

3 TECHNICAL SPECIFICATION

1 THE WORKS

1.1 PROJECT DETAILS

Location: Murray High School

Description of the Works: Extension and Refurbishment of Computer Room AR1005

1.2 GENERAL

Carry out the Works as further described and as shown on the Drawings accompanying the Specification.

1.3 TRADE QUALIFICATIONS

The Contract must only use qualified tradespersons who hold a current trade licence for any trade works carried out under this Contract.

The Principals Representative must approve any exception to this requirement.

1.4 CONTRACT DOCUMENTS

The Contractor must notify the Contact Officer before the tender closing date and time if any discrepancy, error or omission is found in the documents.

1.5 SITE SECURITY AND MAINTENANCE.

The contractor must supply and maintain a temporary site fence with a minimum height of 1.8 metres. This fence is to completely enclose all areas of works on site including stored materials. The fence gate is to be locked at all times. The fencing must be erected and secured in a manner which prevents access to the works area for persons of all ages. The Contractor must keep the site clean and tidy and dispose of all rubbish and surplus materials promptly. Existing facility waste management reciprocals are not to be used for site waste or debris

2.0 SCOPE OF WORK

- 2.01** Supply and install a termite resistant timber frame to form the walls required for the front entrance wall, front and rear of the new store room, located as indicated on drawing. All walls shall be formed from 90mm wide studs and be constructed to comply with all relevant statutory requirements. Supply and install Doors D1 and D3 are to be 920 x 2040 x 40mm solid core primed hardboard faced external grade and are to be swung on three 100mm stainless steel hinges. The doors D1 and D3 are to be hung in proprietary pressed steel door frames which are to be built into the frame work complete with metal door ties as required by the door frame manufacturer and statutory authorities (Face fixing the door jamb to the timber frame will not be allowed). Supply and install to doors D1 and D3, Lockwood 3572 class room lock keyed to match the existing school system. The handles are to be lever type and finished in satin chrome.
- 2.02** Cut out and remove a section of brickwork to form D2. Supply and install Doors D2 is to be 920 x 2040 x 40mm solid core primed hardboard faced external grade and are to be swung on three 100mm stainless steel hinges. The door D2 is to be hung in proprietary pressed steel door frames which is to be installed and filled with mortar. Supply and install to doors D2, Lockwood 3572 class room lock keyed to match the existing school system. The handles are to be lever type and finished in satin chrome.

- 2.03** The existing brick wall and door way which separates the existing classroom from the corridor is to be removed. The existing structural steel column is to remain. The structural component of this wall is unknown and will require full investigation and the engineer design of alternate support if this wall is indeed load bearing. A prime cost of \$5000.00 is to be allowed in the tender for the design and installation of this possible structural works. The Dept of Commerce Representative is to be given Two (2) days notice as to the commencement of this investigation work and is to be present when this work is carried out.
- 2.04** The existing fibrous cement sheet ceiling and parapet wall linings is to be removed and with new ceiling as per clause 2.8 of this specification. The parapet wall lining is to be replaced with 13mm gypsum based plaster board.
- 2.05** Supply and install all materials to fill and level the existing corridor section of floor to this area to the same height as the class room section. This filling material is to be a proprietary filling and levelling compound designed for this purpose. **NOTE** A self mixed sand and cement mix will not be acceptable.
- 2.06** The existing room communications cabinet and enclosed equipment is to be removed from the wall and stored on site for re-positioning. All existing data wiring is to be removed from site. Supply and install all necessary cabling and equipment to connect and service the computers and associated peripheral equipment within this room as per the requirements within the structured cabling specification and to suit the schools needs. Up grade existing equipment if required.
Supply and install all required cabling from the communications cabinet/ building distributor to the Campus Distributor located in room AR1018, This cabling must be installed as per the requirements of the structured cabling specification.
- 2.07** Supply and install galvanised steel battens the same as or equal to Rondo 333 to all existing brick walls and to cover the infill sections of wall in this room.
The battens are to be installed so as to create a plumb and straight wall frame, and with a continuous batten set at 30mm above the finished floor level and 30mm below the finished ceiling level, intermediate vertical battens are to be installed at 450mm centres and no more than 50mm from the edges of a door or window opening.
Additional support noggings are to be installed in the correct position and flush with the surface of the frame. These extra noggins are required to ensure secure fixing of all fittings and fixtures is achieved. **NOTE** All fittings and fixtures must be secured through the wall sheeting and into 45mm of solid material, securing fixtures/fittings to the wall sheeting only will NOT be acceptable.
Supply and install 13mm gypsum based plaster board complete with recessed edged to all walls within this room, all sheeting is to be glued and screw fixed in accordance with manufacturers details and recommendations. All sheet joints and wall junctions are to be plaster sett, incorporating a paper reinforcing tape and be finished to achieve a seamless finish
- 2.08** Remove the existing window reveals and architraves. Supply and install new solid DAR hardwood timber window reveals and 70mm splayed hardwood architraves to all existing windows.
- 2.09** Remove all existing fans lighting support rails and light fittings. Supply and install a suspended ceiling comprising of white Rondo suspended grid and complete with 1200mm x 600mm white ceiling tiles same as or equal to Armstrong acoustic tiles 3570B. Allow to supply 15% of the area as spare tiles which are to be left on site. The ceiling is to follow the rake of the existing ceiling and be started from a height which covers the existing vermiculite drop down ceiling section along the northern wall of this area. This ceiling will be formed between the existing horizontal structural steel members.

- 2.10** Supply and install twin 36 watt Peirlite troffer fluorescent light fittings ETT236 complete with K12 clear prismatic diffusers. Ensure a minimum of 400 lux of lighting to all areas of the ICT and 200 lux to the store room. Supply and install new single piece light switches. The light switches are to be installed at 1800mm from the floor and located next to D1, D2 and D3.
- 2.11** Supply and install open metal shelving to the store room as indicated on plan. Shelving is to be same as or equal to Mobile Storage Systems 1800mm x 450mm Archive shelving. All shelving is to be secured to the wall to prevent units from falling over.
- 2.12** Supply and install a 3.5 kg Carbon Dioxide fire extinguisher. The extinguisher is to be mounted at 1200mm to the centre of the hook and be complete with mounted identification and location disc. Location of the extinguisher is to be confirmed onsite.
- 2.13** Supply and install all materials to allow for the relocation of the internal air-conditioning unit located closest to the brick wall which is to be demolished. This unit is to be repositioned so as to be the same distance from the external wall as the other unit within this room. On completion this unit is to be recommissioned and in full working order. All wiring and pipe work associated with both units are to be concealed within the wall cavity.
- 2.14** Supply and install new carpet and underlay, to all areas within this new room layout including the storeroom and reception training areas, as per Government contract. Specification reference: Carpet type 100% wool loop 1627 grams per m2. (Colour to be determined by client).
- 2.15** Supply and install new built in students and teachers desks as well as the printer station and reception training work stations. The students and teachers desks are to be constructed so as to conform with the drawings in regards to layout and size. All bench tops are to be 33mm moisture resistant chip board, fully laminated with 180 degree post formed edge and ends with safety corners where needed.
- All colors for laminates are to be chosen by the school. All other components of the cabinetry are to be fully laminated 16mm moisture resistant chip board. All raw edges are to be covered by 2mm ABS edge stripping.
- Supply and install a printer cupboard in the position shown on the concept drawings. The printer station is to consist of 2 x 900mm wide by 600mm deep single shelf, double door cupboards. Overall height of the cupboards and bench top is to be 900mm. The units are to be securely fixed to the wall and to each other and mounted upon a 100mm high plinth. All components of the cupboard with the exception of the bench top are to be fully laminated 16mm moisture resistant chip board. All raw edges are to be covered by 2mm ABS edge stripping.
- Supply and install all metal 180 degree overlay type hinges complete with self closing catch. Supply and install 1 x 100mm satin chrome “D” handles to all doors. The bench top is to be 33mm moisture resistant chip board, laminated with 180 degree post formed edge and ends with safety corners where needed. **(All colors for laminates and edging are to be chosen by the school)**. The desk tops in the reception training area are to be constructed utilizing the same method and materials as for the student’s desks. The width of the reception training bench tops is to be 600mm, with the hinged sections being hinged by means of a stainless steel piano hinge and secured in the open position by means of a chrome finished pad bolt. The teachers desk is to measure 1500mm x 700mm and be constructed utilising the same materials and construction as for the students desks.
- 2.16** Supply and install new paint to the walls, doors, architraves, window reveals and structural steel as well as any disturbed areas. Paint to be used is as follows

2.17 Walls to be painted 1x sealer coat and 2x coats acrylic satin finish (acrylic low sheen not acceptable). Colours to be selected by the school.

2.18 Doors, jambs, architraves, reveal and structural steel to be painted with 1x coat primer and 2x coats of enamel high gloss. (Acrylic high gloss will not be acceptable). Colours to be selected by the school.

2.19 Australian Standards

- It is a mandatory requirement of this tender that all deliverables supplied and install under any resultant agreement shall comply with all current relevant Australian Standard(s).
- Where Australian Standards do not exist, appropriate International Standards (where available) shall apply.
- In addition to compliance with relevant Australian and International standards, deliverables offered should comply with other relevant standards and codes, as appropriate, to ensure supply and installation of products, under the resultant agreement, is fit for the intended purpose. Tenderers should provide details of any other relevant standards and codes that deliverables offered comply with.
- All subsequent amendments/revisions to applicable standards and codes and any new standards and codes developed during the period of the agreement, shall apply with immediate effect.
- Where this specification requires standards that exceed or are different from those applicable under relevant Australian or International Standards and codes, this specification shall take precedence.

2.20 Certification and Documentation

- Tenderers are required to provide certification, where applicable, by a practising structural engineer, or where required, other appropriately specialised engineer, registered with the Australian Institute of Engineers, for the design/manufacture and/or construction/installation of any work undertaken in the resultant agreement.
- The Contractor is to submit the completed design, comprising all relevant drawings, specifications, calculations and any other statutory certificates, in accordance with the project requirements, prior to the commencement of work.
- The Contractor is solely responsible for ensuring the completed design is fit for purpose and complies with all relevant regulations, codes and standards.
- The Principal is not bound to check design plans, or other relevant documentation, for works undertaken in the resultant agreement, for errors, omissions or compliance with the requirements of the Contract.
- The Principal is not liable to the Contractor for any claim due to the Principal not detecting or notifying the Contractor of any errors, omissions or non-compliance with the requirements of the Contract, or non-compliance with any relevant regulations, standards and codes, in the completed design.
- Where appropriate, the Contractor is to grant to the Customer an irrevocable licence to use the Contractors design for works undertaken in the resultant agreement.

2.21 Installation

General

Tenderers are advised the following conditions will apply, as appropriate, for all installation works undertaken in the resultant agreement:-

All equipment should be installed to minimise potential risk of hazards and injury to users. It will be the Contractor's responsibility to engage a registered, practicing structural engineer to determine the site classification, including wind classification, exposure and any other information, relevant to the design and installation of the deliverable(s). Contractors must ensure all works undertaken in the resultant agreement are in accordance with the requirements of the site.

The Contractor shall be responsible for undertaking all necessary site preparation and survey work required for the installation of deliverable(s).

From and including the date the site is made available to the Contractor, to the date of completion of the works, the Contractor shall be responsible for the care of the site and surrounding area and all things entrusted to the Contractor by the principal for the purpose of the works.

All fillings used in site preparation, construction and site restoration should be free from perishable matter and consistent with existing soil/ground surface unless the specified filling type can be provided from spoil recovered from the excavations.

The Contractor shall be responsible for applying dust and noise control measures for all works undertaken.

All areas outside the works not required to be altered (including the natural ground surfaces of the site), which have been disturbed by the works, shall be restored to their original condition on completion of the works.