

SPECIFICATION of MATERIALS AND WORKMANSHIP
Required in the
CONSTRUCTION OF A YOUTH RESOURCE CENTER

GENERAL SPECIFICATION

1.00 SCHEDULE OF PARTICULAR CONDITIONS

1.01 Contractors Site Area

The contractor shall have access to the part of the site necessary to carry out the works.

Temporary barriers are to be erected and maintained in a sound, serviceable condition for the whole duration of construction period. They are to be a minimum 1.8m high, fixed to vertical supports sufficient to ensure stability. Provide 1no. personnel gate where directed on site to allow access of employer's personnel to the construction area.

1.02 Security

Contractor is to ensure that all construction personnel, including those employed by sub-contractors, do not enter into the adjacent occupied areas.

1.03 Finishes Schedule

See attached hereto finishes schedule.

2.00 GENERALLY

The work consists of the construction of a Youth Resource Center, with associated services and external works.

Set out the works accurately to the lines and levels as shown on the drawings ,and documents otherwise specified in accordance with instructions from the DTS.

Take note of existing structures and boundaries as references for setting out the works.

Prior to setting out of the building on site, the Engineer/Architect shall be informed to confirm exact location of structures, proposed fixtures, apparatus and cladding of building.

Surplus excavated material shall be removed from site or spread away from the site as directed by the ABG DTS representatives.

3.00 SITE WORKS AND EXTERNAL SERVICES

3.01 SITE CLEARING

Clear the building area of three (3) meters outside the perimeter of all trees, stumps, roots, vegetation and other matters deemed to hinder construction works.

3.02 EXCAVATION AND GROUNDWORK

Refer to drawings, sheets 03 & 04 for general requirements for excavation & fill. Generally fill material shall be an approved road base material.

Allow to dig out completely any sub-surfaces existing structures found during excavation.

Make good to finished ground level or to new building foundation area with fill material as above.

3.03 Foundations

All excavations shall be approved by the Architect before placement of concrete and/or reinforcement. Subgrade preparation and backfilling of trenches under Concrete Slabs on Ground shall be compacted to the standard required for fill under floors.

3.04 Filling under Floors

The fill shall be an approved road base material and carried out in uniform layers, laid parallel to the finished surface in max. compacted thickness of 150mm per layer. The 50mm immediately below the slab shall be compacted coronus or an approved sand of max.1.0mm thoroughly compacted in place. Fill shall not be placed until subgrade has been approved by the Architect.

4.03 Testing

Allow testing of each layer of filling by an approved testing authority for dry density ratio. No layer fill shall be covered before it is approved by the Architect.

4.04 Fumigation

Provide approved ground poisoning treatment to the whole of the sub-grade prior to placement of waterproof membrane. Provide warranty certificate for the treatment from an approved applicator.

5.00 CONCRETE

Refer to drawings, sheets 03 & 04 for general requirements for concrete. Generally Concrete Grades for floor slabs, ramp and landing slabs to be 20Mpa.

5.01 Finishes

External slabs - landing slab and ramp shall be wood float finished, with ruled joints at 2000 crs and ruled edges.

Internal slabs to be trowel finish. Check finishes schedules.

5.02 Formwork

Formwork to edge beam slabs shall not be stripped until compressive strength of the concrete reaches 20Mpa nor earlier than 5days from placement.

Unless otherwise noted, the concrete cover (in mm) to the reinforcement shall be as follows:-

-slabs:30 top cover (unless noted otherwise)

-members in contact with ground:65 mm

-other members: 30mm

Slabs edge beams and mid thickening beams are to be poured together unless otherwise noted.

5.04 Finishes

Concrete sizes as drawn do not include applied finishes and must not be reduced or holed in any way without approval of the Architect.

6.00 STRUCTURAL STEEL

Refer to drawings, sheets 03 & 04 for general requirements for structural steel. Steelwork shall comply with the specification unless otherwise shown on the

drawings.

Unless otherwise noted, the concrete cover (in mm) to the reinforcement shall be as follows:-

Slab - F72 Mesh

Slab Edge Beam - Y12 bars.

Mid Slab Thickening – Y12

Re-enforcements are to be tied and supported with approved chairs and spreader plates as specified otherwise the maximum support or spacing shall be equal to 60 times the bar diameter.

In accordance with the drawings, all structural steel members screw, bolt or weld fixed to be specified, fabricated, supplied and fixed to specification and acceptable standard as required.

7.00 METAL WORKS

All proposed metal fabricated works to be specified, fabricated, supplied and fixed to specification and acceptable standard as required in the following:

- Window and door grills and associated metal works.
- All metal connectors including bolts, roof bracing shall be hot dipped Galvanized uno.

8.00 CARPENTRY AND JOINERY

Refer to drawings, sheets 01, 02, 03 & 04 for general requirements for structural timber and joinery.

Ensure all timber is properly treated against insect attack.

8.01 Framing

Materials and workmanship shall comply with the specification and the current editions of the following Australian Standard Codes as applicable:-

- AS:1720 Timber structures code
- AS:1684 Light Timber framing Code

Generally all ground floor timber framing to be Ex100x50 as shown on the drawings.

All timber used shall have been stress graded by visual or mechanical means in accordance with the appropriate Australian Standards. All timber shall be minimum stress grade F17.

Holes for bolts shall, unless otherwise detailed, shall be made oversize as follows:

-Bolt diameter 12 mm or less -2mm oversize

All timber wall framing shall be 100x50

8.02 Claddings

External wall cladding shall be panel rib. Refer to drawings, sheets 02 & 03.

8.03 Joinery

Refer to 'Door Schedule attached hereunto and 'Window Schedule' sheet 03. for framing sizes.

Fabricate all doors, door and window frames and joinery fittings accordance with the drawings.

All doors are to be solid core with select veneer – rosewood or kwila – OR solid timber – rosewood or kwila. Frames, door stops and architraves to these doors are to be rosewood or kwila to match doors. Only one of the nominated species is to be used.

9.0 GLAZING

All windows shall be 10 blades with 'clear' louver blades.

All louver blades are to have edges ground and polished.

10.00 ROOFING

Roofing is to be Custom Orb Corrugated steel with all capping and flashings to match.

Fit double sided sisalation to underside purlins to the whole of the roof areas, as shown on the drawings, with the exception of the awnings.

Roof Framings shall be;

Truss – Bottom Chord	-	100x50
Top Chord	-	150x50
Web Members	-	50x50

Purlins – 100x50

11.00 ELECTRICAL

Refer to drawing, sheet 05 for electrical services layout.

11.01 Power Supply.

Liase with PNG Power to obtain new property pole adjacent to street boundary.
Provide underground reticulation from property pole.

DOOR - GATE/DOOR - GATE HARDWARE SCHEDULE

DOOR NO.	FRAME	SIZE	DOOR TYPE	HINGES	LOCK	OTHER
			SC: Solid core	All 100mm	All KABA range	Fit rubber
				brass butt	KA=keyed alike	Tipped Bumper
						all Hinged Doors
ALL UNITS						
D1	EX 150X38	2040HX810W	SC / WP	2 no.	RL53SSS Entrance set	
	timber				and B962SSS dble	
					cylinder deadbolt	
					KA	
D2A	EX 150X38	2040HX810W	Timber framed	2no.	Lockable screen	
	timber		door with fly		door latch	
			wire			
D2	EX 150x38	2040HX810W	SC / WP	2 no.	RL53SSS Entrance set	Fit rubber
	timber				and B962SSS dble	Tipped Bumper
					cylinder deadbolt	1no.leaf
					KA	
D3	EX 125x38	Double	SC / WP	4 no.	40mm padlock	Fit rubber
	timber	2040HX810W		(2no.per	PD4001, KA	Tipped Bumper
		EX 150X38		leaf)	(2no. Padlocks)	2no.per leaf
D4	EX 150x38	2040HX810W	SC / WP	2 no.	RL53SSS Entrance set	
	timber					
D4A	EX 150X38	2040HX810W	Timber framed	2no.	Lockable screen	
	timber		door with fly		door latch	
			wire			
	Master Key (MK) is to operate all door locks in the building					
	See drg,sheet 02 for typical elevations					