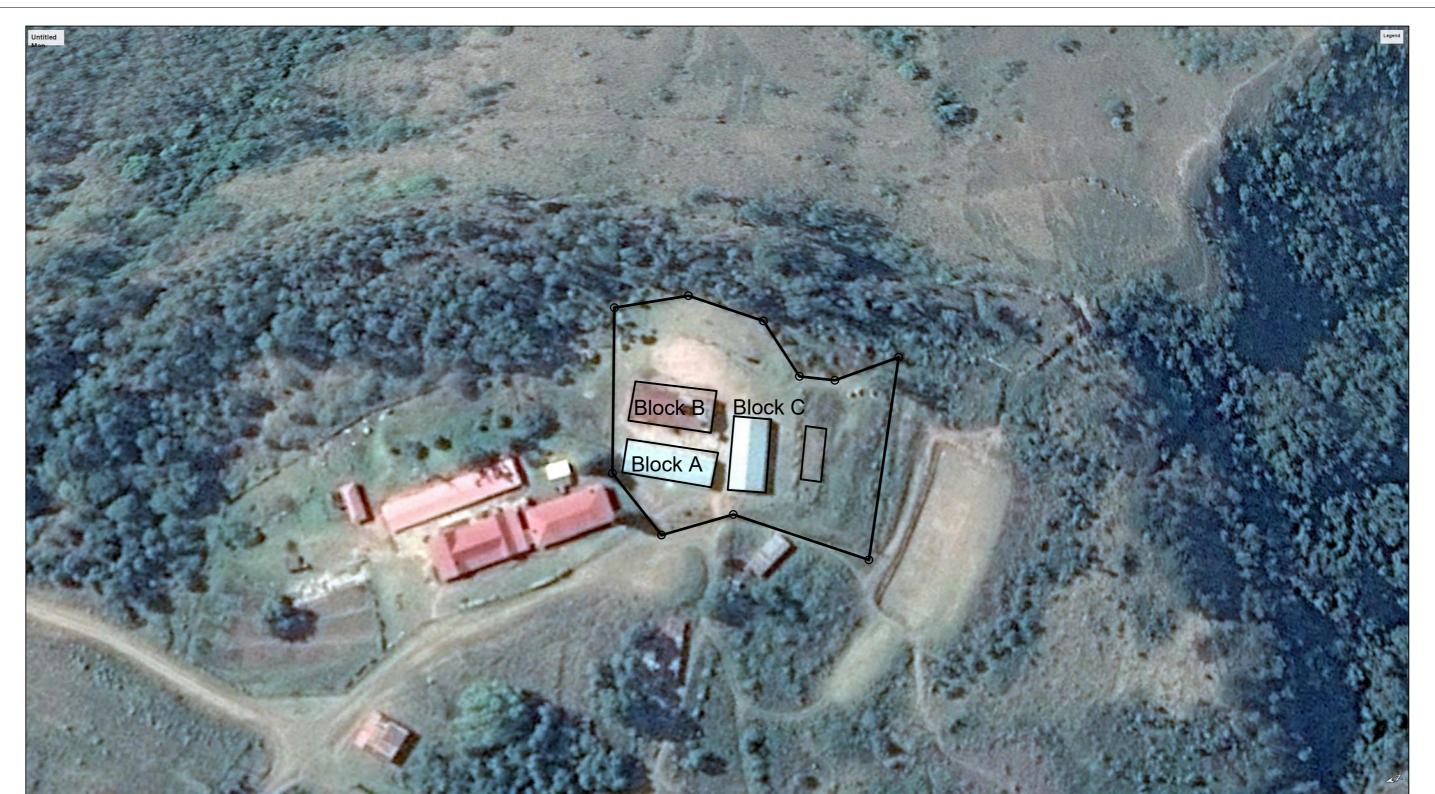
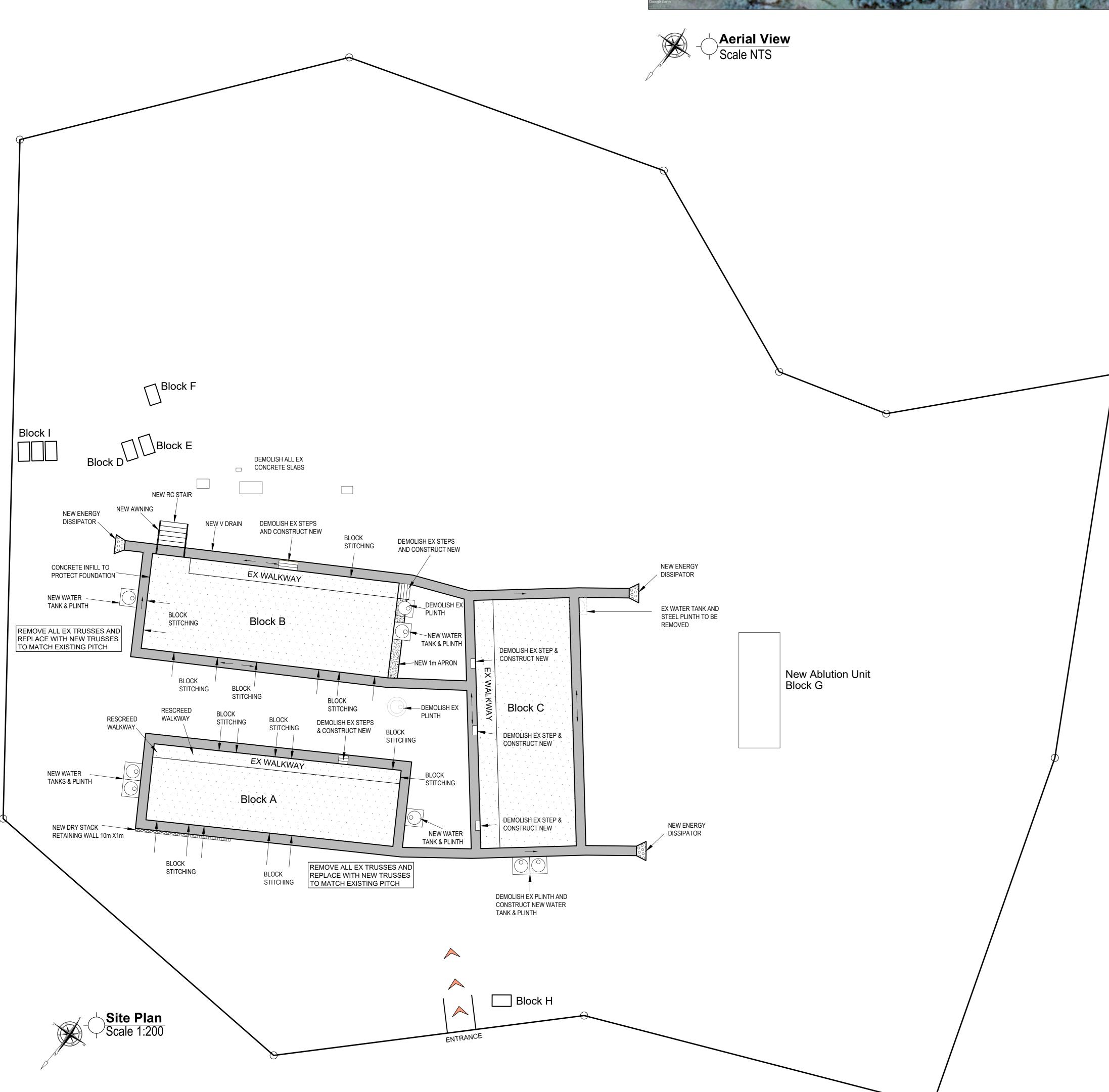
BUILDING NO.	DESCRIPTION
A	Ex Office & 3 Classroom block(26m x 8m)
	,
В	Ex.Hall & Kitchen (26m x 9m)
<u>C</u>	Ex 3 Classroom block (21m x 10m)
D	Ex Ablution block (1.2m x 2.0m²)
E	Ex Ablution block (1.2m x 2.0m²)
F	Ex Ablution block (1.2m x 2.0m²)
G	New Ablution block (15m x 5.5m)
Н	Ex Guard House (1.5 x 1.5)
I	3 x Ablutions Blocks (1.2m x 2.0m per unit)





- **GENERAL NOTES:**
- 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.
- All levels to be checked on site before any work commences. 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.

Workmanship is to be of the highest standard through-out.

- The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period. The contractor is responsible for the correct setting out of all works, particularly boundaries
- building lines servitude's, etc. 0. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY
- BY-LAWS.
- . 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. 4. 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),
- . Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures. 7. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to
- manufacturer's specification and to Engineers detail.

- All STRUCTURAL, CIVIL and ELECTRICAL work to professional Engineers

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

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

and to match existing where applicable.

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).

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 on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be safety glass. Putty to be painted to match window frame, colour to be confirmed on site. at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or

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).

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 DOORS 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 smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

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 the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer screed to fall, made with waterproof admixture.

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.

to inspect sheeting after installation and supply certification.

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 Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, 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 BACKFILL cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting). Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm -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 Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank 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.

Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM 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 -A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install SECURITY GATE AND BURGLAR FLAT BARS: as specified on drawings, or similar approved.

BARGE BOARD:

-Roof Screws:

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 complete aluminium pen tray for the full length of the centre board. Centre board as above or similar approved. Where specified and to be confirmed on site, item as above or similar sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210

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 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.

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

DOWN-PIPES:

All dimensions to be checked before work commences. Architect to be notified immediately of any 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:

where specified.

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:

Wall stitching to be strictly in accordance to Engineers detail.

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

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

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

SURFACE PREPARATION: Ensure that substrates as well as primed and undercoated surfaces are clean, sound and

NFW WORK: Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.

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

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.

New windows to be hot dipped galvanised steel windows or to match existing as indicated

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.

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per

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.

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded

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 vinvl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at

good Rinse and then sealed with 3 coats of a good Sealer. Tile colour: to be confirmed. Item as above or as per existing.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a

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

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.

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.

in depth and thoroughly consolidated, all to engineers detail. WATER TANK AND PLINTH:

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.

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.

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

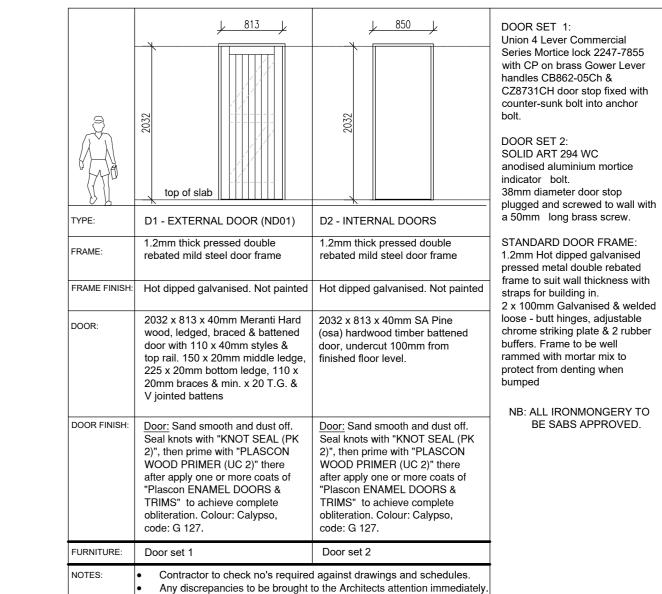
mm. Aluminium pen tray length 2250mm fitted to Centre board. 1 Complete full set of magnetic starter pack consisting of the following for each board supplied: 4 x white board markers Red, Green , Black , Blue, 1x cleaning Cloth

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.



DS 1:50 DOOR SCHEDULE

KZN Department of Public Works Stamp and Signature

Signature: Date:





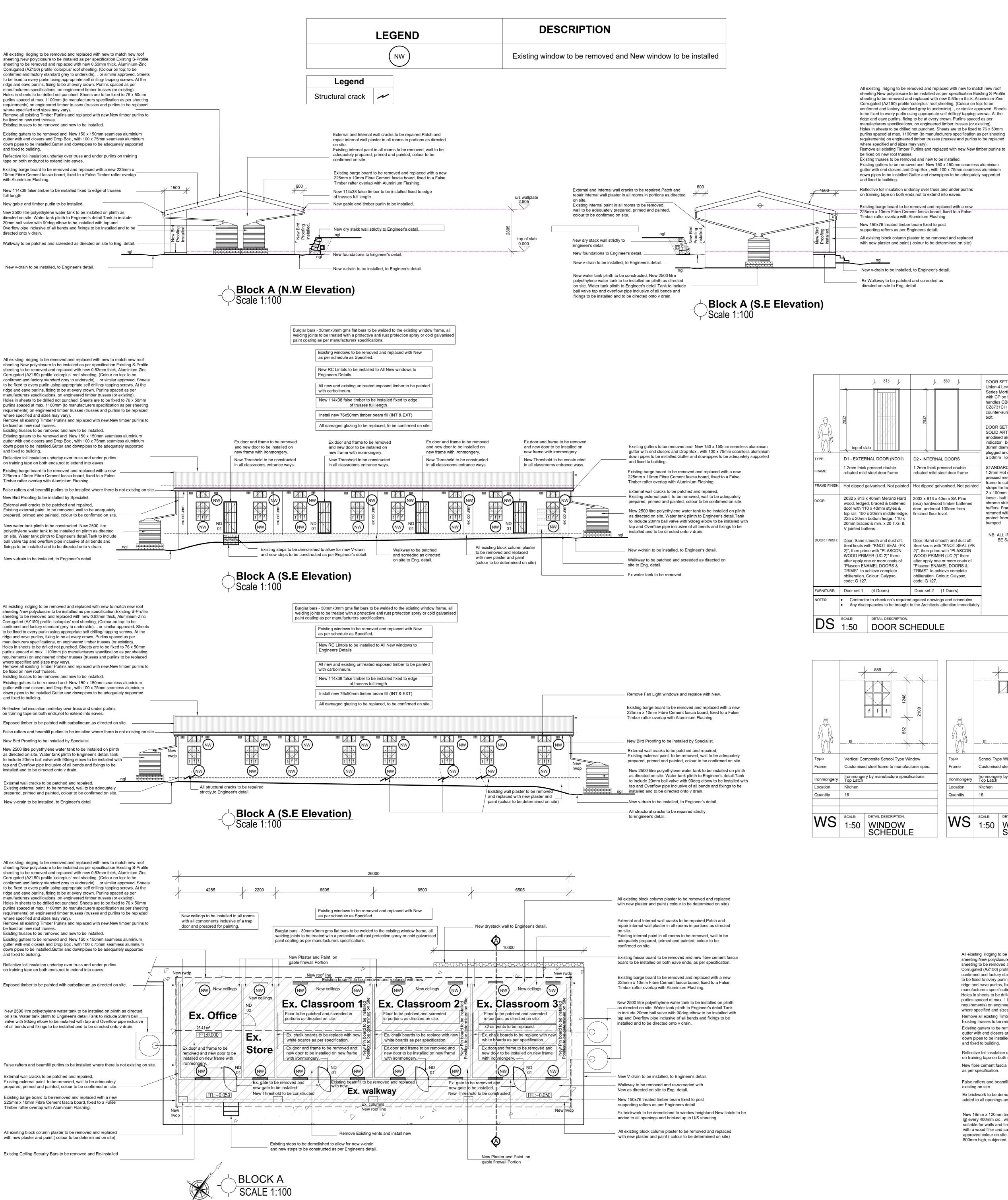
Public Works PROVINCE OF KWAZULU-NATAL

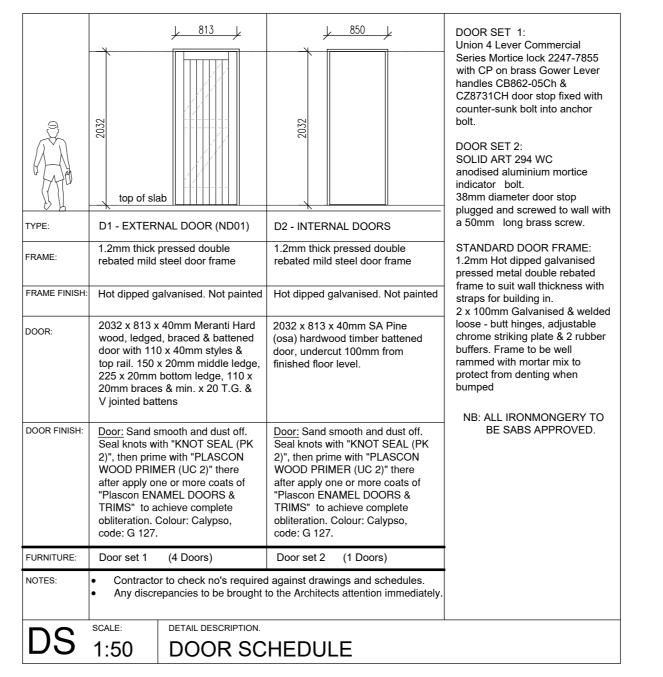
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION -CLUSTER 104 - MOWBRAY PRIMARY SCHOOL

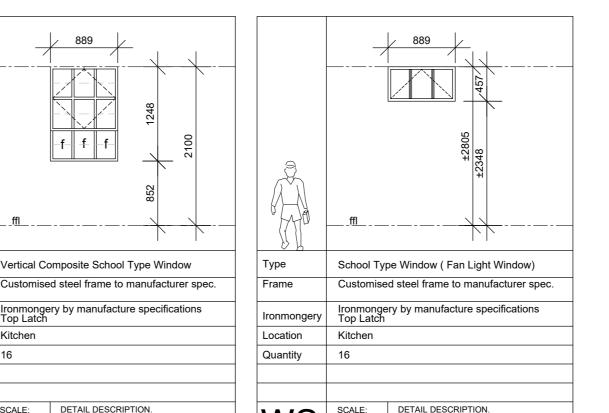
Drawing Description: Site Plan for Mowbray Primary **School**

Stamped by Design Review Committee

Date: 2020/01/04 Drawn: Shaun Geness Date: **2020/06/22** Checked: Muazzam Khan Scales:1:100 Revision: Consultant Drawina No 1363-18 WD01 DOPW Drawing No: Revision: 063877 DOPW WIMS No: ZNTL04772W







where specified and sizes may vary).

and fixed to building.

as per specification.

Existing trusses to be removed and new to be installed.

on training tape on both ends, not to extend into eaves.

added to all openings and bricked up to U/S sheeting

SCALE: DETAIL DESCRIPTION.

GENERAL NOTES: . All dimensions to be checked before work commences. Architect to be notified immediately of any 100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. 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. All levels to be checked on site before any work commences.

All reinforced concrete work to be strictly in accordance with structural engineers detail and

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.

Workmanship is to be of the highest standard through-out.

whilst on site throughout the contract period.

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. . 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. 6. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures. 7. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

- All STRUCTURAL, CIVIL and ELECTRICAL work to professional Engineers - All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS details to take preference

over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES

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

(trusses and purlins to be replaced where specified and sizes may vary).

top of slab

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.

(trusses and purlins to be replaced where specified and sizes may vary). 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 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

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).

removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer screed to fall, made with waterproof admixture 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

-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

BACKFILL 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 Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank 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 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

-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:

the ridge only.

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

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

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 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

DOWN-PIPES:

Shoes to be provided to bottom of down-pipes. Or otherwise stated on drawings, to match existing.

CEILINGS:

to be confirmed on site.

SURFACE PREPARATION:

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. 8. The contractor is to locate and identify any / all existing services and to protect these from damage

CEILING TRAP DOORS: Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position

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

Ensure that substrates as well as primed and undercoated surfaces are clean, sound and

NFW WORK Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.

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.

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

1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses beam above using appropriate channel.

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

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 New doors as indicated on schedule, to be confirmed on site. All external doors to be solid

manufacturers specifications, hardener to be applied once putty is smooth and applied

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded

meranti hardwood, internal doors to be hollow core.

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 Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on

> 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. ile colour: to be confirmed. Item as above or as per existing

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.

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

method also applies to existing water tanks on existing or new plinths.

WATER TANK AND PLINTH: 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

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.

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.

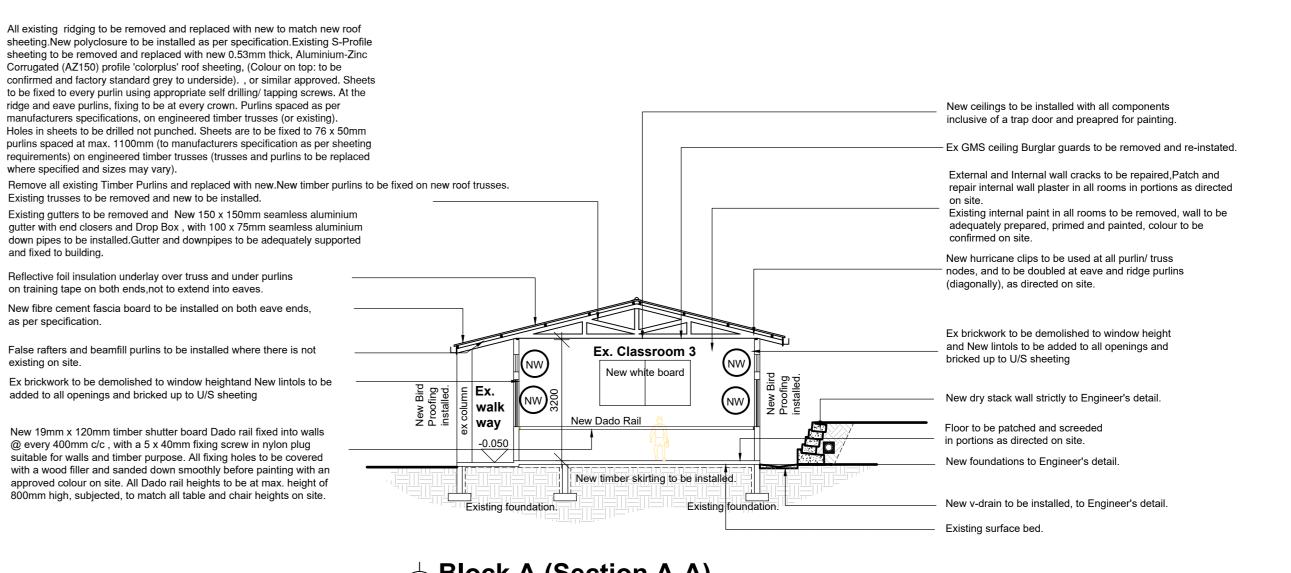
CHALK BOARDS REPLACED WITH WHITE BOARDS: Fixed projection white board (NON REFLECTIVE), Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for 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.

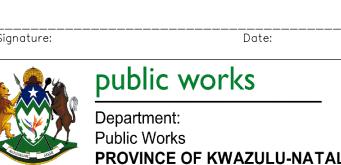


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Sheet 2 of 6 (A0)

Date: Signature: Consultant



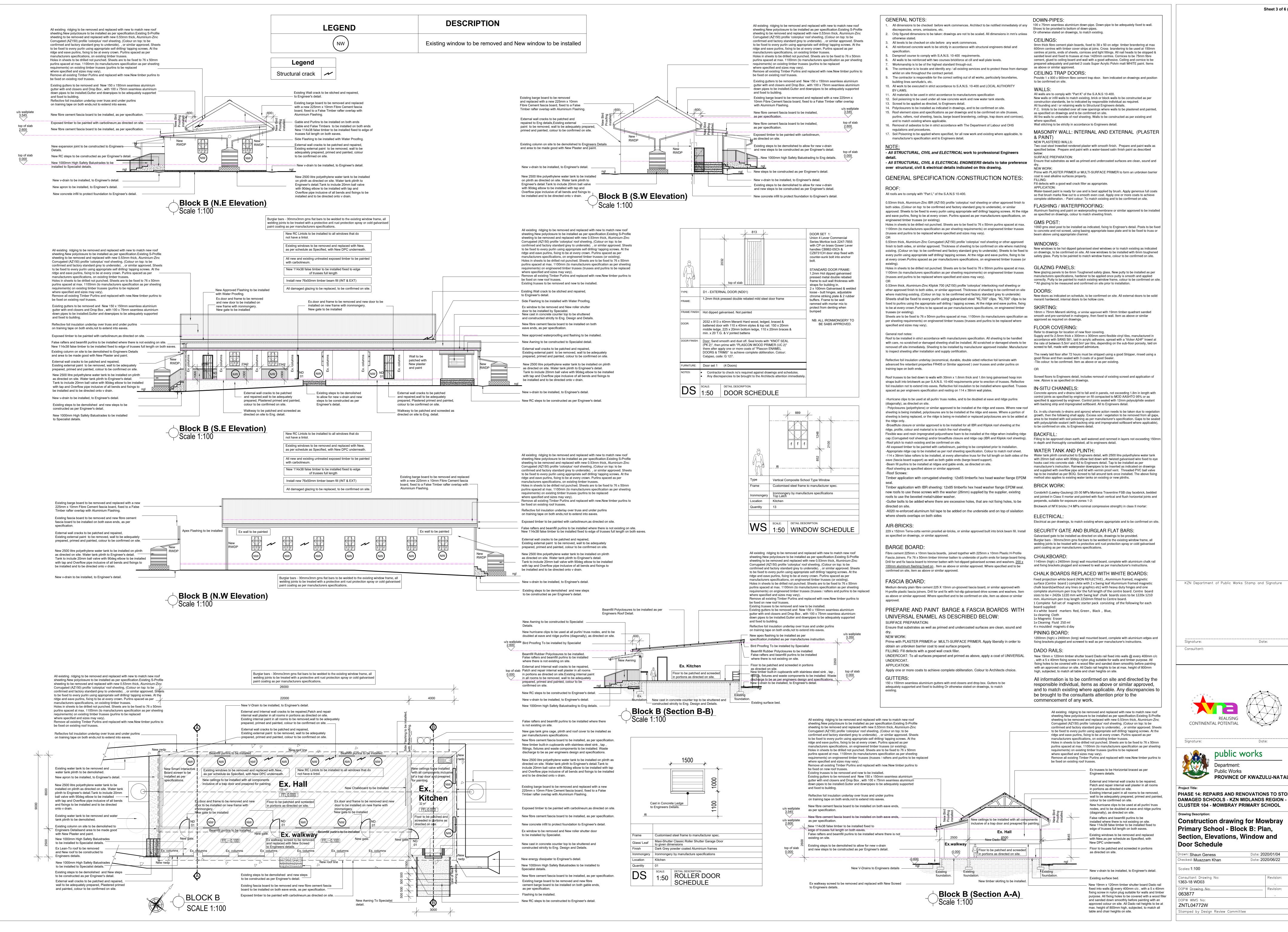


PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION -

CLUSTER 104 - MOWBRAY PRIMARY SCHOOL Drawing Description: Construction drawing for Mowbray Primary School - Block A: Plan,

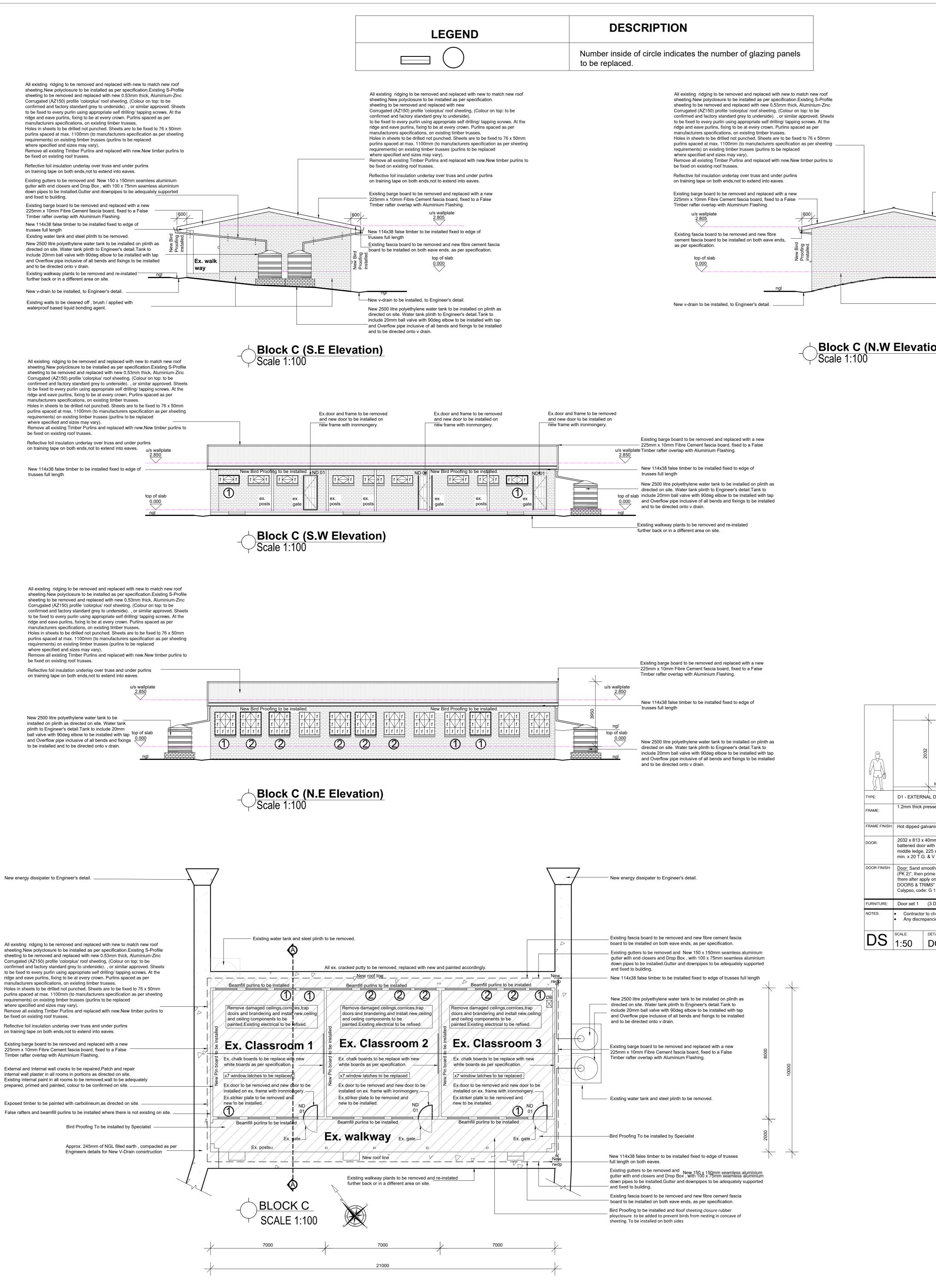
Section, Elevations, Window and **Door Schedule** Date: **2020/01/04** Drawn: Shaun Geness Date: **2020/06/22** Checked: Muazzam Khan Scales:1:100

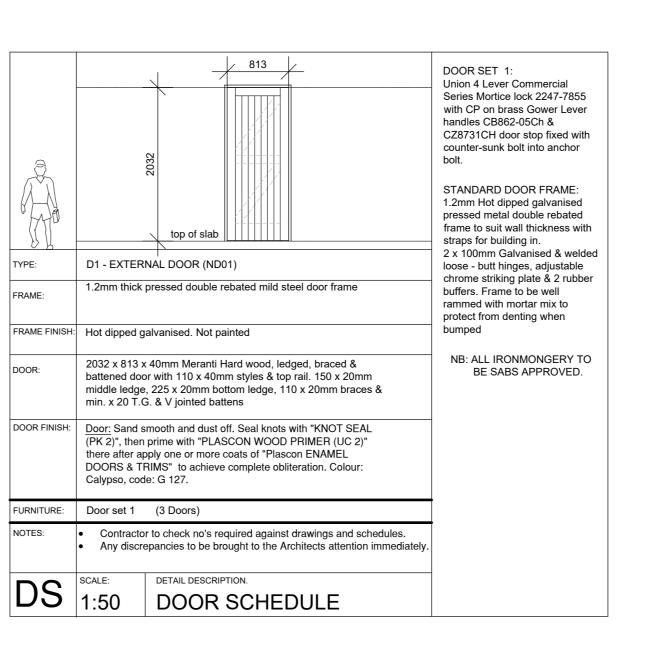
Consultant Drawing No Revision: 1363-18 WD02 DOPW Drawing No: Revision: 063877 DOPW WIMS No: ZNTL04772W Stamped by Design Review Committee



Sheet 3 of 6 (A0)

PHASE 14: REPAIRS AND RENOVATIONS TO STORM





GENERAL NOTES: . All dimensions to be checked before work commences. Architect to be notified immediately of any 100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall.

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.

All levels to be checked on site before any work commences. All reinforced concrete work to be strictly in accordance with structural engineers detail and

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. Workmanship is to be of the highest standard through-out.

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

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

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

Remove all existing Timber Purlins and replaced with new.New timber purlins to

Corrugated (AZ150) profile 'colorplus' roof sheeting, (Colour on top: to be

ridge and eave purlins, fixing to be at every crown. Purlins spaced as per

manufacturers specifications, on existing timber trusses.

where specified and sizes may vary).

be fixed on existing roof trusses.

or in a different area on site.

liquid bonding agent.

requirements) on existing timber trusses (purlins to be replaced

Reflective foil insulation underlay over truss and under purlins

Existing barge board to be removed and replaced with a new

25mm x 10mm Fibre Cement fascia board, fixed to a False

Existing walkway plants to be removed and re-instated further back

Existing walls to be cleaned off , brush / applied with waterproof based

oprox. 245mm of NGL filled earth, compacted as per

Engineers details for New V-Drain consrtruction

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

on training tape on both ends, not to extend into eaves.

Timber rafter overlap with Aluminium Flashing.

whilst on site throughout the contract period. 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. 1. 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),

6. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures. 7. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

over structural, civil & electrical details indicated on this drawing.

- All STRUCTURAL, CIVIL and ELECTRICAL work to professional Engineers - All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS details to take preference

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

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

and to match existing where applicable.

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). 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

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).

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).

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 the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on

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.

to inspect sheeting after installation and supply certification.

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. with backing strip and impregnated softboard. All to Engineers detail. - 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 Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation

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

BACKFILL cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting). Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm -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 Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank 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 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 -A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation

where sheets overlaps on both sides

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 complete aluminium pen tray for the full length of the centre board. Centre board as above or similar approved. Where specified and to be confirmed on site, item as above or similar

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 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.

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

DOWN-PIPES:

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. 8. The contractor is to locate and identify any / all existing services and to protect these from damage

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

Wall stitching to be strictly in accordance to Engineers detail.

Fill defects with a good wall crack filler as appropriate.

SURFACE PREPARATION:

GLAZING PANELS:

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

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

Ensure that substrates as well as primed and undercoated surfaces are clean, sound and

NFW WORK: Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.

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.

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.

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.

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

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per

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.

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 vinvl tiles, manufactured in

File colour: to be confirmed. Item as above or as per existing.

removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer 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.

accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at

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

sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at 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.

in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH: 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

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:

method also applies to existing water tanks on existing or new plinths.

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site. 229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install

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. 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 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,

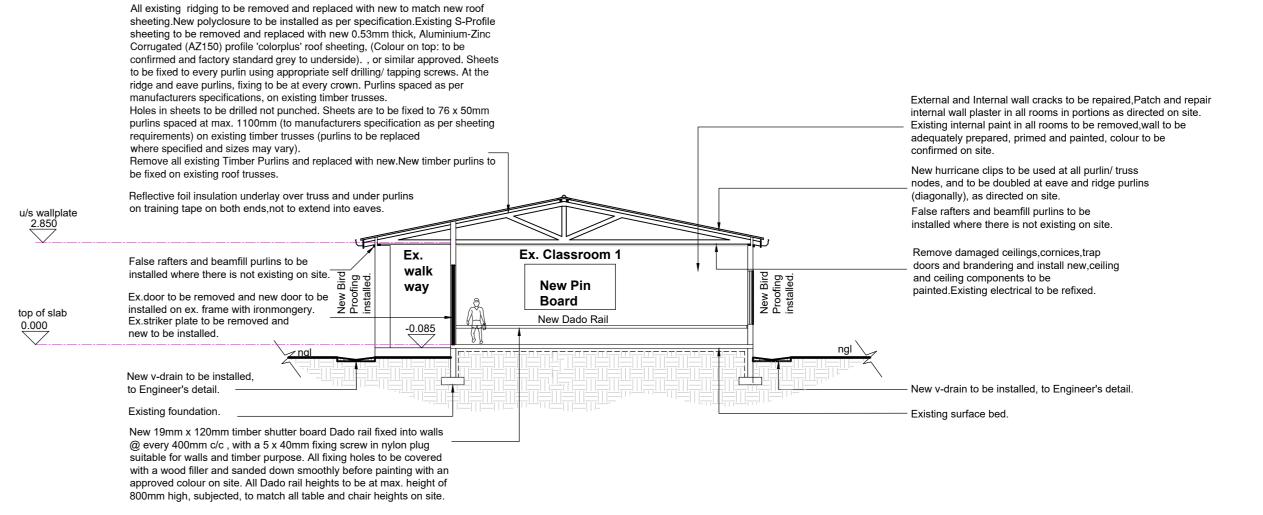
1x cleaning Cloth 1x Magnetic Eraser 1x Cleaning Fluid 250 ml 4 x moulded magnets d day

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.



KZN Department of Public Works Stamp and Signature

Sheet 4 of 6 (A0)

Signature:



PROVINCE OF KWAZULU-NATAL

PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION CLUSTER 104 - MOWBRAY PRIMARY SCHOOL

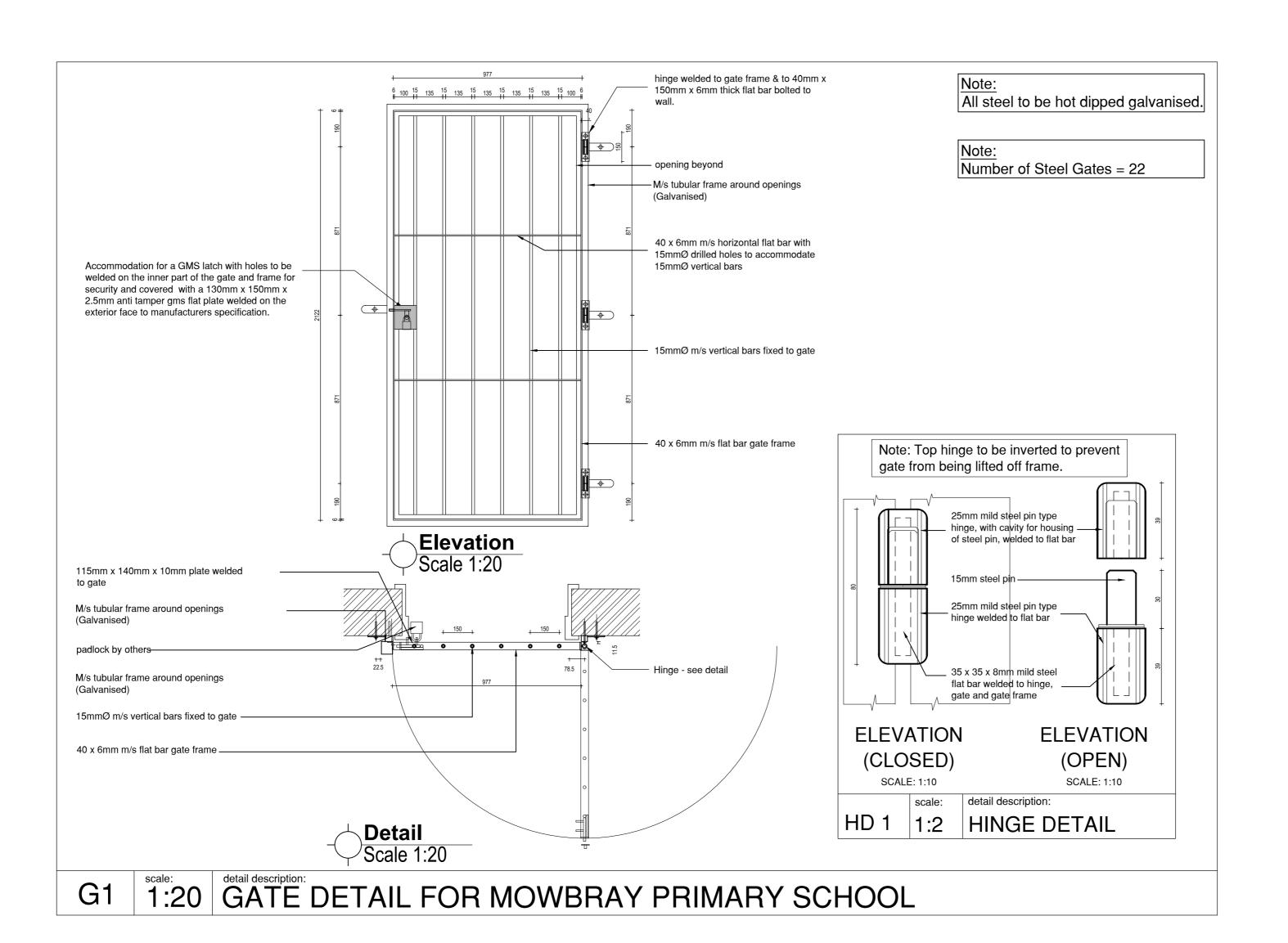
Drawing Description:

Construction drawing for Mowbray Primary School - Block C: Plan, **Section & Elevations**

Date: **2020/01/04** Orawn: Shaun Geness Date: **2020/06/22** Checked: Muazzam Khan Scales:1:100 Consultant Drawing No 1363-18 WD04

Revision: DOPW Drawing No: Revision: 063877 DOPW WIMS No:

ZNTL04772W Stamped by Design Review Committee



Sheet 5 of 6 (A2)

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Signature:

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Consultant:



Signature:

_____ Date:



Stamped by Design Review Committee

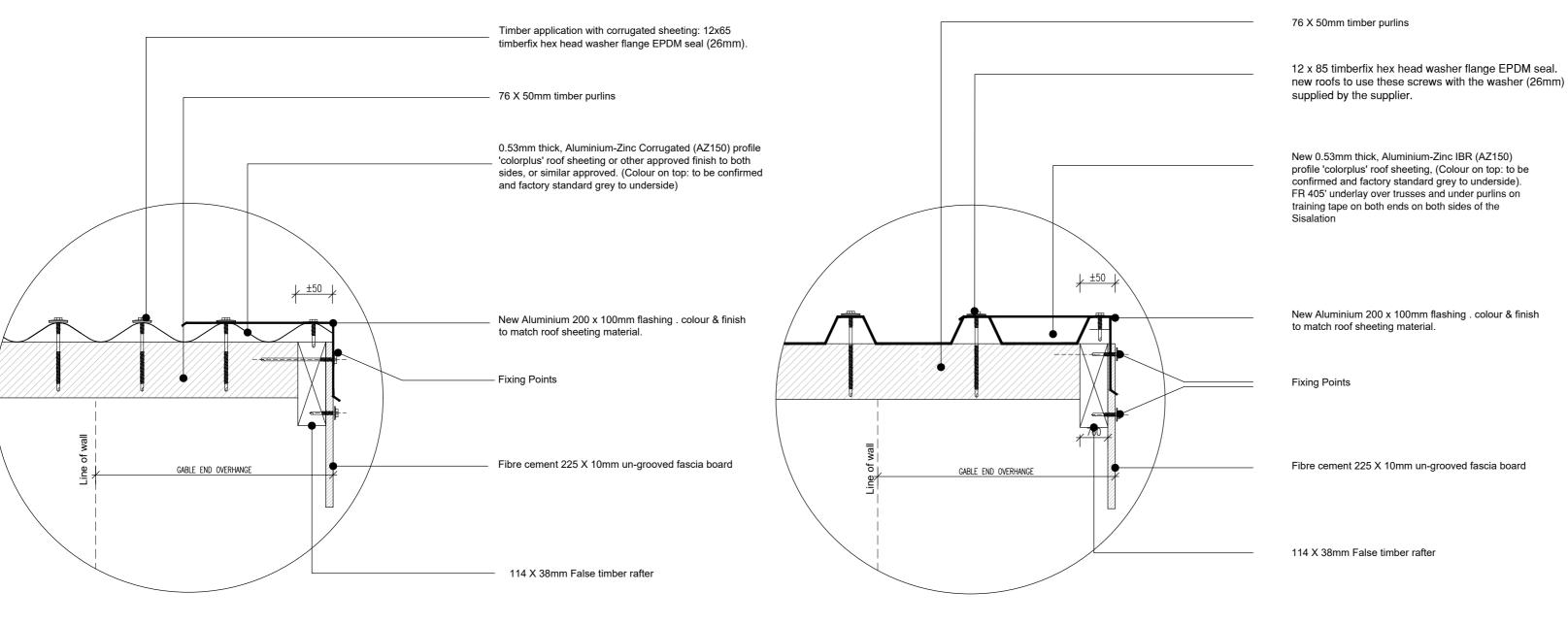
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PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 104 - MOWBRAY PRIMARY SCHOOL

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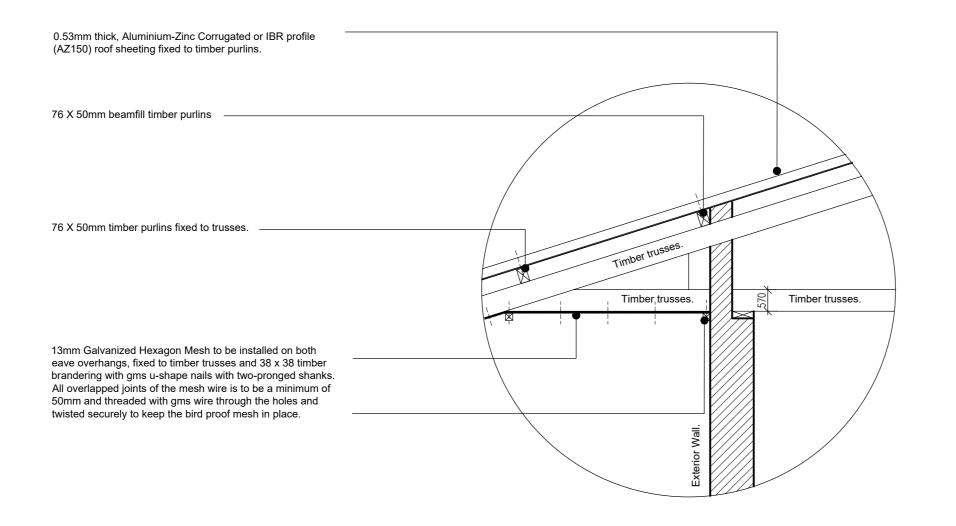
GATE DETAIL

Drawn: T. Mkhize	Date: 20 2	20/05/04
Checked By: T. Mkhize	Date: 20 2	20/05/04
Scales: AS SHOWN		
Consultant Drawing No: 1363-18 WD05		Revision:
DOPW CONTRACT No:		Revision:
063877		0 .
DOPW WIMS No:		
ZNTL04772W		











Sheet 6 of 6 (A2)

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Signature:

Consultant:



Signature

_____ Date:

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 104 - MOWBRAY PRIMARY SCHOOL

Drawing Description:

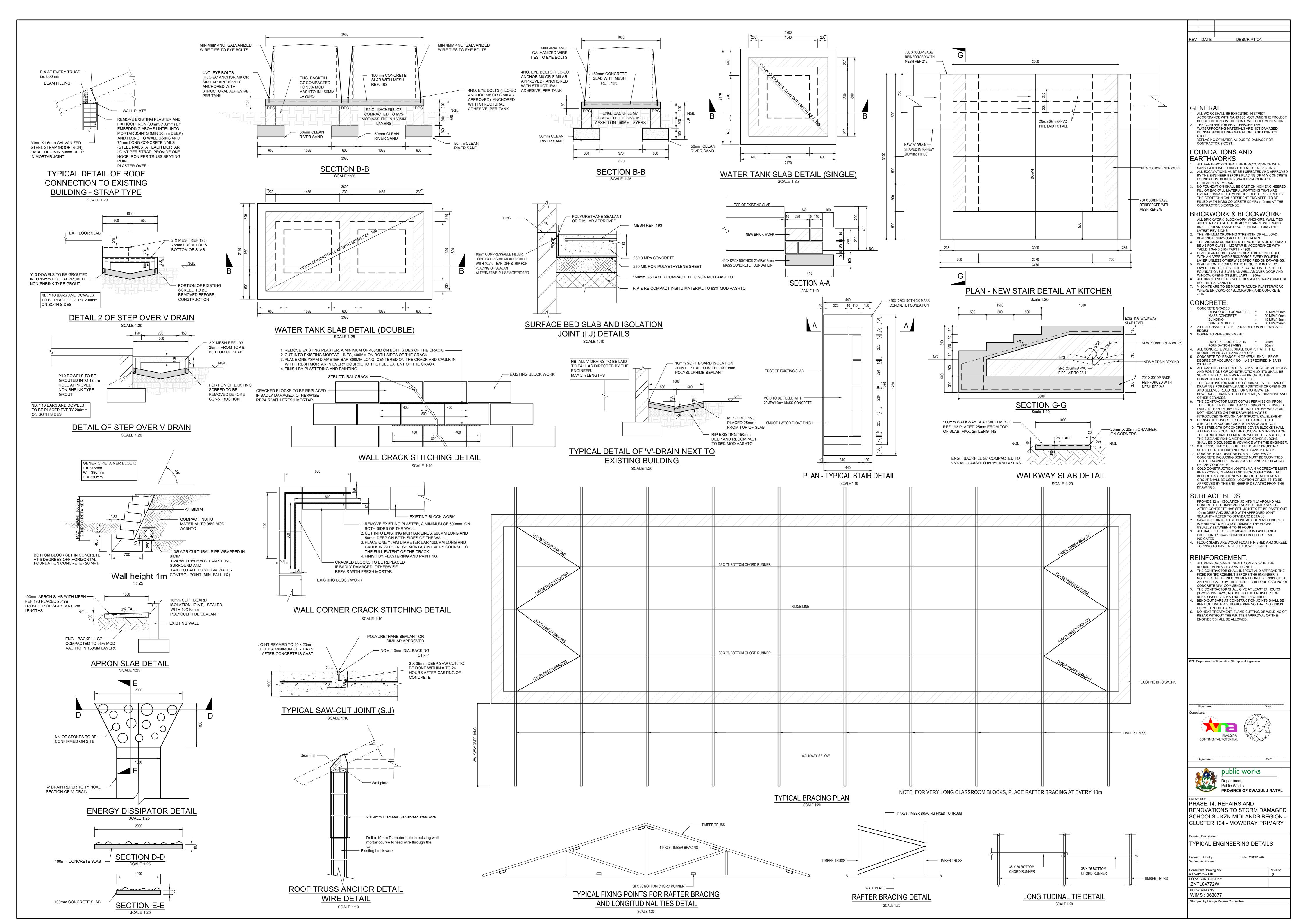
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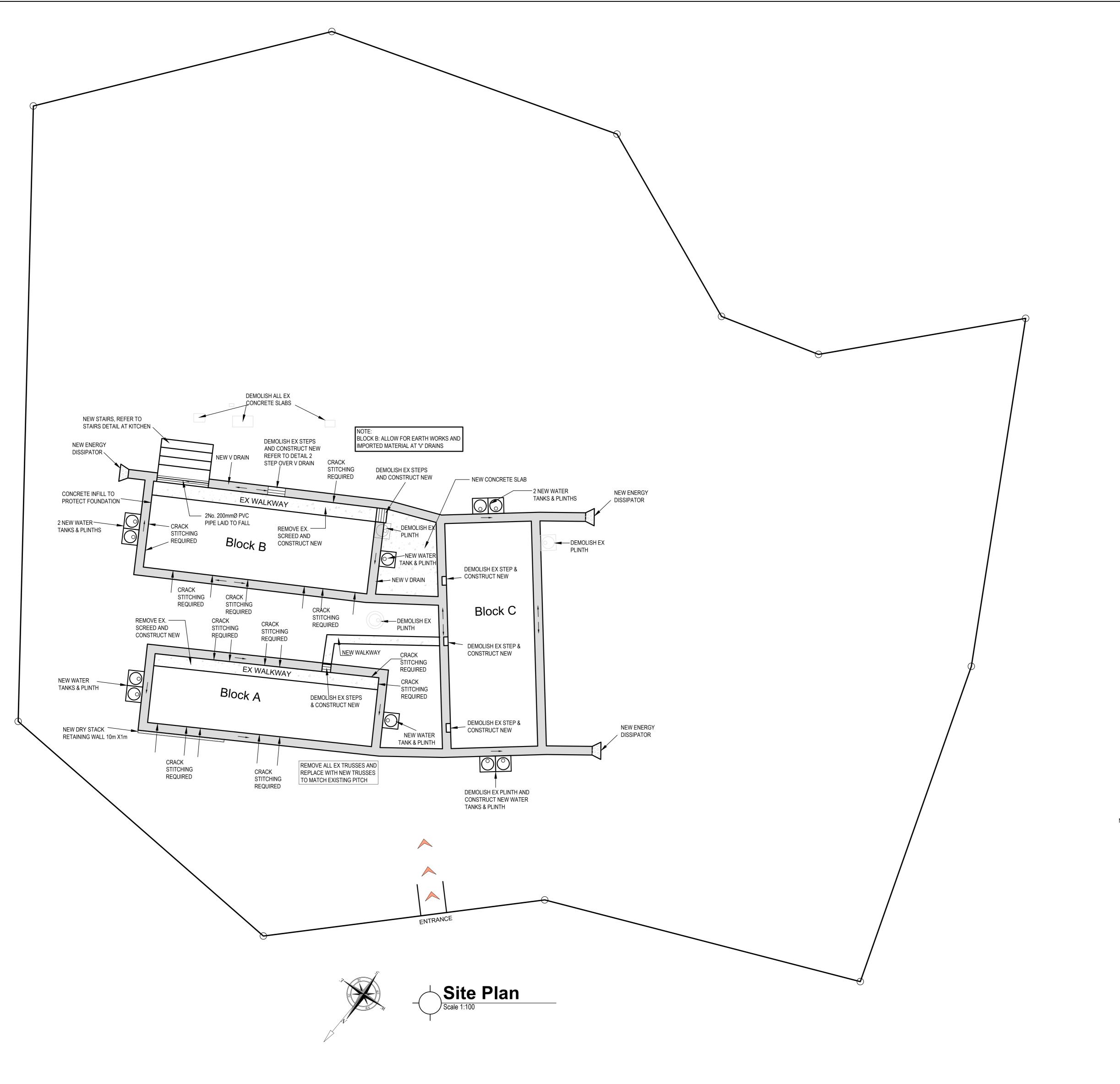
Drawn: T. Mkhize	Date: 2020/05/04	
Checked By: T. Mkhize	Date: 2020/05/04	
Scales: AS SHOWN		
Consultant Drawing No: 1363-18 WD06	Revision:	
DOPW CONTRACT No: 063877	Revision:	
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DOPW WIMS No:

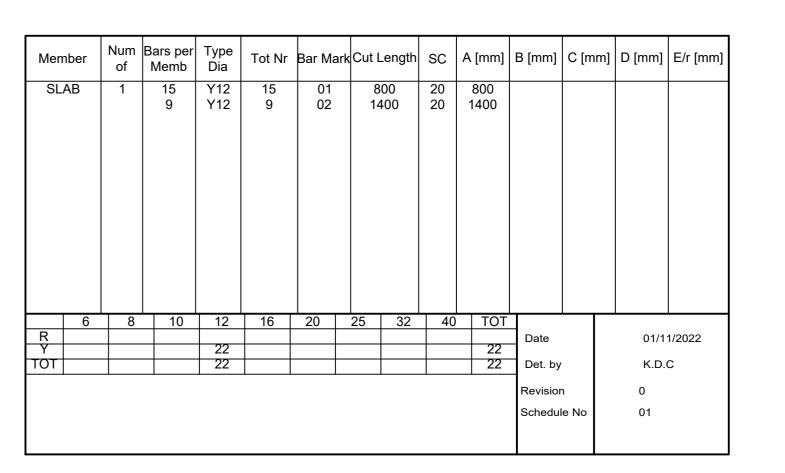
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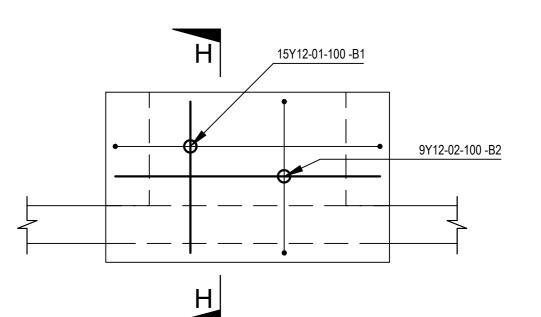
Stamped by Design Review Committee





BUILDING NO.	DESCRIPTION
А	Admin block and classrooms (26m x 8m)
В	Church hall (26m x 10m)
С	3 Classroom block (26m x 10m)



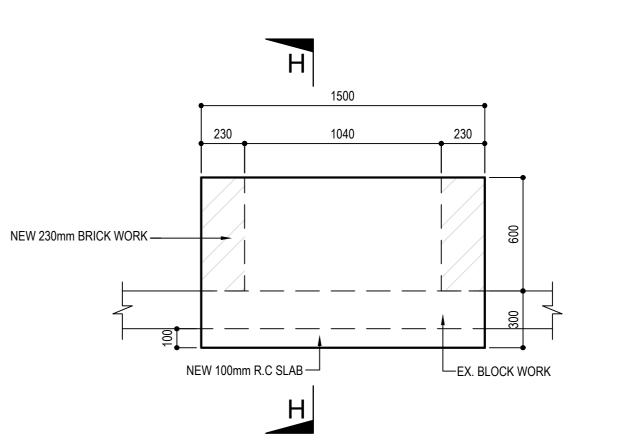


PLAN - REINFORCING OF NEW COUNTER TOP AT KITCHEN

15Y12-01-100 -B1

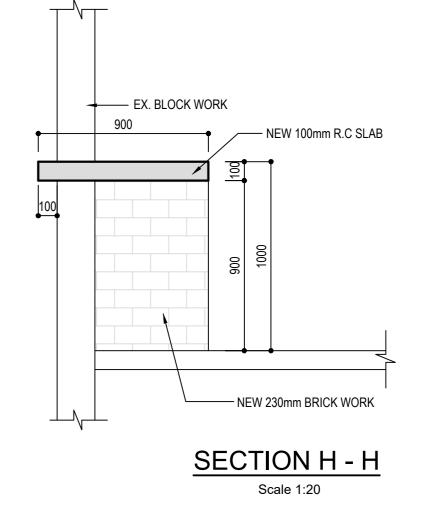
9Y12-02-100 -B2

SECTION H - H



PLAN - DETAIL OF NEW COUNTER TOP AT KITCHEN Scale 1:20

Ocale 1.20



REV DATE DESCRIPTION

GENERAL

 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.
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

BRICKWORK & BLOCKWORK:

ALL BRICKWORK, BLOCKWORK, ANCHORS, WALL TIES AND STRAPS SHALL BE IN ACCORDANCE WITH SANS 0400 – 1990

AND SANS 0164 – 1980 INCLUDING THE LATEST REVISIONS.
THE MINIMUM CRUSHING STRENGTH OF ALL LOAD BEARING
BRICKWORK SHALL BE 14 MPa.

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

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:

3. COVER TO REINFORCEMENT:

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

ROOF & FLOOR SLABS = 25mm
FOUNDATION BASES = 50mm
ALL CONCRETE WORK SHALL COMPLY WITH THE

ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-CC1.

CONCRETE TOLERANCE IN GENERAL SHALL BE OF DEGREE OF ACCURACY NO. II AS SPECIFIED IN SANS 2001-CC1.

ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE

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

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.

CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 2001-CC1.

THE STRENGTH OF CONCRETE COVER BLOCKS SHALL AT LEAST BE FOUND. TO THE CONCRETE STRENGTH OF THE

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:

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

130 INDICATED

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7. FLOOR TOPP

REINFORCEMENT:

ALL REINFORCEMENT SHALL COMPLY WITH THE

REQUIREMENTS OF SANS 920-2011.

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.

THE CONTRACTOR SHALL GIVE AT LEAST 24 HOURS (3 WORKING DAYS) NOTICE TO THE ENGINEER FOR REBAR INSPECTIONS THAT ARE REQUIRED.
BEND-OUT BARS AT CONSTRUCTION JOINTS SHALL BE BENT

OUT WITH A SUITABLE PIPE SO THAT NO KINK IS FORMED IN THE BARS.

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

O'matan



Signature:



Project Title:
PHASE 14: REPAIRS AND

RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 104 - MOWBURY PRIMARY

Drawing Description:

Illustration Site Plan of Engineering works for Mowbray Primary School

 Drawn: I.GAFOOR
 Date: 2020/07/09

 Scales: As Shown
 Revision:

 Consultant Drawing No:
 Revision:

 V16-0539-030a
 0

 DOPW CONTRACT No:
 Revision:

 ZNTL04772W
 DOPW WIMS No:

 WIMS: 063877
 Stamped by Design Review Committee