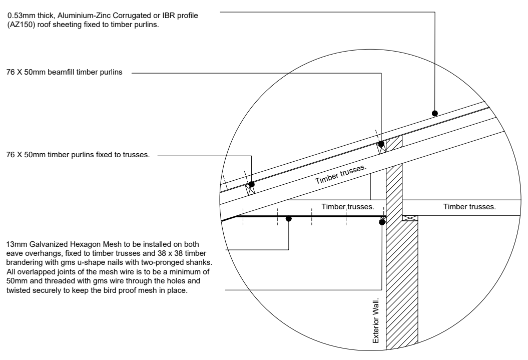
BUILDING NO.	DESCRIPTION
A	Admin Block (12.1m x 9.5m)
B	6 Classroom block (44.6m x 8.4m)
C	3 Classroom block (21.7m x 9.4m)
D	Kitchen Block (4.1m x 3.5m)
E	Container (4.6m x 3m)
F	Ablution block (5.6m x 5.1m)
G	E.C.D Classroom (11m x 13.6m)
H	Ablution block (5.3m x 6.2m)
I	Pre Fab classroom (9m x 7m)
J	Security Gaurd Office (2.5m x 2.5m)

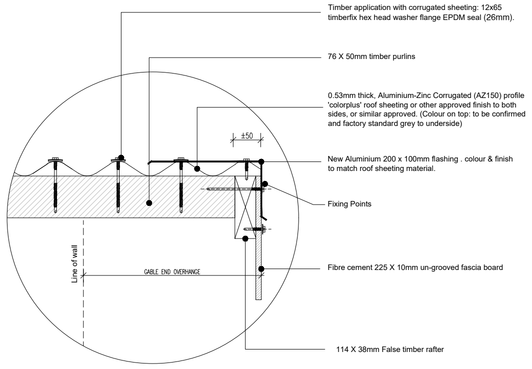
CO-ORDINATES :

LATITUDE	:	28°50'24.18"S
LONGITUDE	:	30°39'51.74"E

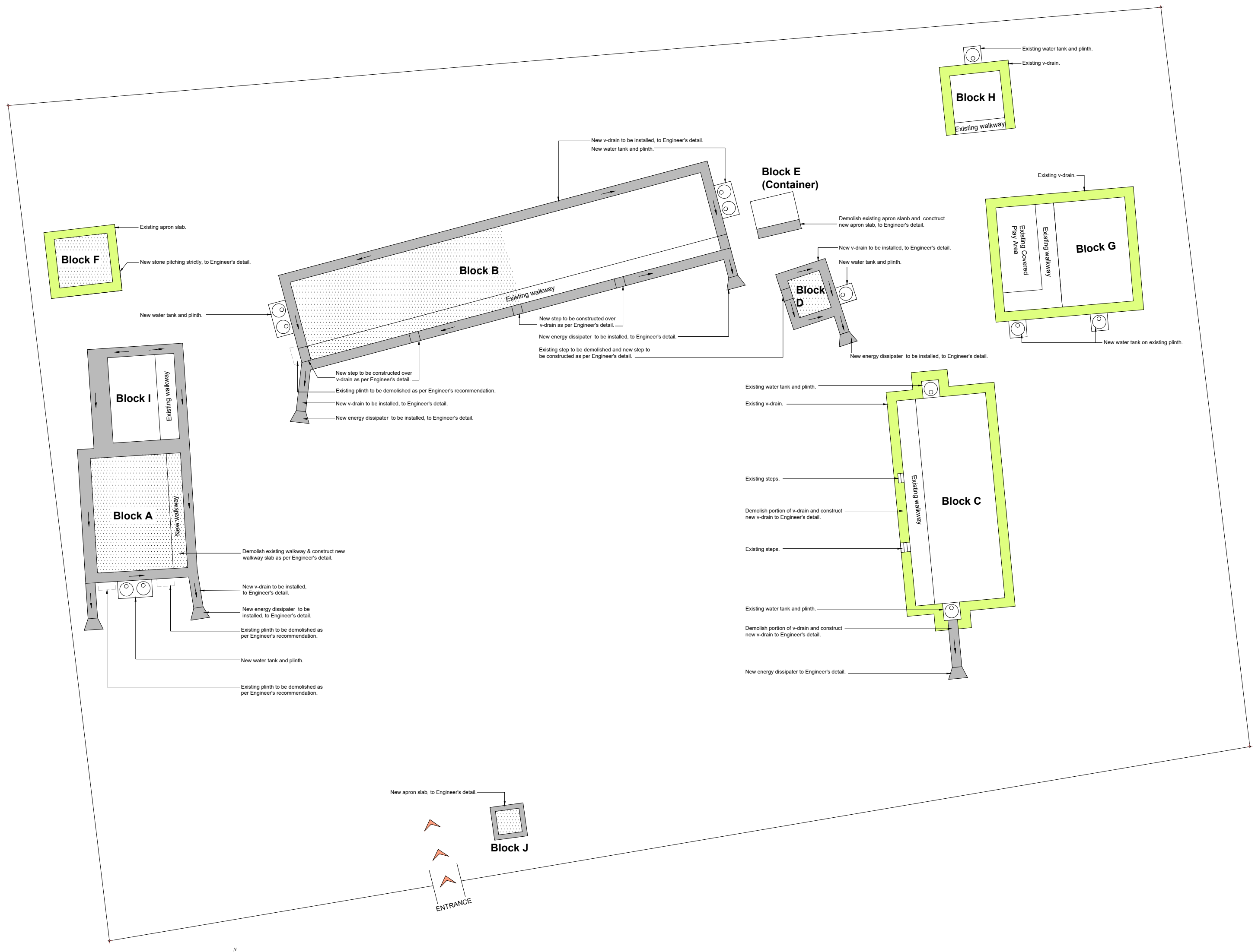
Aerial View
Scale 1:100



Typical bird proofing detail
Scale 1:5



TYPICAL CORREGATED ROOF FLASHING DETAIL
Scale 1:5



Site Plan
Scale 1:250

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall.
Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

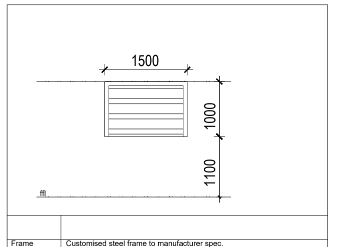
PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

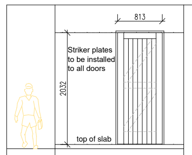
New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.



Frame	Customised steel frame to manufacturer spec.
Glass/ Leaf	Maxi-Shutter Classic Roller Shutter Garage Door to given dimensions
Finish	Dark Grey powder coated Aluminium frames
Ironmongery	Ironmongery by manufacture specifications
Location	Kitchen
Quantity	01

DS | SCALE: 1:50 | DETAIL DESCRIPTION. **ROLLER DOOR SCHEDULE**



TYPE:	D1 - EXTERNAL DOOR (ND01)
FRAME:	1.2mm thick pressed double rebated mild steel door frame
FRAME FINISH:	Hot dipped galvanised. Not painted
DOOR:	2032 x 813 x 40mm Meranti Hard wood, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V jointed battens
DOOR FINISH:	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.
FURNITURE:	Door set 1
NOTES:	• Contractor to check no's required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.

DOOR SET 1:
Union 4 Lever Commercial Series Mortice lock 2247-7855 with CP on brass Gower Lever handles CB862-05Ch & CZ8731CH door stop fixed with counter-sunk bolt into anchor bolt.

STANDARD DOOR FRAME:
1.2mm Hot dipped galvanised pressed metal double rebated frame to suit wall thickness with straps for building in.
2 x 100mm Galvanised & welded loose - butt hinges, adjustable chrome striking plate & 2 rubber buffers. Frame to be well rammed with mortar mix to protect from denting when bumped

NB: ALL IRONMONGERY TO BE SABS APPROVED.

DS | SCALE: 1:50 | DETAIL DESCRIPTION. **DOOR SCHEDULE**

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

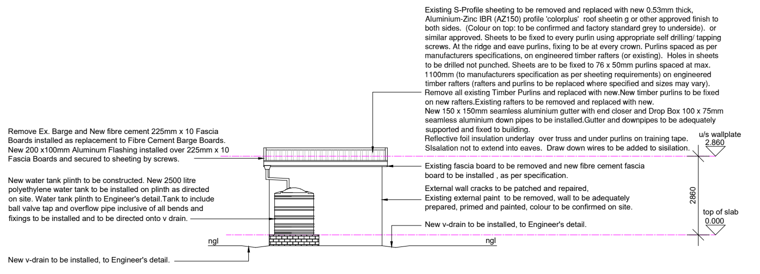
Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

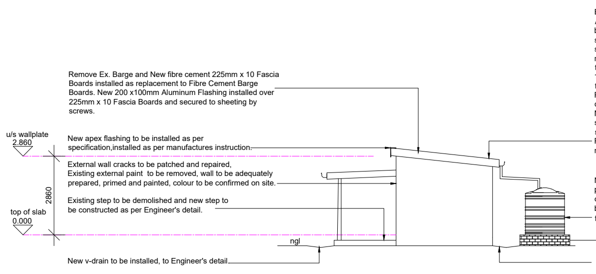
Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Site plan and Details for Mziwenkosi Primary School

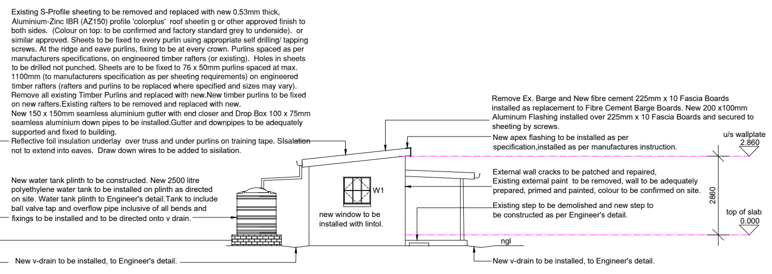
Drawn: Trishaan Singh Date: 2020/04/20
Checked: Muazzam Khan Date: 2020/06/22
Scales: 1:100
Consultant Drawing No: 1367-18 WD01 Revision: .
DOPW Drawing No: ZNTL04774W Revision: .
DOPW WIMS No: WIMS : 063837
Stamped by Design Review Committee



Block D (East Elevation)
Scale 1:100



Block D (South Elevation)
Scale 1:100



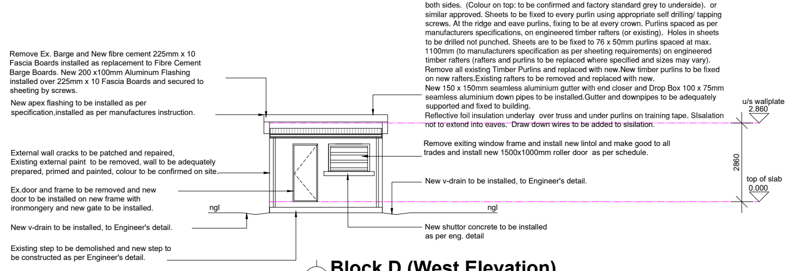
Block D (North Elevation)
Scale 1:100

LEGEND	DESCRIPTION
▭ ○	Number inside of circle indicates the number of glazing panels to be replaced.

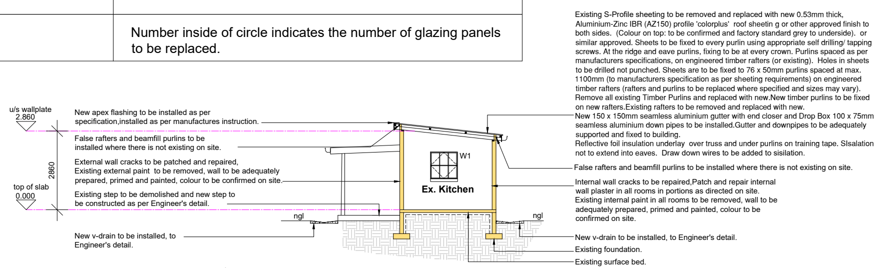
Exposed timber to be painted with carbolineum, as directed on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

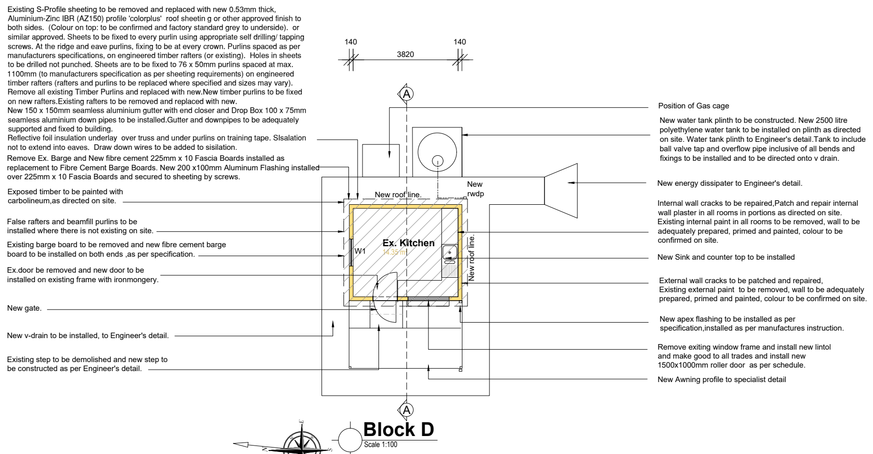
All damaged glazing . replaced, confirmed on site.



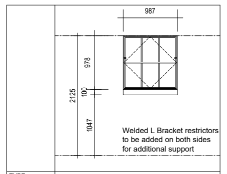
Block D (West Elevation)
Scale 1:100

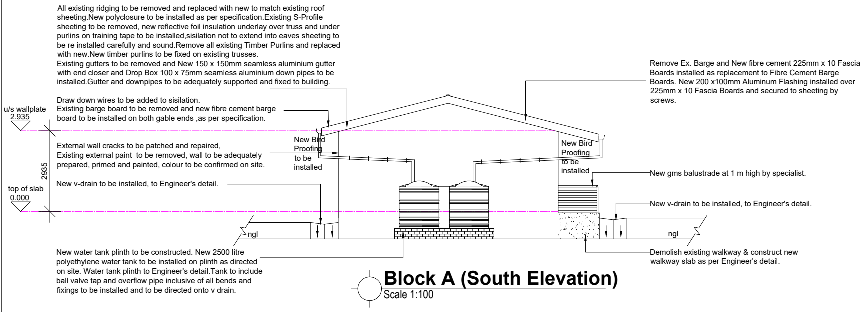


Block D (Section A-A)
Scale 1:100

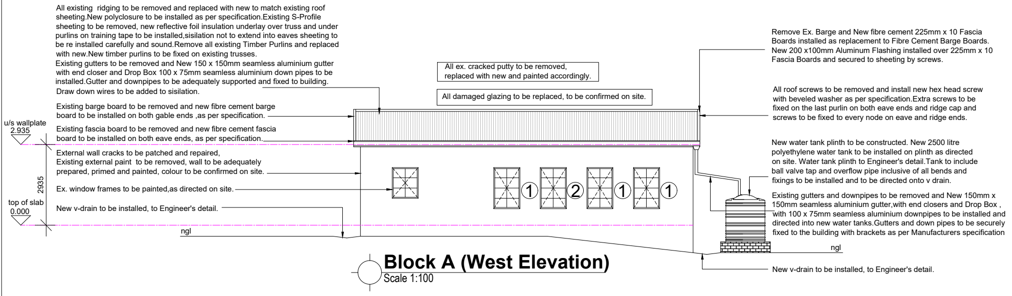


Block D
Scale 1:100

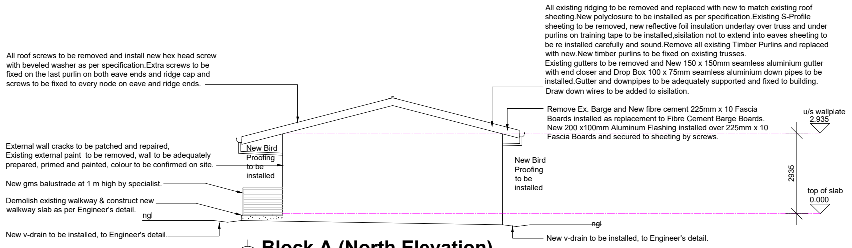
	
TYPE:	W1 X 1 SS32
FRAME:	SS Industrial type rolled steel window sections. SABS approved.
GLASS:	6mm Toughened safety glass puttied in with steel window putty (Painted Putty) . All glazing is to comply with the SANS 10400 PART N. All glazing is to comply with the SANS 10400 PART N. All glazing is to be supplied with a certificate.
FITTINGS:	Approved standard brass fittings to opening sashes
B.BARS:	Galvanized mild steel flat bars as per manufacturers specification
FINISH:	Galvanised. No Painting required.
NOTES:	Cores adjacent to window jambs are to have cores filled allowing fixing lugs to be built -in (Similar to detail below). All putty around glazing is to be painted when dried.
SCALE: 1:50	DETAIL DESCRIPTION. WINDOW SCHEDULE



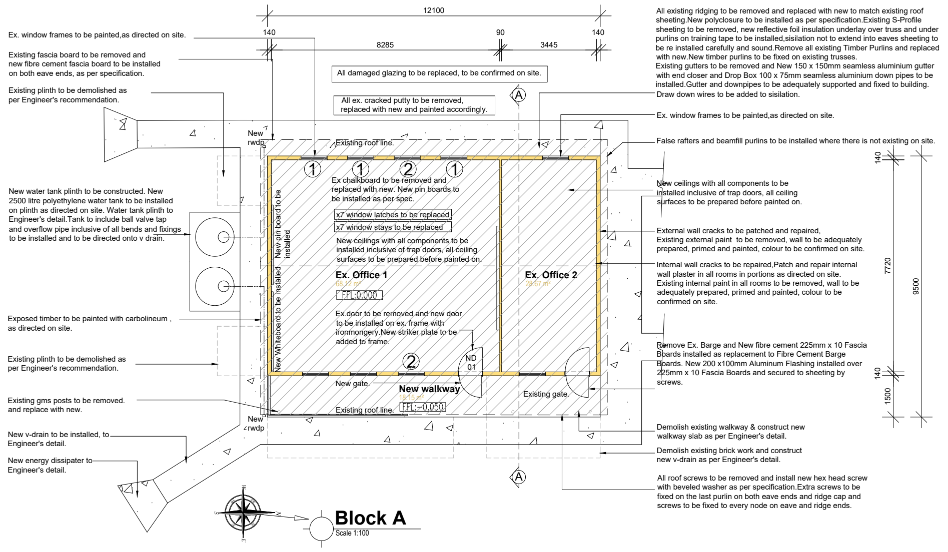
Block A (South Elevation)
Scale 1:100



Block A (West Elevation)
Scale 1:100



Block A (North Elevation)
Scale 1:100



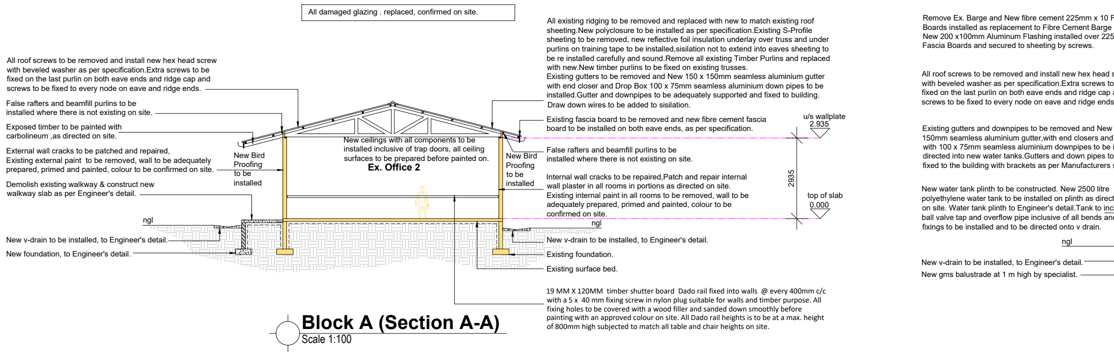
Block A
Scale 1:100

LEGEND	DESCRIPTION
▭ ○	Number inside of circle indicates the number of glazing panels to be replaced.

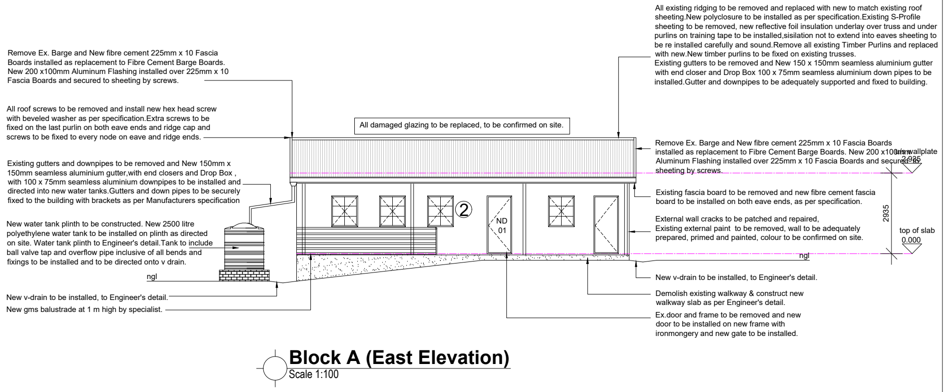
Exposed timber to be painted with carbolineum, as directed on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

All damaged glazing . replaced, confirmed on site.



Block A (Section A-A)
Scale 1:100



Block A (East Elevation)
Scale 1:100

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3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside) Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall.
Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.

Signature: Date:

Consultant:

REALISING
CONTINENTAL POTENTIAL

Signature: Date:

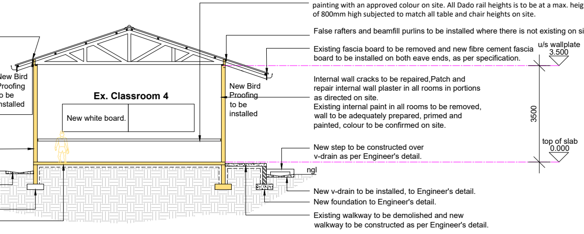
public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Construction drawing for Mziwenkosi Primary School - Block A and D: Plan;Section and Elevations

Drawn: Trishaan Singh Date: 2020/04/20
Checked: Muazzam Khan Date: 2020/06/22
Scales: 1:100
Consultant Drawing No: 1367-18 WD02 Revision: .
DOPW Drawing No: ZNTL04774W Revision: .
DOPW WIMS No: WIMS : 063837
Stamped by Design Review Committee

Sheet 3 of 6 (A0)



All roof screws to be removed and install new hex head screw with beveled washer as per specification.Extra screws to be fixed on the last purlin on both eave ends and ridge cap and screws to be fixed to every node on eave and ridge ends.

False rafters and beamfill purlins to be installed where there is not existing on site.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New v-drain to be installed, to Engineer's detail.

Existing foundation.

Existing surface bed.

19 MM X 120MM timber shutter board Dado rail fixed into walls @ every 400mm c/c with a 5 x 40 mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights is to be at a max. height of 800mm high subjected to match all table and chair heights on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

Internal wall cracks to be repaired,Patch and repair internal wall plaster in all rooms in portions as directed on site.
Existing internal paint in all rooms to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New step to be constructed over v-drain as per Engineer's detail.

New v-drain to be installed, to Engineer's detail.

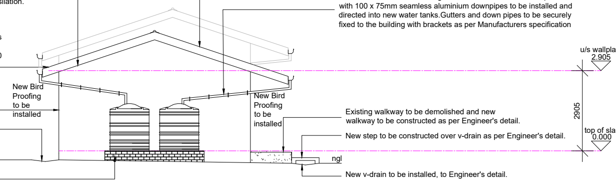
New foundation to Engineer's detail.

Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

Block B (Section B-B)
Scale 1:100

Roof Pitch @ +-18° All existing ridging to be removed and replaced with new to match new roof sheeting. New polyclosure to be installed as per specification. Existing S-Profile sheeting to be removed and replaced with new 0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheetin g or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside) , or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing). Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary). Remove all existing Timber Purlins and replaced with new.New timber purlins to be fixed on new trusses.Existing trusses to be removed and replaced with new. Existing gutters to be removed and New 150 x 150mm seamless aluminium gutter with end closer and Drop Box 100 x 75mm seamless aluminium down pipes to be installed.Gutter and downpipes to be adequately supported and fixed to building. Reflective foil insulation underlay over truss and under purlins on training tape. SIsalation not to extend into eaves. Draw down wires to be added to sisilation.

Remove Ex. Barge and New fibre cement 225mm x 10 Fascia Boards installed as replacement to Fibre Cement Barge Boards. New 200 x100mm Aluminum Flashing installed over 225mm x 10 Fascia Boards and secured to cement 225mm x 10 Fascia Boards installed as replacement to missing Fibre Cement Barge Boards and 100mm x 100 Flashing installed over 225mm x 10 Fascia Boards and secured to sheeting by screws.



External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New v-drain to be installed, to Engineer's detail.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New waterproof flashing by Specialist.

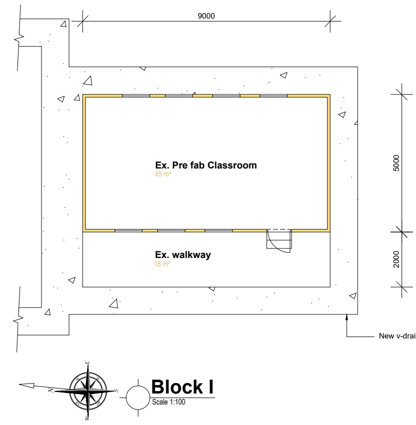
Existing gutters and downpipes to be removed and New 150mm x 150mm seamless aluminium gutter,with end closers and Drop Box , with 100 x 75mm seamless aluminium downpipes to be installed and directed into new water tanks.Gutters and down pipes to be securely fixed to the building with brackets as per Manufacturers specification

Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

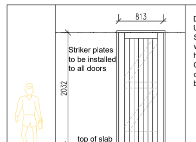
New v-drain to be installed, to Engineer's detail.

Block B (West Elevation)
Scale 1:100



New v-drain to be installed, to Engineer's detail.

Block I
Scale 1:100



TYPE:	D1 - EXTERNAL DOOR (ND01)
FRAME:	1.2mm thick pressed double rebated mild steel door frame
FRAME FINISH:	Hot dipped galvanised. Not painted
DOOR:	2032 x 813 x 40mm Meranti Hard wood, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V jointed battens
DOOR FINISH:	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.
FURNITURE:	Door set 1
NOTES:	• Contractor to check no's required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.

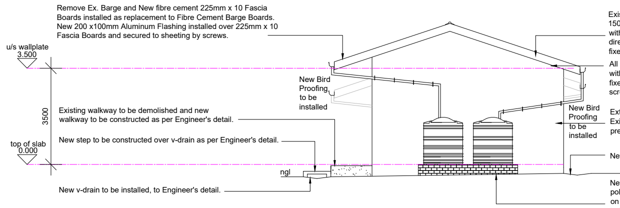
DOOR SET 1:
Union 4 Lever Commercial Series Mortice lock 2247-7855 with CP on brass Gower Lever handles CB862-05Ch & CZ8731CH door stop fixed with counter-sunk bolt into anchor bolt.

STANDARD DOOR FRAME:
1.2mm Hot dipped galvanised pressed metal double rebated frame to suit wall thickness with straps for building in.
2 x 100mm Galvanised & welded loose - butt hinges, adjustable chrome striking plate & 2 rubber buffers. Frame to be well rammed with mortar mix to protect from denting when bumped

NB: ALL IRONMONGERY TO BE SABS APPROVED.

DS SCALE: 1:50 DETAIL DESCRIPTION. DOOR SCHEDULE

Remove Ex. Barge and New fibre cement 225mm x 10 Fascia Boards installed as replacement to Fibre Cement Barge Boards. New 200 x100mm Aluminum Flashing installed over 225mm x 10 Fascia Boards and secured to sheeting by screws.



Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

New v-drain to be installed, to Engineer's detail.

Existing gutters and downpipes to be removed and New 150mm x 150mm seamless aluminium gutter,with end closers and Drop Box , with 100 x 75mm seamless aluminium downpipes to be installed and directed into new water tanks.Gutters and down pipes to be securely fixed to the building with brackets as per Manufacturers specification

All roof screws to be removed and install new hex head screw with beveled washer as per specification.Extra screws to be fixed on the last purlin on both eave ends and ridge cap and screws to be fixed to every node on eave and ridge ends.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New v-drain to be installed, to Engineer's detail.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

Block B (East Elevation)
Scale 1:100

Exposed timber to be painted with carbolineum, as directed on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

All damaged glazing . replaced, confirmed on site.

Roof Pitch @ +-18° All existing ridging to be removed and replaced with new to match new roof sheeting. New polyclosure to be installed as per specification. Existing S-Profile sheeting to be removed and replaced with new 0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheetin g or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside) , or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing). Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary). Remove all existing Timber Purlins and replaced with new.New timber purlins to be fixed on new trusses.Existing trusses to be removed and replaced with new. Existing gutters to be removed and New 150 x 150mm seamless aluminium gutter with end closer and Drop Box 100 x 75mm seamless aluminium down pipes to be installed.Gutter and downpipes to be adequately supported and fixed to building. Reflective foil insulation underlay over truss and under purlins on training tape. SIsalation not to extend into eaves. Draw down wires to be added to sisilation.

All roof screws to be removed and install new hex head screw with beveled washer as per specification.Extra screws to be fixed on the last purlin on both eave ends and ridge cap and screws to be fixed to every node on eave and ridge ends.

All ex. cracked putty to be removed, replaced with new and painted accordingly.

All damaged glazing to be replaced, to be confirmed on site.

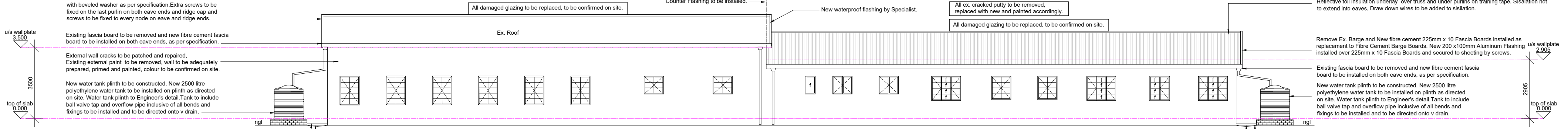
Counter Flashing to be installed.

New waterproof flashing by Specialist.

Trusses and sheeting to be replaced.

All ex. cracked putty to be removed, replaced with new and painted accordingly.

All damaged glazing to be replaced, to be confirmed on site.



Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New step to be constructed over v-drain as per Engineer's detail.

New v-drain to be installed, to Engineer's detail.

Remove Ex. Barge and New fibre cement 225mm x 10 Fascia Boards installed as replacement to Fibre Cement Barge Boards. New 200 x100mm Aluminum Flashing installed over 225mm x 10 Fascia Boards and secured to sheeting by screws.

Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New v-drain to be installed, to Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

Block B (North Elevation)
Scale 1:100

LEGEND	DESCRIPTION
▭ ○	Number inside of circle indicates the number of glazing panels to be replaced.

Roof Pitch @ +-18° All existing ridging to be removed and replaced with new to match new roof sheeting. New polyclosure to be installed as per specification. Existing S-Profile sheeting to be removed and replaced with new 0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheetin g or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside) , or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing). Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary). Remove all existing Timber Purlins and replaced with new.New timber purlins to be fixed on new trusses.Existing trusses to be removed and replaced with new.
Existing gutters to be removed and New 150 x 150mm seamless aluminium gutter with end closer and Drop Box 100 x 75mm seamless aluminium down pipes to be installed.Gutter and downpipes to be adequately supported and fixed to building.
Reflective foil insulation underlay over truss and under purlins on training tape. SIsalation not to extend into eaves. Draw down wires to be added to sisilation.
Remove Ex. Barge and New fibre cement 225mm x 10 Fascia Boards installed as replacement to Fibre Cement Barge Boards. New 200 x100mm Aluminum Flashing installed over 225mm x 10 Fascia Boards and secured to sheeting by screws.

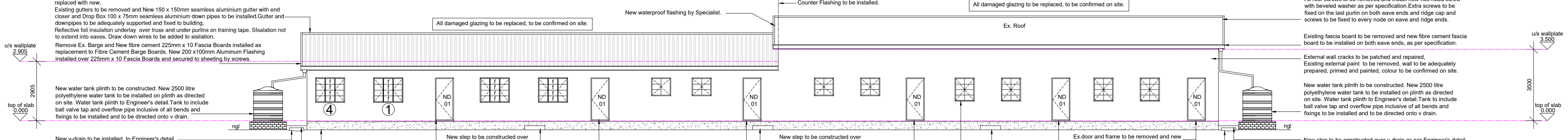
Trusses and sheeting to be replaced.

Counter Flashing to be installed.

New waterproof flashing by Specialist.

All damaged glazing to be replaced, to be confirmed on site.

All damaged glazing to be replaced, to be confirmed on site.



All roof screws to be removed and install new hex head screw with beveled washer as per specification.Extra screws to be fixed on the last purlin on both eave ends and ridge cap and screws to be fixed to every node on eave and ridge ends.

Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New v-drain to be installed, to Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

Ex.door and frame to be removed and new door to be installed on new frame with ironmongery and new gate to be installed.

New step to be constructed over v-drain as per Engineer's detail.

Ex.door and frame to be removed and new door to be installed on new frame with ironmongery and new gate to be installed.

Ex. window frames to be painted,as directed on site.

Ex.door and frame to be removed and new door to be installed on new frame with ironmongery and new gate to be installed.

New step to be constructed over v-drain as per Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

New v-drain to be installed, to Engineer's detail.

Block B (South Elevation)
Scale 1:100

Roof Pitch @ +-14°
All existing ridging to be removed and replaced with new to match new roof sheeting.New polyclosure to be installed as per specification.Existing S-Profile sheeting to be removed and replaced with new 0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides.(Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
Remove all existing Timber Purlins and replaced with new.New timber purlins to be fixed on new trusses.Existing trusses to be removed and replaced with new.
Existing gutters to be removed and New 150 x 150mm seamless aluminium gutter with end closer and Drop Box 100 x 75mm seamless aluminium down pipes to be installed.Gutter and downpipes to be adequately supported and fixed to building.
Reflective foil insulation underlay over truss and under purlins on training tape. SIsalation not to extend into eaves.
Draw down wires to be added to sisilation.

False rafters and beamfill purlins to be installed where there is not existing on site.

New hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

New ceilings with all components to be installed inclusive of trap doors, all ceiling surfaces to be prepared before painted on.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

Internal wall cracks to be repaired,Patch and repair internal wall plaster in all rooms in portions as directed on site.
Existing internal paint in all rooms to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

Existing plinth to be demolished as per Engineer's recommendation.

New energy dissipater to Engineer's detail.

Exposed timber to be painted with carbolineum, as directed on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

All damaged glazing . replaced, confirmed on site.

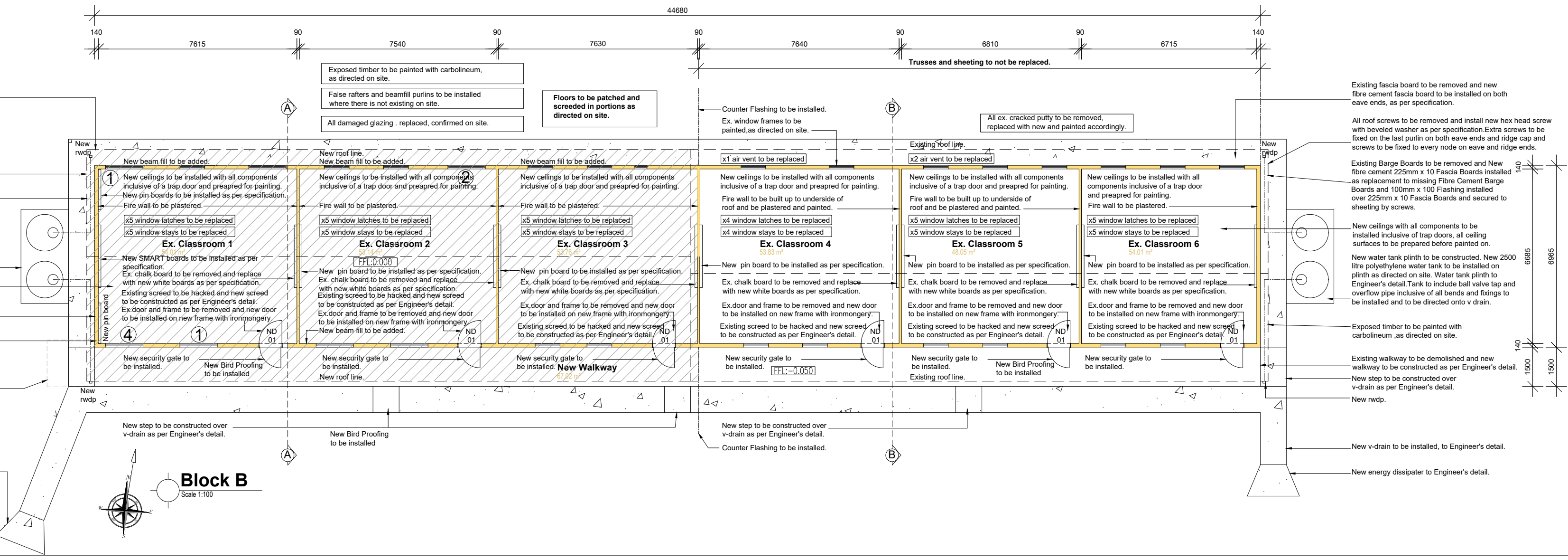
Floors to be patched and screeded in portions as directed on site.

Trusses and sheeting to not be replaced.

Counter Flashing to be installed.

Ex. window frames to be painted,as directed on site.

All ex. cracked putty to be removed, replaced with new and painted accordingly.



New step to be constructed over v-drain as per Engineer's detail.

New Bird Proofing to be installed

New step to be constructed over v-drain as per Engineer's detail.

Counter Flashing to be installed.

Block B
Scale 1:100

Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

All roof screws to be removed and install new hex head screw with beveled washer as per specification.Extra screws to be fixed on the last purlin on both eave ends and ridge cap and screws to be fixed to every node on eave and ridge ends.

Existing Barge Boards to be removed and New fibre cement 225mm x 10 Fascia Boards installed as replacement to missing Fibre Cement Barge Boards and 100mm x 100 Flashing installed over 225mm x 10 Fascia Boards and secured to sheeting by screws.

New ceilings with all components to be installed inclusive of trap doors, all ceiling surfaces to be prepared before painted on.

New water tank plinth to be constructed. New 2500 litre polyethylene water tank to be installed on plinth as directed on site. Water tank plinth to Engineer's detail.Tank to include ball valve tap and overflow pipe inclusive of all bends and fixings to be installed and to be directed onto v drain.

Exposed timber to be painted with carbolineum ,as directed on site.

Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

New step to be constructed over v-drain as per Engineer's detail.

New rwdp.

New v-drain to be installed, to Engineer's detail.

New energy dissipater to Engineer's detail.

Roof Pitch @ +-14°
All existing ridging to be removed and replaced with new to match new roof sheeting.New polyclosure to be installed as per specification.Existing S-Profile sheeting to be removed and replaced with new 0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides.(Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
Remove all existing Timber Purlins and replaced with new.New timber purlins to be fixed on new trusses.Existing trusses to be removed and replaced with new.
Existing gutters to be removed and New 150 x 150mm seamless aluminium gutter with end closer and Drop Box 100 x 75mm seamless aluminium down pipes to be installed.Gutter and downpipes to be adequately supported and fixed to building.
Reflective foil insulation underlay over truss and under purlins on training tape. SIsalation not to extend into eaves.
Draw down wires to be added to sisilation.

Exposed timber to be painted with carbolineum ,as directed on site.

Existing fascia board to be removed and new fibre cement fascia board to be installed on both eave ends, as per specification.

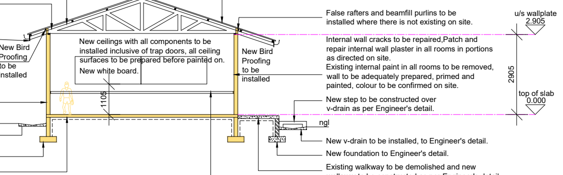
False rafters and beamfill purlins to be installed where there is not existing on site.

External wall cracks to be patched and repaired, Existing external paint to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New v-drain to be installed, to Engineer's detail.

Existing foundation.

Existing surface bed.



New hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.

False rafters and beamfill purlins to be installed where there is not existing on site.

Internal wall cracks to be repaired,Patch and repair internal wall plaster in all rooms in portions as directed on site.
Existing internal paint in all rooms to be removed, wall to be adequately prepared, primed and painted, colour to be confirmed on site.

New step to be constructed over v-drain as per Engineer's detail.

New v-drain to be installed, to Engineer's detail.

New foundation to Engineer's detail.

Existing walkway to be demolished and new walkway to be constructed as per Engineer's detail.

19 MM X 120MM timber shutter board Dado rail fixed into walls @ every 400mm c/c with a 5 x 40 mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights is to be at a max. height of 800mm high subjected to match all table and chair heights on site.

Block B (Section A-A)
Scale 1:100

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside) Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

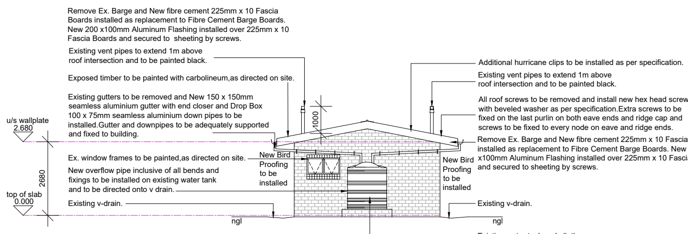
Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

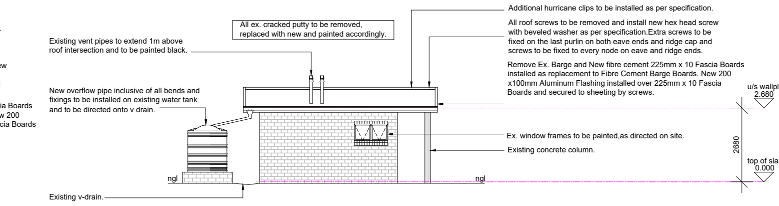
Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Construction drawing for Mziwenkosi Primary School - Block B and I: Plan;Section and Elevations

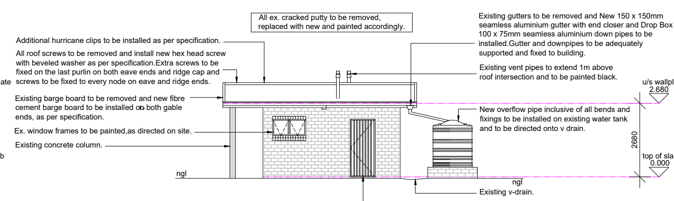
Drawn: Trishaan Singh	Date: 2020/04/20
Checked: Muazzam Khan	Date: 2020/06/22
Scales: 1:100	
Consultant Drawing No: 1367-18 WD03	Revision: .
DOPW Drawing No: ZNTL04774W	Revision: .
DOPW WIMS No: WIMS : 063837	
Stamped by Design Review Committee	



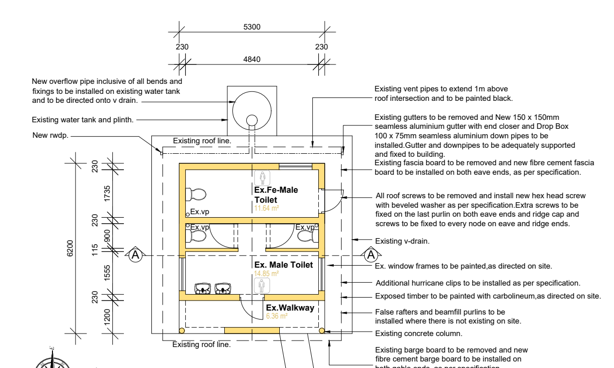
Block H (East Elevation)
Scale 1:100



Block H (North Elevation)
Scale 1:100



Block H (South Elevation)
Scale 1:100



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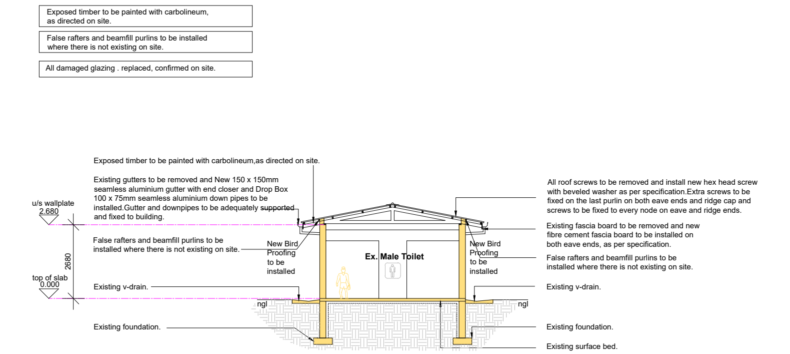
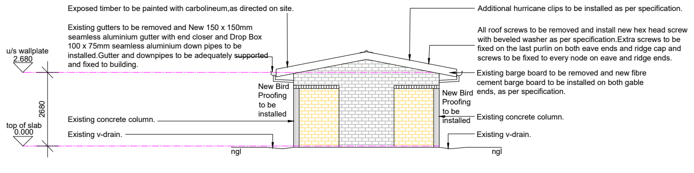
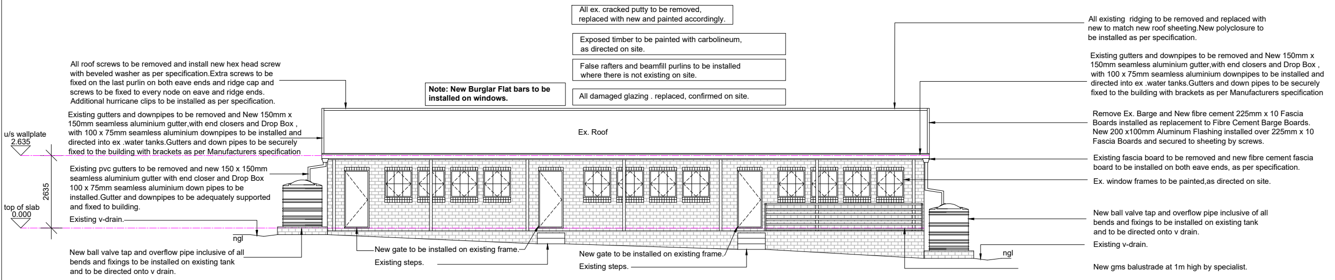


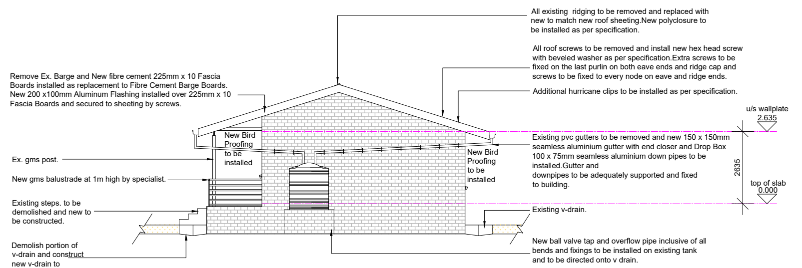
Block H (Section A-A)
Scale 1:100



Block H (West Elevation)
Scale 1:100



Block C (West Elevation)
Scale 1:100



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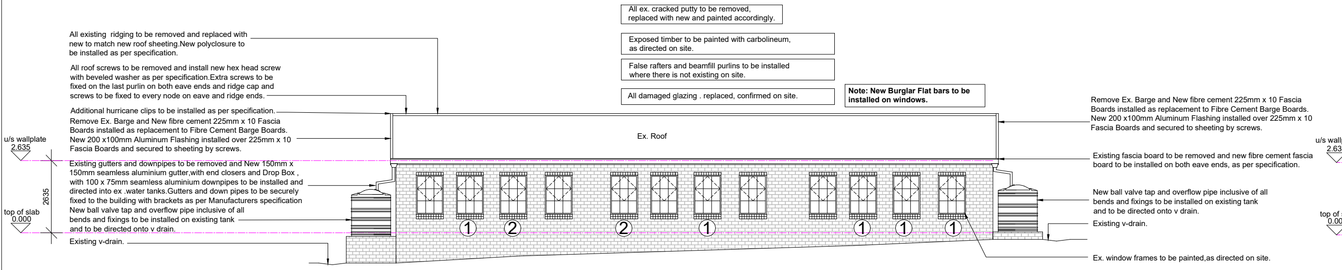

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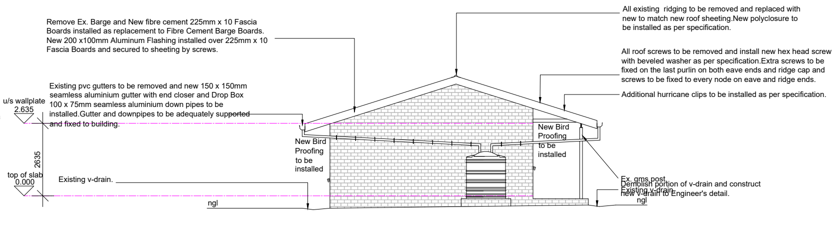
Scale 1:100



Block C (North Elevation)
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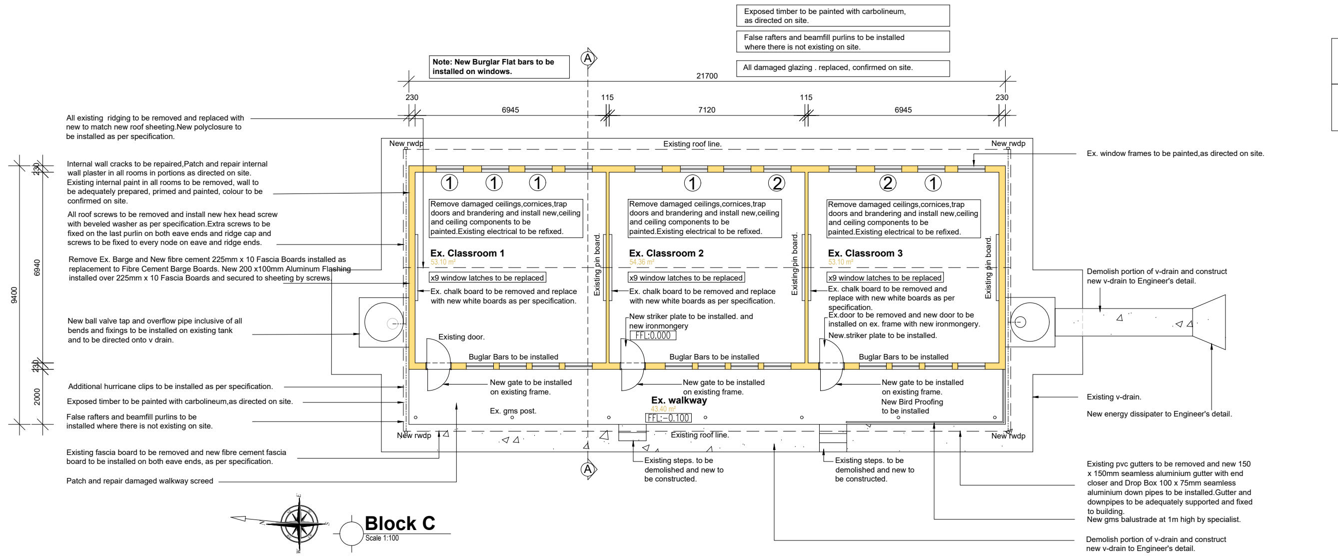
LEGEND	DESCRIPTION
▭ ○	Number inside of circle indicates the number of glazing panels to be replaced.



Block C
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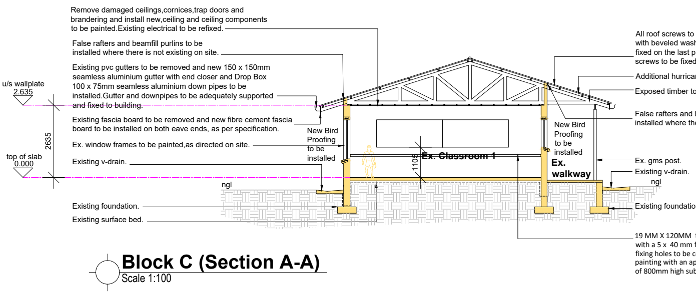

Block C (Section A-A)
Scale 1:100

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
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OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

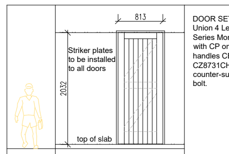
PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.



		DOOR SET 1: Union 4 Lever Commercial Series Mortice lock 2247-7855 with CP on brass Gower Lever handles CB862-05Ch & CZ8731CH door stop fixed with counter-sunk bolt into anchor bolt.
TYPE:	D1 - EXTERNAL DOOR (ND01)	STANDARD DOOR FRAME: 1.2mm Hot dipped galvanised pressed metal double rebated frame to suit wall thickness with straps for building in. 2 x 100mm Galvanised & welded loose - butt hinges, adjustable chrome striking plate & 2 rubber buffers. Frame to be well rammed with mortar mix to protect from denting when bumped NB: ALL IRONMONGERY TO BE SABS APPROVED.
FRAME:	1.2mm thick pressed double rebated mild steel door frame	
FRAME FINISH:	Hot dipped galvanised. Not painted	
DOOR:	2032 x 813 x 40mm Meranti Hard wood, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V jointed battens	
DOOR FINISH:	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.	
FURNITURE:	Door set 1	
NOTES:	• Contractor to check no's required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.	
DS	SCALE: 1:50	DETAIL DESCRIPTION. DOOR SCHEDULE

Signature: Date:

Consultant:

REALISING
CONTINENTAL POTENTIAL

Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Construction drawing for Mziwenkosi Primary School - Block C and H: Plan;Section and Elevations

Drawn: Trishaan Singh Date: 2020/04/20
Checked: Muazzam Khan Date: 2020/06/22
Scales: 1:100
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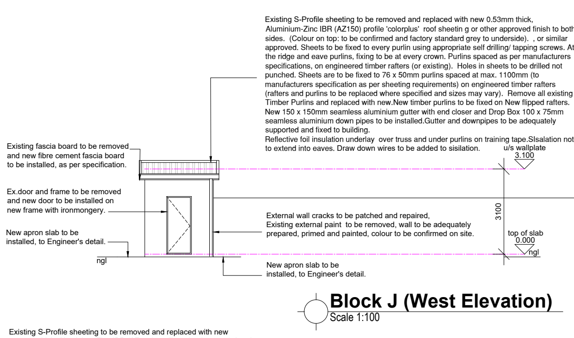
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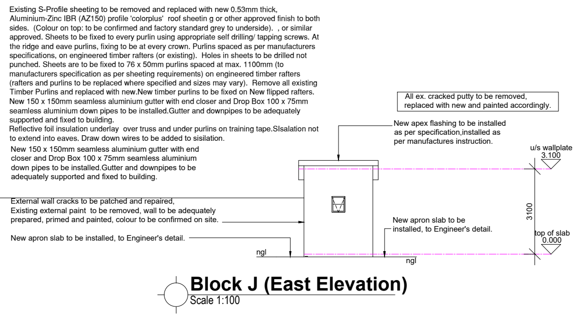
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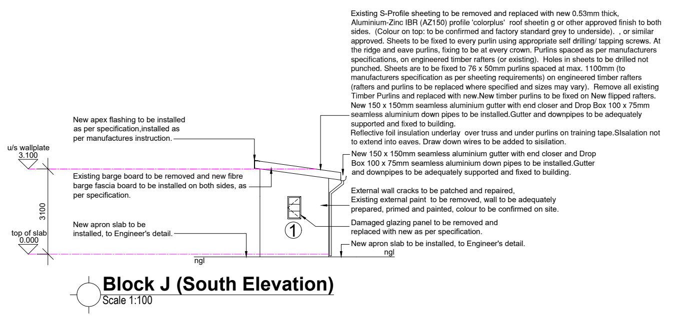
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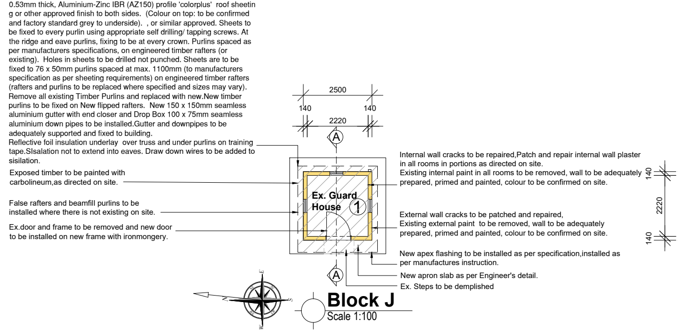
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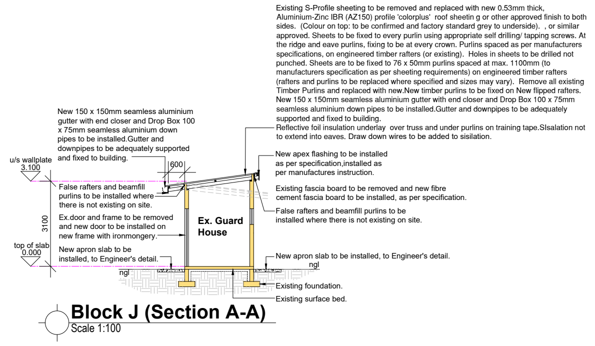
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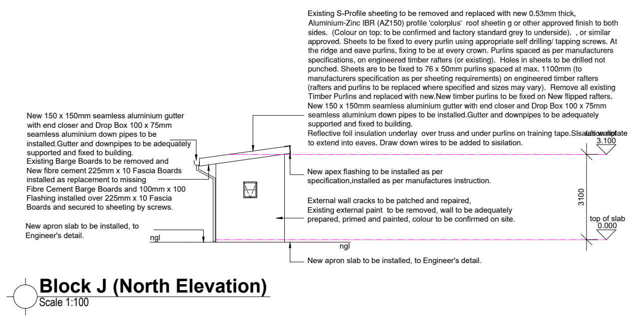
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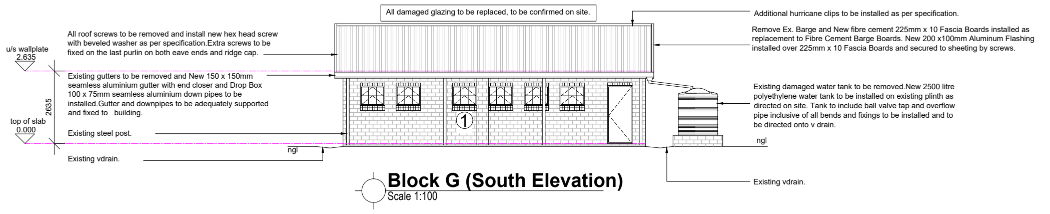
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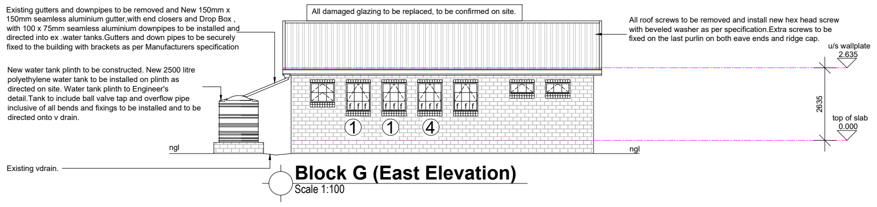
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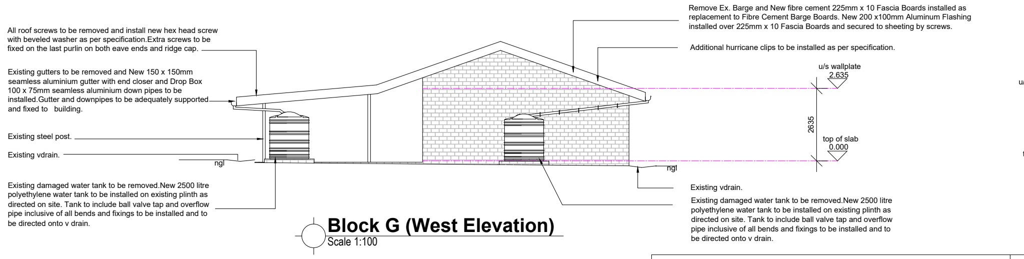
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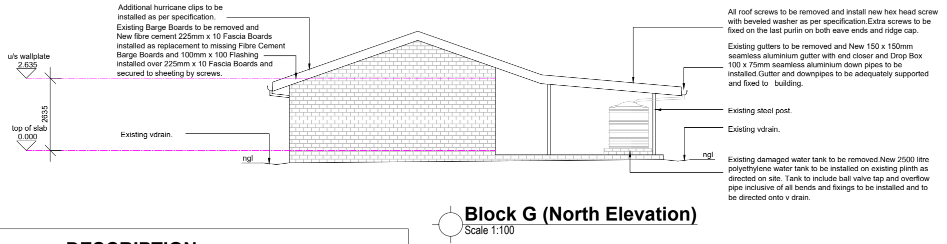
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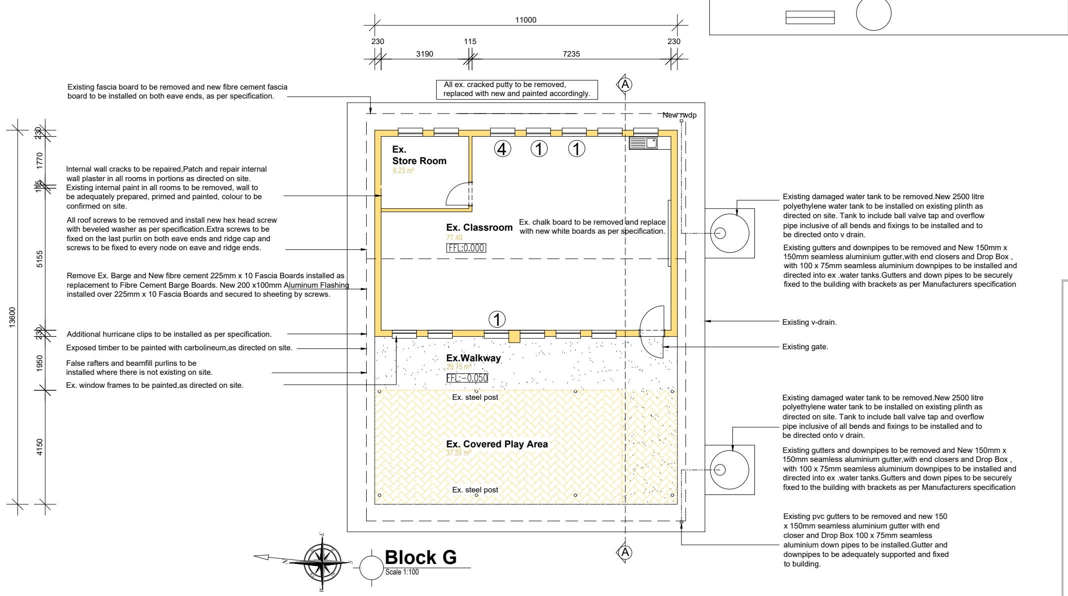
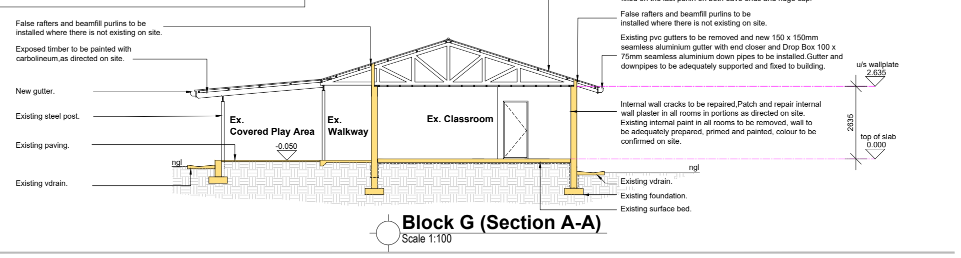
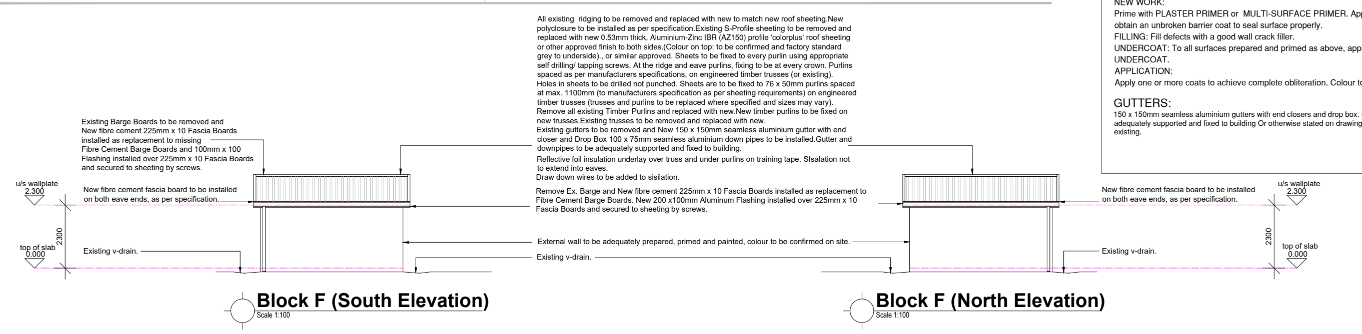
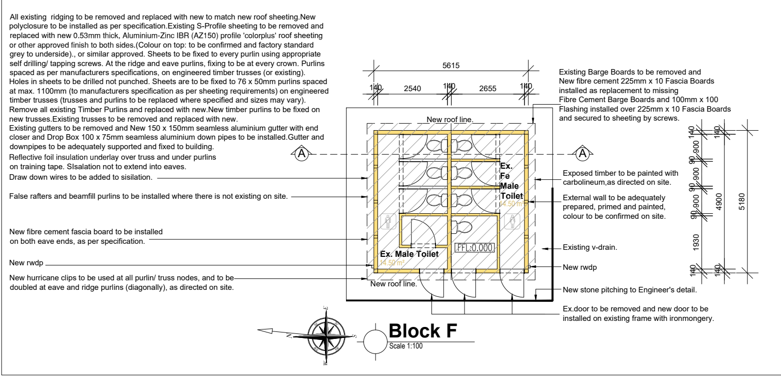
LEGEND	DESCRIPTION
▭ ○	Number inside of circle indicates the number of glazing panels to be replaced.


Block G
Scale 1:100


Block G (Section A-A)
Scale 1:100


Block F (South Elevation)
Scale 1:100

Block F (North Elevation)
Scale 1:100


Block F
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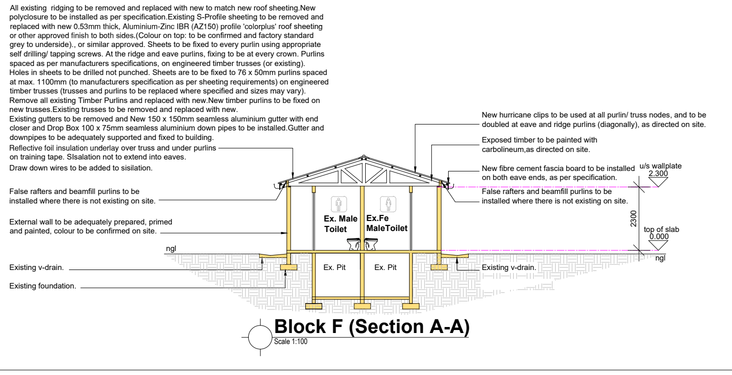
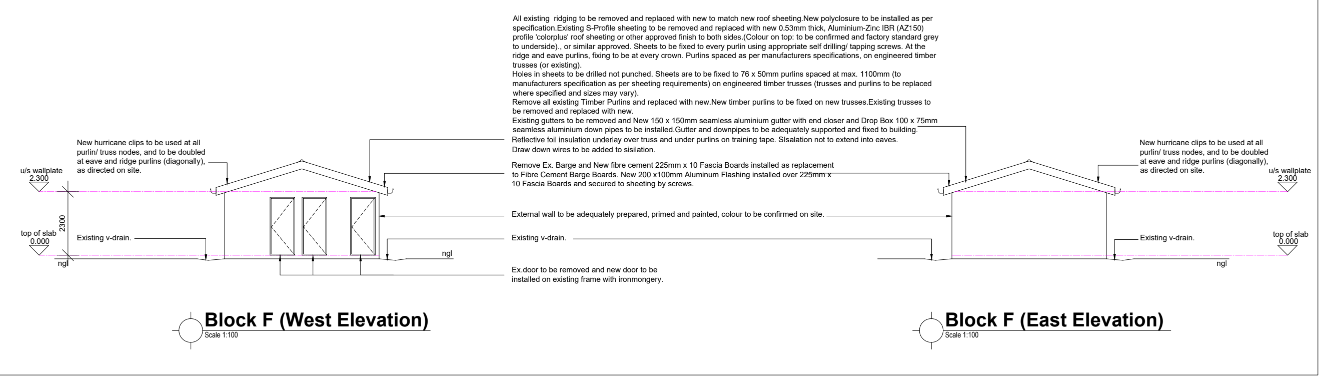

Block F (Section A-A)
Scale 1:100


Block F (West Elevation)
Scale 1:100

Block F (East Elevation)
Scale 1:100

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall.
Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.

Signature: Date:
Consultant:

REALISING
CONTINENTAL POTENTIAL

Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

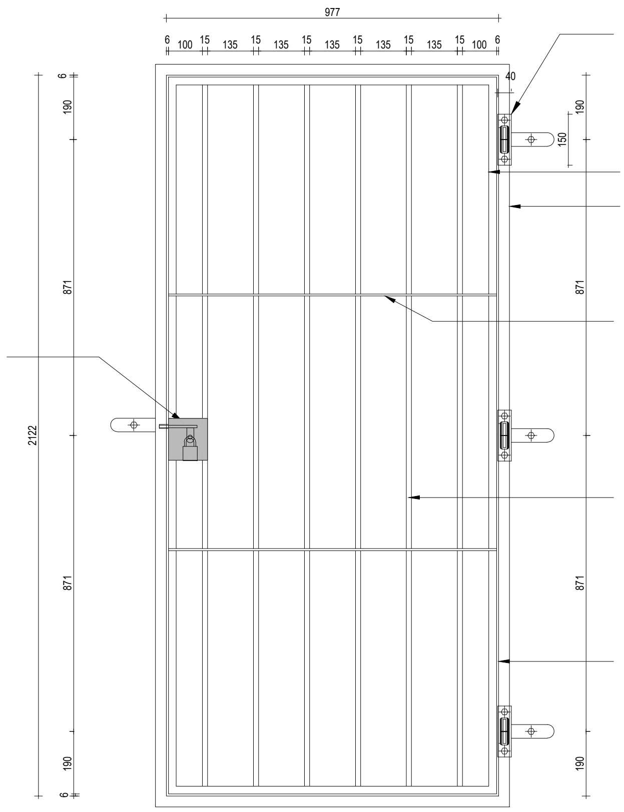
Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Construction drawing for Mziwenkosi Primary School - Block F;G and J: Plan;Section and Elevations

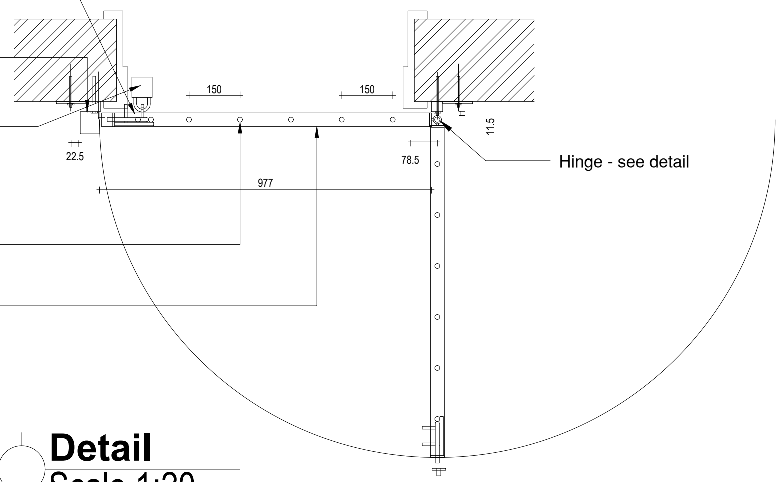
Drawn: Trishaan Singh Date: 2020/04/20
Checked: Muazzam Khan Date: 2020/06/22
Scales: 1:100
Consultant Drawing No: 1367-18 WD05 Revision: .
DOPW Drawing No: ZNTL04774W Revision: .
DOPW WIMS No: WIMS : 063837
Stamped by Design Review Committee

NB: All dimensions confirmed on site

Note:
All steel to be hot dipped galvanised.



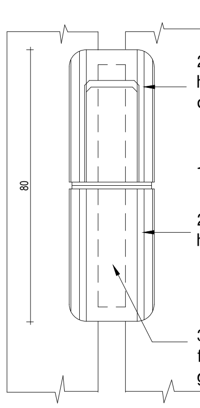
Elevation
Scale 1:20



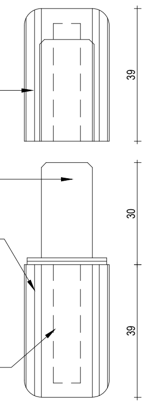
Detail
Scale 1:20

G1	scale: 1:20	detail description: GATE DETAIL FOR MZIWENKOSI PRIMARY

Note: Top hinge to be inverted to prevent gate from being lifted off frame.



ELEVATION
(CLOSED)
SCALE: 1:10



ELEVATION
(OPEN)
SCALE: 1:10

HD 1	scale: 1:2	detail description: HINGE DETAIL

KZN Department of Public Works Stamp and Signature

Signature: Date:

Consultant:

REALISING
CONTINENTAL POTENTIAL

Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:

GATE DETAIL

Drawn: Trishaan Singh Date: 2020/04/20
Checked By: Muazzam Khan Date: 2020/06/22

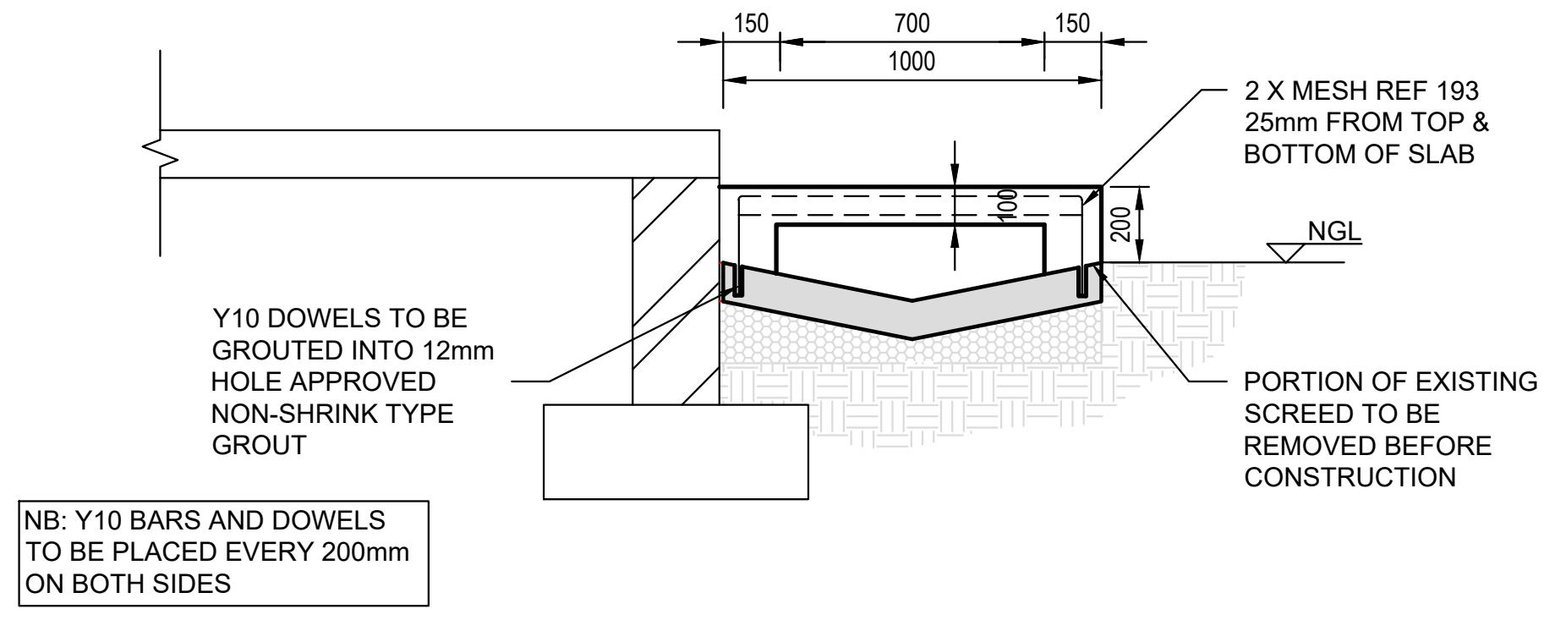
Scales: AS SHOWN

Consultant Drawing No: 1367-18 WD06
Revision: .

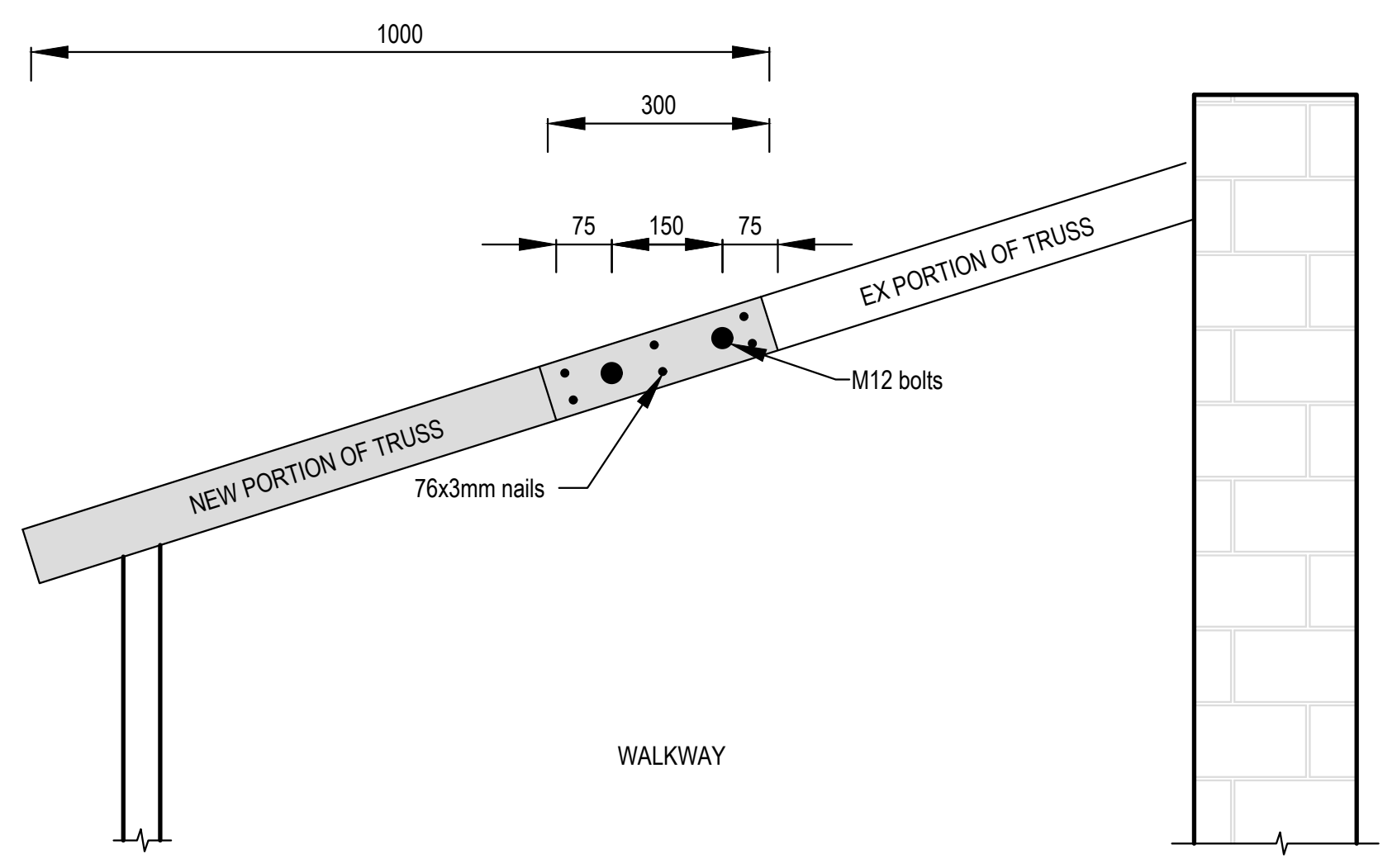
DOPW CONTRACT No: 063837
Revision: 0 .

DOPW WIMS No: WIMS : 063837

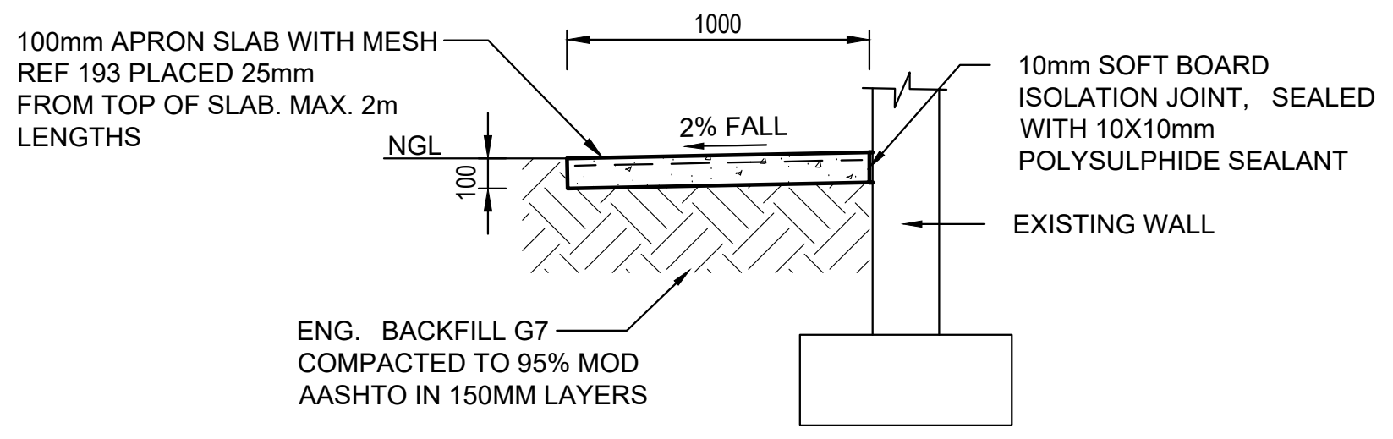
Stamped by Design Review Committee



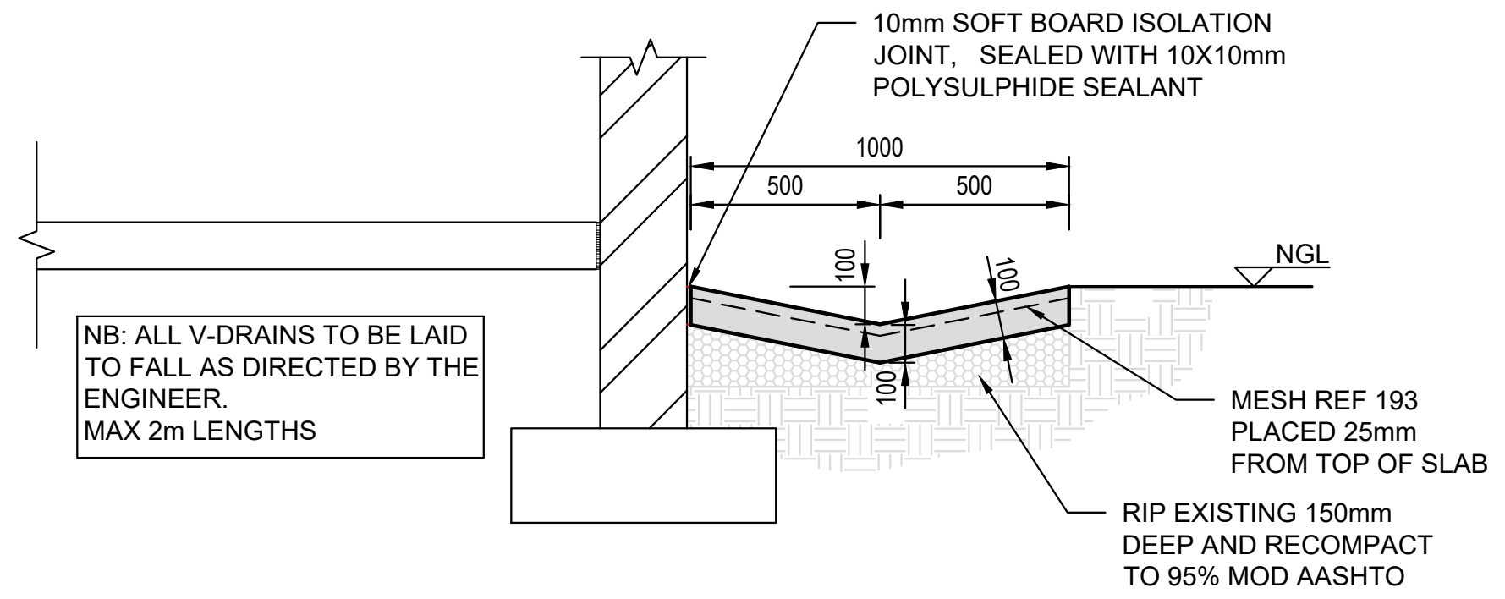
DETAIL OF STEP OVER V DRAIN
SCALE 1:20



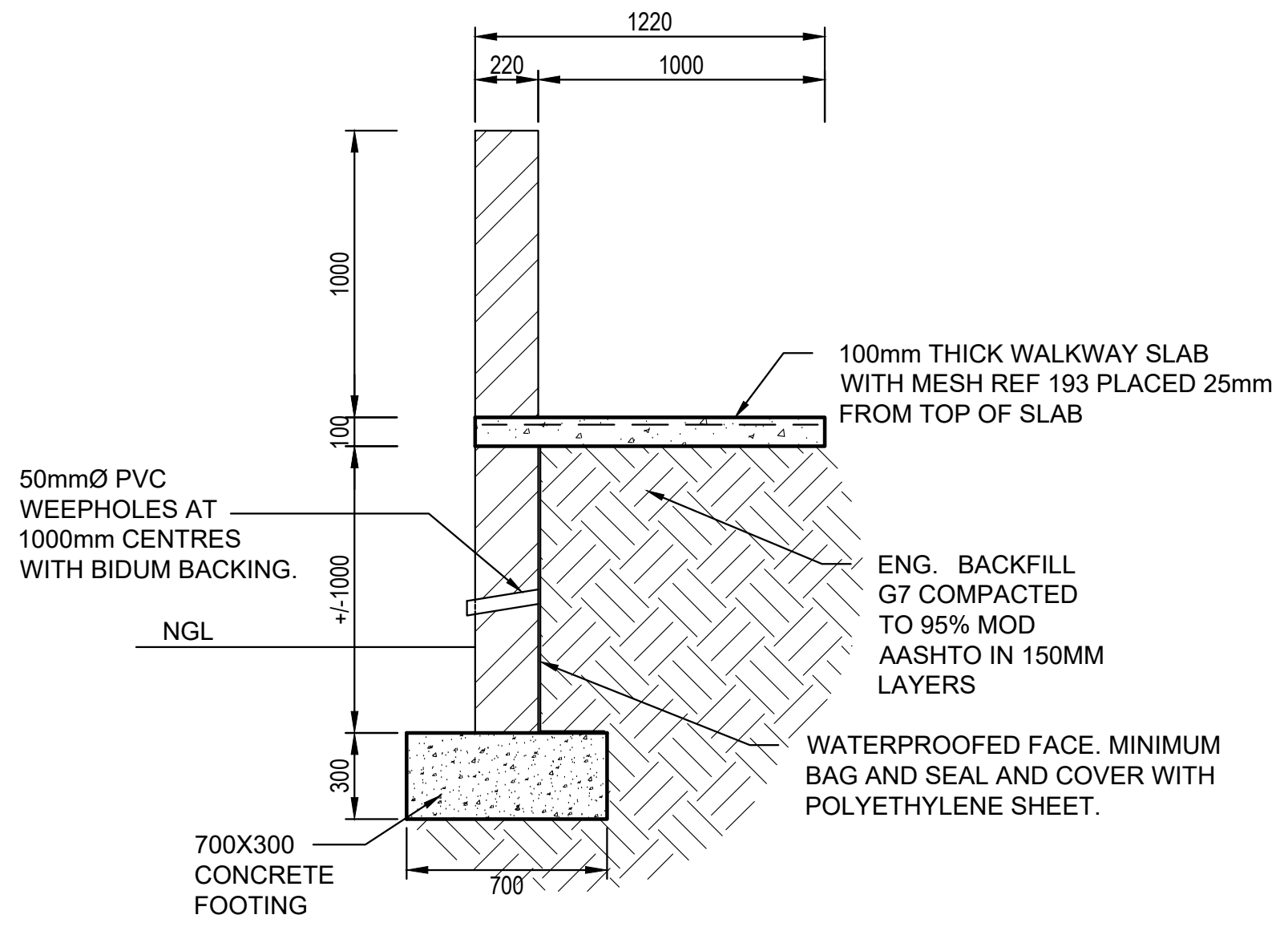
WALKWAY TRUSS JOINT
SCALE 1:10



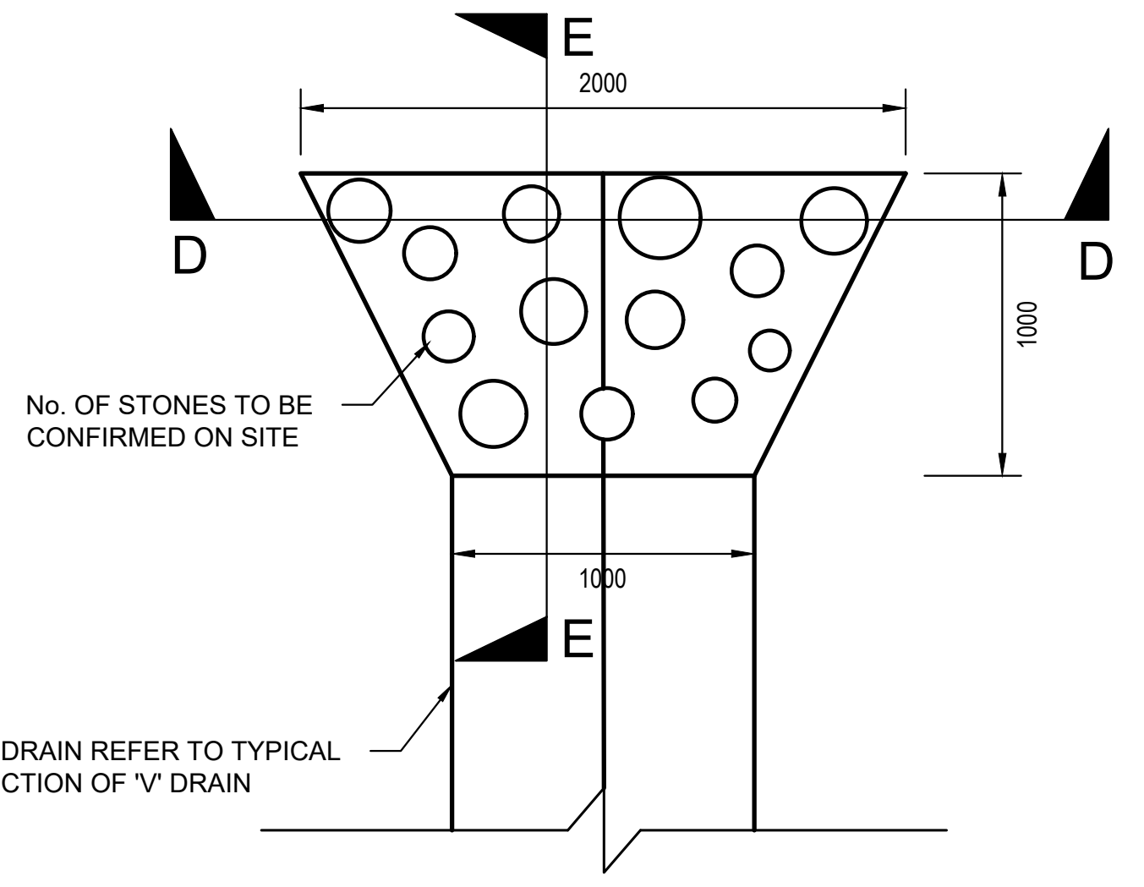
APRON SLAB DETAIL
SCALE 1:25



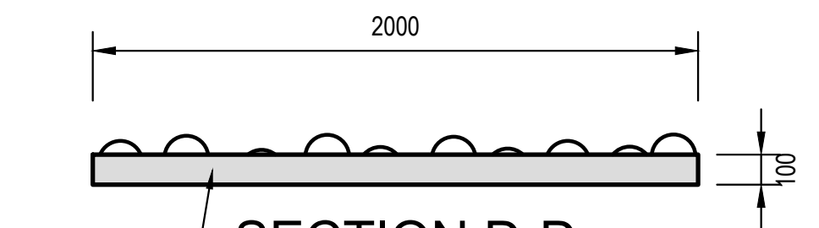
TYPICAL DETAIL OF 'V'-DRAIN NEXT TO EXISTING BUILDING
SCALE 1:20



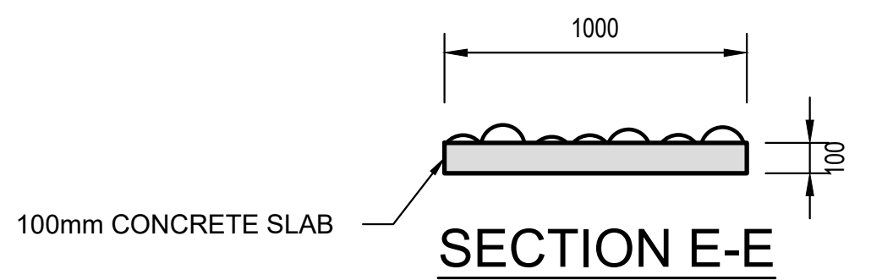
WALKWAY DETAIL
SCALE 1:25



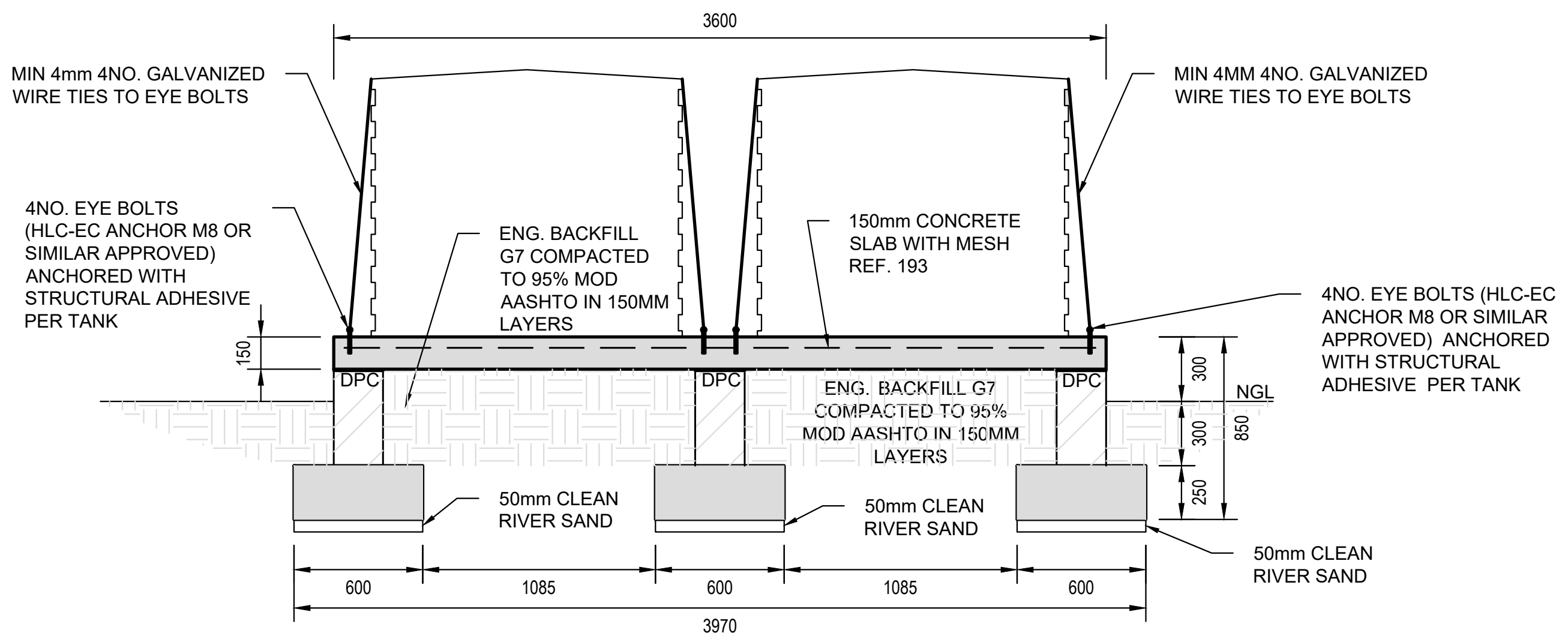
ENERGY DISSIPATOR DETAIL
SCALE 1:25



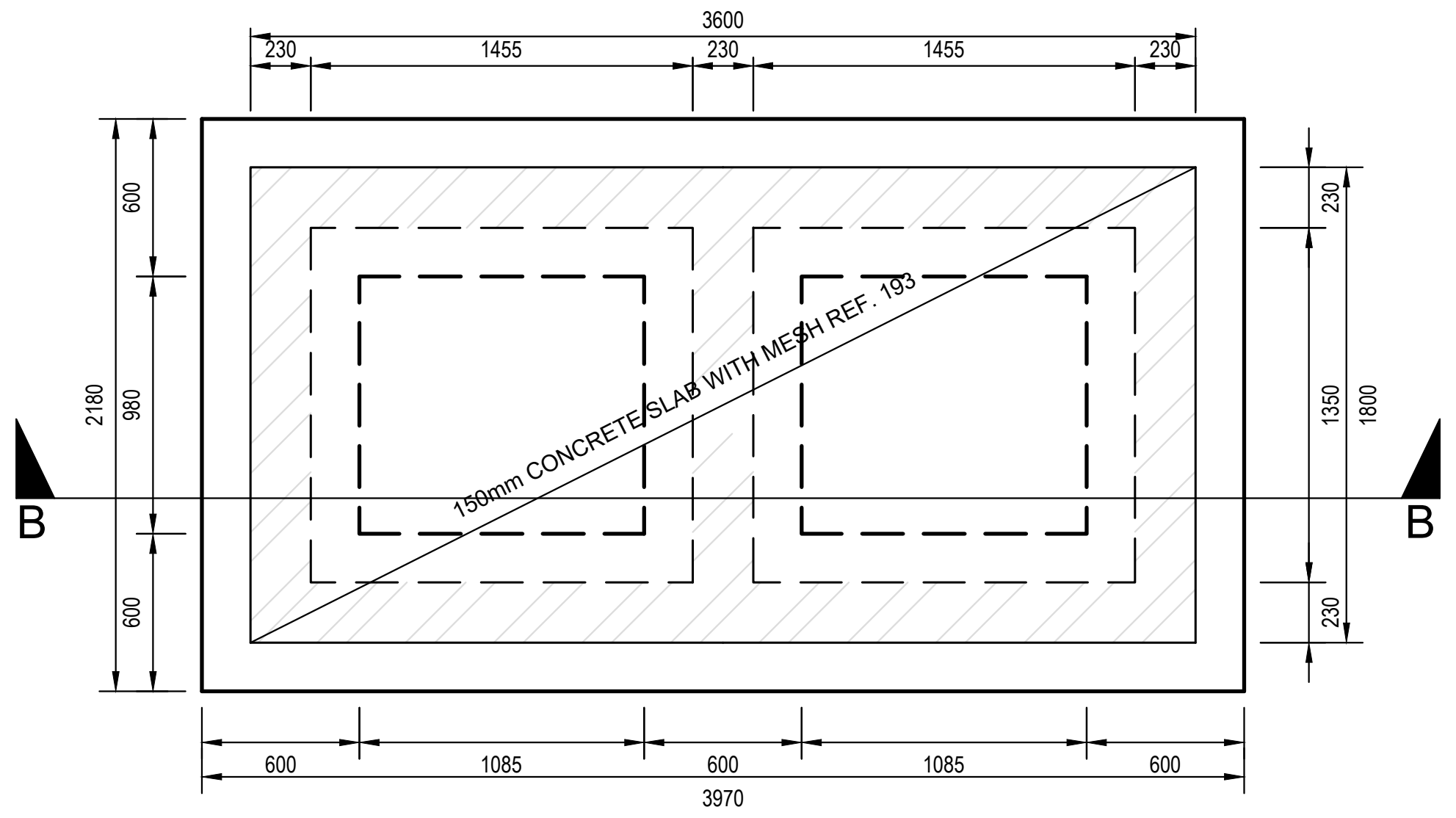
SECTION D-D
SCALE 1:25



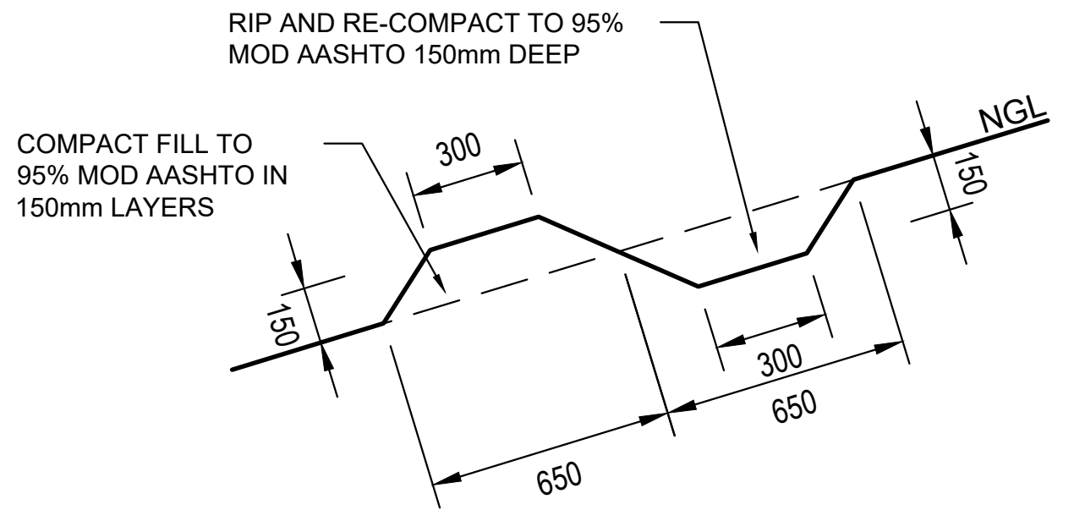
SECTION E-E
SCALE 1:25



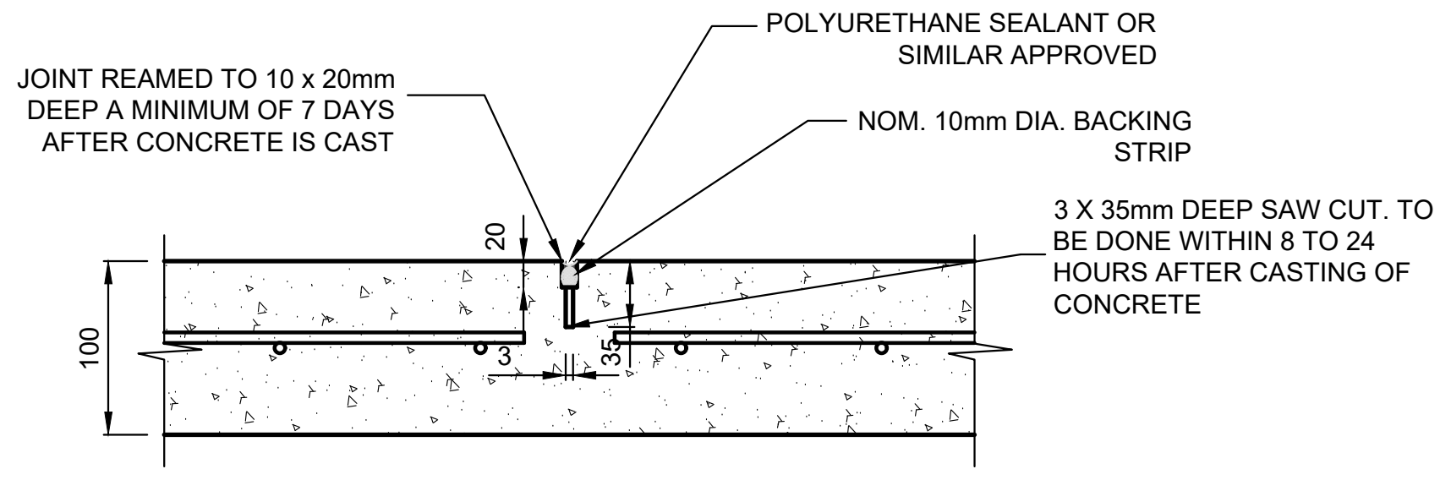
SECTION B-B
SCALE 1:25



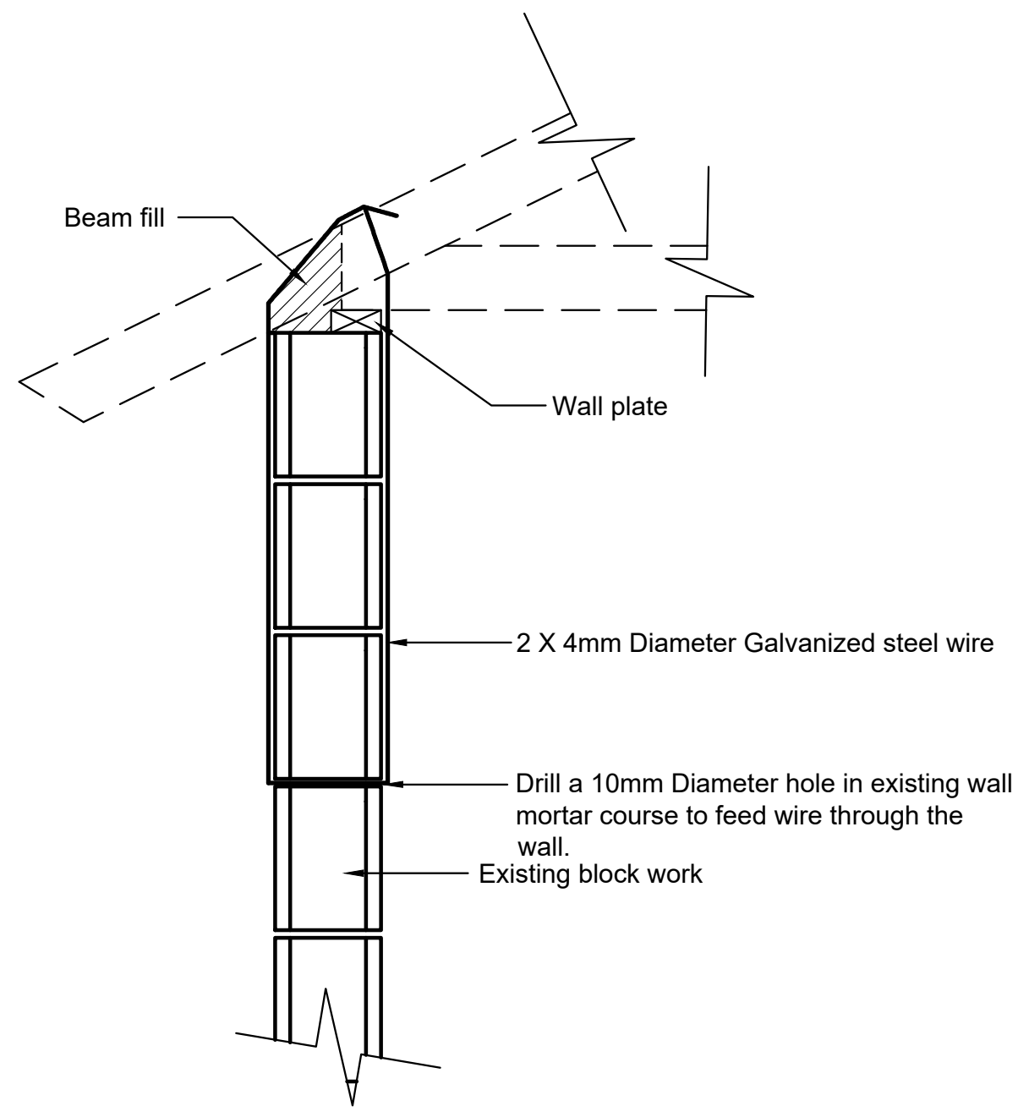
WATER TANK SLAB DETAIL (DOUBLE)
SCALE 1:25



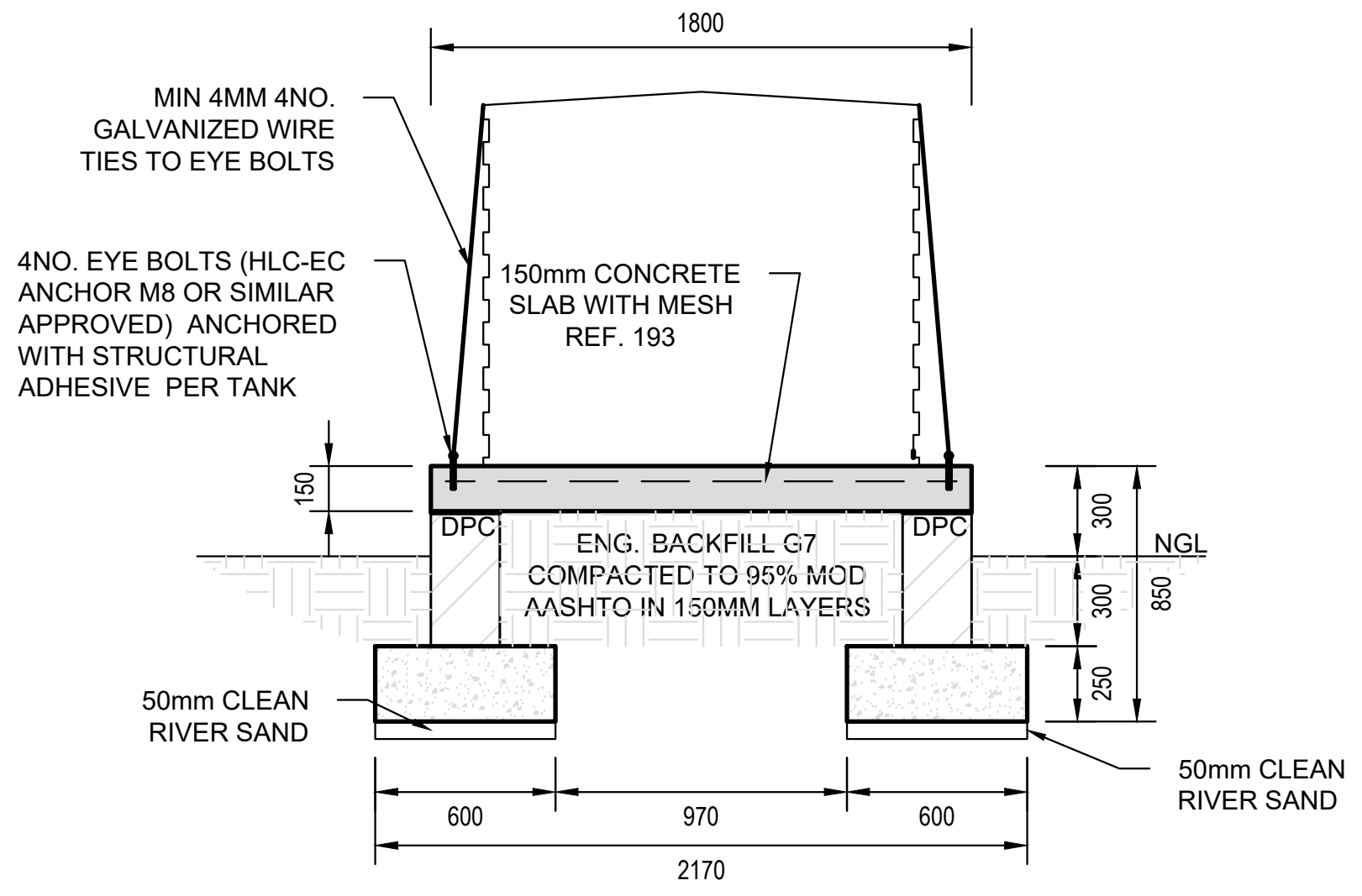
TYPICAL DETAIL OF CUT OFF EARTH BERM
SCALE 1:20



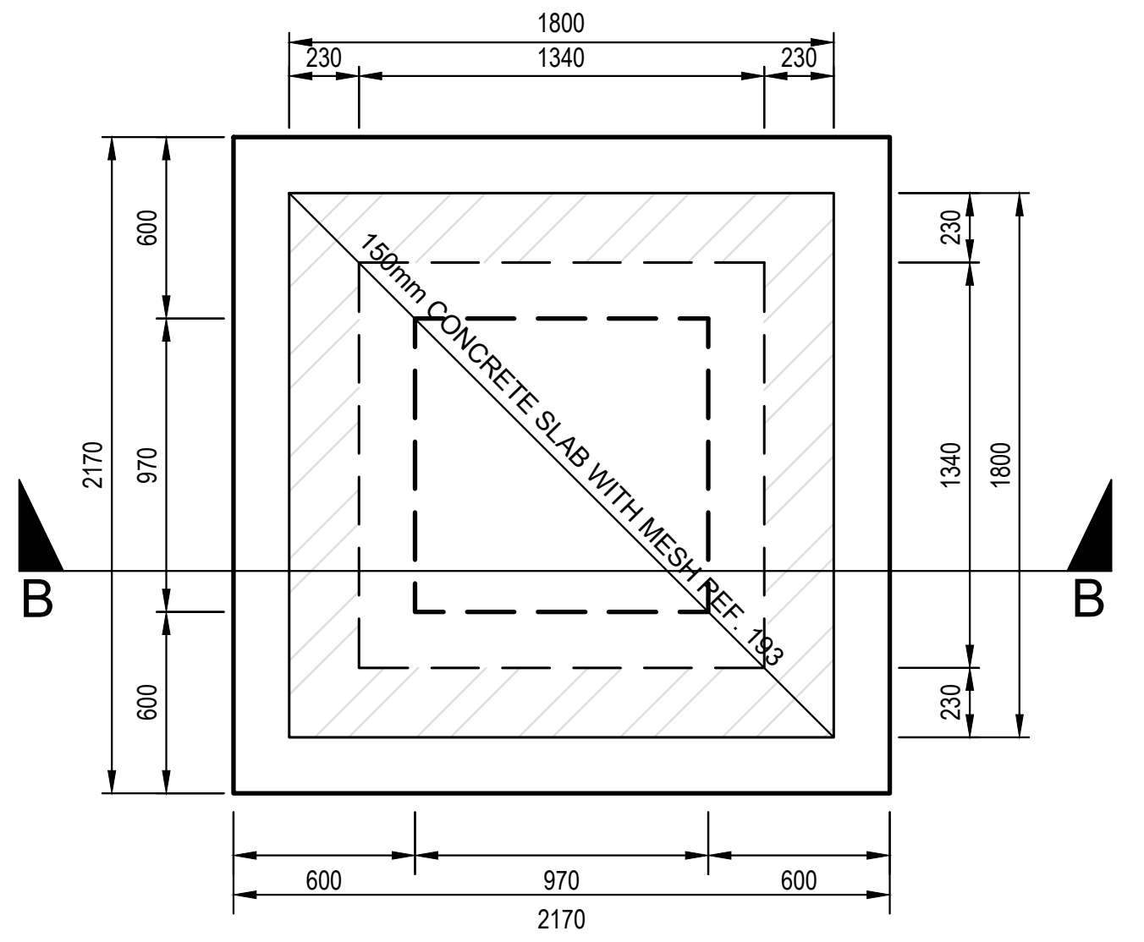
TYPICAL SAW-CUT JOINT (S.J)
SCALE 1:10



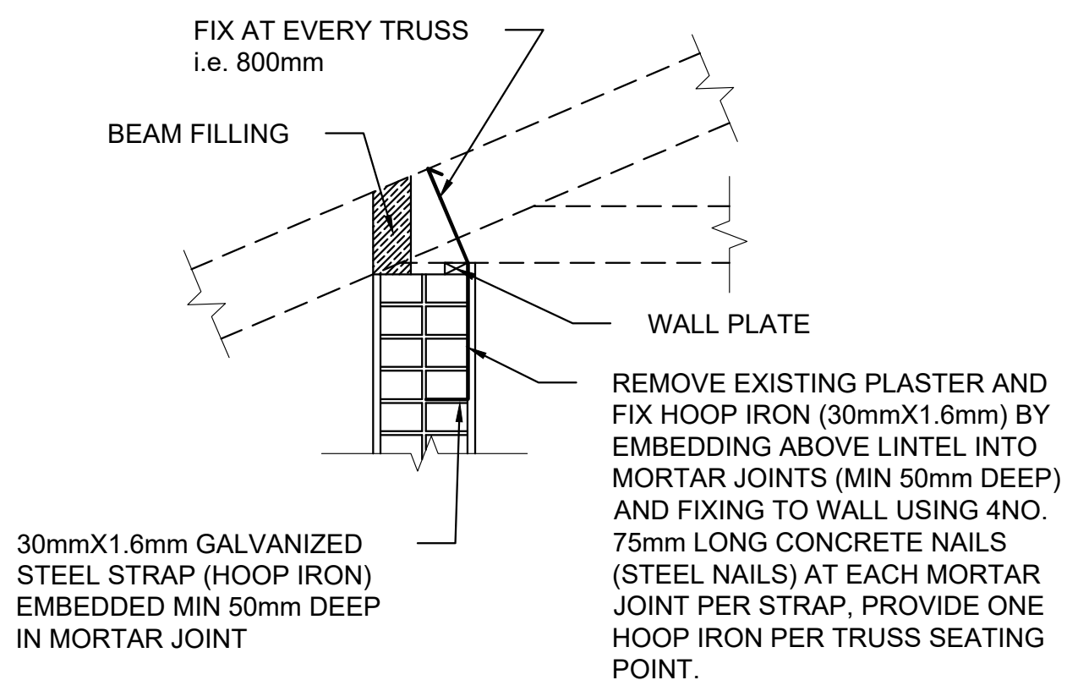
ROOF TRUSS ANCHOR DETAIL
WIRE DETAIL
SCALE 1:10



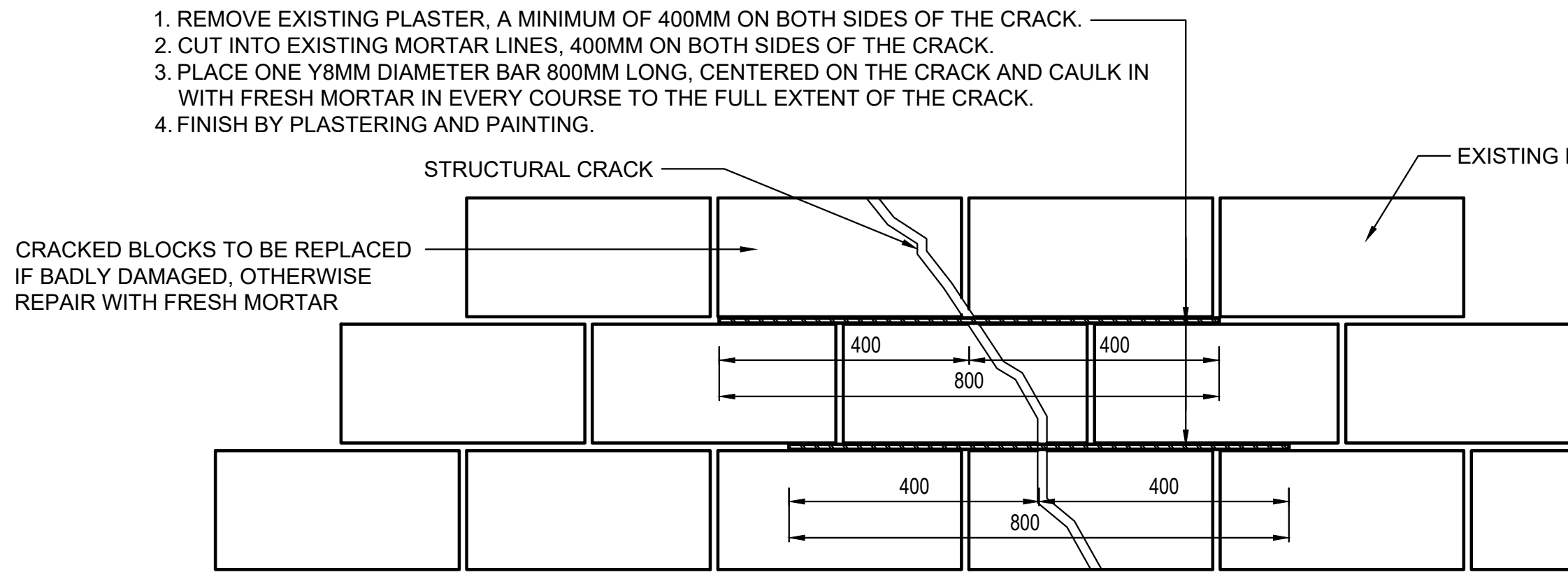
SECTION B-B
SCALE 1:25



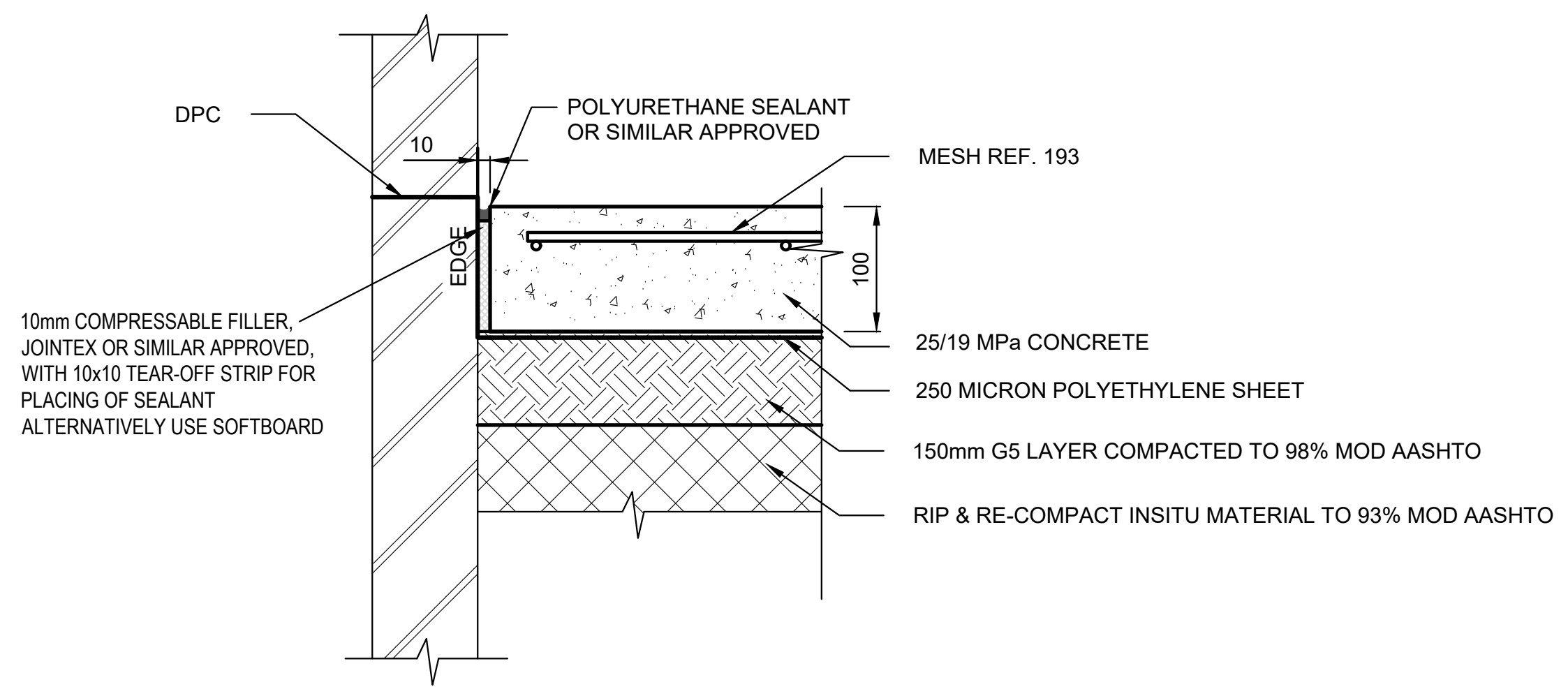
WATER TANK SLAB DETAIL (SINGLE)
SCALE 1:25



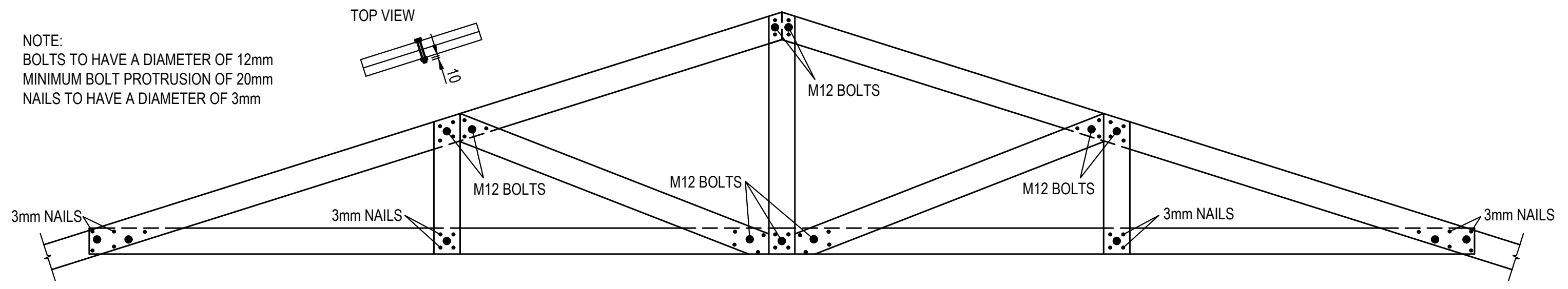
TYPICAL DETAIL OF ROOF CONNECTION TO EXISTING BUILDING - STRAP TYPE
SCALE 1:20


1. REMOVE EXISTING PLASTER, A MINIMUM OF 400MM ON BOTH SIDES OF THE CRACK.
2. CUT INTO EXISTING MORTAR LINES, 400MM ON BOTH SIDES OF THE CRACK.
3. PLACE ONE Y8MM DIAMETER BAR 800MM LONG, CENTERED ON THE CRACK AND CAULK IN WITH FRESH MORTAR IN EVERY COURSE TO THE FULL EXTENT OF THE CRACK.
4. FINISH BY PLASTERING AND PAINTING.

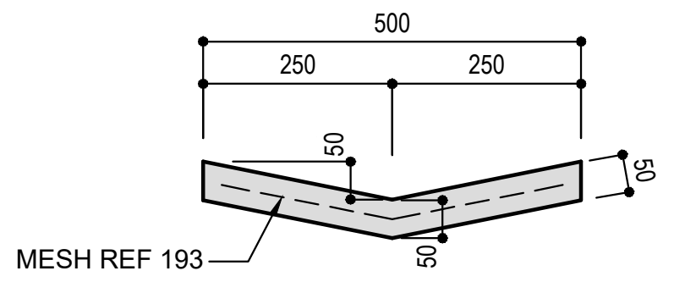
WALL CRACK STITCHING DETAIL
SCALE 1:10



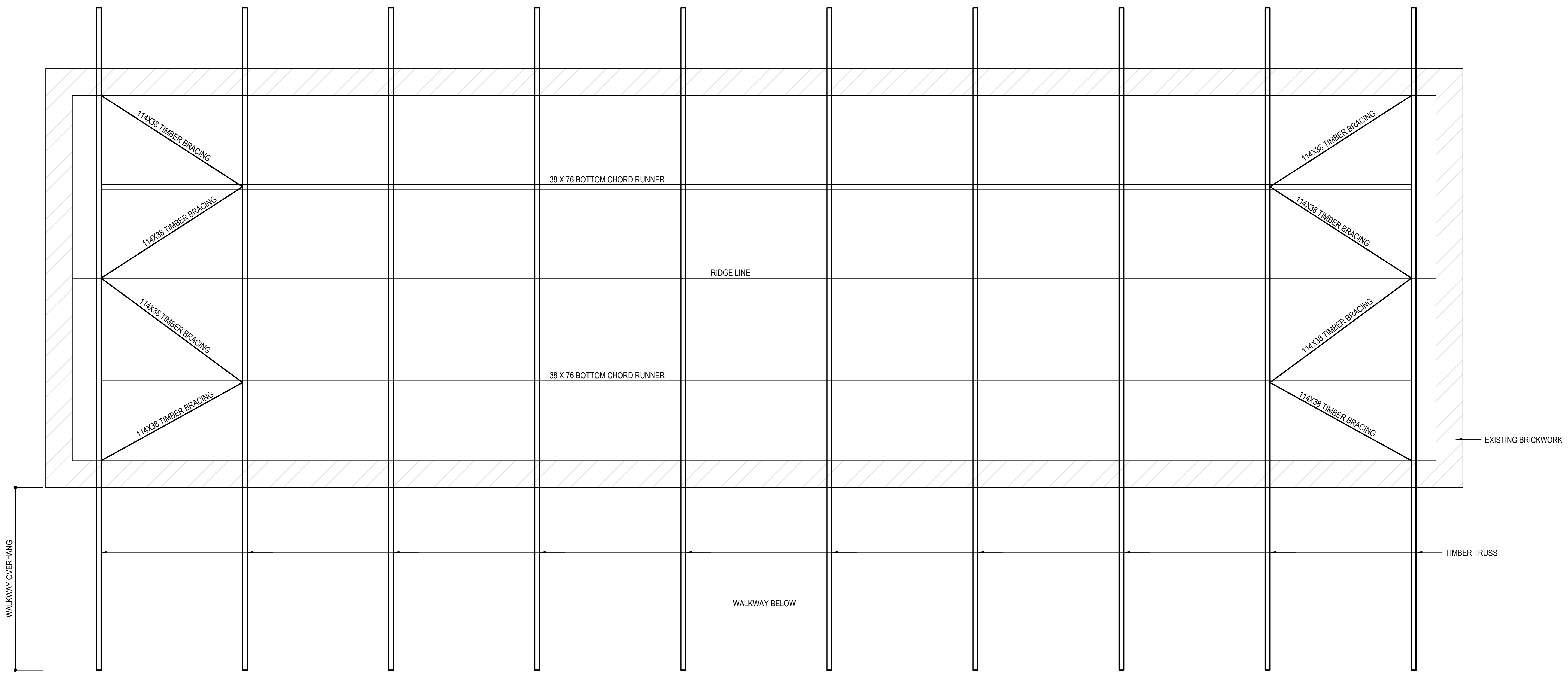
SURFACE BED SLAB AND ISOLATION JOINT (I.J) DETAILS
SCALE 1:10



TYPICAL TRUSS JOINT DETAIL WITH BOLT FIXING POINTS
SCALE 1:10

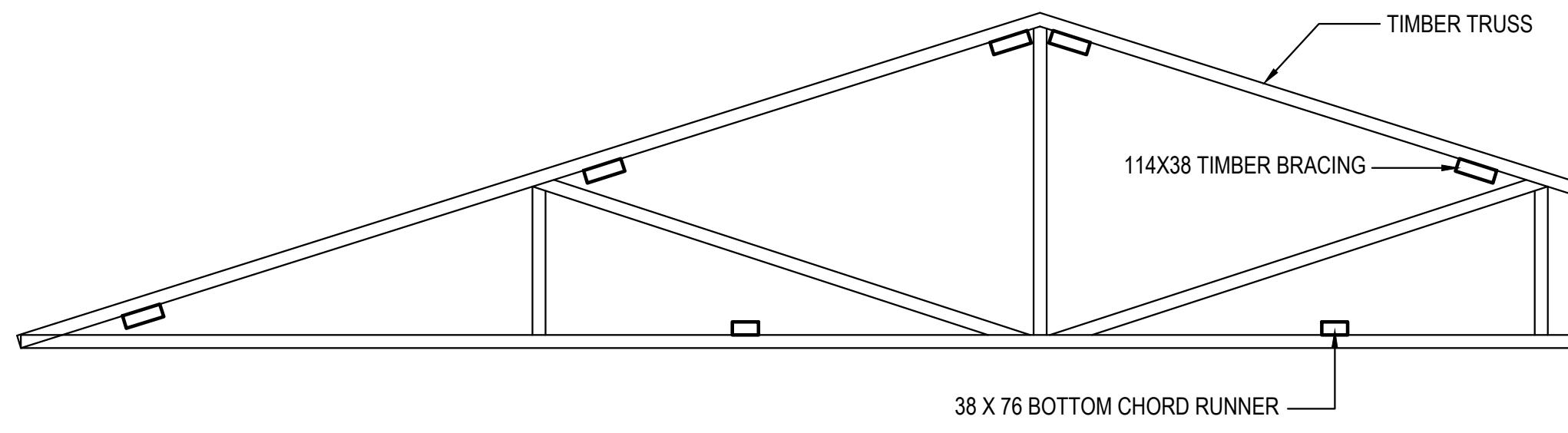


500mm WIDE 'V' DRAIN DETAIL
Scale 1:10

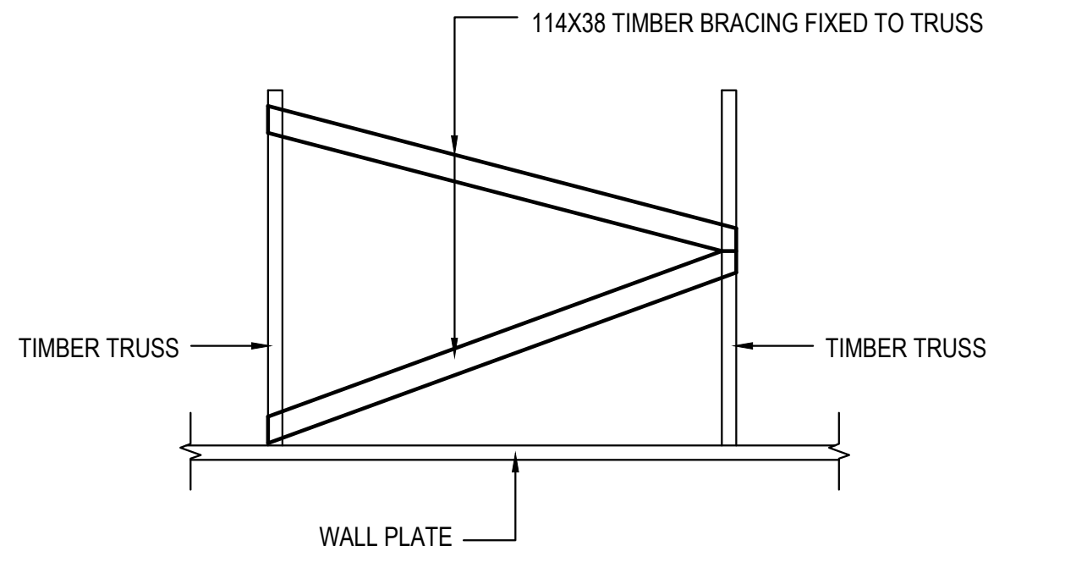


NOTE: FOR VERY LONG CLASSROOM BLOCKS, PLACE RAFTER BRACING AT EVERY 10m

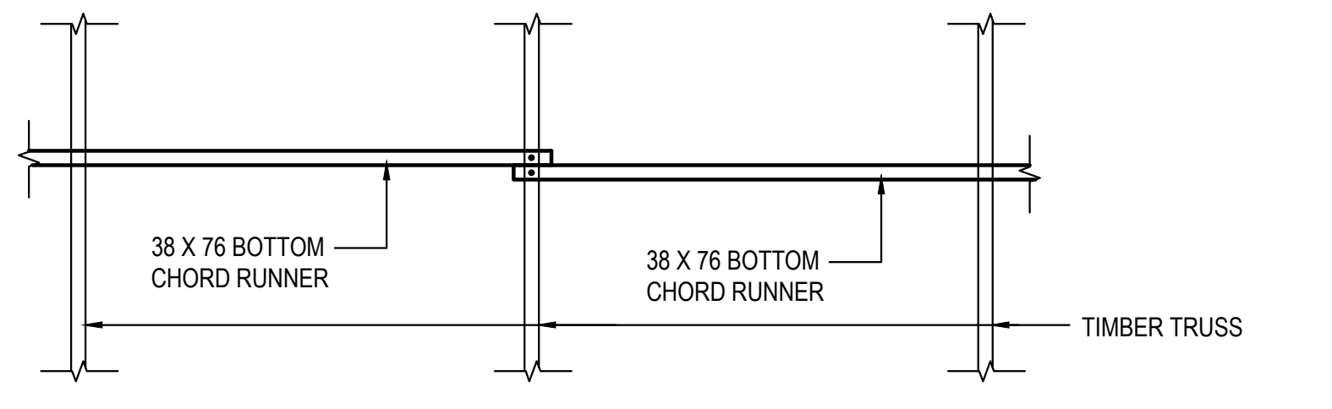
TYPICAL BRACING PLAN
SCALE 1:20



TYPICAL FIXING POINTS FOR RAFTER BRACING AND LONGITUDINAL TIES DETAIL
SCALE 1:20



RAFTER BRACING DETAIL
SCALE 1:20



LONGITUDINAL TIE DETAIL
SCALE 1:20

REV	DATE	DESCRIPTION

GENERAL

1. ALL WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH SANS 2001-CC1VAND THE PROJECT SPECIFICATIONS IN THE CONTRACT DOCUMENTATION.
2. THE CONTRACTOR SHALL ENSURE THAT WATERPROOFING MATERIALS ARE NOT DAMAGED DURING BACKFILLING OPERATIONS AND FIXING OF STEEL.
   REPLACING OF MATERIAL DUE TO DAMAGE FOR CONTRACTOR'S COST.

FOUNDATIONS AND EARTHWORKS

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SANS 1200 D INCLUDING THE LATEST REVISIONS.
2. ALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF ANY CONCRETE FOUNDATION, BLINDING ,WATERPROOFING OR GEOFABRIC MEMBRANE.
3. NO FOUNDATION SHALL BE CAST ON NON-ENGINEERED FILL OR BACKFILL MATERIAL.PORTIONS THAT ARE OVER-EXCAVATED BEYOND THE DEPTH REQUIRED BY THE GEOTECHNICAL / RESIDENT ENGINEER, TO BE FILLED WITH MASS CONCRETE (20MPa / 19mm) AT THE CONTRACTOR'S EXPENSE.

BRICKWORK & BLOCKWORK:

1. ALL BRICKWORK, BLOCKWORK, ANCHORS, WALL TIES AND STRAPS SHALL BE IN ACCORDANCE WITH SANS 0400 – 1990 AND SANS 0164 – 1980 INCLUDING THE LATEST REVISIONS.
2. THE MINIMUM CRUSHING STRENGTH OF ALL LOAD BEARING BRICKWORK SHALL BE 14 MPa.
3. THE MINIMUM CRUSHING STRENGTH OF MORTAR SHALL BE AS FOR CLASS II MORTAR IN ACCORDANCE WITH TABLE 1 SANS 0164 PART I - 1980.
4. LOAD BEARING BRICKWORK SHALL BE REINFORCED WITH AN APPROVED BRICKFORCE EVERY FOURTH LAYER UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
5. IN ADDITION, BRICKFORCE IS REQUIRED IN EVERY LAYER FOR THE FIRST FOUR LAYERS ON TOP OF THE FOUNDATIONS & SLABS AS WELL AS OVER DOOR AND WINDOW OPENINGS (MIN. LAPS = 300mm)
6. ALL BRICK ANCHORS, WALL TIES AND STRAPS SHALL BE HOT DIP GALVANIZED.
7. V-JOINTS ARE TO BE MADE THROUGH PLASTERWORK WHERE BRICKWORK / BLOCKWORK AND CONCRETE JOIN.

CONCRETE:

1. CONCRETE GRADES:
   REINFORCED CONCRETE = 30 MPa/19mm
   MASS CONCRETE = 20 MPa/19mm
   BLINDING = 15 MPa/19mm
   SURFACE BEDS = 30 MPa/19mm
2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:

   ROOF & FLOOR SLABS = 25mm
   FOUNDATION BASES = 50mm
4. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-CC1.
5. CONCRETE TOLERANCE IN GENERAL SHALL BE OF DEGREE OF ACCURACY NO. II AS SPECIFIED IN SANS 2001-CC1.
6. ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE PROJECT.
7. THE CONTRACTOR MUST CO-ORDINATE ALL SERVICES DRAWINGS FOR DETAILS AND POSITIONS OF OPENINGS AND SLEEVES REQUIRED FOR STORMWATER, SEWERAGE, DRAINAGE, ELECTRICAL, MECHANICAL AND OTHER SERVICES
8. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER BEFORE ANY OPENINGS OR SERVICES LARGER THAN 150 mm DIA OR 150 X 150 mm WHICH ARE NOT INDICATED ON THE DRAWINGS MAY BE INTRODUCED THROUGH ANY STRUCTURAL ELEMENT.
9. CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 2001-CC1.
10. THE STRENGTH OF CONCRETE COVER BLOCKS SHALL AT LEAST BE EQUAL TO THE CONCRETE STRENGTH OF THE STRUCTURAL ELEMENT IN WHICH THEY ARE USED. THE SIZE AND FIXING METHOD OF COVER BLOCKS SHALL BE DISCUSSED IN ADVANCE WITH THE ENGINEER.
11. STRIPPING TIMES OF SHUTTERING AND PROPPING SHALL BE IN ACCORDANCE WITH SANS 2001-CC1.
12. CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE INCLUDING SCREED MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING OF ANY CONCRETE.
13. COLD CONSTRUCTION JOINTS ; MAIN AGGREGATE MUST BE EXPOSED, CLEANED AND THOROUGHLY WETTED BEFORE CASTING OF NEW CONCRETE. NO CEMENT GROUT SHALL BE USED. LOCATION OF JOINTS TO BE APPROVED BY THE ENGINEER IF DEVIATED FROM THE DRAWINGS.

SURFACE BEDS:

1. PROVIDE 12mm ISOLATION JOINTS (I.J.) AROUND ALL CONCRETE COLUMNS AND AGAINST BRICK WALLS. AFTER CONCRETE HAS SET, JOINTEX TO BE RAKED OUT 10mm DEEP AND SEALED WITH APPROVED JOINT SEALANT – REFER TO STANDARD DETAILS.
2. SAW-CUT JOINTS TO BE DONE AS SOON AS CONCRETE IS FIRM ENOUGH TO NOT DAMAGE THE EDGES. USUALLY BETWEEN 6 TO 16 HOURS.
3. ALL BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm. COMPACTION EFFORT : AS INDICATED
4. FLOOR SLABS ARE WOOD FLOAT FINISHED AND SCREED TOPPING TO HAVE A STEEL TROWEL FINISH

REINFORCEMENT:

1. ALL REINFORCEMENT SHALL COMPLY WITH THE REQUIREMENTS OF SANS 920-2011.
2. THE CONTRACTOR SHALL INSPECT AND APPROVE THE FIXED REINFORCEMENT BEFORE THE ENGINEER IS NOTIFIED. ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE CASTING OF CONCRETE MAY COMMENCE.
3. THE CONTRACTOR SHALL GIVE AT LEAST 24 HOURS (3 WORKING DAYS) NOTICE TO THE ENGINEER FOR REBAR INSPECTIONS THAT ARE REQUIRED.
4. BEND-OUT BARS AT CONSTRUCTION JOINTS SHALL BE BENT OUT WITH A SUITABLE PIPE SO THAT NO KINK IS FORMED IN THE BARS.
5. NO HEAT TREATMENT, FLAME CUTTING OR WELDING OF REBAR WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE ALLOWED.

KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:
REALISING
CONTINENTAL POTENTIAL

Signature: Date:

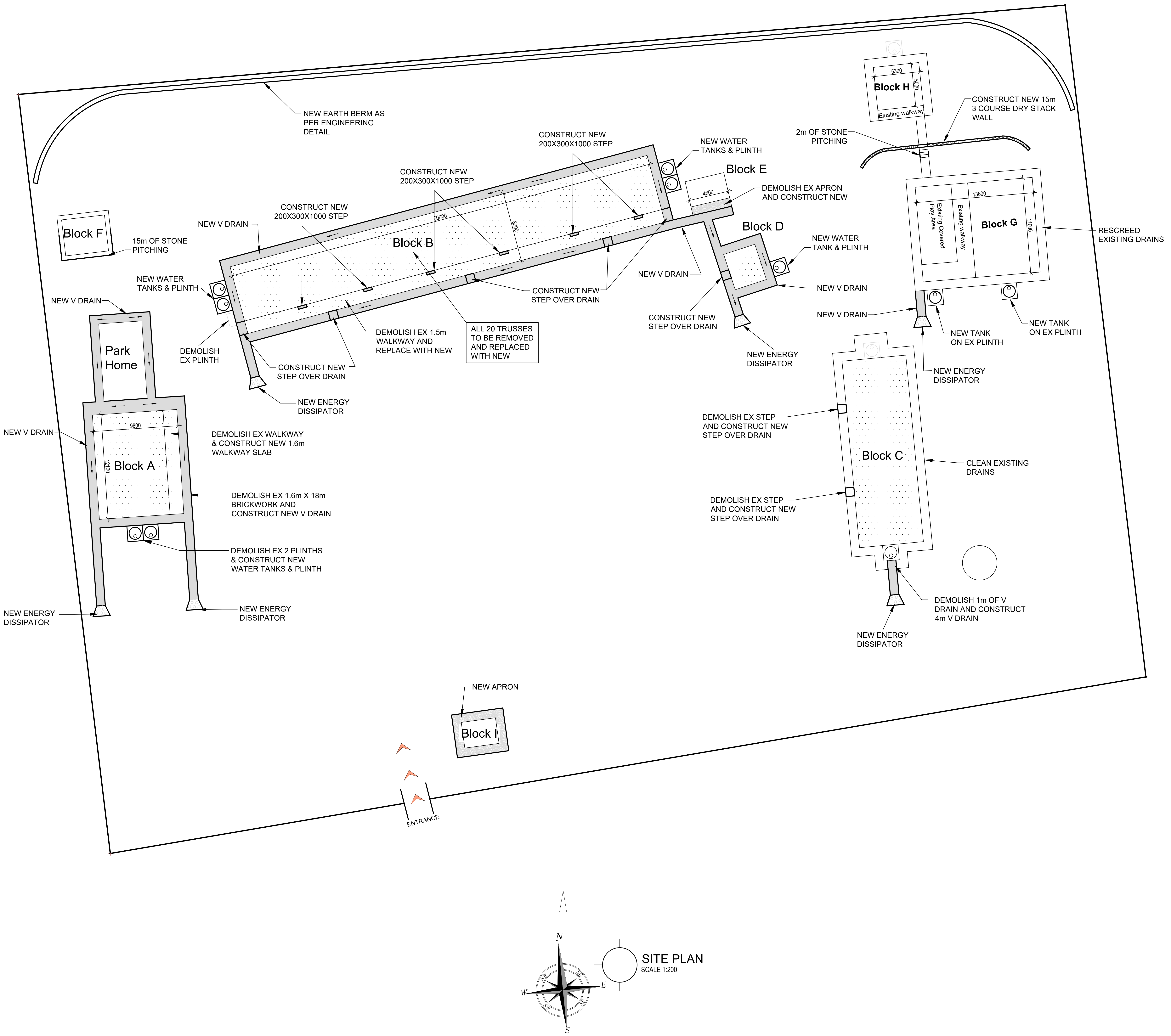
public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
TYPICAL ENGINEERING DETAILS

Drawn: K. Chetty
Date: 2020/07/13
Scales: As Shown
Consultant Drawing No: V16-0539-035
Revision: 0
DOPW CONTRACT No: ZNTL04774W
DOPW WIMS No: WIMS : 063837
Stamped by Design Review Committee

BUILDING NO.	DESCRIPTION
A	Classroom Block (12.1m x 9.8m)
B	Classroom Block (50m x 8m)
C	Classroom Block (21.7m x 7.4m)
D	Store Room (4.3m x 3.8m)
E	Kitchen (4.6m x 3m)
F	Ablution Block (6m x 5.2m)
G	ECD Classroom Block (15.2m x 11.8m)
H	ECD Ablution Block (4.3m x 3.8m)
I	Guard house (4m x 3m)



SITE PLAN
SCALE 1:200

REV	DATE	DESCRIPTION

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KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REALISING
CONTINENTAL POTENTIAL

Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 108 - MZIWENKOSI PRIMARY

Drawing Description:
Illustration Site Plan of Engineering works for Mziwenkosi Primary School

Drawn: I.GAFOOR
Date: 2020/07/13
Scales: As Shown

Consultant Drawing No: V16-0539-035a	Revision: 0
DOPW CONTRACT No: ZNTL04774W	Revision:
DOPW WIMS No: WIMS : 063837	

Stamped by Design Review Committee