



TENDER NO: 61 / 2019

CONSTRUCTION OF WORKSHOP OFFICE BUILDING
AT SECTION 14 ALLOTMENT 09 - KAINANTU.
EASTERN HIGHLANDS PROVINCE

*Property Development Team
PS Group – Finance & Shared Services BU
P. O. Box 1105, BOROKO 111
National Capital District*



TENDER NO: 61 / 2019

CONSTRUCTION OF WORKSHOP OFFICE BUILDING
AT SECTION 14 ALLOTMENT 09 – KAINANTU,
EASTERN HIGHLANDS PROVINCE

Prepared By:.....

Checked By:.....

Date:.....

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09/10/19.

PNG POWER LIMITED

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FRONTISPIECE

BRIEF DESCRIPTION OF TENDER

This Tender is purposely for the Construction of New Workshop Office Building as an annexure to the existing Workshop Building and other associated works required under this contract.

PNG POWER LIMITED

SECTION 1

CONSTRUCTION OF WORKSHOP OFFICE BUILDING AT SECTION 14 ALLOTMENT 09 – KAINANTU. EASTERN HIGHLANDS PROVINCE.

(A) INVITATION TO TENDER

Tender close with:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea

At 4:00 pm _____ 2019.

The Tender Submission shall consist of the following, all duly completed;

- Form of Tender
- Schedule of Quantities
- GST and Tax Registration Numbers
- Additional information/price offered by the Supplier to aid the evaluation of the Tender.

Enquiries during the Tender period shall be addressed to:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea.

ATTENTION: Mr. Ivan Anengo
Senior Property Development Officer
Corporate Services Business Unit

Fax: 323 5239
Telephone: 324 3514
Email: ianengo@pngpower.com.pg

(B) **FORM OF TENDER**

**CONSTRUCTION OF WORKSHOP OFFICE BUILDING AT SECTION 14
ALLOTMENT 09 – KAINANTU. EASTERN HIGHLANDS PROVINCE**

Companies quoting are required to complete the blank spaces in this Tender Form and complete the Schedules included.

To: PNG Power Limited
P. O. Box 1105,
BOROKO. NCD

Gentlemen,

1. Having examined the Drawings, Specification and Schedules for the execution of the above named Works, we, the undersigned, offer to execute and complete the works accordingly for the sum of (words & figures)
.....
.....
.....(K.....)
2. We undertake, if our tender is accepted, to complete and deliver the whole of the works within ten (10) weeks from the date of receiving your Official Order.
3. We agree to abide by this Tender for the period of ninety (90) days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before expiration of that period.
4. This Tender, together with the receipt of your Official Order thereof, shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any Tender you may receive.

Signed and sealed for and on behalf of:)
.....)
by)
the)
of the said Company herein)
authorised in the presence of)
Address of Company Bidding:.....

(C) TENDER DATA

**CONSTRUCTION OF WORKSHOP OFFICE BUILDING AT SECTION 14
ALLOTMENT 09 – KAINANTU. EASTERN HIGHLANDS PROVINCE**

(i) TENDERER'S ORGANISATION

1. Name: Nationality:
2. Business Address: Fax:
P. O. Box No: Phone:
.....

(ii) CONTRACT SUPERVISION

Tenderers shall list their proposed supervisory staff for this Contract. (number and designation only).

(iii) STATEMENT OF EXPERIENCE

The Tenderer shall state hereunder facts in detail describing previous experience and achievements in performing similar or comparable works together with the names of authorities for whom, and the dates when, such works were carried out.

CONSTRUCTION SCHEDULE

CONSTRUCTION OF WORKSHOP OFFICE BUILDING AT SECTION 14 ALLOTMENT 09 – KAINANTU. EASTERN HIGHLANDS PROVINCE

The Bidder should indicate his proposed program for completing various stages of the work by filling in the schedule below.

	TIME IN WEEKS									
ACTIVITY	1	2	3	4	5	6	7	8	9	10
Mobilisation & Set-Up										
Excavation & Levelling										
Concrete Works										
Block Work Construction										
Metal & Steel Works										
Carpentry (incl. roof framing)										
Roofing, Plumbing & Drainage Works										
Tiling and Glazing										
Electrical & Fire										
Painting Works										
Clean Up										

(D) **PRICE SCHEDULES**

**CONSTRUCTION OF WORKSHOP OFFICE BUILDING AT SECTION 14
ALLOTMENT 09 – KAINANTU. EASTERN HIGHLANDS PROVINCE**

(i) **LUMP SUM BREAKDOWN**

1.0	Mobilisation & Site Set Up	K.....
2.0	Excavation & Levelling	K.....
3.0	Concrete Works	K.....
4.0	Concrete Blockworks	K.....
5.0	Metal / Steel Works	K.....
6.0	Carpentry Works (incl. roofing)	K.....
7.0	Roofing, Plumbing & Drainage Works	K.....
8.0	Tiling & Glazing	K.....
9.0	Electrical & Fire Works	K.....
10.0	Painting Works	K.....
11.0	Cleaning Works	K.....
	Sub-total	K.....
	GST	K.....
	TOTAL LUMP SUM (Carried to Form Tender)	K.....

Name of Contractor:

Signature:

Date:

Witness:

SECTION 2 TECHNICAL SPECIFICATION

Description

Page No

1. Schedule of Preliminaries
 - 1.1 General
 - 1.2 Standards
 - 1.3 Nature of Contract
 - 1.4 Location of Site
 - 1.5 Description of Work
 - 1.6 Site Inspection
 - 1.7 Possession of Site
 - 1.8 Site Operations
 - 1.8.1 Safety
 - 1.8.2 Site Facilities
 - 1.9 Construction Schedule
 - 1.10 Use of Second Hand Materials
 - 1.11 Setting Out
 - 1.12 Time for Completion
 - 1.13 Liquidated Damages
 - 1.14 Approvals, Fees and Notices
 - 1.15 Cleaning Up

2. Job Specifications (Scope of Works)
 - 2.1 Mobilisation and Site Establishment
 - 2.2 Excavation and Levelling
 - 2.3 Concrete Works
 - 2.4 Concrete Block Works
 - 2.5 Metal and Steel Works
 - 2.5 Carpentry Works
 - 2.6 Roofing Works
 - 2.7 Electrical, Fire and Plumbing
 - 2.8 Tiling and Glazing
 - 2.9 Painting
 - 2.10 Cleaning Up

(A) JOB SPECIFICATION

1. SCHEDULE OF PRELIMINARIES

1.1 GENERAL

The Contractor shall carry out the works as detailed and or inferred in the Technical Specification comprising of Trade Schedules and Drawings which takes precedence over the Standard Specification, Part (B).

1.2 STANDARDS

All works shall be carried out to the accepted standard trade practices, Local Authority Regulations and the relevant PNG and Australian Standards.

1.3 NATURE OF CONTRACT

The contract will be Fixed Price Lump Sum Contract. Approved variations shall be paid for at the applicable rates listed in the Schedule of Rates for Variations.

1.4 LOCATION OF SITE

The work site is located at Section 14 Allotment 07, 08 & 09 – Kainantu, Eastern Highlands Province. Exact location would be Allotment 09.

1.5 DESCRIPTION OF WORK

All works covered in this contract is as stipulated within the scope of works. It basically requires carpentry, carpentry, metal and steel works, electrical and painting.

1.6 SITE INSPECTION

The Contractor shall inspect the site prior to lodging his Tender and satisfy himself with the nature of the site, PNG Power Ltd will not be liable if conditions proved otherwise climatic conditions and services relevant to the contract.

1.7 POSSESSION OF SITE

Possession of Site shall be on the date stated in the Letter of Acceptance to the successful tenderer.

The Contractor shall be given such possession of the site as is considered necessary to carry out these works, but such possession shall not be deemed to mean exclusive possession.

1.8 SITE OPERATIONS

1.8.1 Safety

All matters and conditions regarding safety, health and welfare of persons working on site shall be the responsibility of the Contractor.

1.8.2 Site Facilities

The Contractor shall arrange for and meet all the costs associated with the provisions of his electricity, telephone, water ablution facilities, temporary buildings for his workmen including site security.

1.9 CONSTRUCTION SCHEDULE

The Contractor shall provide a detailed construction schedule expanding on the Tender Construction Schedule within one(1) week of acceptance of contract.

1.10 USE OF SECOND HAND MATERIALS

No second hand materials shall be used unless indicated in the specification or shown on the drawing or until they have been inspected and approved by the Superintendent. Any materials reused shall be finished to “as new” condition.

1.11 SETTING OUT

The works shall be located where indicated on the drawings, however, the accurate setting out and adherence to details of levels and squareness of the building will be the sole responsibility of the Contractor.

1.12 TIME FOR COMPLETION

The works shall be Practically Completed within Ten (10) weeks from the date of Possession of Site given in PNG Power's Letter of Acceptance.

1.13 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish, excavated material and access material which is of no use to PNG Power. All rubbish shall be dumped at the local authority's official garbage dump and not at or around the work site.

2.0 DESCRIPTION OF WORKS

2.1 MOBILISATION & SITE SET-UP

- 2.1.1 The Contractor shall organise and mobilise on site upon PPL instruction or upon receiving of PPL Official Purchase Order.
- 2.1.2 The contractor shall arrange for temporary services on site including site access, telephone, power and sewerage for use by its workers.
- 2.1.3 The Contractor shall arrange for storage spaces on site to store materials, tools and other plant and equipments.
- 2.1.4 The Contractor shall also arrange for Security on site to safe-guard building materials, plants and equipments where necessary.

2.2 EXCAVATION AND LEVELLING

- 2.2.1 The existing ground level around the perimeter of the building shall be excavated and levelled properly. Backfill any area that is low with proper soil or road base materials. Refer slab level line on site.
- 2.2.2 Locate underground services and foundations before any excavation work commences. Make good at no extra cost damages to existing services.
- 2.2.3 Demolition of existing part of buildings and shall be confirmed by PNG Power inspector and carried out under this contract as agreed upon. Any obstruction (ie; stonewall, trees, stumps etc) shall also be cleared properly to make way for construction.

2.3 CONCRETE WORKS

- 2.3.1 All concrete shall have a minimum strength of 20 MPa.
- 2.3.2 All concrete mixing shall be by mechanically driven revolving drum. Hand mixing is not permitted unless approved by the Superintendent. Minimum mixing proportions shall be 3:2:1 with a maximum slump of 80mm.
- 2.3.3 All footings, slabs, reinforcing, formwork etc. shall be inspected by the Superintendent before commencement of mixing and placing of concrete.
- 2.3.4 For all slab construction, supply and lay fortecon membrane to underside of slab, lapped 150mm and taped at joints.
- 2.3.5 Construct slab of 100mm thick and lay F72 mesh on the entire floor area.

2.4 BLOCK AND MASONRY WORKS

All works under this category shall be undertaken by the experienced Bricklayer and comply with all relevant codes of this specifications.

2.4.1 Blocks

All blocks shall be Class A blocks Monier or equal approved – with a minimum strength of 12MPa.

2.4.2 Standard 400x200 Blocks

Lay stretcher bond, reinforced and core filled as detailed. Refer Drawing No: M11894-08.

2.4.3 Beams

At every second course where horizontal reinforcement is required all round, lay knock out beam blocks and core fill. Also lay and reinforce above all openings.

2.4.4 Reinforcements

Provide and place all bars (S12) and ties (R10) in blockwork as detailed. Horizontal at every second coarse all round.

2.4.5 Conduits

For electrical wiring the contractor will provide 25 dia. Conduits for embedding as instructed on site. Draw wires shall be left in the conduit runs.

2.4.6 Laying

All blocks shall be laid in stretcher bond to meet acceptable standards.

2.4.7 Corefill

All cores whether reinforced or not shall be core-filled.

2.4.8 Jointing

Joints in blockwork shall be "iron" jointed all through-out.

2.4.9 Chasing

Chasing of blockwork is not permitted. Pipework, conduits etc. shall be built in and concealed in blockwalls.

2.4.10 Cleaning

Clean down all blockwork as work progresses to ensure total removal of mortar droppings and smears.

2.5 **METAL AND STEEL WORKS**

All works under this section shall be done with as per relevant building codes and practices.

2.5.1 Supply and installed new 80mm NB galvanised pipe balustrades and hand rails firmly fixed to the concrete apron floor.

2.5.2 Supply and installed new roofing sheets as listed under Roofing Section with proper fastenings.

2.5.3 Supply and install all required louvre frames. Louvre blade shall be 6mm glass blades or metal accepted as approved.

2.5.4 All steel member sizes are as shown on the drawing schedule.

- 2.5.5 All fasteners/bolts for fixing the steel members and the steel truss are also shown in the drawing.
- 2.5.6 All security doors shall be fabricated as per the detail drawings shown.
- 2.5.7 Supply and fabricate all security grill mesh for the windows as shown on the drawings.
- 2.5.8 All steel products shall be obtained from an approved manufacturer.
- 2.5.9 All weldings and fabrication shall be done by a Licensed Welder.

2.6 CARPENTRY

2.6.1 Barge and Fascia Board

Supply and fix new fascia and barge boards. The size shall be 200x32mm and fascia boards shall be securely fixed at the end of 6mm plates with 10mm bolts.

The contractor shall ensure to apply wood primer to exposed timber board surfaces prior to fixing.

2.6.2 Door Jambs and Window Frames

The contractor shall supply and install door and window frames as shown on the drawings.

2.6.3 Roof Framing

- a. Supply and fix roof truss as detailed on Drawing No: M11930-09.
- b. Supply and fix roof battens/purlins as shown on drawings.
- c. Roof frames shall be braced with appropriate pryda wind brace.

2.6.4 Wall Framings

- a. Supply and install all wall framings as shown on the plan drawing.
- b. All stud wall frames and noggings shall be 75 x 50mm hardwood timbers.
- c. All internal frames shall be braced appropriately with hardwood or pryda strap bracings.

2.7 ROOFING WORKS

All roofing works to be carried out in accordance with the Manufacturers relevant codes and practices.

2.7.1 Roofing Sheets

Roofing shall be corrugated zincalume bond custom orb neatly fixed on to the purlins/battens. All roofing sheets shall be in single length.

2.7.2 Overhangs

Overhang length shall be 900mm minimum as shown on drawings.

2.7.3 Roof Fasteners

60mm long tekscrews shall be used as roof fasteners and the contractor shall use three(3) number of tekscrews on roof sheets and securely fastened as per roof battens.

2.7.4 Sisalation

Supply and install 1.2m wide double sided insulation paper and allow 150mm lap over on each joints.

2.7.5 Gutter

- a. Supply and install new sheerline gutter and shall be fixed the full length of both sides of the existing building.
- d. The contractor shall allow a fall starting from the centre of the length of the building and runs towards the two ends of the building.

2.7.6 Gutter Brackets

An appropriate trim line gutter brackets shall be used prior to fixing of the gutter. The gutter brackets shall be fixed at 1.0 meter spacing with an appropriate fixer or fasteners.

2.7.7 Down Pipes

Down pipes shall be 100 diameter PVC and shall be filtered tightly where the drops are. All joints shall be neatly fitted to avoid appearing of gaps.

2.7.8 Flashings

An appropriate metal flashing shall be provided at the edges of the roofing and securely fasten with appropriate fasteners on to the Barge Board. Ensure to seal off screw heads properly with approved sealant.

2.8 **JOINERY AND HARDWARE**

2.8.1 Doors

Supply and install new solid core doors as shown on the drawings.

2.8.2 Door Locks

- a. Provide new Tubular Dead bolts, 777 series with 56x100mm x 75mm "D" handle fixed on both sides of the doors.
- b. Provide magnetic door stoppers to all bedroom door and entry doors where appropriate.

2.8.3 Hinges and Catches

Supply and install new 100mm butt steel hinges. Mark out for fitting of the butt steel hinges shall be 150mm from the top of the door and 200mm up from the bottom edge of the door

2.8.4 Kitchen Bench Tops

- a. All work bench to be constructed as shown on the drawing.
- b. Bench tops shall covered 2mm thick laminex glued with contact adhesives.

2.8.5 Counter Bench

- a. All work bench to be constructed as shown on the drawing.
- b. Bench tops shall covered 2mm thick laminex glued with contact adhesives.

2.8.6 Printing/Radio Room Bench

- a. All work bench to be constructed as shown on the drawing.
- b. Bench tops shall covered 2mm thick laminex glued with contact adhesives.

2.9 **PLUMBING AND DRAINAGE**

2.9.1 General

All plumbing shall be carried out by competent Tradesmen who hold current Sanitary Plumbers licences issued by the authorised Public Health Authority.

2.9.2 Cold Water Supply

Provide and maintain cold water supply to the following fittings:-

- kitchen sink
- hand basin
- water closet

2.9.3 Traps and Wastes

Supply and provide 50mm dia. uPVC to hand basin and kitchen sink.

2.10 **FIRE AND ELECTRICAL**

All electrical works to be undertaken by a Licensed Electrician according to the relevant codes and practices. All materials shall be of the best quality and workmanship shall be accordingly to the best trade practice of the workmanship in accordance with the PNG Power requirement.

2.10.1 Fire

a. Standards and Workmanship

Comply with all relevant Fire Authority rules, codes and requirements.

b. Provide and install portable fire extinguisher of the types and capacities shown below. Install fixings, brackets and position indicating signs and labels for each extinguisher.

c. Provide extinguisher as;

Type 1 4.5kg Dry Chemical Powder (DCP)

Locations of the extinguishers are shown on drawing M11930-10.

2.10.2 Electrical

a. Standards and Workmanship

Comply with all the relevant PNG Power Limited rules, codes and requirements.

b. Distribution Board

The contractor shall supply and install new distribution board for the new building as shown on plan M11930-10.

c. Wiring

All wiring shall be concealed inside the ceiling and in conduits embedded in the block walls.

d. Power Outlets / 3 Phase Outlets

Supply and install as shown on the Electrical Drawing M11930-10 where necessary.

A 3 phase supply is required for this building as it will contain number of heavy duty welding machines.

e. Light Switch

Supply and install light switches as shown on the Electrical plans M11930-10. Switches shall be mounted 1.2m above floor level.

f. Lights and Fittings

Supply and install light tubes and fittings as shown on the Electrical plan – M11930-10.

g. Daylight Switch

Provide and install a daylight switch as shown on drawing - M11930-10.

2.11 PAINTING SPECIFICATION

2.11.1 Quality of Materials

The contractor shall supply all painting materials and store them neatly in an appropriate area free from dust, moisture or anything that may have an immediate effect on painting materials.

All materials used for this painting work shall be of higher grade. No second grade materials shall be used, if the contractor shall or may want to use second graded materials, the contractor must seek Inspector's approval.

2.11.2 Brand

The contractor shall supply materials such as, undercoat, turps, final coat etc, from the same Manufacturer. Mixtures of painting materials from different brand of manufactures shall not be allowed.

2.11.3 Wash down

All painting surfaces shall be thoroughly washed down with approved detergent or sugar soap prior to commencement of any painting work. The contractor shall seek approval from PNG Power supervisor after thorough wash down all surfaces before commencing of painting work.

2.11.4 Drop Sheet

A drop sheet shall be used by the Contractor during the cause of the painting work to protect the floor of the building.

2.11.5 Under Coats

A water base Acrylic under coat or similar approved type under coat that can quickly settled and dried shall be used. The Contractor shall apply one (1) coat on old surfaces. 2 coats of under coats on new surfaces.

2.11.6 Putty

The contractor shall use sparkfilla and polyfilla or similar approved putty to fill holes, gaps or any uneven surfaces. Puttied areas shall be left for a day before any sanding is carried out. This putting work shall be carried out after painting of first coat of under coat.

2.11.7 Final Coat

After completion of the sanding work to all painting surfaces, the contractor shall carry out the painting of the final two (2) coats. Colours shall be preferred by the PNG Power Supervisor.

2.11.8 Turpentine

The Contactor shall only use turpentine to wash paintbrushes or to soften paint so that paints are flexible and easy to use. Kerosene shall not be used when carrying out the painting work.

2.11.9 Scaffolding

The Contractor's responsibility to provide necessary scaffolds and securely fixed to avoid accidents. PNG Power shall not be responsible for any accident created due to negligence.

2.11.10 Painting and Varnishing

- a. The contractor shall use Taubmans paints only when carrying painting works.
- b. Do not apply under coat without the approval of the PNG Power Inspector.
- c. All existing paint surface shall be cleaned and washed down properly with sugar soap or detergents prior to applying of any under coat.
- d. Apply masonry filler under coat for all masonry surfaces prior to painting of final coats.
- e. All rusted metal surface shall be cleaned and scrape off properly before applying of metal primer.
- f. Colours scheme shall be provided by PNG Power Inspector.
- g. New surfaces shall have 2 coats of under before applying of 2 final coats.

2.12 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish and excess material which is of no use to PNG Power Ltd.

All rubbish shall be dumped at the Local Authority's official dump site and not at or around the work site.

*****END OF SCOPE*****

(J) LIST OF DRAWINGS

The Contractor shall undertake the works for Tender in accordance with the Drawings listed below and as appended. The drawings form part of the Contract Documents and all notes on the drawings are considered to be part of the drawings and the Contract. If the drawings conflict with any other part of the Contract Documents, the drawings will take precedence.

Drawing Ref. No.	Drawing Title	Date of Issue
M11930	Construction of Workshop Office Building at Kainantu, Eastern Highlands Province.	May 2018
Sheet 00	Cover Sheet, Drawing Index	
Sheet 01 of 14	Site Locality / Site Plans & Details	
Sheet 02 of 14	Floor Plan	
Sheet 03 of 14	Footing Plan & Foundation Details	
Sheet 04 of 14	Elevation 01	
Sheet 05 of 14	Elevation 02 & 03	
Sheet 06 of 14	Cross Section & Details	
Sheet 07 of 14	Construction Details – Footings & Slab	
Sheet 08 of 14	Construction & Truss Details	
Sheet 09 of 14	Roof Layout & Framing Plan	
Sheet 10 of 14	Electrical Layout	
Sheet 11 of 14	Plumbing & Drainage Layout	
Sheet 12 of 14	Blockwork Construction Details	
Sheet 13 of 14	Window/Door Schedules & Details	
Sheet 14 of 14	Standard Septic & Water Tank Details	



PNG POWER Ltd

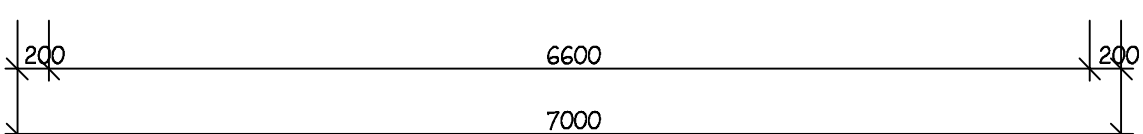
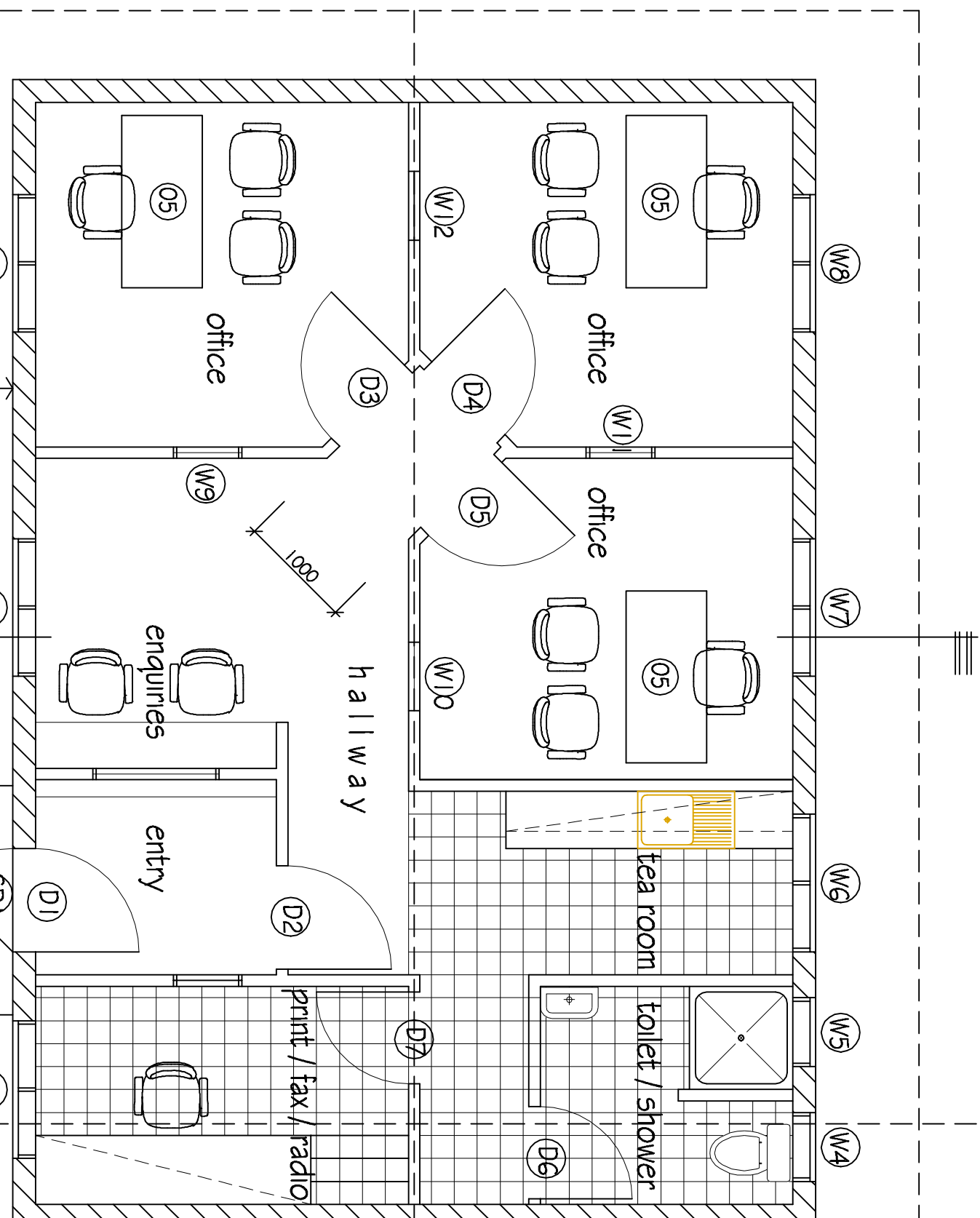
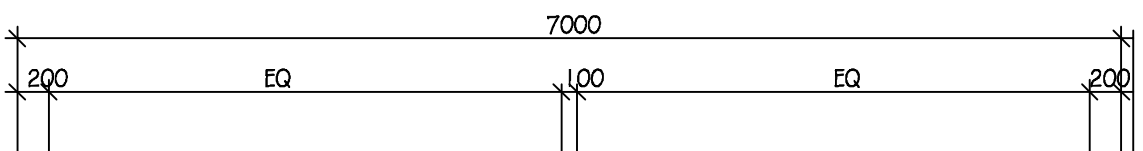
P. O. Box 1105, BOROKO 111. NCD. Papua New Guinea.

COVER SHEET

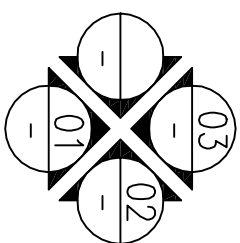
PROPOSED WORKSHOP OFFICE BUILDING AT SECTION 14 LOT 09,
KAINANTU - EASTERN HIGHLANDS PROVINCE

ARCHITECTURAL DRAWINGS

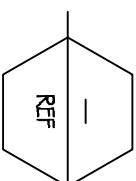
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<input type="checkbox"/>	M11930-02	FLOOR PLAN	<input type="checkbox"/>
<input type="checkbox"/>	M11930-03	FOOTING / FOUNDATION PLAN	<input type="checkbox"/>
<input type="checkbox"/>	M11930-04	ELEVATION 01	<input type="checkbox"/>
<input type="checkbox"/>	M11930-05	ELEVATION 02	<input type="checkbox"/>
<input type="checkbox"/>	M11930-06	CROSS SECTION & DETAILS	<input type="checkbox"/>
<input type="checkbox"/>	M11930-07	CONSTRUCTION DETAILS - FOOTINGS & SLAB DETAILS	<input type="checkbox"/>
<input type="checkbox"/>	M11930-08	CONSTRUCTION & TRUSS DETAILS	<input type="checkbox"/>
<input type="checkbox"/>	M11930-09	ROOF LAYOUT & FRAMING PLAN	<input type="checkbox"/>
<input type="checkbox"/>	M11930-10	ELECTRICAL LAYOUT	<input type="checkbox"/>
<input type="checkbox"/>	M11930-11	PLUMBING & DRAINAGE LAYOUT	<input type="checkbox"/>
<input type="checkbox"/>	M11930-12	BLOCKWORK CONSTRUCTION DETAILS	<input type="checkbox"/>
<input type="checkbox"/>	M11930-13	WINDOW/DOOR SCHEDULES & DETAILS	<input type="checkbox"/>
<input type="checkbox"/>	M11930-14	SEPTIC TANK & WATER TANK DETAILS	<input type="checkbox"/>



ELEVATION LEGEND



FLOOR PLAN



1:50

LINE OF EXIST W/SHOP

NOTES

1. CONFIRM ALL MEASUREMENTS AND SITE SERVICES BEFORE COMMENCEMENT OF ANY WORKS ON SITE.
1. CONFIRM ALL MEASUREMENTS AND SITE SERVICES BEFORE COMMENCEMENT OF ANY WORKS ON SITE.

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CAD Filename:	kainwsoff-01.dwg
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Date Plotted:	25.04.16
Time Plotted:	10:00am

Rev.	Revision	By	Chkd	Date
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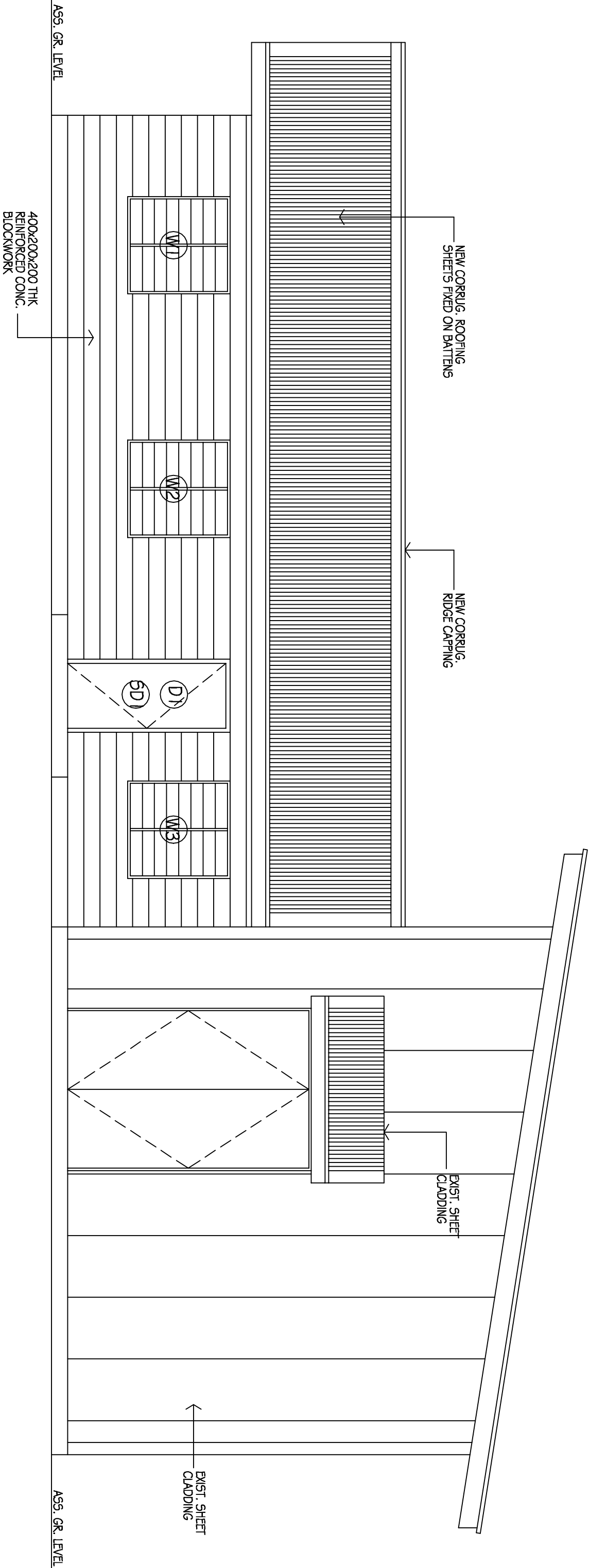
PNG POWER Ltd
P. O. Box 1105, BOROKO 111, NCD, Papua New Guinea
Telephone: (675) 324 3200
Facsimile: (675) 325 0072
Website: www.pngpower.com

Drawn	12	AR 17	Location
Designed	12		Title
Checked			A3
Endorsed			Number
Approved			Revision

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PROPOSED OFFICE

EXIST. WORKSHOP




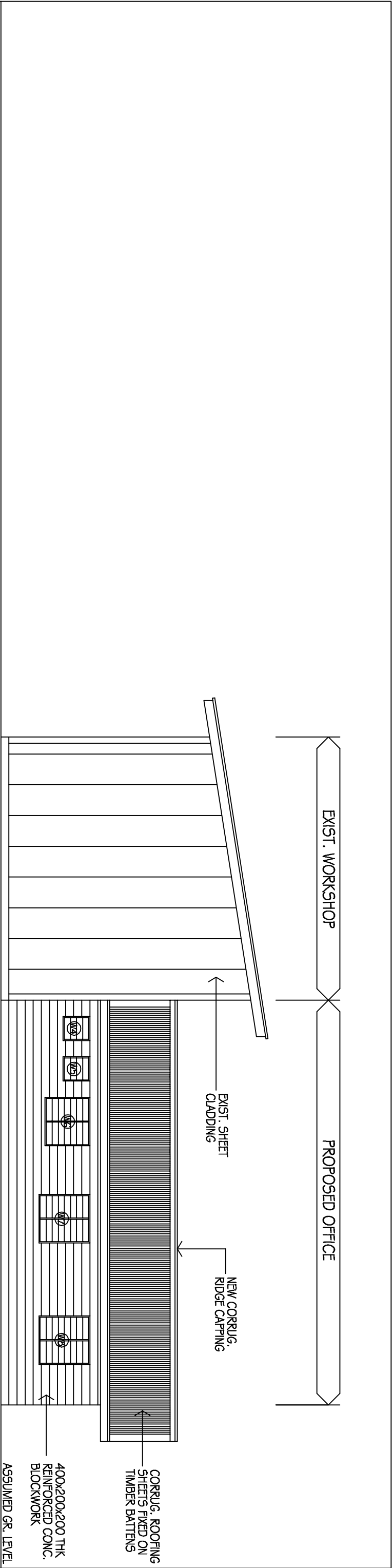
FRONT ELEVATION - 01

1 : 50

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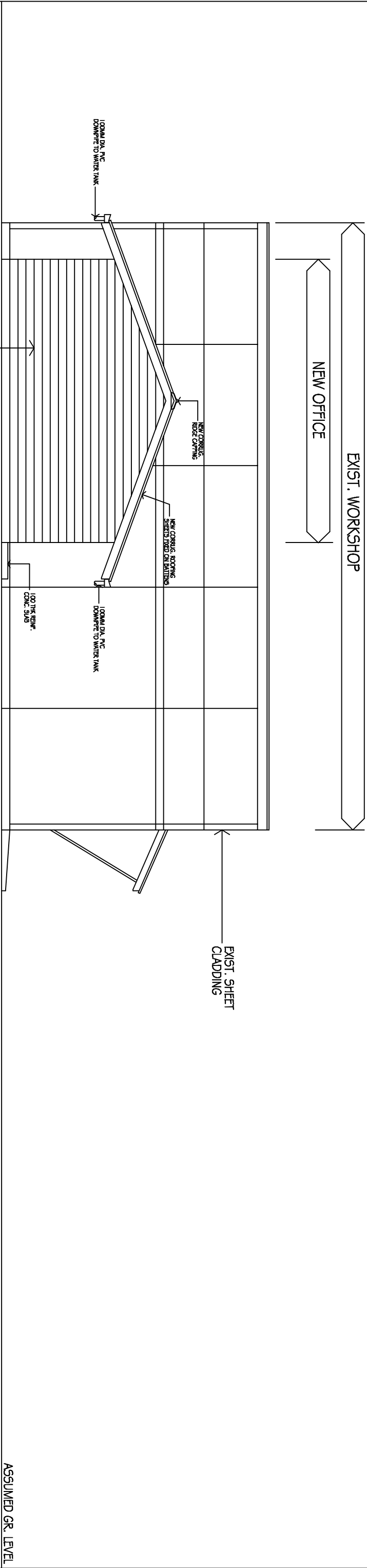
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CAD Filename: Kainasoff-02.dwg	Date Plotted: 25.04.17						
Scale: 1 : 100 / AS SHOWN	Time Plotted: 10:00am						

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Drawn	AR 17	Location	SECTION 14 ALLOTMENT 09 –KAINANTU, EHP
Designed	A	Title	NEW WORKSHOP OFFICE BUILDING
Checked		Number	ELEVATIONS
Endorsed		Revision	M 11930
Approved		Sheet	04 OF 14



—
REF
1 : 100

BACK ELEVATION - 02



—
REF
1 : 100

LHS ELEVATION - 03

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CAD Filename:	Kainwsoft-02.dwg	Date Plotted:	25.04.17				
Scale:	1 : 100 / AS SHOWN	Time Plotted:	10:00am				



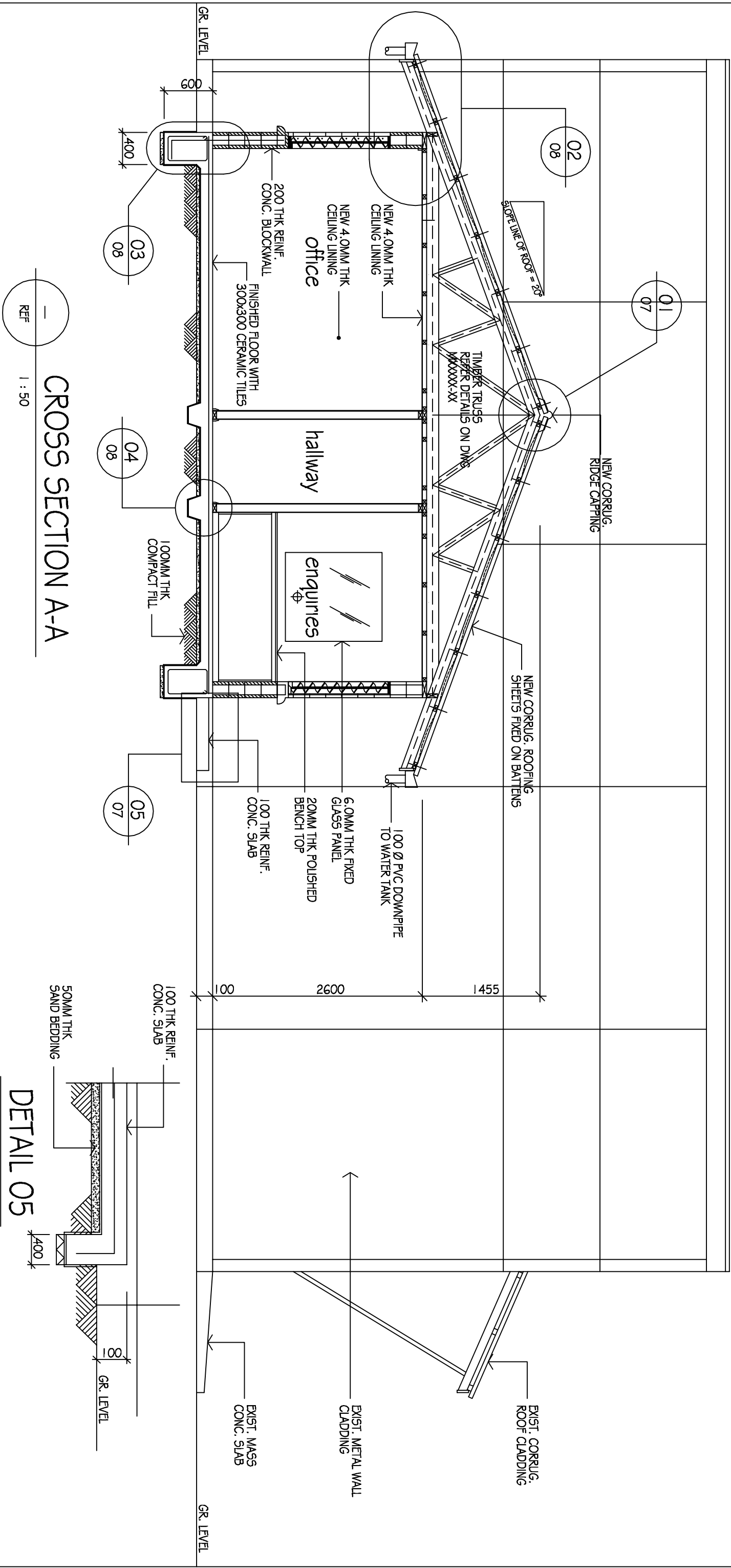
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Drawn	<input checked="" type="checkbox"/>	AR	17	Location	SECTION 14 ALLOTMENT 09 – KAINANTU, EHP
Designed	<input checked="" type="checkbox"/>			Title	NEW WORKSHOP OFFICE BUILDING
Checked				<div>A3</div>	ELEVATIONS 02 & 03
Endorsed				Number	M 11930
Approved				Revision	

Sheet	05 OF 14
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EXIST. WORKSHOP

NEW OFFICE



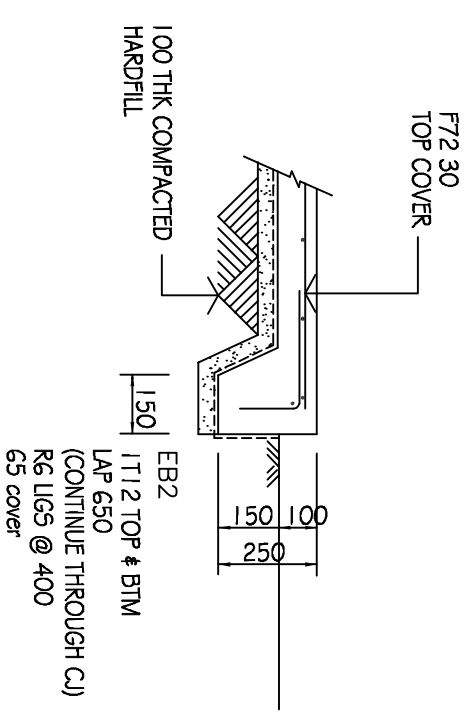
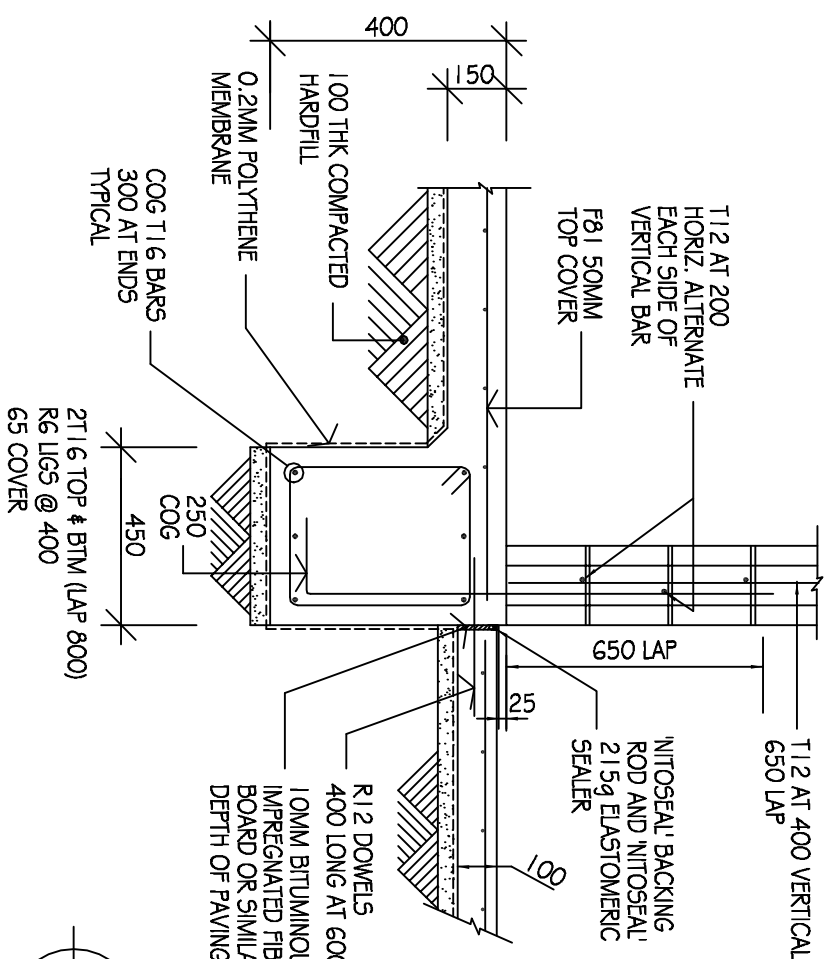
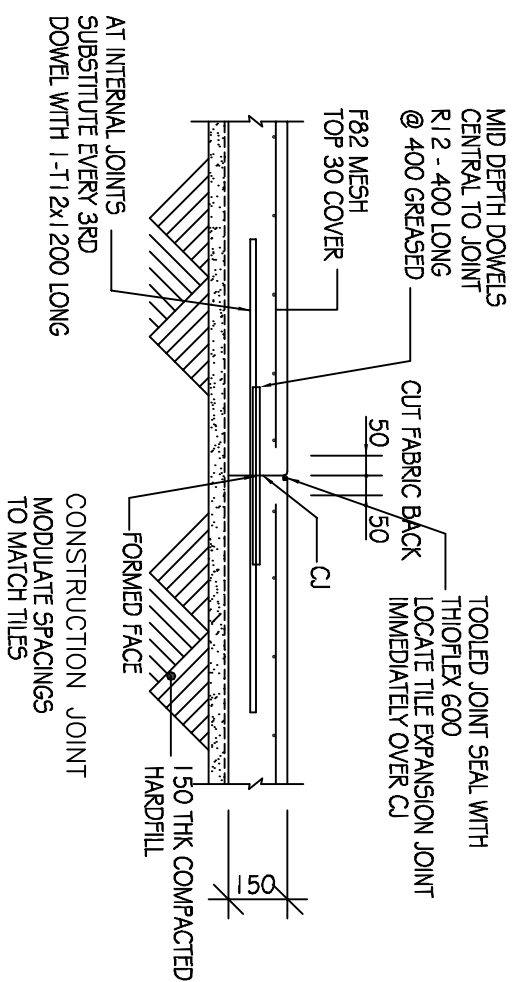
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CAD Filename: kainsoff-02.dwg	Date Plotted: 25.04.17
Scale: 1 : 100 / AS SHOWN	Time Plotted: 10.00am

Rev.	Revision	By	Chk'd	Date



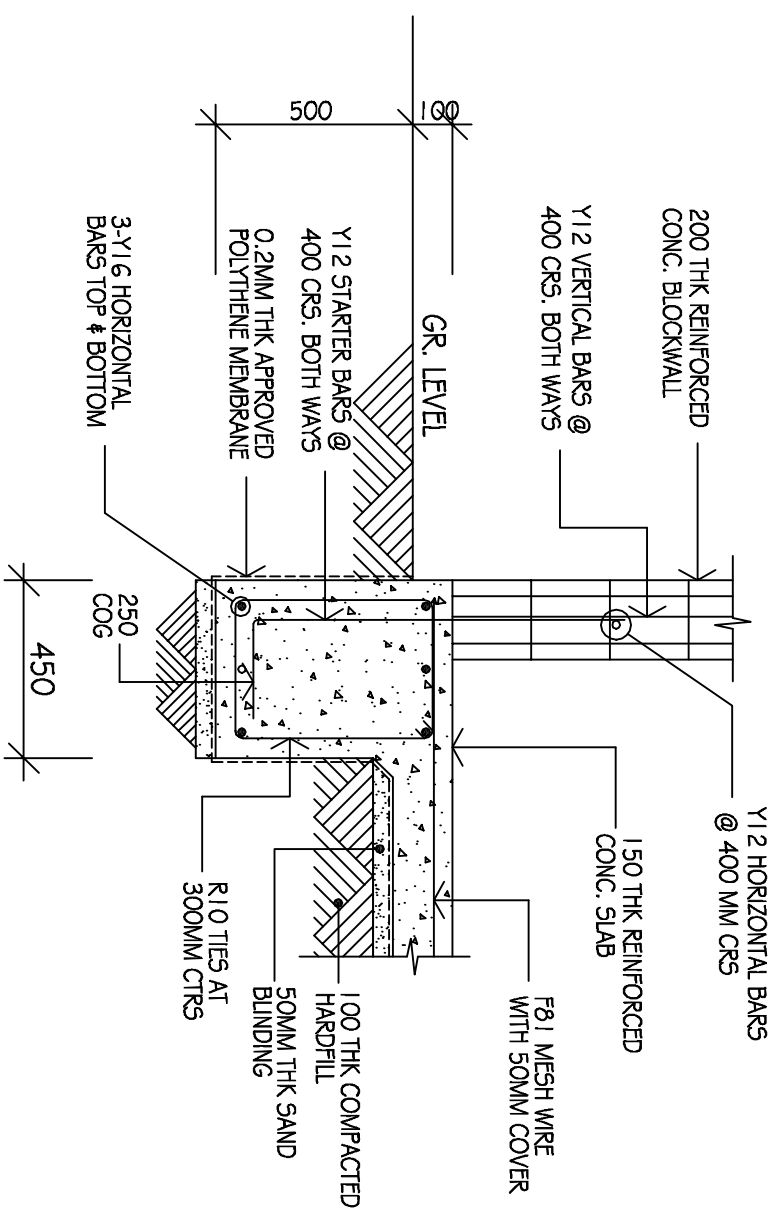
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Drawn	AR 17	Location
Designed		Title
Checked		A3
Endorsed		Number
Approved		Revision
KAINANTU – EASTERN HIGHLANDS PROVINCE		NEW WORKSHOP OFFICE BUILDING
CROSS SECTION & DETAILS		M 11930
Sheet		06 OF 14



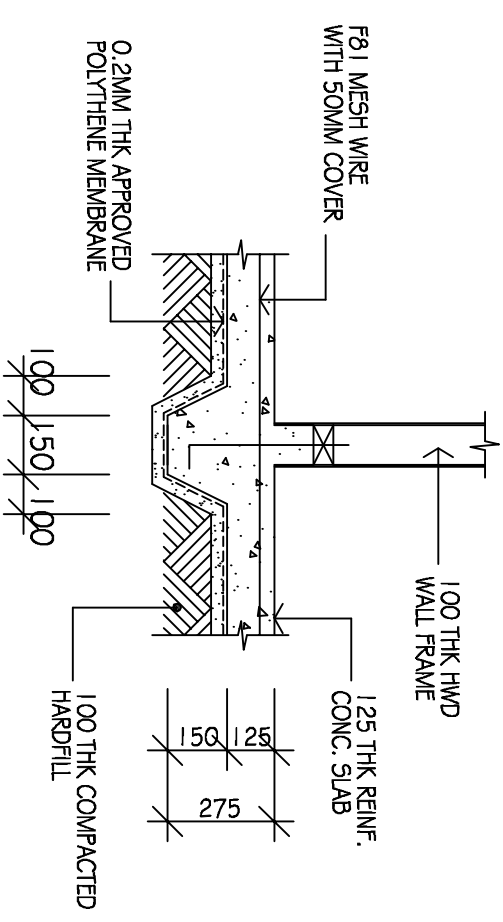
CONSTRUCTION JOINTS

SCALE 1 : 20



EBI - FOOTING DETAILS

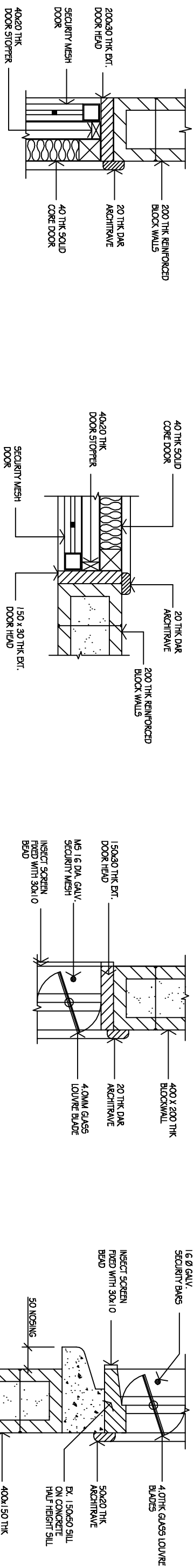
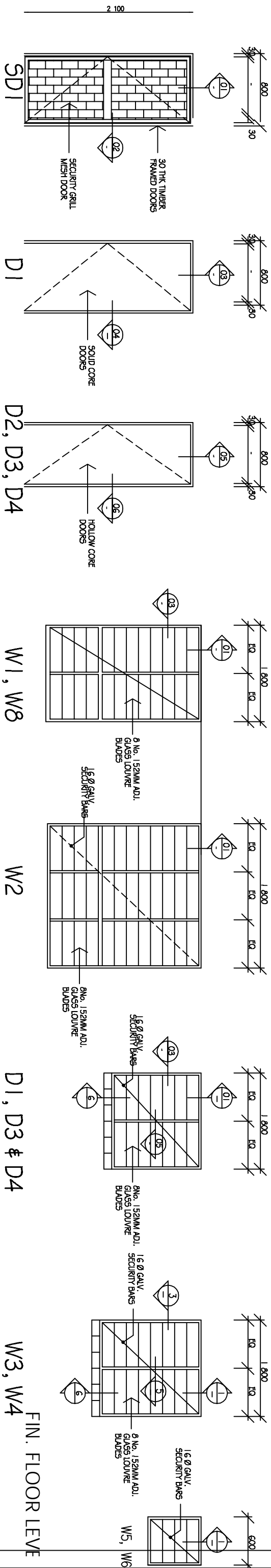
SCALE 1 : 20



FOOTING 01 DETAILS

SCALE 1 : 20

[illegible]



DETAIL 01

1 : 20

REF

DETAIL 02

1 : 20

RTF

DETAIL 03

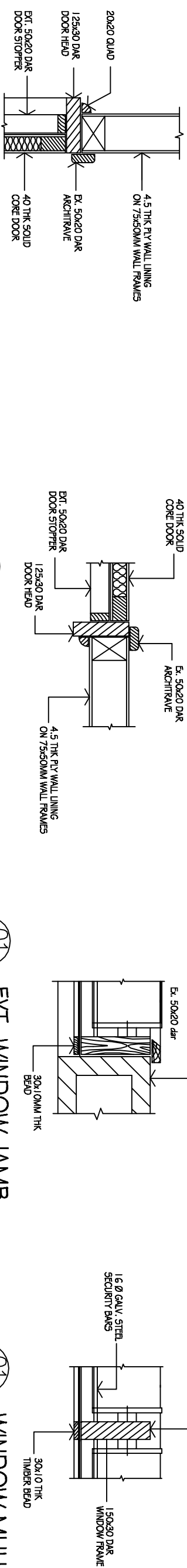
SCALE : 20

RTF

DETAIL 04

REF

SCALE 1 : 20



03
INT. DOOR HEAD
1 : 10

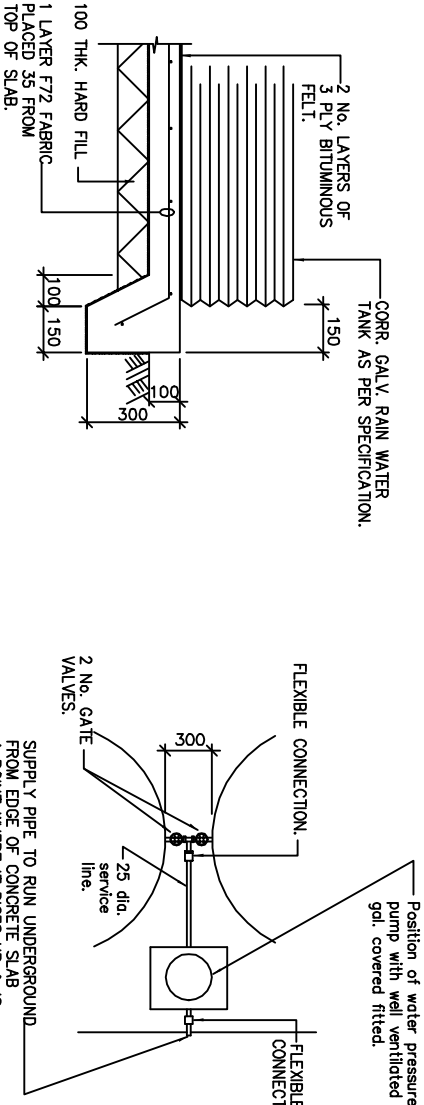
01 INT. DOOR JAMB
- 1 : 10

01 EXT. WINDOW JAMB
1 : 10

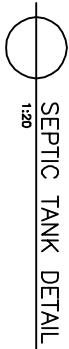
01
-
1 : 10
WINDOW MULLION

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CAD Filename:	kainantut-01.dwg	Date Plotted:	25.04.16	Rev.	
Scale:	1 : 100 / AS SHOWN	Time Plotted:	10:00am	By	
				Crk'd	
				Date	
<div style="text-align: center;"> PNG POWER Ltd P. O. Box 1105, BOROKO 111, MCD, Papua New Guinea. Telephone: (675) 324 3200 Website: www.pngpower.com.pg Facsimile: (675) 325 0072</div>					
Drawn	<input checked="" type="checkbox"/>	AR 117	Location	SECTION 14 ALLOTMENT 09 – KAINANTU, EHP	
Designed	<input checked="" type="checkbox"/>		Title	NEW WORKSHOP OFFICE BUILDING	
Checked		A3		WINDOW / DOOR SCHEDULES & DETAILS	
Endorsed			Number	M 11930	
Approved			Revision		
				Sheet	13 OF 14

HIGH CONVENANT HOUSES	LOW CONVENANT HOUSES	PERSONS	W.C. ONLY.						ALL WASTES EXCLUDING LAUNDRY.						ALL WASTES INCLUDING LAUNDRY.					
			A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
1-2	1	5-10	1 850	-	-	1 500	1 700	1 250	1 175	1 200	600	1 500	1 700	1 250	1 175	1 200	600	1 500	1 700	1 450
3	2	11-15	2 100	-	-	1 500	1 700	1 250	1 625	1 500	750	1 500	1 700	1 250	1 625	1 500	750	1 500	1 700	1 450
4-5	3	16-20	2 350	-	-	1 500	1 700	1 250	1 775	1 600	800	1 500	1 700	1 250	1 375	1 000	1 000	1 500	1 700	1 450
6	4	21-25	2 625	1 500	750	1 500	1 700	1 250	1 225	1 900	950	1 500	1 700	1 450	1 975	1 400	1 200	1 500	1 700	1 450
7	5	26-30	2 775	1 600	800	1 500	1 700	1 250	1 825	1 200	1 100	1 500	1 700	1 450	1 575	1 800	1 400	1 500	1 700	1 450
8	6	31-35	3 075	1 800	900	1 500	1 700	1 250	1 125	1 500	1 250	1 500	1 700	1 450	1 175	1 200	1 250	1 500	1 700	1 450



SCALE: 1 : 25



SCALE: 1 : 50

1. ALL DRAINAGE PIPES TO BE 100 dia. P.V.C.
LAID TO A min. FALL OF 1 : 60.

SEPTIC TANK	TRENCH LENGTH
5-10 PERSON	15m
11-15 PERSON	20m
16-20 PERSON	25m
21-25 PERSON	30m
26-30 PERSON	40m
31-35 PERSON	45m



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<p>CAD Filename: kaimsoft-Q1.dwg</p>	<p>Date Plotted: 20.12.17</p>
<p>Scale: AS SHOWN</p>	<p>Time Plotted: 10.00am</p>

[illegible]

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Drawn	12	DEC 117
Designed	12	
Checked		
Endorsed		
Approved		

Location	SECTION 14 ALLOTMENT 09 – KAINANTU, EHF		
Title	NEW WORKSHOP OFFICE BUILDING		
A3	STD SEPTIC TANKS & WATER TANK DETAILS		
Number	M 11930		
Revision		Sheet	

Location	SECTION 14 ALLOTMENT 09 – KAINANTU, EHP														
Title	NEW WORKSHOP OFFICE BUILDING STD SEPTIC TANKS & WATER TANK DETAILS														
A3															
Number	M 11930										Sheet		14 OF 14		
Revision															