450x250mm RC FOUNDATION



SECTION B-B
SCALE 1 : 50

NOTE:
REFER TO DWG 008 FOR
SCHEDULE OF FITTING
AND FINISHES.

LEGEND

SC	200L LOW PRESSURE SOLAR GEYSER (CLEAN HEAT OR SIMILAR APPROVAL) MOUNTED ON ROOF
WC	TOILET
SHR	SHOWER
WHB	WASH HAND BASIN
U	URINAL
HB	HAND BASIN
BRICK-UP EXISTING OPENING	
BREAK OUT OPENING	

NOTE: SEE NOTES ON DWG 8011/004/GHT/008

T1	ISSUED FOR TENDER PURPOSES ONLY	AUG 20
1	INTERNAL REVIEW	FEB 20

REV.	BY	DESCRIPTION	DATE
008		CHANGE ROOM SURFACE BEDS LAYOUT	
006		CHANGE ROOM - ELEVATIONS	
005		CHANGE ROOM - PLAN LAYOUT	
DRG. No.		REFERENCE DRAWING	
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2nd AVENUE, NEWTON PARK
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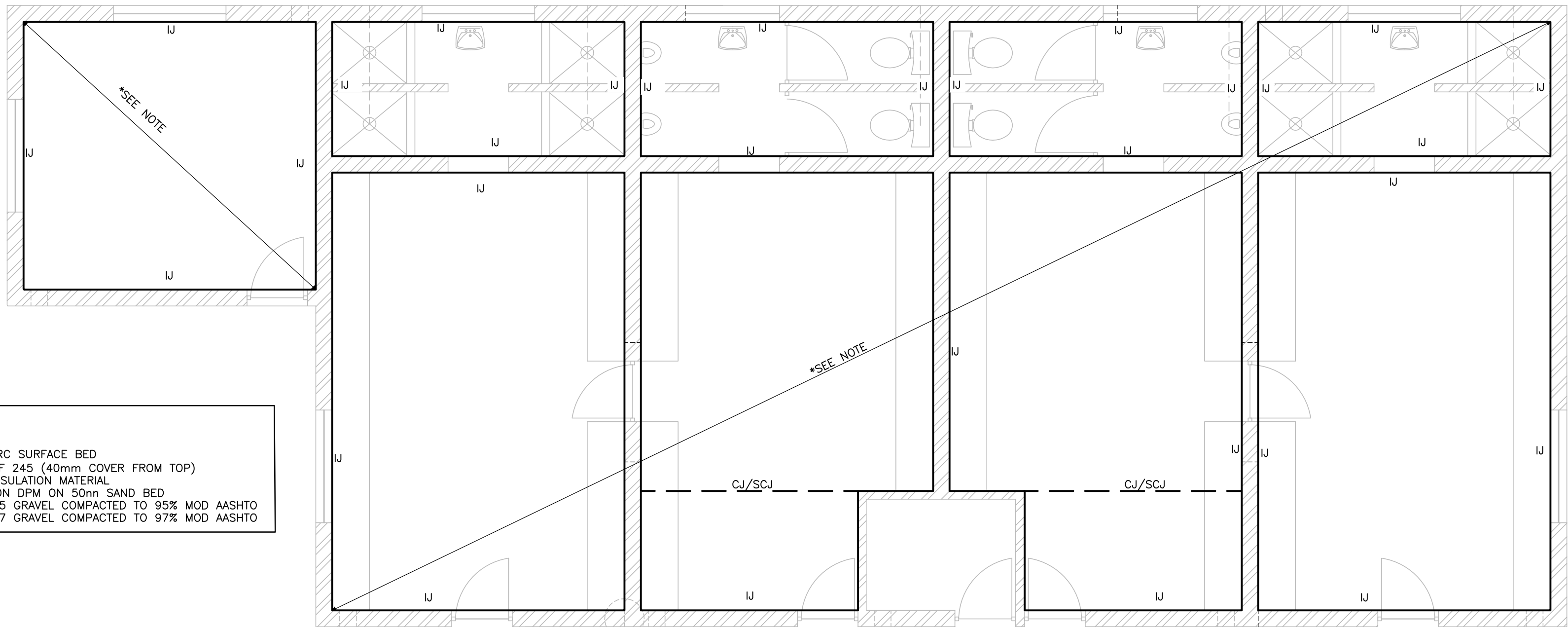
ISO 9001:2015
CERTIFIED

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CHECKED	G.C	PROCESS ENGINEER	N/A
CIVIL ENGINEER	L.S	STRUCTURAL ENGINEER	N/A
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP

CHANGE ROOM SECTIONS	
SCALE 1:500	DATE FEB 20
DRAWING NUMBER 8011/004/GTH/007	REVISION T1

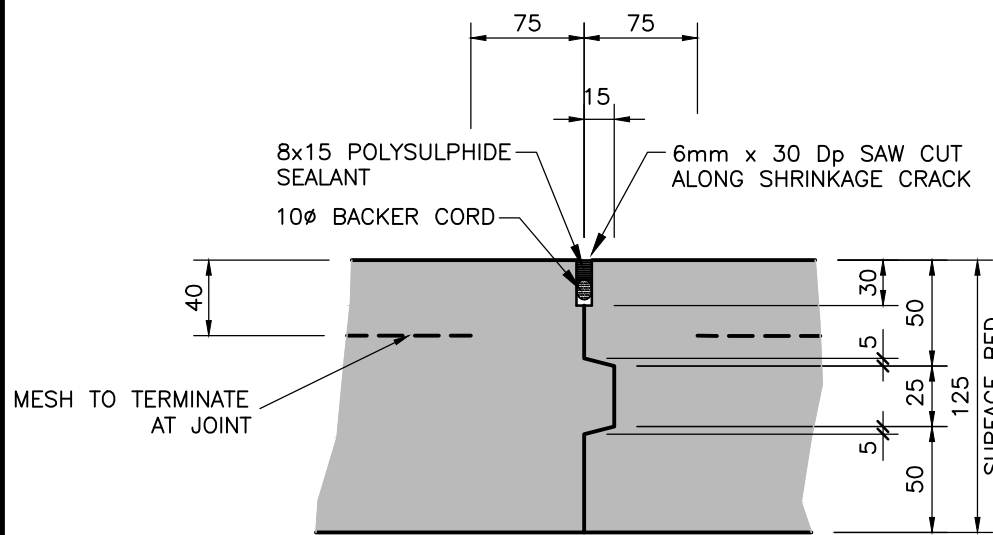


SURFACE BED LAYOUT

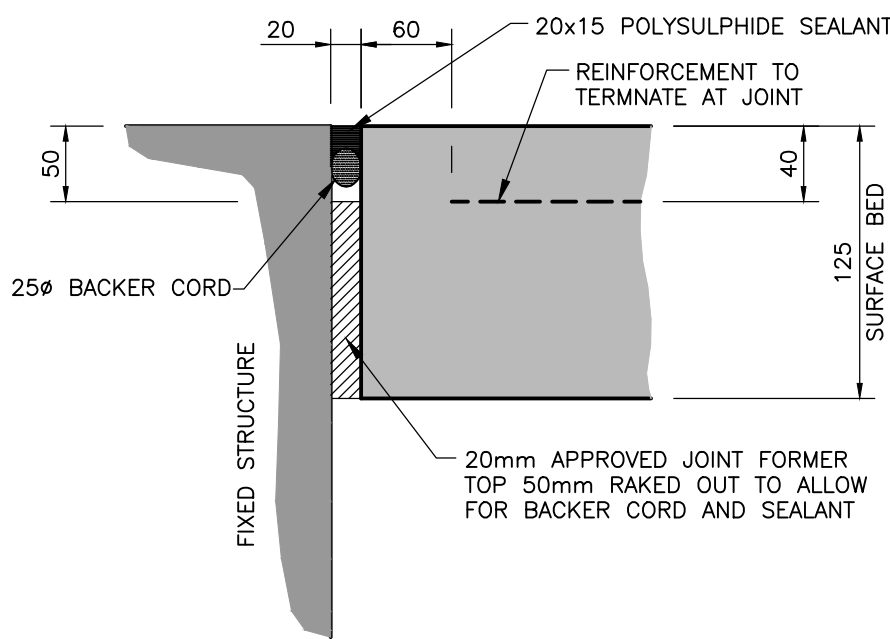
SCALE 1:50

***NOTE:**

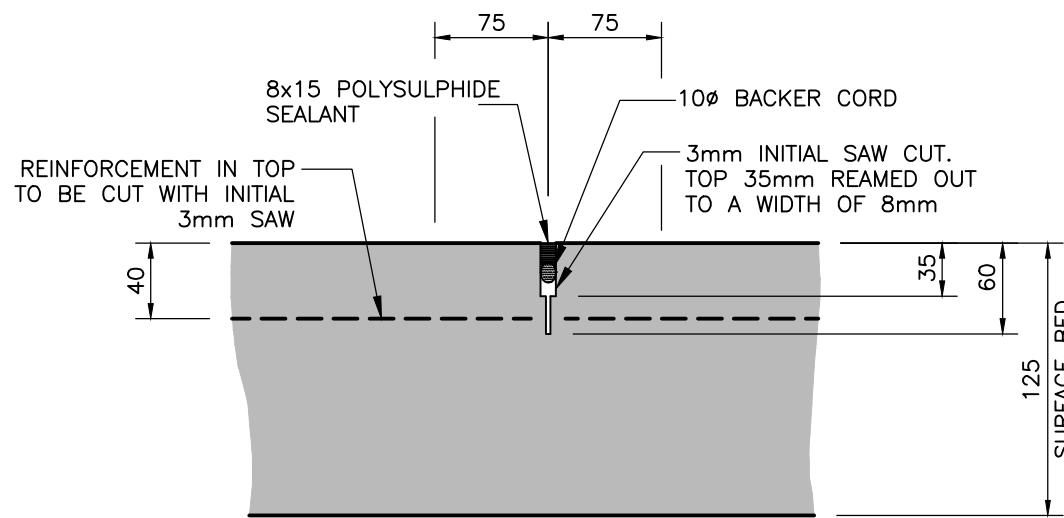
- 125mm RC SURFACE BED
- MESH REF 245 (40mm COVER FROM TOP)
- 25mm INSULATION MATERIAL
- 250MICRON DPM ON 50mm SAND BED
- 150MM G5 GRAVEL COMPACTED TO 95% MOD AASHTO
- 150MM G7 GRAVEL COMPACTED TO 97% MOD AASHTO



TYPICAL DETAIL OF CONSTRUCTION JOINTS (CJ)
SCALE - N.T.S



TYPICAL DETAIL OF ISOLATION JOINTS (IJ)
SCALE - N.T.S.



TYPICAL DETAIL OF SAW CUT JOINTS (SCJ)
SCALE - N.T.S.

GENERAL:

1. THESE NOTES SERVE AS AN ADDENDUM TO THE SPECIFICATION IN THE BOO FOR THIS PROJECT. IN THOSE CASES WHERE THE SPECIFICATION IN THE BOO DIFFER FROM THESE NOTES, THESE NOTES SHALL TAKE PREFERENCE.
2. THE CONTRACTOR SHALL ALLOW FOR ALL STANDARDS/SPECIFICATIONS WHICH ARE REFERRED TO IN THESE NOTES AND WHICH ARE APPLICABLE ON THE SITE.
3. DRAWINGS SHALL BE CHECKED BY THE CONTRACTOR AND ANY DISCREPANCIES IN THE DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE WORK COMMENCES. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE UNTIL IT IS COMPLETED.
4. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL ENGINEERING DRAWINGS.
5. ALL SETTING OUT TO BE DONE TO ARCHITECT'S DRAWING.
6. DRAWINGS MAY NOT BE SCALED.
7. ENGINEER TO CHECK ALL REINFORCEMENT PRIOR TO CASTING OF CONCRETE.
8. CONTRACTOR TO PROVIDE APPROVED PLASTIC COVER BLOCKS TO ENSURE CORRECT COVER TO REINFORCEMENT IN CONCRETE.
9. IT IS THE RESPONSIBILITY OF THE OWNER & THE BUILDER TO ARRANGE WITH THE ENGINEER FOR THE INSPECTIONS. AT LEAST 48 HOURS NOTICE IS REQUIRED.

CONCRETE:

1. EXCEPT WHERE MENTIONED OTHERWISE IN THESE NOTES, THE CONCRETE WORK SHALL COMPLY WITH SABS 1200 G - CONCRETE (STRUCTURAL) (LATEST REVISION)
2. ALL EXPOSED CORNERS OF CONCRETE TO HAVE 20 X 20 CHAMFERS, U.N.O. AND UNLESS CLADDED OR PLASTERED.
3. CONCRETE MIX DESIGNS AND AGGREGATE SAMPLES TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
4. CONCRETE TO BE CURED BY KEEPING MOIST FOR 7 DAYS.
5. CONCRETE CUBE RESULTS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

CONCRETE STRENGTHS (28 DAY STRENGTH (MPA):

- | | |
|------------------------------|----|
| 1. BLINDING | 10 |
| 2. FOUNDATIONS | 25 |
| 3. COLUMNS & BEAMS | 30 |
| 4. SURFACE BEDS | 30 |
| 5. MORTAR (NORMAL BRICKWORK) | 5 |
| 6. CAVITY INFILL CONCRETE | 20 |

FOUNDATIONS:

1. FOUNDATION DESIGN TO BE CONFIRMED AFTER A GEOTECHNICAL ASSESSMENT HAS BEEN DONE.
2. BACKFILLING:
ALL BACKFILLING TO FOUNDATIONS COMPACTED TO 93% MOD AASHTO DENSITY.
3. ALL EXCAVATIONS TO BE APPROVED IN WRITING BY THE ENGINEER BEFORE CONCRETE IS CAST.
4. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING TO PROTECT THE EXCAVATIONS, EXISTING BUILDING AND FOUNDATIONS.

- BRICK REINFORCEMENT (3.55mm MIN DIA) AT VERTICAL CENTERS NOT EXCEEDING 340mm IN ALL SUPERSTRUCTURE WALLS WITH ADDITIONAL LAYERS AS FOLLOWS:
 - IN EVERY COURSE IN ALL FOUNDATION MASONRY. 230mm WIDE BRICKFORCE TO SPAN ACROSS VOID; VOID TO BE FILLED WITH CONCRETE AS SPECIFIED.
 - IN TWO COURSES IMMEDIATELY ABOVE FLOOR SLAB (GROUND AND FIRST FLOOR).
 - IN TWO COURSES IMMEDIATELY BELOW WINDOWS EXTENDING 600mm BEYOND OPENING.
 - IN EVERY COURSE ABOVE LINTELS EXTENDING 600mm BEYOND OPENINGS.
- 5.6mm ROD REINFORCEMENT AS FOLLOWS:
 - 2No IN COURSE IMMEDIATELY ABOVE AND BELOW OPENINGS EXTENDING 600mm BEYOND OPENING.
 - 2No (CONTINUOUS) IN UPPERMOST BED JOINT OF EXTERNAL WALLS.
 - 1No (CONTINUOUS) IN UPPERMOST BED JOINT OF INTERNAL WALLS.
- LOAD BEARING BRICKWORK (220mm MIN):
 - BRICK STRENGTH: 14MPa
 - MORTAR: CLASS II (1:6 MIN MIX PROPORTIONS)

3. ROOF :
 - ROOF SHEETING ON 250 MICRON UNDERLAY ON TIMBER BATTENS & TRUSSES TO SPECIALISTS DETAIL.
 - ROOF COVERING TO BE SAFINTRA 0.53mm OR SIMILAR APPROVED FIBRE CEMENT FASCIAS PAINTED ACRYLIC PVA WHITE.
 - 125mm VHV GUTTER AND 75' RWDP FIXED ACCORDING TO MANUFACTURES SPECIFICATION. RWDP TO HAVE SHOE FOR SURFACE DISCHARGE.

4. CEILING :
 - 6.4mm THICK RHINO BOARD CEILING WITH COVER STRIPS AND CORNICE PAINTED ACRYLIC PVA WHITE.
 - CEILING NAILED TO 38x38 TIMBER BATTENS.
 - TRAP DOOR TO BE PROVIDED.

5. WINDOWS :STEEL FRAME E-TYPE TOP & SIDE HUNG.
RESIDENTIAL OPEN-OUT COMPLYING TO SANS 727:2003
WINDOW CILL TO BE BRICK ON EDGE.

6. INTERNAL FINISHES

a) PLASTER

PLASTERED THROUGHOUT

b) SKIRTING

COVER GRANO 75mm HIGH

c) PAINTING

- 1) 2 COATS APPROVED WOOD SEALER TO ALL WOODEN SURFACES
- 2) WHITE ENAMEL GLOSS FINISH TO INTERNAL DOORS
- 3) WHITE P.V.A. TO INT. PLASTERED WALLS & SOFTBOARD CEILING SOFFIT

d) TILING

- 150x150 WHITE GLAZED WALL TILES
- 1) SPLASH BACK TO WASH HAND BASIN TO THREE TILES WIDE BY THREE TILES HIGH.

e) TOILET FITTINGS: PROVIDE & INSTALL THE FOLLOWING:

- 1) SOAP DISH IN SHOWER (CTM "URBAN GLAM CHROME" SHOWER SOAP HOLDER OR SIMILAR APPROVED)
- 2) TOILET ROLL HOLDER IN W.C. - MILD STEEL "TR2" WITH LOCKABLE LID (OR SIMILAR APPROVED)
- 3) STAINLESS STEEL WALL MOUNTED DOUBLE RAIL HOLDER
- 4) WALL MIRROR ABOVE WASH HAND BASIN.
- 5) 60 X BRASSED COAT HOOKS (GELMAR PRODUCT CODE 3007 OR SIMILAR APPROVED)

f) WATER

PROVIDE HOT AND COLD RUNNING WATER TO SHOWER AND WASH HAND BASIN.

g) DOORS

813mm x 2032mm FRAMED AND BRACED STEEL DOOR.
ALL DOORS HUNG ON PR. OF 100mm STEEL NARROW BUTTS AND FITTED WITH 3-LEVER MORTICE LOCKS.

h) WATER PIPES

ALL WATER PIPES TO MARLEY PEX OR SIMILAR APPROVED

i) SANITARY FITTINGS: PROVIDE & INSTALL THE FOLLOWING:

- 1) SHOWER OVERHEAD TYPE AND TAPS "STAR ECCP" OR SIMILAR APPROVED.
- 2) WATER CLOSET: LOW LEVEL WC WHITE VITREOUS CHINA WITH OR "S" TRAP WITH 6L ENAMELED LOW LEVEL CISTERN.
- 3) WASH HAND BASIN TO BE "VAAL SPRINGBOK" BASIN WITH 2X15mm "COBRA ECCP NO. 111" PILLAR TAPS.
- 4) URINALS -"VAAL FLATBACK" VITROUS CHINA WALL HUNG WITH 38mm CHROMIUM PLATED DOMICAL GRATING WITH" COBRA FJ6,000 FLUSHMASTER" WITH FJT 5.5 FLUSHPIPE.

j) SOLAR GEYSER:

"CLEAN HEAT" LOW PRESSURE SOLAR GEYSER 200litre CAPACITY WITH MATCHING PANELS

DEGREE OF ACCURACY:

DEGREE OF ACCURACY TO BE IN ACCORDANCE WITH SABS 1200 G:

1. ALL CONCRETE WORK TO DEGREE OF ACCURACY II.
2. ALL SURFACES FORMED WITH SMOOTH SHUTTERING FOR OFF SHUTTER CONCRETE TO BE DEGREE OF ACCURACY I.

LEGEND

SC

200L LOW PRESSURE SOLAR GEYSER (CLEAN HEAT OR SIMILAR APPROVAL) MOUNTED ON ROOF

WC

TOILET

SHR

SHOWER

WHB

WASH HAND BASIN

U

URINAL

HB

HAND BASIN

BRICK-UP EXISTING OPENING

BREAK OUT OPENING

GENERAL NOTES

1. CERAMIC TILES :

- (GRANITO RANGE BY 'JOHNSON TILES' - MID GREY MP 572 OR APPROVED EQUAL) TO FLOOR.
- SKIRTING : 75 mm HIGH CUT CERAMIC TILE ALL AROUND.

2. BRICKWORK :

- ALL INTERNAL BRICKWORK TO BE CLAY COMMONS, PLASTERED AND PAINTED 2 COATS ACRYLIC PVA WHITE.
- BRICKFORCE AT WINDOW CILL LEVEL AND WALL PLATE LEVEL ALL AROUND BUILDING.
- NBI 4 COARSES BRICKFORCE ABOVE WINDOWS AND DOORS. DPC AT FLOOR AND WINDOW CILL LEVELS.

- CLAY BRICKS TO COMPLY WITH SANS 227. THEY SHOULD HAVE MOISTURE EXPANSION PROPERTIES NOT EXCEEDING CATEGORY II LIMITATIONS AND MUST NOT BE LAID EARLIER THAN SIX WEEKS AFTER REMOVAL FROM THE KILN.

- CONCRETE MASONRY UNITS TO COMPLY WITH SANS 1215. THESE UNITS SHALL NOT BE WETTED PRIOR TO LAYING. ALL UNFINISHED WALLS SHALL BE PROTECTED AGAINST MOISTURE ENTRY DURING CONSTRUCTION INTERRUPTIONS BY PROVIDING EFFECTIVE COVERS OVER THE TOPS OF SUCH WALLS.

- BRICK REINFORCEMENT - 2.8MM MIN DIAMETER LONGITUDINAL WIRES:INSTALL WITH 250MM MIN LAP LENGTHS, PROPERLY TIED IN AT CORNERS AND WALL JUNCTIONS. SPACING AS FOLLOWS U.N.O.

- FOUNDATION WALLS: INSTALL EVERY COURSE, 230MM WIDE BRICKFORCE TO SPAN ACROSS VOID; VOID TO BE FILLED WITH CONCRETE AS SPECIFIED

- CLAY BRICKS TO COMPLY WITH SANS 227. THEY SHOULD HAVE MOISTURE EXPANSION PROPERTIES NOT EXCEEDING CATEGORY II LIMITATIONS AND MUST NOT BE LAID EARLIER THAN SIX WEEKS AFTER REMOVAL FROM THE KILN.

- CONCRETE MASONRY UNITS TO COMPLY WITH SANS 1215. THESE UNITS SHALL NOT BE WETTED PRIOR TO LAYING. ALL UNFINISHED WALLS SHALL BE PROTECTED AGAINST MOISTURE ENTRY DURING CONSTRUCTION INTERRUPTIONS BY PROVIDING EFFECTIVE COVERS OVER THE TOPS OF SUCH WALLS.

- THE ENGINEER MAY REQUIRE THAT SAMPLES OF MASONRY UNITS BE SUBMITTED FOR LABORATORY TESTING IN ACCORDANCE WITH SANS 10164.

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1	INTERNAL REVIEW	FEB 20

REV.	BY	DESCRIPTION	DATE
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007	CHANGE ROOM SECTIONS
006	CHANGE ROOM - ELEVATIONS
005	CHANGE ROOM - PLAN LAYOUT

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P.O.BOX 27158,
GREENACRES, P.E. 6057,
BLOK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za

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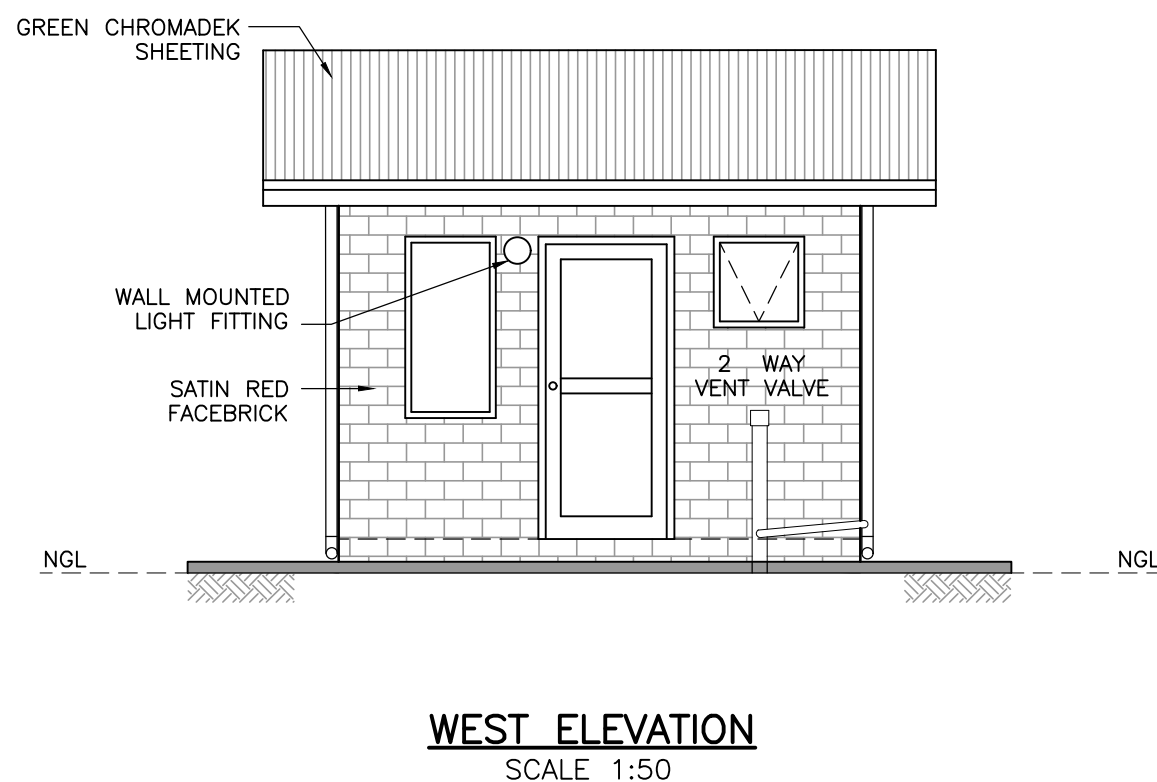
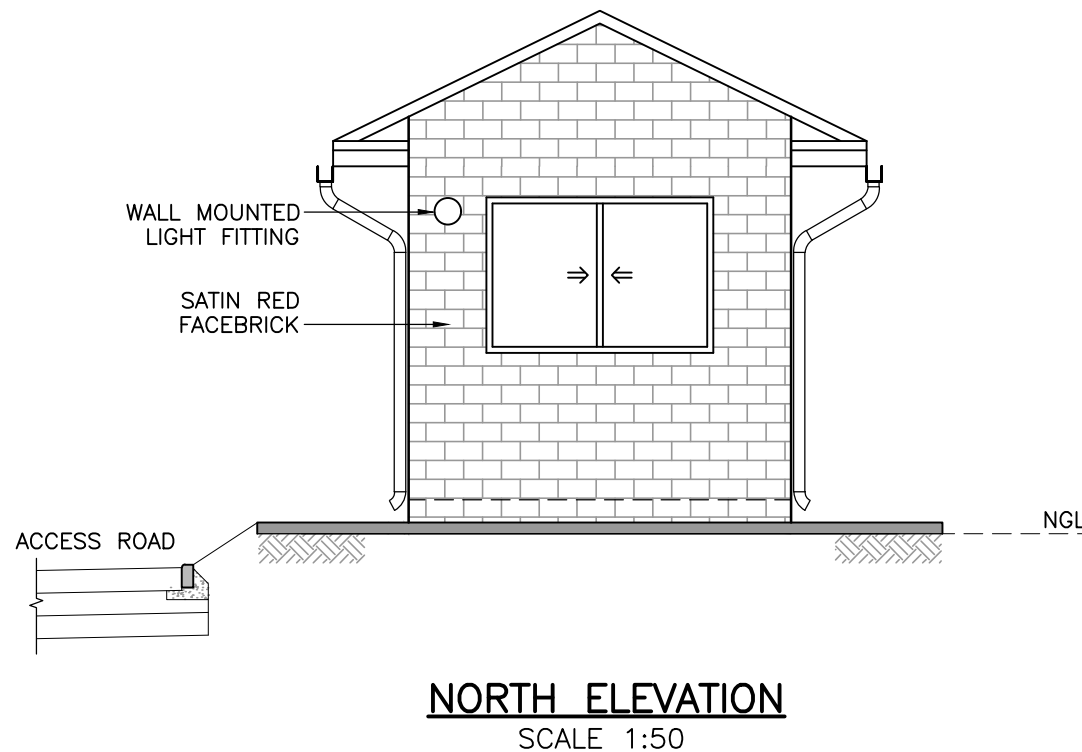
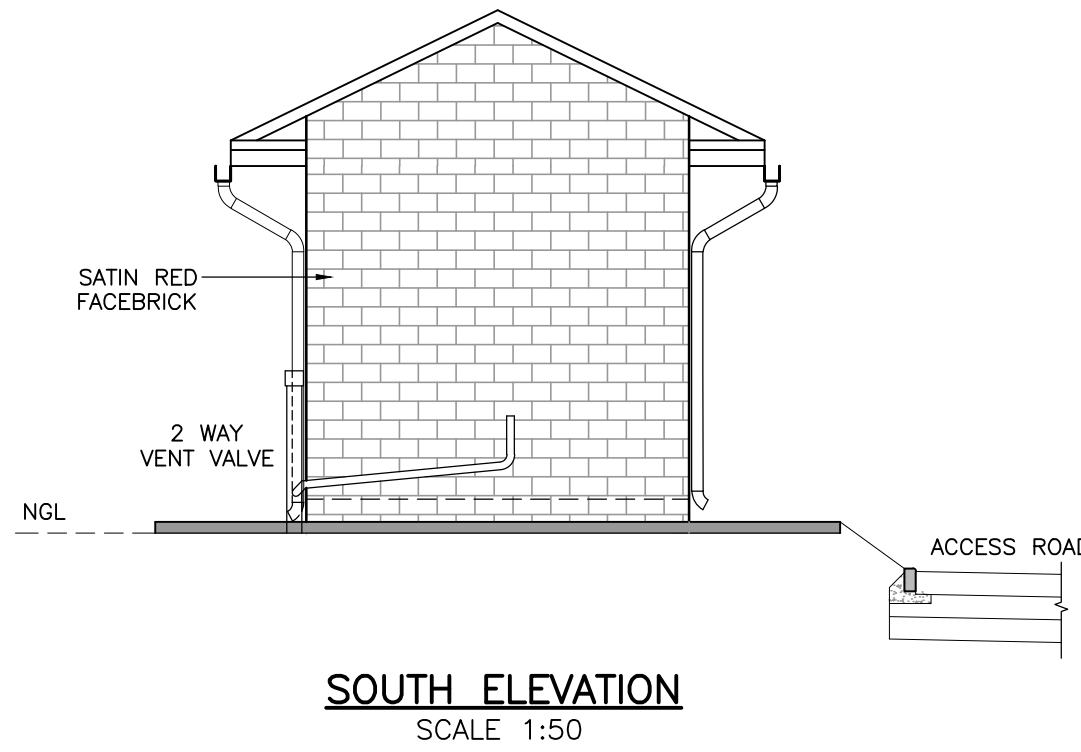
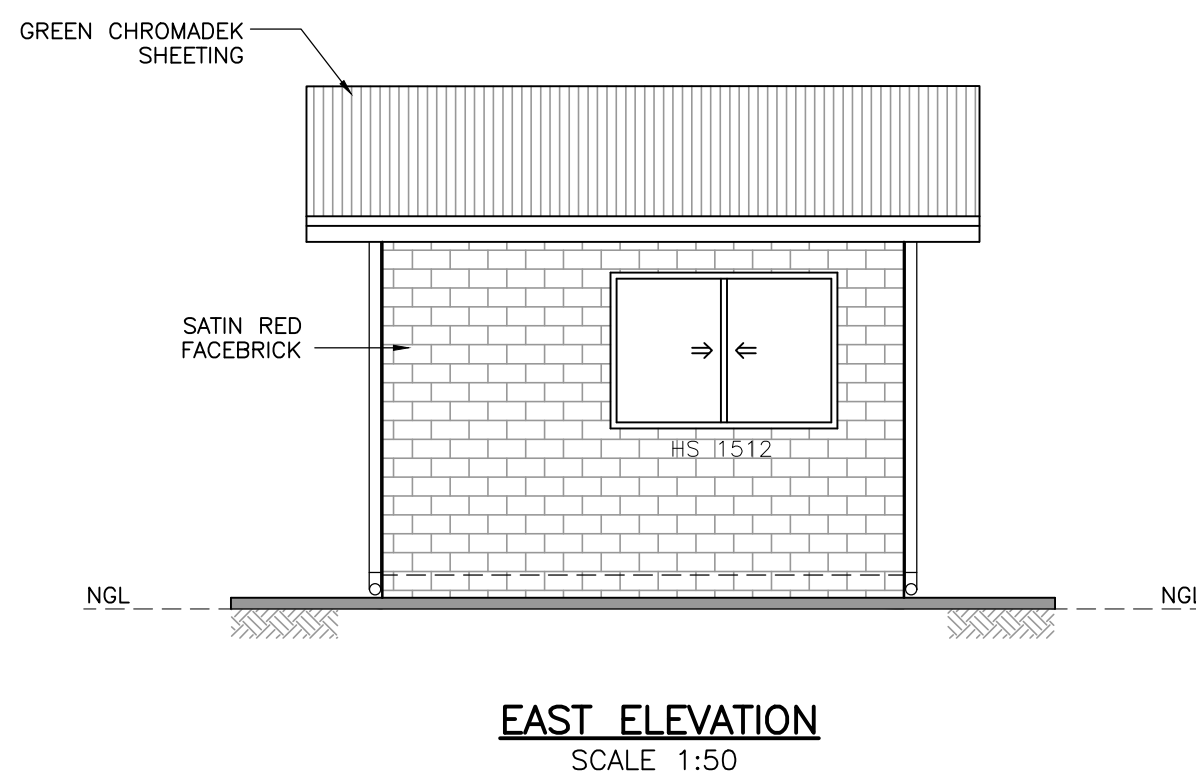
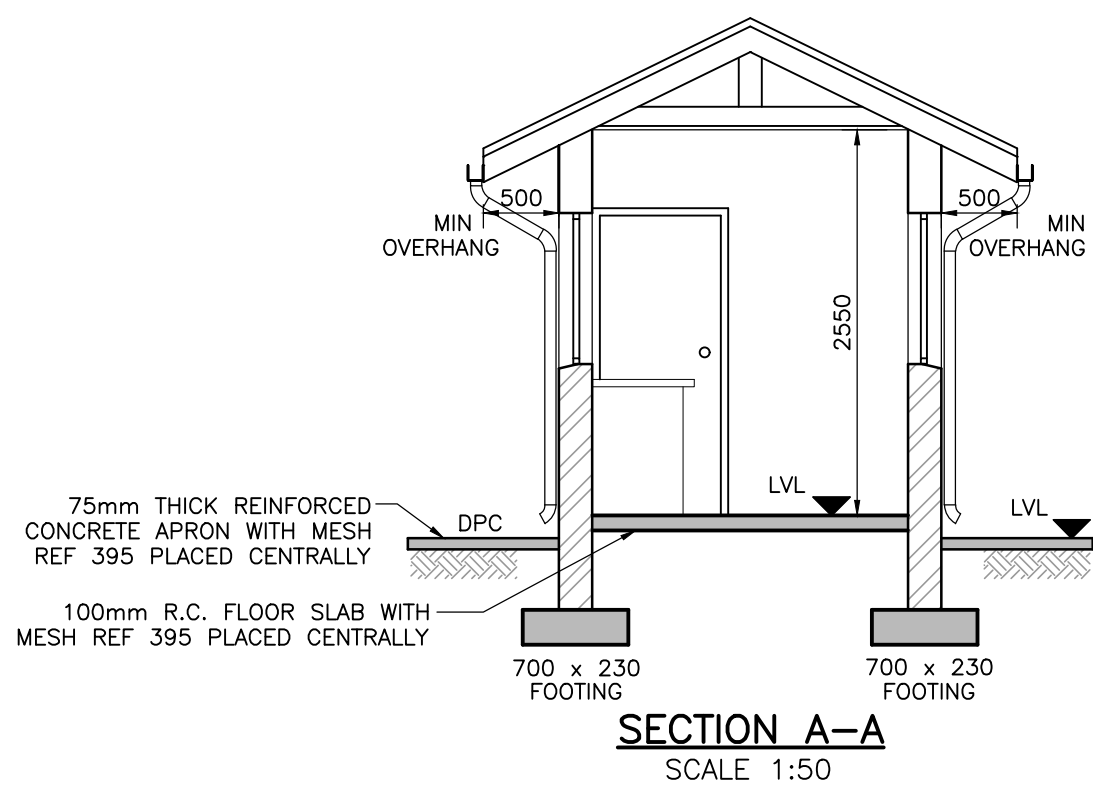
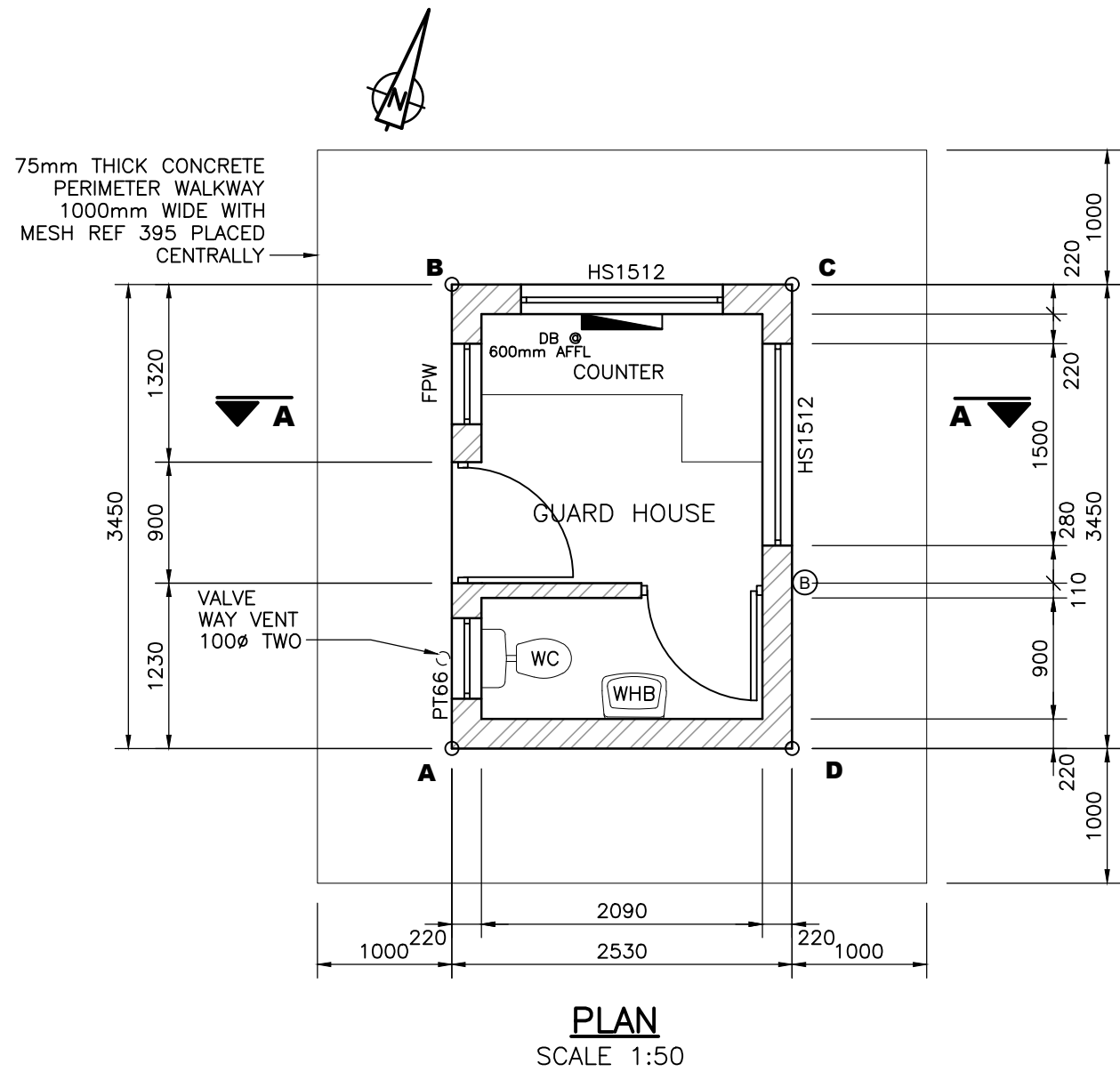
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CHECKED	G.C	PROCESS ENGINEER	N/A
CIVIL ENGINEER	L.S	STRUCTURAL ENGINEER	N/A
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP

CHANGE ROOM SURFACE BEDS LAYOUT

SCALE	1:500	DATE	FEB 20
DRAWING NUMBER	8011/004/GTH/008	REVISION	T1



SETTING OUT DATA

POINT	CO-ORDINATES WGS 31°	
	Y+ 50000.00	X+3330000.00
A	362.982	2116.892
B	364.136	2113.641
C	361.752	2112.794
D	360.598	2116.045

GENERAL NOTES

- FOUNDATION :
 - 700 x 230 DEEP CONCRETE FOOTING, WITH Y10 REBAR AT 300 CENTRES BOTH WAYS, IN 600 DEEP TRENCH U.O.N.
- FLOOR & PERIMETER APRON :
 - 100 THICK CONCRETE FLOOR SLAB WITH BRC MESH ON 250 MICRON PVC UNDERLAY ON WELL RAMMED AND POISONED SOIL.
- CERAMIC TILES :
 - (GRANITO RANGE BY 'JOHNSON TILES' - MID GREY MP 572 OR APPROVED EQUAL) TO TOILET AND GUARD HOUSE.
 - SKIRTING : 75 mm HIGH CUT CERAMIC TILE ALL AROUND.
- BRICKWORK :
 - ALL EXPOSED EXTERNAL BRICKWORK TO BE SATIN RED FACEBRICK.
 - ALL INTERNAL BRICKWORK TO BE CLAY COMMONS, PLASTERED AND PAINTED 2 COATS ACRYLIC PVA WHITE.
 - OUTER FACE OF INTERNAL BRICKWORK SKIN TO BE BAGGED AND BITUMEN PAINTED.
 - BRICKFORCE AT WINDOW CILL LEVEL AND WALL PLATE LEVEL ALL AROUND BUILDING.
 - N.B! 4 COARSE BRICKFORCE ABOVE WINDOWS AND DOORS.
 - DPC AT FLOOR AND WINDOW CILL LEVELS.
- ROOF :
 - ROOF SHEETING ON 250 MICRON UNDERLAY ON TIMBER BATTENS & TRUSSES TO SPECIALISTS DETAIL.
 - GREEN CHROMADEK SHEETING
 - FIBRE CEMENT FASCIAS PAINTED ACRYLIC PVA WHITE.
 - 125mm PVC H.R. GUTTER AND 75' RWDP FIXED ACCORDING TO MANUFACTURES SPECIFICATION.
 - RWDP TO HAVE SHOE FOR SURFACE DISCHARGE.
- CEILING :
 - 6.4mm THICK RHINO BOARD CEILING WITH COVER STRIPS AND CORNICE PAINTED ACRYLIC PVA WHITE.
 - CEILING NAILED TO 38x38 TIMBER BATTENS.
 - TRAP DOOR TO BE PROVIDED.
- WINDOWS :
 - SLIDING WINDOWS TO BE 570 SERIES HORIZONTAL SLIDING NATURAL ANODISED ALUMINIUM WINDOWS TYPE HS 1512 SIMILAR TO THE 'WISPECO' RANGE.
 - WINDOW TO HAVE 4mm THICK CLEAR GLASS.
 - TOILET WINDOW TO BE 340 SERIES NATURAL ANODISED ALUMINIUM PROJECT OUT WINDOW TYPE PT66, SIMILAR TO THE 'WISPECO' RANGE.
 - WINDOW TO HAVE 4mm THICK OBSCURE GLASS.
 - FIXED PANE WINDOW (FPW) TO BE 690 WIDE x 1200 HIGH NATURAL ANODISED ALUMINIUM WINDOW WITH 4mm THICK CLEAR GLASS.
 - WINDOW CILL TO BE BRICK ON EDGE.
- DOORS :
 - ENTRANCE : GLAZED ALUMINIUM DOOR SIMILAR TO THE 'WISPECO' OLYMPIA RANGE WITH STANDARD MORTICE LOCKSET AND HINGES.
 - DOOR TO BE GLAZED WITH TOUCHENED SAFETY GLASS.
 - WEATHERPROOF STRIP AT BOTTOM
 - TOILET : HOLLOW CORE LEAF WITH MASONITE FACING ON 75 x 75 HW. FRAME. DOOR TO HAVE MILD STEEL HINGES AND TWO LEVEL LOCKSET.
 - LEAF AND FRAME TO BE PAINTED GLOSS ENAMEL WHITE.
- SANITARY FITTINGS :
 - WC : 'MAGNIA' RANGE BY ARMITAGE SHANKS OR APPROVED EQUAL.
 - WHB : 'KELSO' RANGE BY ARMITAGE SHANKS OR APPROVED EQUAL WITH 450 HIGH JOHNSON WHITE TILE SPLASH PANEL.
 - TAPS : STOPCOCK AND BIBTAP.
 - N.B! STOPCOCK TO SHUT OFF SUPPLY TO BOTH CISTERN AND WHB. WATER PIPE ABOVE GROUND SHALL BE 15mm Ø COPPER PIPING AND FITTINGS.
 - TOILET ROLL HOLDER.
- COUNTER TOP :
 - 500mm WIDE x 20mm THICK x 730 HIGH CHIP BOARD WITH OAK FINISH MELAMINE. COUNTER EDGE TO BE ROUNDED, ALL TO SHOP FITTERS DETAIL.
- ELECTRICAL :
 - EXTERNAL : 3 No. LIGHT FITTINGS (BRITELIGHT 10 ROUND - TYPE B10-100ES BY 'LASCON LIGHTING' OR SIMILAR)
 - TOILET : 1 No. LIGHT FITTING (GLASS BOWL TYPE WITH PLASTIC GALLERY FOR SCREEN TYPE 60 W GLOBE)
 - GUARD HOUSE : 1 No. SINGLE TUBE FLOURESCENT LIGHT FITTING (TYPE M101Z-136 x 1250 LONG WITH DIFFUSER, BY 'LASCON LIGHTING' OR SIMILAR)
 - 2 NO. LIGHT SWITCH
 - 1 No. PLUG POINT
 - DISTRIBUTION BOARD UNDER COUNTER
- PAINTING :
 - PREPARE AND APPLY TWO COATS BITUMEN PAINT ON BRICK SKIN INCLUDING WORKING AROUND WIRE TIES
 - PREPARE AND APPLY ONE COAT PLASTER PRIMER AND TWO COATS APPROVED PVA ACRYLIC PAINT TO INTERNAL WALLS, FIBBER CEMENT FASOIA AND BARGE BOARD.
 - CLEAN WITH SPIRITS AF SALTS SOLUTION AND APPLY TWO COATS SILICONE BASED BRICK DRESSING IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO EXTERNAL FACE BRICK WALLING
 - PREPARE AND APPLY ONE COAT PLASTER PRIMER AND ONE COAT UNIVERSAL UNDERCOAT AND ONE COAT APPROVED EGGSHELL ENAMEL PAINT ON FIBBER CEMENT CILLS
 - ETCH AND APPLY ONE COAT ZINC PRIMER, ONE UNDERCOAT AND TWO FINISHING COATS APPROVED UNIVERSAL GLOSS ENAMEL PAINT ON STEEL SASHES AND FRAMES, HANDRAILS
 - PREPARE, STOP AND APPLY TWO COATS APPROVED VARNISH ON HARDWOOD DOORS AND FRAMES
 - PREPARE, KNOT PRIME STOP, AND APPLY ONE COAT PINK WOOD PRIMER, ONE UNDERCOAT AND TWO COATS APPROVED UNIVERSAL EGGSHELL ENAMEL PAINT ON GENERAL SURFACES OF EAVES

LIGHTING SYMBOLS

- GLASS BOWL TYPE LIGHT FITTING
- SURFACE MOUNTED BULKHEAD WITH 60W INCANDESCENT LAMP AND ACRYLIC DIFFUSER
- 10A, 1 LEVER, 1-WAY LIGHT SWITCH, MOUNTED @ 1200mm AFFL
- SINGLE TUBE FLUORESCENT LIGHT

POWER SYMBOLS

- 15A, 3 PIN, DOUBLE SWITCH SOCKET OUTLET MOUNTED 1200mm AFFL
- 15A, AIR CONDITIONER SWITCH SOCKET OUTLET MOUNTED AT HIGH LEVEL.

NOTES:

- THE FOLLOWING GROUND IMPROVEMENT MEASURES ARE REQUIRED:
 - STAGE 1: OVER-EXCAVATE OVER THE PLAN AREA OF THE STRUCTURE AND 5m BEYOND DOWN TO A DEPTH CORRESPONDING TO 2.0m BELOW FLOOR LEVEL.
 - STAGE 2: COMPACT THE BASE WITH A 12 TONNE VIBRATORY ROLLER TO ACHIEVE 93% OF MODIFIED A.A.S.H.T.O. MAXIMUM DRY DENSITY FOR AT LEAST 500mm BELOW EXCAVATION LEVEL.
 - STAGE 3: FOLLOWING THE COMPACTION OF THE BASE OF THE EXCAVATION, INTRODUCE G4 MATERIAL IN LAYERS (200mm WHEN PLACED LOOSE) WHICH SHOULD BE COMPACTED TO ACHIEVE 98% MODIFIED A.A.S.H.T.O.
 - STAGE 4: COMPACT THE G4 EQUIVALENT MATERIAL IN LAYERS NOT EXCEEDING 200mm WHEN PLACED LOOSE, TO ACHIEVE 98% MODIFIED A.A.S.H.T.O. MAXIMUM DRY DENSITY. COMPACTION OF THE LAYERS SHOULD PROCEED TO UNDERSIDE OF STRUCTURE. THEREAFTER EXCAVATIONS FOR FOUNDATIONS AND DRAINAGE TRENCHES CAN BE UNDERTAKEN PRIOR TO CASTING BLINDING.

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GREENACRES, P.E. 6057,
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GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
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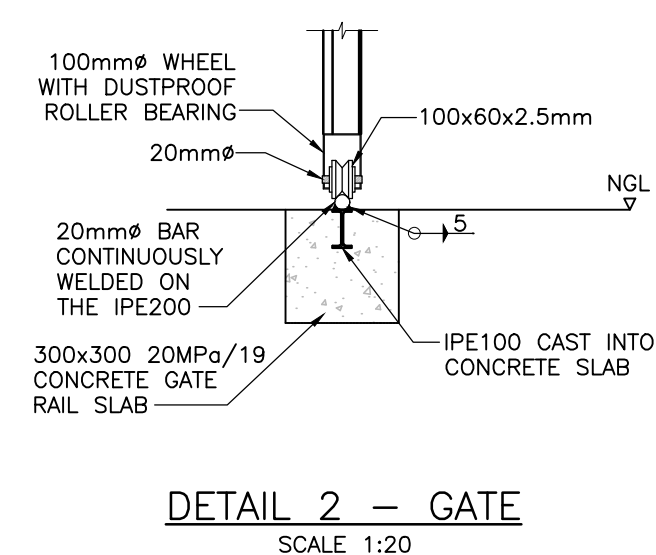
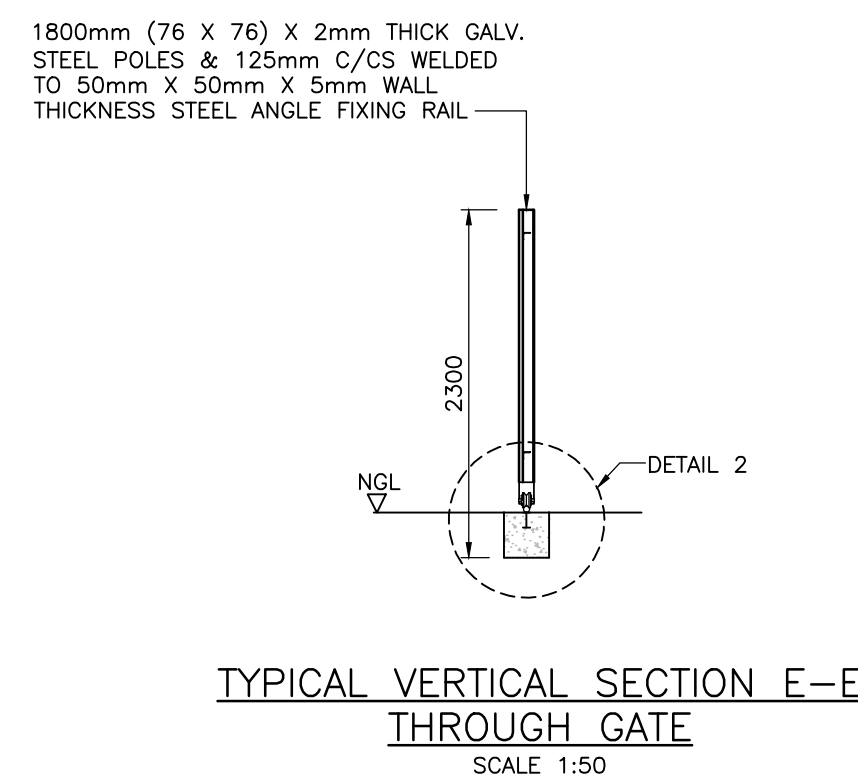
TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
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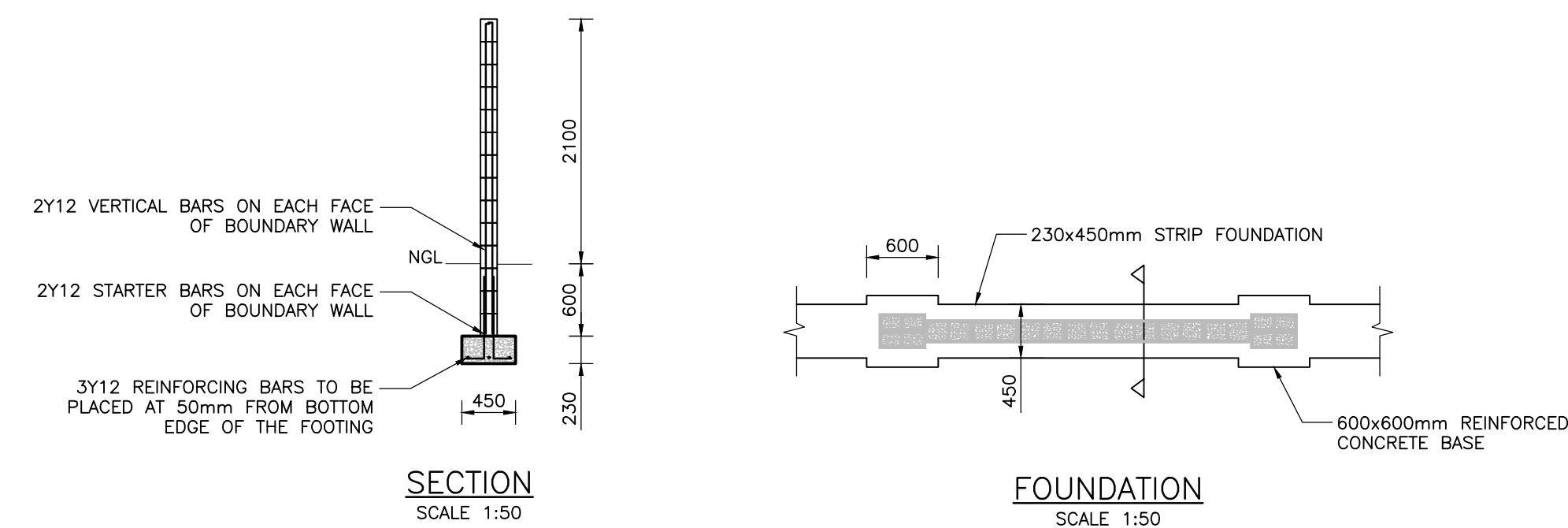
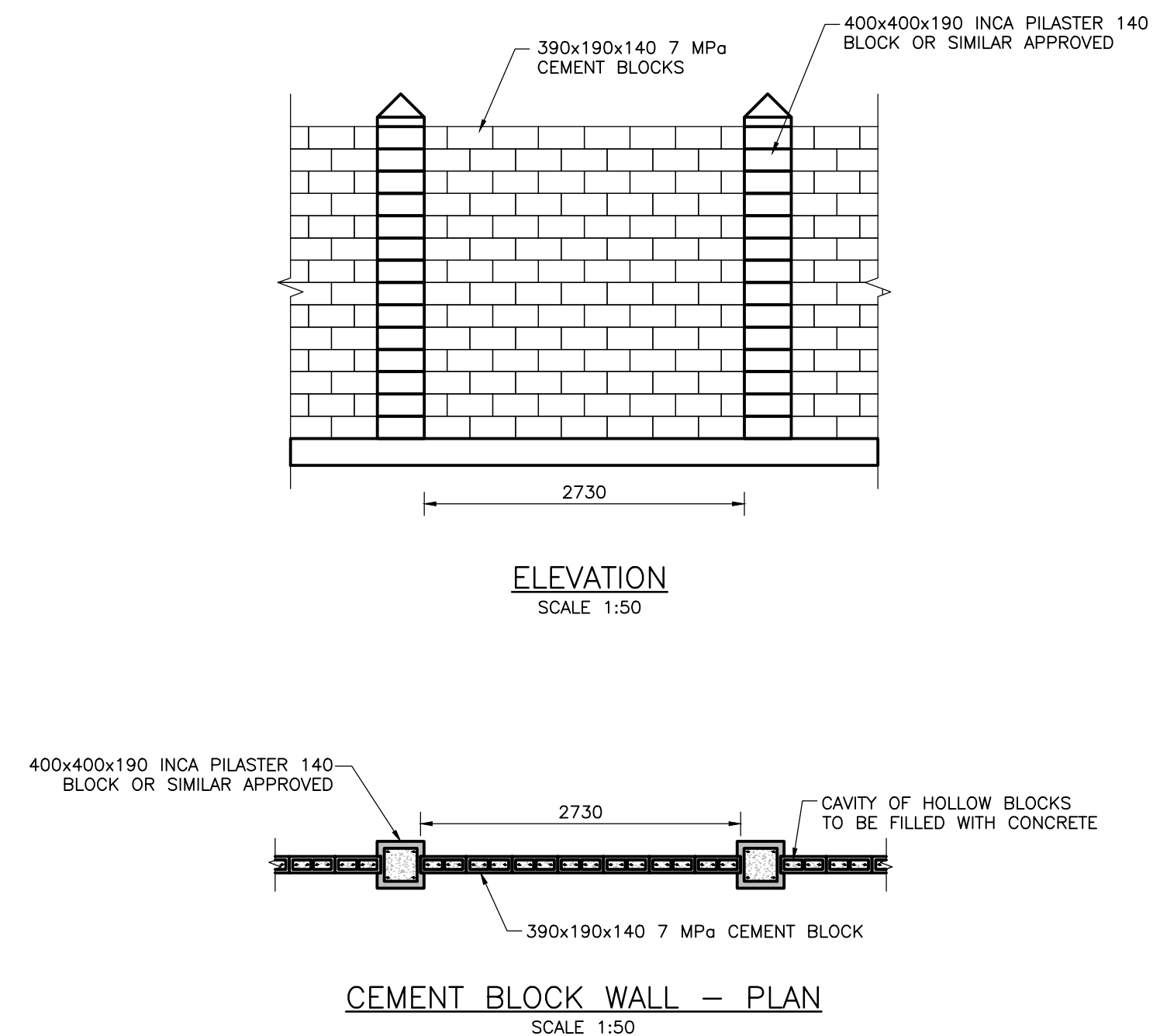
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CIVIL ENGINEER	LS	STRUCTURAL ENGINEER	N/A
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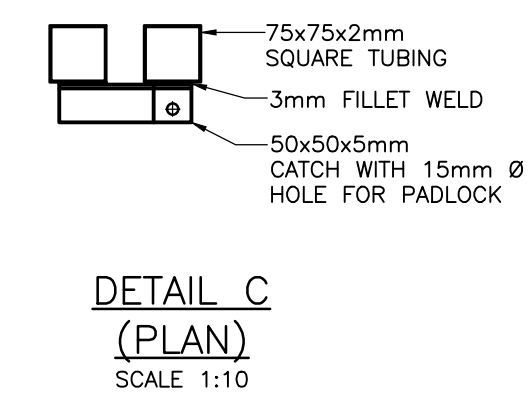
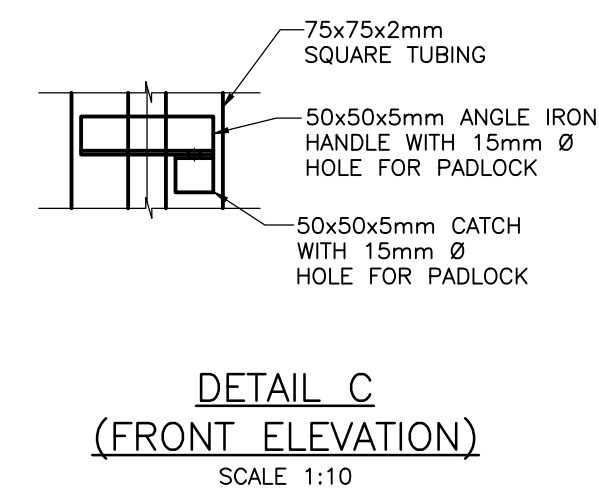
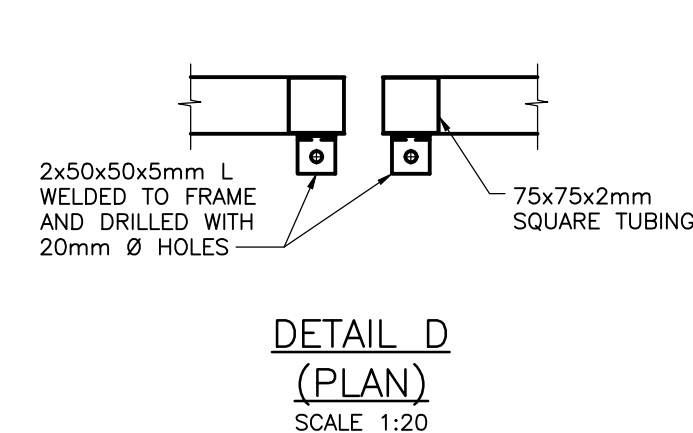
KOUGA LOCAL MUNICIPALITY	
UPGRADING OF KWANONZAMO FACILITY IN HUMANSDORP	
GUARD HOUSE - PLAN LAYOUT & DETAILS	
SCALE	AS SHOWN
DRAWING NUMBER	8011/004/GTH/009
DATE	20/02/2020
REVISION	A1
	T1



ELEVATION
SCALE 1:50



CEMENT BLOCK WALL DETAILS



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P.O. BOX 27158
GREENACRES, P.E. 6057.
BLOCK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za

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INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

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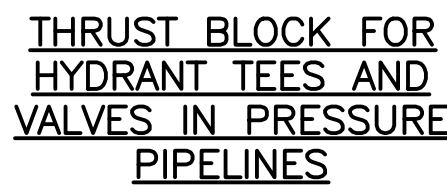
KOUGA LOCAL MUNICIPALITY
 UPGRADING OF KWANONZAMO FACILITY
 IN HUMANSDORP
 TYPICAL GATE & WALL DETAIL

SCALE AS SHOWN	DATE 20/02/2020	
DRAWING NUMBER 8011/004/GTH/010	A1	REVISION 



1. CHAMBERS TO BE FOUND ON IN-SITU MATERIAL OR ON RE-WORKED MATERIAL COMPACTED TO 95% MOD. ASHTO.
2. BACKFILL, FILLER, OR ASPHALT TO 93% MOD. ASHTO IN MAX. 150mm LAYERS.
3. ALL BOLTS, NUTS & WASHERS TO BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH SABS ISO 1499.
4. ALL BOLTS & NUTS TO COMPLY WITH SABS 135. TWO WASHERS ARE TO BE PROVIDED WITH EACH BOLT/NUT. PROTECTION OF THE BOND THREADS TO BE MAINTAINED AFTER TIGHTENING IS TO BE AT LEAST 3mm & NOT MORE THAN 10mm.
5. A MINIMUM OF 150mm MUST BE MAINTAINED BETWEEN CROSSING PIPES.
6. PIPES TO HAVE MINIMUM 900mm COVER AND 1000mm UNDER ROADS
7. REFER TO THE PROJECT SPECIFICATIONS FOR DETAILS ON PIPE FITTINGS, CORROSION PROTECTION, ETC.

1. CONNECTIONS INTO EXISTING WATER MAINS TO BE CARRIED OUT BY CONTRACTOR
2. TUBES TO BE DESIGNED TO SABS 1200-1, INCLUDING VALVES.
3. FIRE HYDRANTS TO DRAWING PSL 1, PSL2/1 AND PSL2/2.
4. WATER LINES TO BE TESTED UNDER ENGINEER'S SUPERVISION AND WITNESSED BY WATER SUB-SILO PRIOR TO CONNECTION TO EXISTING WATER MAINS.
5. COVER TO ALL WATER MAINS.
 - a) IN SIDEWALK: Min.0.75m; Max.1.25m.
 - b) IN ROADWAY: Min.1.0m; Max.1.5m.
6. ALL VALVES TO BE ANTI-CLOCKWISE CLOSING, CLASS 16, C.I. WEDGE TYPE, 150mm DIA. WITH RISING SPINDLE.
7. HYDRANTS TO HAVE A LONDON ROUND TEST OUTLET WITH RISING SPINDLE, CLOCKWISE CLOSING AND A MAXIMUM OVERALL HEIGHT OF 2000mm.
8. HYDRANT SPACING CONFORMS WITH SABS 900-1972 AS AMENDED
9. SUPPLY RESERVOIR: MAGAZINE HILL TWT: 820.60
10. ALL WATER MAINS 75mm DIA. AND OVER TO BE uPVC.
11. ALL HOPE WATER MAINS TO BE TYPE SABS ISO 4427 PE63 PN10 / PE80 PN12.5
12. VALVES AND HYDRANTS TO BE INSTALLED OPPOSITE ERF BOUNDARIES.
13. ALL WATER MAINS ARE TO BE LAID INSIDE THE ROAD RESERVE BOUNDARY UNLESS OTHERWISE SHOWN.
14. ALL CAST IRON FITTINGS TO BE CEMENT MORTAR LINED, "RILSAN" COATED OR FBE COATING.
15. ALL STEEL PIPE FITTINGS SHALL BE IN ACCORDANCE WITH SABS 62 (FOR PIPES UP TO 150mm NOM.Ø).
16. ALL FLANGES SHALL BE RATED AND DRILLED TO SABS 1123, 1600/3 (16 BAR PRESSURE RATED) OR 2500/3 (25 BAR PRESSURE RATED) HOLE DRILLED OFFSET FROM VERTICAL AND HORIZONTAL CENTRE LINE.
17. ALL PIPE FITTINGS TO BE CHECKED PRIOR TO ORDERING / MANUFACTURE, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER. DO NOT SCALE OFF DRAWING, USE FIGURED DIMENSIONS ONLY.
18. MILD STEEL FITTINGS TO BE MANUFACTURED AND WELDED IN ACCORDANCE WITH SABS 1123.
19. ALL BURIED BOLTED CONNECTIONS TO BE DENSOL WRAPPED.
20. MILD STEEL / S.G. AND LINING : SURFACE PREPARATION - GRIT BLAST TO S15 05900, GRADE SQ. 2,5
 - a) INTERNAL LINING - 250 MICRON RILSAN / FBE OR SIMILAR APPROVED
 - b) EXTERNAL COATING - 300 MICRON RILSAN / FBE OR SIMILAR APPROVED
21. DAMAGE COATINGS TO BE REINSTATE BY APPLYING REPAIR KIT AS PER MANUFACTURE SPECIFICATION.



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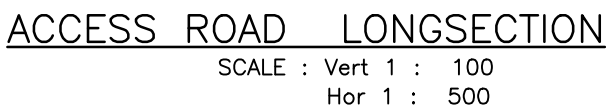
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP
VALVE AND CHAMBER DETAILS

SCALE AS SHOWN	DATE 20/02/2020	
DRAWING NUMBER 8011/004/GTH/011	A1	REVISION T1



- NOTES:**
1. SEE DWG 8011-004-GTH-013 TYPICAL ROAD CROSS SECTION & STORMWATER DETAILS.
 2. ALL EXISTING SERVICES TO BE EXPOSED TO ESTABLISH EXACT LEVELS BEFORE CONSTRUCTION MAY COMMENCE.
 3. ALL WORK TO BE DONE ACCORDING TO THE PROJECT SPECIFICATIONS.
 4. ALL LEVELS AND DIMENSIONS TO BE CHECKED ON THE SITE PRIOR TO ANY CONSTRUCTION.

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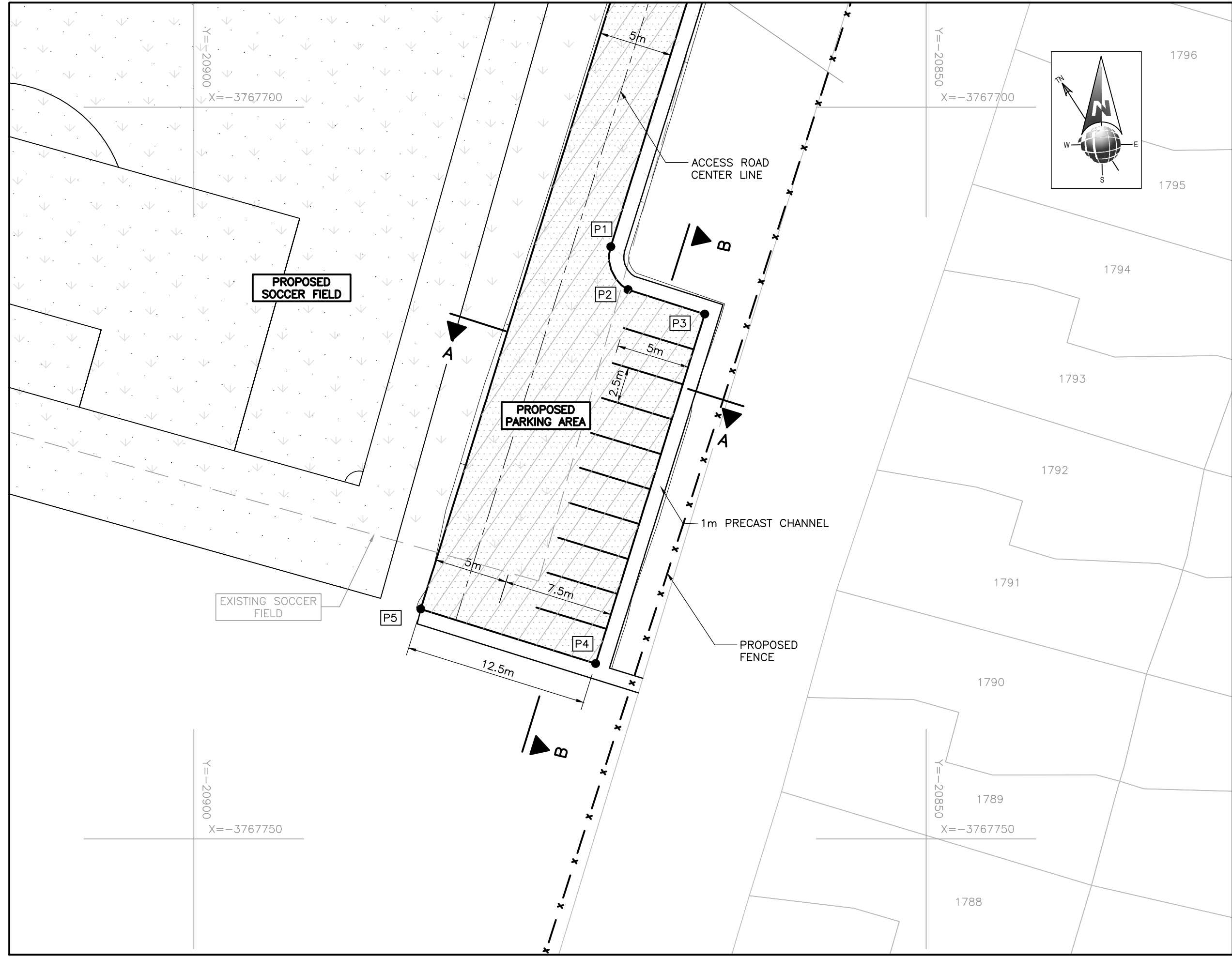
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P.O.BOX 27158,
GREENACRES, P.E. 6057,
BLOCK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
PORT AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RAKA

TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7846
e-mail: mail@boschprojects.co.za
www.boschprojects.co.za

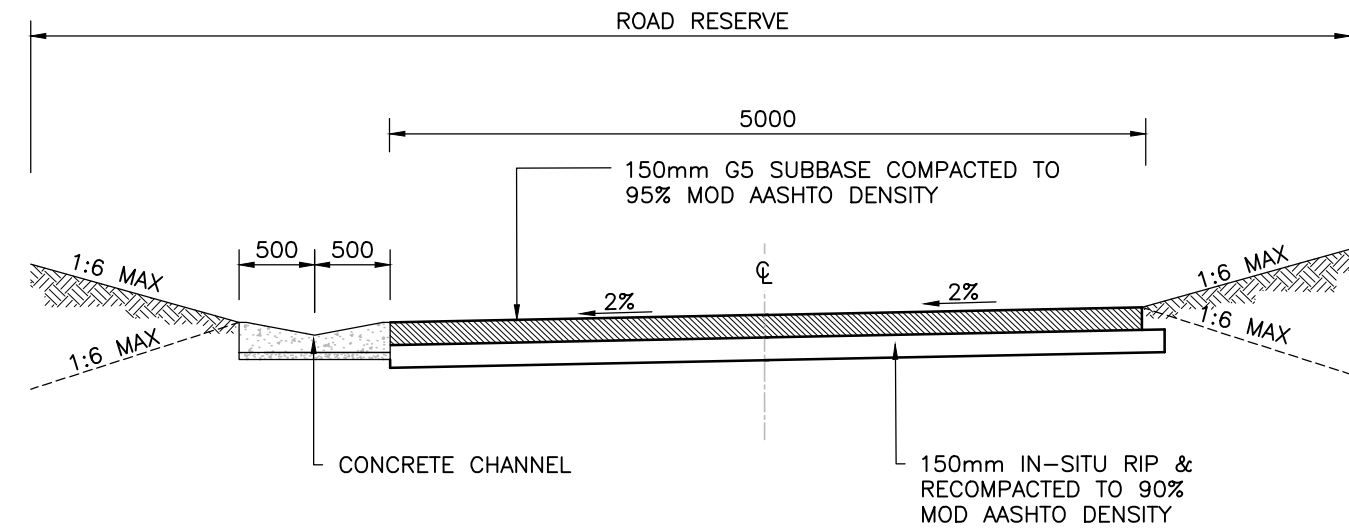


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KOUGA LOCAL MUNICIPALITY UPGRADING OF KWANONZAMO FACILITY IN HUMANSDORP ACCESS ROAD LAYOUT AND LONGSECTION				
SCALE	AS SHOWN		DATE	05/06/2020
DRAWING NUMBER	8011/004/GTH/012		A1	

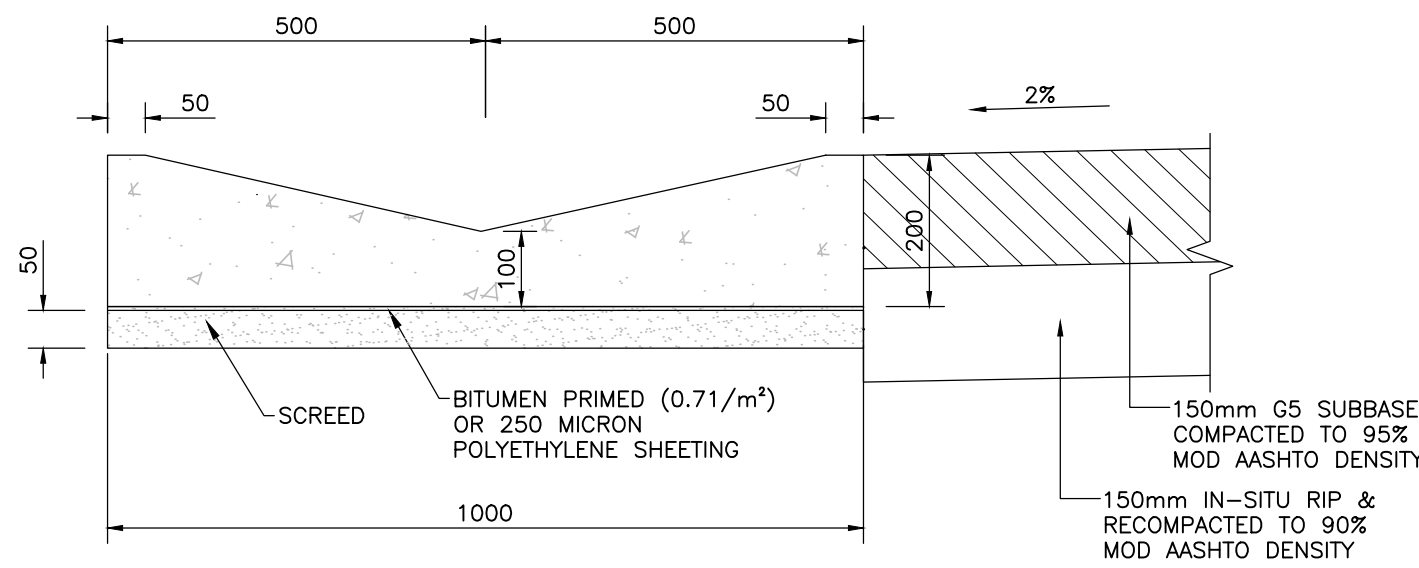


PARKING AREA LAYOUT:
SCALE 1:250

SETTING OUT COORDINATES FOR PARKING AREA			
POINT	Y	X	Z
P1	20871.54	3767709.53	109.71
P2	20870.36	3767712.47	109.66
P3	20865.12	3767714.14	109.55
P4	20872.57	3767738.02	109.42
P5	20884.51	3767734.29	109.67

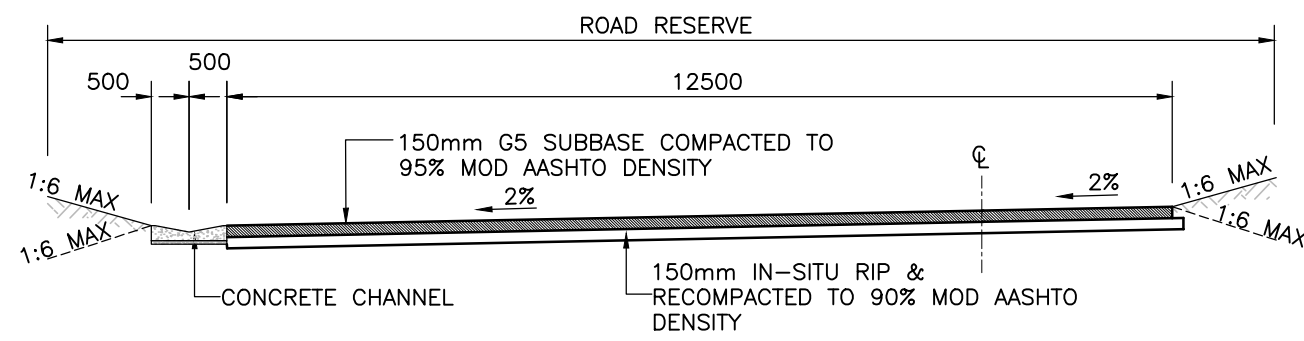


NEW TYPICAL ROAD CROSS SECTION
- GRAVEL ROADWAYS WITH
CONCRETE CHANNELS
SCALE: 1:50

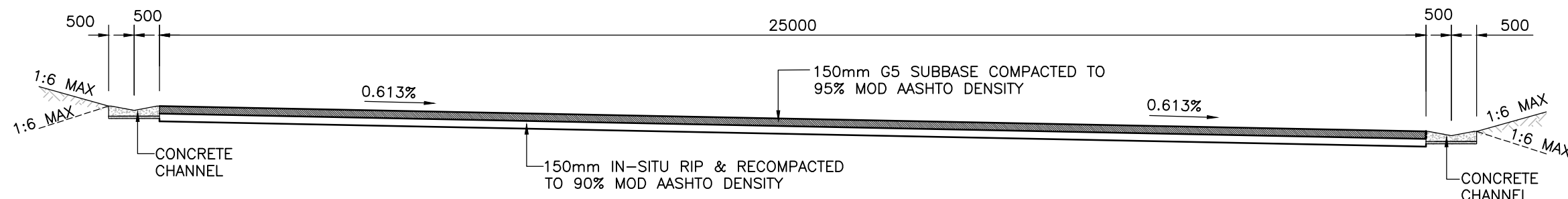


NOTES :
30MPa CONCRETE. IN-SITU MATERIAL TO BE OF G5 SUBBASE QUALITY, COMPACTED TO MINIMUM 95% MOD. A.A.S.H.T.O. DENSITY.
FINISH TO BE WOOD FLOATED.
CONTRACTION JOINTS AT MAXIMUM INTERVAL OF 4m.

STANDARD STORMWATER
CHANNEL DETAIL
SCALE 1:10



SECTION A-A
TYPICAL SECTION OF PARKING AREA
SCALE: 1:100



SECTION B-B
TYPICAL SECTION OF PARKING AREA
SCALE: 1:100

LEGEND

EXISTING

- EXISTING SEWER LINE
- EXISTING SEWER MANHOLE
- EXISTING WATER LINE
- EXISTING FENCE
- EXISTING BUILDING/STRUCTURE
- EXISTING GRAVEL ROAD
- EXISTING TREE/BUSHES
- EXISTING FIELDS
- EXISTING HOUSE/SHACKS

PROPOSED

- PROPOSED FENCE
- PROPOSED ACCESS ROAD
- PROPOSED SW CHANNEL

NOTES:

- ALL EXISTING SERVICES TO BE EXPOSED TO ESTABLISH EXACT LEVELS BEFORE CONSTRUCTION MAY COMMENCE.
- REFER TO DWG 8011-004-GTH-012 FOR ACCESS ROAD LAYOUT AND LONGSECTION.
- ALL WORK TO BE DONE ACCORDING TO THE PROJECT SPECIFICATIONS.
- ALL LEVELS AND DIMENSIONS TO BE CHECKED ON THE SITE PRIOR TO ANY CONSTRUCTION

T1	ISSUED FOR TENDER PURPOSES ONLY	AUG 20
1	INTERNAL REVIEW	FEB 20
REV.	BY	DESCRIPTION
		DATE

DRG. No.	REFERENCE DRAWING
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BOSCH
PROJECTS
GLOBAL ENGINEERING SOLUTIONS
P.O. BOX 27158,
GREENACRES, P.E. 6057,
BLOK 1, FIRST FLOOR,
GREENACRES OFFICE PARK
2nd AVENUE, NEWTON PARK
PORT ELIZABETH, 6045, RSA

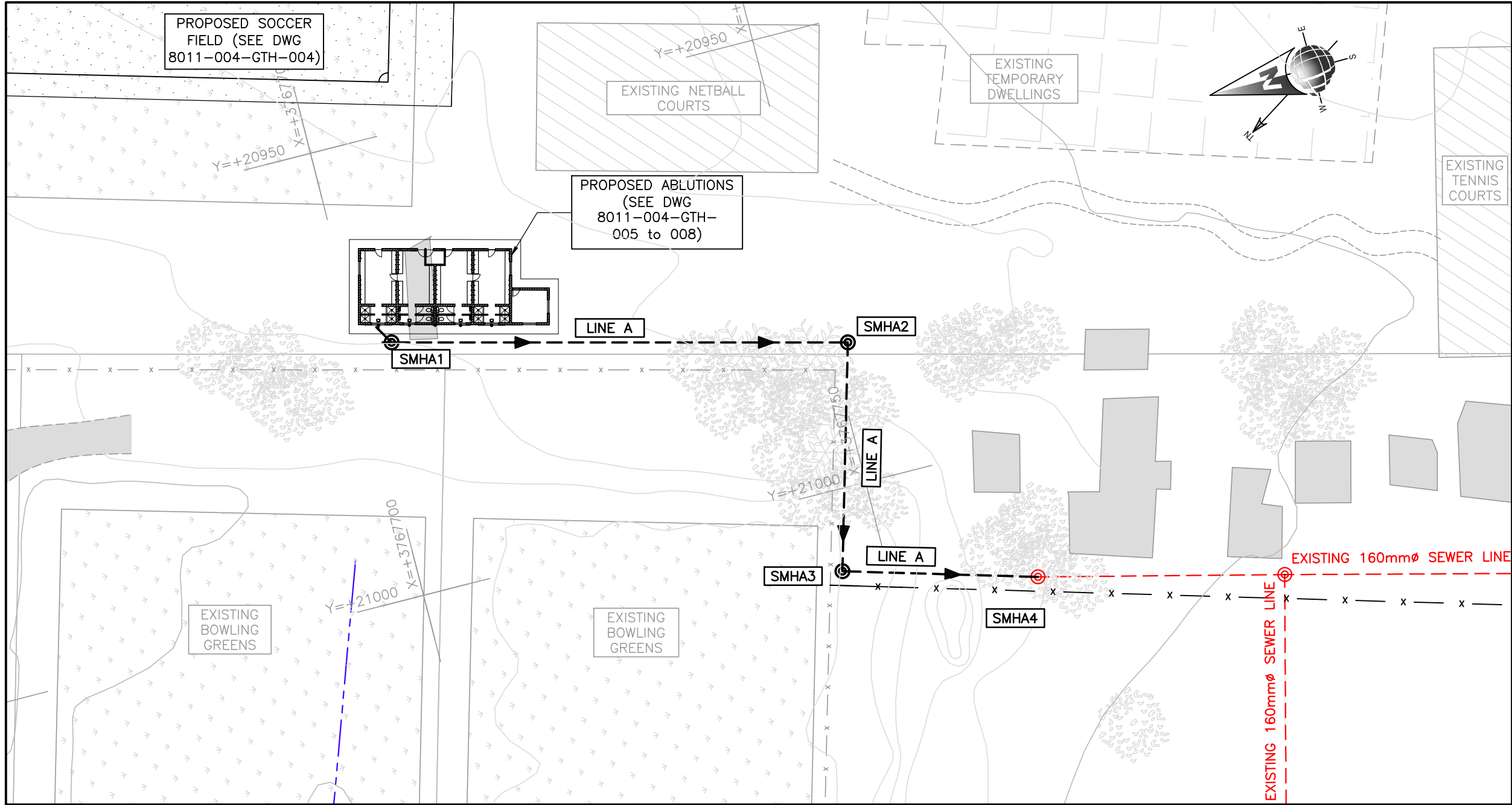
TELEPHONE: (041) 363 0598
TELEFAX: (041) 363 7646
e-mail: mail@boschprojects.co.za
website: www.boschprojects.co.za

DESIGNED	S. MGODUKA	DRAWN	S. MGODUKA
CHECKED	G.C	PROCESS ENGINEER	N/A
CIVIL ENGINEER	L.S	STRUCTURAL ENGINEER	N/A
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER	N/A
MECHANICAL ENGINEER	N/A		

APPROVED	PROJECT MANAGER	DIRECTOR
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KOUGA LOCAL MUNICIPALITY
UPGRADING OF KWANONZAMO FACILITY
IN HUMANSDORP
TYPICAL SECTION OF ACCESS ROAD AND PARKING
AREA AND CHANNEL DETAIL

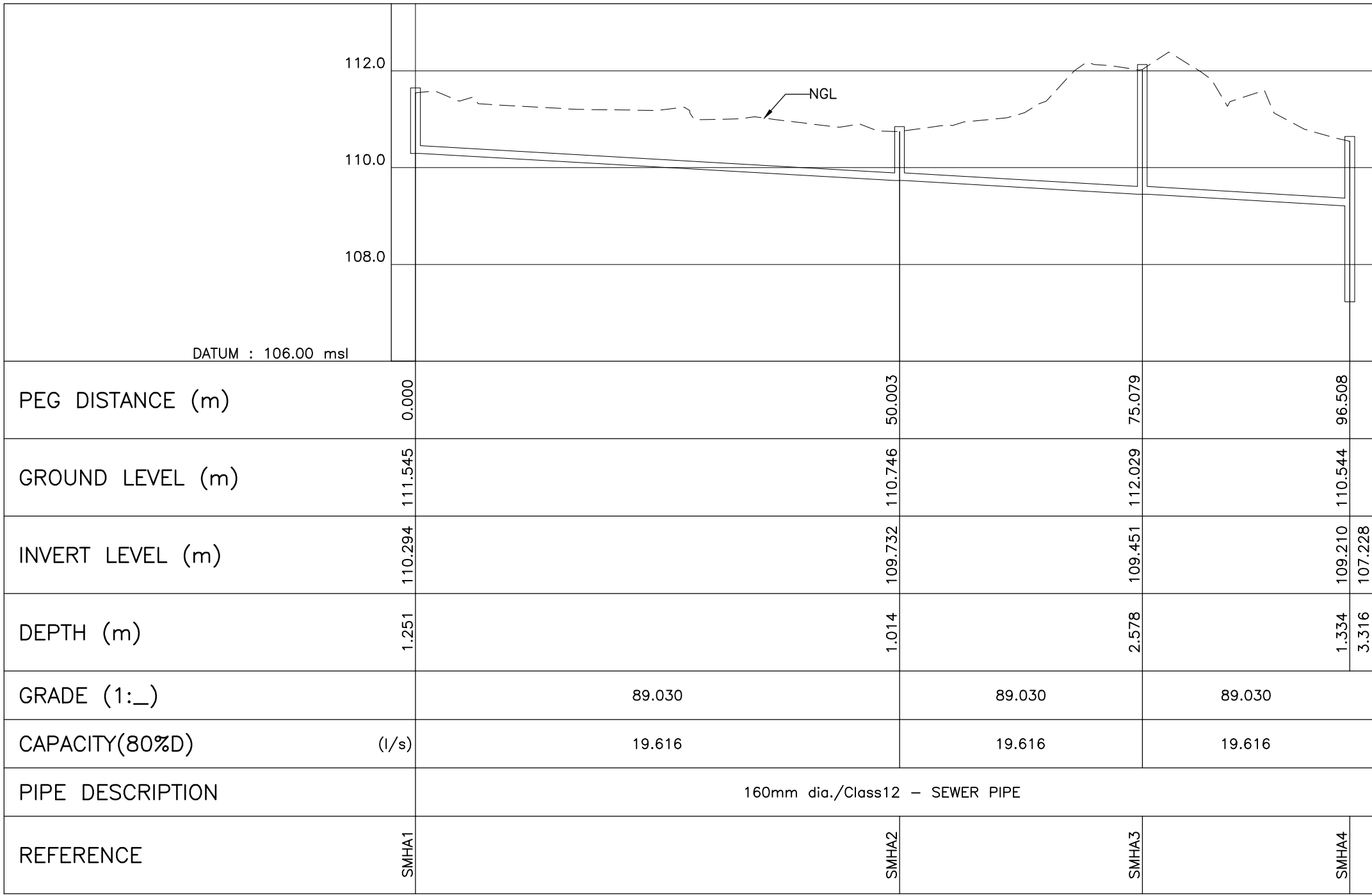
SCALE	AS SHOWN	DATE	20/02/2020
DRAWING NUMBER	8011/004/GTH/013	REVISION	A1
			T1



LAYOUT PLAN – LINE A
SCALE 1 : 500

LEGEND
EXISTING
- - - - - EXISTING SEWER LINE
- - - - - EXISTING SEWER MANHOLE
- - - - - EXISTING WATER LINE
- - - - - EXISTING FENCE
EXISTING BUILDING/STRUCTURE
EXISTING GRAVEL ROAD
EXISTING TREE/BUSHES
EXISTING FIELDS
EXISTING HOUSE/SHACKS
PROPOSED
- - - - - PROPOSED SEWER LINE
- - - - - PROPOSED SEWER MANHOLE
- - - - - PROPOSED WATER LINE
- - - - - PROPOSED FENCE
PROPOSED ACCESS ROAD

- NOTES:**
- CONNECTIONS INTO EXISTING SEWER MAINS TO BE CARRIED OUT BY THE LOCAL MUNICIPALITY.
 - DISTANCE BETWEEN MANHOLE MUST NOT EXCEED 80m.
 - GRADIENTS GREATER THAN 10% REQUIRES ANCHOR BLOCKS.
 - NO RETICULATION SEWER MAY BE AT A DEPTH GREATER THAN 6m.
 - POSITIONS OF EXISTING SERVICES ARE TO BE DETERMINED ON SITE PRIOR TO CONSTRUCTION.
 - A MINIMUM OF 150mm CLEARANCE MUST BE MAINTAINED BETWEEN CROSSING SERVICES.
 - PIPES TO HAVE MINIMUM COVER OF 900mm.
 - ANY DISCREPANCIES TO BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.



LONGSECTION – LINE A
SCALE: VERT 1 : 100
HOR 1 : 500

PIPE DESIGN DATA.						
REFERENCE	Y	X	IL in / out	DEPTH in / out		
SMHA1	20972.281	3767703.457	110.294 110.294	1.251 1.251		
SMHA2	20984.673	3767751.901	109.732 109.732	1.014 1.014		
SMHA3	21008.815	3767745.119	109.451 109.451	2.578 2.578		
SMHA4	21014.728	3767765.715	109.210 107.228	1.334 3.316		

PIPE LENGTHS (m)			
REFERENCE		HORIZ.	SLOPE
SMHA1	– SMHA2	50.003	50.006
SMHA2	– SMHA3	25.076	25.078
SMHA3	– SMHA4	21.429	21.430

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DESIGNED	S. MGODUKA	DRAWN S. MGODUKA		
CHECKED	G.C	PROCESS ENGINEER N/A		
CIVIL ENGINEER	L.S	STRUCTURAL ENGINEER N/A		
INSTRUMENT ENGINEER	N/A	ELECTRICAL ENGINEER N/A		
MECHANICAL ENGINEER	N/A			
APPROVED	PROJECT MANAGER	DIRECTOR		
KOUGA LOCAL MUNICIPALITY				
UPGRADING OF KWANONZAMO FACILITY IN HUMANSDORP				
PROPOSED SEWER LAYOUT AND LONGSECTION LINE A & LINE B				
SCALE	AS SHOWN	DATE 20/02/2020		
DRAWING NUMBER	8011/004/GTH/014	REVISION A1		
		T1		

