

SECTION 730 - SANITARY PLUMBING**SUBSECTION 001 GENERAL****SCOPE - SANITARY PLUMBING**

OUTLINE DESCRIPTION: This Section of the Specification specifies the drainage work from the fittings to the upturn of the drain pipes through the concrete floor slab which are specified in the 'DRAINAGE' Section.

AUTHORITIES AND APPROVALS - SANITARY PLUMBING

AUTHORITIES: Prior to Practical Completion, surrender the documents evidencing approval of the following Authorities whose requirements apply to the work, including the Authorities' certificates of completion:

- Queensland Building Act and By-laws;
- Sewerage and Water Supply Act;
- By-laws and Ordinances of the Local Authority having jurisdiction over the Site;
- Approval requirement of the Joint Committee;
- Clean Waters Act Regulations.

AUTHORITY'S MARK: Pipes, fittings, accessories and the like used in the Works shall bear approval marks where and as required by the Regulatory Authority.

DRAWINGS AND DIMENSIONS - SANITARY PLUMBING

DIAGRAMMATIC LAYOUTS: Drawings showing pipework layouts are diagrammatic only. Before commencing work, verify the positions of fixtures, plant, appliances and the like to which the pipework is to be connected.

VARIATION DRAWINGS: If it is proposed to change the installation from that shown on the Drawings, or if a change is required by a Regulatory Authority, prepare and submit a variation drawing showing the proposed change, and obtain prior approval.

AS-CONSTRUCTED DRAWINGS - SANITARY PLUMBING

REQUIREMENT: Prepare 'as-constructed' drawings of the water services showing the locations of pipes and fittings, including depths of underground pipework, positions of control valves, and the like. Give co-ordinate dimensions where applicable.

EXISTING SERVICES - SANITARY PLUMBING

ALTERATIONS: Deal with existing services as necessary to complete the work specified in this Section.

INTERRUPTIONS: Obtain approval before interrupting an existing service, and perform the work in accordance with an approved program so that the duration and number of interruptions is reduced to a minimum.

TESTING - SANITARY PLUMBING

TESTS: Supply apparatus and materials necessary for, and carry out the tests required by the Specification or regulatory authorities, in the presence of the Superintendent and the authorized representative of the relevant authority for the service under test.

CONCEALED WORK: Do not cover or conceal underground or enclosed work until it has been inspected and tested, in sections where necessary, to the approval of the Superintendent and the relevant authority. Leave pipe joints exposed to enable observation during the tests. Pipework not connected to the Local Authority sewerage system shall be tested in the presence of the Superintendent unless otherwise.

uPVC Pipework: Ensure solvent cement joints have been cured for at least 24 hours before testing.

HYDROSTATIC TESTS: Test pipework at the pressure and for the duration stated in the Sewerage and Water Supply Act.

REJECTION: Pipework is liable to rejection if the pressure loss exceeds the limit permitted by the relevant test.

SUBSECTION 140 WORKMANSHIP

INSTALLATION - SANITARY PLUMBING

GENERALLY: Install pipework to uniform gradients falling to the outlets, straight between required changes of direction, properly supported, with watertight joints aligned flush at internal surfaces. Provide the necessary fittings and accessories, including junctions, branches, inspection and cleaning openings, expansion joints, and the like. Keep the number of joints to a minimum.

CLEANING OUT: Flush each pipeline with clean water and leave it clean and free from debris on completion.

ACCESSIBILITY - SANITARY PLUMBING

FITTINGS: Locate in accessible positions, with adequate clearance, pipe fittings requiring maintenance or servicing, including inspection openings, cleaning points, joints designed to enable removal of pipes, and the like.

CONCEALMENT: Where practicable, conceal pipework so that it is accessible within ducts or non habitable enclosed spaces and does not appear on external walls. Obtain prior approval for the location of exposed pipework.

ENCLOSED PIPEWORK: If pipework is proposed to be enclosed so as to be not accessible after completion, obtain prior approval for the location of pipe runs and pipe fittings, and record the actual locations on as-constructed drawings.

CORE HOLES - SANITARY PLUMBING

APPROVAL: Set out core holes and sleeves where required and obtain approval of the set out prior to placing concrete.

SLEEVES - SANITARY PLUMBING

REQUIREMENT: Where pipes pass through concrete floors or columns, wrap in polythene film prior to pour and seal to finished slab with silicone rubber joint sealer (self extinguishing grade).

CAPPING OFF - SANITARY PLUMBING

REQUIREMENT: During construction, temporarily seal open ends of pipes to prevent the entry of foreign matter into pipe systems. Provide purpose-made covers of pressed steel or rigid plastic. Do not use rags, paper or wood plugs. Leave unfinished work in a safe condition and protect against damage or loss through any cause whatever (including while other trades perform their work) until the Works have been handed over upon completion.

EXPANSION JOINTS - SANITARY PLUMBING

STACKS: Construct expansion joints in stacks immediately above the highest branch at each floor level, as required by By-law 139 of the Sewerage and Water Supply Act.

uPVC PIPE: To AS 2032, clause 6.6.

SUBSECTION 310 FASTENINGS**SUPPORTS - SANITARY PLUMBING**

GENERALLY: Provide supports including hangers, saddles, bolted clips and the like, sufficient to secure the pipework to adjacent surfaces and to support it at joints, at changes of direction, and at intervals suitable to the size and type of pipe and as necessary to prevent sagging of pipework. Make provision for adjustment of gradient as required.

SUPPORT MATERIAL: The same material as the pipe, or galvanized or non-ferrous metals, with bonded PVC or fibreglass woven tape sleeves to separate dissimilar metals. Provide fixings of compatible material.

FIXING TO MASONRY: Galvanized steel or non-ferrous metal bolts or screws into expanding metal masonry anchors. Do not use explosive powered fixings.

uPVC PIPE: Support to AS 2032, clause 6.8, at maximum spacings to Table 6.3.

MAXIMUM SUPPORT INTERVALS:

Pipe Material:	Horizontal or Graded Pipe		Vertical Pipe:	
	Internal:	External:	Internal:	External:
Galvanized steel:	2.0 m	2.0 m	3.0 m	2.0 m

SUBSECTION 500 FINISHES**PIPEWORK FINISHES - SANITARY PLUMBING**

REQUIREMENT: Provide the protective coatings (galvanizing and the like) specified in the pipework installation clauses of this Section.

PIPE IDENTIFICATION - SANITARY PLUMBING

COLOURS: Basic identification colours to AS 1345.

EXTENT: Apply basic identification colours to the pipework in concealed but accessible spaces. If that pipework is scheduled to be painted, paint the full length in the appropriate identification colour. If the pipework is not scheduled to be painted, apply the identification colour in bands at intervals to AS 1345 clause 6, or as self adhesive markers to AS 1345, clause 6 and figs. 1 and 2, showing service direction flow.

SUBSECTION 710 FIXTURES**SANITARY WARE - SANITARY PLUMBING**

GENERALLY: Supply and install sanitary fixtures, including basins, sinks, WC's, urinals and the like as specified and as shown on the Drawings. Supply and fix accessories, including bolts, brackets, putty, mastic, mortar, and the like, necessary for the correct installation for the fixtures.

INSTALLATION: To manufacturer's recommendations.

STANDARDS:

- Laundry Troughs: To AS 1229.
- Wash Basins: To AS 1730.
- Sinks and Drainers: To AS 1756.
- Shower Bases and Modules: To AS 3588.
- Water Closet Pans: To AS 1172.
- Vitreous China for Sanitary Ware: To AS 1976.

STAINLESS STEEL SANITARY WARE - SANITARY PLUMBING

MATERIAL: To AS 1449.

Grade 301, 302 or 304: For sanitary fixtures such as sink and drainer units, bench tops, troughs, urinals, and similar items not subject to strong chemical corrosive action in service.

Grade 316: For sanitary fixtures subject to acidic or other chemical corrosive action in service.

WELDING: Weld Grade 316 stainless steel with molybdenum type electrodes.

STAMPING: Stamp fixtures manufactured from Grade 316 stainless steel in 3 mm high letters and figures to show 'AS 1449/316'.

Where the fixture incorporates a fascia moulding, locate the stamp at the centre of the fascia.

THICKNESSES:

Heavy duty benchtops, sinks, drainers, troughs: 1.6 mm.

Urinals, light duty bench tops, sinks, drainers, troughs: 1.2 mm.

Domestic Type Fixtures: 1800 x 500 mm maximum and incorporating a bowl not larger than 390 x 350 x 155 mm deep): 0.91 mm.

SURFACES: Fabricate sanitary fixtures with seamless surfaces and reinforcement as necessary to maintain stability. Finish surfaces which will be visible in the completed installation smooth, true to plane, and free from defects.

JOINTS: Fit carefully and weld using electrodes of correct type and matching colour. Anneal after welding where necessary. Grind off flush with adjacent surfaces, or to a neat rounded shape at angled junctions, in surfaces which will be visible in the completed installation. Finish to match the surface of the unit.

ANTI-DRUMMING COMPOUND: Waterproof type which adheres to stainless steel and will withstand impact forces likely to be encountered during the service of the fixture. Finish the surface to a smooth plane. Apply evenly to backs of urinals.

Minimum Thickness: 5 mm.

DRAINERS AND BENCHTOPS: Unless otherwise specified, reinforce undersides with heavy gauge galvanized steel or seasoned timber backing. Set down drainers 10 mm minimum below top of edge rim and fall 1 in 40 minimum to sink bowl.

SINK BOWLS: Do not form by spinning unless otherwise specified.

SELF DRAINING: Provide to drain benches of sink units. Form drainage grooves.

EXPOSED EDGES: (Of sink and drainer units, troughs and benchtops): Form to provide matching vertical fascias, with bottom edges flanged inwards and aligned. Form up stands and tiling flanges where shown or specified, or as required, to suit tiling or other wall finishes.

INSET TYPE FIXTURES: Provide proprietary bench fixing and water sealing accessories. Cut suitable openings in bench top to allow recess of sink bowls and drainers. Form perimeter edges with flush rim except where a tiling flange is shown or specified.

FIXING DEVICES: Unless otherwise specified:

Visible in Completed Installation: Chromium plated brass or stainless steel.

All other Locations: Hot dip galvanized steel.

SUBSECTION 711 PIPEWORK

GALVANIZED STEEL PIPEWORK - SANITARY PLUMBING

TUBES AND FITTINGS: To AS 1074, heavy type with screwed joints.

uPVC PIPEWORK - SANITARY PLUMBING

PIPES AND FITTINGS: To AS 1415, Class SWV. Installation to AS 2032.

Solvent Cement: To AS A185.

WASTE TRAPS: To AS A162.

SUBSECTION 730 SANITARY PLUMBING

SOIL AND WASTE SYSTEMS - SANITARY PLUMBING

SOIL AND WASTE PIPES:

Material:

- Generally: uPVC.
- Drinking Fountains: Galvanized steel.

Sizes: As required by the Regulatory Authority and as shown on the Drawings.

WASTE FROM URINALS: Do not discharge through any copper pipe or fittings.

VENT PIPES:

Material:

- Concealed Locations: uPVC.
- Exposed Locations: Galvanized steel pipe.

Staying to Roof: As required by the regulatory authority. If fixings for stays must penetrate the roof covering, seal the penetrations and make watertight by an approved method.

Flashing above Roof: As specified in 'FLASHINGS, CAPPINGS - ROOFING'.

Terminations: Unless otherwise specified, terminate at the height required by By-law 111 of the Sewerage and Water Supply Act. Provide approved type vent cowls, of material to match the vent pipe.

BRANCHES - SANITARY PLUMBING

CONNECTION: When a branch line enters a vertical pipe, the branch fitting shall be wholly outside the vertical pipe so that the internal bore is maintained at all places.

VERTICAL BRANCHES: Form a 25 mm radius at the throat of the bend in branches up to 80 mm diameter, and 50 mm radius in branches above 80 mm diameter.

TRAPS - SANITARY PLUMBING

TYPE: Loose ring 'P' trap

MATERIAL: As shown in following table unless otherwise specified:

<u>Type of Discharge</u>	<u>Pipework Material</u>	<u>fixture Trap Material</u>
Domestic waste	uPVC	uPVC

TRAPS IN VISIBLE LOCATIONS: Chrome plated copper trap and waste where visible unless otherwise noted on Drawings.

TRAPS TO FIXTURES ON EXTERNAL WALLS: Chrome plated copper connected to chrome plated copper waste riser fixed to wall with 3 mm chrome plated copper straps unless otherwise noted on Drawings.

FLOOR WASTES - SANITARY PLUMBING

TRAPS AND RISERS: Provide traps and inlet risers of the same material as the outlet pipework.

Dimensions: Riser: 80 mm
Outlet: 50 mm

GRATES:
Generally: Screw-in type, chrome plated brass.

Handicapped Persons Toilets: Gatic 'Wade W1103/FC5'.

CONNECTION TO SEWER DRAIN - SANITARY PLUMBING

REQUIREMENT: Connect discharge and vent pipes to disconnector gully level inlets or appropriate drain fittings.

SUBSECTION 999 SANITARY PLUMBING SCHEDULES

ACCESSORIES SCHEDULE - SANITARY PLUMBING

<u>ACCESSORY</u>	<u>DESCRIPTION</u>
TAPS	Ceramic valve type, with vandal resistant fixings and accessories, "Raymor Q Water Turn" or equal approved unless specified otherwise.
HOSE COCKS	Hose cocks where shown or scheduled shall be 19 mm chrome plated brass threaded hose cocks of an appropriate pattern and fitted with a vacuum breaker. External hose cocks shall only be mounted on walls of buildings where indicated over Cleaner's sinks or other Sanitary Fittings. All other external hose cocks shall be mounted on standpipes where indicated and as detailed on drawings. Fixings must be non-corrodible and able to withstand heavy use.
HANDLES & SPOUTS	Shall be one of the following unless specified otherwise: Fowler/Irwell C100 Donson 'Ultra 4' Enware 'CS' pattern Raymor 'T5' solid brass Dorf 'Lab 4'

LABORATORY TAPS:

- Type LT1 Single stand, hob mounted fitting with barbed bib tap and single curved fixed outlet fitted with aerator - Raymor Type R10 or equal approved.
- Type LT2 Dual stand, hob mounted hot & cold mixing set with barbed bib taps and single curved swivel outlet fitted with aerator - Raymor Type R20 or equal approved.
- Type LT3 Dual stand, hob mounted hot & cold mixing set with barbed bib taps, additional cold barbed bib tap set at 45° and single curved swivel outlet fitted with aerator - Raymor Type R21 or equal approved.

MIXING VALVES As specified on sheet QN-743-04 "Approved Thermostatic Mixing Valves" and installed as shown on detail QN-743-03 "Thermostatic Mixing Valve - Standard Installation Detail".

HANDHELD SHOWER "CF&T" Daintree Dry complete with "CF&T" BSS-1/32 sliding support rail and chrome plated flexible hose, or equal approved. Colour - white.

SHOWER ROSE Raymor chrome plated all directional rose No. L2241 or equal approved.

**DEMAND CONTROLLED
FLUSHING SYSTEM**

- Urinal cisterns to be operated by a Demand Controlled Flushing System using a sensor device located in the ceiling. Control system to be Fowler "Electro flush" or equal approved complying with the following:-
- (a) fitted with a Passive Infra-Red sensor;
 - (b) sensor to be ceiling mounted
 - (c) control circuits to be 12 volt DC;
 - (d) control unit to be factory sealed and run on 240 volt AC 50 Hz;
 - (e) unit to provide variable flush time, timed flush rate during periods of disuse and have a manual over-ride button;
 - (f) solenoid to be in a vandal proof housing when not concealed in a duct or over ceiling;

FIXTURES SCHEDULE - SANITARY PLUMBING

ITEM S14: Vanity basin, located where noted as "S14" on Drawings.
TYPE: "Caroma Cameo" or "Fowler Regent 500". One tap hole plugged.
TAPS: Chrome plated cold water pillar cock. Dorf Pillar Miser (spring loaded self closing pillar tap with flow timing adjustment and vandal proof handle) or equal approved.

ITEM S15: Toilet suite, located where noted as "S15" on Drawings.
TYPE: "Caroma Concord Viceroy" or "Fowler Pacific Fleur", 6/3 litre dual flush. White plastic seat, closed front with flap - "Caroma Pedigree" or equal approved. Cistern to have external overflow.
TAPS: Chrome plated cold water stop cock.

ITEM S20: Cleaner's sink, located where noted as "S34" on Drawings.
TYPE: Clark or equal approved stainless steel 615 x 475 mm on 38 x 38 x 2 mm RHS galvanised floor mounted frame. Sink complete with hinged chrome plated grate and 500 x 600 mm stainless steel splashback.
TAPS: Chrome plated hose cock, cold water tap only.

ITEM S21: Wall basin, located where noted as "S21" on Drawings.
TYPE: 400 x 500 mm stainless steel basin with tile lip at rear complete with wall brackets bolted through wall. "Radiant Hand Basin" or equal approved. One tap hole.
TAPS: Chrome plated cold water pillar cock. Dorf Pillar Miser (spring loaded self closing pillar tap with flow timing adjustment and vandal proof handle) or equal approved.

- ITEM S22:** Toilet and cistern, located where noted as "S22" on Drawings.
TYPE: "Fowler Pacific Aquasave" with "Fowler Montrose" concealed 6/3 litre dual flush cistern or equal approved combination. Cistern to have external overflow. Mount cistern in duct with extended push buttons. White plastic seat with flap - "Caroma Pedigree" or equal
TAPS: Cold water stop cock in wall.
- ITEM S23:** Urinal, located where noted as "S23" on Drawings.
TYPE: Stainless steel as detailed with wall mounted cistern, minimum flush capacity to Act requirements. Cistern to be operated by a demand controlled flushing system specified above.
TAPS: No. 4 sparges. Chrome plated cold water stop cock. Chrome plated shrouded hose cock mounted 400 mm above floor adjacent to urinal.
- ITEM S26h:** Wall basin, located where noted as "S26h" on Drawings.
TYPE: "Caroma Seaford" or "Fowler Regent 500".
TAPS: Basin set, hot and cold water lever taps and chrome plated basin spout with aerator.
- ITEM S27h:** Shower, located where noted as "S27h" on Drawings.
TYPE: Integral with floor finish.
 Hot and cold shower combination with hand shower on 1500 mm long flexible metal hose and sliding support on vertical grab rail, "CF&T" Daintree Dry and BSS-1/32 or equal approved. Hand shower colour - white.
TAPS: "Donson Oras" or equal approved single lever mixing valve located in accordance with AS1428.1. Connect to cold water supply and thermostatically controlled mixed water.
- ITEM S28:** Toilet and cistern, located where noted as "S28" on Drawings.
TYPE: "Caroma Concorde Disabled" or "Fowler Pacific for Disabled" pan. Cistern - "Fowler Trio, 6/3 litre dual flush" or equal approved. White plastic closed front seat with flap - "Caroma Pedigree" or equal approved. Installation to be in accordance with AS1428.1. Cistern to have external overflow.
TAPS: Chrome plated cold water stop cock.
- ITEM S29h:** Inset sink, located where noted as "S29h" on Drawings.
TYPE: Stainless steel "Clark 4003F" flat rim sink or "Mytton" inset bar sink 400 x 300 x 150 mm.
TAPS: Basin set, hot and cold water. Bench mounted crosshead taps on WC side of basin. Wall mounted 135 mm chrome plated curved swivel spout with aerator, "Raymor Academy" lever style or equal approved.
- ITEM S34:** Drinking trough, located where noted as "S34" on Drawings.
TYPE: 1800 x 400 x 500 mm deep stainless steel trough as detailed.
TAPS: Four bubbler with spring loaded non-concussive cam action tap and hooded mouthpiece, fixed as detailed with the bubbler on left hand end reversed. Cold water only. Fit additional chrome plated stopcock to cold water supply.
- ITEM S40:** Hot water system, located where noted as "S40" on Drawings.
TYPE: Refer to 'ELECTRICAL EQUIPMENT'.
TAPS: Chrome plated cold water stop cock.

SECTION 740 - WATER SERVICES**SUBSECTION 001 GENERAL****SCOPE - WATER SERVICES**

SPECIFIED IN THIS SECTION:

- Cold water services;
- Hot water services if applicable to the building(s) in the Contract.

AUTHORITIES AND APPROVALS - WATER SERVICES

APPROVALS: Prior to Practical Completion, surrender the documents evidencing approval of the following authorities whose requirements apply to the work, including the authorities' certificates of completion:

- Queensland Building Act and By-laws;
- Sewerage and Water Supply Act;
- By-laws and Ordinances of the Local Authority having jurisdiction over the Site;
- Approval requirement of the Joint Committee;
- Clean Waters Act Regulations.

DRAWINGS AND DIMENSIONS - WATER SERVICES

DIAGRAMMATIC LAYOUTS: Drawings showing pipework layouts are diagrammatic only. Before commencing work, verify the positions of fixtures, plant, appliances and the like to which the pipework is to be connected.

VARIATION DRAWINGS: If it is proposed to change the installation from that shown on the Drawings, or if a change is required by a Regulatory Authority, prepare and submit a variation drawing showing the proposed change, and obtain prior approval.

AS-CONSTRUCTED DRAWINGS - WATER SERVICES

REQUIREMENT: Prepare 'as-constructed' drawings of the water services showing the locations of pipes and fittings, including depths of underground pipework, positions of control valves, and the like. Give co-ordinate dimensions where applicable.

EXISTING SERVICES - WATER SERVICES

ALTERATIONS: Deal with existing services as necessary to complete the work specified in this Section.

INTERRUPTIONS: Obtain approval before interrupting an existing service, and perform the work in accordance with an approved program so that the duration and number of interruptions is reduced to a minimum.

SUPPORTING EXISTING WORK: If an existing service or structure, which is to be retained, crosses a new trench, provide in the new trench a permanent support to that service or structure, such as by compacted granular material, for shallow depths, or concrete plug of 20 MPa minimum strength where the support depth exceeds 1.8 metres.

INSPECTION - WATER SERVICES

REQUIREMENT: Give notice, of the minimum time indicated, so that inspection may be made of the following:

- Trenches excavated and ready for pipe laying - 1 working day;
- Work ready for specified testing - 2 working days;
- Underground or enclosed work ready to be covered up or concealed - 1 working day.

WARRANTY - WATER SERVICES

REQUIREMENT: Obtain and furnish to the Principal the warranties offered by the manufacturers of the hot water appliances and accessories used in the Works.

INCLUSION: Include the warranty in the Building Maintenance Manual as specified in 'BUILDING MAINTENANCE MANUAL - PRELIMINARIES'.

MAINTENANCE MANUAL - WATER SERVICES

REQUIREMENT: On completion furnish two copies of a manual consisting of the heater manufacturer's operating instructions together with servicing and other pertinent information on the maintenance and operation of the service, each copy printed or typewritten on A4 sized paper neatly bound in protective covers.

INCLUSION: Include the warranty in the Building Maintenance Manual as specified in 'BUILDING MAINTENANCE MANUAL - PRELIMINARIES'.

SUBSECTION 065 TESTING

MATERIALS TESTING - WATER SERVICES

CERTIFICATE: Where required, provide test certificates prepared by an independent testing authority to show that materials comply with the relevant standards.

PIPEWORK TESTING - WATER SERVICES

HYDROSTATIC TESTS: Test pipework at the pressure and for the duration stated in the Sewerage and Water Supply Act.

CONCEALED WORK: Do not cover or conceal underground or enclosed work until it has been inspected and tested, in sections where necessary, to the approval of the Superintendent and the relevant authority. Leave pipe joints exposed to enable observation during the tests.

UPVC PIPEWORK: Test in accordance with AS 2032 clause 4.4.

Air Tests: High pressure air testing shall not be used.

SUBSECTION 150 WORKMANSHIP**INSTALLATION - WATER SERVICES**

GENERALLY: Install pipework in straight lines and uniform grades. Arrange and support the pipework so that it remains free from vibration, whilst permitting necessary movement. Keep the number of joints to a minimum. Prevent direct contact between incompatible metals.

INSULATION: Insulate hot water pipes.

SUPPORT MATERIAL: Use the same material as the pipe, or galvanised or non-ferrous metals, with bonded PVC or fibreglass woven tape sleeves for saddle clips, and hardwood bushing for hangers, to separate dissimilar metals and to allow for expansion and contraction.

Pipe Material:	Horizontal or Graded Piping:		Vertical Piping:	
	Internal:	External:	Internal:	External:
<u>Cold Water</u>				
Copper:	1.8 m	0.9 m	1.8 m	1.8 m
<u>Hot Water</u>				
Pipe Diameter (mm)				
8 - 10	1 m	-	1.2 m	-
15	1.2 m	-	1.8 m	-
20 - 25	1.8 m	-	2.4 m	-
32 - 40	2.4 m	-	3 m	-

PIPES EXPOSED IN ROOMS: Support at floor, ceiling, and at least one intermediate location.

COVER PLATES: Where cold water lines emerge from wall, floor or ceiling surfaces, provide cover plates of non-ferrous metal, painted to match the pipe, or chrome plated as follows:

SIZES:

Pipe Diameter:	Cover Plate Diameter (nominal):
up to 20 mm	65 mm
up to 50 mm	100 mm
larger than 50 mm	50 mm larger than pipe

CONCEALED PIPEWORK: Where practicable conceal pipework so that it is accessible within non-habitable enclosed spaces such as roof spaces, ducts, and the like. Do not run pipelines in masonry cavities. Provide minimum clearances (measured from the pipe insulation where applicable) as follows:

- between adjacent pipelines: 25 mm;
- between pipelines and electric cables: 50 mm.

ACCESSIBILITY: Locate fittings requiring maintenance or servicing in accessible positions.

CLEANING: On completion flush the pipelines with water and leave clean.

UNDERGROUND INSTALLATION - WATER SERVICES

BEDDING: Continuously support underground pipeline on material graded to the required pipe level, free from sharp or projecting stones, tree roots and the like. Provide a cushion of underlay material, not less than 75 mm thick, where the excavation is:

- not suitable for trimming to provide the required support; or
- excessive; or
- in unsuitable ground; or
- in rock.

Underlay Material: Sand, or selected excavated material free from stones larger than 12.5 mm.

MINIMUM COVER OVER PIPE:

Pipes not subject to Vehicular Loading: 300 mm.

Pipes subject to Vehicular Loading:

- not in roadways: 450 mm;
- under roadways: 750 mm.

PIPEWORK UNDER SLABS: Where copper pipework is laid beneath a concrete slab, protect it by encasing in PVC coated tube sealed to prevent ingress of moisture.

PIPELINE IDENTIFICATION: Lay an appropriately-designated detectable strip or plastic tape in the trench after pipe laying, testing and initial backfilling.

UNDERGROUND JOINTING: Carry out jointing in accordance with the manufacturer's recommendations. Ensure the permanent tightness of all joints against infiltration of ground water, leakage and root penetration.

Flanged Joints: Make joints with rubber insertion packings and bolts. Tighten nuts evenly to a uniform tension. Use a flange insertion not less than 1.5 mm thick, manufactured from best quality cold water rubber, reinforced with canvas or other approved fabric, and covering the full face of the flange. Flange diameter, drilling and bolts shall be to AS 2129 Table C.

Gibault Joints: Set Gibault or similar types of joints with equal overlap on each pipe and set the collars at right angles to the axes of the pipes. Do not twist rubber joints rings. Tighten the nuts up evenly to a uniform tension.

Rubber Ring Joints: To AS 1646. Ring hardness within the 41-50 range of Table 3.1. Ensure rubber rings are evenly in place when the spigot is driven home into the socket. Vegetable-based, non-toxic lubricants may be used for installing rubber rings.

UNDERGROUND FITTINGS

Generally: Position fittings plumb and at the correct depth from the surface. Install risers where necessary.

Hydrants and Valves: Protect all hydrants and valves during laying and backfilling. On completion screw down all glands and ensure all valves operate freely.

Cocks or Fittings: Any cocks or fittings brought onto the job which are not of a type approved by the Joint Committee and have not been stamped by a recognised Testing Authority shall be immediately removed from the job. No backfilling shall be permitted until the Superintendent have checked that all materials are in accordance with the above requirements.

SLEEVES - WATER SERVICES

REQUIREMENT: Where pipes pass through walls and slabs, provide purpose-made plastic sleeves with 12 mm clearance all round pipe, packed with gunned silicone rubber joint sealer (self-extinguishing grade).

ANCHORAGES - WATER SERVICES

ANCHOR BLOCKS: Construct anchor blocks at tees, reducers, blank ends and vertical and horizontal bends and at the locations shown on the Drawings to the details shown on the Drawings. Use concrete with characteristic compressive strength of 15 MPa at 28 days. Bear anchor blocks against the body of the fitting only, clear of joints and against firm undisturbed ground or compacted filling.

CAPPING OFF - WATER SERVICES

REQUIREMENT: During construction, temporarily seal open ends of pipes and valves to prevent the entry of foreign matter into pipe systems. Provide purpose-made covers of pressed steel or rigid plastic. Do not use rags, paper or wood plugs.

SUBSECTION 500 FINISHES**PIPEWORK FINISHES - WATER SERVICES**

REQUIREMENT: Finish exposed pipework, including fittings, supports and the like as follows:

Copper and Copper Alloys: (Including locations): Chrome plate to AS 1192.

SUBSECTION 711 PIPEWORK**COPPER PIPEWORK - WATER SERVICES**

TUBES: To AS 1432 type 'B'.

Identification: Install the tube so that the marking is visible for inspection.

FITTINGS: De-zincification resistant.

Capillary Fittings: To AS 1585, for use with silver brazed joints. Do not use soft solder or solder insert capillary fittings.

Compression Fittings: To AS 1645, Type 2.

Screwed Fittings: To AS 1590.

JOINTING METHODS: Use capillary fittings, compression fittings, silver brazed slip joints, or screwed joints.

Silver Brazed Joints: Use low temperature silver brazing alloy rods to AS 1167, containing 15% silver, and oxy acetylene heating.

Slip Joints: Soften and expand the pipe to form a joint not less than the following lengths:

Nominal Pipe Size:	Length of Slip Joint:
15 - 20 mm	10 mm
25 - 32 mm	12 mm

POLYETHYLENE PIPEWORK - WATER SERVICES

PIPE: To AS 1159.

Class and Type: Class 12, type 50 unless shown otherwise on Drawings.

FITTINGS: To AS 1460, class 1159.

Pressure Class: As for pipe.

INSTALLATION: To AS 2033, Parts 1 - 4 inclusive.

uPVC PIPEWORK - WATER SERVICES

uPVC (Unplasticized Polyvinyl Chloride) PIPES:

- over 80 mm diameter: To AS 2977.1.
- 80 mm diameter and smaller: To AS 1477.1.

Class:

- over 80 mm diameter: Class 18.
- 80 mm diameter and smaller: Class 12.

FITTINGS:

- over 80 mm diameter: Use cast iron fittings.
- 80 mm diameter and smaller: Factory manufactured, rubber ring jointed UPVC pressure fittings may be used.

Moulded Fittings Class: To AS 1477, Part 2, clause 1.5.

Fabricated Fittings Class: To AS 1477, Part 3, clause 1.2.

INSTALLATION: To AS 2032, Parts 1 - 4 inclusive.

Rubber Ring Joints: To AS 2032, clause 3.2.2. After making the joint, check to ensure that the ring is in the correct position.

PIPE INSULATION - WATER SERVICES

REQUIREMENT: Insulation shall be either:

Rigid: Section preformed of rigid cellular polystyrene foam to AS 1366 Part 3, colour coded brown on the edges of each section or rigid cellular polyurethane foam, to AS 1366 Part 1.

or:

Prelagged Pipe: An approved proprietary system in which the pipe is factory sheathed with a flexible sheath type pipe insulation of the modified vinyl foam plastic formulation.

REQUIRED INDICES: All the material used in the insulation of the pipework shall have a Spread of Flame Index not greater than 0 and a Smoke Developed Index not greater than 5, when tested for Early Fire Hazard Properties in accordance with AS 1530 Part 3.

Certification: Submit test certificates from a recognised Testing Laboratory to certify that the materials offered have been tested and achieve these standards.

RESTRICTIONS:

- Do not insulate piping specified to be chromium plated.

- Do not install pipework in externally exposed locations.

THICKNESS: 25 mm for pipes up to 100 mm diameter.

RIGID PIPE APPLICATION: Form the insulation to fit the pipe. Butt joints firmly and fasten insulation to pipe with metal straps at 450 mm approximately, not less than 2 to each section of insulation.

SUBSECTION 713 VALVES AND OUTLETS

ACCESSORIES - WATER SERVICES

REQUIREMENT: Provide the accessories and fittings necessary for the proper functioning of the water services, including taps, valves, outlets, pressure and temperature control devices, strainers, gauges, and the like.

SPECIFICATION REFERENCE: Taps and valves are scheduled in the 'SANITARY PLUMBING SCHEDULES - SANITARY PLUMBING'.

TAP AND VALVE HEADS: Fit a vandalproof or anti-tampering device where this is available as an option on the types selected.

SUPPORT: All fittings to be securely fixed to adequate supports. Taps and valves generally accessible must be supported to withstand heavy school use.

TAPS - WATER SERVICES

COPPER ALLOY TAPS: To AS 1718 and AS 3718, dezincification-resistant.

VALVES - WATER SERVICES

GATE VALVES:

100 mm Diameter and Larger: Cast iron to AS 3579, Class 14.

80 mm Diameter and Smaller: Copper alloy to AS 1628, de-zincification resistant.

NON-RETURN VALVES:

100 mm Diameter and Larger: Cast iron to AS 3578, Class 14.

80 mm Diameter and Smaller: Copper alloy to AS 1628, de-zincification resistant.

SAFETY VALVES GENERALLY: (Including relief valves): To AS 1271.

SLUICE VALVES: Cast iron to AS 2638, Class 14.

VALVE SPINDLES: Use non-rising type valve spindles. Install valves with spindles in a vertical position unless indicated otherwise on the Drawings.

HOSE COCKS: Copper alloy to AS 1718, de-zincification resistant, fitted with vacuum breaker.

APPROVAL: Ensure all valves have been approved for the Joint Committee for their respective uses.

MARKER POST: With the exception of turf valves, provide hardwood valve marker posts with galvanized marker plates in accordance with the Drawings.

SUBSECTION 714 PITS

VALVE BOXES - WATER SERVICES

GENERALLY: Provide cast iron valve boxes with removable covers for access to underground gate valves. Provide cast iron sluice valve covers for access to sluice valves.

VALVE BOX AND/OR COVER: Set beneath each box a shaft formed of uPVC pipe to give clear access to the valve wheel or spindle. Set top flush with pavement surface, or 15 mm above unpaved surfaces, and encase in formed concrete 150 mm deep and 150 mm wide to sides of box, with top surface trowelled smooth.

ACCESS PITS - WATER SERVICES

REQUIREMENT: House water meters, stop valves, control valves, and the like, if installed below ground, in concrete access pits with removable pit covers.

INTERNAL DIMENSIONS: To give 300 mm clear space below and on all sides of the fittings in the pit.

SIDES AND FLOOR: 25 MPa concrete, 100 mm thick, reinforced with F82 fabric to AS 1304.

PIT COVER: Galvanized mild steel floor plate 5 mm thick, with lifting holes, hinged to a galvanized steel angle frame with lugs for casting in.

INSTALLATION: Grade floor to a point on one side and connect to the stormwater drainage system in 100 mm uPVC or vitrified clay pipe. Carry the pit walls up to 50 mm above finished ground level. Cast in the pit cover frame flush with the top. Trowel the top smooth.

SUBSECTION 742 COLD WATER

COLD WATER SERVICE - WATER SERVICES

MAIN CONNECTION: Connect the water supply service as shown on Drawings.

RETICULATION: Extend the supply from the water meter to the draw off points and fixtures shown on Drawings and specified.

SUBSECTION 743 HOT WATER

HOT WATER SERVICE - WATER SERVICES

RETICULATION: Supply hot water piping to connect the heater to the supply and to the draw off points and fixtures shown on Drawings or specified.

UNITARY HEATING SYSTEMS - WATER SERVICES

SPECIFICATION REFERENCE: Storage heaters and auto boilers are specified in the 'APPLIANCES' Section.

SECTION 800 - ELECTRICAL SERVICES**SUBSECTION 001 GENERAL****SCOPE - ELECTRICAL SERVICES**

EXTENT OF WORK: The work comprises the supply of necessary equipment and materials, installation and commissioning, servicing and maintenance of the electrical installations for the site and buildings including the following:

- a) Installation of submains, underground conduit system, and works detailed on the Electrical Site Plan.
- b) Electrical installation for the buildings as detailed in the Building Electrical Installation Drawings and the specification.
- c) Communications access pipes and pits as detailed on Electrical Site Plan.
- d) Any additional work necessary to provide a complete operative installation in accordance with the requirements of this specification and attached specifications listed herein.

ASSOCIATED WORK: For details of work forming part of an electrical installation, refer to the following Sections:

- Section 815 - 'LUMINAIRES'
- Section 817 - 'APPLIANCES'
- Section 825 - 'SWITCHBOARDS'

APPLICABLE DRAWINGS: Electrical Site Plan, Electrical Installation Drawings and any associated drawings/pictorials referenced.

GENERAL: All work shall comply with the latest edition of the SAA Wiring Rules and the requirements of the relevant Statutory Authorities. When complete, the installation shall be left in full working order to the satisfaction of this Departments Superintendent.

STANDARDS - ELECTRICAL SERVICES

SITE COPY: Keep on the site a copy of AS 3000.

AUTHORITIES AND APPROVALS - ELECTRICAL SERVICES

REQUIREMENT: Documents evidencing approval of regulatory authorities, to be provided before Practical Completion.

WORKS BY AUTHORITY: If the responsible authority, pursuant to statutory powers vested in it, elects to perform or supply part of the Works, make the necessary arrangements with the authority.

SUPPLY AUTHORITY REQUIREMENTS: Provide the works required by the supply authority to complete the electrical services installation, including the installation of equipment supplied by the authority.

SAMPLES - ELECTRICAL SERVICES

REQUIREMENT: Submit samples to the Superintendent for permission to use materials, fabrication, or workmanship, or as an example of design. All subsequent work is to be of the same quality as the sample on which the permission to use was given. Permission to use may be withdrawn if the standard of the sample is not maintained.

STORAGE: Keep approved samples in good condition on the site. Samples to be registered by the Superintendent and held in a secure area protected by the Contractor.

DELAY: The Contractor will be solely responsible for the consequences of delay resulting from failure to allow adequate time for the assessment and approval of samples, or from the rejection of samples which do not comply with the specification, or the like.

INSPECTION - ELECTRICAL SERVICES

NOTICE: Give 5 working days notice so that inspection may be made at the following stages:

- Concealed Conduits: Prior to concrete pours, etc.;
- Trench Excavation: Prior to installing cables;
- Cabling: Commencement of cabling installation;
- Cables Laid: After laying underground cables and before and after laying protective covering and marker tape;
- Connection: Connection of cabling and wiring;
- Earthing: Installation and connection of earthing system;
- Acceptance: Installation ready for acceptance;
- Other Inspections: When applicable, prior to fixing Manual Arts machines to floor.

SETTING OUT - ELECTRICAL SERVICES

REQUIREMENT: The positions of outlets, switches and equipment shown on drawings are diagrammatic only. Check on site for positions and verify locations and mounting heights with the Superintendent. When any relocating is required to conform to the above, undertake such relocation without additional costs to the Principal.

Verification: Verify locations of all outlets, switches and equipment to ensure:

- (a) The work of any other trade does not interfere with the electrical installation.
- (b) Are not shrouded by door swings and tracks, furniture or equipment.
- (c) Conformity with any pattern formed by ceilings, panels, tiles, beams and the like.

ANOMALIES: Promptly report any anomalies to the Superintendent, for consideration and instructions. Work proceeding without obtaining approval from the Superintendent, to be carried out without additional expense to the Principal.

SUBSECTION 074 TESTING AND COMMISSIONING

TESTING - ELECTRICAL SERVICES

NOTICE: Give 5 working days notice so that tests may be witnessed by the Superintendent.

TEST CERTIFICATES: Provide a completed Form 2A and written certification that the installation/alterations have been carried out as required by the Electricity Regulations along with any further certificates applicable.

SITE TESTING: Include the following:

- Insulation resistance measurements;
- On motors and major medium voltage equipment items, at 1000 V d.c.;
- On cables and wiring to AS 3000;
- Voltage tests: On paper-insulated cables to AS 1026 Appendix B;
- Functional checks: Full functional and operational checks on energized control equipment and circuits, including adjustments for the correct operation of safety devices;
- Motor rotation: Checking and where necessary, altering connection for the correct motor rotation;
- Earth resistance measurement: To AS 3000;
- Earthing: Confirmation of effective earthing of the exposed metal of electrical equipment.

APPROVAL FOR ENERGIZING: Obtain approval before energizing newly installed or reconnected wiring or equipment.

FAULTY INSTALLATION: During testing, replace fuses and equipment damaged as a result of incorrect installation work.

COMMISSIONING - ELECTRICAL SERVICES

NOTICE: Give 5 working days notice that commissioning of the electrical services is to commence.

SUPPLY CONNECTION: Arrange for the supply authority to install its equipment and make connections.

PHASE SEQUENCE: Ensure the correct phase sequence at the main switchboard after connection of the supply.

BALANCING OF LOAD: Balance the load as evenly as practicable at Practical Completion. Recheck and, where necessary, rebalance the load at completion of the Defects Liability Period.

CIRCUIT PROTECTION: Confirm that circuit protective devices are sized and adjusted, where necessary, to protect the installed circuits.

LUMINAIRES: Clean the luminaire reflectors, mirrors and diffusers. Replace faulty lamps.

SUBSECTION 094 MAINTENANCE

OPERATIONAL MAINTENANCE - ELECTRICAL SERVICES

MAINTENANCE PERIOD: Co-extensive with the Defects Liability Period.

REQUIREMENT: During the maintenance period:

- Carry out periodic inspections and perform maintenance work at the frequencies and following the procedures recommended by the manufacturers of the supplied equipment (except for maintenance work specified to be performed by the Principal);
- Promptly rectify faults. Replace faulty materials and equipment, including luminaire lamps, and accessories.

MINIMUM NUMBER OF VISITS: 1 every 3 calendar months.

CERTIFICATION: At the end of the maintenance period make a final service visit and, upon satisfactory completion of the above procedures, certify in writing that the installation is operating correctly.

MANUALS - ELECTRICAL SERVICES

REQUIREMENT: Before commencement of operational maintenance, provide the specified number of copies of a combined operator's manual and technical manual, written in clear concise English, containing a title page listing suppliers' names, addresses and telephone numbers, a table of contents, and the following data:

Operator's Manual:

- Safe working procedures: For switching and isolating the supply and distribution system;
- Operation and maintenance: Information for the satisfactory long-term operation and maintenance of the installation;
- Maintenance procedures: Recommended maintenance periods and procedures;
- Tools: Particulars of maintenance equipment and tools provided, with instructions for their use.

Technical Manual:

- Diagram: A copy of the single line diagram for the supply and distributed system, showing the ratings of protective devices, size and route length of all mains and submains along with fault levels at each busbar.
- Equipment: A technical description of the equipment supplied, with diagrams and illustrations where appropriate;
- Dismantling: Where necessary, procedures for dismantling and re-assembling equipment;

Form: A4 size, machine printed or typed on durable printing paper, with each page consecutively numbered, and neatly bound in durable vinyl or similar hard covers.

Number of Copies: 4.

SUBSECTION 143 UNDERGROUND SERVICES

UNDERGROUND CABLES - ELECTRICAL SERVICES

STANDARDS: To AS 3000 and AS 3008.

EXCAVATION IN PUBLIC AREAS - ELECTRICAL SERVICES

APPROVALS: Before excavating any public areas including roads, footpaths, reserves and the like, obtain the approval of the relevant authorities and comply with their requirements for alternative traffic arrangements, excavation methods, backfilling and reinstatement.

REINSTATEMENT: Restore areas outside the limits of the Works, which have been disturbed by the Works, to their original condition on completion of the excavation. Reinstatement surfaces to their original level without subsidence and without cracking at junctions with existing surfaces. Restore pavements to match existing. Regrass grassed areas.

TRENCHING - ELECTRICAL SERVICES

LAYING PROGRAM: Excavate trenches in sections of suitable length, lay and bed the relevant service length and backfill the trench section, with the minimum of delay and if possible on the same working day, unless otherwise specified or permitted.

NOTICE FOR INSPECTION: 5 working days.

EXISTING SURFACES: Saw cut existing concrete or bitumen surfaces in a straight line to a minimum depth of 75 mm before excavation is commenced. Lift and store paving slabs for later reinstatement.

EXCAVATION: After excavation, clear trenches of sharp projections.

Depth:

- Supply cables: 600 mm
- Communication Cables: 450 mm
- Rocky Ground: Agree installation depth with Superintendent.

EXCAVATIONS BEYOND SITE BOUNDARY: Notify, and obtain approval from, the appropriate owner before excavation commences. Carry out the excavation to the owner's requirements. Reinstatement the surface to match existing.

CABLE IN TRENCHES - ELECTRICAL SERVICES

DRAW CORDS: Provide polypropylene draw cords in conduits not in use.

SAND: Provide clean sharp sand around cables and conduits installed underground.

UNDER ROADWAYS: Under roadways and areas subject to traffic movement, install cables in a duct or conduit extending to not less than 1 metre on either side of the sealed surface or trafficable area and encase in concrete having a minimum cover thickness of 100 mm.

Concrete Strength: 20 MPa.

SEALING DUCTS AND CONDUITS: Seal the buried entries to ducts and conduits with a pliable non-setting waterproof compound. Seal spare ducts or conduits immediately after installation, and seal the others after the cable installation.

BACKFILLING TRENCHES - ELECTRICAL SERVICES

GARDEN AREAS: Backfill the top 150 mm of the trench with topsoil.

LAWN AREAS: Re-loam the top 150 mm and re-turf trenches passing through existing lawned areas.

EXCESS SOIL: Remove from the site unless otherwise directed.

EXISTING ASSETS: Reinstatement existing surfaces and assets disturbed or removed as a result of the excavations or trenching.

CONCRETE SURFACES: Reinstatement concrete surfaces to the original level using approved reinforcing steel, keyed to the existing and laid to prevent the reinstated concrete from subsiding and cracking.

BITUMEN SURFACES: In existing bitumen surfaces camber the reinstated surface so that the edges are flush and the centre is 10 mm above the existing pavement. Fill the top 150 mm below the bitumen surface with mechanically compacted finely crushed gravel. Prime coat the existing bitumen edges of the trench with bitumen prior to laying 75 mm minimum of hot pre-mix bitumen to the finished cambered surface. If it can be shown that hot pre-mix is not available, cold pre-mix will be accepted.

Standard: The repair procedure and materials shall be generally in accordance with NAASRA Road Maintenance Practice 1975, Section 6.

UNDERGROUND CABLE ROUTES - ELECTRICAL SERVICES

LOCATION: Accurately locate underground cables using route markers placed at intervals of not more than 100 metres for straight distances and at joints, route junctions, changes of direction, terminations and entry points to buildings.

MARKER TAPE: Provide orange plastic warning tape above all runs of underground pipes and direct laid cables with tape 300 mm below surface. Use 100 mm wide tape with the words "CAUTION - ELECTRICAL CABLE BURIED BELOW" clearly marked continuously along tape.

DIRECTION INDICATORS: Mark the direction of cable run by marker plate direction indicators. Provide four distinct versions of the marker plate containing, 'single', 'through', 'L' and 'T' arrows, with the latter three containing a centre marking. A group of two or more plates may be required at some route junctions.

MARKER PLATE INSTALLATION: Set the marker plate flush in a 200 mm minimum diameter concrete base, not less than 200 mm deep or locate in pit shoulder.

MARKER LOCATION: Set the marker flush to the surface in footpaths, roadways, paved areas, etc., and protruding 25 mm above other surfaces.

CABLE INSTALLATION - ELECTRICAL SERVICES

INSTALLATION METHODS:

- Conceal Cabling in ceiling spaces and underground electrical conduits , wherever possible.
- Cables run surface , unless otherwise specified are to be installed in rigid PVC conduit securely fixed and painted to match the surrounds. Prior to installation of any surface run cabling , approval of the proposal is to be obtained from the Superintendent.
- For cables rising up external walls or covered links from underground pipes , protect the cables from 300mm below ground level to 3000mm above ground level with minimum 1.6mm thick galvanized steel duct or pipe , painted to match the surrounds.

DRAWING-IN OF CABLES:

- Where cable is drawn around corners or turning in cable pits, place rollers to conform with the Specification bending radius for the cable, to prevent serving or armouring being damaged by scraping on the ground.
- Draw cable into pipe ducts after laying the ducts and backfilling.
- Arrange installation so that cable may be drawn out of the duct in the event of cable failure.
- Install cables when both the cable and the ambient temperature are at or above 0 degrees C and have been so for the previous 24 hours.

SUBSECTION 811 ACCESSORIES

ACCESSORIES STANDARDS - ELECTRICAL SERVICES

GENERALLY: To AS 3000.

AIR-BREAK SWITCHES, ISOLATORS AND FUSE COMBINATION UNITS: To AS 1775.

PLUGS AND SOCKET OUTLETS: To AS 3112.

LIGHTING AND SOCKET OUTLET SWITCHES: To AS 3133.

FLUSH PLATES: Decorative flush plates are not permitted.

MINIMUM RATING: 240 V, 10 A.

MECHANISM: On face plates secure the mechanism with retaining screws.

Orientation: Switch mechanisms to operate in the vertical plane.

ISOLATING SWITCHES - ELECTRICAL SERVICES

REQUIREMENT: Unless otherwise specified, provide isolating switches to AS 3000. Enclose the isolating switches to suit their operating environment.

GENERAL PURPOSE OUTLETS - ELECTRICAL SERVICES

REQUIREMENT: Unless indicated otherwise, provide white, safety type, 10 amp, 3 flat pin flush, impact resistant, polycarbonate switch plug combinations, all mounted under the one cover plate. NB: These outlets must be able to accept 2 pin and 3 pin plugs. Wire each GPO circuit with no more than 75% of the number of GPO's allowed by AS3000.

PIN ARRANGEMENT: Mount the outlet with the earth pin at the 6 o'clock position.

UNSWITCHED GPO'S: Except in the installation of wall mounted fans/heaters, do not use combination GPO's with no switch mechanism.

ACCESSORIES INSTALLATION - ELECTRICAL SERVICES

MOUNTING: All accessories are to be flush mounted unless otherwise indicated.

FLUSH MOUNTING: Unless otherwise specified, install flush mounted accessories in wall boxes.

Restricted Location: Do not install wall boxes across the junction of wall finishes.

INSTALLATION METHODS:

Wall Construction:

Installation and Cabling Facilities:

- | | |
|------------------------------------|---|
| - Face brick partition: | Architrave switch with conduit channels cut in architrave.
Flush wall box - Conduit concealed in cut bricks. |
| - Face brick external cavity wall: | Flush wall box - unless otherwise specified, conduit run in cavity and tied against inner brick surface. |
| - Stud partition: | Stud mounting bracket - unless otherwise specified, cable run in cavity within 25 mm of the bracket. |

SURFACE MOUNTING: Unless otherwise specified, install surface-mounted accessories on proprietary manufactured mounting blocks.

SUBSECTION 812 CABLES

CABLE MANUFACTURE - ELECTRICAL SERVICES

STANDARDS:

Paper Insulated Cables: To AS 1026.

Conductors: To AS 1125.

Selection of Cables: To AS 3008.1.

Elastomer Insulated Cables: To AS 3116.

PVC Insulated Cables:

Silicone Rubber Insulated Cables: To AS 3178.

MIMS Cables: To AS 3187.

Flexible Cords: To AS 3191.

XPPE Cables: To AS 3198.

CABLE SELECTION - ELECTRICAL SERVICES

STANDARDS: To AS 3000 and AS 3008.1.

RATINGS: Unless otherwise specified use AS 3008.1 for the determination of current ratings and voltage drop.

CONDUCTORS: Use only multi-stranded copper conductors.

Minimum Size: 1.5 mm² for lighting circuits, otherwise to AS 3000.

CABLES: Use copper conductor PVC insulated or PVC insulated and PVC sheathed stranded cables unless otherwise specified. Use PVC insulated and PVC sheathed cables for all cables run underground in conduits.

PVC INSULATED CABLES: Unless otherwise specified, use V75 insulation.

CABLE INSTALLATION - ELECTRICAL SERVICES

STANDARD: To AS 3000.

MANUFACTURER'S RECOMMENDATIONS: Unless otherwise specified, install, terminate and joint cables in accordance with manufacturer's recommendations.

REDUNDANT EQUIPMENT: Remove redundant equipment and wiring, including that in accessible ceiling spaces, and make good exposed surfaces before commencing the installation of new wiring.

HANDLING CABLES: Handle cables so as to avoid damage to insulation and serving or sheathing. Report all damage and replace or repair damaged cable as directed.

STRAIGHT-THROUGH JOINTS: Unless unavoidable due to length or difficult installation conditions, run cables for their entire route length without intermediate straight-through joints. Locate approved joints as directed.

INSTALLATION: Install and adequately support fixed wiring as specified throughout the installation. For cabling routes not specified in detail, submit a proposed route layout.

CONDUCTORS:

Colours: For fixed wiring colour the conductor insulation or, if this is not practicable, slide not less than 150 mm of close fitting coloured sleeving to each conductor at the termination points as follows:

- Active conductors in single phase circuits: RED.
- Active conductors in poly-phase circuits:
 - A PHASE - RED
 - B PHASE - WHITE
 - C PHASE - BLUE
- Other conductors: To AS 3000.

TAGGING: Identify multicore cables and trefoil groups at each end and at crowded intermediate points by means of stamped, non-ferrous tags, clipped around each cable, or trefoil group.

SINGLE INSULATED WIRING IN CONDUIT - ELECTRICAL SERVICES

REQUIREMENT: Complete and permanently fix the conduit run before installing the wiring. Use draw wires to pull in the conductor groups from outlet to outlet.

JUNCTION BOXES: Do not make conductor joints in through-runs of cables unless approved. Install boxes containing joints in accessible locations.

VERTICAL RUNS: For vertical conduit runs in excess of 15 metres make adequate provision for supporting the weight of the wiring to avoid insulation damage.

DAMAGED INSULATION: Replace all wiring in conduits containing conductors with insulation damaged during installation, after determining and removing the cause of damage.

DOUBLE INSULATED WIRING - ELECTRICAL SERVICES

REQUIREMENT: Conceal cable where practicable, utilising the loop-in, loop-out system with joints in cables being effected at outlets.

JUNCTION BOXES: Do not make conductor joints in through-runs of cables unless approved. Install boxes containing joints in accessible locations.

DAMAGED INSULATION: Replace all wiring with insulation damage after determining and removing the cause of damage.

FIXING: In accessible false ceilings, keep cables clear of all ceiling insulating material and/or removable ceiling tiles by securely fixing same to permanent structural members.

COPPER CONDUCTOR TERMINATIONS - ELECTRICAL SERVICES

REQUIREMENT: Unless otherwise approved, terminate copper conductors to equipment, other than small accessory and luminaire terminals, by means of compression-type lugs of the correct size for the conductor, compressed only by the correct tool.

WITHIN SWITCHBOARDS AND EQUIPMENT: Loom and lace together, with PVC straps or string, all conductors from within the same cable or conduit from the point of cable sheath or conduit termination to the terminal block. Neatly bend each conductor to enter directly into the terminal tunnel or terminal stud section, allowing sufficient slack for easy disconnection and reconnection.

Identification Ferrules: Where core identification is required, fit to each core durable numbered ferrules permanently engraved with numbers and/or letters to suit the specified connection diagrams.

Spare Cores: Terminate and identify any spare cores into spare terminals, if available; otherwise neatly insulate and bind the spare cores to the terminated cores.

SUBSECTION B13 CONDUITS AND CABLE SUPPORTS

CONDUITS GENERALLY - ELECTRICAL SERVICES

STANDARDS:

Galvanized Steel Water Pipe: To AS 1074.

Metallic Conduit and Fittings: To AS 2052.

Non-Metallic Conduits and Fittings: To AS 2053.

Installation: To AS 3000.

MINIMUM SIZES:

Metallic and Non-Metallic Conduits: 20 mm.

Galvanized Water Pipe: Medium or heavy tube to AS 1074, 20 mm nominal bore.

FIXINGS: Provide two fixings per conduit saddle. Do not use explosive-powered or similar equipment unless approved.

To Woodwork: Conduit matching saddles and round head cadmium-plated steel wood screws.

To Masonry: Conduit matching saddles and round head cadmium-plated steel screws screwed into expanded or other proprietary type plugs neatly fitting into drilled holes.

To Steelwork: Cadmium-plated steel metal-thread screws. Drill and tap the steelwork for each saddle.

SUPPORT: Unless otherwise specified, fix conduit saddles at a maximum of 1 metre intervals in horizontal runs and 2 metre intervals in vertical runs. Ensure that installed conduits are fully supported during construction.

LENGTHS: Up to the commercially obtainable conduit lengths of run, install conduits without joints. Remove all rags, burrs, and sharp edges from each length before completing each conduit joint. Fit moulded plastic screwed bushes to the free ends of metallic conduit runs before installing the conductors.

INSPECTION FITTINGS: Inspection fittings and the like shall be accessible.

DRAW-IN BOXES: Provide draw-in boxes at suitable intervals not exceeding 30 m in straight runs, and at intervals not exceeding 25 m in other runs including directional changes.

CONCEALED CONDUITS - ELECTRICAL SERVICES

ROUTE OF RUN: Run conduits concealed in wall chases, embedded in floor slabs and installed in inaccessible locations, direct between points of termination with a minimum number of sets. Do not conceal conduit fittings.

LOCATION: Locate conduits run in concrete slabs entirely within the structural slab. Do not run conduits in the concrete topping unless approved.

STEEL CONDUIT: Steel conduit shall be galvanized.

FIXING: Fix conduits directly to the reinforcing rods where the conduits pass above a single layer of reinforcing, or fix mid way between double layers of reinforcing. Route the conduits in slabs so as to avoid crossovers and to keep the number of conduits in any one location to a minimum. Space conduits 75 mm apart in slabs.

ATTENDANCE AT POURS: Ensure that conduits are not displaced, broken, or damaged during concrete pours.

HOLLOW-BLOCK FLOORS: Locate the conduits in the core-filled sections only of precast hollow-block type floors.

PROHIBITED FLOOR SLABS: Do not run conduits in the floor slab of boiler rooms, plant rooms, and tank rooms.

METALLIC CONDUITS AND FITTINGS - ELECTRICAL SERVICES

TYPE: Unless otherwise specified, use galvanized screwed steel conduit and fittings.

ELECTRICAL CONTINUITY: After removal of sharp edges, burrs, etc., paint ends and joint threads of steel conduits with a rust-inhibiting metallic paint which maintains conductivity.

EXPANSION JOINTS: Provide flexible couplings where structural expansion joints occur in buildings and in long straight runs where the ambient temperature varies by more than 40 degrees C. Use flexible conduit and fittings for the couplings and maintain electrical conductivity between the two ends of rigid metallic conduit. Install conduit support saddles close to the flexible coupling in a manner which allows free movement for expansion and contraction.

NON-METALLIC CONDUITS AND FITTINGS - ELECTRICAL SERVICES

TYPE: Unless otherwise specified, use heavy duty type. Associated fittings shall be of the same material as specified for the conduit.

Colour: Orange.

JOINTS: Use cemented joints. Adopt the manufacturer's recommended procedure for making joints.

WALL BOXES: Standard size wall boxes shall be of the same material as the conduit. Where special size boxes are specified, and where such boxes are not obtainable in uPVC, use pre-fabricated metal boxes.

FITTINGS: Use inspection-type fittings in accessible and exposed locations.

CONDUIT SETTINGS: Where practicable, have conduits preformed by the manufacturer. At site, use correctly sized springs to form sets in uPVC conduit. Bends shall be of large radii and, after setting, shall maintain effective diameter and shape. Reject conduit sets distorted by kinks, wrinkles, flats or heating.

EXPANSION JOINTS: Install flexible couplings where structural expansion joints occur in buildings and in straight runs not embedded in wall chases or floor slabs. Install conduit saddles close to the flexible coupling in a manner which allows free movement for expansion and contraction.

Spacing: 8 metres.

MECHANICAL DAMAGE: In situations where the conduit is exposed to mechanical damage and external to buildings, provide mechanical protection to uPVC conduit for a height of not less than 3 metres above ground or platform level.

RESTRICTIONS ON USE: Do not install PVC conduit in locations where:

- exposed to direct sunlight;
- subject to mechanical damage or high ambient temperatures.

Roof Spaces: Where installed across rafters or joists, fasten conduit to the side of timber battening of adequate dimensions.

White PVC Conduit: Reserved for Communications and Telecom conduits. Do not use for light and power installations.

FLEXIBLE CONDUIT - ELECTRICAL SERVICES

TYPE: Use heavy duty PVC flexible conduit with associated fittings unless otherwise specified.

Colour: Grey.

USE: In addition to its use on expansion joints, fit flexible conduit to equipment and plant subjected to vibration or where necessary for adjustment or ease of maintenance.

LENGTH: The maximum length of a flexible conduit connection shall be sufficient to allow maintenance.

GALVANIZED STEEL WATER PIPE - ELECTRICAL SERVICES

USE: Galvanized steel water pipe may be used for cable enclosures buried in the ground or run in concrete trenches or the like. Seal joints against the entry of water or moisture. Associated fittings shall be either galvanized steel, cast iron or approved non-ferrous metal.

PREPARATION: Ensure that the pipe and fitting interiors are free from sharp edges or rough protrusions before installing cables.

OTHER WIRING ENCLOSURES - ELECTRICAL SERVICES

DUCTING: To NEMA-VE 1-79 and NEMA-VE 1-84.

General: Unless otherwise specified, use rigid PVC ducts of suitable design with readily removable covers, or metal ducts. Size duct to accommodate a 100% increase in the number of cables to be installed.

Metal Ducts: Construct from minimum 1.0 mm thick preformed galvanized steel, with removable cover. Duct to be electrically continuous and earthed.

Fixing: Fix ducts to ensure a close finish of duct against building surface. Cut square all joints and butt ducts against building features, ceilings and mounting blocks to avoid gaps.

Cable Fixing: Fit suitable straps within ducts installed on walls or ceilings to ensure cables remain in ducts when covers are removed.

Cable Joints: Do not provide joints in wiring within duct.

Accessibility: Install ducts where they will be accessible after installation.

Entries: Round off sharp edges and provide PVC bushes or the like for cable entries into metallic ducting.

Mounting: Duct to be surface mounted unless otherwise indicated.

Support: Support ducts within 100 mm of each end, and at intervals not exceeding 400 mm where ducts are below 3000 mm from floor level. Fix ducts in accessible ceiling spaces at intervals not exceeding 1000 mm.

Inaccessible Spaces: Do not install ducts in inaccessible spaces unless directed otherwise.

Expansion Joints: Provide expansion joints in ducts at 7500 mm intervals and at building expansion joints. Expansion joints in PVC ducts maybe of the type using PVC straps across the joint glued to the duct on one side of the joint only. Use a glue recommended by the duct manufacturer. Expansion joints in metal ducts to have approved fishplates, metal thread screws and washers.

CABLE AND CONDUIT SUPPORTS - ELECTRICAL SERVICES

SUPPORT SYSTEM: Bends, connectors, trays, ladders, brackets and other supports necessary to make a complete cable or conduit support system shall be of the same manufacture, sized to adequately support the installed cabling.

STEEL TRAYS: To NEMA-VE 1-79 and NEMA-VE 1-84. Galvanize after manufacture to AS 1650.

Minimum Steel Thickness:

- Trays up to 150 mm wide: 1.0 mm.
- Trays from 150 mm to 300 mm wide: 1.2 mm.
- Trays over 300 mm wide: 1.6 mm.

Folded Edge: Minimum height 20 mm, radiused.

Slotting: Normal or reverse with no burrs or sharp edges on the side to which cables are attached.

CABLE LADDER: To NEMA-VE 1-79 and NEMA-VE 1-84. Galvanized after manufacture to AS 1650 for steel components.

Construction: Manufacture the cable ladder from two folded steel or extruded structural grade aluminium side rails with cable support rungs between the two rails spaced at intervals of not more than 300 mm.

Small Cable: Do not run cables smaller than 13 mm outside diameter on cable ladder unless continuously supported.

CABLE FIXING: Slots or ladder rails shall be suitable for fixing cable ties, strapping or saddles.

BEND RADIUS: Bends shall have a minimum inside radius of not less than twelve times the outside diameter of the largest diameter cable carried.

SPARE CAPACITY: Provide sufficient space on the tray or ladder for not less than 50% more cables or conduits than specified.

ACCESS: Position the cable support to give adequate access for inspecting, replacing, or adding cable.

CABLE STRAPPING: Fix cable to the support system by proprietary nylon ties, straps or saddles, at 1000 mm centres for vertical runs and 2000 mm centres for horizontal runs.

CABLE PROTECTION: Provide a slightly curved support surface under cables leaving the tray or cable ladder to protect the cable sheath from impingement by the tray or ladder edge.

CLEARANCE: Maintain at least 200 mm clearance from hot water pipes and 500 mm clearance from boilers or furnaces.

SUBSECTION 815 LUMINAIRES

LUMINAIRE MANUFACTURE - ELECTRICAL SERVICES

SPECIFICATION REFERENCE: 'LUMINAIRES' Section 815.

LUMINAIRE INSTALLATION - ELECTRICAL SERVICES

MOUNTING: Mount luminaires on proprietary manufactured supports, brackets and hangers where available. Where the specified mountings cannot be used, submit proposed mounting arrangements for approval.

FABRICATED SUPPORTS: Jig position fixings so that similar fittings may be easily interchanged.

LOCATION: Where the exact locations of luminaires are not shown on the Drawings or specified, locate the luminaires so that:

- They are accessible for maintenance without affecting personnel safety;
- They are not likely to be subjected to vibration;
- They will provide a maximum of effective lighting for the activities intended to be performed in the area, for example, operating and maintenance activities in plant rooms and similar areas where service piping, ductwork, and the like equipment is installed.

OUTSIDE LIGHTING: Adjust the aim of floodlights under night lighting conditions to provide the required area lighting levels.

SUBSECTION 817 APPLIANCES

SPECIFICATION REFERENCE: 'APPLIANCES' Section 817.

SUBSECTION 820 ELECTRICAL SERVICE INSTALLATION

INSTALLATION GENERALLY - ELECTRICAL SERVICES

STANDARD: To AS 3000.

CONSUMERS MAINS - ELECTRICAL SERVICES

REQUIREMENT: Provide facilities at the point of connection to the supply authority's service, metering and controls, to meet the requirements of the supply authority.

SETTING OUT OF RETICULATION - ELECTRICAL SERVICES

CABLE ROUTES: The routes shown on the Drawings are approximate only. Determine the final routes to suit the building structure or site conditions.

APPROVAL: Obtain approval for the final routes from the Superintendent prior to installing consumers mains and submains.

CONCEALMENT: Unless otherwise specified, conceal and protect cables and conduits.

ARRANGEMENT: Arrange cables and conduits parallel with walls, ceilings and floors.

SEPARATE CONDUITS: Run circuits originating at different distribution boards in separate conduits.

PENETRATIONS - ELECTRICAL SERVICES

FIRE WALLS AND STRUCTURAL MEMBERS: Do not penetrate without approval.

DAMP COURSES: Do not penetrate.

FLOOR SLAB: Run pipes entering a building at ground level under the waterproof membrane and vertically penetrate the membrane and the floor slab.

ROOF: Provide a suitable seal between the pipe and the roofing material.

EXISTING STRUCTURES: Obtain approval for penetrations through existing structures.

SLEEVES: Fit a uPVC sleeve for each penetration through ground floor slabs, ground floor beams and external walls for cables not enclosed in conduit. In addition, for MIMS cables fit a sleeve for each masonry penetration.

PENETRATION SIZE: Provide a penetration of diameter 10 mm greater than the pipe or sleeve diameter for pipes and sleeves penetrating external walls, ground slab, or ground floor beams.

REINSTATEMENT - ELECTRICAL SERVICES

Requirement Generally: Fireproof all penetrations through fireproof walls or floor slabs, irrespective of size, upon completion of installation of cables. Fireproofing shall be carried out by fixing a suitable galvanised sheet metal cover (minimum thickness 1.6 mm) around the cables on both sides of the wall and underside of slab, pack space with fireproof material to comply with AS 3000 and the Building Act.

Metal Cableways: Where metallic ducts penetrate fire-rated members, restore the fire rating of the member (wall, floor, etc.) around the duct with section of lid fitted, and protruding not less than 50 mm either side of fire-rated member. Additional, fit a removable fire barrier within the duct in the most accessible location, within the fire-rated member.

Protection: Fix plastic grommet around metal edges bearing against cables. Paint sheet metal covers to match surrounding areas.

Fire Barriers: Proprietary type fire barriers may be installed. In any case, fireproofing must comply with all Building Act, Local Authority and Supply Authority requirements.

METALLIC SUPPORT SYSTEMS AND FIXINGS - ELECTRICAL SERVICES

FABRICATION: Provide brackets, racks, hangers and other supports sized to adequately support the installed system and equipment, fabricated from structural steel sections or from other materials in section of equivalent strength.

Minimum Thickness of Structural Steel Sections:

- Angles and bars: 6.5 mm.
- Rods: 10 mm diameter.

FIXING TO BUILDING STRUCTURE: Fix the support by surface fixing to ceilings and walls, or suspension hangers from ceilings, or angle brackets or racks from walls, using the following methods, as appropriate:

- Masonry or concrete walls: Proprietary expansion anchors
- Concrete slab ceilings: Proprietary expansion anchors
- Structural steel: Site welding.

Spacing Generally: Space supports at intervals where a deflection greater than 6.5 mm is prevented.

- Tray: Maximum 1200 mm;
- Ladder: Maximum 3000 mm.

Fixing of Tray or Ladder: Bolt the tray or ladder to single sided bracket for horizontal runs and roll steel channel in vertical runs.

FINISHES:

Galvanizing: To AS 1650.

Surface Preparation: Where metal surfaces are to be painted, prepare them as per the following:

SUBSTRATE PREPARATION:

STANDARDS: To AS 2311 and AS 2312 as applicable.

GENERALLY: Prepare substrates to receive the systems specified. Procedures shall include, but not necessarily be limited to, the following:

Cleaning: Clean down and remove oil, grease and loose foreign matter, including laitance, efflorescence, moss, lichen, mould, mildew, dirt and corrosion products, in a manner which causes neither undue damage to the substrate nor damage to, or contamination of, the surroundings.

Glossy Surfaces: Adequately scuff and/or solvent or chemically etch as appropriate to provide satisfactory adhesion for subsequent paint coats.

Filling: Fill cracks and holes with fillers, sealants or grouting cements as appropriate for the finishing system and substrate and sand smooth.

Drying: Unless otherwise specified, ensure that surfaces are cured and dry before painting commences.

Recontamination: Apply the first coat of paint immediately after cleaning and before contamination of the substrate can occur. Where contamination of intermediate coats occurs, clean in accordance with the coating manufacturer's recommendations and to the Superintendent's approval immediately prior to over-coating.

METAL SURFACES GENERALLY:

METHODS: To AS 1627, as appropriate to the requirements of this Specification.

IRON AND STEEL SURFACES:

GENERALLY: Remove weld spatter, slag, burrs, or any other objectionable surface irregularities.

DEGREASING: To AS 1627, by solvent or alkaline cleaning.

HAND OR POWER TOOL CLEANING: To AS 1627. Provide a final surface at least equal to preparation grade 'St2' of AS 1627.

BLAST CLEANING: To AS 1627, to the class specified in the specified protective treatment. Provide a surface roughness appropriate for the specified treatment.

Paint System: Unless otherwise specified, paint conduits and support systems as follows:

- Indoor Locations: A system not inferior to 'FULL GLOSS, SOLVENT-BORNE: INTERIOR - PAINTING'.
- Outdoor Locations: A system not inferior to 'FULL GLOSS, SOLVENT-BORNE: EXTERIOR - PAINTING'.

Paint Colours: In locations exposed to view, use a final coat of approved colour, generally to match the surroundings. In switchrooms and plant rooms, ceiling spaces, cable ways and underground use light orange No. 557 to AS 1345.

EARTHING SYSTEM - ELECTRICAL SERVICES

UNDERGROUND EARTHING SYSTEM: Provide the following earthing system: To AS 3000.

Type: MEN - all bonded to electrode(s) at one point only on the Site.

Material: Copper.

CONNECTIONS: For the connection of the main earthing conductor and interconnecting bonding use clamps to AS 1882.

Location: Locate connections within a pit having a removable cover. Size the pit and cover to allow access for testing, disconnection and reconnection.

Connection Height: Install the pit cover flush with the surrounding finished ground level and make the connection to the earthing system not less than 150 mm above the level of the ground within the pit.

Earth Electrode: Earth electrodes shall be of either copper or steel rod copper clad and shall incorporate integral driving heads and points. Stainless steel rods grade 302 are also acceptable. Install earth electrodes vertically. Electrodes may be driven direct into the ground or installed in holes previously drilled and packed with a suitable conductive graphite slurry.

INSTALLATION IN ROCK: Where electrodes are to be installed in rock, fill the gap between the rock and the electrode with bentonite clay or a resin compound or as otherwise approved.

ELECTRODES IN CORROSIVE SOIL: Install each electrode in a 200 mm bore hole, backfill with a conductive metallic grouting compound, and compact with a vibrator.

ADDITIONAL BONDING: Provide additional bonding between the earthing system and the following:

Building Services: In each building, bond the electrical earth to all piped services (if metallic pipes) at the closest practical point to where these piped services enter the building. This includes cold water, hot water, waste and the like. The bonding earth conductor to be 6 sq. mm minimum or otherwise comply with AS 3000.

LABELLING - ELECTRICAL SERVICES

ADDITIONAL MARKING: Provide marking as follows in addition to that required by AS 3000.

OUTLETS:

Requirement: Identify all outlets, lighting control and power outlets with the number of the circuit to which it is connected by means of a press-in plastic indicator inserted and glued into the flush plate.

Indicators: Where circuit number has two numerals, provide one indicator with two numerals on same.

Location: Indicators inserted over the flush plate fixing screws are not acceptable.

LABEL TYPES: Unless otherwise specified, provide the following label types:

- For Interior Use: Engraved two-colour laminated plastic.
- For Exterior Use: Engraved and filled stainless steel.

Label Edges: Round or bevel the edges of labels exceeding 1.5 mm thickness.

COLOURS:

Warning Notices: White letters on a red background.

Other Labels: Black lettering on white background.

FIXING: Fix each label by not less than two cadmium plated screws. Where adjacent to terminations, locate the label so that the installed wiring does not mask the label.

LETTERING HEIGHT: Generally not less than the following:

Isolating Switches:	10 mm.
Other Equipment:	4 mm.
Warning Notices:	4 mm.
Inside Enclosures:	3 mm.

SAMPLES: Provide samples of the proposed label material, sizes, lettering and text for approval.

EQUIPMENT SUPPLIED BY PRINCIPAL - ELECTRICAL SERVICES

EQUIPMENT: For equipment to be supplied by the Principal for installation by the Contractor refer to the 'ELECTRICAL SERVICES SCHEDULES'.

Delivery, insurance, Storage and the Like: Arrangements for delivery, insurance, storage and the like of equipment supplied by the Principal are specified in 'ITEMS SUPPLIED BY THE PRINCIPAL - PRELIMINARIES'.

INSTALLATION: Unless otherwise specified, install the equipment in accordance with the manufacturer's or supplier's recommendations.

accordance with the Contract.

BUILDING:	EQUIPMENT:	NUMBER SUPPLIED:
	Nil	Nil

EXCLUDED EQUIPMENT SCHEDULE - ELECTRICAL SERVICES

PROVISION: Where equipment is listed in the following Schedule, it will be supplied and installed by the Principal. The Contractor shall have no involvement with this equipment.

BUILDING:	EQUIPMENT:	NUMBER:
	Nil	Nil

NON-SCHEDULED EQUIPMENT - ELECTRICAL SERVICES

REQUIREMENT: Supply and install in accordance with the Contract, all items of equipment that are shown on Drawings and do not appear in either the 'SUPPLIED EQUIPMENT SCHEDULE - ELECTRICAL SERVICES' or the 'EXCLUDED EQUIPMENT SCHEDULE - ELECTRICAL SERVICES'.

RTI RELEASE

SECTION 815 - LUMINAIRES**SUBSECTION 001 GENERAL****SCOPE - LUMINAIRES**

EXTENT OF WORK: The work comprises the supply of necessary equipment and materials, installations and commissioning, servicing and maintenance of the lighting installations for the site and buildings as detailed on the Electrical Drawings and Specifications.

ASSOCIATED SECTIONS: This Section is associated with Section 800 - 'ELECTRICAL SERVICES'. Traditionally this Section would form part of the electrical services work.

APPLICABLE DRAWINGS: Electrical Site Plan, Electrical Installation Drawings, and any associated drawings/pictorials referenced.

MARKING - LUMINAIRES

STANDARD: To AS 3137.

PACKAGING - LUMINAIRES

REQUIREMENT: Pack luminaires and components in robust and sealed packages suitable for withstanding conditions between dispatch and installation.

TESTING - LUMINAIRES

STANDARD: To AS 3137.

SUBSECTION 003 PERFORMANCE**PERFORMANCE STANDARDS - LUMINAIRES**

THERMAL CHARACTERISTICS: To AS 3137.

GLARE CONTROL: To AS 1680 Section 5.

LAMP PERFORMANCE - LUMINAIRES

REQUIREMENT: Ensure that the starter switches (where applicable), control gear and lampholders are suitable for use with the lamps supplied and will allow the lamps to achieve the performance given in the lamp manufacturer's published data sheets.

SUBSECTION 170 MANUFACTURE**GENERAL CONSTRUCTION - LUMINAIRES**

STIFFNESS: The materials, body shape, and method of manufacture shall result in a luminaire of adequate stiffness to prevent warping or sagging when installed in position.

BODY SHAPE: Rectangular and square luminaires shall have straight parallel edges and square corners.

SURFACE MOUNTING: For fixing of surface-mounted luminaires to ceilings or wall provide symmetrically placed fixing holes as follows:

- In square and rectangular luminaires: Not less than four holes.
- In circular luminaires: Not less than three holes.

SUSPENSION MOUNTING: Provide suspensions and luminaire suspension connectors capable of supporting, without damage, five times the mass of the luminaire, or 25 kg, whichever is the greater.

RECESSED MOUNTING IN SUSPENDED CEILINGS: To AS 2946.

CEILING TRIM: Where ceiling trim is specified attach it to the luminaires with concealed fixings.

DEGREE OF PROTECTION - LUMINAIRES

STANDARDS:

Non-Hazardous Locations: To AS 1939.

Class I Hazardous Areas: To AS 3000 and AS 2480.

Class II Hazardous Areas: To AS 2236.

REQUIREMENT: Construct each luminaire to provide the protection appropriate to its location.

FABRICATED BODIES - LUMINAIRES

MATERIALS: Use zinc-coated steel sheet unless otherwise specified.

Zinc-coated Steel Sheet: To AS 2551.

- Coating Class: EZ 20/20.
- Minimum Thickness: 0.6 mm provide adequate thickness is achieved by body shape, folding technique, etc.; otherwise 0.8 mm.

Extruded Aluminium: To AS 1866. May be used in lieu of, or in conjunction with, sheet steel elements.

- Alloy Designation: 6063-T5.

Aluminium Sheet: To AS 1734.

- Alloy Designation: 5005/H34.
- Minimum Thickness: 1.0 mm.

Stainless Steel: To AS 1449.

- Grade: 304.
- Minimum Thickness: 1.0 mm.

JOINTING:

Sheet Metal: Weld joints and grind smooth exposed corners and edges.

Extruded Aluminium: Weld joints, or use appropriate proprietary jointing devices. Do not use self-tapping screws unless specifically designed extruded slots are provided.

Between Aluminium and Sheet Steel: Pop-rivet, or use appropriate proprietary jointing devices. Do not use self-tapping screws.

MOULDED PLASTIC BODIES - LUMINAIRES

MATERIALS: For exterior use, provide a UV stabilized material with a carbon black filler or other approved means of stabilization.

BODY FINISH - LUMINAIRES

METAL BODIES:

Preparation: (Except for aluminium bodies which have been etched and anodized): Degrease to AS 1627 Part 1.

Finish: An approved factory applied finish not inferior to 'GLOSS LATEX: EXTERIOR - PAINTING' or a powder coating.

Minimum Paint Thickness: 0.025 mm for each surface and edge.

BAKED FINISHES:

PRECOATED FINISH: Factory-applied vinyl or acrylic precoated finishes on aluminium or aluminium-zinc coated steel capable of withstanding 20% salt spray at 35 degrees C for three hundred hours without blistering, corroding, chalking, losing gloss or adhesion or changing colour after a recovery period of 30 minutes.

POWDER COATING:

PREPARATION:

Unprotected Steel: Remove rust by abrasive blast to AS 1627.4 Class 3, clean by immersing in trichloroethylene or an alkaline solution, and apply a coat of iron phosphate.

Galvanized Steel: Clean by immersing in a suitable alkaline or acidic solution, apply a chromate or zinc phosphate chemical conversion coating, rinse and degrease.

Aluminium: Clean by immersing in a suitable alkaline or acidic solution, caustic etch and apply a chromate chemical conversion coating.

APPLICATION: Apply powder using an electrostatic spray gun or fluidized bed such that no dust particles or other impurities blemish the final product.

BAKING: After application, bake the film in an oven accurately controlled to the temperature recommended by the coating manufacturer.

DIFFUSERS AND VISORS - LUMINAIRES

REQUIREMENT: Provide diffusers and visors manufactured from UV stabilized acrylic, UV stabilized polycarbonate or other approved material which achieves the specific glare control.

POSITION: Locate diffusers and visors so that the diffuser or visor temperature does not exceed 75 degrees C.

COLOUR MATCHING: Colour match diffuser of the same type.

WIRING - LUMINAIRES

STANDARD: To AS 3137.

FLUORESCENT LUMINAIRES:

Cable: V105 250 V PVC insulated cable copper conductor, minimum size 24/0.2 mm (stranded), or 1/0.80 mm (solid).

Loom Wiring: Neatly loom the wiring and install clear of ballasts. Fix the looms with soft metal, polythene or similar approved clips fastened to the luminaire body.

Termination: Terminate the cables in a terminal block adjacent to the cable entry.

INCANDESCENT AND DISCHARGE LAMP LUMINAIRES:

Cable: Wire between the terminal block and lampholder in stranded 250 V teflon-insulated cable, minimum size 24/0.2 mm.

Termination: Provide a junction box mounted on the top or side or within the luminaire body. Mount a fixed terminal block inside the junction box.

BALLASTS: Connect the ballasts to provide independent operation of each lamp.

TERMINAL BLOCKS: Fix each terminal block to the body and provide one spare terminal in each block. Unless otherwise specified, provide terminals which are each capable of accommodating not less than three 2.5 mm² conductors.

EARTHING: Provide an earthing connection point comprising an earth bolt or screw of not less than 5 mm diameter x 12 mm length located adjacent to the terminal block. Fix the bolt or screw to the luminaire metallic body or junction box by welding or double locknuts on to serrated washers.

FLEXIBLE CORD: To recessed luminaires provide an external 1500 mm length of 1 mm² 3-core PVC/PVC flexible cord to AS 3191, connected to a 10 A 3-pin plug top to AS 3112.

SUBSECTION 813 ACCESSORIES AND CONTROLGEAR

BALLASTS - LUMINAIRES

BALLAST RATINGS: For operation at 240 V 50 Hz with a maximum operating temperature of 130 degrees C.

CONNECTIONS: Provide quick-connect terminals or teflon-insulated leads not less than 150 mm in length.

FLUORESCENT LAMP BALLASTS:

Standards: To AS 2643 and AS 3168.

Operation: Switch start, unless otherwise specified.

Losses: The losses at the operating temperature, measured to AS 2643 Appendix F, shall be within the limits specified in the following tables. Low loss ballasts shall be used unless otherwise indicated.

Lamp Size (W):	Ballast Grade:			Nominal Lamp Current (A):
	Standard (W):	Premium (W):	Low Loss (W):	
Switch Start Type:				
18/20	12.0	9.0	6.0	0.37
36/40	12.0	9.0	6.0	0.43
58/65	15.0	12.0	9.0	0.67
Rapid Start Type:				
20	14.0	11.0	7.5	0.37
40	14.0	11.0	7.5	0.43
65	17.5	14.5	11.0	0.67

Filament Transformers: To AS 3108, Parts 1, 2 and 3.

DISCHARGE LAMP BALLASTS:

Mercury Vapour and Low Pressure Sodium Types: To AS 1468.

High Pressure Sodium Type: To IEC 662.

Metal Halide Type:

- Up to 150 W: Reactance start.
- Indoor, above 150 W: Constant wattage.
- Outdoor, above 150 W: To lamp manufacturer's recommendations.

Igniters: Provide igniters of a type which disconnects upon ignition of the lamp. The design and use of igniters shall be as recommended by the lamp manufacturer.

CAPACITORS AND FILTERS - LUMINAIRES

POWER FACTOR CORRECTION: To AS 2644. Provide correction which achieves a power factor of not less than 0.85 lagging after two hours of continuous operation.

RADIO INTERFERENCE SUPPRESSION:

Limits: To AS 1044.

Capacitors: To AS 3145.

BLOCKING INDUCTORS: Where required by the supply authority, provide blocking inductors to that authority's approval.

FLUORESCENT LAMP STARTER SWITCHES - LUMINAIRES

STANDARD: To IEC 155.

STARTER SWITCHES: Where used, electronic starter switches shall limit the d.c. current to the design capacity of the ballast.

LAMP HOLDERS - LUMINAIRES

STANDARDS: To AS 3000 and AS 3137.

FLUORESCENT TUBE TYPE:

Material: High strength non-tracking thermoplastic to AS 3100.

Contacts: To make positive electrical contact with the lamp pins.

Indication: Provide visual indication when the lamp pins are in the connected position.

BAYONET CAP TYPE: To AS 3117.

EDISON SCREW TYPE: To AS 3140.

Goliath Edison Screw Type: (GES): Shall be suitable for both E.39 (Mogul) and E.40 (GES) lamp caps.

FUSES - LUMINAIRES

STANDARD: To AS 3135 Category A4.

REQUIREMENT: Provide fuses for fluorescents and high intensity discharge lamp ballasts.

MOUNTING OF ACCESSORIES - LUMINAIRES

FIXING GENERALLY:

Location: Positively locate accessories, including ballasts, capacitors, connection blocks, lampholders and the like.

Fixings: Fix ballasts and all other heavy accessories to the luminaire body (or to separate enclosures where applicable) with plated metal-thread screws and nuts. Screws shall remain fixed in position when accessories and fixing nuts are removed.

BALLASTS:

Location: Position ballasts to obtain maximum heat dissipation.

Spacing: Where two or more ballasts are installed in the one luminaire, provide a minimum spacing of 50 mm between ballasts. Maintain the same spacing from capacitors. Use a separate ballast for each lamp.

BAYONET CAP AND EDISON SCREW ACCESSORIES:

Lampholder and Socket Mountings: Fix lampholder and starter switch sockets to prevent rotation.

FLUORESCENT ACCESSORIES:

Lampholder Mountings: Mount each lampholder on a rigid bracket, to the dimensions and tolerances specified in AS 1201.2. Space lampholders laterally at not less than 70 mm centres.

Starter Switch Mounting: Unless otherwise specified, mount each starter switch so that it is not less than 20 mm from other components in the gear tray, and is accessible without removing the gear tray cover.

SUBSECTION 815 LAMPS

LAMPS GENERALLY - LUMINAIRES

REQUIREMENT: Supply luminaires complete with lamps.

SINGLE MANUFACTURER: Lamps of the one type shall be of the same manufacture.

LAMP IDENTIFICATION: Provide a legible label in each luminaire, fixed in a position convenient for reading at the luminaire installed position, which clearly identifies the lamp type to be installed in the luminaire.

TUBULAR FLUORESCENT LAMPS - LUMINAIRES

STANDARD: To AS 1201.

REQUIREMENT: Provide lamps with low resistance cathodes and standard bi-pin caps.

INCANDESCENT LAMPS - LUMINAIRES

STANDARD: To AS 2325.

TYPE: Tungsten filament for general lighting purposes rated at 250 V.

LAMP CAPS:

Lamp Rating:

Cap Type:

Up to 100 W:
100 - 200 W:
Over 200 W:
Extra low voltage:
(ELV):

Bayonet (BC)
Medium Edison screw (MES)
Goliath Edison screw (GES)
Small bayonet cap (SBS), or
Small Edison screw (SES)

HIGH PRESSURE MERCURY VAPOUR LAMPS - LUMINAIRES

STANDARD: To IEC 188.

HIGH PRESSURE SODIUM LAMPS - LUMINAIRES

STANDARD: To IEC 662.

LOW PRESSURE SODIUM LAMPS - LUMINAIRES

STANDARD: To IEC 192.

EMERGENCY LUMINAIRES - LUMINAIRES

All emergency luminaires (including emergency exit luminaires) shall be constructed, wired and installed accordance with Australian Standard AS 2293.1.

All emergency luminaires (including emergency exit luminaires) shall be classified and marked in accordance with Australian Standard AS 2293.1.

SECTION 817 - APPLIANCES**SUBSECTION 001 GENERAL****SCOPE - APPLIANCES**

OUTLINE DESCRIPTION: This Section details the requirements for the supply and the installation of various types of appliances. Refer to the Electrical Drawings and the 'ELECTRICAL SERVICES SCHEDULE - ELECTRICAL SERVICES' to determine the appliances required and the contractual responsibilities regarding their supply and installation.

ASSOCIATED SECTIONS: This Section is associated with Section 800 - 'ELECTRICAL SERVICES'. Traditionally this Section would form part of the electrical services work.

APPLICABLE DRAWINGS: Electrical Site Plan, Electrical Installation Drawings, and any associated drawings/pictorials referenced.

HOT WATER SYSTEMS - APPLIANCES

STANDARD: To AS 1056, AS 1529 Parts 1 and 3, and AS 3142.

REQUIREMENT: Hot water systems are to be of size and wattage indicated. Ensure unit supplied will fit into space provided.

Approval: From Queensland Electricity Commission or the statutory approvals Authorities in other States of the Commonwealth of Australia.

OUTLET: Permanently connect system on a separate circuit as follows:

<u>Wattage</u>	<u>Cable Size</u>	<u>Protections</u>
0 - 1800 W	1.5 mm ²	16A A.C.B.
2000 - 3600 W	2.5 mm ²	20A A.C.B.
4000 - 4800 W	4.0 mm ²	25A A.C.B.

CONTROL: Provide a white flush suitably rated single pole control switch with neon indicator. Mount switch on wall adjacent system. Engrave switch "Hot Water" with 6 mm letters.

WIRING: Protect wiring from switch with flexible plastic conduit and flexible plastic conduit fittings.

HOT WATER UNIT:

Conformity: With requirements of Standard Water Supply By-Laws.

Cylinder: Fabricated from rolled steel (minimum thickness 3 mm) with cylinder ends (minimum thickness 5 mm) pressed to concave shape and lined with vitreous enamel.

External Casing: Manufactured by using sheet steel of minimum thickness 0.6 mm and finished in baked enamel.

Insulations: Low density mineral wool blanket (or equivalent) such that the heat loss does not exceed the appropriate value given in AS 1056.

Anode: Provide a replaceable magnesium alloy anode of a type most suitable for application with the available type of water. Suspend anode from the top to within 100 mm of the bottom of the pressure cylinder. Anode to provide cathodic protection from mineral, electrical or other form of deleterious action to the cylinder.

Element: Single phase screw-in or bolt-in type in direct contact with the water. Total wattage not to exceed 15.5 watts per litre of rated hot water delivery, unless otherwise specified.

Thermostat: Contact type permanently set at 70 degrees C, and fitted adjacent to the element. Provide a built-in over temperature cut-out to automatically shut off the electricity supply.

Pressure Relief Valve: To be a combination temperature and pressure relief valve type with a maximum temperature setting of 99 degrees C and a maximum pressure setting of 1400 kPa.

INSTALLATION:

Tray: Seat heater in a PVC spill tray with 75 mm upstand all round.

Support: Support heater on three 50 mm PVC pipes cut in length to match the heater diameter to provide air space between the heater base and tray.

Drainage: Provide a drain to the tray by means of 25 mm bore PVC tubing discharging to a drainage point. Discharge from pressure relief valve to be run to tray by means of 13 mm copper tubing.

Orientations: Position Hot Water Unit so as, for maintenance purposes, access to elements is not restricted.

Stopcock: Provide a stopcock on the discharge pipe at the base of the cylinder in an accessible position to facilitate emptying of the cylinder contents into spill tray for maintenance purposes.

RTI RELEASE

SECTION 825 - SWITCHBOARDS**SUBSECTION 001 GENERAL****SCOPE - SWITCHBOARDS**

EXTENT OF WORK: The work covered in this Section comprises the supply of necessary equipment and materials for, and installation, commissioning, servicing and maintenance of the required switchboards.

ASSOCIATED SECTIONS: This Section is associated with Section 800 - 'ELECTRICAL SERVICES'. Traditionally this Section would form part of the electrical services work.

APPLICABLE DRAWINGS: Electrical Site Plan, Electrical Installation Drawings, and any associated drawings/pictorials referenced.

STANDARDS - SWITCHBOARDS

SITE COPY: Keep on the site a copy of AS 3439.1.

AUTHORITIES AND APPROVALS - SWITCHBOARDS

WORKS BY AUTHORITY: If the responsible authority, pursuant to statutory powers vested in it, elects to perform or supply part of the Works, make the necessary arrangements with the authority.

SUPPLY AUTHORITY'S EQUIPMENT: If supply authority metering is required, install meters, current transformers, potential fuses, test links and the like equipment supplied by the supply authority, and provide the wiring necessary to complete the installation.

Meter Compartment: When required, install the supply authority's equipment in a meter compartment constructed and enclosed to that authority's requirements, and as specified for the main switchboard where not in conflict with those requirements. Fit to the compartment a hinged door with a non-lockable latching mechanism.

APPROVED SUB-CONTRACTORS - SWITCHBOARDS

MANUFACTURE: Obtain the switchboard from an approved specialist switchboard manufacturer.

OPERATIONAL MAINTENANCE - SWITCHBOARDS

MAINTENANCE PERIOD: Co-extensive with the Defects Liability Period.

REQUIREMENT: During the maintenance period:

- Carry out periodic inspections and maintain the switchboard installation in a condition to meet the specified performance.
- Promptly rectify faults. Replace faulty materials and equipment without charge.
- Provide thermoscans at 6 months and at end of Defects Liability Period.
- Provide written reports on maintenance activities.

MAINTENANCE BY PRINCIPAL: Nil.

CERTIFICATION: At the end of the maintenance period make a final inspection of the installation and upon satisfactory completion certify in writing that the installation is operating correctly.

MANUALS - SWITCHBOARDS

REQUIREMENT: Provide the specified number of copies of a combined operator's manual and technical manual written in clear concise English, containing a title page listing the supplier's name, address and telephone number, a table of contents, and the following data:

Operator's Manual:

- Information necessary for the satisfactory long-term operation and regular maintenance of the installation;
- Recommended maintenance periods and procedures;
- Particulars of maintenance tools or equipment provided and instructions for their use.

Technical Manual:

- Detailed technical description of each equipment item and its function, and instructions for use;
- Where necessary, procedures for dismantling and re-assembly of equipment;
- List of spare parts provided.

FORM: A4 size, machine printed or typed on durable printing paper, neatly bound in durable vinyl or similar hard covers.

NUMBER OF COPIES: 3.

SUBSECTION 180 INSTALLATION

SITE ERECTION - SWITCHBOARDS

INSTALLATION: To AS 3000.

WALL MOUNTING SWITCHBOARDS: Fix the switchboard rigidly into position by not less than four fixing screws of minimum size 6 mm. Use masonry anchors for brickwork and concrete work.

FLOOR MOUNTING SWITCHBOARDS: Install the switchboard level and plumb using neatly cut and fitted packing plates under the channel base. Fix the base to the floor by means of minimum 12 mm fixing screws, front and rear, at either end and at intervals of 2 m along the length of the board. Neatly pack the space under the base after levelling with sand-cement grout.

SUBSECTION 300 DESIGN AND CONSTRUCTION

GENERAL DESIGN - SWITCHBOARDS

MANUFACTURED SWITCHGEAR ASSEMBLIES: To AS 3439.1.

NON-DOMESTIC SWITCHBOARDS AND CONTROL PANELS: Comprising equipment where the installation requirement is less than 100 A per phase and the prospective fault level is less than 5 kA: To AS 3000.

DOMESTIC SWITCHBOARDS: To AS 3000 and AS 3006.

TRANSIENT PROTECTION: Provide equipment and accessories which generally incorporate protection of semiconductor components against damage caused by switching and other external transients.

EXTERNAL DESIGN - SWITCHBOARDS

REQUIREMENT: Provide an enclosure comprising panels, doors and the like, giving the specified enclosure, segregation and degree of protection.

Design and Construction: To AS 3439.1 where applicable.

Degree of Protection: To AS 1939.

SUPPORTING STRUCTURE: Fabricate supporting frames from rolled, cold formed or extruded metal sections, with joints fully welded and ground smooth. Provide concealed fixing or brackets located to allow the assembly to be mounted and fixed in the specified location without removal of equipment.

PANELS: Machine fold sheet metal angles, corners and edges with a minimum return of 25 mm around the edges of front and rear panels, and 13 mm minimum return edge around doors. Provide stiffening to panels and doors where necessary to prevent distortion or drumming.

EQUIPMENT FIXING: Provide equipment mounting panels fixed to threaded metal inserts located inside the enclosure at the rear of the mounting panels.

LIFTING PROVISIONS: Provide fixings in the supporting structure, and removable attachments, for lifting switchboard assemblies whose shipping dimensions exceed 1.8 m high x 0.6 m wide.

FLOOR-MOUNTING: Provide a metal plinth channel, not less than 75 mm high, for mounting the complete switchboard assembly on site. Drill sufficient clearance holes for 12 mm diameter bolts, in the switchboard and the plinth, to rigidly fix the switchboard assembly to the plinth and the plinth to the floor.

Plinth Orientation: Refer to Drawings.

WALL-MOUNTING:

For Flush or Semi-Flush Switchboards: Provide a facing flange, of the same material and finish as the enclosure, and of a section which incorporates a return allowing the outside edge to fit neatly against the wall.

Minimum Flange Width: 32 mm.

WEATHERPROOFING: For protection designations of IP55 or higher second characteristic numeral to AS 1939, provide the following:

Screening: Non-ferrous insect screen material, unpainted, to ventilation and cable entry openings, to prevent entry of vermin, and guarded to provide the specified degree of protection.

Flanges to Openings: To form a drip tray and prevent the entry of water when doors or covers are open.

CABLE ENTRIES - SWITCHBOARDS

REQUIREMENT: Provide sufficient clear space within each enclosure, adjacent to the cable entries, to allow the incoming cables and wiring to be neatly run and terminated, without overcrowding.

SIZE OF ENTRY: For cable entry and internal distribution, provide cable entries sized to accommodate all required cables plus a 100% increase.

DOORS - SWITCHBOARDS

MAXIMUM WIDTH: 750 mm.

MINIMUM DOOR SWING: Through 135 degrees.

HANGING: Hang doors on heavy-duty chromium-plated steel hinges which allow easy removal of the door when in the open position.

DOOR HARDWARE: Provide a chromium plated lever-type handle to each door, operating a latching system with latching bar and guides.

LOCKING: Incorporate a cylinder lock in the latching system. All the locks of one installation shall be keyed alike.

Locks: Provide "Lowe and Fletcher" or "Lenlok Pty. Ltd." No. 92268 locks to all switchboard doors.

Number of Keys Required: 2 per switchboard installed.

DUST SEALS: Provide a resilient strip seal, of foamed neoprene or the like, around each door, housed in a suitable channel or housing and fixed with an approved industrial adhesive.

Seal Contact:

- Indoor Locations: Positive contact with a flat surface of the enclosure at least as wide as the seal strip.
- Weatherproof Switchboards: A continuous positive line of contact.

REMOVABLE PANELS AND COVERS - SWITCHBOARDS

MAXIMUM WIDTH: 750 mm.

HANGING: Hang panels and covers on fixed studs with knurled nuts or captive nuts with knurled bolts, in either case fixing is to remain part of the panel or cover.

DOOR HARDWARE: Provide chromium plated 'D' type handles to each removable plate.

DUST SEALS: Provide a resilient strip seal, of foam neoprene or the like, around the cover or panel, housed in a suitable channel or housing, fixed with an approved industrial adhesive.

SEAL CONTACT:

- Indoor Locations: Positive contact with a flat surface of the enclosure at least as wide as the seal strip.
- Weatherproof switchboards: A continuous positive line of contact.

ESCUTCHEON PLATES - SWITCHBOARDS

REQUIREMENT: Provide removable escutcheon plates with neat cut-outs for circuit breaker handles and the like. Fit chromium plated lifting handles or knobs to each escutcheon plate.

FRAME: Provide a continuous 12 mm wide support frame for the fixing of each escutcheon plate, including additional support where necessary to prevent panel distortion.

FIXING: Fix each plate to the frame with metal fixings held captive in the plate and spaced uniformly.

MAXIMUM HEIGHT: 1200 mm.

HANGING: Hang escutcheon plates on hinges which allow opening through a minimum of 90 degrees and permit the removal of the escutcheon when in the open position.

FINISHES - SWITCHBOARDS

SURFACE PREPARATION: Where metal surfaces are to be painted:

Unprotected Steel: Remove rust by abrasive blast to AS 1627.4 Class 3, clean by immersing in trichloroethylene or an alkaline solution, and apply a coat of iron phosphate.

Galvanized Steel: Clean by immersing in a suitable alkaline or acidic solution, apply a chromate or zinc phosphate chemical conversion coating, rinse and degrease.

Aluminium: Clean by immersing in a suitable alkaline or acidic solution, caustic etch and apply a chromate chemical conversion coating.

PAINT SYSTEMS:

For Indoor Locations: A system not inferior to 'FULL GLOSS, SOLVENT-BORNE: INTERIOR - PAINTING'.

For Exterior Locations: A system not inferior to 'FULL GLOSS, SOLVENT-BORNE: EXTERIOR - PAINTING'.

PAINT COLOURS: To AS 2700.

UNPAINTED METAL FINISHES: Linishing, sanding, sand blasting, etching and the like shall be within the range of approved samples.

Linishing: Provide a linish finish to AS 1100.201 Roughness grade N4.

Sanding: Use an orbital sander with No. 60 emery paper. Wipe over on completion with a kerosene soaked cloth.

Etching: An alkaline process. Clean thoroughly on completion.

Sand Blasting: Produce a fine even satin finish.

SUBSECTION 810 CONDUCTORS

BUSBARS - SWITCHBOARDS

REQUIREMENT: Provide busbar circuits within the switchboard as specified.

DE-RATING: De-rate busbars in accordance with AS 3000 Appendix C.

CROSS SECTION: Radius edges and corners to prevent damage to insulation.

SUPPORT: Provide support sufficient to withstand without damage the maximum prospective fault currents.

INSULATION: Insulate busbars as follows:

Active and Neutral Busbars: A fully-insulated system using the specified insulation material.

Joints: Insulate either by taping or plastic coating, as follows:

- Taped Joints: Apply a non-adhesive stop-off type tape, coloured to match the specified colour coding, half lapped to achieve a thickness of not less than that of the solid insulation.
- Plastic-Coated Joints: Apply, in accordance with the manufacturer's recommendations, and to a minimum thickness equal to that of the solid insulation, an air-drying plastic coating material which achieves a tensile strength in excess of 17 MPa, and a minimum elongation of 300%.

COLOUR CODING: Colour the insulation or busbars as follows:

Active Busbars: Red, white or blue.

Neutral Busbars: Black.

Earth Busbar: Green and yellow.

Identification: Clearly mark and number terminal connections.

NEUTRAL AND EARTH LINKS - SWITCHBOARDS

LOCATION: Locate neutral and earth links within 0.6 m of each cable entry.

CONNECTIONS: Provide stud connections for cables of cross section 16 mm² or larger.

TERMINALS: Provide terminals for incoming and outgoing neutral and earth conductors, including the MEN link. Provide additional terminals for future circuits.

Identification: Clearly mark and number terminals.

WIRING - SWITCHBOARDS

CABLE TYPES: Unless otherwise specified, provide 0.6 kV V-75 PVC insulated cables to AS 3147, for general internal wiring and heat resisting insulated cables for connection to equipment capable of raising the insulation temperatures above 75 degrees C.

POWER CIRCUITS: Provide cables sized to suit a current carrying capacity of not less than the maximum continuous rating of the equipment mounted within the switchboard, or sized to withstand the 'let-through' energy of the circuit protective device, whichever is the greater. If the conductors are to be bunched or installed within wiring ducts, apply appropriate de-rating factors to AS 3008 Part 1 when determining conductor size. The minimum size power conductor shall be multistrand 2.5 mm².

CONTROL AND INDICATION CIRCUITS: Provide conductors of not less than 1.0 mm² with 32/0.2 stranding and otherwise sized to suit the current carrying capacity of the particular circuit.

CABLE COLOURS: Colour code the wiring as follows:

A Phase:	Red
B Phase:	White
C Phase:	Blue
Neutral:	Black
Earthing:	Green/Yellow
Control and Indication:	

WIRING SUPPORT: If wiring is not installed in ducts, neatly bunch, support and lace it with PVC ties or strips. Provide protective insulation where bunched wiring or cables are in contact with metal, or pass through cut-outs in sheet metal.

Segregation: Segregate electric circuits subject to possible interference, and the like.

SUBSECTION 812 SWITCHGEAR AND CONTROLGEAR

SWITCHGEAR - SWITCHBOARDS

REQUIREMENT: Provide mains switching, outgoing circuit switching, protection and auxiliary equipment as shown on the Drawings.

MOULDED CASE AND MINIATURE CIRCUIT BREAKERS - SWITCHBOARDS

STANDARDS: To AS 2184 for fault capacities of 10 kA or more. To AS 3111 for miniature overcurrent circuit breakers up to 100 A current rating and less than 10 kA fault capacity.

Range: Excepting where larger current ratings and interrupting capacities are required, provide circuit breakers with a minimum interrupting capacity of 6000 amperes at 415 V AC.

All circuit breakers provided must be available up to and including a current rating of 100 amperes as an automatic device in the one frame size.

MOUNTING: Mount the circuit breakers so that the 'ON-OFF' and current rating indications are clearly visible with the cover or escutcheon in position, and so that arc discharges from the circuit breakers are directed away from live metal and insulation. Align operating toggles in the same plane.

CLIP TRAY CHASSIS: For miniature overcurrent circuit breakers provide clip tray assemblies, capable of accepting the installation of single, double, or triple circuit breakers, and related busbars. Provide moulded clip-on pole fillers for all unused portions of the chassis.

CLEARANCE: Maintain sufficient space around the circuit breakers to allow all incoming and outgoing cables, including cables to spare poles, to be installed and terminated without overcrowding. For clip tray chassis mountings the clearance between the circuit breaker terminals and compartment walls shall not be less than 90 mm up to 36 poles and 115 mm above 36 poles.

ACCESSORIES: Provide auxiliary contacts and other required accessories.

MOUNTING:

Integral Type: Mount in a position readily accessible for viewing and adjustment.

External Type: Flush mount in the specified location.

EARTH LEAKAGE DEVICES - SWITCHBOARDS

STANDARD: To AS 3190 and AS 3111.

CORE BALANCE TYPE: Provide a built-in toroid coil operating through a shunt trip on a single or multi-pole circuit breaker.

INTEGRAL TYPE: Shall incorporate earth leakage in the circuit breaker protection operation, and be suitable for mounting in the same manner as specified for moulded case and miniature circuit breakers.

MAXIMUM TRIPPING TIME: 20 milliseconds.

LABELS - SWITCHBOARDS

MARKING: To AS 3439.1 and AS 3000. Marking shall include labels for each switchboard control, circuit designations and ratings, fuses fitted to fuse holders, current-limiting fuses, warning notices for operational and maintenance personnel, and the like.

SAMPLES: Provide samples of proposed label material, label sizes, lettering sizes and lettering text for approval.

LOCATION: Screw-fix each label adjacent to its relevant item of equipment, but not on the equipment.

MATERIAL: Two-colour laminated plastic or photo-anodized rigid aluminium.

COLOURS:

Warning Notices: White letters on red background.

Other Labels: Black on white background.

LETTERING HEIGHT: Generally not less than the following:

Main Switchboard Designation: 25 mm.

Main Switches: 20 mm.

Feeder Control Switches: 10 mm.

Identifying Labels: (on outside of cubicle rear covers, etc.): 6 mm.

Equipment Labels within Cubicles: 4 mm.

Warning Notices: 4 mm.

SCHEDULE CARDS: For light and general power distribution provide schedule cards of minimum size 200 x 150 mm with text typewritten to show:

- Sub-main designation size, rating and route length;
- Light and power circuit number, type and area supplied.

Mounting: Mount the schedule card in a holder fixed to the inside of the enclosure door, adjacent to the distribution circuit switches, and protect the schedule with a hard plastic cover.

SUBSECTION 999 SWITCHBOARDS SCHEDULES**SWITCHBOARD OPERATING PARAMETERS SCHEDULE - SWITCHBOARDS****SUPPLY SYSTEM:**

Nominal Voltages:

- Line: 415 V.
- Phase: 240 V.

Frequency: 50 Hz.

Number of Phases: Refer to single line diagram.

Number of Wires: Refer to single line diagram.

Neutral Connection: Star Point.

Earthing System: MEN.

Maximum Fault Level

Symmetrical (kA r.m.s.): Refer to single line diagram.

Supply Authority:

- Back-up protection: Primary Fuses.

SERVICE CONDITIONS:

Ambient Air Temperature Range: -5 to +40 degrees C.

Relative Humidity: Up to 100%.

TYPE 'A' SWITCHBOARD SCHEDULE - SWITCHBOARDS

DETAIL DRAWING: Drawing Number A4SE 1007 latest amendment.

LIMITING OVERALL DIMENSIONS:

Width: 600 mm.

Depth: 150 mm.

Height: 250 mm.

MINIMUM INTERNAL DEPTH: 70 mm.

EXTERNAL DESIGN: Enclosed.

MOUNTING: Wall.

DEGREE OF PROTECTION:

Numerical Designation: Weatherproof IP56, Non-weatherproof IP51.

Enclosure Category: Category 1 to AS 1939.

FORM OF SEGREGATION: Form 1.

EQUIPMENT CONNECTION: Front connected.

MATERIALS AND FINISH:

Definitions: To AS 3439.1.

	Material:	Finish:	Paint Colour:
Enclosure:	(1.0 mm thick min.	Baked enamel	Grey
Escutcheons:	(zinc annealed	paint	
Doors:	(sheet steel		

FUTURE EXTENSIONS: The switchboard general arrangement shall provide spare space for equipment required for the future circuits.

Spare Space: 50% spare space up to a maximum of 4 spare poles or as otherwise indicated on the Drawings.

CABLE ENTRIES:

Type: Knockouts.
Location: Top and bottom.
Spare Entry Space: 50%.

DOORS:

Hinge Type: Concealed.
Number of Latching Points: 1.
Lock Type: Lowe and Fletcher No. 92268 or Lenlok equivalent.

NEUTRAL AND EARTH LINKS:

Spare Space: To match spare space capacity of future extensions.

Identification for neutral connections: Mark and number all terminals

MOULDED CASE AND MINIATURE CIRCUIT BREAKERS:

Rated Current: To suit circuit loading refer to Drawings.
Fault Capacity: 6 kA minimum.
Closing Method: Manual.
Opening Method: Manual and overcurrent automatic trip.
Range: Up to 100A rating in same frame size.

EARTH LEAKAGE DEVICE:

Type: As per Drawings.
Sensitivity: 30 mA.

SECTION 910 - LANDSCAPE**SUBSECTION 001 GENERAL****APPROVED SUPPLIERS - LANDSCAPE**

PLANT MATERIAL: Obtain plant material, including plants, turf, topsoil, top dressing and mulch, from approved suppliers subject to prior written approval. Advise immediately if supply difficulties are encountered.

PROOF OF ORDERING: Furnish proof of ordering of plants as scheduled in 'PLANT SCHEDULE' shown on Drawings, within 30 days of the acceptance of the tender. Advise the Superintendent that they are ready for inspection. All plants are to be set aside in a separate common area at the nursery ready for inspection. No extension of time will be granted because of late ordering of plants. Order sufficient quantities to allow for failures.

APPROVED SUB-CONTRACTORS - LANDSCAPE

REQUIREMENT: All work shall be performed by a member of the Queensland Association of Landscape Industries or equal approved qualifications.

INSPECTION - LANDSCAPE

NOTICE: Give not less than 2 working days' notice so that inspection may be made of the following, as applicable:

- Setting out completed;
- Trees tagged;
- Clearing completed;
- Plant materials available at the source of supply;
- Sub-grades cultivated prepared prior to placing specified soil;
- Sub-grades compacted prior to paving;
- Turfing bed prepared prior to turfing, seeding or stolonising;
- Plant material set out before planting;
- Planting, staking and tying completed;
- Turfing completed;
- Paving, trim, fixtures and furniture completed;
- Upon completion of Establishment Period;
- Upon completion of Defects Liability work.

SUBSECTION 210 EARTHWORKS**CULTIVATION - LANDSCAPE**

CULTIVATION: Cultivate the ground surface in preparation for placement of specified soil by ripping to depths shown on drawings. Do not disturb services or tree roots; if necessary cultivate these areas by hand. During cultivation, thoroughly mix in any materials specified to be incorporated into the sub-grade. Do not cultivate within 500 mm of paths or structures. Remove stones exceeding 25 mm, clods of earth exceeding 50 mm, and any other deleterious material brought to the surface during cultivation, including roots, sticks, weeds and the like. Trim the surface to the required shapes after cultivation.

SUB-GRADE SURFACES: Trim after cultivation to shapes and levels such that the required depth of specified soil can be placed to the specified finished surface levels.

METHOD: Submit details of the proposed method to be used. Obtain approval from the Superintendent prior to commencing cultivation.

SAMPLE AREA: Prepare a sample area of cultivation approximately 5 m x 5 m in a location to the following areas agreed with the Superintendent, and obtain approval before proceeding:

- planting areas;
- turfed areas;

Incorporation: Approved areas may be incorporated into the Works.

IMPORTED SOIL MIX - LANDSCAPE

DEFINITIONS:

Soil: To AS 2223 and AS 3743.

Soil Mix Type C: To AS 2223, clause 3.2.2, Premium Garden Soil.

Soil Mix Type D: To AS 2223, clause 3.2.1, General Purpose Soil.

SOIL TYPES AND DEPTHS: The soil types required from the table below are shown on the Drawings. The depths of soil are shown on the Drawings.

SOIL MIX SCHEDULE:

Type C

Sandy Loam	45%	
Aged Lignified Plant Material	35%	(such as aged cellulose, aged bagasse, aged feed lot manure, or aged sawdust. Aged for a minimum of 5 weeks and stored for a further 3 weeks)
Organic Matter	20%	(such as cellulose, bagasse, feed lot manure, sawdust, hay, grass, wheat stubble or cotton seed meal)
Crop King 88	1.5 kg/cu metre	
Urea	1.5 kg/cu metre	

Type D

Sandy Loam	55%	
Aged Lignified Plant Material	45%	(such as aged cellulose, aged bagasse, aged feed lot manure, or aged sawdust. Aged for a minimum of 5 weeks and stored for a further 3 weeks)
Crop King 88	1.5 kg/cu metre	
Urea	1.5 kg/cu metre	

SOIL MIX PARTICLE SIZE SCHEDULE: (% passing by mass):
AS sieve aperture% Passed:

2.36	100
1.18	90 - 95
0.60	70 - 85
0.30	20 - 30
0.15	0 - 3
0.075	0 - 1.5
0.002	0

SOIL MIX PROPERTIES SCHEDULE:

Property	Type	Amount
Nutrient levels	Phosphorus (P)	0.7 to 4 mg/l (Type C) 8 to 40 mg/l (Type D)
	Potassium (K)	35 to 250 mg/l
	Calcium (Ca)	50 to 340 mg/l
	Calcium (Ca)/Magnesium (Mg) Ratio	
2 to 6	Potassium (K)/Magnesium (Mg) Ratio	
1 to 7	Sodium (Na)	< 100 mg/l
Trace Elements	Iron (Fe)	> = 35 mg/l
	Copper (Cu)	0.4 to 10 mg/l
	Zinc (Zn)	0.3 to 10 mg/l
	Manganese (Mn)	1 to 15 mg/l
	Boron (B)	0.02 to 0.65 mg/l
Other Properties:	Bulk Density	=> 0.85 kg/l
	pH	5.8 - 6.5 (pH units)
	Electrical conductivity	=< 1.8 mS/cm
	Organic matter	=> 20% (Type C) => 15% (Type D)

Analyses to be carried out in accordance with AS 3743 APPENDIX C as for Soil Mixes, Organic matter to be determined by 'Loss on Ignition' method.

IMPORTED SOIL MIX: Import approved soil mix "Type C", "Type D" and Topdressing on to the site.

IMPORTED SOIL MIX ALTERNATIVE: Site strip topsoil raised to the standard of the appropriate imported soil mix type by the use of additives such as organic matter lime etc, may be approved for use at the Superintendent's discretion, subject to compliance with the relevant test criteria, and provided that there shall be no contract variation involving additional cost.

TOP DRESSING - LANDSCAPE

DEFINITIONS:

Top Dressing: To AS 2223, clause 4, suitable for application to turf or grass areas.

TOP DRESSING DEPTHS: The depth of topdressing is shown on the Drawings.

TOP DRESSING PARTICLE SIZE SCHEDULE: (% passing by mass):

AS sieve aperture % Passed:

2.36	100
1.18	90 - 95
0.60	80 - 90
0.30	25 - 45
0.15	20 - 30
0.075	15 - 20
0.002	10 - 15

TOP DRESSING PROPERTIES SCHEDULE:

Property	Type	Amount
Other Properties	Bulk Density	1.35 - 1.45 tonne per cubic metre
	pH	5.5 - 6.5
	Electrical conductivity	=< .65 mS/cm
	Specific Gravity	2.4 - 2.6
	Acid Solubility	< 5% in a 1:1 HCL and water solution
Trace Elements	Copper (Cu)	0.3 to 5 mg/l
	Zinc (Zn)	0.5 to 5 mg/l
	Manganese (Mn)	2 to 50 mg/l
	Boron (B)	0.05 to 2 mg/l

TESTING - LANDSCAPE

Requirement: Carry out the tests specified in 'IMPORTED SOIL MIX- LANDSCAPE' & 'TOP DRESSING - LANDSCAPE' to the relevant Australian Standards by an approved NATA testing authority.

Obtain technical approval of the Superintendent prior to importing to site soil mixes and topdressing.

Samples for Testing:

- Imported Soil Mix: To AS 2223 Appendix A, blended sample size to be 250 grams.
- Top Dressing: To AS 2223 Appendix A, blended sample size to be 250 grams.

SOIL TESTS: Take as recommended in AS 2223 Appendix A, and test to the methods in AS 3743, as applicable. Test all specified soil and top dressing.

Certificates: Forward original test certificates from a NATA testing authority to the Superintendent.

Costs: All costs associated with testing shall be at the Contractor's expense.

Sample for Superintendent: Provide a 1 kg sample of the soils and top dressing approved for use in the Works, to the Superintendent prior to spreading of soil.

PLACING SPECIFIED SOIL - LANDSCAPE

CONTAMINATION: Where diesel oil, cement or other phytotoxic material has been spilt on the subsoil or specified soil, excavate the contaminated soil, dispose of it off the site, and replace it at no extra cost with imported soil mix, as directed, to restore design levels.

PLACING: Place the appropriate specified soil on the prepared subsoil to the areas and depths shown on the Drawings. Spread and grade evenly, making the necessary allowances so that the required finished levels and contours may be achieved after light compaction.

COMPACTION: Prevent excess compaction by constructional plant. Compact lightly and uniformly in 150 mm layers. Progressively tamp backfilling soil to avoid later subsidence, and thoroughly water to prevent voids. Rake over lightly to attain finished profiles. Avoid differential subsidence and produce a finished soil surface which is

- at design levels as shown on Drawings;
- smooth and free from stones or lumps of soil;
- graded to drain freely, without ponding, to catchment points;
- graded evenly into adjoining ground surfaces; and
- ready for planting.

PLANTED AREAS: Progressively tamp backfilling soil to avoid later subsidence, and thoroughly water to prevent voids. Rake over lightly to attain finished profiles.

FINISHING: Finish soil as shown on Drawings

SURPLUS: Unless otherwise directed, dispose of surplus soil remaining on site after placing by spreading evenly over the areas directed by the Superintendent.

SUBSECTION 120 MATERIALS**FERTILIZER - LANDSCAPE**

SUPPLY: Provide proprietary fertilizer, deliver to the site in sealed bags marked to show manufacturer or vendor, weight, fertiliser type, N:P:K: ratio, recommended uses and application rates. Use in accordance with the recommendations.

FERTILIZER TYPES & RATES: As shown on Drawings.

APPLICATION:

Turfing:

- Mix the fertilizer thoroughly into the specified soil prior to spreading specified soil;
- Broadcast over turfed area immediately prior to the end of Establishment Period and thoroughly water in.

Plantings: Place fertilizer as shown on Standard Landscape Detail LD 121 at the time of planting.

MULCH - LANDSCAPE

GENERALLY: Use mulch which is free of deleterious, toxic and extraneous matter such as soil, weeds, stones, fresh pine bark, sticks and the like.

LOCATION: Mulch the areas shown on the Drawings.

DEPTH: As shown on Drawings after settlement.

APPLICATION: Slope towards the base of plant stems, but not in contact with the stem.

MULCH TYPES:

Slash Pine Bark: From mature trees, graded in size from 50 x 50 x 25 mm to 25 x 15 x 15 mm, free from wood slivers.

PLANTS - LANDSCAPE

GENERALLY: Supply plants which

- have large root systems, without serious evidence of root curl, restriction or damage;
- are vigorous, well established, free from disease and pests, of good form consistent with species or variety;
- are hardened off, not soft or forced, and suitable for planting in the natural climate conditions prevailing in the location of planting;

Trees: Use trees which, unless required to be multi-stemmed, have a single leading shoot.

SUBSTITUTIONS: Make no substitutions unless approved in writing by the Superintendent. Substitutions will not be approved if plants have not been made available for inspection at the Nursery within 30 days of the contract being awarded.

LABELLING: Label at least one plant of each species or variety in a planting group with a durable waterproof printed plastic tag.

REPLACEMENTS: Order sufficient quantities to allow for failures. Use plants of the same type, quality and size, replace any plants which are damaged whilst being transported to the site or during the work under the Contract or which fail or are rejected.

WARRANTY: Furnish a warranty from the supplier attesting that the plants are true to the specified species and type, and free from diseases, pests, weeds and the like.

STORAGE: Deliver plant material to the site on a day to day basis, and plant immediately after delivery. If this is not possible, keep them in good condition on the site, adequately protected from frost, wind, sun, and vermin by appropriate storage methods, including on-site nursery of sufficient size, with provision for watering the stock.

POTTING ON: Do not carry out potting on unless authorised.

PLANT CONTAINERS: Supply plants in weed-free containers of the sizes specified in the 'PLANT SCHEDULE' shown on Drawings.

PLANT SIZES:

- Where a minimum plant height is specified in the 'PLANT SCHEDULE', the height shall be the vertical distance between the soil level and the natural top of the plant whilst standing vertically.
- Where a minimum plant height is not specified in the 'PLANT SCHEDULE', provide the plant of a height appropriate to the pot size.

TURF - LANDSCAPE

TURF: Obtain turf from an approved specialist grower of cultivated turf. Use turf of even thickness, free from weeds and other foreign matter.

SUPPLY: Deliver the turf from the supplier within 24 hours of being cut, and lay within 36 hours of cutting. Prevent it from drying out between cutting and laying.

WARRANTY: Furnish a warranty from the supplier that the turf is free from weeds and other foreign matters.

TURF:

Species & Grade: As shown on the Drawings.

Grade A: Shall have a minimum of 95% of the species type specified.

Grade B: Shall have a minimum of 80% of the species type specified.

Cover Grass: Shall have a minimum of 50% of the species type specified.

Minimum Thickness: 25 mm of soil attached.

SUBSECTION 150 WORKMANSHIP

TURFING - LANDSCAPE

FERTILIZING: Mix the fertilizer thoroughly into the specified soil before placing turf.

LAYING: Lay the turf.

- in "stretcher" pattern with the joints staggered and close butted;
- parallel with the long sides of level areas, parallel with contours on slopes;
- to design levels shown on Drawings;
- close butt all joints.

TAMPING: Lightly tamp to an even surface immediately after laying. Roll the turf with a roller weighing not more than 90 kg per metre of width for sandy or light soils.

WATERING: Immediately after laying. Moisten the topsoil to its full depth. Continue watering as necessary to maintain moisture to this depth. Keep the turf in a healthy condition.

MOWING: Maintain the grass at the required height by mowing.

CORING: Core the turf surface with a hollow tyne corer (tynes to be min. 19mm diameter) to a depth of 200mm. Pass coring machine several times over surface to achieve close spacing of core holes. Remove core plugs from site. Core prior to top dressing.

MAKING GOOD: Lift failed turf and relay with new turf.

MAINTENANCE: Maintain the turfed areas until the attainment of a dense continuous sward of healthy and evenly green grass over the whole area. Lift failed turf and relay with new turf. Where levels have deviated from the design levels after placing and watering, lift turf and regrade specified soil to achieve design levels.

TOP DRESSING: When the turfed area is established & after coring; Mow, remove cuttings and lightly top dress to all turfed areas to a depth of 10 mm with top dressing as specified in 'TOP DRESSING - LANDSCAPE'. Rub the dressing well into the joints and correct any unevenness in the turf surface.

MOWING - LANDSCAPE

GENERALLY: Mow grass to achieve the following program:

CUT:

- Mow to 20 mm height when turf has grown to 40 mm height;
- Repeat as necessary to encourage good turf growth.
- Mow turf to 20 mm height during the last week of the Establishment Period.

WEEDING - LANDSCAPE

REQUIREMENT: Remove weeds that emerge in the grassed areas, or where necessary spray with an approved weedicide for broad leaved weeds, to manufacturer's recommendations.

PLANTING - LANDSCAPE

LOCATIONS: Do not vary the plant locations from those shown on the Drawings unless otherwise directed in writing. If it appears necessary to vary the locations and spacings to avoid service lines, or to cover the area uniformly, or for similar reasons, apply for directions.

PLANTING CONDITIONS: Do not plant in unsuitable weather conditions such as extreme heat, cold, wind or rain. Suspend excavation in other than sandy soils when the soil is wet, or during frost periods.

WATERING: Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress.

PLACING: When the hole is of the correct size, and not before, remove the plant from the container with minimum disturbance to the root ball, ensure that the root ball is moist and place it in its final position, in the centre of the hole and plumb, and with the soil level of the plant root ball level with the finished surface of the surrounding soil.

FERTILIZING: Specified in 'FERTILIZER - LANDSCAPE'.

BACKFILLING: Backfill with specified soil. Lightly tamp down the mixture and water to eliminate air pockets. Ensure the specified soil is not placed over the top of the root ball, so that the plant stem remains the same height above ground as it was in the container.

WATERING BASINS: Construct a watering basin around the base of each individual plant, other than in planting beds, consisting of a raised ring of soil capable of holding a minimum of 10 L.

PLANTING MACHINE: If a planting machine is to be used as an alternative to hand planting, submit the proposed method for approval.

CONTAINERS: Collect empty plant containers daily during planting operations and remove or store on site for later removal if permitted, but ensure that they are not able to be scattered by wind or other causes.

MULCH SPREADING - LANDSCAPE

REQUIREMENT: Spread so that after settling it is

- smooth and evenly graded between design surface levels;
- of the required depth and areas shown on the Drawings; and
- sloped towards the base of plant stems in planting beds, but not closer than 50 mm with the stem.

SPRAYING - LANDSCAPE

REPORTING: Immediately report any evidence of insect attack or disease amongst plant material it is noted and await further instructions from the Superintendent.

SPRAYING: If so directed, spray with an insecticide, fungicide or both in accordance with manufacturer's recommendations, and to comply with statutory requirements. Submit proposal and obtain approval before starting this work.

SUBSECTION 187 ESTABLISHMENT**PLANTING ESTABLISHMENT - LANDSCAPE**

PLANTING ESTABLISHMENT PERIOD: The planting establishment period shall be six (6) weeks and shall commence from the Date of Practical Completion of the Works or from the Date of Practical Completion of the planting works (if specified to be a separable part of the Works), whichever is the later.

PRACTICAL COMPLETION OF PLANTING: Practical Completion of the planting works includes, but is not limited to;

- establishment of turfed areas
- replacement of plants which have failed or been damaged or stolen during the work under the Contract.

MAINTENANCE PROGRAM: Furnish a proposed planting maintenance program, and amend it as required. Comply with the approved program.

MAINTENANCE LOG BOOK: Keep a log book recording when and what maintenance work has been done and what materials, including approved toxic materials, have been used. Maintain log book in location nominated by superintendent. All entries are to be initialled by person nominated by superintendent.

MAINTAINING EXISTING PLANTING AND TURF: Where existing planting or turf is shown or otherwise designated to be within the contract area, maintain it as specified for the corresponding classification of new turf or plantings.

PROTECTION OF WORKS: Provide any fencing or barriers necessary to protect the planting from damage throughout the Planting Establishment Period.

RECURRENT WORKS: Throughout the Planting Establishment Period, continue to carry out recurrent works of a maintenance nature, including but not limited to, watering, mowing, weeding, rubbish removal, fertilizing, pest and disease control, restolonizing, returfing, staking and tying, relabelling, replanting, cultivating, pruning, aerating, renovating, top dressing, keeping the site neat and tidy.

REPLACEMENTS: Continue to replace failed, damaged or stolen plants.

MULCHED SURFACES: Maintain the surface in a clean and tidy condition and reinstate the mulch as necessary to maintain specified depth.

STAKES AND TIES: Adjust and/or replace as required.

TURFED AREAS: Commence turf maintenance at the completion of stolonizing and turfing. Water and weed as required to maintain healthy and weed free growth. Mow as required to maintain turf height specified in 'MOWING - LANDSCAPE'. Apply lawn fertilizer as specified in 'FERTILIZER - LANDSCAPE' immediately prior to the end of Establishment Period. Carry out the last mowing and fertilization not less than seven days before the end of the planting establishment period. Remove turf clippings from the site.

WEEDING AND RUBBISH REMOVAL - LANDSCAPE

WEED ERADICATION: Regularly remove, by hand, rubbish and weed growth that may occur or recur throughout turfed, planted and mulched areas. Continue eradication throughout the course of the Works and during the Planting Establishment Periods.

SUBSECTION 420 PATHS, PAVEMENTS

SUB-GRADE PREPARATION - LANDSCAPE

SUB-GRADE TO PAVING: Unless otherwise specified or shown, lay paving over sub-grade prepared as specified in 'GROUNDWORKS'. Regrade if necessary to maintain the specified thickness of succeeding courses.

PAVING GRADES - LANDSCAPE

REQUIREMENT: Grade external pavings to even falls where shown on the Drawings. Drain the surface away from structures and to outlets or the surface run-off system provided without ponding.

FINISHED LEVELS: Unless otherwise specified, maintain finished levels without step or break at changes of finish.

SURFACE TOLERANCE: Plus or minus 10 mm from the correct level, plus or minus 3 mm from a 3 m straightedge laid in any direction on an area of uniform grade. Deviation between the surface of adjacent paving units maximum 2 mm.

SAMPLE PANEL - LANDSCAPE

REQUIREMENT: Prepare in approved position, sample paving panel including samples of specified junctions details and trim.

Incorporate into the works: An approved panel, if suitably located, may be permitted to be incorporated into the Works. Otherwise remove all traces on completion of the Works.

BEDDING COURSE - LANDSCAPE

SAND BEDDING COURSE: Over the subgrade lay the unit pavers on a coarse bedding sand. Sand shall be suitable for concrete manufacture, free from deleterious material including soluble salts or other contaminants liable to cause efflorescence and excessive or non-uniform moisture content. Screed the bed to a uniform minimum compacted thickness of 35 mm, and to the required levels and falls. Do not disturb the screeded surface before the units are laid.

LAYING PAVING - LANDSCAPE

TAMPING: After laying complete sections of paving tamp the unit pavers into the bedding course with a mechanical tamper, making final adjustments to falls and levels.

EXTENT: Carry paving under seats and similar fittings.

UNIT PAVING JOINTS - LANDSCAPE

DRY JOINTS: Fill the joints flush on completion by sweeping in fine sand.

CUTTING UNIT PAVING - LANDSCAPE

CUTTING UNITS: Cut paving units so as to maintain sharp arrises and accurate joints and margins. Do not cut paving units to sizes below 50 mm in any direction.

PENETRATIONS: Make good around penetrations such as seat supports, pergola posts and the like with cement mortar coloured to match paving units.

CONCRETE PAVING - LANDSCAPE

Source, Type & Size: As shown on Drawings.

Pattern: Number & Type: Running Bond.

EDGE RESTRAINTS - LANDSCAPE

REQUIREMENT: Provide hidden concrete edge restraints where shown on drawings.

CONCRETE MIX: 1 cement : 2 sand : 4 aggregate with 75 mm slump.

CLEANING - LANDSCAPE

GENERALLY: Leave paving finish clean on completion.

SCHEDULE OF SIGNAGEAMENITIES BLOCK type B (B63)

LOCATION:	DOOR NO.:	CONTENT:	TYPE:
On block wall	ADJ. 2/1	Amenities	5
On block wall	ADJ. 2/1	BOYS	2
R3	3/1	STAFF	2
R4	1/1	STORE	2
On block wall	ADJ. 5/5	Amenities	5
R5	ADJ. 5/5	GIRLS	2
R6	6/1	Wheelchair Symbol	

NOTE:

Signage as per standard drawing S2-A7.

SCHEDULE OF COLOURS & FINISHESEXTERIOR

ITEM:	FINISH:	COLOUR:
Roof Sheeting & Flashings	Colorbond	Off White
Gutters & Barges	Colorbond	To match existing Toilets
Downpipes	Colorbond	To match existing Toilets
Blockwork Walls	Gloss Acrylic	Cream to match weatherboards Block A
Brickwork	Nubrik	Regency Red with cream/beige mortar
Concrete columns	Gloss Acrylic	Match existing posts underneath Block A
Fibre Cement Gables & Fascia	Low Gloss Acrylic	Cream to match weatherboards Block A
Timber fascia & barge to walkway & covered link	Gloss Acrylic	To match fascia existing Toilets
Steel Columns	Hot Dip Galv.	Left Natural
Steel Gates	Hot Dip Galv.	Left Natural
Steel Portals to Covered Link	Hot Dip Galv.	Left Natural
Fibre Cement Soffits	Low Gloss Acrylic	Cream to match weatherboards Block A
Fibre Cement Sandwich Panels	Gloss Acrylic	"
External Flush Doors	Gloss Enamel	To match block base existing Toilets
Door Jambs	Gloss Enamel	To match gutters.
Metal Louvres	Baked Enamel	White
Security screen to louvres	Powder Coat	"

NOTE:

Confirm colours with project architect prior to commencement of work.
Provide sample of 3 bricks of nominated colour prior to ordering for final approval.

SCHEDULE OF COLOURS & FINISHES

INTERIOR

ITEM:	FINISH:	COLOUR:
Fibrous Cement Ceilings	Flat Acrylic	Natural White
Concrete Columns	Semi-Gloss Acrylic	White Sapling
Blockwork Walls	Semi-Gloss Acrylic	White Sapling
F.C. Panels under Louvres	Semi-Gloss Acrylic	White Sapling
Flush Doors	Gloss Enamel	Caufield Green
Door Trims	Gloss Enamel	Heritage Red
Laminated Bench Tops	Formica Velvet Finish	Victorian Teal
Laminated Cupboard Doors & Drawer Fronts	Formica Velvet Finish	Penthouse
Laminated Kickboards	Formica Velvet Finish	Cherrystone
Toilet Partitions	Hardicolor	To match Formica 'Victorian Teal' Velvet Finish
Toilet Partition Doors	Hardicolor	To match Formica 'Cherrystone' Velvet Finish
Floor Tiles	Simons 50x50	Bretagne
Wall Tiles & Tiled Splashback	Johnson Wall Tiles - "Waringa" 100 x 100	Terracotta Micros Gloss
Safety Sheet Vinyl to Disabled Person's toilet/shower	Altro Safety Flooring "Impressionist 25"	Lichen

NOTE:

Confirm colours with Project Architect prior to commencement of work. Paint colours have been selected from the Dulux Master Palette range. Textured laminate colours are "Formica" colours or equal approved. Non-slip vinyl from the Altro safety flooring range "Impressionist 25".

SCHEDULE OF DRAWINGS

Drawing No.:

Drawing Title:

SITE PLANS

21779 /1A	Architectural Site Plan
21779 /1D	Drainage Site Plan
21779/15097/1E	Electrical Site Plan

SITE WORKS**ARCHITECTURAL**

21779/15097/AR1	Set Out Plan
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DRAINAGE

21779/15097/HY1	Hydraulic Services Plan
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BUILDING WORKS**ARCHITECTURAL**

21779/15097/B63-A1	Plans
21779/15097/B63-A2	Elevations & Sections
21779/15097/B63-A3	Fitout Key Plan & Schedules
21779/15097/B63-A3.1	Room Fitout
21779/15097/B63-A3.2	Room Fitout
21779/15097/B63-A3.3	Room Fitout
21779/15097/BD-AD1	Primary Building Elements
21779/15097/BD-AD10	Primary Building Elements
21779/15097/BD-AD20	Primary Building Elements
21779/15097/BD-AD26	Miscellaneous Details
21779/15097/BD-AD33	Aluminium Joinery
21779/15097/BD-AD41	Fixtures & Equipment

ELECTRICAL

21779/15097/E1	Electrical Floor Plan
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STRUCTURAL

21779/15097/S1	Foundation, Blockwall & Roof Framing Plans
21779/15097/S2	Foundation Details
21779/15097/S3	Foundation, Column & Wall Details
21779/15097/S4	Wall Details
21779/15097/S5	Roof Details
21779/15097/S6	Roof Details

SCHEDULE OF DRAWINGS

STANDARD DRAWINGS

*A4SE 1007c Load Centre
*A4SE 11005a Fluorescent Bulkhead Luminaire Type - FV

RTS 17a Covered Link Details

S1737c Sign Board Details
S1946 Sewerage Inspection Chambers
S1958 Standard Drainage Details
S1951 Hydraulic Services Notes
S2-A7 Signage Details

*QN-743-03 Thermostatic Mixing Valve - Standard Instaliation Detail
*QN-743-04 Approved Thermostatic Mixing Valves

*LD092 Field Inlet
*LD160 Surface Treatment ORG
*LD402 Garden Edging

*CEP D130 Spoon Drain

NOTE:

* - Denotes Bound in Specification

RTI RELEASE

SCHEDULE OF PROVISIONAL QUANTITIES & RATES

The tenderer shall allow in his tender an amount to cover the following:

- 1. Extensions of Time for Principal Delays, refer to the Form of Tender and Clause 35.5 of the Special Conditions of Contract.

Principal Caused Delays:

$$5 \text{ days} \times \$ \underline{\hspace{2cm}} / \text{day} = \$ \underline{\hspace{2cm}}.$$

Insert on Form of Tender a rate for each day and include the total cost for the number of days scheduled.

- 2. Updates of Construction Programme.

Refer to Section 000 PRELIMINARIES of the Specification and the Form of Tender.

Updates of Construction Programme 1 No. \$ /update.

Insert on Form of Tender a rate per each update and include the total cost for the numbers of updates required.

- 3. Compaction Testing.

Refer to Section 210 GROUNDWORKS Subsection 065 TESTS, Costs of Tests Groundwork Testing to AS 1289.

$$2 \text{ No. tests to 5.2.1} \times \$ \underline{\hspace{2cm}} / \text{test} = \$ \underline{\hspace{2cm}}$$

$$4 \text{ No. tests to 5.3.1/5.4.1} \times \$ \underline{\hspace{2cm}} / \text{test} = \$ \underline{\hspace{2cm}}$$

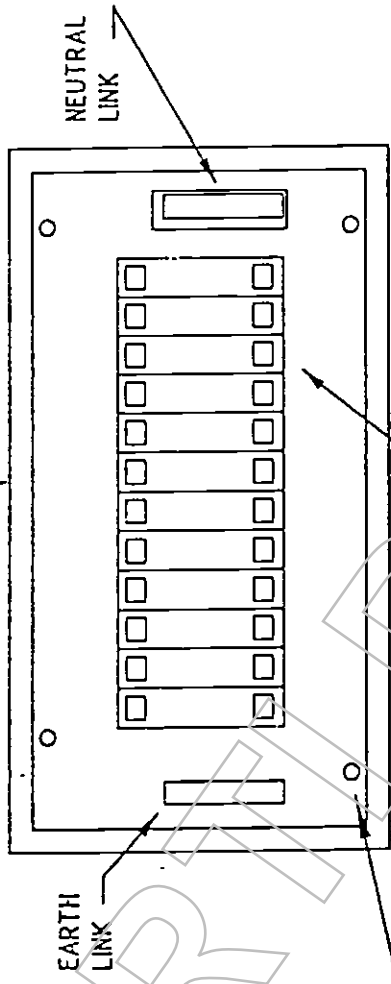
TOTAL \$

Insert on Form of Tender a rate per each test and include the total cost for the total number of tests.

1. THIS DRAWING INDICATES THE MIN. REQUIREMENTS. REFER TO THE APPLICABLE SPECIFICATION CLAUSE FOR DETAILS.
2. THE SWITCHBOARD SHALL COMPLY WITH THE APPLICABLE AUSTRALIAN STANDARDS & THE REQUIREMENTS OF THE LOCAL SUPPLY AUTHORITY.
3. THE SWITCHBOARD ENCLOSURE SHALL BE RATED AS SPECIFIED & AT LEAST IP50 TO AS-1939.
4. ALL METALWORK SHALL BE 1.0mm ZINC ANNEALED STEEL SHEET, TREATED WITH ETCH PRIMER UNDERCOAT & FINISHED WITH 2 COATS OF ENAMEL PAINT OR POWDER COATED PAINT. FINISH TO BE GREY (BS 631) OR ORANGE (ND. 557 AS K185V).
5. THE SWITCHBOARD EQUIPMENT LAYOUT IS TYPICAL & ALTERNATIVE LAYOUTS MAY BE ACCEPTABLE. ENSURE ADEQUATE SPACE IS PROVIDED FOR CABLE ENTRY & TERMINATION.
6. SELF TAPPING SCREWS ARE NOT ACCEPTABLE.
7. NO REMOVEABLE FIXINGS SHALL BE ACCESSIBLE FROM THE FRONT OR SIDES OF THE SWITCHBOARD WITH THE DOOR CLOSED. i.e. SCREWS OR NUTS
8. CIRCUIT BREAKERS SHALL BE MOULDED CASE TYPE TO AS 3111 WITH A MIN. INTERRUPTING CAPACITY OF 6KA (SYM).
9. LABEL THE MAIN SWITCH & NUMBER ALL CIRCUIT BREAKERS. LABELS SHALL BE SCREW FIXED ENGRAVED WH-BK-WH LAMINATED PLASTIC WITH LETTERING A MIN. 4mm HIGH. ALTERNATIVE C.B.'S MAY BE NUMBERED WITH PRESS IN PLASTIC INDICATORS, GLUED OR HEAT SPLAYED. PROVIDE A CIRCUIT SCHEDULE CARD WITH MOUNTING FITTED INSIDE DOOR.

RETICULATE TO C.B.'S WITH INSULATED COPPER BUSBARS OR INSULATED CABLE

MAKE PROVISION FOR CABLE ENTRY (KNOCKOUTS) AT TOP & BOTTOM OF SWITCHBOARD



PROVISION FOR MOUNTING (A OFF) ACCESSIBLE WITH C.B.'S IN SITU

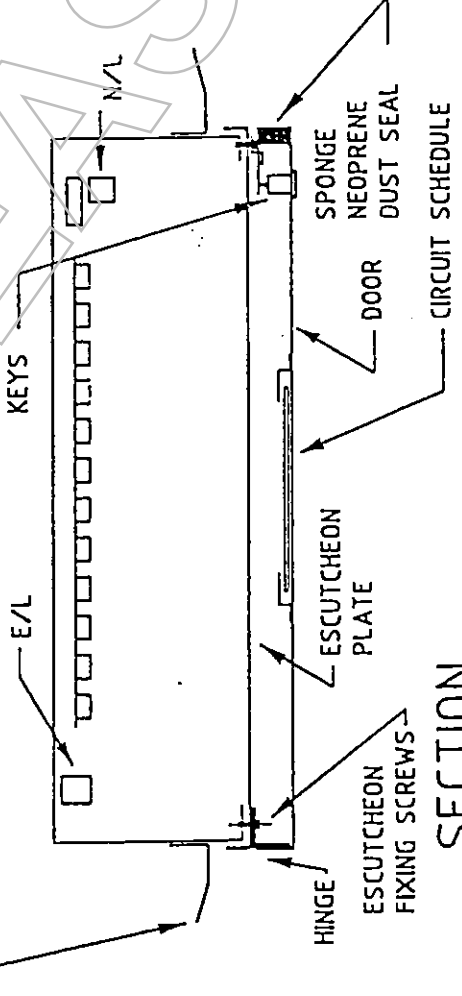
CLIP TRAY CHASSIS FOR C.B. MOUNTING

ELEVATION

(ESCUTCHEON REMOVED)

FLUSH MOUNTING FLANGE WHERE APPLICABLE TO BE A MIN OF 25mm WIDE

CHROME PLATED LOCK EQUAL TO LOWE & FLETCHER OR LENLOC NO. 92268 SUPPLY 2 KEYS



SECTION

DRAWN	M. PRICE	DATE	1/8/96
DISCIPLINE TEAM LEADER	M. PRICE	DATE	1/8/96
AUTHORISED FOR ISSUE	A. RUSSELL	DATE	1/8/96
SCALE	N.T.S	AT	A4 SIZE

LOAD CENTRE

FORM BPRS F101A

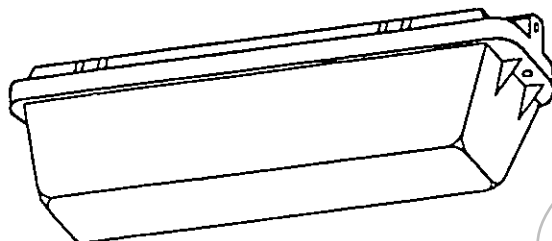
PROJECT SERVICES
Quality Assured ISO 9011
A Business Unit of the Department of Government

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DRAWING NUMBER: **A4SE 1007** ISSUE: **C**

Dundula State School Amenities Block Type B"

PREVIOUSLY PICTORIAL SHEET NO. EE 1005



FLUORESCENT
BULKHEAD LUMINAIRE TYPE - "FV"

THIS FITTING SHALL BE FITTED WITH ONE (1) 18WATT FLUORESCENT TUBE. THE FITTING SHALL COMPRISE AN INJECTION MOULDED BODY AND VISOR, THE BODY BEING GLASS FILLED NYLON AND THE VISOR SHALL BE POLYCARBONATE. AN EXTRUDED NEOPRENE GASKET SHALL BE SECURED BY ADHESIVE TO THE BODY TO FORM A WEATHER-PROOF SEAL WITH THE VISOR WHICH SHALL BE SECURED TO THE BODY BY ALLEN HEAD OR PHILLIPS HEAD SCREWS.

RTI RELEASE

FORM BPRS F101A

AWN	M. PRICE	1/8/96
	DATE	
	M. PRICE	1/8/96
	DATE	
DISCIPLINE TEAM LEADER	A. RUSSELL	1/8/96
	DATE	
AUTHORISED FOR ISSUE	N.T.S.	A4 SIZE
	AT	

FLUORESCENT
BULKHEAD LUMINAIRE
TYPE - "FV"



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DRAWING NUMBER	ISSUE
A4SE 11005 A	

Dundula State School, Amenities Block Type B"

- ONLY SPECIFIC PROPRIETARY THERMOSTATIC HOT WATER MIXING VALVES SHALL BE DEEMED TO BE ACCEPTABLE BY THIS DEPARTMENT FOR USE IN GOVERNMENT BUILDINGS.
- AS AT THE DATE OF THIS INSTRUCTION, THE FOLLOWING PRODUCT LINES ARE KNOWN TO COMPLY WITH THE INTENT OF THE ABOVE.

① "GROHE" thermostatic mixing valves
 Model Nos - 34402LS SERIES
 - 34413LS SERIES
 - 34600LS SERIES
 - 34619LS SERIES
 (Supplied by Argent (Australia) Pty Ltd)

② "HORATERM" thermostatic mixing valve
 Model No. - 700119
 (Supplied by RYE Australia)


③ "RADA" thermostatic mixing valves
 Series Nos. - 15
 - 17
 - 20
 (Supplied by Moody & Winter Sales Pty. Ltd.)

④ "HANSA" thermostatic mixing valves
 Model Nos - 802/LS
 - 804/LS
 - 805/LS
 (Supplied by Starion (Australia) Pty Ltd)

A	02.05.96	APPROVED LIST OF MIXING VALVES ALTERED	<i>gn.</i>
ISSUE	DATE	SUBJECT	AUTHORISED
AMENDMENTS			

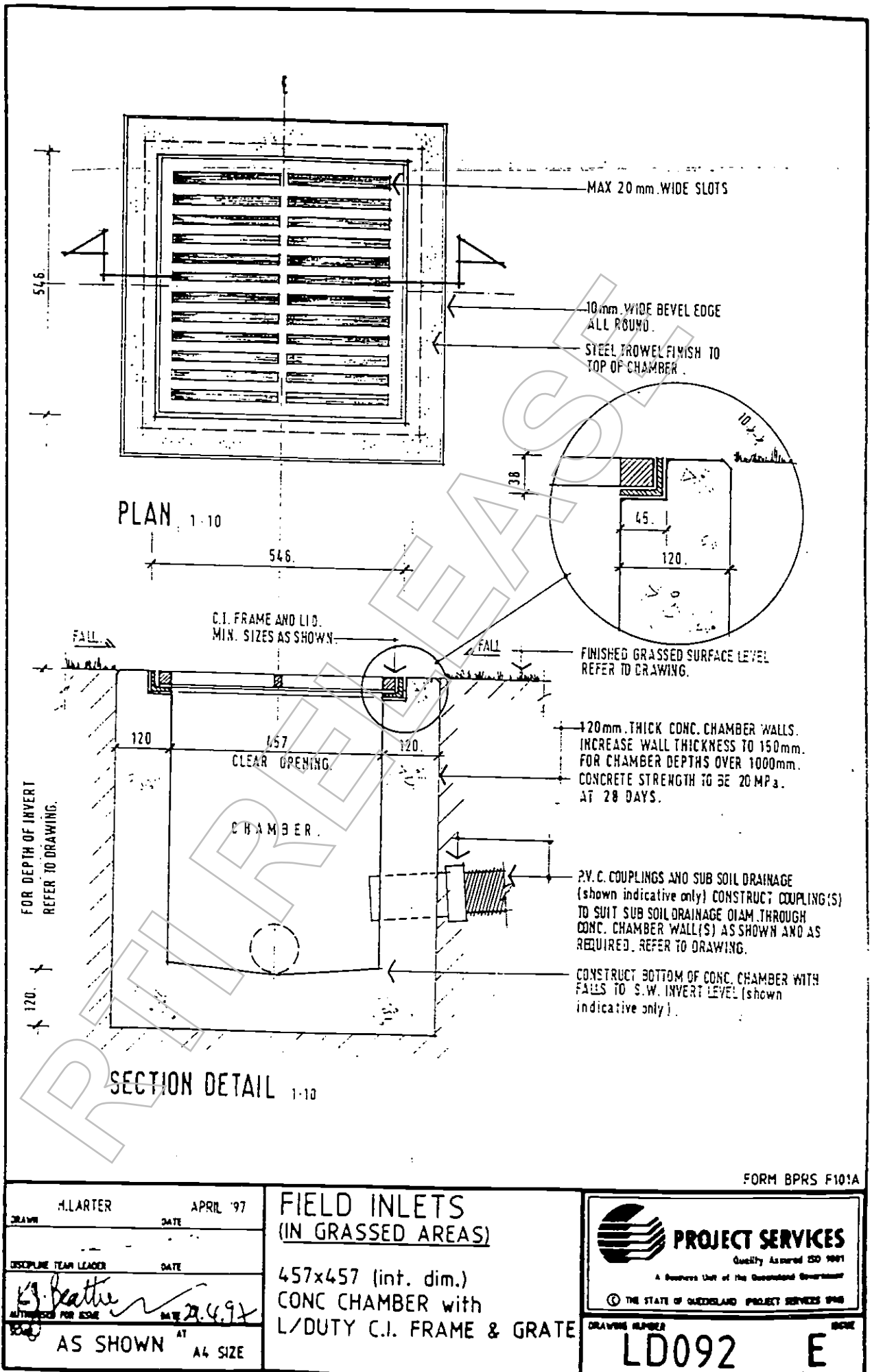
DRAWN	G. WOODRUFF	DATE	02.05.96
DISCIPLINE TEAM LEADER	<i>G. Woodruff</i>	DATE	16.5.96
AUTHORISED FOR ISSUE	<i>H. Woodruff</i>	DATE	21.5.96
SCALE	N.T.S.	AT	A4 SIZE

APPROVED
 THERMOSTATIC
 MIXING VALVES



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 Department of Public Works & Housing
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DRAWING NUMBER **QN-743-04/A** ISSUE



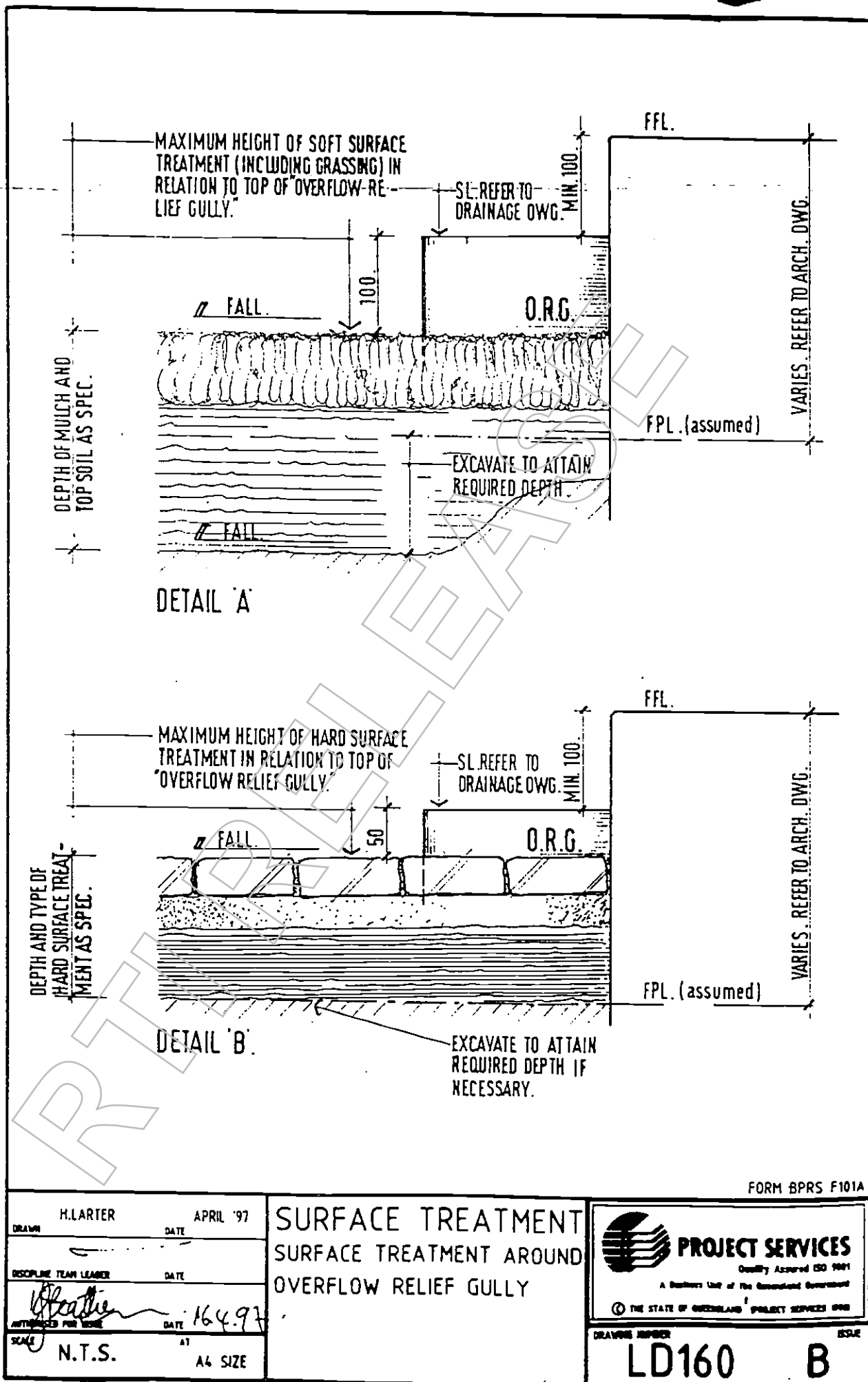
FORM BPRS F101A

DRAWN	H. LARTER	DATE	APRIL '97
DISCIPLINE TEAM LEADER		DATE	
APPROVED FOR ISSUE	<i>H. Beattie</i>	DATE	22.4.97
SCALE	AS SHOWN	AT	A4 SIZE


**FIELD INLETS
(IN GRASSED AREAS)**

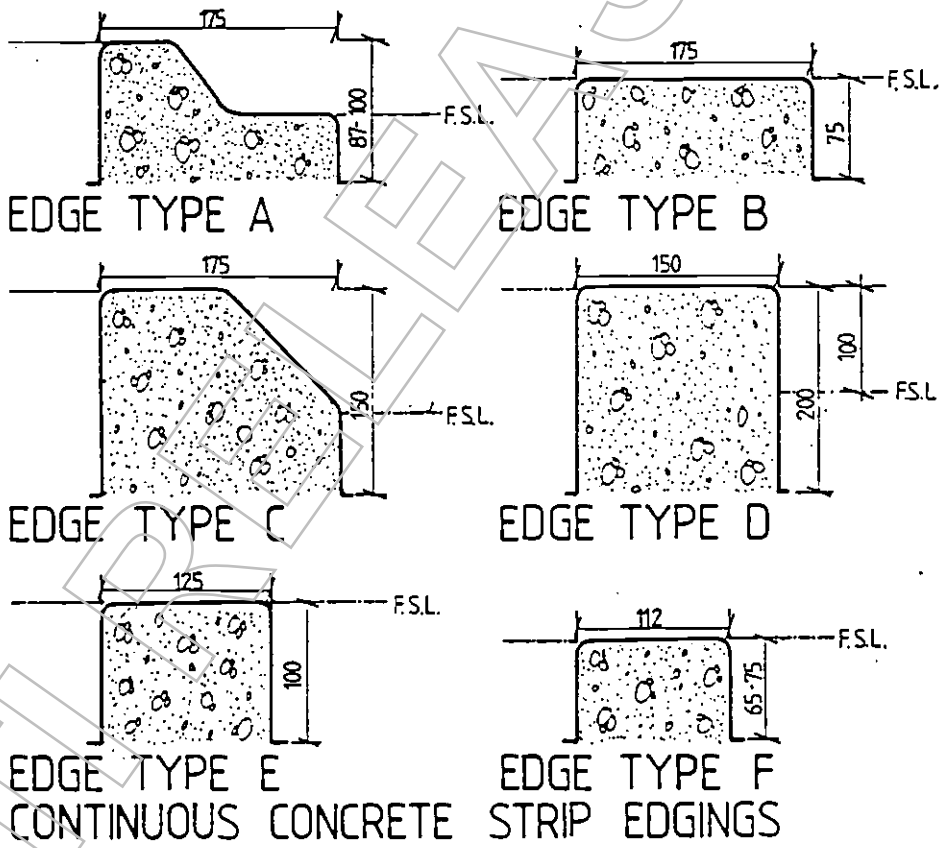
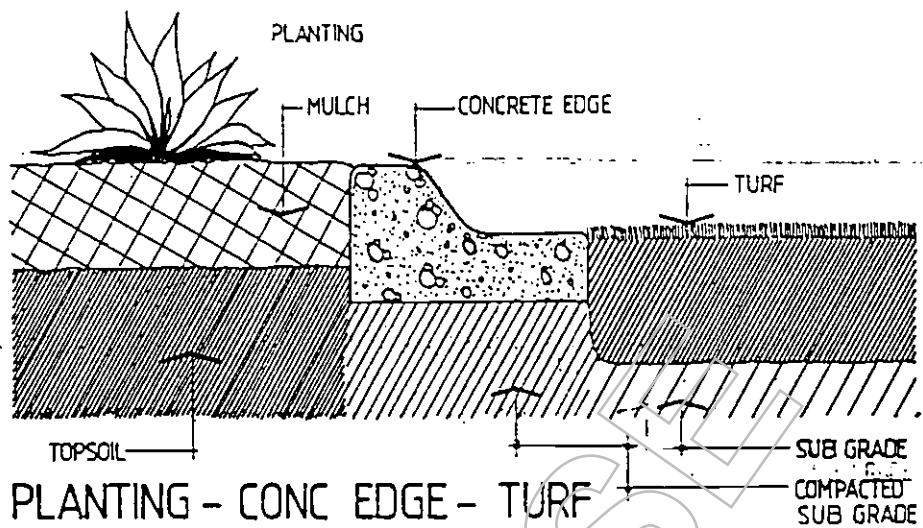
457x457 (int. dim.)
CONC CHAMBER with
L/DUTY C.I. FRAME & GRATE

<p>PROJECT SERVICES Quality Assured ISO 9001 A Business Unit of the Queensland Government</p>			
		<p>© THE STATE OF QUEENSLAND PROJECT SERVICES 1998</p>	
DRAWING NUMBER	LD092	SCALE	E



FORM BPRS F101A

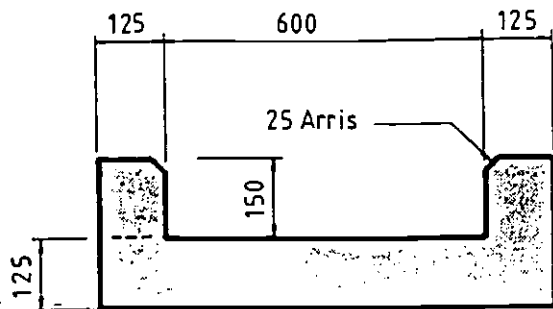
DRAWN H. LARTER DATE APRIL '97	SURFACE TREATMENT SURFACE TREATMENT AROUND OVERFLOW RELIEF GULLY	 PROJECT SERVICES Quality Assured ISO 9001 A Business Unit of The Queensland Government © THE STATE OF QUEENSLAND PROJECT SERVICES 0908
DISCIPLINE TEAM LEADER DATE		
AUTHORIZED FOR ISSUE DATE 16.4.97		
SCALE N.T.S. AT A4 SIZE		
DRAWING NUMBER LD160		ISSUE B



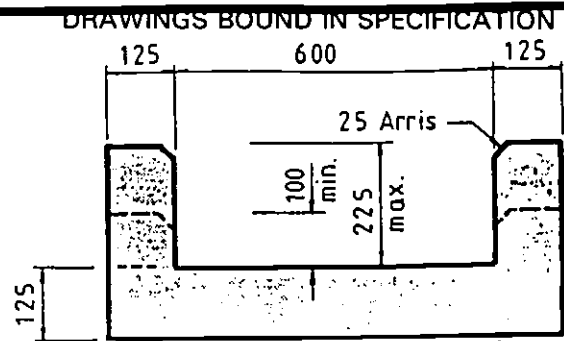
NOTE

- FINISHED SURFACE LEVEL F.S.L. IS INDICATIVE ONLY
- POSITION CONSTRUCTION JOINTS AT 5m. CENTRES AND/OR AT CHANGES OF CURVATURE OR AS OTHERWISE SHOWN AND/OR SPECIFIED

AMENDMENTS		DEPARTMENT OF WORKS ARCHITECTURAL SERVICES SECTION LANDSCAPE	SCALE 1:5
			DATE JUL '84
DRAWN D.W.M.	SUPERVISING ARCHITECT 1 FATB	EDGING CONTINUOUS STRIP EDGES	LANDSCAPE DETAIL LD 402
CHECKED <i>[Signature]</i>	DIRECTOR DIVISION OF BUILDING W. Buzgl 3/84		ISSUE B

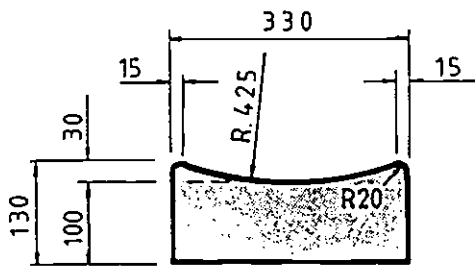


CONSTANT DEPTH CHANNEL
TYPE A

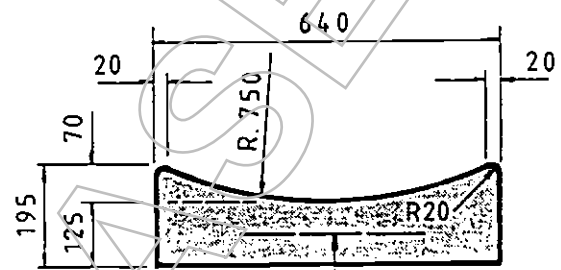


DRAWINGS BOUND IN SPECIFICATION
VARIABLE DEPTH CHANNEL
TYPE B

CONCRETE BOX CHANNEL



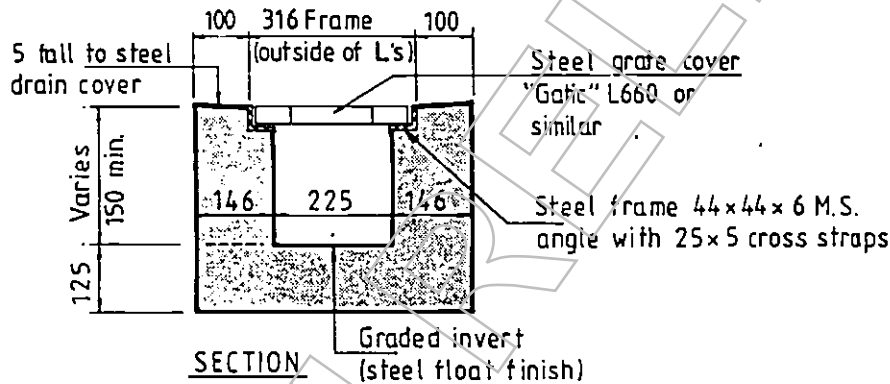
TYPE A



TYPE B

F8TM - 400 wide centrally placed with 300 laps.

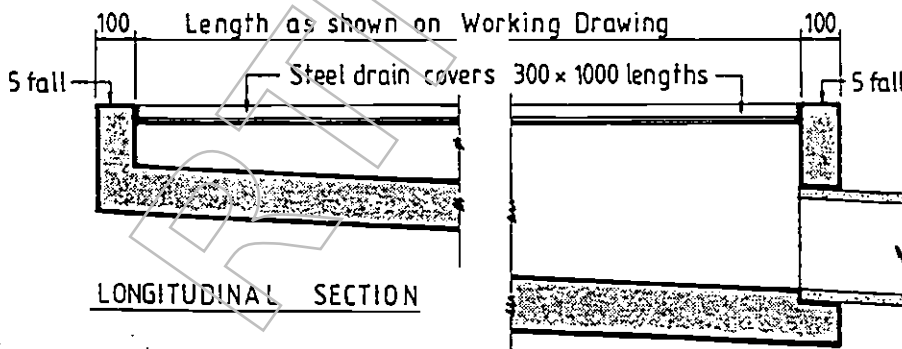
CONCRETE INVERT DRAIN



SECTION

NOTES

1. Longitudinal grade on channels and drains to be a minimum of 1 in 100 U.N.O.
2. Concrete
F_c : 20MPa
Max. aggregate size : 20mm
Slump : 80mm
3. Covers and Frames to be dipped in hot bitumen.



LONGITUDINAL SECTION

GRATED DRAIN

R.C. Pipe to stormwater drainage system

SUPERSEDES DWG NO. SdW12

PROJECT SERVICES

A Business Unit of the Queensland Government Administrative Services Department

CIVIL ENGINEERING PRACTICE
STRUCTURAL & CIVIL ENGINEERS

DRAWN	S.J.P.	CHECKED	f. m.
DESIGN	C.E.P.	CHECKED	COT.

CONCRETE DRAINS

Dundulla State School, Amenities Block Type B
DATE AUG. 1993

SCALE N.T.S.

STANDARD DRAWING NUMBER

CEP D150 Page 217

PROJECT SERVICES

REPORT ON GEOTECHNICAL INVESTIGATION FOR PROPOSED AMENITIES BLOCK, DUNDULA STATE SCHOOL

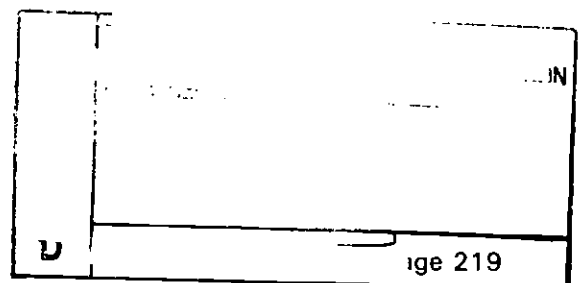
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3. SUB-SURFACE CONDITIONS
4. ENGINEERING ASSESSMENT AND INTERPRETATION

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- APPENDIX B Descriptive Borehole Logs
- APPENDIX C Dynamic Cone Penetrometer Results
- APPENDIX D Laboratory Test Results

Prepared by ULLMAN & NOLAN GEOTECHNIC
September, 97

71621G/9.97



"Dundula State School, Amenities Block Type B "



ULLMAN & NOLAN GEOTECHNIC

A DIVISION OF ULLMAN & NOLAN PTY. LTD.

ACN 010 026 418

CONSULTING GEOTECHNICAL ENGINEERS

71 CONNORS ROAD, PAGET
P.O. BOX 5630, MACKAY MAIL CENTRE 4741
TELEPHONE: (079) 52 5255
FAX: (079) 52 5455

17 September, 1997

1.0 LETTER OF TRANSMITTAL

Project Services
Department of Public Works & Housing
Central Queensland Regional Office
PO Box 247
ROCKHAMPTON QLD 4700

Attention: Mr M Wakeham

Dear Sir

FOUNDATION INVESTIGATION FOR THE PROPOSED AMENITIES BLOCK - DUNDULA STATE SCHOOL

We are pleased to present herewith the final report on the geotechnical investigation for the proposed amenities block, Dundula State School.

The investigation revealed a minor amount of fill overlying the Pioneer Valley alluvial deposit comprising sandy clays, clayey sands and clays. These materials have been assessed to be competent for an allowable bearing pressure of 90kPa.

The estimated ground movement in response to wetting and drying of the near surface soils has been evaluated to vary between 30 and 40mm. In terms of AS 2870, Residential Slabs and Footings, the site classifies as an 'M' site. The depth and character of the fill on the site technically preclude the adoption of standard footings design contained in AS 2870. It is recommended that footing slab design be based on engineering principles.

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LABORATORY

NATA Reg No 910 MACKAY
NATA Reg No 1852 BRISBANE CENTRAL
NATA Reg No 1866 DARWIN
NATA Reg No 2080 MOBILE LABORATORY No 1
NATA Reg No 2080 MOBILE LABORATORY No 2

ASSOCIATE R J ROLLESTON, BSc(ASA)

"Dundula State School, Amenities Block Type B"

Page



While the boreholes have been located to give reasonable representation of the likely foundation soils on the site, there is an inherent variability in alluvial deposits. It is therefore recommended that further professional advice be sought should ground conditions differ significantly from those indicated in this report.

We believe this report concludes this commission.

Yours faithfully

s.78B

for N.J Kidd
ULLMAN & NOLAN GEOTECHNIC

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2.0 SCOPE OF INVESTIGATION

Ullman & Nolan Geotechnic were commissioned to investigate and report on foundation conditions at the site for the proposed amenities block at Dundula State School. The investigation comprised drilling, probing, laboratory testing and engineering interpretation and assessment.

The field work was carried out on 29 August 1997. This involved the drilling of two (2) boreholes (BH1 & BH2) in the locations shown on the plan in Appendix A. The boreholes were drilled under the supervision of a senior soil technician using a trailer mounted Jacro 350 geotechnical drill rig. Drilling extended to a depth of three (3) metres in both boreholes. Materials encountered were visually classified, logged and sampled. Standard Penetration Testing (SPT) was undertaken to assist in assessing insitu properties of the foundation materials. A U(50) undisturbed tube sample was also retrieved for detailed examinations and laboratory testing. Descriptive borehole logs have been compiled and are presented in Appendix B.

Dynamic Cone Penetrometer (DCP) testing was undertaken adjacent to each borehole to assist in assessing the integrity of the shallow founding soils. The DCP results are presented in Appendix C.

3.0 SUB-SURFACE CONDITIONS

The drill holes revealed approximately 0.7 metres of fill overlying alluvium. The surficial fill is made up of non-plastic sands and low plasticity silty sands and sandy clays. The underlying alluvium comprises intermediate and low plasticity clayey sands, sandy clays and some limited amount of clay.

The fill competency has been assessed to be either firm or medium dense. The basal alluvium was logged as firm in the upper horizons becoming stiff to very stiff with depth.

Ground water was not intersected in any of the boreholes.

4.0 ENGINEERING ASSESSMENT & INTERPRETATION

Engineering assessment has been based on field insitu testing (SPT, DCP and pock penetrometer) visual classification, laboratory testing as well as appropriate surrogate information.

There is approximately 0.7 metres of fill on the site. It is expected that some of this fill will be stripped to a depth sufficient for removing surface vegetation and organic matter. Backfilling of the stripped ground to formation level should aim for a minimum of 95% standard dry density ratio. It is recommended that a non-reactive fill material which on compaction can easily shed water be utilised beneath the proposed building.

Footing design should be made on the basis on an allowable bearing capacity of 90kPa at a minimum founding depth of 0.6 metres below the existing ground surface. Total settlement of the order of 25mm should be allowed for at this intensity of load. Differential settlement of the order of 15mm.

Laboratory shrink-swell tests carried out as part of this investigation indicates that shrink-swell characteristic movement of the order of 30 to 40mm will be applicable to the site. This level of shrink-swell mobility assumes, a 2 metre depth of influence and a 1.2pF maximum suction change. The site therefore classifies as a Class 'M' site (AS 2870, Residential Slabs and Footings). The depth and character of the fill on the site technically preclude the adoption of standard footings design contained in AS 2870. It is recommended that foundation design be based on engineering principles. Compliance to the foundation maintenance requirements detailed in AS 2870 will ensure satisfactory performance of the proposed foundations.

The reach of excavation machinery will control the maximum depth of excavations on site. A conventional backhoe will be adequate for shallow excavations. Vertical sided trenches to 2 metre depth will be stable for short term openings. Where workmen are required in excavations deeper than 1.5 metres, safety provisions will be required.

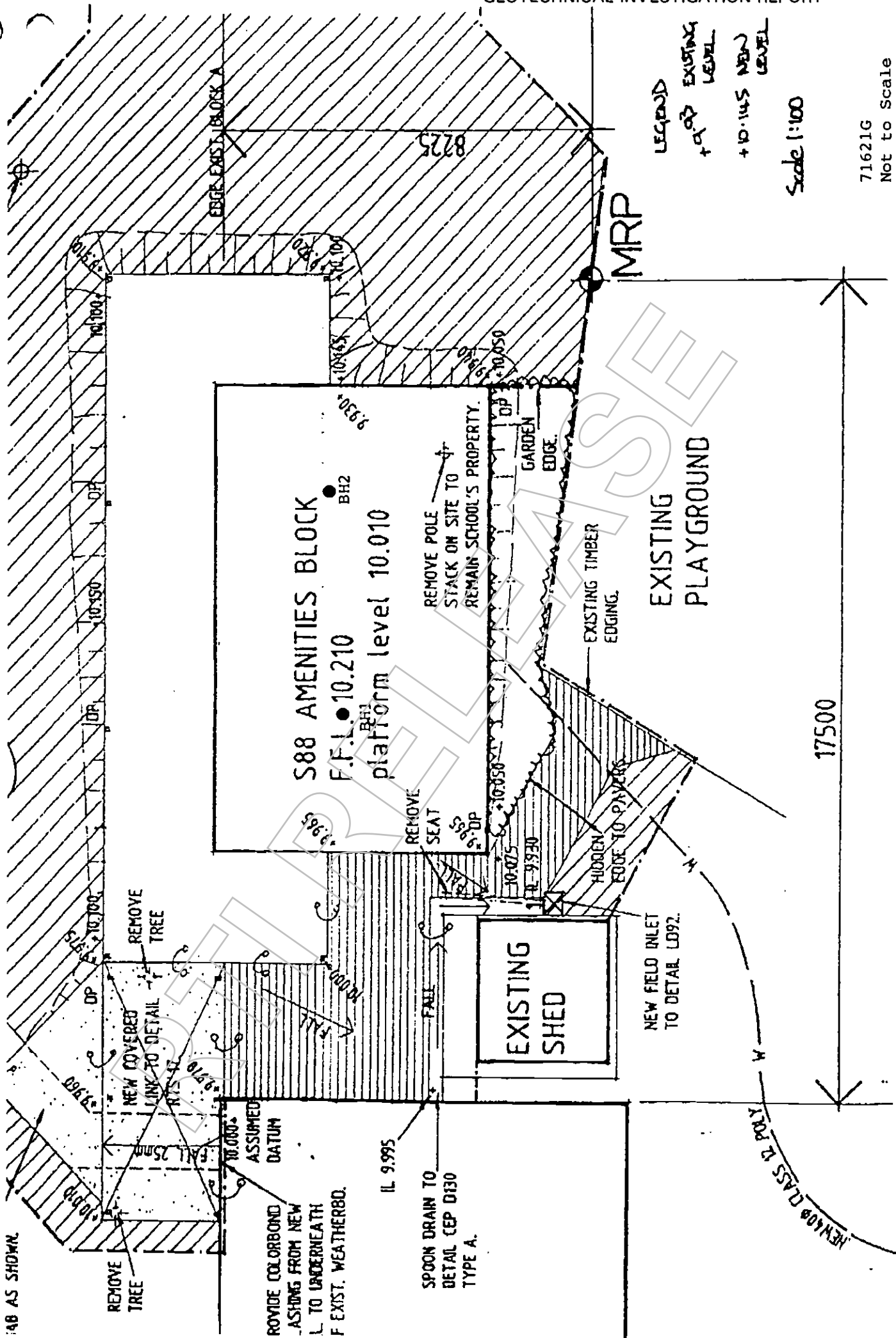
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APPENDIX A
BOREHOLE LOCALITY SKETCH

LEGEND
+10.00 EXISTING LEVEL
+10.145 NEW LEVEL

Scale 1:100

71621G
Not to Scale



"Dundula State School, Amenities Block Type B"

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APPENDIX B
DESCRIPTIVE BOREHOLE LOGS



ULLMAN & NOLAN GEOTECHNIC

A DIVISION OF ULLMAN & NOLAN PTY. LTD.

ACN 010 026 418

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P.O. BOX 5630, MACKAY MAIL CENTRE 4741
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FAX: (079) 52 5455

CONSULTING GEOTECHNICAL
ENGINEERS

CLIENT: Project Services

PROJECT: Geotechnical Investigation for Proposed Amenities Block

LOCATION: Dundula State School

TEST BY: WS,MS **DATE:** 29.8.97

U&N JOB NO: 71621G

REPORT ON: DESCRIPTIVE BOREHOLE LOGS

Equipment Description: Trailer mounted Jacro 350 Drilling Rig

BOREHOLE NO	DEPTH (m)	MATERIAL DESCRIPTION
1	0.00-0.10	Sand; yellow-brown, medium to coarse grained, with silt, root fibres present, moist, medium dense (fill) MPS 2 LL NP P75 10 (SP-SM)
	0.10-0.35	Clayey Sand; grey mottled brown, fine to coarse grained, root fibres present, moist, firm (fill) MPS 2 LL 35 P75 35 (SC)
	0.35-0.65	Clayey Sand; grey mottled brown, fine to coarse grained, root fibres present, moist, firm (fill) MPS 2 LL 35 P75 40 (SC)
	0.65-1.10	Sandy Clay; grey, yellow and brown mottled, sand is fine to coarse grained, root fibres present, moist, firm to stiff MPS 5 LL 40 P75 50 (CI)
		U50 @ 0.50-0.73m PP=260kPa
	1.10-1.30	Sandy Clay; grey, white, yellow and brown mottled, sand is fine to coarse grained, moist, stiff to very stiff MPS 1 LL 40 P75 60 (CI)

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R I REEA, BE(Hons) GradDipEnv MEng
T H SHERLEY, BE LGE

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ASSOCIATE R J ROLLESTON, BSc ASA

MATERIALS LABORATORY NATA Reg No 810 MACKAY
NATA Reg No 1852 BRISBANE CENTRAL
NATA Reg No 1855 DARWIN
NATA Reg No 1856 MACKAY
NATA Reg No 1857 MACKAY

"Dundula State School, Amenities Block Type B"

RTI 20033R s88 Amenities No. 233

Page **QUALITY MANAGEMENT SYSTEM**
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Geotechnical Investigation for Proposed Amenities Block
Dundula State School

1 cont/d	1.30-1.50	Clay ; white, grey and yellow mottled, with fine to coarse grained sand, moist, stiff MPS 1 LL 45 P75 80	(CI)
	1.50-1.80	Sandy Clay ; white, grey and yellow mottled, sand is fine to coarse grained, moist, stiff MPS 1 LL 35 P75 50	(CL)
	1.80-2.50	Clay ; grey mottled yellow and black, with fine to medium grained sand, moist, stiff MPS 0.5 LL 50 P75 80	(CI)
		SPT @ 1.50-1.95m N=15 (9,8,7)	
	2.50-2.80	Clay ; grey and yellow mottled, with fine to coarse grained sand, moist, stiff MPS 1 LL 45 P75 80	(CI)
	2.80-3.00	Clayey Sand ; grey, black, white and yellow mottled, fine to coarse grained, moist, stiff MPS 1 LL 35 P75 40	(SC)
2	0.00-0.10	Silty Sand ; dark brown, fine to coarse grained, root fibres present, moist, medium dense (fill) MPS 2 LL 15 P75 15	(SM)
	0.10-0.40	Sandy Clay ; green-yellow, sand is fine to coarse grained, root fibres present, moist, stiff (fill) MPS 1.5 LL 40 P75 50	(CI)
	0.40-0.65	Sand ; yellow-brown, fine to coarse grained, with silt, root fibres present, moist, medium dense (fill) MPS 1 LL NP P75 10	(SP-SM)
	0.65-0.80	Clayey Sand ; grey, yellow and white mottled, fine to coarse grained, root fibres present, moist, firm MPS 1 LL 40 P75 45	(SC)
	0.80-1.05	Clayey Sand ; grey, yellow and white mottled, fine to coarse grained, moist, firm to stiff MPS 1 LL 35 P75 40	(SC)
	1.05-1.15	Clayey Sand ; grey mottled yellow, fine to coarse grained, moist, firm to stiff MPS 1.5 LL 30 P75 40	(SC)

Geotechnical Investigation for Proposed Amenities Block
Dundula State School

2 cont/d	1.15-1.25	Sandy Clay ; grey mottled yellow, sand is fine to coarse grained, moist, stiff MPS 1 LL 40 P75 50 (CI)
	1.25-1.50	Clayey Sand ; grey mottled yellow and white, fine to coarse grained, moist, stiff MPS 1 LL 40 P75 45 (SC) SPT @ 1.00-1.45m N=13 (3,6,7)
	1.50-1.80	Sandy Clay ; grey mottled yellow, sand is fine to medium grained, moist, stiff MPS 0.5 LL 40 P75 30 (CI)
	1.80-1.90	Clayey Gravelly Sand ; grey, yellow and brown mottled, fine to medium grained, gravel is fine to medium grained, subangular, moist, stiff MPS 15 LL 35 P75 35 (SC)
	1.90-2.20	Clayey Sand ; grey, brown and yellow mottled, fine to medium grained, moist, stiff MPS 0.5 LL 35 P75 45 (SC)
	2.20-2.65	Clayey Sand ; grey mottled yellow and white, fine to coarse grained, moist, stiff MPS 2 LL 35 P75 35 (SC) SPT @ 2.00-2.45m N=18 (5,7,11)
	2.65-3.00	Sandy Clay ; grey mottled yellow, white, black and brown mottled, sand is fine to coarse grained, moist, very stiff MPS 12 LL 45 P75 55 (CI)

NOTE: Description is on a visual classification basis in accordance with AS 1726, Geotechnical Investigations.

Checked By: 33 Date: 6/9/97

APPENDIX C
DYNAMIC CONE PENETROMETER RESULTS

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ULLMAN & NOLAN (GEOTECHNIC) PTY LTD

A.C.N. 010 026 909

DYNAMIC CONE PENETROMETER

UNGR 92

Issue: 1 Rev: 0

(-/8/95)

Page 1 of 2

Mackay Laboratory

CLIENT: PROJECT SERVICES **JOB NO:** 71621G **LAB REF NO:** 97-02108AB
PROJECT: DUNDULA STATE SCHOOL **TESTED BY:** WS,MS **DATE:** 29.8.97
CHECKED BY: EB **DATE:** 1.9.97

TEST PROCEDURES: AS 1289.F3.2 **CLIENT REF:** -

Test No.: A
 Test Location/Chainage : BH#1
 Ground Surface R.L. (m) : Nil
 Depth Below Ground
 Surface at start of Test (mm): N/A
 Soil Description : Refer Logs
 Soil Moisture Condition: Refer Logs
 Depth to Groundwater (m) : Not Encountered

Test No.: B
 Test Location/Chainage : BH#2
 Ground Surface R.L. (m) : Nil
 Depth Below Ground
 Surface at start of Test (mm): N/A
 Soil Description : Refer Logs
 Soil Moisture Condition: Refer Logs
 Depth to Groundwater (m) : Not Encountered

Cumulative No. of Blows	Depth Below Starting Level (mm)	Penetration Rate (mm/blow)
4	100	25
8	200	25
10	300	50
13	400	33
14	500	100
16	600	50
18	700	50
20	800	50
22	900	50
24	1000	50

Cumulative No. of Blows	Depth Below Starting Level (mm)	Penetration Rate (mm/blow)
6	100	17
12	200	17
19	300	14
24	400	20
25	500	100
27	600	50
28	700	100
31	800	33
35	900	25
42	1000	14



Registered No. 910
 Certificate No. 97-02108A
 Date of Issue 1.9.97

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Authorized Signatory :.....

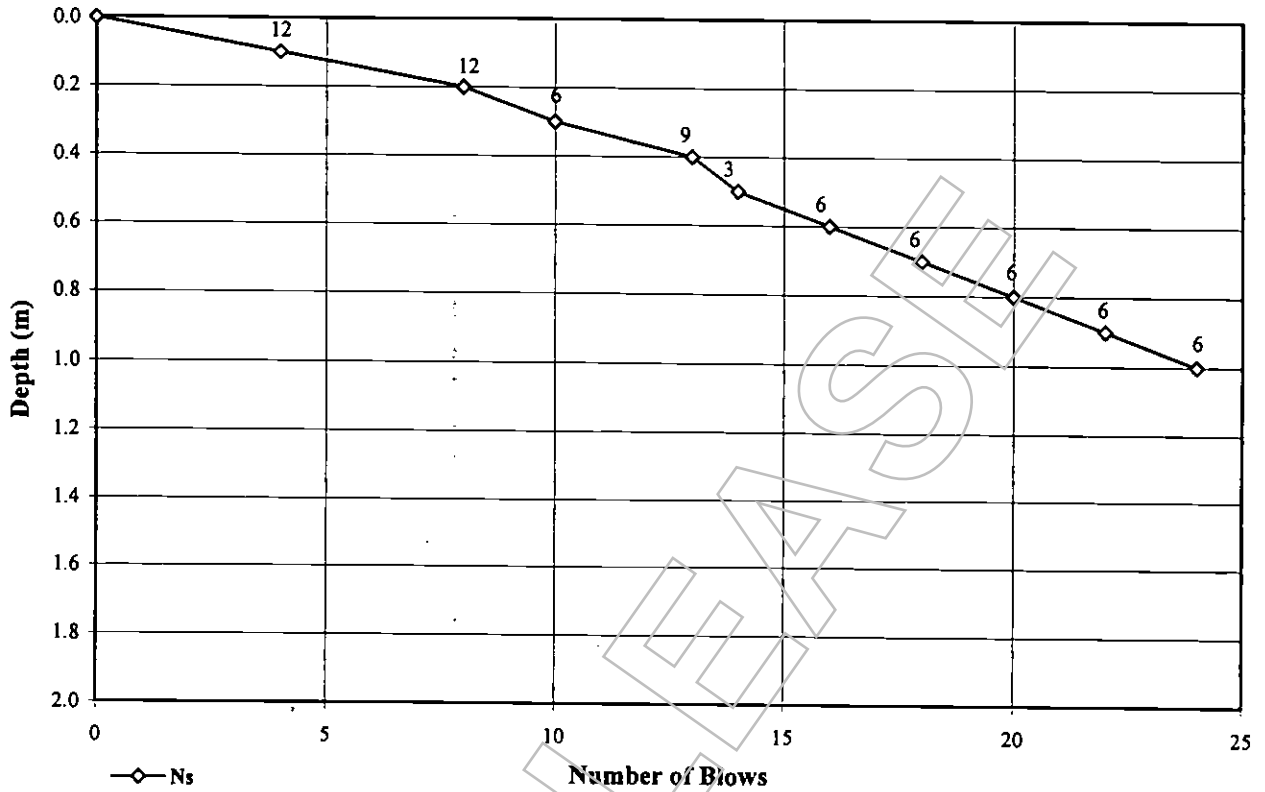
[Redacted Signature]

J. GRAHAM

DYNAMIC CONE PENETROMETER

71621G

DUNDULA STATE SCHOOL
BH#1



DUNDULA STATE SCHOOL
BH#2



RTI RELEASE

APPENDIX D
LABORATORY TEST RESULTS

ULLMAN & NOLAN (GEOTECHNIC) PTY LTD
 A.C.N. 010 026 909
 REPORT ON THE SHRINKAGE INDEX OF A SOIL - SHRINK SWELL INDEX

UNGR 29
 Issue: 1 Rev 2
 (-/8/94)

Sheet ...1... of 1..... Mackay Laboratory

CLIENT: ... Project Services JOB NO: ... 71621G ... LAB REF NO: 97-02109A

PROJECT: . New Amenities Block SAMPLED BY: U&N . DATE: 29.8.97

LOCATION: Dundula State School TESTED BY: EB ... DATE: 29-31.8.97

MATERIAL: Borehole 1, Depth 0.50-0.73m CHECKED BY: NJR . DATE: ... 5.9.97

TEST PROCEDURES: AS 1289.7.1.1 CLIENT REF: O/N 4500001858

Visual Description of Soil: ... Sandy Clay: grey, yellow and brown mottled, sand is fine to coarse grained, root fibres present, moist, firm to stiff

(CI) MPS: 5 LL 40 P75: 50

Shrink-Swell Index I_s : ... 2.2 %

Initial Moisture Content (Swell): ... 19.2 %

Final Moisture Content (Swell): ... 19.3 %

Initial Moisture Content (Shrinkage): .. 19.2 %

Estimated Percentage of Significant Inert Particles: ... 50 %

Extent of Soil Crumbling during Shrinkage: ... Nil

Extent of Cracking of the Shrinkage Specimen: ... Nil

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 Date of Issue 5.9.97

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Authorized Signatory: N.J. Richardson

"Dundula State School, Amenities Block Type B "

CONDITIONS OF CONTRACT BETWEEN PROJECT SERVICES AND Q-BUILD

1. INTERPRETATION

The following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires:-

"Contract" means the agreement in writing between the Principal and the Contractor for the execution of the work under the Contract, including documents or parts of documents to which reference may properly be made to ascertain the rights and obligations of the parties;

"Contractor" means Q-Build.

"Practical Completion" means the work under the Contract is complete in accordance with the Contract except for latent or undiscovered defects and for minor omissions and defects which will not (and the rectification of which will not) prevent or impair the normal use and occupation of the Works;

"Principal" means Project Services.

"Superintendent" means the person nominated by the Principal in the letter of acceptance of the offer to exercise the functions of the Superintendent under the Contract.

"work under the Contract" means the work which the Contractor is or may be required to execute under the Contract including any variations;

"Works" means the whole of the work to be executed and completed in accordance with the Contract, including all variations provided for by the Contract, which by the Contract is to be handed over to the Principal.

2. EXECUTION AND COMPLETION OF WORKS

The Contractor, until the Superintendent has certified that the Works have reached Practical Completion in accordance with the Contract, shall execute and complete the Works in accordance with the Contract and any drawings, specifications and other documents issued by the Principal to the Contractor under the Contract. Unless otherwise provided for by the Contract, the Contractor shall be responsible for all things, including items not expressly mentioned in the Contract, necessary for the satisfactory completion and performance of the work under the Contract. The several documents which constitute the Contract shall be taken as mutually explanatory and anything contained in one but not in another shall be equally binding as if contained in all.

The Contractor shall comply with the requirements of all relevant legislation and the lawful requirements of public or other authorities affecting the Works; shall unless otherwise specified pay all fees in connection therewith; and shall give all notices and obtain all necessary consents.

3. WORKPLACE HEALTH AND SAFETY ACT 1995

For the purpose of this clause the words "Principal Contractor", "construction workplace", "serious bodily injury", "work caused illness", "work injury" and "dangerous event" have the meanings assigned to them by the Workplace Health and Safety Act 1995 ("the Act").

If the work under the Contract is performed at a construction workplace, upon acceptance by the Principal of the Contractor's offer:-

- (a) the Principal shall be deemed to have appointed the Contractor to be the Principal Contractor pursuant to section 13 of the Act;
- (b) the Contractor shall be deemed to have accepted the appointment; and
- (c) the Contractor shall, in respect of the Works to be executed under the Contract, be responsible for the performance of the functions of the Principal Contractor within the meaning of the Act and Associated Regulation in force under the Act.

Such appointment of the Contractor as Principal Contractor under the Act shall be in force during the continuance of the Contract unless sooner revoked by the Principal giving twenty-one (21) days notice in writing to the Contractor of its revocation or by the Principal taking over or cancelling the Contract pursuant to any provision of the Contract or according to law.

The Contractor shall indemnify and keep indemnified the Principal against all liabilities which may be imposed under or which may arise out of enforcement of any section of the Act or associated Regulation.

The Contractor shall notify the Superintendent of every work caused illness, work injury, serious bodily injury and dangerous event which occurs on site as soon as possible but not later than twelve (12) hours after such occurrence.

Except as may be provided for in the Contract documents, if at any time the Contractor discovers on the site of the Works the presence of any material which may be or may contain asbestos or any other hazardous material or substance, the contractor shall not disturb the material or substance and shall contact the Superintendent and inform the Superintendent of the existence of the material or substance. The Contractor shall ensure that personnel are protected from exposure to the material or substance until the nature of the material or substance has been determined. The Superintendent shall issue directions to the Contractor in respect of action to be taken.

4. PROTECTION OF PERSONS AND PROPERTY

The Contractor shall provide all things and take all measures necessary to protect people and property, avoid unnecessary interference with the passage of people and vehicles and prevent nuisance and unreasonable noise and disturbance. If the Contractor, its employees, agents or subcontractors damage property on or adjacent to the site, either directly or indirectly, the Contractor shall provide temporary protection for and shall repair and reinstate the damaged property.

5. INDEMNITY BY CONTRACTOR

The Contractor shall indemnify the Principal against:-

- (a) loss of or damage to the Works from any cause whatsoever and shall at its own cost make good any such loss or damage;
- (b) loss of or damage to property of the Principal, including existing property in or upon which the work under the Contract is being carried out; and
- (c) claims by any person against the Principal in respect of personal injury or death or loss of or damage to any property arising out of or as a consequence of the carrying out by the Contractor of the work under the Contract, but the Contractor's liability to indemnify the Principal shall be reduced proportionally to the extent that the act or omission of the Principal or employees or agents of the Principal may have contributed to the loss, damage, death or injury.

6. INSURANCE OF EMPLOYEES

The Contractor shall insure against liability for death of or injury to persons employed by the Contractor including liability by statute and at common law. The insurance shall be maintained until the work under the Contract including any remedial work is completed to the satisfaction of the Principal. The insurance shall be extended to indemnify the Principal for the Principal's statutory liability to persons employed by the Contractor. The Contractor shall ensure that every subcontractor is similarly insured. Failure by the Contractor to provide evidence of insurance of employees when demanded by the Principal shall constitute a substantial breach of the Contract by the Contractor.

7. MATERIALS AND WORKMANSHIP

All materials used in any work under the Contract and the standards of workmanship shall be in conformity with the provisions of the Contract. In the absence of such provisions in the Contract the material or standard of workmanship as the case may be shall be of a kind which is suitable for its purpose and is consistent with the nature and character of the Works. Unless otherwise specified, all materials shall be new and workmanship shall be in accordance with the relevant manufacturer's recommendations or, if none, the relevant Australian Standard where applicable. Apart from any tests specified, the Superintendent may at any time direct that any materials or work shall be examined and/or tested. If the Contractor fails to remedy any work not in accordance with the Contract within a period of time stipulated in writing by the Superintendent or a reasonable time, whichever is the less, then the Principal may have such work remedied by other persons at the Contractor's expense or may accept the work and deduct any reduced value or additional costs from payments or recover the reduced value or additional costs as a debt. The Contractor shall remain responsible for the suitability of the work for its purpose under the Contract.

The Contractor shall establish and maintain a quality system which conforms to the specified requirements and provide the Superintendent with access to that quality system to enable monitoring and quality auditing. The quality system shall be used only as an aid to achieving and documenting compliance with the Contract and shall not relieve the Contractor of the responsibility to comply with the Contract.

8. TIME FOR COMMENCEMENT

The Contractor shall commence work under the Contract within 14 days after the Principal has given the Contractor possession of the site and shall, unless otherwise permitted, give at least two days notice to the Superintendent prior to the commencement of work.

9. TIME FOR COMPLETION

The Contractor shall execute the Works to the stage of Practical Completion to the satisfaction of the Superintendent within the time for completion stated on the Project Confirmation Form or within such extended time as is agreed to in writing by the Superintendent at any time before the time for completion. The Contractor shall not be entitled to an extension of time for delays caused by its acts or omissions whether occurring before or after the time for completion nor for delays due to inclement weather or industrial conditions occurring after the time for completion. The Superintendent shall have the power to extend the time for completion for any reason including any delay arising out of a breach of the Contract provisions by the Principal or its agents.

10. LIQUIDATED DAMAGES

If the Contractor fails to complete the Works within the time for completion together with any extensions of time granted by the Superintendent, the Contractor shall be liable to the Principal by way of pre-estimated and liquidated damages and not as a penalty for the amount stated on the Project Confirmation Form for every day or part of a day after that time or extended time until the whole of the Works has been completed.

11. DEFECTS LIABILITY PERIOD

The Contractor shall maintain the Works for the Defects Liability Period stated in the offer and shall promptly rectify at its own expense all omissions, defective workmanship or materials and all damage, loss or injury to the Works occasioned by faulty workmanship or materials. If the Contractor does not make good such omission, defect, damage, loss or injury, the Principal may have the omission, defect, loss, damage or injury remedied by other persons and the cost so incurred shall be a debt due to the Principal which may be deducted from payments.

12. CLEANING OF SITE

The Contractor shall keep the site and the Works clean and tidy and regularly remove from the site rubbish and surplus material arising from the execution of the Works. On completion of the Works the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind.

13. VARIATIONS

The Superintendent may direct in writing a variation to any work under the Contract including temporary work and such direction shall not invalidate the Contract. The variation shall be valued by mutual agreement between the Contractor and the Superintendent or failing agreement, by the Superintendent, and the Contract price increased or decreased accordingly. No payment for additional work shall be made unless the additional work is authorised in writing by the Superintendent.

14. PAYMENT

At monthly intervals or as otherwise agreed and upon issue of a Certificate of Practical Completion and within the time prescribed by Clause B5.06 of the Conditions of Engagement between Q-Build and Project Services, the Contractor shall deliver to the Superintendent claims for payment supported by evidence of the amount due to the Contractor and such information as the Superintendent may reasonably require.

Claims for payment and the payment thereof shall be in accordance with Clause B4.00 of the Conditions of Engagement between Q-Build and Project Services.

Payment of moneys to the Contractor shall not be evidence of the value of work or an admission of liability or evidence that work has been executed satisfactorily but shall be a payment on account only. The Superintendent may by a later payment certificate correct an error in a previous payment certificate.

15. SETTLEMENT OF DISPUTES

Not later than 14 days after a dispute has arisen either party shall refer the dispute to the Superintendent. Within 28 days of receiving notice of the dispute the Superintendent shall give to each party the Superintendent's written decision on the dispute. If the Superintendent fails to give a written decision on the dispute, or if either party is dissatisfied with the decision of the Superintendent the parties shall, within 14 days of the date of receipt of the decision, or within 14 days of the date upon which the decision should have been given by the Superintendent, confer at least once to attempt to resolve the dispute. If the dispute is not resolved clause F1.05 of the Conditions of Engagement between Q-Build and Project Services shall be enacted.



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Education Queensland



QUEENSLAND GOVERNMENT

TENDER DOCUMENTS

Education Queensland



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COOLER SCHOOLS 1999 PROGRAM

SPECIFICATION FOR BUILDERS CONTRACT 3 MACKAY

PROJECT No. 25429

Tender No: EDCP 0051
Date Issued:
Time/Date Closing:
Enquiries By Fax Only To: Peter Ahern
Fax: (07) 3405 5677

TENDER BOX
Strategic Procurement Section
Education House
Floor 13
30 Mary Street
Brisbane QLD 4002

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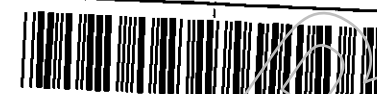
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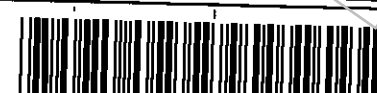
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**COOLER SCHOOLS 1999 PROGRAM
BUILDERS WORK CONTRACT NO. 3 - MACKAY
NOTICE TO TENDERERS**

Education Queensland

1. TENDERS CLOSE AT 2.00 PM,
2. LODGE AT: TENDER BOX
STRATEGIC PROCUREMENT SECTION
EDUCATION HOUSE
FLOOR 13
30 MARY STREET
BRISBANE
QLD 4002
3. YOU ARE REQUIRED TO RETURN ONE (1) ORIGINAL OF ALL RETURNABLE SCHEDULES.

RTI RELEASE

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NOTICE TO TENDERERS

1.0 Conditions of Contract

1.1 Tenderers are to note that the Department of Public Works' "Special Conditions of Contract and Annexure For Use With Australian Standard Minor Works Contract conditions (AS 4305-1996) have been modified.

1.2 The Conditions of Contract applicable to this tender are Australian Standard Minor Works Contract Conditions (AS 4305-1996) as amended by the Department of Public Works' "Medium Works Conditions of Contract (with or without design) For Use With Australian Standard Minor Works Conditions of Contract AS 4305-1996".

1.3 Tenderers' attention is drawn in particular to the following clauses which contain the major differences between the current and the superseded conditions. This list is not exhaustive and tenderers should make their own assessment:

- (i) inclusion of clause 3.1.2 relative to the provision of security.
- (ii) the designation of the previous clause 3.2 to become clause 3.3 which is applicable only if stated in the annexure.
- (iii) increase in margin for profit and overheads on variations pursuant to clause 23.

2.0 GST Clauses

Tenderers are to note the inclusion of GST clauses which are added as Supplementary Conditions of Contract.

3.0 QBSA's Financial Assessment Requirements

In addition to the principles of the Queensland Government State Purchasing Policy, one of the requirements for evaluating Tenderers is conducting a Financial Capacity Assessment.

The Qld Department of Public Works has selected the Qld Building Services Authority (BSA) to assess the financial capability of Tenderers tendering for Government contracts. The BSA, in turn, engages external financial consultants to carry out these assessments.

Your assistance in supplying the information below, within the specified time frame, will result in the awarding of a contract to the successful Tenderer expeditiously.

- A complete set of current financial statements* certified by an external accountant plus a full set of financial statements for the previous financial year, including:

- balance sheet
- profit and loss statement
- trading accounts and any supporting schedules.

(* Current financial statements means the statements must be complete to one of the following dates:
31 March 30 June 30 September 31 December
but they must not be more than 3 months old at the date of assessment of the Tenderer by BSA.)

- The value of the contract receipts for government jobs and non-government jobs for the above statements.
- The value of the general building and house building work for the contract receipts for the above statements.
- Details of any partnerships you/the company may be involved with and full financial statements for each of these partnerships.
- Any other relevant financial information you/the company may wish to submit to assist with the financial assessment.

Tenderers will be required to supply all the above information within 2-3 days of receiving a written request from the BSA and Tenderers must be available to respond to any queries raised by the BSA's financial consultants in relation to the information supplied.

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Education Queensland

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Medium Works Conditions of Contract	
Specification	
Schedule of Related Contracts and Schools	
Preliminaries	
Drawings Bound in Specification	

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RETURNABLE SCHEDULES

Education Queensland

RTI RELEASE

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Tender Form – for use with Australian Standard Minor Works Contract Conditions AS4305-1996

Name of Principal	As Specified in the Special Conditions of Contract, Annexure
Address for lodgement of tenders	The Tender Box, Strategic Procurement Section, Education House, Education Queensland, Floor 13, 30 Mary Street, Brisbane, Q, 4002.
Time for close of Tenders at	2.00 pm on

INSTRUCTIONS

1. Tenderer:
Insert the Workers Compensation No. and A.C.N. numbers.
Insert the full name of the tenderer and Queensland Building Services Authority (Q.B.S.A.) licence number.
Include trading name if applicable.

2. Tender Sum
Insert the Tendered Sum.
Warning: The Contract Sum is subject to variation and not rise and fall in accordance with Conditions of Contract.

3. Addenda
If no addenda have been allowed for, indicate ✓ in the box provided.

4. Special Conditions of Contract
Nominate (✓ appropriate box) the Tenderer's elected alternative.

5. Address
Pursuant to clause 32 of the Conditions of Contract insert the address for Service of Notices.

6. Execution
(i) Tenderer/agent to sign/affix Common Seal in accordance with its articles of association.

(ii) Print name of signatory/person who affixed seal. Where signature is that of an agent, written authority from tenderer is to be included with the tender.

Print name of witness.
Witness to sign.

Workers Compensation No. A.C.N. No.

I / We
.....
..... Q.B.S.A.
..... License No.

the under signed do hereby tender to execute and complete all work and perform all of the obligations in accordance with the terms of the Tender Documentation issued for the purposes of tendering in respect of:

for the lump sum of
.....
(words only)

The Lump Sum Tender Price includes allowance for the provision of addenda designated

inclusive or: Nil addenda allowed for in the Tender Sum.

Pursuant to the Special Conditions of Contract clause 3.3,
I / We elect to lodge Security * or; I / We elect to establish a "Retention Fund" *
(tick one only)*

My / Our address for the service of notices is
.....
Telephone: (.....) Facsimile: (.....)

(i) Signed Sealed and Delivered on the
..... day of 199...
by
(Name of Tenderer/Tenderer's Agent)
or
(ii) The Common Seal of
..... is affixed in accordance
with its articles of association by
on the day of 199...
in the presence of
(Name of Witness)(always required, please print)
.....
(Signature of Witness)

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PROVISIONAL BILL OF QUANTITIES

Builders Work Contract No 3 - Mackay

ITEM	DESCRIPTION	SPECIFICATION	UNIT	PROV QTY	RATE	EXTENSION
	Contract area: Mackay					
	<u>MEASUREMENT AND PRICE CLAUSES</u>					
A	All dimensions below are in mm unless given otherwise.		Note			
B	Price to include for making good existing adjacent surfaces, including painting, as required following provision of all openings and access panels or disturbing the surface. The made good surfaces shall match existing.		Note			
C	Price to include for arranging for all documentation and certification required for the lawful execution of the Builders Work including Building Approval.		Note			
D	Prices for all work shall include for all required scaffold (to AS1576), temporary power and temporary water supply required to complete the works.		Note			
E	All building works shall comply with statutory requirements and Australian standards including OH & S guidelines and minimum clearance to switchboards as required.		Note			
	<u>STRUCTURAL PENETRATIONS, FLASHING AND CAPPING</u>					
F	Provision of structural openings through walls, floors, ceilings, bulkheads and roofs.	Prices for forming openings shall include for cutting roof, wall or floor material, trimming and strengthening the roof or wall structure, placing all necessary flashings, and making good to provide a weather proof installation.	Note			
G	Provision of flashings and cappings for all roof and exposed wall penetrations.	Flashing material to AS2904. Preform to required shapes where possible. Notch, scribe, flute or dress down as necessary to follow the profile of adjacent surfaces. Mitre angles and lap joints 150 mm. Flash projections above or through the roof with two part flashings, consisting of a base flashing and a cover flashing, with at least 100 mm overlap. Provide for independent movement between the roof and the projection. Flash pipes by sealing with neutral cured silicone rubber and provision of a proprietary flexible clamping shoe with attached metal surround flashing.	Note			
H	Roof Penetrations	0- 100 diameter	Each	20		
I	Roof Penetrations	100-500 diameter	Each	10		
J	Roof Penetrations	0-0.25m ²	Each	10		
K	Roof Penetrations	0.26 - 0.5m ²	Each	10		
L	Roof Penetrations	0.5 - 1m ²	Each	10		
M	Wall Penetrations	Brick - 0-100 dia	Each	20		
N	Wall Penetrations	Brick - 100-500 dia	Each	10		
O	Wall Penetrations	Brick - 0-0.25m ²	Each	10		
P	Wall Penetrations	Brick - 0.26-0.5m ²	Each	10		
Q	Wall Penetrations	Brick - 0.5-1m ²	Each	10		
R	Wall Penetrations	Concrete Filled Block - 0-100 dia	Each	20		
S	Wall Penetrations	Concrete Filled Block - 100-500 dia	Each	10		
T	Wall Penetrations	Concrete Filled Block - 0-0.25m ²	Each	10		
U	Wall Penetrations	Concrete Filled Block - 0.26-0.5m ²	Each	10		
V	Wall Penetrations	Concrete Filled Block - 0.5-1m ²	Each	10		
W	Wall Penetrations	FC Sheet or Timber Block - 0-100 dia	Each	20		
X	Wall Penetrations	FC Sheet or Timber Block - 100-500 dia	Each	10		
Y	Wall Penetrations	FC Sheet or Timber Block - 0-0.25m ²	Each	10		
Z	Wall Penetrations	FC Sheet or Timber Block - 0.26-0.5m ²	Each	10		
AA	Wall Penetrations	FC Sheet or Timber Block - 0.5-1m ²	Each	10		
AB	Removal of Louvre Window	And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe penetrations etc.	Each	40		
AC	Removal of Fixed Glass	And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe penetrations etc.	Each	40		
AD	Removal of a Hopper Window	And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe	Each	40		

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AE	Removal of Security Bars	penetrations etc.		
AF	Ceiling Penetrations	Associated with items AB, AC, AD. Prices for forming openings in ceilings shall include for cutting plasterboard ceiling or removing ceiling tiles, trimming and strengthening the structure, placing all necessary furrings and trims, and making good to provide a flush installation.	each note	20
AG	Ceiling Penetrations	0 - 100 diameter	each	20
AH	Ceiling Penetrations	100-500 diameter	each	20
AI	Ceiling Penetrations	0-0.25m ²	each	20
AJ	Ceiling Penetrations	0.26 - 0.5m ²	each	10
AK	Ceiling Penetrations	0.5 - 1m ²	each	10
AL	Management Plans	Price for providing a Management Plan in accordance with the requirements of the Workplace Health and Safety Regulations 1997 'Asbestos Removal Work' when penetrating asbestos cement roofing and obtain written approval from the relevant Authorities before commencing work on site. To be treated on a case by case basis. Contractor to notify Superintendent if/where it exists prior to work commencing.	Note	
AM		Asbestos master plan	per plan	1
<u>ACCESS PANELS</u>				
AN	Provision of access panels as required through flush ceilings and bulkheads.	Material to match adjacent ceiling/bulkhead. Provide perimeter trim to access panel and adjacent ceiling/bulkhead. Provide access panel support and screw fixings to facilitate regular maintenance access.	Note	
AO		0 - 0.1m ²	each	10
AP		0.1 - 0.25m ²	each	10
AQ		0.25 - 0.5m ²	each	10
<u>UNDERCUT DOORS</u>				
AR	Undercutting doors as required.	Nominal 25 mm, unless noted otherwise. Provide additional frame material as required, including painting. Prices to include for removal of door, making good damaged finishes on door and frame and rehanging the door.	Note	
AS		Single door (0-1000 wide)	each	10
AT		Pair of doors (1000 - 2000 wide)	each	2
<u>ROOF ACCESS</u>				
AU	Provision of roof access and walkways	Roof access position(s) and walkways, handrails and nominal 600 mm wide maintenance platform around roof mounted evaporative cooling units and other roof mounted equipment. Materials, design and construction to AS1657 -1992. Ladder rail to roof.	Note	
AV		3 - 5m ladder with safety cage	each	2
AW		5 - 8m ladder with safety cage	each	2
AX		6m length of walkway including handrail to one side	per length	10
AY		4 sided platform including handrail to surround evap. cooler. Nominal size of evap cooler is 1000 x 1000	per platform	2
AZ		4 sided platform including handrail to surround evap. cooler. Nominal size of evap cooler is 1250 x 1250	per platform	2

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BA	<u>SUPPORT FRAMES / BRACKET</u>	Hot dipped galvanised metal complete with closing strips and end caps. PCL 600 or similar.	Note	
BB		Wall mounted condenser unit support	Each	40
BC		Wall mounted fan coil unit support	Each	40
BD		Ceiling support for fan coil unit	Each	40
BE		Ceiling support for recessed fan coil unit	Each	40
	<u>PLINTHS</u>			
BF	Provision of nominal 100 mm thick concrete pads under ground-mounted condensing and evaporative cooling units.	Materials and construction to AS3600 -1994. Concrete: 20Mpa to AS1379. Reinforcement: F72 fabric to AS1302. Framework class 3.	Note	
BG		900 x 2000	per plinth	20
BH		900 x 3500	per plinth	20
BI		900 x 5000	per plinth	10
BJ		600 x 3000	per plinth	10
BK		600 x 4000	per plinth	10
	<u>ENCLOSURES</u>			
BL	Provision of Condensing Unit Cages	Condenser cages shall have three sides and a top with the fourth side being formed by a wall of the school building. Provide the fourth side for elevated buildings such as modulars. Construct the cages from black steel to detail and hot dip galvanise on completion. Provide a brass shackled lock (Lockwood 234B) to each cage. Locks to be keyed alike to suit the School. Refer detail CS1999CUC1.	Note	
BM		Single cage	Each	20
BN		Double Cage	Each	20
BO		Single Cage Double Height	Each	10
BP		Double Cage Double Height	Each	10
	<u>GRAVEL PITS</u>			
BQ		Price for providing a condensate soakage system. System to be designed: (a) to comply with the relevant local government Authority requirements for the design of transpiration/evaporation septic systems, as applicable to the region and (b) to suit local ground conditions with respect to percolation rates, materials and workmanship to AS3500.3 -1990 and AS1945 -1990 Pits are to be sized to suit the number of AC units and be positioned a minimum of 2000 clear of building foundations. Condensate shall enter the pit via a wall mounted tundish (at 2100 AGL minimum) and a 50 diameter minimum underground pipe. Mechanical protection from the tundish to ground level shall be provided.	Note	
BR		Gravel pit 1000 x 1000 x 1000	Per pit	100
BS	<u>ELECTRICAL PITS</u>	Reinforced concrete cable pit complete with a high grade cast iron medium duty pit lid cast into a suspended concrete slab, provide an upstand and cable access all to suit the individual main switchboard. Refer to detail CS1999 MSBP.	Note	
	A typical main switchboard has a footprint of 1850 x 600mm			
BT		Electrical pit	Per pit	16

TREES

BU	Removal and disposal of trees including stumps	Price for removal and disposal of trees including stumps and root system from site.	Note	
BV		Tree to 1800 high	Each	10
BW		Tree over 1800 high	Each	4
BX	All items A - BW inclusive	SUB TOTAL:		

HOURLY RATES OF TRADESMEN

BY		Price of a provisional rate for hourly rates of tradesman for further work to that identified above		
BZ		Concreter	per hour	8
CA		Fencer	per hour	8
CB		Carpenter / Plasterer / Painter	per hour	8
CC		Sheetmetal worker	per hour	8
CD		Labourer	per hour	8
CE		Roofer	per hour	8
CF		Glazier	per hour	8
CG		Scaffolder	per hour	8
CH	Items BZ to CG inclusive	SUB TOTAL:		
CI	Items BX & CH	GRAND TOTAL:		

RTI RELEASE

COOLER SCHOOLS CODE OF CONDUCT FOR CONTRACTORS

1. **General Background and Limitations**
Notwithstanding rules and regulations mentioned under Common law, Criminal Law, Workplace Health and Safety, Education Queensland regulations and others, these briefing notes are compiled to highlight potential and specific issues related to individuals visiting and working in school premises.
2. **Site Rules**
 - Project start - up meeting comprising representatives from each school, EQ, Project manager and Contractor.
 - Site induction of all contractors and sub-contractor's staff before entering the site.
 - Visitors to report each day at school reception desk recording and stating business, hours, locations etc.
 - Clear identification of each worker by name badge, the employer shall be identified either by uniform or badge.
 - All communications to follow project/contract structure.
 - Incident and accident reports are compulsory and must be lodged on the day of the event.
 - Do not use offensive language.
 - Do not answer provocation by students.
 - Do not smoke on site.
 - Do not bring prohibited substances on site.
 - Clear all rubbish daily.
3. **Records and Documentation**
 - Visitors logbook signed by visitor and school representative: each day on arrival and departure of site.
 - Maintenance book signed by visitor and school representative.
 - Site meeting minutes
 - Diary notes.
4. **Safety**
 - Ensure safety of staff, teachers, pupils while working at the end of each working day.
 - Ensure protection of Contractors equipment, material and school equipment.
 - Ensure protection against dust, debris, fumes and spillage.
 - Provide safety data sheet of all hazardous material.
 - Ensure the fire alarms system (smoke or thermal detectors) are not accidentally activated.
 - Ensure the intruder detection systems are not accidentally activated.
5. **Security**
 - Ensure security against theft.
 - Ensure security against vermin and rodents.
 - Ensure security against rain, water damage, condensate damage, refrigerant leakage.
6. **Co-ordination**
 - Co-ordinate all activities, jobs, start-up, testing, cut in with school representatives and individual occupants of each area.
 - Co-ordinate all work, equipment layouts and school items to be relocated.

I have read and understood the above details and understand that a non-compliance with the intent herein constitutes a breach in contract.

Acknowledgment: _____

Date: _____

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MEDIUM WORKS CONDITIONS OF CONTRACT

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QUEENSLAND GOVERNMENT
DEPARTMENT OF PUBLIC WORKS

Medium Works

Conditions of

Contract

(with or without design)

for use with

Australian Standard Minor Works Conditions of Contract AS 4305 - 1996

May 1999

Conditions of Tender
Special Conditions of Contract &
Annexure

Prepared by
Legal and Contractual Services
Department of Public Works

Release

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Tender Requirements for Design and Construction Contract Tenders

Tenderers are required to submit as part of the tender the following:

A Development Proposal based on the Tender Documents. The Development Proposal is required to contain:

- (i) a statement of the names of consultants which the Tenderer proposes to engage and the extent of services envisaged;
- (ii) a time program indicating all activities occurring during the time required for the execution of the work under the Contract, including design development, documentation, construction and commissioning activities;
- (iii) the projected cash flow;

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CONDITIONS OF TENDER

Lump Sum Tenders using AS4305 - 1996 Minor Works Contract Conditions

1. DEFINITIONS

1.1 Meanings assigned to words and expression in the Conditions of Contract shall apply to those words and expressions in the Tender Documents.

1.2 Unless the contrary intention applies, the following definitions also apply;

"Intellectual Property Rights" means copyright, patents and all rights in relation to inventions, registered and unregistered trademarks (including service marks), registered designs, circuit layouts and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields;

"Tender" means an offer submitted by a Tenderer in response to the Tender Documents;

"Tenderer" means any party submitting a Tender in response to the Tender Documents and includes a party requested directly or indirectly by the Principal to submit a Tender;

2. TENDER DOCUMENTS

2.1 "Tender Documents" comprise:

- (a) the Tender Form;
- (b) these Conditions of Tender;
- (c) Minor Works Contract Conditions (AS 4305 - 1996);
- (d) the Special Conditions of Contract;
- (e) the Code of Tendering (AS4120 - 1994) as amended by these Conditions of Tender;
- (f) the Specification and Drawings; and
- (g) other documents as are issued and/or referred to by the Principal for the purpose of tendering.

2.2 To the extent of any inconsistency between the Conditions of Tender and AS4120, the Conditions of Tender shall prevail.

3. CONDITIONS OF TENDER

3.1 By receiving a copy of the Tender Documents or submitting a Tender in response to the Tender Documents, a party agrees to be bound by the terms of the Conditions of Tender.

4. NOT BOUND

4.1 The Principal, in its absolute discretion may decline to accept or consider the lowest, best value for money or any Tender.

4.2 Without limiting the generality of Clause 4.1 and notwithstanding that the Principal has invited Tenders from selected organisations or has otherwise procured submission of Tenders:

- (a) the Tenderer acknowledges that the Principal has not at the time of inviting tenders satisfied itself as to the Tenderers financial capacity to satisfactorily perform and complete the Contract in accordance with its terms.
- (b) the Principal may decline to accept or consider any Tender from a Tenderer who, within seven (7) days prior to the proposed date of acceptance of a Tender or such other date as the Principal may at its absolute discretion advise, is not able to satisfy the Queensland Building Services Authority "QBSA" that it has sufficient financial capacity to satisfactorily perform and complete the Contract in accordance with its terms or is not able or does not elect to comply with any condition that may be imposed by the QBSA in assessing the financial capacity of the Tenderer.

4.3 The Tenderer shall provide to the QBSA within the time stipulated all information requested in relation to the financial capacity of the Tenderer to undertake and complete the work under the Contract.

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4.4 In the provision of any information requested, the Tenderer acknowledges and agrees that such information provided may be used by the QBSA in any assessment it may undertake for the purposes of determining the continuing capacity of the licensee to demonstrate that it meets the licensing criteria required by the Queensland Building Services Authority Act.

4.5 All costs of tendering shall be borne by the Tenderer.

5. INFORMATION

5.1 The Tenderer is required to visit the site and satisfy itself of local conditions and facilities and otherwise to acquaint itself with all matters relating to the proposed Contract before submitting its Tender.

5.2 The Principal will not be liable for any claim on the grounds of erroneous or insufficient information.

5.3 The Principal shall not be bound by any oral advice or information given or furnished in respect of the Tender but shall be bound only by written advice or information furnished by an officer of the Department of Public Works and Housing.

5.4 Tenderers shall upon request assist the Principal in its assessment of the Tender by providing further information including but not limited to, financial data and managerial capacity of the Tenderer.

6. TENDER REQUIREMENTS

6.1 Tenders shall be submitted on the Tender Form provided by the Principal.

6.2 The Tender shall be accompanied by all documents required by the Tender Documents to be submitted with the Tender.

6.3 Where a schedule of technical details is required to be lodged with the Tender, the Tenderer shall when requested by the Principal provide such additional information, by way of further details, illustrations, catalogues, brochures and the like, as may be necessary to fully describe the Tender.

6.4 The Tenderer shall complete and sign every document included in the Tender Documents on which provision is made for its signature and (except where otherwise provided) shall lodge every such document completed and signed, witnessed and dated as provided for with the Tender.

7. COMPLIANCE WITH REQUIREMENTS AND ALTERNATIVES

7.1 Any Tender which does not comply in every respect with the requirements of, or which contains provisions not required or allowed by the Tender Documents may be rejected. However, the Tenderer may submit an alternative Tender in addition to a conforming Tender.

8. LODGEMENT OF TENDER

8.1 The Tender shall be enclosed in a sealed envelope, addressed and delivered to the "Address for lodgment of Tenders" as indicated on the Tender Form.

8.2 The envelope shall be endorsed with the name of the work tendered for, the closing date and time for receipt of Tenders and the Tenderer's name and address.

8.3 Tenders shall be lodged in the tender box at the location indicated on the Tender Form by being placed therein before the time specified for the closing of Tenders. Any Tender not in the tender box before the specified closing time may be rejected at the discretion of the Principal.

In exercising its discretion the Principal shall, amongst other factors, consider if there is satisfactory evidence that such Tender was:

- (a) delivered to the "Address for lodgment of Tenders", stated on the Tender Form, before the specified closing time for receipt of Tenders; or
- (b) dispatched to the "Address for lodgement of Tenders" stated on the Tender Form in sufficient time to reach that office under normal circumstances before the specified closing time for receipt of tenders.

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8.4 Franking machine stamps will not be accepted by the Principal as proof of the date and time of dispatch of a Tender received after the specified closing time for the receipt of Tenders.

8.5 A tender received by telephonic or telegraphic devices, telegram, telex, facsimile or other electronic means will not be considered.

9. QUALITY ASSURANCE

9.1 The Tenderer shall provide evidence with the Tender that it can comply with the Quality Assurance requirements of the proposed Contract.

10. QUEENSLAND GOVERNMENT'S STATE PURCHASING POLICY

10.1 Notwithstanding any industry practice to the contrary, the Principal may accept a Tender that on a view of all the circumstances appears to it to offer the best value for money and otherwise comply with the fundamental principles set forth in the State Purchasing Policy.

11. CODE OF TENDERING

11.1 The Principal has adopted the Code of Tendering AS4120-1994 as amended by these Conditions of Tender, as its Code of Tendering.

11.2 The Code of Tendering applies to all parties involved in the tender process including the Principal and Tenderer.

11.3 Tenderers agree to comply with the Code of Tendering.

12. INTELLECTUAL PROPERTY

12.1 Intellectual Property Rights in all material submitted by the successful Tenderer in its Tender is hereby assigned to the Principal upon acceptance of the Tender. To the extent that such Intellectual Property Rights (whether of the Tenderer or a third party) cannot be assigned until their creation, such Intellectual Property Rights shall thereupon be assigned to the Principal.

12.2 To the extent that any material submitted in the successful Tender is the subject of pre-existing Intellectual Property Rights of third parties, the Tenderer shall procure an assignment of all such Intellectual Property Rights to the Principal.

13. INTELLECTUAL PROPERTY WARRANTY & INDEMNITY

13.1 The Tenderer warrants that the Intellectual Property Rights to be assigned to the Principal do not and will not infringe the Intellectual Property Rights of any person.

13.2 The Tenderer fully indemnifies the Principal against any loss, costs, expenses, demands or liability, whether direct or indirect, arising out of any claim by a third party against the Principal alleging that the material contained in the Tender or acts by the Principal in relation to the Principal's use of the Tender material infringe any Intellectual Property Rights of that third party.

14. CONTACT PERSON

14.1 The contact person for all inquiries regarding the tender process is

**The Programme Manager – Cooler Schools,
Education Queensland
Telephone: (07) 3247 3577.**

14.2 The Tenderer must direct all queries in respect of the tender process to the Programme Manager unless directed otherwise by the Principal.

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SPECIAL CONDITIONS OF CONTRACT

GENERAL

The Conditions of Contract shall be the "Australian Standard Minor Works Contract Conditions AS4305 - 1996" as amended by these Special Conditions of Contract.

References to "Annexures" to AS4305 shall be read as reference to Annexures attached to these amendments.

References to "attached to these Conditions" shall be read as reference to attachments to these amendments.

In the event of conflict or inconsistency between the provision of AS 4305 - 1996 and these Special Conditions of Contract, the Special Conditions of Contract shall take precedence.

1. INTERPRETATION

"Contract Sum"

Delete/insert

" 'Contract Sum' means -

- (a) where the Principal accepted a lump sum, the lump sum;
- (b) where the Principal accepted rates, the sum ascertained by calculating the products of the rates and the corresponding quantities in the Bill of Quantities or Schedule of Rates;
- (c) where the Principal accepted a lump sum and rates, the aggregate of the sums referred to in paragraphs (a) and (b),

but excluding any additions or deductions which may be required to be made under the Contract."

"Date of Practical Completion"

Delete/insert

" 'Date for Practical Completion' means the last day of the period of time stated in Item 11."

2. NATURE OF CONTRACT

Insert new subclause -

"2.3 Sales Tax Exemption to Government Departments

Certain materials, plant and equipment purchased for incorporation into the Works may be exempt from payment of sales tax under the Sales Tax (Exemptions and Classifications) Act. The Contractor shall make its own inquiries to ascertain the extent of any such exemptions."

3. SECURITY AND RETENTION MONEYS

Express the existing clause as subclause "3.1 Security and Security in Lieu of Retention Moneys" and insert as the first paragraph:

- "3.1.1 Security and retention moneys are for the purpose of ensuring the due and proper performance of the Contract and for the purpose of providing security of payment to Subcontractors of the Contractor (as these terms are defined in the Subcontractors' Charges Act)."

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Delete the third paragraph and insert:

"3.1.2 The Contractor may request at any time permission to provide security to be held by the Principal in lieu of retention moneys pursuant to subclause 3.1.1. The Principal may in his entire discretion and without giving reasons reject any such request by the Contractor.

The security shall be in any of the forms stated in Item 12. The form of undertaking attached to these conditions is approved.

In the event that the Contractor requests to provide security in lieu of retention and the Principal elects to agree to the request - the following provisions shall apply notwithstanding any other provision in the Contract to the contrary.

- (a) The security shall be for an amount equal to 5% of the Contract Sum or such other sum as may be calculated pursuant to subclause (d) hereunder and shall be lodged with the Principal.
- (b) Unless and until the expiration of a period of 5 working days after the security is lodged, retention moneys shall be deducted in accordance with clause 3.1.1.
- (c) 5 working days after the lodgement of the security - retention moneys pursuant to clause 3.1.1 shall not be deducted and all retention moneys previously deducted (if any) pursuant to this clause shall be the subject of the next following progress certificate issued by the Superintendent with appropriate amounts credited to the Contractor.
- (d) Subject to the rights of the Principal under the Contract, the provisions of clauses 3.1, 3.2, and 28 shall apply to the security.
- (e) A security given pursuant to this clause 3.1.2 shall be regarded as a performance undertaking with purposes as set out in clause 3.1.1."

Insert further subclauses as follows:

"3.2 Recourse to Retention Moneys and Conversion of Security

A Party may have Recourse to Retention Moneys and/or Cash Security.

The Principal may at any time convert into money security that does not consist of money whether or not the Principal is then entitled to exercise a right under the contract in respect of the security. The Principal shall not be liable in any way for any loss occasioned by such conversion.

If after the Principal has exercised all or any of his rights under the contract in respect of the security (except for those set out in this clause), the security or any part thereof then remaining is, but for this clause, releasable to the contractor. The Principal may, before releasing any security or any part thereof then remaining:

- (a) ascertain the existence and amount of any Subcontractors' Charge (as defined in clause 3.3);
- (b) in the event that any such Subcontractors' Charge is found to exist, the Principal may convert into money any security or any part thereof then remaining that does not consist of money whereupon any money so obtained shall be payable, creditable or allowable to the Contractor pursuant to the Contract in complete or partial satisfaction of the contract price (as the term is defined in the Subcontractors' Charges Act); and

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- (c) pay into court or otherwise secure the money for the benefit of the chargee from such moneys so payable, creditable or allowable the total amount set out in the said Subcontractors' Charges and account to the Contractor as to the balance, if any."

"3.3 Security for Subcontractors

If stated in the Annexure to the Conditions of Contract, the following clauses have been added to AS4305 - 1996.

3.3.1 Any security or retention monies provided pursuant to this subclause are additional to and distinct from those provided for in clauses 3.1 and 3.2 of the Conditions of Contract and are provided solely on the terms and conditions of this clause.

3.3.2 For the purposes of clause 3.3 the following words and phrases shall have the following meanings:

"**Security**" means 5% of the Contract Sum in any of the forms stated in Item 12. The unconditional undertaking attached to these Conditions is approved;

"**Subcontractor**" means a person who has entered into a contract with the Contractor for the performance of any part of the work under the contract in accordance with clause 5.

"**Subcontractors' Charges Act**" means the Subcontractors' Charges Act 1974-1979 and includes any statutory amendments or regulations thereto.

"**Retention Fund**" means either an undertaking by a financial institution being a trading bank carrying on business in Australia approved by the Contractor and held upon trust upon the terms and conditions contained in clause 3.3.9 hereof and convertible into money on terms and conditions agreed upon between the Contractor and Subcontractor or a trust fund established by the Contractor pursuant to this subclause by the opening of an account which may be either:-

- (a) in the joint names of the Contractor and Subcontractor and from which withdrawals may only be made upon the signature of 2 persons, one appointed by each of the Contractor and Subcontractor; or
- (b) in the sole name of the Contractor and from which a withdrawal may only be made with the Subcontractor's written consent which is obtained not more than 3 days prior to such withdrawal

or a combination of both undertaking and trust fund.

"**Subcontractors' Charge**" means a Notice of Intention to Claim Charge made or given to the Principal by any Subcontractor concerning the performance of work for a Contractor (as those terms of "Subcontractor", "Contractor" and "Work" are defined in the Subcontractors' Charges Act) purportedly pursuant to the provisions of the Subcontractors' Charges Act.

3.3.3 Any Security provided pursuant to this clause is -

- a) firstly for the purpose of satisfying (to the extent of the Security) claims of any Subcontractor or Subcontractors of the Contractor (as these terms are defined in the Subcontractors' Charges Act) in respect of a Subcontractors' Charge (and thereby further securing Subcontractors entitlements to the benefits conferred in the Subcontractors' Charges Act);

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- (b) secondly, for the purpose of satisfying (to the extent of the Security) any other claims which any Subcontractor has against the Principal pursuant to some other legal entitlement; and
 - (c) thirdly, to satisfy any claims of the Principal against the Contractor.
- 3.3.4 Within twenty-eight (28) days of the date of acceptance of tender the Contractor shall either:
 - (a) lodge the Security with the Principal; or
 - (b) establish a Retention Fund for the purpose of this clause and give notice thereof in writing to the Principal.
- 3.3.5 Consequent upon service of a Subcontractor's Charge upon the Principal by any Subcontractor the Principal may at any time convert any Security that does not consist of cash.
- 3.3.6 Upon receipt of cash Security from the Contractor or upon any conversion of any Security by the Principal pursuant to clause 3.3.5 or upon any payment to the Principal by the financial institution or insurance company pursuant to the terms of any Security, any money so held or obtained by the Principal shall be payable creditable or allowable to the Contractor pursuant to the contract in complete or partial satisfaction of the contract price (as that term is defined in the Subcontractors' Charges Act) and may be paid into Court by the Principal pursuant to the Subcontractors' Charges Act or otherwise dealt with in accordance with the terms of that legislation provided that the moneys so obtained shall not be payable except for the purpose of satisfying a claim referred to in clause 3.3.3(a) or (b).
- 3.3.7 Subject to clauses 3.3.5 and 3.3.6 and notwithstanding clause 28, any Security provided pursuant to this clause or any part thereof remaining shall not be released by the Principal until after the expiration of three (3) months after the issue of the Certificate of Final Completion. Prior to its release the Principal may ascertain whether or not all of its rights to payment can be satisfied without the need to have recourse to this security. If the Principal is of the opinion that that is not the case the Principal shall then be entitled to withhold the release of this security and to convert it in whole or in part and apply it towards satisfaction of those rights to payment.
- 3.3.8 Where the Principal converts the security and makes a payment pursuant to clauses 3.3.5 and 3.3.6 hereof, the Principal shall thereupon be entitled to give written notice to the Contractor requiring the Contractor to provide further Security for an amount equal to the payment by the Principal. Failure to provide such further security within 14 days of the date of such notice shall entitle the Principal to deduct this amount from any certificate which may issue pursuant to clause 24 unless the Superintendent has already made such a deduction when certifying for payment pursuant to clause 24.
- 3.3.9 Any Retention Fund established pursuant to this clause shall be held on trust for the Subcontractor until the Subcontractor becomes entitled to receive it.
- 3.3.10 Where pursuant to a term in the Subcontract:
 - (a) the Contractor withholds any retention money from a payment to a Subcontractor, the Contractor warrants that it will forthwith deposit those moneys into a trust fund established pursuant to clause 3.3.4 and hold those moneys in accordance with this clause.

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- (b) the Subcontractor has provided the Contractor with security in substitution for retention moneys to be retained by the Contractor, the Contractor shall hold that security in accordance with this clause."

4. CONTRACT DOCUMENTS

No amendments

5. SUBCONTRACTING

Insert new paragraph

"The Contractor shall confirm to the Superintendent in writing the name and address of the Subcontractor, the total value of the proposed Subcontract and that the Contractor and the Subcontractor have prior to commencement of any work by the Subcontractor entered into an agreement in writing for the performance of the work which contains provisions concerning Security and Record of Payment in identical terms to those contained in clauses 3.3 and 37 of the Conditions of Contract."

6. PROTECTION OF PEOPLE AND PROPERTY

7. CARE OF THE WORK AND REINSTATEMENT OF DAMAGE

8. DAMAGE TO PERSONS AND PROPERTY

9. INSURANCE OF THE WORK UNDER THE CONTRACT

10. PUBLIC LIABILITY INSURANCE

11. INSURANCE OF EMPLOYEES

12. INSURANCE PROVISIONS

13. SUPERINTENDENT

14. REPRESENTATIVES

15. SITE

16. MATERIALS AND WORK

No amendments.

17. PROGRESS, PROGRAMMING AND SUSPENSION

Insert a new paragraph:-

"The Contractor shall give the Superintendent reasonable advance notice of when the Contractor requires any information, materials, documents or instructions from the Superintendent or the Principal."

18. PRACTICAL COMPLETION

19. EXTENSION OF TIME FOR PRACTICAL COMPLETION

20. DAMAGES FOR DELAY IN REACHING PRACTICAL COMPLETION

21. DELAY OR DISRUPTION

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22. DEFECTS LIABILITY

No amendments.

23. VARIATIONS

Insert a new paragraph after paragraph three:-

"The margin for profit and overheads shall be 12¹/₂% for work carried out by the Contractor's own workers and 7¹/₂% for work carried out by others."

24. CERTIFICATES AND PAYMENTS

No amendment.

25. CERTIFICATE OF PRACTICAL COMPLETION

Insert "written" in the first line before "request".

26. EFFECT OF CERTIFICATES

Delete "or a Certificate of Practical Completion".

28. FINAL CERTIFICATE

Insert at the end of the first paragraph:-

"or give the Contractor in writing the reasons for not issuing the certificate".

29. DEFAULT

Insert at the end of subclause 29.2:-

"Upon giving a notice by the Principal under this clause, the Principal may suspend payments to the Contractor until the earlier of -

- (a) the date upon which the Contractor shows reasonable cause;
- (b) the date upon which the Principal takes action under Clause 29.3(a) or (b); or
- (c) the date which is 7 days after the last day for showing cause in the notice under this clause.

If the Principal exercises the right under clause 29.3(a), the Contractor shall not be entitled to any further payment in respect of the work taken out of the hands of the Contractor unless a payment becomes due to the Contractor under clause 29.3."

30. INSOLVENCY

31. DISPUTE RESOLUTION

32. SERVICE OF NOTICES

No amendments.

Add the following new clauses:-

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"33. WORKPLACE HEALTH AND SAFETY

For the purpose of this clause the words "Principal Contractor", "serious bodily injury", "dangerous event", "work caused illness" and "work injury" have the meanings assigned to them by the Workplace Health and Safety Act ("the Act").

Upon acceptance by the Principal of the Contractor's offer -

- (a) the Principal shall be deemed to have appointed the Contractor to be the Principal Contractor pursuant to s.13 of the Act;
- (b) the Contractor shall be deemed to have accepted the appointment; and
- (c) the Contractor shall, in respect of the works to be executed under the contract, be responsible for the performance of the functions of the Principal Contractor within the meaning of the Act and Regulations in force under the Act.

Such appointment as Principal Contractor under the Act shall be in force during the continuance of the contract unless sooner revoked by the Principal giving twenty-one (21) days notice in writing to the Contractor of its revocation or by the Principal taking over or cancelling the contract pursuant to any provision of the contract or according to law.

The Contractor shall indemnify and keep indemnified the Principal against all liabilities which may be imposed under or which may arise out of enforcement of any section of the Act or Regulations.

The Contractor shall notify the Superintendent of every serious bodily injury, dangerous event, work caused illness and work injury which occurs on site as soon as possible but not later than twelve (12) hours after such occurrence."

"34. APPRENTICE TRAINING REQUIREMENTS

The Contractor, in its execution of the work under the Contract, must employ on the site of the works either directly or indirectly through subcontractors, apprentices/trainees for a number of labour hours no less than 10% of the total hours of the remainder of the labour employed on site. In this regard -

- (a) this requirement excludes any consideration in respect of mechanical and electrical trades;
- (b) the Contractor must submit to the Principal within seven (7) days after the issue of the Certificate of Practical Completion or termination of the Contract a return in the Form attached to these Conditions. Without prejudice to any other rights under the Contract or otherwise, the Principal may suspend payment and return of retention monies (whether or not held in alternative form) to the Contractor until the return is received."

"35. GENERAL RIGHT OF SET OFF

Without limiting the Principal's rights under any other provision in the contract and notwithstanding the provisions of or the issue of a certificate by the Superintendent under clause 24 and 29, the Principal may deduct from any monies due to the Contractor any sum which is payable by the Contractor to the Principal whether or not the Principal's right to payment arises by way of damages, debt, restitution or otherwise and whether or not the factual basis giving rise to the Principal's right to payment arises out of this contract, any other contract, or is independent of any contract. If the monies payable to the Contractor are insufficient to discharge the liability of the Contractor to pay such sum to the Principal, the Principal may have recourse to retention monies or security provided therefor. Nothing in this clause shall affect the right of the Principal to recover from the Contractor the whole of such monies or any balance that remains owing."

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"36. APPLICABLE LAW

The law governing the Contract, its interpretation, any agreement to arbitrate and the conduct of any arbitration or litigation, is the law of the State of Queensland."

"37. PAYMENT OF WORKERS AND SUBCONTRACTORS

37.1 The Contractor, with each payment application, shall provide to the Superintendent a schedule of all subcontractors employed on the Works showing their names, addresses and trade.

37.2 (a) All payments to Subcontractors shall be recorded by the Contractor on a Record of Payments form which shall be in the form attached to these conditions. The Contractor shall ensure that, as to any payment to any Subcontractor, such form is fully completed, executed by the Subcontractor concerned, and kept by the Contractor as proof of compliance with this clause.

(b) At the time of making a progress claim under clause 24 the Contractor shall deliver to the Superintendent a statement naming any Subcontractor who has failed or refused to execute a Record of Payment form or to whom no payment has yet been made and hereby acknowledges that the Superintendent may thereupon notify any such Subcontractor that after the expiration of 10 days from the date of the progress claim the Superintendent proposes to issue a payment certificate to the Principal including such amounts as may be claimed by the Contractor in respect of such Subcontractor.

(c) The Record of Payment forms shall be:

- (i) kept by the Contractor until six months after issuance of the Final Certificate by the Superintendent;
- (ii) provided to the Superintendent for inspection and copying upon reasonable notice in writing.

(d) At the request of the Contractor and out of moneys payable to the Contractor the Principal may on behalf of the Contractor make payment directly to a worker or Subcontractor.

(e) Before the payment of any money to the Contractor by the Principal, the Superintendent may require the Contractor:

- (i) to deliver to the Superintendent a Statutory Declaration in the form attached to these conditions by the Contractor, or where the Contractor is a corporation, by the representative of the Contractor who is in a position to know the facts attested to that all the Subcontractors of the Contractor have been paid all that is due and payable to such Subcontractors up to a date specified by the Superintendent and that all its workers who at any time have been engaged on work under the contract by the Contractor have been paid all moneys due and payable to them up to the date of submission by the Contractor of a progress claim in respect of their employment on the work under the contract;

and, if requested in writing, reasonable supporting documentary evidence thereof,

- (ii) to deliver to the Superintendent a Statutory Declaration in the form attached to these conditions by any Subcontractor, or where the Subcontractor is a corporation, by a representative of the Subcontractor who is in a position to know the facts attested to:-

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- that all workers who have been engaged by a Subcontractor of the Contractor have been paid all moneys due and payable to them up to the date of submission by the Contractor of a progress claim in respect of their employment on the work under the contract; and
- that all Subcontractors of the Subcontractor have been paid all that is due and payable to such Subcontractors up to the date of submission by the Contractor of a progress claim in respect of the work under the contract

and, if requested in writing, reasonable supporting documentary evidence thereof.

- (f) If within 3 days after the request is made by the Superintendent, the Contractor fails to provide a Statutory Declaration in the form attached to these conditions or the documentary evidence requested in a form satisfactory to the Principal (as the case may be) the Principal may, notwithstanding the other provisions of the Contract suspend payments to the Contractor until such Statutory Declaration is provided.

- 37.3 The Contractor acknowledges that the Principal may release to a Subcontractor details of payments in percentage terms made by the Principal to the Contractor in respect of the works or any part thereof unless the Contractor shows reasonable grounds why such details should not be released or satisfies the Principal, that all payments due and payable to the Subcontractor by the Contractor have been paid.
- 37.4 If a worker or Subcontractor obtains a court order in respect of monies referred to in clause 5.4 and produces to the Principal the court order and a Statutory Declaration that it remains unpaid, the Principal may pay the amount of the order, and costs included in the order, to the worker or Subcontractor and the amount paid shall be a debt due from the Contractor to the Principal.
- 37.5 After the making of a sequestration order or a winding up order in respect of the Contractor, the Principal shall not make any payment to a worker or Subcontractor without the concurrence of the official receiver or trustee of the estate of the bankrupt or the liquidator as the case may be."

38. DESIGN RESPONSIBILITY

If stated in the Annexure to the Conditions of Contract, the following clauses have been added to AS4305 - 1996.

38.1 Design

38.1.1 The Contractor shall:

- (a) complete the Design and documentation of the Works including working drawings and trade specifications in accordance with the provisions of the provisions of the Contract and all relevant Statutory Requirements;
- (b) have the same liability to the Principal as would an Architect designing and documenting the Works independently under a separate contract with the Principal;
- (c) ensure that materials and standards of workmanship prescribed in drawings, trade specifications and other documents are fit for the purpose, consistent with the nature and character of the Works and in accordance with the Contract. Local preferences and trade practices shall be considered in the selection of materials, systems and services.

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38.1.2 The Contractor warrants to the Principal that:

- (a) the Contractor will exercise the proper skill, care and diligence expected of a competent design professional;
- (b) the design and the Works complies with this contract and is fit for the purpose in all respects.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975 or any review or approval of the design undertaken by or on behalf of the Principal.

The Contractor acknowledges that the Principal is relying on the Contractor's skill and judgement in undertaking the design and construction of the Works.

38.2 Building Act

38.2.1 The Authority stated in Item 28 shall be the Authority for the purpose of Building Act approval.

The Contractor shall be responsible for obtaining approval under the Building Act 1975 in respect of the design. For this purpose the Contractor shall pay all fees and submit to the Authority all material necessary for obtaining such approval.

The Contractor shall not carry out or cause to be carried out any building work in respect of which the Building Act 1975 requires approval unless such approval has been obtained.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975, nor any review or approval of the design undertaken on behalf of the Principal.

38.2.2 The Contractor shall allow a minimum of twenty-eight (28) days for Building Act approval.

The Contractor shall liaise with the Principal's Supervisor in order to ascertain requirements with respect to Building Act inspections.

During construction, plumbing and sanitary drainage installations shall be inspected by, and shall comply with the requirements of, the applicable Authority's plumbing and drainage Inspectors. Fees for inspections shall be paid by the Contractor.

38.2.3 Approvals and certificates issued by the relevant Authorities shall be surrendered to the Principal following Practical Completion of the Works."

39. COMPLIANCE WITH STATUTES

The Contractor shall comply with all requirements of any Statute or authority having jurisdiction with regards to the Works and shall, at its own expense, obtain all necessary consents required by or under such Statute or authority."

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This Annexure takes the place of the Annexure to the Australian Standard Minor Works Contract Conditions.

ANNEXURE to the Australian Standard Minor Works Contract Conditions

This Annexure shall be completed and issued as part of the tender documents and, subject to any amendments to be incorporated into the Contract, is to be attached to these Contract Conditions and shall be read as part of the Contract.

Item

1	The Principal: (Clause 1)	Crown in the right of the State of Queensland through the Director General, Education Queensland																	
2	Address of the Principal:	Education House 30 Mary Street Brisbane Qld 4002																	
3	The Contractor: (Clause 1)	As per the accepted tender																	
4	The address of the Contractor:	As per the accepted tender																	
5	The Superintendent: (Clause 1)	As per Letter of Acceptance																	
6	The address of the Superintendent:	As per Letter of Acceptance																	
7	The Contract Documents comprise: (Clauses 1 and 4)	<table border="0"> <thead> <tr> <th style="text-align: left;"><u>Document</u></th> <th style="text-align: right;"><u>No of copies to be provided</u></th> </tr> </thead> <tbody> <tr> <td>(a) the accepted Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(b) the Conditions of Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(c) Minor Works Contract Conditions (AS 4305 - 1996)</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(d) the Special Conditions of Contract</td> <td style="text-align: right;">3</td> </tr> <tr> <td>(e) the Code of Tendering (AS 4120 - 1994) as amended by the Conditions of Tender</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(f) the Specification and Drawings</td> <td style="text-align: right;">3</td> </tr> <tr> <td>(g) other documents as are issued and/or referred to by the Principal for the purpose of tendering</td> <td style="text-align: right;">3</td> </tr> </tbody> </table>	<u>Document</u>	<u>No of copies to be provided</u>	(a) the accepted Tender	1	(b) the Conditions of Tender	1	(c) Minor Works Contract Conditions (AS 4305 - 1996)	0	(d) the Special Conditions of Contract	3	(e) the Code of Tendering (AS 4120 - 1994) as amended by the Conditions of Tender	0	(f) the Specification and Drawings	3	(g) other documents as are issued and/or referred to by the Principal for the purpose of tendering	3	
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(f) the Specification and Drawings	3																		
(g) other documents as are issued and/or referred to by the Principal for the purpose of tendering	3																		
8	This item is not used.																		
9	Payments under the Contract shall be made at:	Brisbane																	
10	This item is not used																		
11	The period of time for Practical Completion: (Clause 1)	24 weeks after the Date of Acceptance of Tender (as adjusted pursuant to the Contract)																	
12	Security (if provided): (Clause 3.1)	Amount: Not to be provided	Release																

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Either cash or an undertaking, in a form

approved by the Principal, provided by a financial institution or insurance company approved by the Principal or cash paid in honour thereof.

- | | | |
|-----|---|---|
| 13 | Time for provision of security: (Clause 3.1) | Not to be provided |
| 13A | Special Conditions of Contract for Security for Subcontractors applies or does not apply (Clause 3.3): | Clause 3.3 shall not apply. |
| 14 | Amount of limit of indemnity for damage to persons and property: (Clause 8(a)) | Unlimited |
| 15 | The party to effect a contract works policy of insurance: (Clause 9) | Contractor |
| 16 | The amount of contract works insurance cover: (Clause 9) | The Contract Sum plus 20% |
| 17 | The party to effect a public liability policy of insurance: (Clause 10) | The Contractor |
| 18 | The amount of public liability insurance cover in respect of any one occurrence shall be not less than: (Clause 10) | \$10,000,000 |
| 19 | The time for giving possession of the Site to the Contractor: (Clause 15) | 7 days after the Date of Acceptance of Tender |
| 20 | Liquidated damages: (Clause 20) | \$ rate per day = $\frac{8.5\% \times \text{Contract Sum}}{365}$, or
\$100 per day, which ever is the greater |
| 21 | Extra cost per day for delay or disruption: (Clause 21) | 5% of the Contract Sum ÷ (7 x the period of time for practical completion at item 11) |
| 22 | The defects liability period: (Clause 22) | 52 weeks |
| 23 | Times for payment claims: (Clause 24) | Monthly |
| 24 | The rate of interest on overdue payments: (Clause 24) | 7% per annum |
| 25 | This item is not used. | |
| 26 | This item is not used. | |
| 27 | Special Conditions of Contract for Design Work shall / shall not apply (Clause 38) | Clause 38 shall apply. |
| 28 | The Authority for the purpose of Building Act approval: | The Chief Building Surveyor, Queensland Government Department of Public Works |

Release

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Approved Form of Unconditional Undertaking - Sub-clause 3.2 (Security in Lieu of Retention)

UNDERTAKING

CONTRACT FOR.....
..... ("THE CONTRACT")

At the request of
..... **ACN**

("the **CONTRACTOR**") and in consideration of.....
.....
..... ("the **PRINCIPAL**") accepting this undertaking in lieu of Retention Moneys provided for in the Contract and, without limiting the generality thereof, for the provision of security to any Subcontractor of the Contractor in respect of a Subcontractors' Charge under the Subcontractors' Charges Act or any other claims which any Subcontractor has against the Principal pursuant to some other legal entitlement.....

ACN ("the **FINANCIAL INSTITUTION**") unconditionally undertakes to pay on demand any sum or sums which may from time to time be demanded by the Principal to a maximum aggregate of

This undertaking is to continue:

- (i) until notification has been received from the Principal that the sum is no longer required by the Principal; or
- (ii) until this undertaking is returned to the Financial Institution; or
- (iii) until payment to the Principal by the Financial Institution of the whole of the sum.

Should the Financial Institution be notified in writing signed by or on behalf of the Principal that the Principal desires payment to be made of the whole or any part or parts of the sum, it is unconditionally agreed that the Financial Institution will make payment or payments to the Principal forthwith without reference to the Contractor and notwithstanding any notice given by the Contractor not to pay same.

Provided always that the Financial Institution may at any time without being required so to do pay to the Principal the sum of

less any amount or amounts it may previously have paid under this undertaking or such lesser sum as may be required and specified by the Principal and thereupon the liability of the Financial Institution hereunder shall immediately cease.

Dated at day of 1996.

Signed in my presence by) Signed for and on behalf of

.....)

the Attorney of) by its said Attorney who states that he has no notice

.....) of the revocation of the said Power of Attorney at the

pursuant to Power of Attorney) time of his executing this instrument.

who is personally known to me:)

.....)

.....)

Release

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Conditions of Contract Clause 37

Record of Payment Form

(To be submitted to the Principal's Representative by the Contractor)

(The following to be inserted by the Principal)

1. Contract Description

Contractor

(The following to be inserted by the Contractor / Subcontractor)

2. Subcontractor

Address

Subcontract Description

SUBCONTRACTOR'S DECLARATION

It is hereby declared that the Subcontractor has received all monies due and payable from the Contractor up to and including/...../..... (insert date on which payment received was due and payable.)

Further payment to the Subcontractor from the Contractor is not anticipated to be due until/...../..... (insert date on which the next subcontract progress payment is anticipated to become due. If no further payment is anticipated to become due insert "N.A.")

A further Record of Payment Form will be signed by the subcontractor in respect of the anticipated payment when it is received from the Contractor.

Signed (Signature of Subcontractor or its representative)

Name of signatory (Please print)

Date/...../.....

Instructions:

Pursuant to clause 37 of the Conditions of Contract it is the responsibility of the Contractor to:-

- ensure section 2. above is completed in full upon making any payment to a Subcontractor,
- notify the Principal's Representative of any refusal or failure by a Subcontractor to complete this Record of Payment form,
- retain this Record of Payment form as proof of payment that the Subcontractor has been paid, and
- provide this form upon request to the Principal's Representative.

Upon receipt of payment from the Contractor by the Subcontractor the Subcontractor is to:-

- complete Section 2 and sign the "Subcontractor's Declaration" as appropriate, and
- return this Record of Payment form to the Contractor.

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Conditions of Contract Clause 37

Statement of Contractor

(To be submitted to the Principal's Representative by the Contractor with each payment claim)

To: The Principal's Representative

From: (the Contractor)

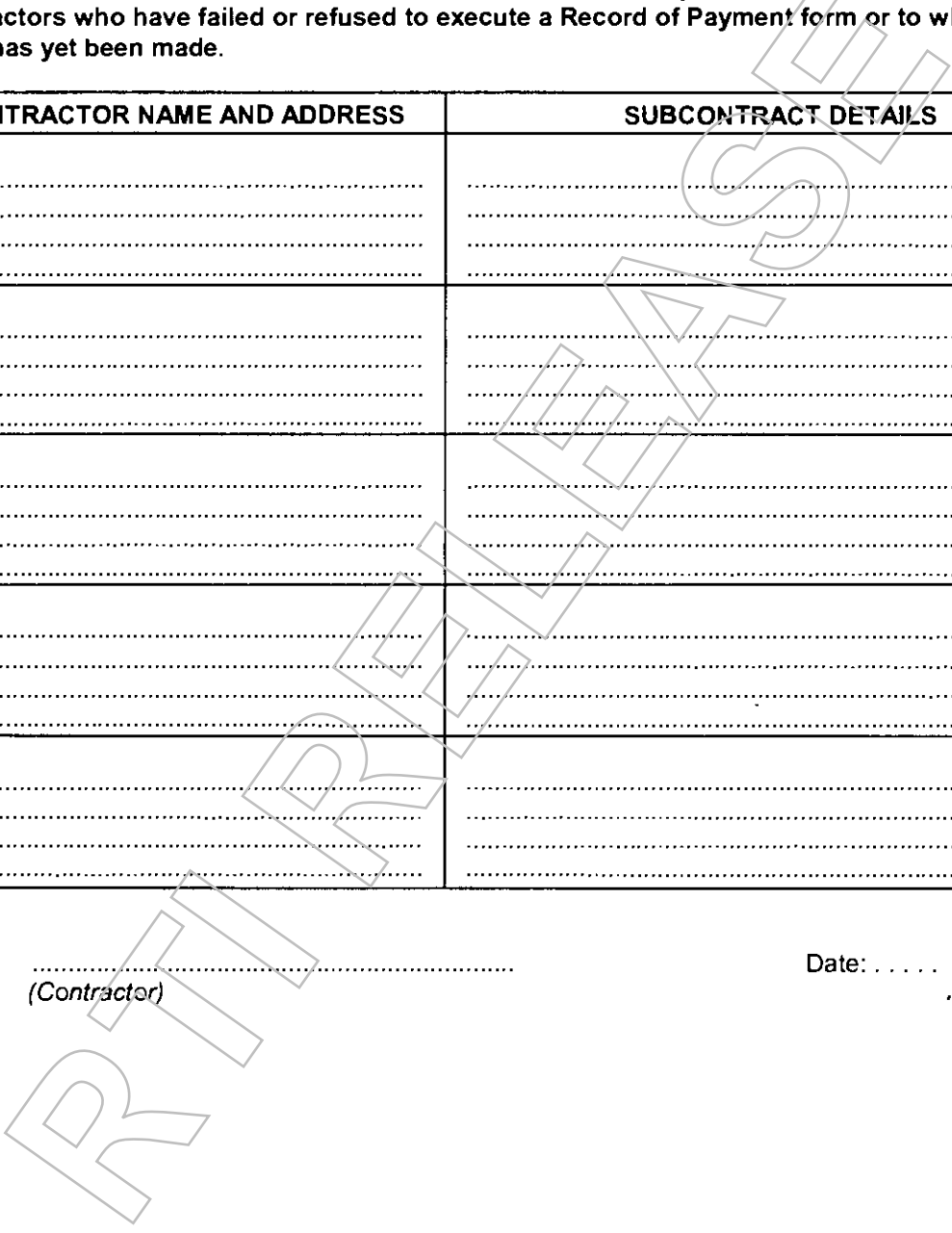
Contract:

Pursuant to clause 37 of the Conditions of Contract you are hereby notified as indicated below of the Subcontractors who have failed or refused to execute a Record of Payment form or to whom no payment has yet been made.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACT DETAILS
1.
2.
3.
4.
5.

Signed
 (Contractor)

Date: / /



Release

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Conditions of Contract Clause 37

Statutory Declaration by Contractor

Oaths Act 1867

Queensland
To Wit

I, of
.....
in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the
..... (Insert name of Principal) "the State" and
.....
"the Contractor" for
..... (the Contract).

- 1.... I hold the position of
I am in a position to know the facts contained herein and to bind the Contractor by the terms of this declaration, and I am duly authorised by the Contractor to make this declaration on its/his behalf.
- 2.... All the Contractor's workers who at any time have been engaged on work under the Contract by the Contractor have been paid in full all moneys due and payable to them up to the date of submission by the Contractor of Progress Claim No.
- 3.... All Subcontractors and consultants of the Contractor have been paid all that is due and payable to them up to the date of submission by the Contractor of Progress Claim No..... in respect of their part of the work under the Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the **Oaths Act 1867**.

.....
TAKEN AND DECLARED before me (Signed)
(name in full).....
.....
at..... in the State of
this
day of..... 199.....

A Justice of the Peace

Release

Conditions of Contract Clause 37

Statutory Declaration by Subcontractor

Oaths Act 1867

Queensland
To Wit

I of
.....
in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the
..... (Insert name of Principal) (the State) and
.....
"the Contractor" for (the Contract)
..... [name of Subcontractor]

("the Subcontractor") is a Subcontractor to the Contractor for part of the work under the Contract, namely:
.....
.....

1.... I hold the position of
I am in a position to know the facts contained herein and to bind the Subcontractor by the terms of this
declaration, and I am duly authorised by the Subcontractor to make this declaration on its/his behalf.

2.... All the Subcontractor's workers who at any time have been engaged on work under the Contract by the
Subcontractor have been paid in full all moneys due and payable to them up to the date of submission by
the Contractor of Progress Claim No

3.... All Subcontractors of the Subcontractor have been paid all that is due and payable to them up to the date
of submission by the Contractor of Progress Claim No..... in respect of their part of the work
under the Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the
provisions of the **Oaths Act 1867**.

..... (Signed)
TAKEN AND DECLARED before me)
(name in full))
.....)
at in the State of)
..... this)
day of 199.....)

A Justice of the Peace

Release

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Conditions of Contract
Clause 34

Apprentice Training Requirement - (Form of Return to the Principal)

1. PRINCIPAL CONTRACTOR

LEGAL IDENTITY:.....
 TRADING NAME:.....
 ADDRESS:.....
 POSTCODE:.....
 PHONE NO:..... FAX NO:.....
 CONTACT PERSON:.....

2. CONTRACTING AUTHORITY

NAME:.....
 ADDRESS:.....
 POSTCODE:.....
 PHONE NO:..... FAX NO:.....
 CONTACT PERSON:.....

3. CONTRACT DESCRIPTION

CONTRACT NAME:.....
 REFERENCE NO:.....
 TOTAL HOURS OF ALL WORKERS EMPLOYED ON SITE DURING
 PERFORMANCE OF THE WORKS: (excluding apprentices/trainees
 and excluding mechanical and electrical trades)(Hours)
 CONTRACT TRAINING REQUIREMENT (10% minimum)(Hours)

4. TRAINING DETAILS (In respect of Total Contract) (*)
(excluding mechanical and electrical trades)

APPRENTICE/TRAINEE NAME	REG. NO. (where applicable)	TRADE OR CLASSIFICATION	PERIOD ON CONTRACT(**)	HOURS	EMPLOYER
			TOTAL HOURS		

(* If insufficient space please attach separate sheet)
 (** Insert first date employed on site and last date employed on site)

.....
 Signature of Principal Contractor or Authorised Person

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Supplementary Conditions of Contract (relating to GST)

40. GOODS AND SERVICES TAX

40.1 Definitions

For the purposes of clauses 39 and 40, the following definitions have the following meanings:

'GST' means a tax in the nature of a supply of goods and services tax levied or imposed by the Commonwealth of Australia;

'GST Date' means the date on which a liability for GST on any supply under the Contract first arises;

'Recipient' means, in respect of a particular supply made under this Contract, the party obliged to pay for that supply;

'Reimbursable Item' means an item of expense incurred by one party in respect of which, under the Contract, that party is entitled to be reimbursed by the other party for the cost of the item;

'Supplier' means, in respect of a particular supply made under this Contract, the party entitled to payment for that supply.

40.2 General GST Price Review

If any supply made under this Contract (other than the supply of a Reimbursable Item) is subject to GST, the Recipient must pay to the Supplier, in respect of that supply, an amount sufficient to ensure that the Supplier retains after payment of GST the amount that the Supplier would have received had GST not been payable or such lesser amount as the Supplier may charge having regard to section 75AU of the *Trade Practices Act 1974* (C'wealth) and any corresponding State or Territory legislation.

40.3 GST on Reimbursable Items

If the supply of any Reimbursable Item under this Contract is subject to GST, then, from the GST Date, the payment due to the Supplier for each Reimbursable Item for which the Recipient is required to reimburse the Supplier under the Contract is to be calculated as follows:

$$\text{Payment Due} = (A - B) \times (1 + C)$$

where:

A = the GST-inclusive price of the relevant Reimbursable Item being the amount paid by the Supplier for that Reimbursable Item;

B = the amount of any GST input tax credit for which the Supplier is eligible on the relevant Reimbursable Item; and

C = the rate of GST applicable at the time of making the calculation, expressed as a decimal.

40.4 Time for Payment

Subject to clause 40.5, the Principal or Contractor, as the case may be, must pay any amount payable under clauses 40.2 and 40.3 on the same date as payment must be made for the supply giving rise to the liability for GST.

40.5 Tax Invoice and Registration

Despite any other provision of this Contract, a Recipient need not make a payment under clauses 40.2 or 40.3 until the Supplier has given the Recipient:

- (a) a GST tax invoice for that payment stating the amount of GST paid or payable by the Supplier in respect of the supply to which the GST tax invoice relates; and
- (b) evidence satisfactory to the Recipient that the Supplier is a registered supplier for the purposes of GST.

40.6 GST Disputes

If a dispute between the Contractor and the Principal arises out of or in connection with clause 40 of the Contract, including a dispute concerning an Adjustment Amount, then either party shall deliver by hand or send by certified mail to the other party and to the Superintendent a notice of dispute in writing adequately identifying and providing details of the dispute. If the dispute has not been resolved within 14 days after service of a notice of dispute, the dispute must be referred for determination by a person:

- (a) who has at least 10 years experience as an accountant practising in taxation;
- (b) who is appointed by the Contractor and Principal but if they do not agree who to appoint within 28 days after one party notifies the other that it requires a person to be appointed for the purposes of this clause, then that person is to be nominated at either party's request by the President of the Institute of Chartered Accountants or the President's nominee;
- (c) who the parties must instruct to give a written decision with reasons;
- (d) who acts as an expert and not as an arbitrator;
- (e) whose decision except in the case of obvious error is final and binding; and
- (f) whose cost the parties must bear equally.

Pending that person's determination, the Contractor and the Principal must continue to comply with this Contract.

31 DISPUTE RESOLUTION

Delete/Insert the first sentence of clause 31-

'If a dispute between the Contractor and the Principal (other than a dispute arising out of or in connection with clause 40) arises out of or in connection with the Contract, including a dispute concerning a direction given by the Superintendent, then either party shall deliver by hand or send by certified mail to the other party and to the Superintendent a notice of dispute in writing adequately identifying and providing details of the dispute.'

39 COMPLIANCE WITH STATUTES

Add new sentence –

The Contractor's obligation in respect of GST will not necessitate a variation under clause 23 or give rise to any adjustment of the Contract Price or reimbursement entitlement under this clause.

SPECIFICATION

Education Queensland

RTI RELEASE

Release

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**SPECIFICATION - SCHEDULE OF RELATED
CONTRACTS AND SCHOOLS**

Education Queensland

RTI RELEASE

Release

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SCHEDULE OF RELATED CONTRACTS AND SCHOOLS

BUILDERS WORK CONTRACT NO. 3

(MACKAY)

MECHANICAL & ELECTRICAL CONTRACTS / SCHOOLS

The following list of schools forms part of the 1999 Cooler Schools Program and this contract covers building associated work to be carried out at these schools.

<u>Group M1</u>	<u>Group M2</u>	<u>Group M3</u>
Eimeo Road SS Fitzgerald SS Kewarra SPS Mackay North SS Slade Point SS	Mackay North SHS Northview SS Pioneer SHS Dundula SS Eungella SS Gargett SS Mackay SHS Pinnacle SS Chelona SS	Bloomsbury SS Calen SS Coningsby SS Farleigh SS Hampden SS Mt. Charlton SS Seaforth SS Yalbaroo SS
<u>Group M4</u>	<u>Group M5</u>	<u>Group M6</u>
Carmilla SS Koumala SS Mackay Central SS Mirani SS Mirani SHS Sarina SHS Sarina SS St Lawrence SS Swayneville SS West Hill SS	Capella SS Clermont SS Clermont SHS Kilcummin SS Mackenzie River SS Middlemount SS Mistake Creek SS	Glenden SS Homebush SS Nebo SS Oakenden SS Walkerston SS

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SPECIFICATION - PRELIMINARIES

Education Queensland

RTI RELEASE

Release

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1 Description of the works

The works comprise the provision of builders work required for the completion of ventilation, air conditioning and evaporative cooling works being undertaken under one or more separate mechanical & electrical services contracts. Each mechanical & electrical services contract itself covers the installations at a number of schools (varying from one to eight schools) within the general region.

The works comprise the provisional quantities nominated on the bill.

The Builders Work contractor is responsible for:

- Liaison with the mechanical & electrical services contractors within the nominated region.
- Programming of the builders work in support of the mechanical & electrical services contracts such that delays to those contracts do not occur.
- Design, supply, installation, testing, approval and warranty of the builders work at each installation.
- Provision of design and as-built drawings for all works that require building approval.
- Undertake the role of Principal contractor under the Queensland Workplace Health & Safety Act for all works requiring building approval.
- Reporting on progress to the Superintendent on a weekly basis.

2 The Site

For the purposes of this contract "the site" shall include each and every site covered under the related mechanical & electrical contracts.

3 Programming of the Works

3.1 GENERAL REQUIREMENTS

The Contractor is to produce a time scale bar chart within two weeks of the date of the Letter of Acceptance.

The bar chart shall show the logical progression of all activities necessary for the orderly completion of the design and the work. All restraints or dependencies shall be shown such that the critical path can be identified.

The bar chart shall consist of appropriate activities, which accurately represent the Contractors proposed methods of completing the whole of the Work, and shall include the preparation and approval of working drawings, procurement of materials, quality assurance activities, manufacture and execution delivery, as the case may be, of all items of Work.

Key dates shall be clearly shown against relevant activities. Each activity shall be identified by a description, which shall permit easy identification, by reference to a specific portion of the Work.

Any review of or comments upon a program by the Superintendent will not:

- a) relieve the Contractor from or alter its liabilities or obligations under the Contract, especially (without limitation) the obligation to achieve completion by the Date for Practical Completion;
- b) evidence or constitute a direction by the Superintendent to accelerate, disrupt, prolong or vary any, or all, of the Contractor's Activities; or
- c) affect the time for performance of the Principal's or the Superintendent's Contract obligations, including (without limitation) oblige the Principal or the Superintendent to do

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anything earlier than is necessary to enable the Contractor to achieve Completion by the Date for Practical Completion.

3.2 PROGRAMME CONSTRAINTS

The Contractor is required to progressively liaise with the superintendent during the design development stage to ensure that when final documentation is lodged for approval by the Superintendent and school representatives the documentation reflects detailed design issues discussed prior to lodgement for approval.

3.3 NUMBER OF PROGRAMME REVISIONS

Allow to provide at least one updated programme during the construction period.

3.4 MONITORING PROJECT PROGRESS AGAINST PROGRAMME

On a weekly basis, mark-up a copy of the current programme with the progress of each activity clearly indicated. Keep a copy of the latest marked up programme at the nominated office.

4 Payments

The Contractor is to submit its claims for payment in the form shown in the Bill on a school-by-school basis complete with a summary total.

5 Variation price requests

All Contractor variation price requests should be submitted on the standard form. A copy of this form will be provided on acceptance of tender. All backup information, as identified on the form, should be provided with each Contractor price request, to allow the Superintendent to promptly assess the claim.

6 Meetings

The contractor is to arrange such meetings as may be required by the Superintendent to be held between representatives of the Principal, the Contractor, the mechanical & electrical services contractors, the Superintendent and any appropriate consultants or Subcontractors. The Superintendent will chair the meetings. The Contractor is to take minutes of the meetings and forward a copy of the minutes to all parties in attendance within three working days after each meeting.

7 Monthly reports

The Contractor is to issue, the Superintendent, one copy of a report each month, covering on a school-by-school basis:

- any scope changes – details of potential, requested and approved variations;
- status of the detailed design, documentation and construction work relative to the program;
- identifying any sources of delay and actions to be taken to overcome any delay;
- details of financial progress, estimates of cost for potential, requested and approved variations and progress thereof and any other change or potential change to the financial position of the Contract;
- quality issues;
- workplace health and safety issues;
- human resource changes;
- communications issues;

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- procurements issues

8 Personnel carrying out work

- 8.1 The Contractor is to ensure that the personnel carrying out the works and the consultants, Contractor's Subcontractors and agents are competent and experienced in the type of work they are undertaking and are registered or licensed under the legislation requiring them to be registered or licensed for the purposes of or incidental to the execution of the Works.
- 8.2 The Superintendent may direct the Contractor to remove from the Site so as not to have any further connection with the execution of the Works any person employed by the Contractor, its Subcontractors or agents who in the opinion of the Superintendent misconducts itself or is incompetent or negligent in the performance of itself duties or creates a danger to any person or property. The Contractor is to comply with such directions within the time specified by the Superintendent.
- 8.3 The Contractor is to ensure that all persons employed to perform the Works, including personnel of the Contractor, its Subcontractors and agents are paid at the rates fixed by relevant awards, determinations, judgements or orders of any tribunals and are employed under the conditions (including hours of work) prescribed therein.
- 8.4 The Contractor is to ensure that all persons employed to perform the Works, including personnel of the Contractor, its Subcontractors and agents are and remain financial members of an appropriate registered union while working on the Site or carrying out the Works.
- 8.5 Before commencing work the Contractor is to make itself aware of all industrial matters, including all statutory requirements, awards, codes of industrial conduct, industry agreements and site agreements that may apply to the Works or the site. The Contractor is to comply at all times with the statutory requirements, awards, codes of industrial conduct, industry agreements and site agreements during the execution of the Works.
- 8.6 The Contractor is to keep and maintain at the Contractor's site office (or such other place approved by the Superintendent) up to date records concerning:
- 1) Any superannuation scheme the Contractor is required to make payments to; and
 - 2) Long service leave schemes the Contractor is required to comply with in accordance with statutory requirements, awards, codes of industrial conduct or industry agreements, which apply to the Works or the Site.
- 8.7 the Contractor is to allow the Superintendent and its representatives access at all reasonable times to the records referred to in paragraph 8.6.

9 Compliance with statutory requirements

- 9.1 The Contractor is to comply with statutory requirements in respect of the Works and any order of a court or authority affecting the Works.
- 9.2 The Contractor is to pay any fees, charges, security deposits and like payments in respect of the Works in accordance with statutory requirements.
- 9.3 Without limiting the Contractor's obligations under other paragraphs the Contractor is to:
- a) make all applications for approvals and give all notices required to comply with statutory requirement;
 - b) advise the Superintendent in writing of the intent and details of any proposed application or notice two (2) days before making of the application or the giving of the notice and provide to the Superintendent a copy of any proposed application or notice before making the application or giving the notice and is to comply with any directions of the Superintendent in relation to the application of notice;
 - c) when requested by the Superintendent, provide to the Superintendent a copy of any documents or records and any other information used or relied upon by the Contractor to prepare the application or notice;
 - d) inform the Superintendent in writing of the requirements or conditions proposed by any authority in relation to the giving of an approval or consent and obtain the written permission of the Superintendent before agreeing to those requirements and conditions; and
 - e) inform the Superintendent in writing of the time, date and location of any meeting between the Contractor and any authority in sufficient time to enable the Superintendent

to arrange representation at the meeting. A representative of the Nominated Representative is entitled to attend any such meeting.

9.4 If, in the Contractor's opinion, any provision of requirement of the Contract is at variance with statutory requirements or the requirements of an order of a court or authority the Contractor is to immediately notify the Superintendent in writing. The notification is to contain detailed particulars of:

- a) the provision or requirement which is at variance with statutory requirements or the order; and
- b) the amendment or modification of the provision or requirements recommended by the Contractor to comply with statutory requirements or the order.

9.5 The Superintendent may direct the Contractor as to the course of action to be taken to ensure that statutory requirements are complied with in the execution of the Works.

10 Confidentiality

In addition to the requirements for Confidentiality specified in the Condition of Contract, the Contractor is to regard all information discussed at meetings concerning the Contract as confidential and shall not disclose such information to a third party except with the prior written agreement of the Principal, particular to each specific instance.

11 Manufacture and supply of materials

If requested by the Superintendent, the Contractor is to notify in writing of:

- a) the make and place of manufacture;
- b) the source of supply;
- c) the performance capacities; and
- d) and other information requested by the Superintendent, of materials or goods to be used in connection with the Works.

12 Quality assurance

The Contractor is to develop and maintain a Project Quality Assurance System in accordance with the Quality Assurance clause of the Conditions of Contract.

13 As-built drawings

The Contractor is to supply to the Superintendent in electronic and hard form acceptable to the Superintendent:

- a) "As - Built" drawings for the Works; and
- b) all other information relating to the operation and maintenance of the Works as required by the Superintendent.

14 Return of Documents

The Contractor is to, if requested by the Superintendent, after Practical Completion of the Works or the termination of the Contractor's engagement, return or supply to the Superintendent all documents provided to the Contractor by the Superintendent or in the contractor's possession or control relating to the Works or the Contract.

15 Dilapidation Record

The Contractor is to the satisfaction of the Superintendent before commencing work on the Site and within 20 days after the Date of Practical Completion.:

- inspect all land, footpaths, roads, buildings or other structures which may be affected by the execution of the Works, in the company of the Superintendents representative and a

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representative of the owner or authority controlling the land, footpath, road, building or other structure;

- make a written and photographic record of existing visible defects in the land, footpaths, road, buildings or other structures; and
- lodge with the Superintendent a copy of each record of inspection showing the date of the inspection and signed on behalf of the Contractor and the owner or controlling authority by way of acknowledgment that the record of inspection is true and correct.

16 Security and Access

- 16.1 The Contractor is to comply with the entry and security procedures nominated by the Superintendent from time to time for access to the Site or a part of the Site.
- 16.2 The Superintendent may deny access to the Site to the Contractor or any person who does not comply with the entry and security procedures.
- 16.3 The Contractor is not entitled to any additional payment of compensation or extension of time, in contract, tort or otherwise for any losses suffered by the Contractor or any delay in the progress of the Works arising out of any denial of access to the Site of any person who does not comply with the entry and security procedures.

17 Security system

The Contractor is to arrange where approval is received to work outside nominated hours, with the building maintenance contractor to disarm and rearm appropriate access security devices as required to allow the Works to be completed. The Contractor is to also pay all service call costs associated with these services at no additional cost to the Principal.

18 Occupied premises

The principal or persons authorised by the Principal will continue in possession and occupancy of the school.

The Contractor is to ensure the ongoing and uninterrupted operation of the school other than authorised interruptions as agreed in advance with the Superintendent.

The Contractor is to secure and maintain safe access, by approved means, to occupied premises for the Principal and such authorised persons as shall be notified to the Contractor by the Superintendent. The Contractor is to also prevent unauthorised access.

The Contractor is to arrange work to minimise nuisance to the occupants and ensure their safety.

The Contractor is to ensure that a margin of one metre continuous escape path is maintained clear of debris and obstructions.

Prior to commencing work in sensitive areas and in sufficient time for examination, the Contractor is to submit to the Superintendent complete details of the proposed method of work. The Contractor is not to commence work until approved by the Superintendent.

19 Site identification

The Site shall be the area within the limits as agreed between the Contractor and Superintendent to allow completion of the Works.

Access on to and around the Site, and use of the Site for temporary works and construction plant, including working and storage areas, location of offices, workshops, sheds, parking and the like, is restricted to those areas agreed by the Superintendent and subject to such conditions as may be imposed by the Superintendent.

The Contractor is to take necessary precautions to secure the assets of the Principal.

The Contractor is not to store waste building materials, poisons, flammable liquids and other dangerous items on Site unless approved by the Superintendent.

20 Prohibited Work Methods and Materials

The Contractor is not to use or permit the use of explosives.

21 Asbestos

No asbestos products or asbestos based materials shall be used in any part or parts of this building or its services and the Contractor is to ensure that Sub-Contractors, Nominated Sub-Contractors, suppliers and others are advised of this restriction.

No compensation will be paid if asbestos is brought on to the Site and subsequently discovered and if discovered such removal and consequential making good or costs will be totally at the expense of the Contractor.

Each school site should have an asbestos management plan in place. The Contractor shall make its self aware of any management plan for each school site and comply with the requirements of the plan. A copy of any relevant asbestos management plan is available from the school principal.

Should the Contractor find any asbestos on Site not mentioned in the asbestos management plan while, carrying out the Works, then the Contractor should halt work and immediately notify the Superintendent of the existence of asbestos. The Superintendent will provide instructions to the Contractor on the removal and disposal of the asbestos.

22 No Smoking on site

There is to be no smoking on the site.

23 Information to Subcontractors

Advise Sub-contractors and suppliers and installers of material of the requirements of this section of the specification.

24 Interpretation of drawings

Check dimensions on Site before proceeding with the work. Notify the Superintendent of any omission or conflict in drawings and their relation to Specifications.

25 Sub-contractors and suppliers

Within seven (7) days of receipt of the Letter of Acceptance, supply to the Superintendent a complete list of Sub-Contractors and Suppliers proposed for the Works. The Superintendent reserves the right to reject any so listed.

26 Site Amenities

Provide statutory and necessary temporary amenities and temporary sanitary facilities for site workers. Maintain in working condition and clean daily.

Release

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27 Temporary fire extinguishers

Maintain fully charged and accessible fire extinguishers as are necessary for the care and safety of the Works. as required by Local Fire Authority.

28 General attendance on sub-contractors

General attendance shall include taking deliver, assisting to unload, storing and protecting Sub-contractor's materials and for allowing Sub-contractors ample working space, scaffolding, hoists and ordinary plant, etc... and messing and sanitary accommodation and for cutting away, building in and protecting finished work and making good.

29 Coordination with other contractors

The following works on and adjoining the Site will be executed by persons engaged by the Principal and are not included in this contract:

<u>Contract</u>	<u>Anticipated Programme</u>
Mechanical & electrical services	In conjunction with this contract

The Contractor is required to coordinate and liaise with any contractors engaged by the Principal to enable them to proceed with their work.

30 Precautions in carrying out work under the contract

Unless otherwise specified in the Contract, observe, in the absence of statutory requirement to the contrary, the relevant current Australian Standard published by Standards Australia relating to storage, transport, use of materials, fire precautions in arc or flame cutting, flame heating and arc or gas welding operations, plant and equipment, work processes and safety precautions.

31 Maintenance of services and equipment

The Contractor is to ensure that all services and equipment within buildings are maintained fully operational.

Without impairing the overall effectiveness of the security and fire alarm systems, the Contractor is to take precautions to prevent accidental setting off of alarms.

The Contractor is to bear all costs incurred by any such setting off attributed to any cause whatsoever.

32 Interruption of existing services

The Contractor is to take all necessary measures to identify location of services.

The Contractor is to maintain existing services to all occupied areas and existing operational building equipment throughout the Contract period except for approved interruption periods, which are to be kept to a minimum. The Contractor is to be held responsible for any damage suffered by the Principal, or to those users of the building within the precinct of the Site, due to an unauthorised interruption of a service.

The Contractor is to make an application to the Superintendent for approval to interrupt an existing service five (5) working days prior to the intended date of the interruption. If the period for interruption applied for is unacceptable to the Principal for a legitimate reason, the

Contractor is to defer or advance the interruption period to suit. There shall be no grounds for claims for damages or extension of time due to the refusal.

33 Joining up to Existing Buildings/Work/Services

Where the method of joining up of old and new work is not otherwise specified the cutting away and joining up shall be carried out in a manner approved by the Superintendent and made good by trades to match existing adjacent work.

34 Interference with Existing Buildings

Notify the Superintendent of connection, disconnection or interference with existing services. Repair, to the satisfaction of the Superintendent, damage that occurs to services, during currency of the Contract.

35 Damaged services

Where existing services at or adjacent to the Site are in non-serviceable condition, arrange for an inspection by the Superintendent and appropriate Authority. At such meeting, record the condition and follow instructions when issued in writing by the Superintendent.

36 Solid, liquid and gaseous contaminants

The Contractor shall

- a) be responsible for the proper disposal, off site, of solids, liquid and gaseous contaminants.
- b) discharge gaseous contaminants in such a manner that they will be sufficiently diluted with fresh air that the toxicity will be reduced to an acceptable level.
- c) subject to statutory and local requirements, liquid contaminant may be diluted with water to a level of quality acceptable in the sewer system or contained in approved vessels for disposal at sites approved by the relevant Authority.
- d) dispose of solid contaminants by removal from the Site to locations approved by the relevant Authority.
- e) comply with all conditions of the Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA) environmental commitments with regard to the installation are complied with.

37 Disposal of Refuse

Refuse from construction operation (including food scraps and the like) shall be removed from the Site daily.

38 Explosive power tools

Explosive power tools shall not be used, unless previously approved by the Superintendent.

39 Shop Drawings

Shop Drawings mean complete drawings showing details of fabrication, assembly, installation, fixing and waterproofing methods of specific items or components, and shall include necessary explanatory notes and specifications. Shop drawings are to include architectural, steelwork, fencing and penetration details.

When preparing Shop Drawings, do the following:

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Release

- a) include provision in the construction program for the production and distribution, review and return of shop drawings
- b) refer discrepancies discovered in the Tender/Contract Documents to the Superintendent for direction
- c) verify relevant dimensions. Dimension drawings so that the items or components fit accurately into the required position
- d) ensure that shop drawings conform with the requirements of the specification
- e) all drawings shall be of consistent standard size and presentation
- f) review of shop drawings shall imply only that the Contractor interpretations of the relevant requirements of the Contract are generally correct, but shall in no way relieve the Contractor of his obligations under the Contract to construct and complete the Works correctly and accurately
- g) do not order, manufacture, assemble or supply any item or component needed according to requirements of shop drawings until the Superintendent returns the applicable stamped drawings.

Allow to provide 2 copies to the Superintendent. The Superintendent will return 1 copy.

40 Miscellaneous completion procedures

- a) Removal of protection: Except as otherwise indicated or requested by the Superintendent, remove temporary protection devices and facilities installed during the course of the work to protect previously-completed work. Remove evidence of protection devices. Remove protection before Practical Completion.
- b) Trade Cleaning: As each trade completes its work in each area of the building, the Sub-Contractor is required to be responsible for cleaning the area on a daily basis, having regard for the occupants of the building.

41 Final cleaning

Final cleaning: provide final cleaning of the work described in this Specification, at a time indicated, consisting of cleaning each surface or unit of work to normal 'clean' condition expected for a first class building cleaning and maintenance program.

Examples of required cleaning are:

- a) remove labels, which are not required as permanent labels
- b) clean exposed exterior and interior hard surfaces finished, to a dirt free condition, free of dust, stains, fingermarks, films and similar noticeable distracting substances. Except as otherwise indicated, avoid substances of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.
- c) remove debris and surface dust from limited access spaces
- d) clean concrete floors broom clean
- e) clean project site, including planted sections and footpaths, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, petro-chemical spills and other foreign deposits.
- f) label keys for locks accurately and provide in duplicate to the Superintendent prior to Practical Completion

42 Clean site and access roads

Be responsible for maintaining clean roads and access. Remove and clean away mud, building debris from footpaths, gutters, drains, walls etc when such occurs.

43 Guarantees and Warranty

- a) the Contractor or other approved Guarantor or Guarantors is to provide written guarantees where so specified elsewhere in this specification.

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- b) Each guarantee shall be in an approved form and shall specifically include the provisions required herein.
- c) Guarantee periods shall commence from the date of the Notice of Practical Completion

44. Patent rights

The contractor is to ensure that no patent is infringed and that unless otherwise specified, amounts payable and condition imposed in respect of the manufacture, use or exercise of patented invention are paid and complied with and shall indemnify the Principal against claims, damages, costs, charges and expenses in way whatsoever arising out of the manufacture, use or exercise by the Contractor of patented invention.

45. Site access

Site access is to be agreed in writing with the Superintendent.

46. Working hours

Working hours are 7:00am to 6:00pm Monday to Friday, unless otherwise agreed in writing by the Superintendent. Noisy activities are to be limited to outside school hours. The Contractor is to minimise inconvenience to the building occupants.

Works on site related to this Contract may need to be stopped for short periods of time to accommodate the school operation requirements. The Superintendent will endeavour to notify the Contractor 48 hours in advance, where practical.

The Contractor is to make allowances in the construction programme to accommodate these. Allow for all out of hours work to be included.

47. Noise control

The Contractor is to take all practicable precautions to minimise noise resulting from work under the Contract. Construction equipment fitted with noise suppressors should be used where practicable.

48. Dust control

The Contractor is to take all measures to restrict dust caused by the work under the contract.

49. Sign boards

The contractor is not permitted to display company signboards.

50. Year 2000 compliance Issues – Date compliance

50.1 MANAGEMENT SOFTWARE SYSTEMS

The works shall be designed and warranted for year 2000 compatibility and compliance.

- if computer software is included in the works the Contractor is to supply all parts, software and expertise necessary to ensure compliance to industry trends and standards. In particular, all software shall be designed and warranted to year 2000 compatibility and;
 - I. will manage and manipulate Date data, including single century formulas and multi-century formulas and date values;
 - II. will provide date data interface values that reflect the century

- III. will function without error or interruption related to date data, including without limitations, errors or interruption from functions, which involve date data from more than one century
- IV. requires that all date data (whether received from users, systems, applications or other sources) include an indication of century in each instance and
- V. all date output and results, in any form, will include an indication of century in each instance

For the purpose of this Clause "date data" means any data or input which includes an indication of or reference to date.

- a) the Contractor is to provide the Superintendent with information from the software in accordance with the Contract requirement and when requested by the Superintendent.
- b) the Contractor is to provide backup sources for the software in a form, which the Superintendent may readily copy, duplicate and load into devices in which the software normally resides.

50.2 EQUIPMENT

For the purpose of this clause, "Equipment means:

- a) computer hardware; and
- b) equipment, machinery or systems the operation of which is controlled by, or dependent upon, a microprocessor or electronic chip.

Without limiting its other warranties under this agreement, the Contractor represents and warrants that all Equipment installed as part of the Works by the contractor will provide full functionality and operation without adverse effect with respect to all dates after the date of execution of this agreement.

50.3 WARRANTY

Without limitation, the requirement that the Equipment provide full functionality with respect to all dates includes the Equipment being generally in compliance with SAA/SNZ MP77:1999 and being able to deal without error or interruption with:

- a) leap years
- b) functions that are programmed to commence or end on a particular date; and
- c) all calculations based on dates, including calculations such as subtractions, additions, percentages, sequences and comparisons.

The Contractor is to ensure that where there are any modifications or additions to upgrades of Equipment installed or used as part of the Works, such modifications, additions or upgrades will comply with the warranties in the is Clause.

50.4 TESTING AND RECTIFICATION

The Contractor agrees that, at the request from time to time of the Superintendent, the Contractor:

- a) will conduct, or arrange to be conducted, specific comprehensive testing of the Equipment in accordance with this specification to the Owner's satisfaction to ensure compliance of the Equipment with the above warranties; and
- b) will rectify or replace as necessary any equipment, which cannot be demonstrated to comply with the above warranties.

the cost of all rectification or replacement pursuant to Clause (b) above shall be borne by the Contractor, but only to the extent that it relates to Equipment, or any part of the Equipment, which was installed in the provision of the Works.

50.5 NOTIFICATION

If either party becomes aware at any time that any Equipment will not or may not fully comply with the above warranties, that party is to immediately notify the other party.

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51 Works to be undertaken by the mechanical & electrical services contractors

51.1 GENERAL

The mechanical & electrical services contractor will provide all incidental works required for storage, construction, installation, operation and maintenance of the mechanical & electrical services installation with the exception of the items of work scheduled in the Bill which are defined as Builders Work.

51.2 MINOR PENETRATIONS

The mechanical & electrical services contractor will provide minor openings through walls, floors, ceilings, bulkheads and roofs with the exception of the items of work scheduled in the Bill which are defined as Builders Work.

51.3 MAKING GOOD

The mechanical & electrical services contractor will make good existing adjacent surfaces, including painting, as required following provision of the minor openings and penetrations with the exception of any making good associated with the items of work scheduled in the Bill which are defined as Builders Work

RTI RELEASED

SPECIFICATION - DRAWINGS BOUND IN SPECIFICATION

Education Queensland

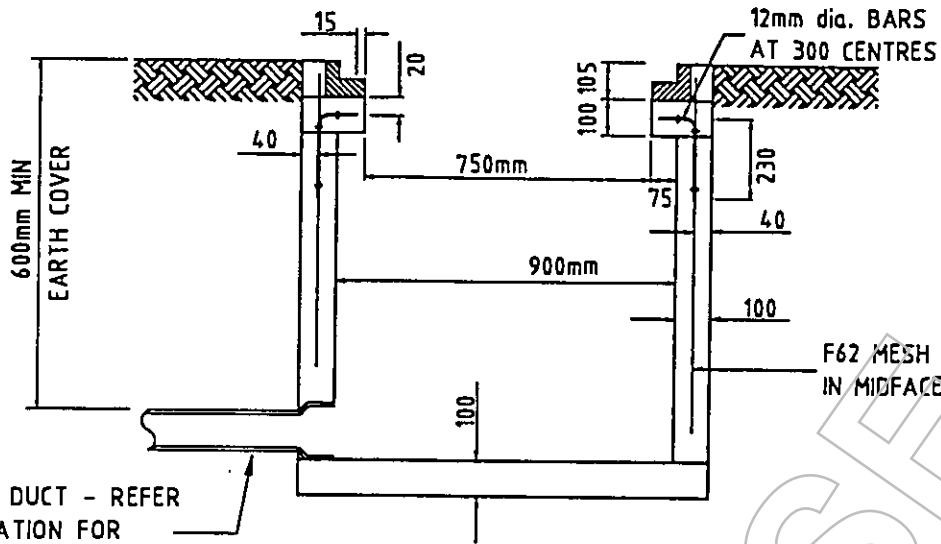
RTI RELEASE

Release

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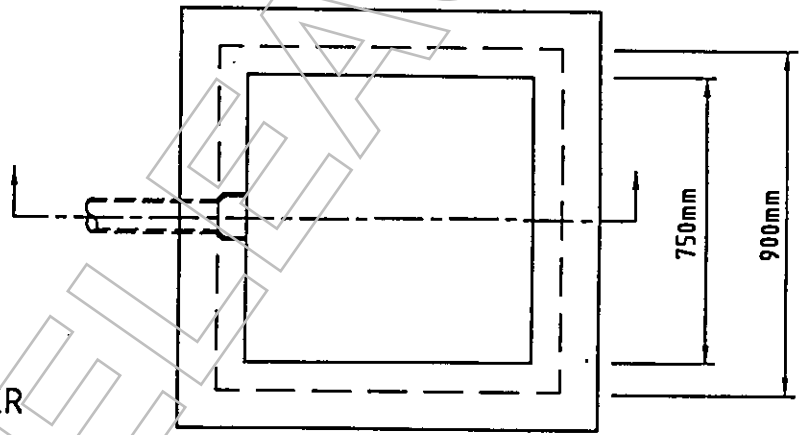
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AUTOCAD DRAWING

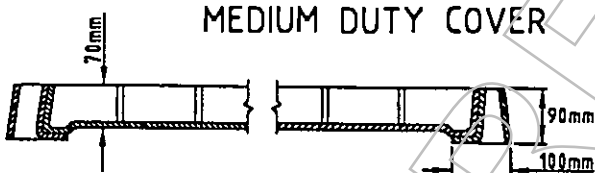


TYPICAL DUCT - REFER SPECIFICATION FOR DUCT MATERIAL

SECTIONAL ELEVATION



PLAN VIEW



MEDIUM DUTY COVER

PIT COVER AND FRAME SHALL CONSIST OF HIGH GRADE CAST IRON, & BE OF CROSS WEBBED CELLULAR CONSTRUCTION, WHICH SHALL BE FILLED WITH CONCRETE ON SITE. THE COVER AND FRAME SHALL PROVIDE A GAS AND WATER TIGHT CONTACT & A STABILISING FIT BY A TAPER CONTACT ON THE SIDES AND "UNDERCUT" AND "DRAWCUT" CONTACT AT OPPOSITE ENDS.

FORM BPRS F101A

DRAWN	M. PRICE	DATE	1/8/96
DISCIPLINE TEAM LEADER	M. PRICE	DATE	1/8/96
AUTHORISED FOR ISSUE	A. RUSSELL	DATE	1/8/96
SCALE	N.T.S	AT	A1 SIZE

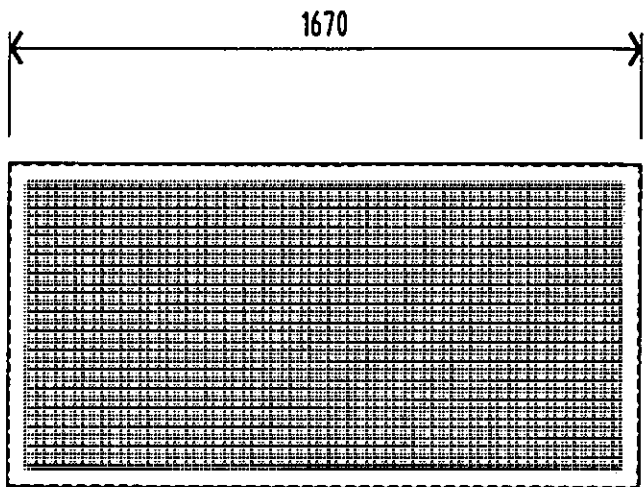
ELECTRICAL CABLE PIT
TYPE 10
900mm x 900mm MEDIUM DUTY

PROJECT SERVICES
Quality Assured ISO 9001
A Business Unit of the Queensland Government
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DRAWING NUMBER: A4SE 1074
ISSUE: B

00673

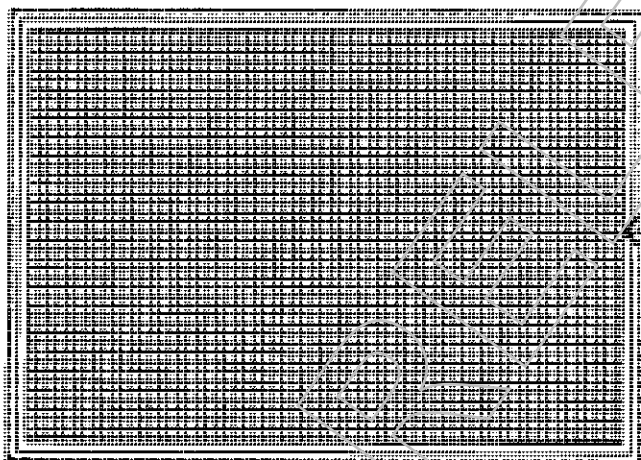
Release



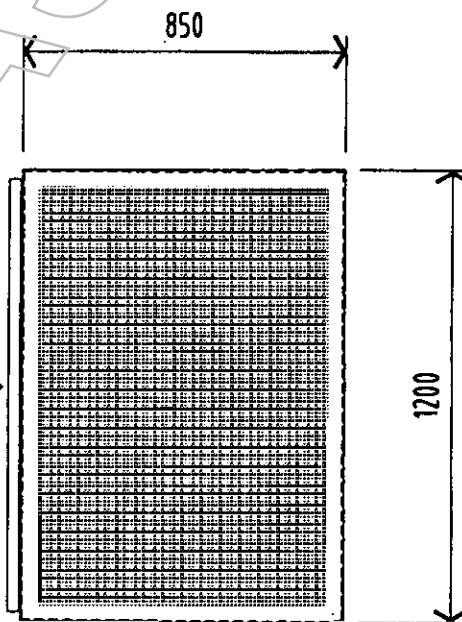
PLAN

NOTES

1. FRAME MATERIAL - 50 x 50 x 5mm BLACK STEEL ANGLE
2. GATE MATERIAL - 30 x 30 x 2mm BLACK STEEL SHS
3. MESH - 25 x 25 x 3mm BLACK STEEL MESH
4. COMPLETE CAGE TO BE HOT DIP GALVANISED AFTER FABRICATION
5. CAGE FOR ONE A.C. UNIT ONLY
6. GATE TO BE SUPPORTED ON HINGES AND PADLOCKED WITH A BRASS SHACKLED LOCK (PROVIDE 2 KEYS)
7. MESH TO TOP, SIDES AND GATE OF CAGE. MESH NOT REQUIRED AT BOTTOM OF CAGE, OR REAR, EXCEPT FOR RAISED BUILDINGS SIMILAR TO MODULARS
8. PROVIDE FOUR M12 HOLES IN BASE OF CAGE FOR SECURING TO CONCRETE PLINTH WITH STAINLESS STEEL FIXINGS



FRONT ELEVATION



SIDE ELEVATION

Release

FORM BPRS F101B

D.P. WILLIAMS DRAWN	DRAFTING CHECK
DESIGN	DESIGN VERIFICATION
s.78B	26.05.00
AUTHORISED FOR ISSUE	DATE

Education
Queensland



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COOLER SCHOOLS CONDENSING
UNIT CAGES

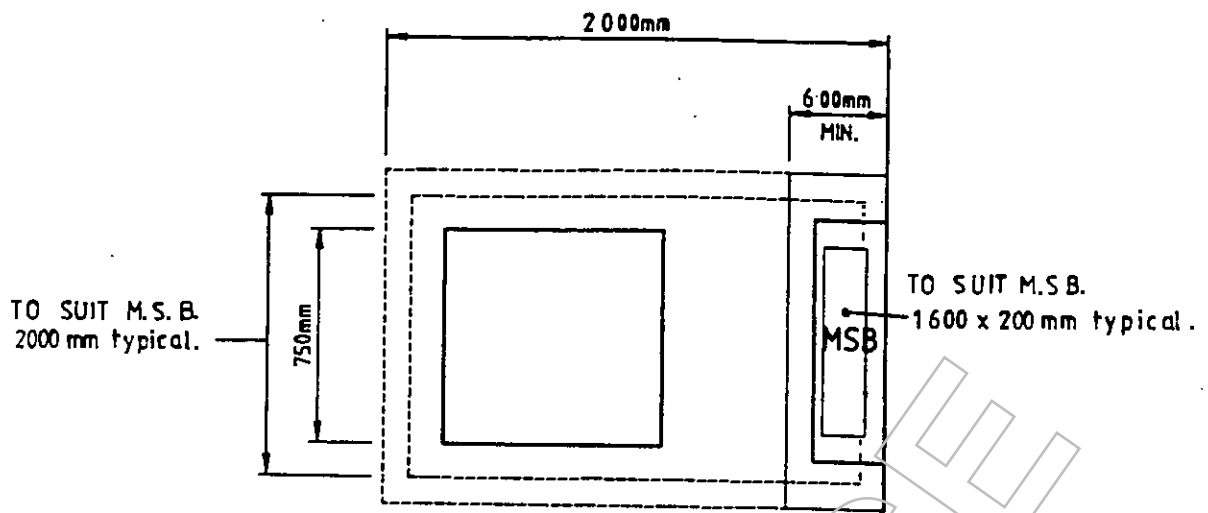
DRAWING NUMBER

ISSUE

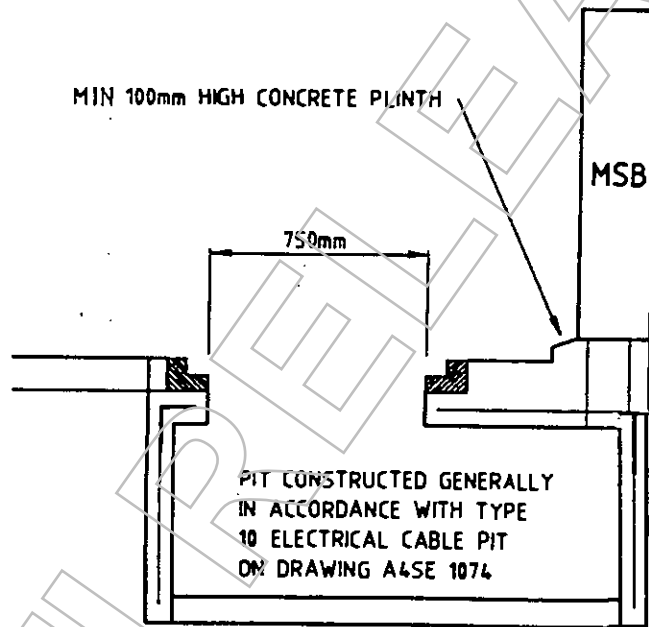
CS 1999-CUC1

A4 SIZE

SCALE
1 : 20



PLAN VIEW



SECTION

Release

AMENDMENTS			
ENGINEERING SERVICES PRACTICE			
ELECTRICAL ENGINEERING & MECHANICAL ENGINEERING			
DESIGNER	DATE	DESCRIPTION	TO/ISSUED BY
DRAWN	s.78B	VERIFIED	
DESIGN		PROJECT OFFICER	
AUTHORISED FOR ISSUE	DATE	SCALE	N/A
		CABLE ACCESS TO MAIN SWITCHBOARD	
		DRAWING No.	
		CS 1999 M.S.B. P	

00077

Copy No. 008

JULY 2002

Specification

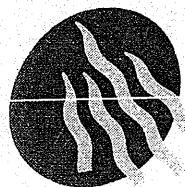
COOLER SCHOOLS ROUND 3

MACKAY AREA CONTRACT 4

Irrelevant 73(2) - other state schools

Dundula State School

Subsidy Air-Conditioning
FSC Air-Conditioning Resource Centre
FSC Electrical Upgrade



Project Services

Queensland Government

Department of Public Works

SPECIFICATION

COOLER SCHOOLS ROUND 3

MACKAY AREA CONTRACT 4

Irrelevant 73(2)

Dundula SS 21779

E.Q.PROJECT NO.: 103496 / 103497 / 103537
P.S.REFERENCE NO.: 32135 S
DATE: JULY 2002

All enquiries during the Tender Period shall be directed to
Mr. Ken Hodge Project Manager

Telephone 4938 4533
Facsimile 4938 4974

All enquiries after the acceptance of tender shall be directed
to the Superintendent's Representative.

Tenders Close at

Tender Box
Project Services
Level 3
149 Bolsover Street
Rockhampton QLD 4701



Project Services

Queensland Government

A business unit of the
Department of Public Works

80 GEORGE STREET, BRISBANE QLD 4000

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s.78B

AUTHORISED FOR ISSUE

23/7/02
DATE

RTI 20033R Cooler Schools - Round 3 No. 2

Release

NOTICE TO TENDERERS

1. LODGEMENT OF TENDERS

Tenders are to be lodged at:

Tender Box
Project Services
Level 3
149 Bolsover Street
Rockhampton, Qld 4701

2. RETURNABLE SCHEDULES

You are required to return one (1) original and one (1) copy of all returnable schedules.

3. CONDITIONS OF CONTRACT

The Conditions of Contract applicable to this tender are Australian Standard General Conditions of Contract (AS 4305 – 1996) as amended by the Department of Public Works' *Conditions of Contract* including *Special Conditions of Contract* and *Annexure* attached to this specification.

4. QBSA'S FINANCIAL ASSESSMENT REQUIREMENTS

One of the Principal's requirements for evaluating Tenderers is conducting a Financial Capacity Assessment.

The Queensland Department of Public Works has selected the Building Services Authority (BSA) to assess the financial capability of Tenderers tendering for Government contracts. The BSA, in turn, engages external financial consultants to carry out these assessments.

Your assistance in supplying the information below, within the specified time frame, will result in the awarding of a contract to the successful Tenderer expeditiously.

- A complete set of financial statements* certified by an external accountant plus a full set of financial statements for the previous financial year, including:
- balance sheet
- profit and loss statement
- trading accounts and any supporting schedules.

(*Current financial statements means the statements must be complete to one of the following dates:
31 March 30 June 30 September 31 December
but they must not be more than 3 months old at the date of assessment of the Tenderer by BSA).

- The value of the contract receipts for government jobs and non-government jobs for the above statements.
- The value of the general building and house building work for the contract receipts for the above statements.
- Details of any partnerships you/the company may wish to submit to assist with the financial assessment.

Tenderers will be required to supply the above information within 2-3 days of receiving a written request from the BSA and Tenderers must be available to respond to any queries raised by the BSA's financial consultants in relation to the information supplied.

5. TENDER EVALUATION

Tenderers should note the provisions of clauses 1, 9 and 10 of the Conditions of Tender in relation to Conforming and Alternative Tenders. Tenderers are advised that these provisions will be strictly adhered to in the consideration, evaluation and acceptance of Tenders.

CONDITIONS OF TENDER

Lump Sum Tenders using AS4305 - 1996 Minor Works Contract Conditions

1. DEFINITIONS

Meanings assigned to words and expressions in the Conditions of Contract shall apply to those words and expressions used in the Tender Documents.

Unless the contrary intention applies, the following definitions also apply;

“Alternative Tender” means any Tender that is not a Conforming Tender;

“Conforming Tender” means a Tender that complies with the requirements of the Tender Documents;

“Intellectual Property Rights” means copyright, patents and all rights in relation to inventions, registered and unregistered trademarks (including service marks), registered designs, circuit layouts and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields;

“Tender” means an offer submitted by a Tenderer.;

“Tenderer” means a party submitting a Tender and includes a party invited directly or indirectly by the Principal to submit a Tender;

2. TENDER DOCUMENTS

2.1 “Tender Documents” comprise:

- (a) the Tender Form;
- (b) these Conditions of Tender;
- (c) the Code of Tendering (AS4120 - 1994) as amended by these Conditions of Tender;
- (d) Minor Works Contract Conditions (AS 4305 - 1996) as amended by the Special Conditions of Contract;
- (e) the Specification and Drawings; and
- (f) other documents as are issued and/or referred to by the Principal for the purpose of tendering.

2.2 To the extent of any discrepancy or inconsistency between these Conditions of Tender and AS4120, these Conditions of Tender shall prevail.

2.3 In the event of any discrepancy or inconsistency between the Special Conditions of Contract and the Minor Works Contract Conditions, the Special Conditions of Contract shall prevail.

3. LODGEMENT OF TENDER

3.1 The Tender shall be submitted in a sealed envelope, addressed and delivered to the “Address for lodgement of Tenders” as indicated on the Tender Form.

3.2 The envelope shall be endorsed with the name of the project and tender number, the closing date and time for receipt of Tenders and the Tenderer’s name and address.

3.3 Tenders shall be lodged in the tender box at the location indicated on the Tender Form by being placed therein before the time specified for the closing of Tenders. Any Tender not in the tender box before the specified closing time may be rejected at the discretion of the Principal.

In exercising its discretion as to rejection of any Tender the Principal shall, amongst other factors, consider evidence, if any, that such Tender was dispatched to the “Address for lodgement of Tenders” stated on the Tender Form in sufficient time to reach that office and be placed in the tender box under normal circumstances before the specified closing time for receipt of tenders.

3.4 A tender received by telephonic or telegraphic devices, telegram, telex, facsimile or other electronic means will not be considered.

4. **TENDER REQUIREMENTS**

- 4.1 A completed Tender Form, as provided by the Principal, and all other documents required by the Tender Documents shall be submitted with the Tender.
- 4.2 The Tenderer shall complete and sign every document included in the Tender Documents on which provision is made for its signature and shall lodge every such document completed and signed, witnessed and dated as requested.

5. **INFORMATION**

- 5.1 The Principal's Contact Officer for all inquiries regarding the tender process is:

**The Manager, Tenders
Project Services
Telephone: (07) 3224 6177**

- 5.2 The Principal will not be liable for any claim on the grounds of erroneous or insufficient information.
- 5.3 The Principal shall not be bound by any oral advice or information given or furnished in respect of the Tender but shall be bound only by written advice or information furnished by or on behalf of the Principal.
- 5.4 For the purposes of assessment of Tenders, Tenderers shall provide such additional information as may be requested by the Principal including but not limited to, financial data.

6. **TENDERER TO INFORM ITSELF**

- 6.1 The Tenderer is deemed to have visited and inspected the site and its surrounds and satisfied itself of conditions and facilities and otherwise acquainted itself with all matters relating to the proposed Contract before submitting its Tender.

7. **TENDERING BY GOVERNMENT AGENCIES**

- 7.1 Notwithstanding clause 6.2.2 of AS4120, the Principal may invite, consider or accept a Tender from one or more government agencies.

8. **COSTS OF TENDERING**

Costs of tendering shall be borne by the Tenderer.

9. **PRINCIPAL NOT BOUND**

- 9.1 Notwithstanding the evaluation of Tenders (if any) in accordance with clause 10 herein, the Principal may in its absolute discretion and at any time accept, or decline to accept, any Tender.
- 9.2 Without derogating from the provisions in clause 9.1, the Principal may, in its absolute discretion, decline to evaluate any Tender that it has determined to be an Alternative Tender.

9.3 Notwithstanding that the Principal may have invited Tenders from selected organisations or has otherwise procured submission of Tenders:

- (a) the Tenderer acknowledges that the Principal may not, at the time of inviting tenders, have satisfied itself as to the Tenderer's financial capacity to satisfactorily perform and complete the Contract in accordance with its terms.
- (b) the Principal may decline to consider or accept a Tender from a Tender who:
 - (i) within seven (7) days of being requested to do so, has not been able to satisfy the Queensland Building Services Authority (QBSA) that it has sufficient financial capacity to satisfactorily perform and complete the Contract in accordance with its terms; or
 - (ii) prior to the award of a tender:
 - does not have a *Contract PQC: Application* under consideration, or being processed, by the PQC Registrar that was submitted prior to 5:00pm, 26 October 2001; or
 - does not hold a *Certificate of Prequalification (PQC)*; or
 - is not appropriately registered for the work the subject of the Tender, pursuant to the Prequalification (PQC) System released and current at the time and date of closing of tenders.

9.4 In the provision of any information to the QBSA, the Tenderer acknowledges and agrees that such information so provided may be used by the QBSA in any assessment it may undertake for the purposes of determining the continuing capacity of the licensee to meet any licensing criteria required by the Queensland Building Services Authority Act.

10. TENDER EVALUATION

10.1 The Principal shall evaluate Conforming Tenders in accordance with the tender evaluation criteria contained in the Tender Documents or, in the absence of any stated tender evaluation criteria, on the basis of best value for money for Government.

10.2 The Principal, if it determines to evaluate an Alternative Tender, shall evaluate such Alternative Tender on the basis of best value for money for Government which may, or may not, be the tender evaluation criteria contained in the Tender Documents.

10.3 Where both Conforming and Alternative Tenders have been evaluated, the Principal may accept that Tender which on a view of all circumstances represents the best value for money for Government.

11. PROJECT FUNDING

11.1 The Principal will not provide particulars of project funding arrangements to Tenderers.

12. INTELLECTUAL PROPERTY

12.1 Intellectual Property Rights in all material, whether of the Tenderer or a third party, submitted by a Tenderer in its Tender is assigned to the Principal, without any requirement for further documentation or writing, upon acceptance by the Principal of its Tender.

12.2 To the extent that any material submitted by a Tenderer is the subject of pre-existing Intellectual Property Rights of third parties, the Tenderer warrants that it is able to procure an assignment of all such Intellectual Property Rights to the Principal and agrees to obtain such assignment upon acceptance of its Tender.

12.3 The Tenderer indemnifies the Principal against any loss, costs, expenses, demands or liability, whether direct or indirect, arising out of any claim by a third party against the Principal alleging that the material contained in the Tender or acts by the Principal in relation to the Principal's use of the Tender material infringe any Intellectual Property Rights of that third party.

13. FREEDOM OF INFORMATION

13.1 The name of the Tenderer and tendered Lump Sum and subsequent Contractor and contract sum shall be subject to public disclosure. Any other information provided with the Tender which the Tenderer desires not to be subject to public disclosure shall be clearly endorsed – "In Confidence" – by the Tenderer.

13.2 In an assessment of any application made under the Freedom of Information legislation, any information endorsed "In Confidence" by a Tenderer will be assessed for non-disclosure in accordance with the terms of the legislation. Information will not be disclosed provided there is legislative authority to do so.

14. REGISTRATION AS A PRE-QUALIFIED TENDERER

The Principal may decline to consider or accept a Tender from a Tenderer who, prior to the award of a Tender, does not hold a Certificate of Prequalification, or is not appropriately registered for the work the subject of the Tender, pursuant to the Prequalification (PQC) System released and current at the time and date at which Tenders were invited.

Tenderers must note that:

- (a) *if awarded a Contract as a result of submitting a Tender, the Principal will, in accordance with the Prequalification (PQC) System, prepare and submit performance reports to the PQC Registrar. Such performance reports may include, amongst other things, information regarding:*
 - (i) *achievements or compliance with representations made in response to tender evaluation criteria (if any) contained in the tender documents;*
 - (ii) *compliance with any legislation relating to workplace health and safety, industrial relations and workers compensation legislation; and*
 - (iii) *compliance with the provisions of the Contract concerning Subcontracting (clause 5), Apprentice/Trainee Policy (clause 35) and Payment of Workers and Subcontractors (clause 38);*
- (b) *the Queensland Government has published a document entitled "Queensland Code of Practice for the Building and Construction Industry" (the Code of Practice). Tenderers are reminded that by being registered pursuant to the Prequalification (PQC) System they have provided an undertaking that they will abide by the Code of Practice.*

In accordance with the conditions of Prequalification, an adverse performance report or non-compliance with the Code of Practice may result in a review of the Contractors PQC registration status.

RTI RELEASED

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RETURNABLE SCHEDULES

RTI RELEASE

TENDER SCHEDULE

SECTION OF THE WORKS	Irrelevant 73(2) - other state schools		Dundula SS
1. <u>FSC Electrical Upgrade</u> – Lump Sum	\$	\$	\$
2. <u>Subsidy Air-Conditioning</u> Lump Sum	\$	\$	\$
<i>Block A</i> <i>Classrooms A101, A102, A103, A154 and A160</i> <i>Computer Rooms A104a, A105c, A107 and A108</i> <i>Science Labs A155 & A157</i> <i>Staff Rooms A105, A105a, A105b, A161a, A161b, and A161c</i> <i>Computer Server Room A107a</i>	\$		
<i>Block L</i> <i>1st Floor Classrooms L1, L2 and Withdrawal</i>			
<i>Block A</i> <i>Classrooms A1, A2, A3, A4, One Withdrawal Room, One Practical Learning Area (PLA)</i>			\$
<i>Block B</i> <i>Classrooms B1, B2, One Withdrawal Rooms</i>			\$
<i>Block C Preschool</i> <i>One Main Activities Space, and One Office</i>			\$
Totals for each school (1+2) – Lump Sum	\$ (i)	\$ (ii)	\$ (iii)
Grand Total (i)+(ii)+(iii)– Lump Sum			

Signed by:.....Date:.....

On behalf of:.....(Tenderer's name)

PRINCIPAL SUPPLIED SPLIT UNITS SCHEDULE

SECTION OF THE WORKS	Irrelevant 73(2)		Dundula SS
1. FSC Air-Conditioning to Resource Centre 2.5 kW wall mounted 5kW ceiling suspended 8kW ceiling suspended 10kW ceiling suspended 14kW ceiling suspended 10kW ceiling cassette 14kW ceiling cassette	<u>No.</u>	<u>No.</u>	<u>No.</u>
2. Subsidy Air-Conditioning 2.5 kW wall mounted 5kW ceiling suspended 8kW ceiling suspended 10kW ceiling suspended 14kW ceiling suspended 10kW ceiling cassette 14kW ceiling cassette			
Grand Totals for each School (1+2) 2.5kW wall mounted 5kW wall mounted 5kW ceiling suspended 8kW ceiling suspended 10kW ceiling suspended 14kW ceiling suspended 10kW ceiling cassette 14kW ceiling cassette			
Grand Totals all Schools 2.5kW wall mounted 5kW wall mounted 5kW ceiling suspended 8kW ceiling suspended 10kW ceiling suspended 14kW ceiling suspended 10kW ceiling cassette 14kW ceiling cassette			
Grand Total all units			

Signed by:.....Date:.....

On behalf of:.....(Tenderer's name)

TENDER REQUIREMENTS FOR DESIGN AND CONSTRUCTION CONTRACT TENDERS

Tenderers are required to submit as part of the tender the following:

A Development Proposal based on the Tender Documents. The Development Proposal is required to contain:

- (i) a statement of the names of consultants which the Tenderer proposes to engage and the extent of services envisaged;
- (ii) a tender schedule showing price for each building and rooms;
- (iii) Principal supplied split units schedule;
- (iv) Signed copy of the Code of Conduct.

RTI RELEASE

**COOLER SCHOOLS
CODE OF CONDUCT FOR CONTRACTORS**

1. **General, Background and Limitations**
Notwithstanding rules and regulations mentioned under Common Law, Criminal Law, Workplace Health and Safety, Education Queensland regulations and others, these briefing notes are compiled to highlight potential and specific issues related to individuals visiting and working in school premises.
2. **Site Rules**
 - Project start-up meeting comprising representatives from each school, EQ, Project Manager and Contractor.
 - Site induction of all Contractors and sub-contractors' staff before entering the site.
 - Visitors to report each day at school reception desk recording and stating business, hours, locations etc.
 - Clear identification of each worker by name badge. The employer shall be identified either by uniform or badge.
 - All communications to follow project/contract structure.
 - Incident and accident reports are compulsory and must be lodged on the day of the event.
 - Do not use offensive language.
 - Do not answer provocation by students.
 - Do not smoke on site.
 - Do not bring prohibited substances on site.
 - Clear all rubbish daily.
3. **Records and Documentation**
 - Visitors logbook signed by visitor and school representative; each day on arrival and departure of site.
 - Maintenance book signed by visitor and school representative.
 - Site meeting minutes.
 - Diary notes.
4. **Safety**
 - Visitors logbook signed by visitor and school representative; each day on arrival and departure of site.
 - Ensure safety of staff, teachers, pupils while working at the end of each working day.
 - Ensure protection of Contractors equipment, material and school equipment.
 - Ensure protection against dust, debris, fumes and spillage.
 - Provide safety data sheet of all hazardous material.
 - Ensure the fire alarm system (smoke or thermal detectors) are not accidentally activated.
 - Ensure the intruder systems are not accidentally activated.
5. **Security**
 - Ensure security against theft.
 - Ensure security against vermin and rodents.
 - Ensure security against rain, water damage, condensate damage, refrigerant leakage.
6. **Co-ordination**

Co-ordinate all activities, jobs, start-up, testing, cut in with school representatives and individual occupants of each area.

Co-ordinate all work, equipment layouts and school items to be relocated.

I have read and understood the above details and understand that a non-compliance with the intent herein constitutes a breach in contract.

Acknowledgment: _____ Date: _____

SCOPE – DUNDULA STATE SCHOOL

RTI RELEASE

1 Introduction

1.1 GENERAL

This document outlines the scope of work associated with the upgrade of air conditioning to the Dundula State School.

1.2 COMPLIANCE WITH THE BUILDING ACT

The contractor shall have the completed design of the installation certified for compliance with the Building Act.

1.3 REFERENCED SECTIONS

The following Cooler Schools standard specifications and referenced drawings as applicable shall be read in conjunction with this section:

- Specification – Air conditioning
- Specification – Evaporative Coolers
- Specification – Electrical
- Specification – Builders work
- Specification – Preliminaries

The specifications are bound into a document titled "Standard Document for Cooler Schools Contracts", dated July 2002, and are available by contacting the Project Manager, Cooler Schools, Project Services, Central Queensland Ph 4938 4533.

1.4 STANDARD AIR CONDITIONING UNITS

Unless otherwise required in specific locations, and approved by superintendent, the air conditioning design shall utilise units from the Carrier and Hitachi models scheduled in Table 1.1. The Principal will supply the units as specified in the Preliminary Conditions of the Contract.

The capacities listed in Table 1.1 are nominal only. The contractor shall refer to the equipment manufacturer's data to determine actual capacities.

Air conditioning units with nominal capacities of 2.5, 5 and 8 kW operate on single-phase electrical power supply. Air conditioning units with nominal capacities of 10 and 14 kW operate on three-phase electrical power supply.

Unless specifically listed in Table 3.1, the 8kW units shall be used only in those schools that have no three-phase electrical supply.

1.5 EVAPORATIVE COOLING UNITS

The contractor shall be responsible for supplying all evaporative cooling units.

Table 1.1 Air conditioning unit schedule

Type of List	GTH (kW)	Make and Model	
		Carrier	Hitachi
Wall mounted	2.5	42G100CP / 38G100CP	RAS-09CA1 / RAC-09CA1R
Wall mounted	5	42G225CP / 38G225CP	RAS-5182CA / RAC-5182CVA
Under ceiling	5	42ARM018 / 38AV018	
Under ceiling	8	42ARM030 / 38HD030	RPC-3AG5E / RAS-3AQVE5
Under ceiling	10	42ARM036 / 38HDT036	RPC-3.5AG5E / RAS-3.5AQE5
Under Ceiling	14	42ARM048 / 38HDT048	RPC-5AG5E / RAS-5AQE5
Ceiling Cassette	10	40GKX048 / 38GL048	RCI-3.5AG5E / RA3.5AQE5
Ceiling Cassette	14	40GKX060 / 38GL060	RCI-5AG5E / RAS-5AQE5

2 Description of Installation

2.1 GENERAL

As part of the Cooler Schools program for Education Queensland, air conditioning is to be provided in various areas of the Dundula State School.

The services to be provided shall be as follows:

- Air conditioning to the following areas:
 - Block A. - Classrooms A1, A2, A3, A4.
 - One Withdrawal Room
 - One Practical Learning Area (PLA)

 - Block B. - Classrooms B1, B2.
 - One Withdrawal Room

 - Block C Preschool. One main activities space and one office.

- Evaporative cooling to the following areas:
Not required.

- The upgrade of the electrical services may include:
 - Consumer mains
 - Switchboards
 - Sub-mains
 - Underground reticulation conduits and cable pits.
 - Telecommunications conduits and pits

3 Scope of Work

3.1 General

Without limiting the generality of the General Conditions of Contract, and except as otherwise expressly provided herein, the work included, but is not limited to the supply of all material, equipment, warehousing, labour, supervision, services, tools, testing devices, data and drawings, and each and every item of expense necessary for the design, engineering, fabrication, delivery, handling, hauling, unloading, receiving, storage, erection, shop assembly, installation, testing, start up, commissioning and documentation of the following Work:

3.2 DESIGN AND DOCUMENTATION

Detailed design of the air conditioning installation for each room requiring air conditioning as scheduled.

Detailed design of the evaporative cooling installation for each room requiring evaporative cooling as scheduled.

Verification that the number and rating of air conditioning units as scheduled in Table 3.1 is sufficient and suitable for the purpose, and otherwise selection of new units from the standard sizes nominated in Table 1.1 to obtain the specified performance.

Proposals to change from the suggested equipment is to be advised to the Superintendent before units are ordered.

Site measurement, setting out, detailed dimensional design and documentation of the Works to ensure the installation suits the requirements of the scope of work.

Detailed calculation (camel heat load program or equal) and design to select the most suitable size of air conditioning unit from the standard sizes made available by the Principal.

Drawings showing all air conditioning units, evaporative cooling units, outside air fans, ducting, supports, condensate lines, and any other detail required for documenting the installation of the mechanical services.

Drawings showing all building and plumbing works associated with the installation of mechanical services such as; plinths, enclosures, equipment support, maintenance platforms, penetrations, condensate drain termination points and water supply connection locations.

Drawings for the site electrical services including the technical data provided in this specification and details of the site conditions:

- Site plans of underground services reticulation and switchboard locations.
- Switchboard layouts and shop drawings.
- Single line diagrams of the distribution system.

Drawings and schematics of the control circuit for each air conditioning, evaporative cooling unit and outside air system. These drawings shall clearly describe the operation of the control systems and shall include all additional controls provided by the contractor and their relation to the air conditioning units 'as supplied' controls.

Verification that the number and size of underground conduits is sufficient to enclose the specified number of cables.

Design, where viable, of the alterations required to the existing main switchboard to upgrade the rating to the specified capacity.

The calculation of fault-loop impedance for all new circuits to comply with the requirements of AS/NZS—3000:2000 clause 1.7.4.3 and appendix B.

Evaluation of the prospective fault current at each distribution switchboard, and selection of the over current protection in each functional units to ensure adequate discrimination and cascading as required to provide overload and short circuit protection of the new and existing sections of the installation.

Selection of subcircuit cables for each appliance to provide a current carrying capacity not less than the rated current of the appliance and a voltage drop not exceeding the maximum values calculated from the voltage drop information provided in the schedule of submains.

Design of a cable support system to provide the required strength and space for the specified additional spare capacity.

Submission to the superintendent, the certificate of compliance and test records.

Provision of statutory approvals and licences, and payment of levies necessary for the works. (Except for supply authority charges to upgrade the electricity supply system).

Provision of as built drawings including block diagrams, cable schedules and layouts of equipment.

QA documentation as required.

Operation and maintenance manuals including mechanical (Building Act Compliance stamped) and electrical 'as installed' drawings.

Servicing and maintenance of the installation after practical completion including rectification of any defects throughout the specified defected liability period.

Provision of adequate training to the facility nominated operators to ensure effective and efficient operation of all equipment provided to the satisfaction of the superintendent.

3.3 NEGOTIATION WITH THE SUPPLY AUTHORITY

Notification to the supply authority of the proposed demand increases, negotiation to determine the options available and selection of a technically and logistically acceptable and cost effective solution to supply the immediate and projected increased electrical load of the school.

Notification in writing to the superintendent of the resolution of negotiations with the supply authority and facilitating of the payment by the due date by the Principal of any applicable fees. The non-payment of fees to the supply authority shall not constitute a valid reason for an extension of the time to complete the work.

3.4 DEMOLITION

Disconnection and removal of existing electrical services as required for the provision of the specified services.

Coordination with the electricity supply authority for the temporary isolation of the supply to the consumer mains.

Disconnection and removal of redundant cables and switchboards as required.

Making good and painting of surfaces left exposed after removal of redundant equipment.

Handing over to the School Principal any redundant air conditioning units.

3.5 MECHANICAL SERVICES

3.5.1 General

All necessary mechanical services to provide fully operational air conditioning and evaporative cooling installations to meet the Performance requirements of this specification. This work shall include, but not limited to, the following:

- Installation of Principal supplied air conditioning units.
- Supply and installation of evaporative cooling units
- Provision of outside air supply systems.
- Provision of all associated ductwork, insulation, grilles, diffusers and filters.
- Provision of all electrical supply wiring and controls necessary to extend the power supply from the building switchboard to the mechanical services equipment and provide a fully operative installation.
- Provision of all associated refrigeration and condensate drainage pipework.
- Coordination with the building contractor to advise of size and location of all items listed as major associated building works in Section 3.5.8. This shall include detail drawings necessary to convey the extent of work required of the builder.
- Removal of redundant air conditioning units.
- Testing and commissioning.
- Service and maintenance of all equipment during the defects liability period.

For Dundula State School the conditioning units supplied shall be Hitachi. For all 2 or 8 hour timer controlled areas requiring the installation of single-phase units, those individual units shall be Carrier. Refer also to Table 3.1.

3.5.2 Air Conditioning Units

Install Principal supplied air conditioning units in the areas scheduled in Table 3.1. The air conditioning units installed shall be located in the nominated areas to achieve optimum air distribution. This shall include; all minor building works required for the installation, provision of electricity supply and the draining of the condensate from each air conditioning unit to a suitable drain system.

The areas to be air-conditioned and the suggested capacities and quantities of air conditioning units required are as follows:

Table 3.1 Air Conditioning Units

Air conditioning unit	Total cooling capacity (kW)	Preferred type of unit *	Control Type
Block A			
AC.A1-1 (A1 classroom)	14	Under Ceiling	2 hour
AC.A1-1 (A1 classroom)	10	Under Ceiling	2 hour
AC.A2-1 (A2 classroom)	14	Under Ceiling	2 hour
AC.A2-1 (A2 classroom)	10	Under Ceiling	2 hour
AC.A3-1 (A3 classroom)	10	Under Ceiling	2 hour
AC.A3-1 (A3 classroom)	10	Under Ceiling	2 hour
AC.A4-1 (A4 classroom)	10	Under Ceiling	2 hour
AC.A4-1 (A4 classroom)	10	Under Ceiling	2 hour
AC.A5 (withdrawal)	10	Under Ceiling	2 hour
AC.A6 (PLA)	10	Under Ceiling	2 hour
Block B			
AC.B1-1 (B1 classroom)	14	Under Ceiling	2 hour
AC.B1-2 (B1 classroom)	14	Under Ceiling	2 hour
AC.B2-1 (B2 classroom)	14	Under Ceiling	2 hour
AC.B2-2 (B2 classroom)	10	Under Ceiling	2 hour
AC.B2-3 (B2 classroom)	10	Under Ceiling	2 hour
AC.B3 (withdrawal)	14	Under Ceiling	2 hour
Block C Preschool			
AC.C1-1 (main activity space)	14	Under Ceiling	2 hour
AC.C1-2 (main activity space)	14	Under Ceiling	2 hour
AC.C2 (office)	5	Wall Mount	Proprietary

Irrelevant 73(2) - personal contact telephone numbers

✓
14 ✓
14 ✓
14 ✓
14 ✓
14 ✓
✓
✓
✓
14 ✓
out ✓
✓
✓
✓

* Note that where it is not possible to install the preferred type of air conditioner due to physical site limitations or the like, an alternative type may be required.

Hyphenated numbers represent multiple air conditioning units serving the one space.

The capacity and number of air conditioning units listed in Table 3.1 are suggested only and should not be used as a basis for establishing the tender price.

Following acceptance of the tender, the contractor shall confirm the number and capacities of air conditioning units required to meet the Performance requirements for air-conditioned spaces as defined in the Section 3.12 Performance and Guarantee. No negotiations shall be entered into regarding the installation of quantities of units that are additional to the quantities listed in Table 3.1.

Using the Principal Supplied Splits Units Schedule included with this document, the contractor shall advise the Principal of the actual capacities and number of units required.

3.5.3 Double Teaching Spaces

All spaces identified by the school or in this document as Double Teaching Areas shall, for the purposes of selecting and installation of air conditioning units, be considered as two individual classroom spaces. This shall apply whether or not the area is currently fitted with separating concertina doors. The contractor shall allow for future modifications where the double teaching space will be divided by concertina doors or fixed partitions into two individual classrooms. In the main this will mean that all double teaching areas will be served by minimum of four air conditioning units and not the possible three as determined by the heat load. For areas in far north Queensland, or rooms that have high internal equipment loads, the two units per classroom may have to be increased to three, a total of six units for the double teaching area.

3.5.4 Outside Air Supply

Provide outside air systems as necessary to introduce the outside air quantities to each of the air-conditioned areas as listed in Table 3.2.

The fans listed are the preferred method for the introduction of outside air however the contractor may make use either of the following methods as necessary to achieve the air quantities specified:

- A soffit or roof gable mounted intake grille through a ducted system including a panel filter and fan.
- Proprietary wall or window mounted fan units consisting of a weatherproof intake louvre, centrifugal fan, filter and room outlet.

For small areas such as staff offices, outside air may be introduced via a small proprietary wall or window mounted axial fan unit consisting of a weatherproof intake, axial fan and room outlet.

Provide electrical interlocks between air conditioning units and the outside air fans as required under the air conditioning section of this document.

Table 3.2 Outside Air Fans

Fan	Duty (l/s)	Preferred type *
Block A		
OAF.A1-1 (A1 classroom)	150	Wall Mount Centrifugal
OAF.A1-1 (A1 classroom)	150	Wall Mount Centrifugal
OAF.A2-1 (A2 classroom)	150	Wall Mount Centrifugal
OAF.A2-1 (A2 classroom)	150	Wall Mount Centrifugal
OAF.A3-1 (A3 classroom)	150	Wall Mount Centrifugal
OAF.A3-1 (A3 classroom)	150	Wall Mount Centrifugal
OAF.A4-1 (A4 classroom)	150	Wall Mount Centrifugal
OAF.A4-1 (A4 classroom)	150	Wall Mount Centrifugal
OAF.A5 (withdrawal)	130	Wall Mount Centrifugal
OAF.A6 (PLA)	150	Wall Mount Centrifugal

Block B		
OAF.B1-1 (B1 classroom)	180	Wall Mount Centrifugal
OAF.B1-2 (B1 classroom)	180	Wall Mount Centrifugal
OAF.B2-1 (B2 classroom)	180	Wall Mount Centrifugal
OAF.B2-2 (B2 classroom)	180	Wall Mount Centrifugal
OAF.B3-1 (withdrawal)	110	Wall Mount Centrifugal
OAF.B3-2 (withdrawal)	110	Wall Mount Centrifugal
Block C Preschool		
OAF.C1-1 (main activity space)	180	Wall Mount Centrifugal
OAF.C1-2 (main activity space)	180	Wall Mount Centrifugal
OAF.C2 (office)	40	Wall Mount Axial

Note that where it is not possible to install the preferred type of fan due to physical site limitations or the like, an alternative type may be required.

Hyphenated numbers represent multiple fan units serving the one space.

The quantities listed in Table 3.2 are the minimum outside air quantities to be introduced into each space. The contractor shall confirm with the school Principal the actual number of occupants in the space to determine the actual outside air quantities necessary to meet the requirements of AS1668.2 and the Building Code of Australia. The contractor shall increase the air quantities as may be necessary to meet these requirements. No negotiations shall be entered into regarding additional costs for air quantities that are higher than those listed in Table 3.2 but necessary to meet the requirements of AS1668.2 and the Building Code of Australia.

In addition to the requirements for the determination of outside air quantities as mentioned above, the contractor shall, in calculating the outside air quantities for classroom spaces, allow a maximum of one person per 2m² of floor space up to a maximum of 30 persons in any space. For areas identified as double teaching areas, the calculation of outside air shall be based on the equivalent of two individual classroom spaces equal to half the floor area of the double teaching space.

3.5.5 Systems control type

Control systems for Cooler schools installations can take the following three forms:

- Proprietary
- 2-Hour Timer
- 8-Hour Timer.

The contractor shall provide the control system as listed in Table 3.1 and as described in the air conditioning specification section of "Standard Document for Cooler Schools Contracts".

Air conditioning units and outside air fans that are designated by hyphenated numbers represent multiple units serving the one space. As such they shall be operated via a single controller and shall run together as a single operating system.

All spaces identified by the school or in this document as Double Teaching Areas but that do not have a separating concertina partition shall, for the purposes of air conditioning controls, be considered as one individual classroom space.

All spaces identified by the school or in this document as Double Teaching Areas but that do have a separating concertina partition shall, for the purposes of air conditioning controls, be considered as two individual classroom spaces.

3.5.6 Existing air conditioning units

Unless noted otherwise in this document, all existing air conditioning units serving areas covered by this contract shall be deemed redundant. All such redundant air conditioning units shall be removed.

Redundant air conditioning units are to remain the property of the school and as such are to handed to the school Principal after removal.

The contractor shall remove, terminate and make safe, all electrical wiring and controls associated with the operation of the redundant air conditioning units. This shall exclude GPOs or electrical supply lines that can be re-used for the installation of new air conditioning units as specified elsewhere in this document.

The redundant air conditioners shall be cleaned, serviced, and returned to the School Principal. Liaise with the School Principal to ensure suitable storage is provided.

3.5.7 Minor Associated Building Works

Associated building and plumbing works of a minor nature shall be carried out by the contractor and will include the following:

- All building penetrations up to 100mm square. Penetrations above 100mm square shall be considered major and shall not be carried out by the contractor.
- Pipework covers.
- Condensate lines from each air conditioning unit to the nominated condensate drainage point as specified elsewhere in this document.
- Extension of water supply from ball valve isolators provided as 'Major Associated Building Works' to each evaporative cooling unit.

3.5.8 Major Associated Building Works

Associated building and plumbing works of a major nature shall be carried out under a separate contract by a building contractor and will include the following:

- Provision of all concrete plinths.
- Provision of all condensing unit enclosures.
- Provision of all galvanised steel condensing unit and evaporative cooling support stands.
- Provision of all galvanised steel condensing unit wall mount brackets
- Provision of all galvanised steel support brackets for the support of under ceiling fan coil units that may be required in addition to those supplied by the air conditioning unit supplier.
- Roof access ladders, walkways and platforms.
- Rubble pits as required for the termination of condensate lines.
- Cutting and making good all penetrations above 100mm square.
- Cutting of asbestos cement sheet.
- Modifications to 'T' Bar ceiling support structures.
- Roof structure modifications such as trimmers, penetrations and flashed roof upstands to allow for installation and support of air conditioning and evaporative cooling units.
- Roof penetrations and flashing as required for the installation and support of air conditioning units and outside air fans.
- Removal of louvres or windows and fitment of fixed panels for the support of outside air fans.
- Making good wall penetrations left after the removal of existing air conditioning units.
- Provision of a water supply line terminating at a ball valve adjacent to each evaporative cooling unit

- Provision of tundishes for the collection of air-conditioning condensate and evaporative cooling drainage.

3.6 ELECTRICAL SERVICES

3.6.1 Maximum demand

The anticipated electricity demand of the initial air conditioning equipment is 174A. The maximum demand after the initial stage of air conditioning will be 336A and increase to approximately 392A when all existing and future classrooms and office areas are air conditioned.

3.6.2 Extent of the electrical services upgrade

Electricity supply

- The supply authority need to be advised of the anticipated increase in maximum demand, and the timing of the work, as an upgrade of the power supply to the site may be required.
- The supply authority may require the customer to provide a capital contribution towards the cost of the electricity supply upgrade and a guarantee of minimum revenue.
- Education Queensland will be responsible for the payment of fees and charges as negotiated with the supply authority for the upgrade of the electricity supply to the site.

Consumer mains

- Existing consumer mains are to remain.

Main switchboard

- Existing MSB is to remain.

Cables

Upgrading of the existing cables and provision of new cables to supply the projected maximum demand of existing and anticipated buildings as shown in Table 3.3.

Provide new submains to Block A, Block B, and Preschool.

Table 3.3 Cable schedules

CABLE ROUTE	Connection Source SB	Total A.C. Load (A/Ph)	Total Max. Demand (A/Ph)	Cable Length (m)	Maximum Allowable Voltage Drop %	Required Cable Size mm ² / phase
	Note 1			Note 2	Note 3	Note 4
Consumer Mains	Point of Supply	246	392	35	0.75%	240 existing
(Diversity applied)						
Submains						
Existing Buildings						
Block A – AC DSB	MSB	85	85	10	0.26%	25
Block A – L&P DSB	MSB	-	80	10	0.24%	25
Block B	MSB	53	86	41	0.78%	35
Amenities	MSB	-	-	-	-	Note 6
Tuckshop	MSB	-	-	-	-	Note 6
Resource / Admin	MSB	36	71	45	0.7%	35 Existing

Pre School	MSB	36	56	30	0.47%	25
Future Building	MSB	-	56	-	-	-

Note 1 The sizes indicated are approximate or unknown. The condition of any existing cable and its suitability for reuse should be verified on site.

Note 2 Cable size may require upgrading if the route length is increased significantly.

Note 3 The voltage drop permitted from the distribution switchboard to the respective appliance shall be 5% of the nominal voltage less the voltage drop in the respective submains and the consumer mains.

Note 4 The number and sizes indicated is for each active and the neutral conductor. Except for the consumer mains, each circuit shall include an earth conductor not less than that required by Clause 5.2.5 of AS/NZS 3000-2000.

Note 5 Re-use existing sub mains.

Note 6 Redirect (and extend if necessary) to new MSB.

Distribution switchboards

- Verification of the suitability of the existing distribution switchboards to withstand the increases fault current of the upgraded supply and provision of suitable fault protection or replacement with suitably rated new distribution switchboards.
- Provide new DSB's to Block A, Block B, and Preschool.

Table 3.4 Switchboards

Building	Designation	Existing switchboard			Required switchboard			Notes/comments
		No of Phases	Rating (A)	Poles no	Spare poles no	Current rating (A)	Poles no	
Block A	DSB 6 - L&P	3	100	36	20		Existing to remain	
Block A	DSB 7 - AC	3	-	-	-	100	48	-
Block B	DSB 3	1	55	12	3	100	36	Note 1
Resource / Admin	DSB 2	3	200	36	15		Existing to remain	
Pre School	DSB 4	3	55	10	1	100	36	Note 1
Amenities	DSB 5	-	-	-	-		Existing to remain	
Tuckshop	DSB 1	-	-	-	-		Existing to remain	

Note 1 Replace the existing switchboard and transfer the existing circuit to the new switchboard and equip with circuit breakers as required.

Note 2 Install the new switchboard adjacent the existing and supply the existing from the new with suitably protected submain cables.

Note 3 Install the new switchboard adjacent the existing and supply the new switchboard from the existing with suitably protected submain cables.

Note 4 Provide adequate fault limiting protection for the existing and new final subcircuits

Note 5 In buildings with multiple distribution switchboards the air conditioning equipment will be supplied from the new switchboard only.

Note 6 Construct this switchboard to allow connection of full size cables onto ACB's etc.

Underground Reticulation

- Investigation on site to establish the extent and suitability of any existing underground reticulation system.
- Provide underground conduits from MSB to Block B and from MSB to Preschool.

Table 3.5 Conduits

From	To	Existing power conduits	New power conduits	Notes / Comments
POS	MSB	1 x 100		
MSB	Pre School	1 x 50	Reuse if possible	
MSB	Resource / Admin	1 x 80		
MSB	Block B	1 x 25	1 x 80	Reduce to 50 above ground

Provision of underground cable ducts for telecommunication services as follows:

- Separate telecommunication cable pits, minimum 610 L x 305 W clear opening and 820 deep, adjacent to the existing electrical services pits and as required to terminate the underground telecommunication conduits.
- One 100 mm and two 50 mm telecommunications conduits between cable pits where new trenches are provided for power cables.

Three 50mm telecommunication conduits between cable pits and buildings where new trenches are provided for power cables.

3.6.3 Minor Associated Building Works

Associated building works of a minor nature shall be carried out by the contractor and will include the following:

- Reinstatement of paving, paths, etc.
- All building penetrations up to 100 mm

3.6.4 Major Associated Building Works

Associated building of a major nature shall be carried out under a separate contract by a building contractor and will include the following:

- Provision of large purpose built pits and upstands to suit external main switchboards

3.7 BUILDING WORK

The extent of building works shall be as listed under Major Associated Works in Mechanical Services Section 3.4 and Electrical Services section 3.5.

3.8 TERMINATION POINTS

Coordinate the mechanical, electrical, fire and hydraulic services as appropriate, the termination points for electrical power supplies, fire alarm shut down, water supplies and drainage for the equipment and systems.

Electrical supply

- Electricity supply connected to the Point of Supply nominated by the supply authority following notification of the proposed increase of the electricity demand.
- Final subcircuits terminated with new circuit protection devices at the busbars of existing or the new distribution switchboards as indicated in the switchboard schedule.
- Disconnection of existing submains and final subcircuits from existing switchboard and reconnection to new switchboards where new switchboards are scheduled to be replaced.

Fire Alarm / Security Detectors

- Relocate existing fire alarm and security detector circuits connected at the terminal of existing alarm panels as required to ensure the integrity and reliability of the existing alarm panel is not compromised. All work is to be carried out by approved installers.

Hydraulics

- Water supply connected to the existing domestic water supply as required.
- Condensate pipes terminated at gravel pits, sewerage or stormwater as required by Local Regulations.

3.9 TESTING AND COMMISSIONING

Testing and commissioning of the completed installation to demonstrate compliance with the Specification requirements.

All of the inspection and testing data fully documented and recorded on suitable forms so the results can be permanently registered and bound into the final quality assurance documentation.

The tests are intended to demonstrate that all components will function correctly, as separate components and as part of integrated system in accordance with the construction documents and include, but are not limited to, the following:

- Verification of correct phase sequence at each 3 phase switchboard and appliance.
- Verification of function of each circuit, appliance, control and protection device, switch, outlet and each control device.
- Verification of compliance of each component of the installation with the relevant requirement of the Australian Standards and statutory authorities.

Submission to the superintendent within 5 days of completion of three copies of the results of the following electrical tests:

- insulation resistance of the consumer mains, main switchboard, submains and distribution switchboards, and LV final subcircuits;
- resistance of the main earthing system;
- impedance of the earth loop at each outlet;
- phase sequence at each 3 phase appliance.

Any work required to make good deficiencies, which become apparent during the commissioning tests, will not constitute a variation to the Contract.

Acceptance of the installation will be in writing on successful completion of the tests and submission of the test results. The acceptance of the test results will not relieve the Contractor of the responsibility to furnish a satisfactory operating facility, for which the Contractor will continue to be required to undertake rectification as necessary with the Defects Liability Period at no additional cost to the Contract.

3.10 IDENTIFICATION AND LABELS

Identification of the distribution switchboard, circuit number and phase at each switch, motor isolator, and any other accessory at which cables are terminated, with materials and methods approved by the superintendent.

Identification of the respective distribution switchboard with descriptive label as shown on the submain cable schedule or as agreed with the superintendent.

Identification of the telecommunication services cable pits.

3.11 COORDINATION WITH OTHERS

Arrangement of all works so that normal operations of the school can progress in an orderly and efficient manner and any disruption is minimised.

3.12 EXCLUSIONS

The following is specifically excluded from the scope of work:

- Supply of air conditioning units. (The Principal will deliver these to the contractor).
- Payment of any fees and charges imposed by the electricity supply authority.

3.13 PERFORMANCE AND GUARANTEE

3.13.1 Mechanical services

The Contractor shall guarantee that the entire system and each of its components will start up, shut down and operate stably, safely and reliably within the design parameters specified in Table 3.7.

Table 3.7 Air Conditioning Design Parameters

Extreme ambient conditions within which plant shall be required to operate:	Summer: 45°C DB and full solar load
Outside ambient conditions in which air conditioning plant shall be required to achieve CMR:	Summer: 32°C DB, 26.5° WB and full solar load
Internal conditions in which air conditioning plant shall be required to achieve CMR:	Summer: 26°C±1K DB; 55% RH (not controlled)
Electricity supply:	Nominal 415 V, 50 Hz, balanced three phase, earthed neutral; otherwise in accordance with AS 2926, Standard voltages, at the consumer's terminals

The contractor shall ensure that the system is able to efficiently provide not less than the specified Continuous Maximum Ratings (CMR) of performance at full load and at partial loads as required by the design parameters; and that the required ratings are maintained during the defect liability period.

Automatic controls, motors and switchgear and every other component of the entire system must be selected, installed and adjusted for continuous, safe, unattended operation at the specified limiting conditions and be adjusted to comply with this requirement at the time of commissioning.

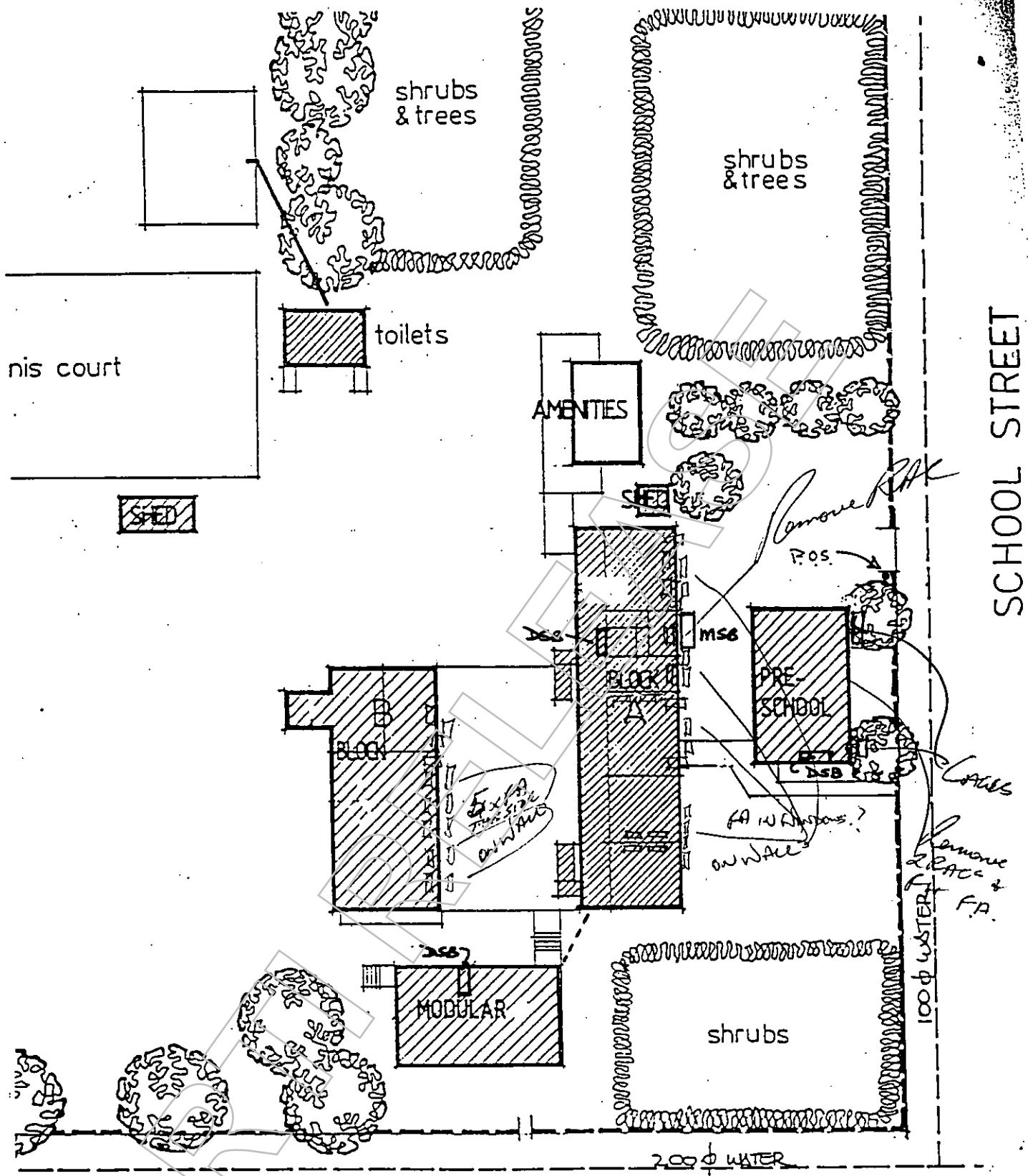
The installation shall be guaranteed to maintain the Continuous Rating parameters under the specified ambient conditions and to continue to operate without damage under the extreme operating conditions specified in the schedule of outside air fans and air conditioning units.

The outside air systems installed shall be capable of providing the outside air quantities as specified in Section 3.5 Mechanical Services and Table 3.2 of this document.

4 Site Plan

Refer to attached site plan.

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DUNDULA STATE SCHOOL

N.T.S.

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Conditions of Contract including Special Conditions of Contract and Annexure

(Australian Standard General Conditions of Contract AS 4305-1996)

February 2001

Prepared by
Legal and Contractual
Department of Public Works

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CONDITIONS OF CONTRACT

1. GENERAL

The Conditions of Contract shall be the "Australian Standard Minor Works Contract Conditions AS4305 - 1996" as amended by the Special Conditions of Contract.

2. INTERPRETATION

In the event of conflict or inconsistency between the provisions of the Australian Standard Contract Conditions (AS4305 - 1996) and the Special Conditions of Contract, the Special Conditions of Contract shall take precedence.

References to "Annexures" to AS4305 - 1996 shall be read as references to Annexures attached to the Special Conditions of Contract.

References to "attached to these Conditions" shall be read as references to attachments to the Special Conditions of Contract.

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SPECIAL CONDITIONS OF CONTRACT

1. INTERPRETATION

Delete the definition for "Contract Sum" and insert in its place -

" 'Contract Sum' means -

- (a) where the Principal accepted a lump sum, the lump sum;
- (b) where the Principal accepted rates, the sum ascertained by calculating the products of the rates and the corresponding quantities in the Bill of Quantities or Schedule of Rates;
- (c) where the Principal accepted a lump sum and rates, the aggregate of the sums referred to in paragraphs (a) and (b),

but excluding any additions or deductions which may be required to be made under the Contract "

Delete the definition for "Date for Practical Completion" and insert in its place -

" 'Date for Practical Completion' means the last day of the period of time stated in Item 11."

Insert new definition -

" 'Separable Portion' means a portion of the work under the Contract described in the Contract as a Separable Portion or which the Superintendent has determined pursuant to Clause 19.3 shall be a Separable Portion. "

2. NATURE OF CONTRACT

No Amendment

3. SECURITY AND RETENTION MONEYS

Express the existing clause as subclause "3.1 Security and Security in Lieu of Retention Moneys" and insert as the first paragraph -

"3.1.1 Security and retention moneys are for the purpose of ensuring the due and proper performance of the Contract and for the purpose of providing security of payment to Subcontractors of the Contractor (as these terms are defined in the Subcontractors' Charges Act). "

Delete the second paragraph commencing with the words "If no security is stated....." and insert in its place-

"If no security is stated in Item 12, the Principal may retain 10% of the value of work incorporated into the Works (excluding GST) from each progress payment until 5% of the Contract Sum, minus GST, is held. "

Delete the third paragraph commencing with the words "The Principal may have recourse....." and insert in its place-

"3.1.2 The Contractor may request at any time permission to provide security to be held by the Principal in lieu of retention moneys. The Principal may in its entire discretion and without giving reasons reject any such request by the Contractor.

The security shall be in any of the forms stated in Item 12. The form of unconditional undertaking attached to these conditions is approved.

In the event that the Contractor requests to provide security in lieu of retention and the Principal elects to agree to the request - the following provisions shall apply notwithstanding any other provision in the Contract to the contrary.

- (a) The security shall be for an amount equal to 5% of the Contract Sum and shall be lodged with the Principal.
- (b) Unless, and until the expiration of a period of 5 working days after, the undertaking is lodged, retention moneys shall be deducted in accordance with clause 3.1.
- (c) 5 working days after the lodgement of the undertaking - retention moneys pursuant to clause 3.1 shall not be deducted and all retention moneys previously deducted (if any) pursuant to

clause 3.1 shall be the subject of the next following progress certificate issued by the Superintendent with appropriate amounts credited to the Contractor.

- (d) Subject to the rights of the Principal under the Contract, the provisions of clauses 3.1, 3.2, and 28 shall apply to the undertakings.
- (e) An undertaking given pursuant to this clause 3.1.2 shall be regarded as a performance undertaking with purposes as set out in clause 3.1.1. ”

Insert further subclauses as follows -

“

3.2 Recourse to Retention Moneys and Conversion of Security

A Party may have recourse to Retention Moneys and/or cash security.

The Principal may at any time convert into money security that does not consist of money whether or not the Principal is then entitled to exercise a right under the contract in respect of the security. The Principal shall not be liable in any way for any loss occasioned by such conversion.

If, after the Principal has exercised all or any of the Principal's rights under the contract in respect of the security (except for those set out in this clause), the security or any part thereof then remaining is, but for this clause, releasable to the contractor, the Principal may, before releasing any security or any part thereof then remaining, ascertain the existence and amount of any Subcontractors' Charge (meaning a Notice of Intention to Claim Charge made or given to the Principal by any Subcontractor concerning the performance of work for a Contractor (as those terms of "Subcontractor", "Contractor" and "Work" are defined in the *Subcontractors' Charges Act*) purportedly pursuant to the provisions of the *Subcontractors' Charges Act*) purportedly pursuant to the provisions of the *Subcontractors' Charges Act*.

In the event that any such Subcontractors' Charge is found to exist, the Principal may convert into money any security or any part thereof then remaining that does not consist of money whereupon any money so obtained shall be payable, creditable or allowable to the Contractor pursuant to the Contract in complete or partial satisfaction of the contract price (as the term is defined in the *Subcontractors' Charges Act*) and pay into court the money for the benefit of the chargee from such moneys so payable, creditable or allowable the total amount set out in the said Subcontractors' Charges and account to the Contractor as to the balance, if any. ”

4. CONTRACT DOCUMENTS

No amendment

5. SUBCONTRACTING

Insert new paragraphs -

“The Contractor shall confirm to the Superintendent, in the form attached, the name and address of the Subcontractor, the total value of the proposed Subcontract and that the Contractor and the Subcontractor have prior to commencement of any work by the Subcontractor entered into an agreement in writing for the performance of the work which contains provisions concerning record of payment in identical terms to those contained in clause 38 and this clause 5 of the Conditions of Contract.

The Contractor shall not, without the written approval of the Superintendent, allow:

- (a) a subcontractor to assign or subcontract any of the work under the Contract; or
- (b) the performance of any of the work under the Contract by any party (including without limitation a subcontractor) other than the Contractor or a subcontractor notified to the Superintendent pursuant to this clause.

Any request for approval pursuant to this clause shall be made in writing by the Contractor to the Superintendent and the Contractor shall provide to the Superintendent such information and additional information which the superintendent may reasonably request. The Superintendent may, in its entire discretion and without giving reasons, reject any such request for approval by the Contractor ”

6. PROTECTION OF PEOPLE AND PROPERTY

No amendment

7. CARE OF THE WORK AND REINSTATEMENT OF DAMAGE

No amendment

8. DAMAGE TO PERSONS AND PROPERTY

No amendment

- | | | |
|-----|---|--------------|
| 9. | INSURANCE OF THE WORK UNDER THE CONTRACT | No amendment |
| 10. | PUBLIC LIABILITY INSURANCE | No amendment |
| 11. | INSURANCE OF EMPLOYEES | No amendment |
| 12. | INSURANCE PROVISIONS | No amendment |
| 13. | SUPERINTENDENT | No amendment |
| 14. | REPRESENTATIVES | No amendment |
| 15. | SITE | No amendment |
| 16. | MATERIALS AND WORK | No amendment |
| 17. | PROGRESS, PROGRAMMING AND SUSPENSION | |

Insert a new paragraph -

“The Contractor shall give the Superintendent reasonable advance notice of when the Contractor requires any information, materials, documents or instructions from the Superintendent or the Principal.”

- | | | |
|-----|---|--------------|
| 18. | PRACTICAL COMPLETION | No amendment |
| 19. | EXTENSION OF TIME FOR PRACTICAL COMPLETION | |

Express the existing provisions as “19.1 Claims for Extensions of Time”

Delete the second paragraph and insert -

“The causes are -

- (a) (i) any act, default or omission of the Principal, the Superintendent or an employee, consultant or agent of the Principal;
- (ii) latent conditions; and
- (b) those other than -
 - (i) breaches or omissions by the Contractor; and
 - (ii) industrial conditions or inclement weather occurring after the Date for Practical Completion.

Where more than one event causes concurrent delays and the cause of at least one of those events but not all of them, is not a cause referred to in (a) above then to the extent that the delays are concurrent, the Contractor shall not be entitled to an extension of time for Practical Completion.”

Insert new subclauses -

“
19.2 Separable Portions

The interpretations of -

- (a) Date for Practical Completion;
- (b) Date of Practical Completion;
- (c) Practical Completion,

and Clauses 3, 7, 19, 22 and 25 shall apply separately to each Separable Portion and references therein to the Works and to work under the Contract shall mean so much of the Works and the work under the Contract as is comprised in the relevant Separable Portion.

If the Contract does not make provision for the amount of security, retention moneys or liquidated damages applicable to a Separable Portion, the respective amounts applicable shall be such proportion of the security, retention moneys or liquidated damages applicable to the whole of the work under the Contract as the value of the Separable Portion bears to the value of the whole of the work under the Contract.

19.3 Use of Partly Completed Works

If a part of the Works has reached a stage equivalent to that of Practical Completion but another part of the Works has not reached such a stage and the parties cannot agree upon the creation of Separable Portions, the Superintendent may determine that the respective parts shall be Separable Portions.

In using the Separable Portion that has reached Practical Completion, the Principal shall not hinder the Contractor in the performance of the work under the Contract.

- 20. **DAMAGES FOR DELAY IN REACHING PRACTICAL COMPLETION** No amendment
- 21. **DELAY OR DISRUPTION** No amendment
- 22. **DEFECTS LIABILITY** No amendment
- 23. **VARIATIONS**

Insert a new paragraph after paragraph three -

“The margin for profit and overheads shall be 12½% for work carried out by the Contractor’s own workers and 7½% for work carried out by others.”

24. CERTIFICATES AND PAYMENTS

Delete “28” in the first line of the fifth paragraph and insert in its place “21”.

25. CERTIFICATE OF PRACTICAL COMPLETION

Insert “written” in the first line before “request”.

26. EFFECT OF CERTIFICATES

Delete “or a Certificate of Practical Completion”.

27. FINAL PAYMENT CLAIM

Insert after the words “defects liability period,” in the first line “or where there is more than one, the last to expire,”

28. FINAL CERTIFICATE

Insert at the end of the first paragraph -

“or give the Contractor in writing the reasons for not issuing the certificate”.

29. DEFAULT

No amendment

30. INSOLVENCY

No amendment

31. DISPUTE RESOLUTION

Delete/Insert -
“

31. SETTLEMENT OF DISPUTES

Not later than 14 days after a dispute has arisen either party shall refer the dispute to the Superintendent. Within 28 days of receiving notice of the dispute the Superintendent shall give to each party the Superintendent’s written decision on the dispute. If the Superintendent fails to give a written decision on the dispute, or if either party is dissatisfied with the decision of the Superintendent the parties shall, within 14 days of the date of receipt of the decision, or within 14 days of the date on which the decision should have been given by the Superintendent, confer at least once to attempt to

resolve the dispute. In the event that the dispute cannot be so resolved the dispute may be referred by either party to arbitration or litigation. Arbitration shall be effected by a single arbitrator who shall be either:-

- (a) mutually agreed upon by the parties in writing; or
- (b) in the absence of agreement, by an arbitrator appointed in accordance with the provisions of the law relating to arbitration in the State of Queensland.

The party requesting arbitration must give notice in writing to the other party within 28 days of the parties conferring.

32. SERVICE OF NOTICES

No amendment

Add the following new clauses -

“

33. LATENT CONDITIONS

33.1 Definition

Latent Conditions are –

- (a) physical conditions on the Site or its surroundings, including artificial things but excluding weather conditions, which differ materially from the physical conditions which should reasonably have been anticipated by a competent and experienced Contractor at the time of the Contractor's tender if the Contractor had –
 - (i) examined all information made available in writing by the Principal to the Contractor for the purpose of tendering; and
 - (ii) examined all information relevant to the risks, contingencies and other circumstances having an effect on the tender and obtainable by the making of reasonable enquiries; and
 - (iii) inspected the Site and its surroundings; and
- (b) any other conditions which the Contract specifies to be Latent Conditions.

33.2 Notification

If, during the execution of the work under the Contract, the Contractor becomes aware of a Latent Condition, the Contractor shall forthwith and where possible before the Latent Condition is disturbed, give written notice thereof to the Superintendent.

33.3 Extension of Time and Cost

Delay caused by a Latent Condition may justify an extension of time under Clause 19.1.

If a Latent Condition causes the Contractor to –

- (a) carry out additional work;
- (b) use additional constructional plant; or
- (c) incur extra cost including but not limited to the cost of delay or disruption,

which the Contractor could not reasonably have anticipated at the time of tendering, a valuation shall be made under Clause 23.

33.4 Time Bar

In making a valuation pursuant to Clause 33.3, regard shall not be had to the value of additional work carried out, additional constructional plant used or extra cost incurred more than 28 days before the date on which the Contractor gives the written notice required by the first paragraph of Clause 33.2.

34. **WORKPLACE HEALTH AND SAFETY ACT 1995**

For the purpose of this clause the words "Principal Contractor", "serious bodily injury", "dangerous event", "work caused illness" and "work injury" have the meanings assigned to them by the *Workplace Health and Safety Act* ("the Act").

Upon acceptance by the Principal of the Contractor's offer -

- (a) the Principal shall be deemed to have appointed the Contractor to be the Principal Contractor pursuant to s.13 of the Act;
- (b) the Contractor shall be deemed to have accepted the appointment; and
- (c) the Contractor shall, in respect of the works to be executed under the contract, be responsible for the performance of the functions of the Principal Contractor within the meaning of the Act and Regulations in force under the Act.

Such appointment as Principal Contractor under the Act shall be in force during the continuance of the contract unless sooner revoked by the Principal giving twenty-one (21) days notice in writing to the Contractor of its revocation or by the Principal taking over or cancelling the contract pursuant to any provision of the contract or according to law.

The Contractor shall indemnify and keep indemnified the Principal against all liabilities which may be imposed under or which may arise out of enforcement of any section of the Act or Regulations.

The Contractor shall notify the Superintendent of every serious bodily injury, dangerous event, work caused illness and work injury which occurs on site as soon as possible but not later than twelve (12) hours after such occurrence.

35. **APPRENTICE /TRAINEE POLICY**

The Contractor, either directly or indirectly through subcontractors, in its execution of the work under the Contract, must employ apprentices/trainees on the site of the works for the number of labour hours no less than the number derived by multiplying the accepted Contract Sum by 0.12%: viz

Contract Sum x .12% = number of labour hours.

For the purposes of this clause, the term "apprentices/trainees" shall include any employees engaged in the following arrangements:

- (a) a formal apprenticeship or formal traineeship as provided for in State vocational education and training legislation that results in a nationally recognised building and construction qualification;
- (b) a cadetship or scholarship incorporating formal tertiary professional or technical education that results in a nationally recognised building and construction qualification.

The Contractor shall:

- (i) within 14 days of the Date of Acceptance of Tender submit to DETIR, with a copy to the Superintendent, a completed Compliance Plan in the form attached to these conditions; and
- (ii) within 7 days of the expiration of each successive thirteen week period commencing from the Date of Acceptance of Tender submit to DETIR, with a copy to the Superintendent, a completed Interim Compliance Report in the form attached to these conditions; and
- (iii) within 14 days of the Date of Practical Completion, or if there is more than one the last occurring Date of Practical Completion, submit to DETIR, with a copy to the Superintendent, a completed Practical Completion Compliance Report in the form attached to these conditions.

The Contractor acknowledges that failure to comply in part or in whole with this requirement for employment of apprentices/trainees will be a substantive factor that will be taken into account in the award of future Contracts by the Principal (the State of Queensland).

For the purposes of this Clause 35 the term DETIR means the Department of Employment Training and Industrial Relations or it's successor in title having responsibility for Employment Policies and Programs.

36. GENERAL RIGHT OF SET OFF

Without limiting the Principal's rights under any other provision in the contract and notwithstanding the provisions of or the issue of a certificate by the Superintendent under clause 24 and 29, the Principal may deduct from any monies due to the Contractor any sum which is payable by the Contractor to the Principal whether or not the Principal's right to payment arises by way of damages, debt, restitution or otherwise and whether or not the factual basis giving rise to the Principal's right to payment arises out of this contract, any other contract, or is independent of any contract. If the moneys payable to the Contractor are insufficient to discharge the liability of the Contractor to pay such sum to the Principal, the Principal may have recourse to retention moneys (whether or not these are held by the Principal in alternate form pursuant to clause 3.1), and if they are insufficient, to security provided under clause 3.1 of the contract. Nothing in this clause shall affect the right of the Principal to recover from the Contractor the whole of such monies or any balance that remains owing.

37. APPLICABLE LAW

The law governing the Contract, its interpretation, any agreement to arbitrate and the conduct of any arbitration or litigation, is the law of the State of Queensland.

38. PAYMENT OF WORKERS AND SUBCONTRACTORS

- 38.1 The Contractor, with each claim for payment, shall provide to the Superintendent a schedule of all subcontractors employed on the Works showing their names, addresses and trade.
- 38.2 All payments to Subcontractors shall be recorded by the Contractor on a Record of Payments form which shall be in the form attached to these conditions. The Contractor shall ensure that, as to any payment to any Subcontractor, such form is fully completed, executed by the Subcontractor concerned, and kept by the Contractor as proof of compliance with this clause.
- 38.3 At the time of making a progress claim under clause 24 the Contractor shall deliver to the Superintendent a statement in the form attached to these conditions, naming any Subcontractor who has failed or refused to execute a Record of Payment form or to whom no payment has yet been made and hereby acknowledges that the Superintendent may thereupon notify any such Subcontractor that the Superintendent proposes to issue a payment certificate to the Principal including such amounts as may be claimed by the Contractor in respect of such Subcontractor.
- 38.4 The Record of Payment forms shall be:
- (i) kept by the Contractor until issuance of the Final Certificate by the Superintendent;
 - (ii) provided to the Superintendent for inspection and copying upon reasonable notice in writing.
- 38.5 At the request of the Contractor and out of moneys payable to the Contractor the Principal may on behalf of the Contractor make payment directly to a worker or Subcontractor.
- 38.6 Before the payment of any money to the Contractor by the Principal, the Superintendent may require the Contractor:
- (a) to deliver to the Superintendent a statutory declaration in the form attached to these conditions by the Contractor, or where the Contractor is a corporation, by the representative of the Contractor who is in a position to know the facts attested to that:
 - (i) all Subcontractors of the Contractor have been paid all that is due and payable to such subcontractors up to the date of submission by the Contractor of a progress claim in respect of the work under the Contract; and
 - (ii) all its workers who at any time have been engaged on work under the Contract by the Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of a progress claim, in respect of their engagement on the work under the Contract;

and, if requested in writing, reasonable supporting documentary evidence thereof,

- (b) to deliver to the Superintendent a Statutory Declaration in the form attached to these conditions by any Subcontractor, or where the Subcontractor is a corporation, by the representative of the Subcontractor who is in a position to know the facts attested to -
- (i) that all workers who have been engaged by a Subcontractor of the Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of a progress claim in respect of their engagement on the work under the Contract; and
- (ii) that all Subcontractors of the Subcontractor have been paid all that is due and payable to such Subcontractors up to the date of submission by the Contractor of a progress claim in respect of the work under the Contract

and, if requested in writing, reasonable supporting documentary evidence thereof.

- 38.7 The Contractor acknowledges that the Principal may release to a Subcontractor details of payments in percentage terms made by the Principal to the Contractor in respect of the works or any part thereof unless the Contractor shows reasonable grounds why such details should not be released or satisfies the Principal that all payments due and payable to the Subcontractor by the Contractor have been paid.
- 38.8 If a worker or Subcontractor obtains a court order in respect of monies referred to in clause 38.3 and produces to the Principal the court order and a Statutory Declaration that it remains unpaid, the Principal may pay the amount of the order, and costs included in the order, to the worker or Subcontractor and the amount paid shall be a debt due from the Contractor to the Principal.
- 38.9 After the making of a sequestration order or a winding up order in respect of the Contractor, the Principal shall not make any payment to a worker or Subcontractor without the concurrence of the official receiver or trustee of the estate of the bankrupt or the liquidator as the case may be.

39. DESIGN RESPONSIBILITY

If stated in the Annexure to the Conditions of Contract, the following clauses have been added to AS4305 - 1996.

39.1 Design

39.1.1 The Contractor shall:

- (a) complete the design and documentation of the Works including working drawings and trade specifications in accordance with the provisions of the Contract and all relevant Statutory Requirements;
- (b) have the same liability to the Principal as would an Architect designing and documenting the Works independently under a separate contract with the Principal;
- (c) ensure that materials and standards of workmanship prescribed in drawings, trade specifications and other documents are fit for the purpose, consistent with the nature and character of the Works and in accordance with the Contract. Local preferences and trade practices shall be considered in the selection of materials, systems and services.

39.1.2 The Contractor warrants to the Principal that:

- (a) the Contractor will exercise the proper skill, care and diligence expected of a competent design professional;
- (b) the design and the Works complies with this contract and is fit for the purpose in all respects.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975 or any review or approval of the design undertaken by or on behalf of the Principal.

The Contractor acknowledges that the Principal is relying on the Contractor's skill and judgement in undertaking the design and construction of the Works.

39.2 Building Act

39.2.1 The Authority stated in Item 28 shall be the Authority for the purpose of Building Act approval.

The Contractor shall be responsible for obtaining approval under the Building Act 1975 in respect of the design. For this purpose the Contractor shall pay all fees and submit to the Authority all material necessary for obtaining such approval.

The Contractor shall not carry out or cause to be carried out any building work in respect of which the Building Act 1975 requires approval unless such approval has been obtained.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975, nor any review of approval of the design undertaken on behalf of the Principal.

39.2.2 The Contractor shall allow a minimum of twenty-eight (28) days for Building Act approval.

The Contractor shall liaise with the Principal's Supervisor in order to ascertain requirements with respect to Building Act inspections.

During construction, plumbing and sanitary drainage installations shall be inspected by, and shall comply with the requirements of, the applicable Authority's plumbing and drainage Inspectors. Fees for inspections shall be paid by the Contractor.

39.2.3 Approvals and certificates issued by the relevant Authorities shall be surrendered to the Principal following Practical Completion of the Works."

40. COMPLIANCE WITH STATUTES

The Contractor shall comply with all requirements of any Statute or authority having jurisdiction with regards to the Works and shall, at its own expense, obtain all necessary consents required by or under such Statute or authority.

41. GST AND PAYG

41.1 Definitions

(a) Terms defined by the GST Law and PAYG Law and used (without separate definition) in this clause, shall have the meaning given to them by the GST Law or PAYG Law;

(b) For the purposes of this clause:

"GST" means goods and services tax or tax equivalents as imposed by the GST Law;

"GST Law" has the meaning given to that term in A New Tax System (Goods and Services Tax) Act 1999 or, if that Act does not exist for any reason, means any Act imposing or relating to the imposition or administration of a goods and services tax in Australia and any regulation made under that Act, including any Act or arrangement relating to the operation or administration of a voluntary or notional GST or tax equivalents regime referred to in clause 17 of the Intergovernmental Agreement on the Reform of Commonwealth-State Financial relations dated June 1999;

"PAYG Law" means any Act dealing with or relating to the introduction or administration of the PAYG system referred to in Schedule 1 of the Taxation Administration Act 1953;

"registered for GST" means registered as a supplier under the GST Law and in respect of the Contractor, also having provided an ABN to the Principal;

"tax invoice" has the meaning given to that term by the GST Law and includes a recipient created tax invoice for the purposes of clause 41.4.

41.2 GST Included

(a) The Contract Sum includes any GST on taxable supplies to be made under the Contract (as at the Date of Acceptance of Tender);

- (b) Where the Contract Sum includes any provisional sum or provisional delay amount, the Contract Sum shall, in addition to the provisional sum or provisional delay amount, include any allowance for GST for that provisional sum or provisional delay amount;
- (c) Where under the Contract a party is obliged to pay the other party an amount calculated by reference to the cost, expense, loss or other liability suffered or incurred by that other party ("Reimbursable Liability") the party shall pay the aggregate of:
 - (i) the Reimbursable Liability net of input tax credits available to the other party in respect of the Reimbursable Liability; and
 - (ii) GST (if any) incurred by the other party in respect of the recovery by the other party of the Reimbursable Liability under the Contract;
- (d) Where under the Contract a party is obliged to pay the other party an amount (other than the Contract Sum) calculated by reference to an agreed rate or an agreed lump sum, unless the agreed rate or lump sum is expressed to include GST, the party shall pay the aggregate of:
 - (i) the amount calculated by reference to the agreed rate or the agreed lump sum (as the case may be) ("Agreed Amount"); and
 - (ii) GST (if any) incurred by the other party in respect of the recovery by the other party of the Agreed Amount under the Contract;
- (e) No other provision of the Contract shall operate to give the Contractor any claim in connection with GST.

41.3 Notification of GST Registration Status

- (a) The Contractor warrants to the Principal that:
 - (i) the Contractor is registered for GST as at the Date of Acceptance of Tender and shall maintain that registration until the issue of a Final Certificate under the Contract; and
 - (ii) the Contractor's ABN notified by the Contractor to the Principal is correct;
- (b) The Contractor shall immediately notify the Principal if at any time the Contractor ceases to be registered for GST.
- (c) The Principal acknowledges it is registered for GST and shall notify the Contractor if at any time the Principal ceases to be registered for GST.

41.4 Principal Created Tax Invoices

- (a) This clause 41.4 applies in respect of taxable supplies made to the Principal unless:
 - (i) the Contractor is not registered for GST;
 - (ii) the parties are bound by a Voluntary Agreement;
 - (iii) the Principal is not entitled under GST Law to issue tax invoices in respect of taxable supplies made to the Principal; or
 - (iv) the Principal has at any time notified the Contractor that this clause 41.4 is not to apply.
- (b) Whether or not this clause 41.4 is to apply at any time may be determined by the Principal in its absolute discretion;
- (c) Where this clause 41.4 applies:
 - (i) the Principal may issue tax invoices and adjustment notes in respect of taxable supplies made to it;
 - (ii) the Contractor shall not issue tax invoices or adjustment notes in respect of taxable supplies made to the Principal;

- (iii) where the Principal or Superintendent (on the Principal's behalf) issues a tax invoice or adjustment note in respect of any taxable supply made to the Principal, the Principal shall ensure a copy of the tax invoice or adjustment note is provided to the Contractor within 28 days of the Superintendent certifying the amount of the payment or adjustment to be made in respect of the taxable supply;
- (iv) until the Principal notifies the Contractor otherwise, the Principal appoints the Superintendent its agent for the purposes of issuing and providing to the Contractor tax invoices or adjustment notes in respect of taxable supplies made to the Principal; and
- (v) the Contractor shall immediately notify the Principal if it becomes aware of any adjustment event relevant to a tax invoice issued by the Principal.

41.5 Supplier Created Tax Invoices

- (a) This clause 41.5 applies to the extent clause 41.4 does not apply where:
 - (i) the Contractor is registered for GST; and
 - (ii) the parties are not bound by a Voluntary Agreement.
- (b) Where this clause 41.5 applies:
 - (i) despite any other provision of the Contract:
 - A. the Principal shall not be obliged to pay the Contractor any amount certified by the Superintendent to be payable in respect of a taxable supply, until 7 days after the Contractor has provided to the Superintendent a tax invoice in respect of the amount payable; and
 - B. within 7 days after the Superintendent certifies any amount to be payable by the Contractor to the Principal in respect of a taxable supply the Principal shall provide to the Contractor a tax invoice in respect of the payment.

41.6 PAYG Withholding

- (a) This clause 41.6 applies where:
 - (i) the Contractor is not registered for GST; or
 - (ii) the parties are bound by a Voluntary Agreement.
- (b) Whether or not the Principal should bind itself to a Voluntary Agreement at any time may be determined by the Principal in its absolute discretion.
- (c) Where this clause 41.6 applies, the Principal shall be entitled to withhold from any payment otherwise due to the Contractor under or in connection with the Contract tax calculated and to be held in accordance with the PAYG Law.

This Annexure takes the place of the Annexure to the Australian Standard Minor Works Contract Conditions.

ANNEXURE to the Australian Standard Minor Works Contract Conditions

This Annexure shall be completed and issued as part of the tender documents and, subject to any amendments to be incorporated into the Contract, is to be attached to these Contract Conditions and shall be read as part of the Contract.

Item

- | 1 | The Principal: (Clause 1) | Crown in the right of the State of Queensland through the Director General, Education Queensland | | | | | | | | | | | | | | | | |
|--|---|--|-----------------|------------------------------------|-------------------------|---|------------------------------|---|--|---|--|---|---|---|------------------------------------|---|--|---|
| 2 | Address of the Principal: | Education House
30 Mary Street
Brisbane Qld 4002 | | | | | | | | | | | | | | | | |
| 3 | The Contractor: (Clause 1) | As per the accepted tender | | | | | | | | | | | | | | | | |
| 4 | The address of the Contractor: | As per the accepted tender | | | | | | | | | | | | | | | | |
| 5 | The Superintendent: (Clause 1) | As per Letter of Acceptance | | | | | | | | | | | | | | | | |
| 6 | The address of the Superintendent | As per Letter of Acceptance | | | | | | | | | | | | | | | | |
| 7 | The Contract Documents comprise: (Clauses 1 and 4) | <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Document</u></th> <th style="text-align: right;"><u>No of copies to be provided</u></th> </tr> </thead> <tbody> <tr> <td>(a) the accepted Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(b) the Conditions of Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(c) Minor Works Contract Conditions (AS 4305 – 1996)</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(d) the Special Conditions of Contract</td> <td style="text-align: right;">4</td> </tr> <tr> <td>(e) the Code of Tendering (AS 4120 – 1994) as amended by the Conditions of Tender</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(f) the Specification and Drawings</td> <td style="text-align: right;">4</td> </tr> <tr> <td>(g) other documents as are issued and/or referred to by the Principal for the purpose of tendering</td> <td style="text-align: right;">4</td> </tr> </tbody> </table> | <u>Document</u> | <u>No of copies to be provided</u> | (a) the accepted Tender | 1 | (b) the Conditions of Tender | 1 | (c) Minor Works Contract Conditions (AS 4305 – 1996) | 0 | (d) the Special Conditions of Contract | 4 | (e) the Code of Tendering (AS 4120 – 1994) as amended by the Conditions of Tender | 0 | (f) the Specification and Drawings | 4 | (g) other documents as are issued and/or referred to by the Principal for the purpose of tendering | 4 |
| <u>Document</u> | <u>No of copies to be provided</u> | | | | | | | | | | | | | | | | | |
| (a) the accepted Tender | 1 | | | | | | | | | | | | | | | | | |
| (b) the Conditions of Tender | 1 | | | | | | | | | | | | | | | | | |
| (c) Minor Works Contract Conditions (AS 4305 – 1996) | 0 | | | | | | | | | | | | | | | | | |
| (d) the Special Conditions of Contract | 4 | | | | | | | | | | | | | | | | | |
| (e) the Code of Tendering (AS 4120 – 1994) as amended by the Conditions of Tender | 0 | | | | | | | | | | | | | | | | | |
| (f) the Specification and Drawings | 4 | | | | | | | | | | | | | | | | | |
| (g) other documents as are issued and/or referred to by the Principal for the purpose of tendering | 4 | | | | | | | | | | | | | | | | | |
| 8 | This item is not used | | | | | | | | | | | | | | | | | |
| 9 | Payments under the Contract shall be made at: | Brisbane | | | | | | | | | | | | | | | | |
| 10 | This item is not used | | | | | | | | | | | | | | | | | |
| 11 | The period of time for Practical Completion: (Clause 1) | 16 weeks after the date of acceptance of tender (as adjusted pursuant to the Contract) | | | | | | | | | | | | | | | | |
| 12 | Security (if provided): (Clause 3.1) | Amount: Not to be provided

Form : Either cash or an undertaking, in a form approved by the Principal, provided by a financial institution approved by the Principal or cash paid in honour thereof. | | | | | | | | | | | | | | | | |
| 13 | Time for provision of security: (Clause 3.1) | Not to be provided | | | | | | | | | | | | | | | | |

- | | | |
|----|---|---|
| 14 | Amount of limit of indemnity for damage to persons and property: (Clause 8(a)) | Unlimited |
| 15 | The party to effect a contract works policy of insurance: (Clause 9) | Contractor |
| 16 | The amount of contract works insurance cover: (Clause 9) | The Contract Sum plus 20% |
| 17 | The party to effect a public liability policy of insurance: (Clause 10) | The Contractor |
| 18 | The amount of public liability insurance cover in respect of any one occurrence shall be not less than: (Clause 10) | \$10,000,000 |
| 19 | The time for giving possession of the Site to the Contractor: (Clause 15) | 7 days after the date of acceptance of tender |
| 20 | Liquidated damages: (Clause 20) | \$ 100 per day |
| 21 | Extra cost per day for delay or disruption: (Clause 21) | 8% of the Contract Sum ÷ (7 x the period of time for practical completion at item 11) |
| 22 | The defects liability period: (Clause 22) | 52 weeks |
| 23 | Times for payment claims: (Clause 24) | Monthly |
| 24 | The rate of interest on overdue payments: (Clause 24) | 10% per annum + the rate comprising the annual rate, as published from time to time by the Reserve Bank of Australia, for 90 day bills current at the date the payment became due |
| 25 | This item is not used | |
| 26 | This item is not used | |
| 27 | Special Conditions of Contract for Design Work shall / shall not apply: (Clause 39) | Clause 39 shall apply |
| 28 | The Authority for the purpose of Building Act approval: (Clause 39.2) | The Chief Building Surveyor, Queensland Government, Department of Public Works |

Conditions of Contract
Clause 3.1

Form of Undertaking

CONTRACT for ("the Contract")
At the request of ("the Contractor")
and in consideration of ("the Principal")
accepting this undertaking in lieu of Retention Moneys provided for in the contract and, without limiting the
generality thereof, for the provision of security to any Subcontractor of the Contractor in respect of a Subcontractors'
Charge under the Subcontractors' Charges Act or any other claims which any Subcontractor has against the Principal
pursuant to some other legal entitlement,
.....
("the Financial Institution") unconditionally undertakes to pay on demand any sum or sums which may from time to
time be demanded by the Principal to a maximum aggregate of \$
(.....)

The undertaking is to continue

- (i) until notification has been received from the Principal that the sum is no longer required by the Principal;
or
- (ii) until this undertaking is returned to the Financial Institution; or
- (iii) until payment to the Principal by the Financial Institution of the whole of the sum.

Should the Financial Institution be notified in writing signed by or on behalf of the Principal that the Principal
desires payment to be made of the whole or any part or parts of the sum, it is unconditionally agreed that the
Financial Institution will make payment or payments to the Principal forthwith without reference to the Contractor
and notwithstanding any notice given by the Contractor not to pay same.

Provided always that the Financial Institution may at any time without being required so to do pay to the Principal
the sum of \$
.....)
less any amount or amounts it may previously have paid under this undertaking or such lesser sum as may be
required and specified by the Principal and thereupon the liability of the Financial Institution hereunder shall
immediately cease.

Dated at day of 200

SIGNED for and on behalf of (Financial Institution)

By its Attorney(s)-
..... (Name)

Pursuant to Power of Attorney No }
who hereby warrant that he has/they have not received }
notification of revocation of his/their appointment. } Attorney

in the presence of - }
.....
Witness

Branch of Issue: Telephone:

Conditions of Contract
Clause 5

Confirmation of Subcontracts

(To be submitted to the Superintendent by the Contractor for all subcontracts entered into)

To: The Superintendent

From: (the Contractor)

Contract:

Pursuant to clause 5 of the Conditions of Contract I advise that I have entered into a subcontract for

.....
(specify the nature of the work)

The proposed subcontractor is
(specify the Subcontractor's name)

of

.....

.....
(specify the Subcontractor's address)

and the total value of the subcontract is \$
(specify the subcontract value)

I confirm that the subcontract has been entered into in accordance with requirements of clause 5 and that the provisions concerning record of payment required by clause 38 of the conditions of contract have been established.

Signed
(Contractor)

Date: / /

RTI RELEASED



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY

(Conditions of Contract Clause 35)

COMPLIANCE PLAN

(Form to be completed and returned within 14 working days of the Date of Acceptance of Tender)

PRINCIPAL CONTRACTOR

Legal Name:

Trading Name:

Address: Postcode:

Phone No: () Fax No: ()

Contact Person:

PRINCIPAL

Name:

Address: Postcode:

Phone No: () Fax No: ()

Contact Person:

CONTRACT DESCRIPTION

Contract Name:

Project Number:

As Contractor, you have given a Contractual commitment to comply with the Apprentice/Trainee Policy. Please provide details of where you intend to source your workers under structured training.

**Note: This is simply a guide to indicate your intentions.*

TENDER PRICE: \$ _____ x 0.12% (Building) (a) = _____ Total hours of compliance

or x 0.06% (Civil) (b) = _____ Total hours of compliance

- Up skilling your existing workers = _____ hrs
- Employing your own apprentices/trainees/cadets = _____ hrs
- Using Group Training Scheme apprentices/trainees/cadets = _____ hrs
- Using Q-Build apprentices/trainees/cadets = _____ hrs
- Using sub-contractor apprentices/trainees/cadets = _____ hrs
- Using RTCS apprentices/trainees/cadets = _____ hrs
- Other (please specify) _____ = _____ hrs

(c) = _____ Total hours of compliance
(should equal either a or b above)

(Signature of Principal Contractor or Authorised Person)

/ /2000

Form to completed and returned to: Project Officer (Construction Industry)
Division of Training
DETIR
LMB 527
GPO Brisbane Qld 4001



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

INTERIM COMPLIANCE REPORT

(To be submitted within 7 days of the expiration of the successive 13 week period commencing from the Date of Acceptance of Tender)

PRINCIPAL CONTRACTOR

Legal Name:
Trading Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person Position:

PRINCIPAL

Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person

CONTRACT DESCRIPTION

Contract Name:
Project Number:

CONTRACT PRICE: \$ _____ x 0.12% (building) = _____ total hours of compliance
or x 0.06% (civil) = _____ total hours of compliance

(1) Structured Training Hours Achieved
For The Period ____ / ____ / ____ to ____ / ____ / ____ = _____ hours

(Signature of Principal Contractor or Authorised Person)

____ / ____ / 2000

(1) Structured Training Hours as defined in the 10% Training Policy Quick Guide available from DETIR on ph: (07) 3237 0154 and Qld Purchasing on ph: 1800 631 991 or (07) 3235 4333

Form to be completed and returned to: Project Officer (Construction Industry)
Division of Training
DETIR
LMB 527
GPO Brisbane Qld 4001



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

PRACTICAL COMPLETION REPORT

(To be submitted within 14 days of the Date of Practical Completion, or if there is more than one, the last occurring Date of Practical Completion)

PRINCIPAL CONTRACTOR

LEGAL IDENTITY:
 TRADING NAME: (if different to legal)
 PQC REGISTRATION No PQC LEVEL:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON:

PRINCIPAL

NAME:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON:

CONTRACT DESCRIPTION

CONTRACT NAME:
 Project Number:

DEEMED HOURS FOR TRAINING

CONTRACT PRICE: x 0.12% (building) = (Hours)
 or x 0.06% (civil) = (Hours)

TRAINING DETAILS

If insufficient space please see over

Apprentice/Trainee Name (a)	Training Agreement No. (b)	Apprenticeship/ Traineeship/ Cadetship (c)	Period of Engagement on Project (d)	Total Hours (e)	Employer (f)

Form to be completed and returned to:
 Project Officer (Construction Industry)
 Division of Training
 DETIR
 LMB 527
 GPO Brisbane Qld 4001

The above information is true and correct.

.....
 Signature of Principal Contractor or Authorised Agent



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

PRACTICAL COMPLETION REPORT

(To be submitted within 14 days of the Date of Practical Completion, or if there is more than one, the last occurring Date of Practical Completion)

PRINCIPAL CONTRACTOR Defined as the contractor who was awarded the overall contract If registered under Pre-Qualification Criteria

LEGAL IDENTITY:
 TRADING NAME: (if different to legal name)
 PQC REGISTRATION No PQC LEVEL:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON: Defined as the Government department/statutory body you are dealing with in the administration of the contract

PRINCIPAL Defined as the Government department/statutory body you are dealing with in the administration of the contract

NAME:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON:

CONTRACT DESCRIPTION As specified on contract - including location

CONTRACT NAME: Project Number: Legal or trade name of the employer listed on the training agreement that applies to the apprentice/trainee in column C. This may be a sub-contractor or group scheme.

DEEMED HOURS FOR TRAINING Defined as the final contract sum for the whole

CONTRACT PRICE: x 0.12% (building) = (Hours)
 or x 0.06% (civil) = (Hours)

TRAINING DETAILS
If insufficient space please see over

Apprentice/Trainee Name (a)	Training Agreement No. (b)	Apprenticeship/ Traineeship/ Cadetship (c)	Period of Engagement on Project (d)	Total Hours (e)	Employer (f)
For the purposes of compliance, the terms apprentices/trainees/cadets shall include any employees engaged in the following arrangements:					
<ul style="list-style-type: none"> ➤ A formal apprenticeship or formal traineeship as provided for in State vocational education and training legislation (refer to the "Quick Guide" for a detailed list of acceptable trades); and ➤ A cadetship or scholarship implying formal tertiary, professional or technical education. 					

Form to be completed and returned to:
 Project Officer (Construction Industry)
 Division of Training
 DETIR
 LMB 527
 GPO Brisbane Qld 4001

The above information is true and correct.

 Signature of Principal Contractor or Authorised Agent

Conditions of Contract
Clause 38

Record of Payment Form
(To be submitted to the Superintendent by the Contractor)

(The following to be inserted by the Principal)

1. Contract Description

Contractor

(The following to be inserted by the Contractor / Subcontractor)

2. Subcontractor

Address

Subcontract Description

SUBCONTRACTOR'S DECLARATION

It is hereby declared that the Subcontractor has received all moneys due and payable from the Contractor up to and including / / *(insert date on which payment received was due and payable.)*

Further payment to the Subcontractor from the Contractor is not anticipated to be due until / / *(insert date on which the next subcontract progress payment is anticipated to become due. If no further payment is anticipated to become due insert "N.A.")*

A further Record of Payment Form will be signed by the subcontractor in respect of the anticipated payment when it is received from the Contractor.

Signed *(Signature of Subcontractor or its representative)*

Name of signatory *(Please print)*

Date / /

Instructions:

Pursuant to clause 38 of the Conditions of Contract it is the responsibility of the Contractor to:-

- (i) ensure that sections 1. and 2. above are completed in full upon making any payment to a Subcontractor.
- (ii) notify the Superintendent of any refusal or failure by a Subcontractor to complete this Record of Payment form,
- (iii) retain this Record of Payment form as proof of payment that the Subcontractor has been paid, and
- (iv) provide this form upon request to the Superintendent.

Upon receipt of payment from the Contractor by the Subcontractor the Subcontractor is to:-

- (v) complete Section 2 and sign the "Subcontractor's Declaration" as appropriate, and
- (vi) return this Record of Payment form to the Contractor.

Conditions of Contract
Clause 38

Statement of Contractor

(To be submitted to the Superintendent by the Contractor with each payment claim)

To: The Superintendent

From: (the Contractor)

Contract:

Pursuant to clause 38 of the Conditions of Contract you are hereby notified as indicated below of the Subcontractors who have failed or refused to execute a Record of Payment form or to whom no payment has yet been made.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACT DETAILS
1.
2.
3.
4.
5.

Signed
 (Contractor)

Date: / /

Conditions of Contract
Clause 38

Statutory Declaration by Contractor

Oaths Act 1867

Queensland

To Wit

I, of

in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the Crown in right of the State of Queensland through

(the State) and

“the Contractor” for (the Contract).

1. I hold the position of

I am in a position to know the facts contained herein and to bind the Contractor by the terms of this declaration, and I am duly authorised by the Contractor to make this declaration on its/his behalf.

2. All the Contractor's workers who at any time have been engaged on work under the Contract by the Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of Progress Claim No

3. All Subcontractors of the Contractor have been paid all that is due and payable to them up to the date of submission by the Contractor of Progress Claim No in respect of their part of the work under the Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the Oaths Act 1867.

TAKEN AND DECLARED before me)

..... name in full) Contractor

at)

in the State of)

this day of 20...)

A Justice of the Peace

Conditions of Contract
Clause 38

Statutory Declaration by Subcontractor

Oaths Act 1867

Queensland
To Wit

I, of

.....
in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the Crown in
right of the State of Queensland through

.....
"the Contractor" for
..... (the Contract)

..... [name of Subcontractor]

("the Subcontractor") is a Subcontractor to the Contractor for part of the work under the Contract, namely:

1. I hold the position of

.....
I am in a position to know the facts contained herein and to bind the Subcontractor by the terms of this
declaration, and I am duly authorised by the Subcontractor to make this declaration on its/his behalf.

2. All the Subcontractor's workers who at any time have been engaged on work under the Contract by the
Subcontractor have been paid in accordance with the relevant Award or Industrial Instrument, all moneys
due and payable to them up to the date of submission by the Contractor of Progress Claim
No

3. All Subcontractors of the Subcontractor have been paid all that is due and payable to them up to the
date of submission by the Contractor of Progress Claim No in respect of their part of the work
under the Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of
the Oaths Act 1867.

TAKEN AND DECLARED before me)
.....)
..... name in full)
.....)
.....)
.....)

Subcontractor

at

in the State of

this day of 20....)

A Justice of the Peace

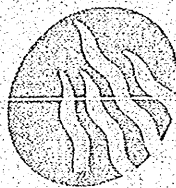
Copy No. 2

Specification

JULY 2002

COOLER SCHOOLS ROUND 3

MACKAY AREA BUILDERS CONTRACT



Project Services

Queensland Government

Department of Public Works

SPECIFICATION

COOLER SCHOOLS ROUND 3

MACKAY AREA BUILDERS CONTRACT

P.S.REFERENCE NO.: 32135 BM
DATE: JULY 2002

All enquiries during the Tender Period shall be directed to
Mr. Ken Hodge Project Manager

Telephone 4938 4533
Facsimile 4938 4974

All enquiries after the acceptance of tender shall be directed
to the Superintendent's Representative.

Tenders Close at

Tender Box
Project Services
Level 3
149 Bolsover Street
Rockhampton QLD 4701



Project Services

Queensland Government

A business unit of the
Department of Public Works

80 GEORGE STREET, BRISBANE QLD 4000

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(Project Services 2002)

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AUTHORISED FOR ISSUE

DATE

5/7/02
01

NOTICE TO TENDERERS

1. LODGEMENT OF TENDERS

Tenders are to be lodged at:

Tender Box
Project Services
Level 3
149 Bolsover Street
Rockhampton, Qld 4701

2. RETURNABLE SCHEDULES

You are required to return one (1) original and one (1) copy of all returnable schedules.

3. CONDITIONS OF CONTRACT

The Conditions of Contract applicable to this tender are Australian Standard General Conditions of Contract (AS 4305 – 1996) as amended by the Department of Public Works' *Conditions of Contract* including *Special Conditions of Contract* and *Annexure* attached to this specification.

4. QBSA'S FINANCIAL ASSESSMENT REQUIREMENTS

One of the Principal's requirements for evaluating Tenderers is conducting a Financial Capacity Assessment.

The Queensland Department of Public Works has selected the Building Services Authority (BSA) to assess the financial capability of Tenderers tendering for Government contracts. The BSA, in turn, engages external financial consultants to carry out these assessments.

Your assistance in supplying the information below, within the specified time frame, will result in the awarding of a contract to the successful Tenderer expeditiously.

- A complete set of financial statements* certified by an external accountant plus a full set of financial statements for the previous financial year, including:
- balance sheet
- profit and loss statement
- trading accounts and any supporting schedules.

(*Current financial statements means the statements must be complete to one of the following dates:

31 March 30 June 30 September 31 December

but they must not be more than 3 months old at the date of assessment of the Tenderer by BSA).

- The value of the contract receipts for government jobs and non-government jobs for the above statements.
- The value of the general building and house building work for the contract receipts for the above statements.
- Details of any partnerships you/the company may wish to submit to assist with the financial assessment.

Tenderers will be required to supply the above information within 2-3 days of receiving a written request from the BSA and Tenderers must be available to respond to any queries raised by the BSA's financial consultants in relation to the information supplied.

5. TENDER EVALUATION

Tenderers should note the provisions of clauses 1, 9 and 10 of the Conditions of Tender in relation to Conforming and Alternative Tenders. Tenderers are advised that these provisions will be strictly adhered to in the consideration, evaluation and acceptance of Tenders.

Tender Form

Schedule of Provisional Quantities

The Tenderer shall price this schedule and the total of the provisional quantity(ies) stated multiplied by the tendered rate per item shall be provisional allowance(s). The Tendered rate(s) in this schedule shall be the rate exclusive of GST. Notwithstanding, the Tenderer acknowledges that the Tender Sum at Item 2 of the Tender Form includes both the provisional allowance(s) plus the GST component(s) in relation to the provisional allowance(s).

Description of Work	Provisional Quantity	Tendered Rate /Unit (exclusive of GST)	Provisional Allowance (exclusive of GST)
		\$.....	\$.....
		\$.....	\$.....
		\$.....	\$.....
		\$.....	\$.....

Where the tenderer fails to submit an amount against a quantity, for any reason whatsoever, the Tenderer shall be deemed to have included in the tendered sum an allowance for the Provisional Quantity(ies) of the item(s) as stated in this schedule. Any adjustment to the Provisional Quantity(ies) shall be valued pursuant to clause 23 of the Conditions of Contract.

Prices for Variations

The Tenderer shall price the items set out hereunder. The price against the respective items of work shall be applied, where applicable, for the valuation of variations to the work under this contract:-

Description of Work	Rate (exclusive of GST)

Where the tenderer fails to submit a rate against an item, for any reason whatsoever, any adjustment shall be valued pursuant to clause 23 of the Conditions of Contract.

Warranty to Comply with Apprentice/Trainee Policy

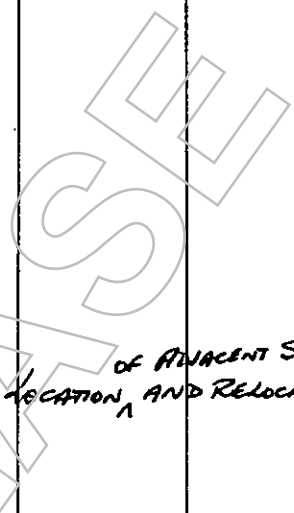
By its signature on this Tender Form, the Tenderer warrants that, if awarded a Contract for this project, it will comply with the training requirements of clause 35 of the Conditions of Contract and acknowledges that this warranty is given in addition to any of the terms of the Conditions of Contract.

Calculation of GST Component of Tender Sum

Net Tender Sum (Tender Sum exclusive of GST)	\$
GST Component of Tender Sum	\$
Tender Sum (As per Item 2 of Tender Form)	\$

PROVISIONAL SCHEDULE OF RATES

ITEM	DESCRIPTION	SPECIFICATION	UNIT	RATE	QUANTITY	EXTENSION
	MEASUREMENT AND PRICE CLAUSES					
A	All dimensions below are in mm unless given otherwise.		Note			
B	Price to include for making good existing adjacent surfaces, including painting, as required following provision of all openings and access panels or disturbing the surface. The made good surfaces shall match existing.		Note			
C	Price to include for arranging for all documentation and certification required for the lawful execution of the Builders Work including Building Approval. AND SITE SAFETY PLANS.		Note			
D	Prices for all work shall include for all required scaffold (to AS1576), temporary power and temporary water supply required to complete the works.		Note			
E	All building works shall comply with statutory requirements and Australian standards including OH & S guidelines and minimum clearance to switchboards as required.		Note			
	STRUCTURAL PENETRATIONS, FLASHING AND CAPPING					
F	Provision of structural openings through walls, floors, ceilings, bulkheads and roofs.	Prices for forming openings shall include for cutting roof, wall or floor material, trimming and strengthening the roof or wall structure, placing all necessary flashings, and making good to provide a weather proof installation.	Note			
G	Provision of flashings and cappings for all roof and exposed wall penetrations.	Flashing material to AS2904. Preform to required shapes where possible. Notch, scribe, flute or dress down as necessary to follow the profile of adjacent surfaces. Mitre angles and lap joints 150 mm. Flash projections above or through the roof with two part flashings, consisting of a base flashing and a cover flashing, with at least 100 mm overlap. Provide for independent movement between the roof and the projection. Flash pipes by sealing with neutral cured silicone rubber and provision of a proprietary flexible clamping shoe with attached metal surround flashing.	Note			
H	Roof Penetrations	0 - 100 diameter	Each			
I	Roof Penetrations	100-500 diameter	Each			
J	Roof Penetrations	0-0.25m ²	Each			
K	Roof Penetrations	0.26 - 0.5m ²	Each			
L	Roof Penetrations	0.5 - 1m ²	Each			
M	Wall Penetrations	Brick - 0-100 dia	Each			
N	Wall Penetrations	Brick - 100-500 dia	Each			
O	Wall Penetrations	Brick - 0-0.25m ²	Each			
P	Wall Penetrations	Brick - 0.26-0.5m ²	Each			
Q	Wall Penetrations	Brick - 0.5-1m ²	Each			
R	Wall Penetrations	Concrete Filled Block - 0-100 dia	Each			
S	Wall Penetrations	Concrete Filled Block - 100-500 dia	Each			
T	Wall Penetrations	Concrete Filled Block - 0-0.25m ²	Each			
U	Wall Penetrations	Concrete Filled Block - 0.26-0.5m ²	Each			
V	Wall Penetrations	Concrete Filled Block - 0.5-1m ²	Each			
W	Wall Penetrations	FC Sheet or Timber Block - 0-100 dia	Each			
X	Wall Penetrations	FC Sheet or Timber Block - 100-500 dia	Each			
Y	Wall Penetrations	FC Sheet or Timber Block - 0-0.25m ²	Each			
Z	Wall Penetrations	FC Sheet or Timber Block - 0.26-0.5m ²	Each			
AA	Wall Penetrations	FC Sheet or Timber Block - 0.5-1m ²	Each			
AB	Removal of Louvre Window	And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe penetrations etc.	Each			
AC	Removal of Fixed Glass	And the installation of an edge trimmed pre finished panel to suit fresh air fans,	Each			



OF ADJACENT SERVICES,
THE LOCATION AND RELOCATION IF REQUIRED,

PRE FINISHED PANEL PENETRATIONS

0-100 DIA
100-500 DIA
0-0.25m²
0.26-0.5m²
0.5-1m²

AD	Removal of a Hopper Window	pipe penetrations etc. And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe penetrations etc.	Each
AE	Removal of Security Bars	Associated with items AB, AC, AD.	each
AF	Ceiling Penetrations	Prices for forming openings in ceilings shall include for cutting plasterboard ceiling or removing ceiling tiles, trimming and strengthening the structure, placing all necessary furrings and trims, and making good to provide a flush installation.	note
AG	Ceiling Penetrations	0 - 100 diameter	each
AH	Ceiling Penetrations	100-500 diameter	each
AI	Ceiling Penetrations	0-0.25m ²	each
AJ	Ceiling Penetrations	0.26 - 0.5m ²	each
AK	Ceiling Penetrations	0.5 - 1m ² PROVIDE	each
AL	Management Plans ASBESTOS	Price for providing a Management Plan in accordance with the requirements of the Workplace Health and Safety Regulations 1997 'Asbestos Removal Work' when penetrating asbestos cement roofing and obtain written approval from the relevant Authorities before commencing work on site. To be treated on a case by case basis. Contractor to notify Superintendent if/where it exists prior to work commencing.	Note
AM	Asbestos master plan	Asbestos master plan	See plan
	ACCESS PANELS		
AN	Provision of access panels as required through flush ceilings and bulkheads.	Material to match adjacent ceiling/bulkhead. Provide perimeter trim to access panel and adjacent ceiling/bulkhead. Provide access panel support and screw fixings to facilitate regular maintenance access.	Note
AO		0 - 0.1m ²	each
AP		0.1 - 0.25m ²	each
AQ		0.25 - 0.5m ²	each
	UNDERCUT DOORS		
AR	Undercutting doors as required.	Nominal 25 mm, unless noted otherwise. Provide additional frame material as required, including painting. Prices to include for removal of door, making good damaged finishes on door and frame and rehanging the door	Note
AS		Single door (0-1000 wide)	each
AT		Pair of doors (1000 - 2000 wide)	each
	ROOF ACCESS		
AU	Provision of roof access and walkways	Roof access position(s) and walkways, handrails and nominal 600 mm wide maintenance platform around roof mounted evaporative cooling units and other roof mounted equipment. Materials, design and construction to AS1657 -1992. Ladder rail to roof.	Note
AV		3 - 5m ladder with safety cage	each
AW		5 - 8m ladder with safety cage	each
AX		6m length of walkway including handrail to one side	per length
AY		4 sided platform including handrail to surround evap. cooler. Nominal size of evap cooler is 1000 x 1000	per platform

AZ		4 sided platform including handrail to surround evap. cooler. Nominal size of evap-cooler is 1250 x 1250	per platform
	SUPPORT FRAMES / BRACKET		
BA		Hot dipped galvanised metal complete with closing strips and end caps. PCL 600 or similar.	Note
BB		Wall mounted condenser unit support	Each
BC		Wall mounted fan coil unit support	Each
BD		Ceiling support for fan coil unit	Each
BE		Ceiling support for recessed fan coil unit	Each
	PLINTHS		
BF	Provision of nominal 100 mm thick concrete pads under ground-mounted condensing and evaporative cooling units.	Materials and construction to AS3600 - 1994. Concrete: 20Mpa to AS1379. Reinforcement: F72 fabric to AS1302. Framework class 3.	Note
BG		900 x 2000	per plinth
BH		900 x 3500	per plinth
BI		900 x 5000	per plinth
BJ		600 x 3000	per plinth
BK		600 x 4000	per plinth
	ENCLOSURES		
BL	Provision of Condensing Unit Cages	Condenser cages shall have three sides and a top with the fourth side being formed by a wall of the school building. Provide the fourth side for elevated buildings such as modulars. Construct the cages from black steel to detail and hot dip galvanise on completion. Provide a brass shackled lock (Lockwood 234B) to each cage. Locks to be keyed alike to suit the School. Refer detail C51999CUC1.	Note
BM		Single cage	Each
BN		Double Cage	Each
BO		Single Cage Double Height	Each
BP		Double Cage Double Height	Each
	GRAVEL PITS CONDENSATE		
BQ		Price for providing a condensate soakage system. System to be designed: (a) to comply with the relevant local government Authority requirements for the design of transpiration/evaporation septic systems, as applicable to the region and (b) to suit local ground conditions with respect to percolation rates. materials and workmanship to AS3500.3 -1990 and AS1945 -1990	Note
		Pits are to be sized to suit the number of AC units and be positioned a minimum of 2000 clear of building foundations. Condensate shall enter the pit via a wall mounted tundish (at 2100 AGL minimum) and a 50 diameter minimum underground pipe. Mechanical protection from the tundish to ground level shall be provided.	
BR		Gravel pit 1000 x 1000 x 1000	per pit

TUNDISH TO EXISTING STORMWATER DOWNPIPE EACH
TUNDISH TO UNDERGROUND STORMWATER/SEWER SYSTEM INCLUDING CONCRETE CUTTING AND MAKING GOOD EACH.

BS	ELECTRICAL PITS A typical main switchboard has a footprint of 1850 x 600mm	Reinforced concrete cable pit complete with a high grade cast iron medium duty pit lid cast into a suspended concrete slab, provide an upstand and cable access all to suit the individual main switchboard. Refer to detail CS1999 MSBP.	Note
BT	TREES Removal and disposal of trees including stumps	Electrical pit	Per pit
BU		Price for removal and disposal of trees including stumps and root system from site.	Note
BV		100 DIA TRUNK Tree to 1800 high	Each
BW		100 DIA TRUNK Tree over 1800 high	Each
BX	Supply and installation of tree	Tree to 1200 high	Each
BY	All items A-BX inclusive	SUB TOTAL:	
	<u>HOURLY RATES OF TRADESMEN</u>		
BZ		Price of a provisional rate for hourly rates of tradesmen for further work to that identified above.	
CA		Concreter	per hour
CB		Fencer	per hour
CC		Carpenter / Plasterer / Painter	per hour
CD		Sheet Metal Worker	per hour
CE		Labourer	per hour
CF		Roofer	per hour
CG		Glazier	per hour
CH		Scaffolder	per hour
CI	Items CA to CH inclusive	SUB TOTAL:	
CJ	Items BY & CI	GRAND TOTAL:	

CONDITIONS OF TENDER

Lump Sum Tenders using AS4305 - 1996 Minor Works Contract Conditions

1. DEFINITIONS

Meanings assigned to words and expressions in the Conditions of Contract shall apply to those words and expressions used in the Tender Documents.

Unless the contrary intention applies, the following definitions also apply;

“Alternative Tender” means any Tender that is not a Conforming Tender;

“Conforming Tender” means a Tender that complies with the requirements of the Tender Documents;

“Intellectual Property Rights” means copyright, patents and all rights in relation to inventions, registered and unregistered trademarks (including service marks), registered designs, circuit layouts and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields;

“Tender” means an offer submitted by a Tenderer.;

“Tenderer” means a party submitting a Tender and includes a party invited directly or indirectly by the Principal to submit a Tender;

2. TENDER DOCUMENTS

2.1 “Tender Documents” comprise:

- (a) the Tender Form;
- (b) these Conditions of Tender;
- (c) the Code of Tendering (AS4120 - 1994) as amended by these Conditions of Tender;
- (d) Minor Works Contract Conditions (AS 4305 - 1996) as amended by the Special Conditions of Contract;
- (e) the Specification and Drawings; and
- (f) other documents as are issued and/or referred to by the Principal for the purpose of tendering.

2.2 To the extent of any discrepancy or inconsistency between these Conditions of Tender and AS4120, these Conditions of Tender shall prevail.

2.3 In the event of any discrepancy or inconsistency between the Special Conditions of Contract and the Minor Works Contract Conditions, the Special Conditions of Contract shall prevail.

3. LODGEMENT OF TENDER

3.1 The Tender shall be submitted in a sealed envelope, addressed and delivered to the “Address for lodgement of Tenders” as indicated on the Tender Form.

3.2 The envelope shall be endorsed with the name of the project and tender number, the closing date and time for receipt of Tenders and the Tenderer’s name and address.

3.3 Tenders shall be lodged in the tender box at the location indicated on the Tender Form by being placed therein before the time specified for the closing of Tenders. Any Tender not in the tender box before the specified closing time may be rejected at the discretion of the Principal.

In exercising its discretion as to rejection of any Tender the Principal shall, amongst other factors, consider evidence, if any, that such Tender was dispatched to the “Address for lodgement of Tenders” stated on the Tender Form in sufficient time to reach that office and be placed in the tender box under

normal circumstances before the specified closing time for receipt of tenders.

- 3.4 A tender received by telephonic or telegraphic devices, telegram, telex, facsimile or other electronic means will not be considered.

4. TENDER REQUIREMENTS

- 4.1 A completed Tender Form, as provided by the Principal, and all other documents required by the Tender Documents shall be submitted with the Tender.
- 4.2 The Tenderer shall complete and sign every document included in the Tender Documents on which provision is made for its signature and shall lodge every such document completed and signed, witnessed and dated as requested.

5. INFORMATION

- 5.1 The Principal's Contact Officer for all inquiries regarding the tender process is:

**The Manager, Tenders
Project Services
Telephone: (07) 3224 6177**

- 5.2 The Principal will not be liable for any claim on the grounds of erroneous or insufficient information.
- 5.3 The Principal shall not be bound by any oral advice or information given or furnished in respect of the Tender but shall be bound only by written advice or information furnished by or on behalf of the Principal.
- 5.4 For the purposes of assessment of Tenders, Tenderers shall provide such additional information as may be requested by the Principal including but not limited to, financial data.

6. TENDERER TO INFORM ITSELF

- 6.1 The Tenderer is deemed to have visited and inspected the site and its surrounds and satisfied itself of conditions and facilities and otherwise acquainted itself with all matters relating to the proposed Contract before submitting its Tender.

7. TENDERING BY GOVERNMENT AGENCIES

- 7.1 Notwithstanding clause 6.2.2 of AS4120, the Principal may invite, consider or accept a Tender from one or more government agencies.

8. COSTS OF TENDERING

Costs of tendering shall be borne by the Tenderer.

9. PRINCIPAL NOT BOUND

- 9.1 Notwithstanding the evaluation of Tenders (if any) in accordance with clause 10 herein, the Principal may in its absolute discretion and at any time accept, or decline to accept, any Tender.
- 9.2 Without derogating from the provisions in clause 9.1, the Principal may, in its absolute discretion, decline to evaluate any Tender that it has determined to be an Alternative Tender.

- 9.3 Notwithstanding that the Principal may have invited Tenders from selected organisations or has otherwise procured submission of Tenders:
- (a) the Tenderer acknowledges that the Principal may not, at the time of inviting tenders, have satisfied itself as to the Tenderer's financial capacity to satisfactorily perform and complete the Contract in accordance with its terms.
 - (b) the Principal may decline to consider or accept a Tender from a Tenderer who, within seven (7) days of being requested to do so, has not been able to satisfy the Queensland Building Services Authority (QBSA) that it has sufficient financial capacity to satisfactorily perform and complete the Contract in accordance with its terms.
- 9.4 In the provision of any information to the QBSA, the Tenderer acknowledges and agrees that such information so provided may be used by the QBSA in any assessment it may undertake for the purposes of determining the continuing capacity of the licensee to meet any licensing criteria required by the Queensland Building Services Authority Act.

10. TENDER EVALUATION

- 10.1 The Principal shall evaluate Conforming Tenders in accordance with the tender evaluation criteria contained in the Tender Documents or, in the absence of any stated tender evaluation criteria, on the basis of best value for money for Government.
- 10.2 The Principal, if it determines to evaluate an Alternative Tender, shall evaluate such Alternative Tender on the basis of best value for money for Government which may, or may not, be the tender evaluation criteria contained in the Tender Documents.
- 10.3 Where both Conforming and Alternative Tenders have been evaluated, the Principal may accept that Tender which on a view of all circumstances represents the best value for money for Government.

11. PROJECT FUNDING

- 11.1 The Principal will not provide particulars of project funding arrangements to Tenderers.

12. INTELLECTUAL PROPERTY

- 12.1 Intellectual Property Rights in all material, whether of the Tenderer or a third party, submitted by a Tenderer in its Tender is assigned to the Principal, without any requirement for further documentation or writing, upon acceptance by the Principal of its Tender.
- 12.2 To the extent that any material submitted by a Tenderer is the subject of pre-existing Intellectual Property Rights of third parties, the Tenderer warrants that it is able to procure an assignment of all such Intellectual Property Rights to the Principal and agrees to obtain such assignment upon acceptance of its Tender.
- 12.3 The Tenderer indemnifies the Principal against any loss, costs, expenses, demands or liability, whether direct or indirect, arising out of any claim by a third party against the Principal alleging that the material contained in the Tender or acts by the Principal in relation to the Principal's use of the Tender material infringe any Intellectual Property Rights of that third party.

13. FREEDOM OF INFORMATION

- 13.1 The name of the Tenderer and tendered Lump Sum and subsequent Contractor and contract sum shall be subject to public disclosure. Any other information provided with the Tender which the Tenderer desires not to be subject to public disclosure shall be clearly endorsed – "In Confidence" – by the Tenderer.
- 13.2 In an assessment of any application made under the Freedom of Information legislation, any information endorsed "In Confidence" by a Tenderer will be assessed for non-disclosure in accordance with the terms of the legislation. Information will not be disclosed provided there is legislative authority to do so.

14. **REGISTRATION AS A PRE-QUALIFIED TENDERER**

The Principal may decline to consider or accept a Tender from a Tenderer who, prior to the award of a Tender, does not hold a Certificate of Prequalification, or is not appropriately registered for the work the subject of the Tender, pursuant to the Prequalification (PQC) System released and current at the time and date at which Tenders were invited.

Tenderers must note that:

- (a) *if awarded a Contract as a result of submitting a Tender, the Principal will, in accordance with the Prequalification (PQC) System, prepare and submit performance reports to the PQC Registrar. Such performance reports may include, amongst other things, information regarding;*
 - (i) *achievements or compliance with representations made in response to tender evaluation criteria (if any) contained in the tender documents;*
 - (ii) *compliance with any legislation relating to workplace health and safety, industrial relations and workers compensation legislation; and*
 - (iii) *compliance with the provisions of the Contract concerning Subcontracting (clause 5), Apprentice/Trainee Policy (clause 35) and Payment of Workers and Subcontractors (clause 38);*
- (b) *the Queensland Government has published a document entitled "Queensland Code of Practice for the Building and Construction Industry" (the Code of Practice). Tenderers are reminded that by being registered pursuant to the Prequalification (PQC) System they have provided an undertaking that they will abide by the Code of Practice.*

In accordance with the conditions of Prequalification, an adverse performance report or non-compliance with the Code of Practice may result in a review of the Contractors PQC registration status.

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RETURNABLE SCHEDULES

RTI RELEASE

PROVISIONAL SCHEDULE OF RATES

ITEM	DESCRIPTION	SPECIFICATION	UNIT	RATE	QUANTITY	EXTENSION
	<u>MEASUREMENT AND PRICE CLAUSES</u>					
A	All dimensions below are in mm unless given otherwise.		Note			
B	Price to include for making good existing adjacent surfaces, including painting, as required following provision of all openings and access panels or disturbing the surface. The made good surfaces shall match existing.		Note			
C	Price to include for arranging for all documentation and certification required for the lawful execution of the Builders Work including Building Approval.		Note			
D	Prices for all work shall include for all required scaffold (to AS1576), temporary power and temporary water supply required to complete the works.		Note			
E	All building works shall comply with statutory requirements and Australian standards including OH & S guidelines and minimum clearance to switchboards as required.		Note			
	<u>STRUCTURAL PENETRATIONS, FLASHING AND CAPPING</u>					
F	Provision of structural openings through walls, floors, ceilings, bulkheads and roofs.	Prices for forming openings shall include for cutting roof, wall or floor material, trimming and strengthening the roof or wall structure, placing all necessary flashings, and making good to provide a weather proof installation.	Note			
G	Provision of flashings and cappings for all roof and exposed wall penetrations.	Flashing material to AS2904. Preform to required shapes where possible. Notch, scribe, flute or dress down as necessary to follow the profile of adjacent surfaces. Mitre angles and lap joints 150 mm. Flash projections above or through the roof with two part flashings, consisting of a base flashing and a cover flashing, with at least 100 mm overlap. Provide for independent movement between the roof and the projection. Flash pipes by sealing with neutral cured silicone rubber and provision of a proprietary flexible clamping shoe with attached metal surround flashing.	Note			
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AC	Removal of Fixed Glass	And the installation of an edge trimmed pre finished panel to suit fresh air fans,	Each			

AD	Removal of a Hopper Window	pipe penetrations etc. And the installation of an edge trimmed pre finished panel to suit fresh air fans, pipe penetrations etc.	Each
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AZ		4 sided platform including handrail to surround evap. cooler. Nominal size of evap cooler is 1250 x 1250	per platform
	SUPPORT FRAMES / BRACKET		
BA		Hot dipped galvanised metal complete with closing strips and end caps. PCL 600 or similar.	Note
BB		Wall mounted condenser unit support	Each
BC		Wall mounted fan coil unit support	Each
BD		Ceiling support for fan coil unit	Each
BE		Ceiling support for recessed fan coil unit	Each
	PLINTHS		
BF	Provision of nominal 100 mm thick concrete pads under ground-mounted condensing and evaporative cooling units.	Materials and construction to AS3600 - 1994. Concrete: 20Mpa to AS1379. Reinforcement: F72 fabric to AS1302. Framework class 3.	Note
BG		900 x 2000	per plinth
BH		900 x 3500	per plinth
BI		900 x 5000	per plinth
BJ		600 x 3000	per plinth
BK		600 x 4000	per plinth
	ENCLOSURES		
BL	Provision of Condensing Unit Cages	Condenser cages shall have three sides and a top with the fourth side being formed by a wall of the school building. Provide the fourth side for elevated buildings such as modulars. Construct the cages from black steel to detail and hot dip galvanise on completion. Provide a brass shackled lock (Lockwood 234P) to each cage. Locks to be keyed alike to suit the School. Refer detail CS1999CUC1.	Note
BM		Single cage	Each
BN		Double Cage	Each
BO		Single Cage Double Height	Each
BP		Double Cage Double Height	Each
	GRAVEL PITS		
BQ		Price for providing a condensate soakage system. System to be designed: (a) to comply with the relevant local government Authority requirements for the design of transpiration/evaporation septic systems, as applicable to the region and (b) to suit local ground conditions with respect to percolation rates. materials and workmanship to AS3500.3 -1990 and AS1945 -1990 Pits are to be sized to suit the number of AC units and be positioned a minimum of 2000 clear of building foundations. Condensate shall enter the pit via a wall mounted tundish (at 2100 AGL minimum) and a 50 diameter minimum underground pipe. Mechanical protection from the tundish to ground level shall be provided.	Note
BR		Gravel pit 1000 x 1000 x 1000	Per pit

BS	ELECTRICAL PITS A typical main switchboard has a footprint of 1850 x 600mm	Reinforced concrete cable pit complete with a high grade cast iron medium duty pit lid cast into a suspended concrete slab, provide an upstand and cable access all to suit the individual main switchboard. Refer to detail CS1999 MSBP.	Note
BT	TREES Removal and disposal of trees including stumps	Electrical pit	Per pit
BU		Price for removal and disposal of trees including stumps and root system from site.	Note
BV		Tree to 1800 high	Each
BW		Tree over 1800 high	Each
BX	Supply and installation of tree	Tree to 1200 high	Each
BY	All items A-BX inclusive	SUB TOTAL:	
	HOURLY RATES OF TRADESMEN		
BZ		Price of a provisional rate for hourly rates of tradesmen for further work to that identified above.	
CA		Concreter	per hour
CB		Fencer	per hour
CC		Carpenter / Plasterer / Painter	per hour
CD		Sheet Metal Worker	per hour
CE		Labourer	per hour
CF		Roofer	per hour
CG		Glazier	per hour
CH		Scaffolder	per hour
CI	Items CA to CH inclusive	SUB TOTAL:	
CJ	Items BY & CI	GRAND TOTAL:	

**COOLER SCHOOLS
CODE OF CONDUCT FOR CONTRACTORS**

1. **General, Background and Limitations**
Notwithstanding rules and regulations mentioned under Common Law, Criminal Law, Workplace Health and Safety, Education Queensland regulations and others, these briefing notes are compiled to highlight potential and specific issues related to individuals visiting and working in school premises.
2. **Site Rules**
 - Project start-up meeting comprising representatives from each school, EQ, Project Manager and Contractor.
 - Site induction of all Contractors and sub-contractors' staff before entering the site.
 - Visitors to report each day at school reception desk recording and stating business, hours, locations etc.
 - Clear identification of each worker by name badge. The employer shall be identified either by uniform or badge.
 - All communications to follow project/contract structure.
 - Incident and accident reports are compulsory and must be lodged on the day of the event.
 - Do not use offensive language.
 - Do not answer provocation by students.
 - Do not smoke on site.
 - Do not bring prohibited substances on site.
 - Clear all rubbish daily.
3. **Records and Documentation**
 - Visitor's logbook signed by visitor and school representative; each day on arrival and departure of site.
 - Maintenance book signed by visitor and school representative.
 - Site meeting minutes.
 - Diary notes.
4. **Safety**
 - Visitor's logbook signed by visitor and school representative; each day on arrival and departure of site.
 - Ensure safety of staff, teachers, and pupils while working at the end of each working day.
 - Ensure protection of Contractors equipment, material and school equipment.
 - Ensure protection against dust, debris, fumes and spillage.
 - Provide safety data sheet of all hazardous material.
 - Ensure the fire alarm system (smoke or thermal detectors) is not accidentally activated.
 - Ensure the intruder systems are not accidentally activated.
5. **Security**
 - Ensure security against theft.
 - Ensure security against vermin and rodents.
 - Ensure security against rain, water damage, condensate damage, and refrigerant leakage.
6. **Co-ordination**
Co-ordinate all activities, jobs, start-up, testing, cut in with school representatives and individual occupants of each area.
Co-ordinate all work, equipment layouts and school items to be relocated.

I have read and understood the above details and understand that a non-compliance with the intent herein constitutes a breach in contract.

Acknowledgment: _____ Date: _____

SPECIFICATION - SCHEDULE OF RELATED CONTRACTS & SCHOOLS

The following list of schools forms part of the Cooler Schools Round 3 Program and this contract covers building associated work to be carried out at these schools.

Mackay Area

Contract 1

Contract 2

Contract 3

s73(2) - irrelevant - other schools

Contract 4

Contract 5

Contract 6

Dundula SS

SPECIFICATION – BUILDERS WORK

RTI RELEASE

1 Description of the works

The works comprise the provision of builders work required for the completion of ventilation, air conditioning and evaporative cooling works being undertaken under one or more separate mechanical & electrical services contracts. Each mechanical & electrical services contract itself covers the installations at a number of schools (varying from one to eight schools) within the general region.

The works comprise the provisional quantities nominated on the bill.

The Builders Work contractor is responsible for:

- Liaison with the mechanical & electrical services contractors within the nominated region.
- Programming of the builders work in support of the mechanical & electrical services contracts such that delays to those contracts do not occur.
- Design, supply, installation, testing, approval and warranty of the builders work at each installation.
- Provision of design and as-built drawings for all works that require building approval.
- Undertake the role of Principal contractor under the Queensland Workplace Health & Safety Act for all works requiring building approval.
- Reporting on progress to the Superintendent on a weekly basis.

2 The Site

For the purposes of this contract “the site” shall include each and every site covered under the related mechanical & electrical contracts.

3 Programming of the Works

3.1 GENERAL REQUIREMENTS

The Contractor is to produce a time scale bar chart within two weeks of the date of the Letter of Acceptance.

The bar chart shall show the logical progression of all activities necessary for the orderly completion of the design and the work. All restraints or dependencies shall be shown such that the critical path can be identified.

The bar chart shall consist of appropriate activities, which accurately represent the Contractors proposed methods of completing the whole of the Work, and shall include the preparation and approval of working drawings, procurement of materials, quality assurance activities, manufacture and execution delivery, as the case may be, of all items of Work.

Key dates shall be clearly shown against relevant activities. Each activity shall be identified by a description, which shall permit easy identification, by reference to a specific portion of the Work.

Any review of or comments upon a program by the Superintendent will not:

- a) relieve the Contractor from or alter its liabilities or obligations under the Contract, especially (without limitation) the obligation to achieve completion by the Date for Practical Completion;
- b) evidence or constitute a direction by the Superintendent to accelerate, disrupt, prolong or vary any, or all, of the Contractor’s Activities; or
- c) affect the time for performance of the Principal’s or the Superintendent’s Contract obligations, including (without limitation) oblige the Principal or the Superintendent to do

anything earlier than is necessary to enable the Contractor to achieve Completion by the Date for Practical Completion.

3.2 PROGRAMME CONSTRAINTS

The Contractor is required to progressively liaise with the superintendent during the design development stage to ensure that when practical is due detailed design issues have been adequately addressed.

3.3 NUMBER OF PROGRAMME REVISIONS

Allow to provide at least one updated programme during the construction period.

3.4 MONITORING PROJECT PROGRESS AGAINST PROGRAMME

On a weekly basis, mark-up a copy of the current programme with the progress of each activity clearly indicated. Keep a copy of the latest marked up programme on site.

4 Payments

The Contractor is to submit its claims for payment in the form shown in the Bill on a school-by-school basis complete with a summary total.

5 Variation price requests

All Contractor variation price requests should be submitted on the standard form. A copy of this form will be provided on acceptance of tender. All backup information, as identified on the form, should be provided with each Contractor price request, to allow the Superintendent to promptly assess the claim.

6 Meetings

The contractor is to arrange such meetings as may be required by the Superintendent to be held between representatives of the Principal, the Contractor, the mechanical & electrical services contractors, the Superintendent and any appropriate consultants or Subcontractors. The Superintendent will chair the meetings. The Contractor is to take minutes of the meetings and forward a copy of the minutes to all parties in attendance within three working days after each meeting.

7 Monthly reports

The Contractor is to issue, the Superintendent, one copy of a report each month, covering on a school-by-school basis:

- any scope changes – details of potential, requested and approved variations;
- status of the detailed design, documentation and construction work relative to the program;
- identifying any sources of delay and actions to be taken to overcome any delay;
- details of financial progress, estimates of cost for potential, requested and approved variations and progress thereof and any other change or potential change to the financial position of the Contract;
- quality issues;
- workplace health and safety issues;
- human resource changes;
- communications issues;
- procurements issues

8 Personnel carrying out work

- 8.1 The Contractor is to ensure that the personnel carrying out the works and the consultants, Contractor's Subcontractors and agents are competent and experienced in the type of work they are undertaking and are registered or licensed under the legislation requiring them to be registered or licensed for the purposes of or incidental to the execution of the Works.
- 8.2 The Superintendent may direct the Contractor to remove from the Site so as not to have any further connection with the execution of the Works any person employed by the Contractor, its Subcontractors or agents who in the opinion of the Superintendent misconducts itself or is incompetent or negligent in the performance of itself duties or creates a danger to any person or property. The Contractor is to comply with such directions within the time specified by the Superintendent.
- 8.3 The Contractor is to ensure that all persons employed to perform the Works, including personnel of the Contractor, its Subcontractors and agents are paid at the rates fixed by relevant awards, determinations, judgements or orders of any tribunals and are employed under the conditions (including hours of work) prescribed therein.
- 8.4 The Contractor is to ensure that all persons employed to perform the Works, including personnel of the Contractor, its Subcontractors and agents are and remain financial members of an appropriate registered union while working on the Site or carrying out the Works.
- 8.5 Before commencing work the Contractor is to make itself aware of all industrial matters, including all statutory requirements, awards, codes of industrial conduct, industry agreements and site agreements that may apply to the Works or the site. The Contractor is to comply at all times with the statutory requirements, awards, codes of industrial conduct, industry agreements and site agreements during the execution of the Works.
- 8.6 The Contractor is to keep and maintain at the Contractor's site office (or such other place approved by the Superintendent) up to date records concerning:
- 1) Any superannuation scheme the Contractor is required to make payments to; and
 - 2) Long service leave schemes the Contractor is required to comply with in accordance with statutory requirements, awards, codes of industrial conduct or industry agreements, which apply to the Works or the Site.
- 8.7 The Contractor is to allow the Superintendent and its representatives access at all reasonable times to the records referred to in paragraph 8.6.

9 Compliance with statutory requirements

- 9.1 The Contractor is to comply with statutory requirements in respect of the Works and any order of a court or authority affecting the Works.
- 9.2 The Contractor is to pay any fees, charges, security deposits and like payments in respect of the Works in accordance with statutory requirements.
- 9.3 Without limiting the Contractor's obligations under other paragraphs the Contractor is to:
- a) make all applications for approvals and give all notices required to comply with statutory requirement;
 - b) advise the Superintendent in writing of the intent and details of any proposed application or notice two (2) days before making of the application or the giving of the notice and provide to the Superintendent a copy of any proposed application or notice before making the application or giving the notice and is to comply with any directions of the Superintendent in relation to the application of notice;
 - c) when requested by the Superintendent, provide to the Superintendent a copy of any documents or records and any other information used or relied upon by the Contractor to prepare the application or notice;
 - d) inform the Superintendent in writing of the requirements or conditions proposed by any authority in relation to the giving of an approval or consent and obtain the written permission of the Superintendent before agreeing to those requirements and conditions; and
 - e) inform the Superintendent in writing of the time, date and location of any meeting between the Contractor and any authority in sufficient time to enable the Superintendent to arrange representation at the meeting. A representative of the Nominated Representative is entitled to attend any such meeting.

- 9.4 If, in the Contractor's opinion, any provision of requirement of the Contract is at variance with statutory requirements or the requirements of an order of a court or authority the Contractor is to immediately notify the Superintendent in writing. The notification is to contain detailed particulars of:
- a) the provision or requirement which is at variance with statutory requirements or the order; and
 - b) the amendment or modification of the provision or requirements recommended by the Contractor to comply with statutory requirements or the order.
- 9.5 The Superintendent may direct the Contractor as to the course of action to be taken to ensure that statutory requirements are complied with in the execution of the Works.

10 Confidentiality

In addition to the requirements for Confidentiality specified in the Condition of Contract, the Contractor is to regard all information discussed at meetings concerning the Contract as confidential and shall not disclose such information to a third party except with the prior written agreement of the Principal, particular to each specific instance.

11 Manufacture and supply of materials

If requested by the Superintendent, the Contractor is to notify in writing of:

- a) the make and place of manufacture;
- b) the source of supply;
- c) the performance capacities; and
- d) and other information requested by the Superintendent, of materials or goods to be used in connection with the Works.

12 Quality assurance

The Contractor is to develop and maintain a Project Quality Assurance System in accordance with the Quality Assurance clause of the Conditions of Contract.

13 As-built drawings

The Contractor is to supply to the Superintendent in electronic and hard form acceptable to the Superintendent:

- a) "As - Built" drawings for the Works; and
- b) all other information relating to the operation and maintenance of the Works as required by the Superintendent.

14 Return of Documents

The Contractor is to, if requested by the Superintendent, after Practical Completion of the Works or the termination of the Contractor's engagement, return or supply to the Superintendent all documents provided to the Contractor by the Superintendent or in the contractor's possession or control relating to the Works or the Contract.

15 Dilapidation Record

The Contractor is to the satisfaction of the Superintendent before commencing work on the Site and within 20 days after the Date of Practical Completion.:

- inspect all land, footpaths, roads, buildings or other structures which may be affected by the execution of the Works, in the company of the Superintendents representative and a representative of the owner of or authority controlling the land, footpath, road, building or other structure;

- make a written and photographic record of existing visible defects in the land, footpaths, road, buildings or other structures; and
- lodge with the Superintendent a copy of each record of inspection showing the date of the inspection and signed on behalf of the Contractor and the owner or controlling authority by way of acknowledgment that the record of inspection is true and correct.

16 Security and Access

- 16.1 The Contractor is to comply with the entry and security procedures nominated by the Superintendent from time to time for access to the Site or a part of the Site.
- 16.2 The Superintendent may deny access to the Site to the Contractor or any person who does not comply with the entry and security procedures.
- 16.3 The Contractor is not entitled to any additional payment of compensation or extension of time, in contract, tort or otherwise for any losses suffered by the Contractor or any delay in the progress of the Works arising out of any denial of access to the Site of any person who does not comply with the entry and security procedures.

17 Security system

The Contractor is to arrange where approval is received to work outside nominated hours, with the building maintenance contractor to disarm and rearm appropriate access security devices as required to allow the Works to be completed. The Contractor is to also pay all service call costs associated with these services at no additional cost to the Principal.

18 Occupied premises

The principal or persons authorised by the Principal will continue in possession and occupancy of the school.

The Contractor is to ensure the ongoing and uninterrupted operation of the school other than authorised interruptions as agreed in advance with the Superintendent.

The Contractor is to secure and maintain safe access, by approved means, to occupied premises for the Principal and such authorised persons as shall be notified to the Contractor by the Superintendent. The Contractor is to also prevent unauthorised access.

The Contractor is to arrange work to minimise nuisance to the occupants and ensure their safety.

The Contractor is to ensure that a margin of one metre continuous escape path is maintained clear of debris and obstructions.

Prior to commencing work in sensitive areas and in sufficient time for examination, the Contractor is to submit to the Superintendent complete details of the proposed method of work. The Contractor is not to commence work until approved by the Superintendent..

19 Site identification

The Site shall be the area within the limits as agreed between the Contractor and Superintendent to allow completion of the Works.

Access on to and around the Site, and use of the Site for temporary works and construction plant, including working and storage areas, location of offices, workshops, sheds, parking and the like, is restricted to those areas agreed by the Superintendent and subject to such conditions as may be imposed by the Superintendent.

The Contractor is to take necessary precautions to secure the assets of the Principal.

The Contractor is not to store waste building materials, poisons, flammable liquids and other dangerous items on Site unless approved by the Superintendent.

20 Prohibited Work Methods and Materials

The Contractor is not to use or permit the use of explosives.

21 Asbestos

No asbestos products or asbestos based materials shall be used in any part or parts of this building or its services and the Contractor is to ensure that Sub-Contractors, Nominated Sub-Contractors, suppliers and others are advised of this restriction.

No compensation will be paid if asbestos is brought on to the Site and subsequently discovered and if discovered such removal and consequential making good or costs will be totally at the expense of the Contractor.

Each school site should have an asbestos management plan in place. The Contractor shall make its self aware of any management plan for each school site and comply with the requirements of the plan. A copy of any relevant asbestos management plan is available from the school principal.

Should the Contractor find any asbestos on Site not mentioned in the asbestos management plan while, carrying out the Works, then the Contractor should halt work and immediately notify the Superintendent of the existence of asbestos. The Superintendent will provide instructions to the Contractor on the removal and disposal of the asbestos.

22 No Smoking on site

There is to be no smoking on the site.

23 Information to Subcontractors

Advise Sub-contractors and suppliers and installers of material of the requirements of this section of the specification.

24 Interpretation of drawings

Check dimensions on Site before proceeding with the work. Notify the Superintendent of any omission or conflict in drawings and their relation to Specifications.

25 Sub-contractors and suppliers

Within seven (7) days of receipt of the Letter of Acceptance, supply to the Superintendent a complete list of Sub-Contractors and Suppliers proposed for the Works. The Superintendent reserves the right to reject any so listed.

26 Site Amenities

Provide statutory and necessary temporary amenities and temporary sanitary facilities for site workers. Maintain in working condition and clean daily.

27 Temporary fire extinguishers

Maintain fully charged and accessible fire extinguishers as are necessary for the care and safety of the Works, as required by Local Fire Authority.

28 General attendance on sub-contractors

General attendance shall include taking deliver, assisting to unload, storing and protecting Sub-contractor's materials and for allowing Sub-contractors ample working space, scaffolding, hoists and ordinary plant, etc., and messing and sanitary accommodation and for cutting away, building in and protecting finished work and making good.

29 Coordination with other contractors

The following works on and adjoining the Site will be executed by persons engaged by the Principal and are not included in this contract:

<u>Contract</u>	<u>Anticipated Programme</u>
Mechanical & electrical services	In conjunction with this contract

The Contractor is required to coordinate and liaise with any contractors engaged by the Principal to enable them to proceed with their work.

The Mechanical and Electrical Contractor shall provide a comprehensive schedule of builders work required for the execution of this contract, to the contractor, two weeks prior to the Mechanical and Electrical contractor requiring any of these works to commence. At the commencement of the work, the Contractor is to provide to the Superintendent a fixed price based on the required extent of work and the Provisional Bill of Quantities.

30 Precautions in carrying out work under the contract

Unless otherwise specified in the Contract, observe, in the absence of statutory requirement to the contrary, the relevant current Australian Standard published by Standards Australia relating to storage, transport, use of materials, fire precautions in arc or flame cutting, flame heating and arc or gas welding operations, plant and equipment, work processes and safety precautions.

31 Maintenance of services and equipment

The Contractor is to ensure that all services and equipment within buildings are maintained fully operational.

Without impairing the overall effectiveness of the security and fire alarm systems, the Contractor is to take precautions to prevent accidental setting off of alarms.

The Contractor is to bear all costs incurred by any such setting off attributed to any cause whatsoever.

32 Interruption of existing services

The Contractor is to take all necessary measures to identify location of services.

The Contractor is to maintain existing services to all occupied areas and existing operational building equipment throughout the Contract period except for approved interruption periods, which are to be kept to a minimum. The Contractor is to be held responsible for any damage suffered by the Principal, or to those users of the building within the precinct of the Site, due to an unauthorised interruption of a service.

The Contractor is to make an application to the Superintendent for approval to interrupt an existing service five (5) working days prior to the intended date of the interruption. If the period for interruption applied for is unacceptable to the Principal for a legitimate reason, the Contractor is to defer or advance the interruption period to suit. There shall be no grounds for claims for damages or extension of time due to the refusal.

33 Joining up to Existing Buildings/Work/Services

Where the method of joining up of old and new work is not otherwise specified the cutting away and joining up shall be carried out in a manner approved by the Superintendent and made good by trades to match existing adjacent work.

34 Interference with Existing Buildings

Notify the Superintendent of connection, disconnection or interference with existing services. Repair, to the satisfaction of the Superintendent, damage that occurs to services, during currency of the Contract.

35 Damaged services

Where existing services at or adjacent to the Site are in non-serviceable condition, arrange for an inspection by the Superintendent and appropriate Authority. At such meeting, record the condition and follow instructions when issued in writing by the Superintendent.

36 Solid, liquid and gaseous contaminants

The Contractor shall

- a) be responsible for the proper disposal, off site, of solids, liquid and gaseous contaminants.
- b) discharge gaseous contaminants in such a manner that they will be sufficiently diluted with fresh air that the toxicity will be reduced to an acceptable level.
- c) subject to statutory and local requirements, liquid contaminant may be diluted with water to a level of quality acceptable in the sewer system or contained in approved vessels for disposal at sites approved by the relevant Authority.
- d) dispose of solid contaminants by removal from the Site to locations approved by the relevant Authority
- e) comply with all conditions of the Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA) environmental commitments with regard to the installation are complied with.

37 Disposal of Refuse

Refuse from construction operation (including food scraps and the like) shall be removed from the Site daily.

38 Explosive power tools

Explosive power tools shall not be used, unless previously approved by the Superintendent.

39 Shop Drawings

Shop Drawings mean complete drawings showing details of fabrication, assembly, installation, fixing and waterproofing methods of specific items or components, and shall include necessary explanatory notes and specifications. Shop drawings are to include architectural, steelwork, fencing and penetration details.

When preparing Shop Drawings, do the following:

- a) include provision in the construction program for the production and distribution, review and return of shop drawings
- b) refer discrepancies discovered in the Tender/Contract Documents to the Superintendent for direction
- c) verify relevant dimensions. Dimension drawings so that the items or components fit accurately into the required position
- d) ensure that shop drawings conform with the requirements of the specification
- e) all drawings shall be of consistent standard size and presentation
- f) review of shop drawings shall imply only that the Contractor interpretations of the relevant requirements of the Contract are generally correct, but shall in no way relieve the Contractor of his obligations under the Contract to construct and complete the Works correctly and accurately
- g) do not order, manufacture, assemble or supply any item or component needed according to requirements of shop drawings until the Superintendent returns the applicable stamped drawings.

Allow to provide 2 copies to the Superintendent. The Superintendent will return 1 copy.

40 Miscellaneous completion procedures

- a) Removal of protection: Except as otherwise indicated or requested by the Superintendent, remove temporary protection devices and facilities installed during the course of the work to protect previously-completed work. Remove evidence of protection devices. Remove protection before Practical Completion.
- b) Trade Cleaning: As each trade completes its work in each area of the building, the Sub-Contractor is required to be responsible for cleaning the area on a daily basis, having regard for the occupants of the building.

41 Final cleaning

Final cleaning: provide final cleaning of the work described in this Specification, at a time indicated, consisting of cleaning each surface or unit of work to normal 'clean' condition expected for a first class building cleaning and maintenance program.

Examples of required cleaning are:

- a) remove labels, which are not required as permanent labels
- b) clean exposed exterior and interior hard surfaces finished, to a dirt free condition, free of dust, stains, fingermarks, films and similar noticeable distracting substances. Except as otherwise indicated, avoid substances of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.
- c) remove debris and surface dust from limited access spaces
- d) clean concrete floors broom clean
- e) clean project site, including planted sections and footpaths, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, petro-chemical spills and other foreign deposits.
- f) label keys for locks accurately and provide in duplicate to the Superintendent prior to Practical Completion

42 Clean site and access roads

Be responsible for maintaining clean roads and access. Remove and clean away mud, building debris from footpaths, gutters, drains, walls etc when such occurs.

43 Guarantees and Warranty

- a) the Contractor or other approved Guarantor or Guarantors is to provide written guarantees where so specified elsewhere in this specification.
- b) Each guarantee shall be in an approved form and shall specifically include the provisions required herein.
- c) Guarantee periods shall commence from the date of the Notice of Practical Completion

44 Patent rights

The contractor is to ensure that no patent is infringed and that unless otherwise specified, amounts payable and condition imposed in respect of the manufacture, use or exercise of patented invention are paid and complied with and shall indemnify the Principal against claims, damages, costs, charges and expenses in way whatsoever arising out of the manufacture, use or exercise by the Contractor of patented invention.

45 Site access

Site access is to be agreed in writing with the Superintendent.

46 Working hours

Working hours are 7:00am to 6:00pm Monday to Friday, unless otherwise agreed in writing by the Superintendent. Noisy activities are to be limited to outside school hours. The Contractor is to minimise inconvenience to the building occupants.

Works on site related to this Contract may need to be stopped for short periods of time to accommodate the school operation requirements. The Superintendent will endeavour to notify the Contractor 48 hours in advance, where practical.

The Contractor is to make allowances in the construction programme to accommodate these. Allow for all out of hours work to be included.

47 Noise control

The Contractor is to take all practicable precautions to minimise noise resulting from work under the Contract. Construction equipment fitted with noise suppressors should be used where practicable.

48 Dust control

The Contractor is to take all measures to restrict dust caused by the work under the contract.

49 Sign boards

The contractor is not permitted to display company signboards.

50 Miscellaneous Works

50.1 GENERAL

The mechanical & electrical services contractor will provide all incidental works required for storage, construction, installation, operation and maintenance of the mechanical & electrical services installation with the exception of the items of work scheduled in the Bill which are defined as Builders Work, and are the responsibility of the contractor.

50.2 MINOR PENETRATIONS

The mechanical & electrical services contractor will provide minor openings through walls, floors, ceilings, bulkheads and roofs with the exception of the items of work scheduled in the Bill which are defined as Builders Work, and are the responsibility of the contractor.

50.3 MAKING GOOD

The mechanical & electrical services contractor will make good existing adjacent surfaces, including painting, as required following provision of the minor openings and penetrations with the exception of any making good associated with the items of work scheduled in the Bill which are defined as Builders Work, and are the responsibility of the contractor.

RTI RELEASE



Conditions of Contract including Special Conditions of Contract and Annexure

(Australian Standard General Conditions of Contract AS 4305-1996)

February 2001

Prepared by
Legal and Contractual
Department of Public Works

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CONDITIONS OF CONTRACT

1. GENERAL

The Conditions of Contract shall be the "Australian Standard Minor Works Contract Conditions AS4305 – 1996" as amended by the Special Conditions of Contract.

2. INTERPRETATION

In the event of conflict or inconsistency between the provisions of the Australian Standard Contract Conditions (AS4305 - 1996) and the Special Conditions of Contract, the Special Conditions of Contract shall take precedence.

References to "Annexures" to AS4305 – 1996 shall be read as references to Annexures attached to the Special Conditions of Contract.

References to "attached to these Conditions" shall be read as references to attachments to the Special Conditions of Contract.

RTI RELEASE

SPECIAL CONDITIONS OF CONTRACT

1. INTERPRETATION

Delete the definition for "Contract Sum" and insert in its place -

" 'Contract Sum' means -

- (a) where the Principal accepted a lump sum, the lump sum;
- (b) where the Principal accepted rates, the sum ascertained by calculating the products of the rates and the corresponding quantities in the Bill of Quantities or Schedule of Rates;
- (c) where the Principal accepted a lump sum and rates, the aggregate of the sums referred to in paragraphs (a) and (b),

but excluding any additions or deductions which may be required to be made under the Contract. "

Delete the definition for "Date for Practical Completion" and insert in its place -

" 'Date for Practical Completion' means the last day of the period of time stated in Item 11."

Insert new definition -

" 'Separable Portion' means a portion of the work under the Contract described in the Contract as a Separable Portion or which the Superintendent has determined pursuant to Clause 19.3 shall be a Separable Portion. "

2. NATURE OF CONTRACT

No Amendment

3. SECURITY AND RETENTION MONEYS

Express the existing clause as subclause "3.1 Security and Security in Lieu of Retention Moneys" and insert as the first paragraph -

"3.1.1 Security and retention moneys are for the purpose of ensuring the due and proper performance of the Contract and for the purpose of providing security of payment to Subcontractors of the Contractor (as these terms are defined in the Subcontractors' Charges Act). "

Delete the second paragraph commencing with the words "If no security is stated....." and insert in its place-

"If no security is stated in Item 12, the Principal may retain 10% of the value of work incorporated into the Works (excluding GST) from each progress payment until 5% of the Contract Sum, minus GST, is held. "

Delete the third paragraph commencing with the words "The Principal may have recourse....." and insert in its place-

"3.1.2 The Contractor may request at any time permission to provide security to be held by the Principal in lieu of retention moneys. The Principal may in its entire discretion and without giving reasons reject any such request by the Contractor.

The security shall be in any of the forms stated in Item 12. The form of unconditional undertaking attached to these conditions is approved.

In the event that the Contractor requests to provide security in lieu of retention and the Principal elects to agree to the request - the following provisions shall apply notwithstanding any other provision in the Contract to the contrary.

- (a) The security shall be for an amount equal to 5% of the Contract Sum and shall be lodged with the Principal.
- (b) Unless, and until the expiration of a period of 5 working days after, the undertaking is lodged, retention moneys shall be deducted in accordance with clause 3.1.
- (c) 5 working days after the lodgement of the undertaking - retention moneys pursuant to clause 3.1 shall not be deducted and all retention moneys previously deducted (if any) pursuant to

clause 3.1 shall be the subject of the next following progress certificate issued by the Superintendent with appropriate amounts credited to the Contractor.

- (d) Subject to the rights of the Principal under the Contract, the provisions of clauses 3.1, 3.2, and 28 shall apply to the undertakings.
- (e) An undertaking given pursuant to this clause 3.1.2 shall be regarded as a performance undertaking with purposes as set out in clause 3.1.1.

Insert further subclauses as follows -

“

3.2 Recourse to Retention Moneys and Conversion of Security

A Party may have recourse to Retention Moneys and/or cash security.

The Principal may at any time convert into money security that does not consist of money whether or not the Principal is then entitled to exercise a right under the contract in respect of the security. The Principal shall not be liable in any way for any loss occasioned by such conversion.

If, after the Principal has exercised all or any of the Principal's rights under the contract in respect of the security (except for those set out in this clause), the security or any part thereof then remaining is, but for this clause, releasable to the contractor, the Principal may, before releasing any security or any part thereof then remaining, ascertain the existence and amount of any Subcontractors' Charge (meaning a Notice of Intention to Claim Charge made or given to the Principal by any Subcontractor concerning the performance of work for a Contractor (as those terms of "Subcontractor", "Contractor" and "Work" are defined in the *Subcontractors' Charges Act*) purportedly pursuant to the provisions of the *Subcontractors' Charges Act*) purportedly pursuant to the provisions of the *Subcontractors' Charges Act*.

In the event that any such Subcontractors' Charge is found to exist, the Principal may convert into money any security or any part thereof then remaining that does not consist of money whereupon any money so obtained shall be payable, creditable or allowable to the Contractor pursuant to the Contract in complete or partial satisfaction of the contract price (as the term is defined in the *Subcontractors' Charges Act*) and pay into court the money for the benefit of the chargee from such moneys so payable, creditable or allowable the total amount set out in the said Subcontractors' Charges and account to the Contractor as to the balance, if any.

- 4. **CONTRACT DOCUMENTS** No amendment
- 5. **SUBCONTRACTING**

Insert new paragraphs -

“The Contractor shall confirm to the Superintendent, in the form attached, the name and address of the Subcontractor, the total value of the proposed Subcontract and that the Contractor and the Subcontractor have prior to commencement of any work by the Subcontractor entered into an agreement in writing for the performance of the work which contains provisions concerning record of payment in identical terms to those contained in clause 38 and this clause 5 of the Conditions of Contract.

The Contractor shall not, without the written approval of the Superintendent, allow:

- (a) a subcontractor to assign or subcontract any of the work under the Contract; or
- (b) the performance of any of the work under the Contract by any party (including without limitation a subcontractor) other than the Contractor or a subcontractor notified to the Superintendent pursuant to this clause.

Any request for approval pursuant to this clause shall be made in writing by the Contractor to the Superintendent and the Contractor shall provide to the Superintendent such information and additional information which the superintendent may reasonably request. The Superintendent may, in its entire discretion and without giving reasons, reject any such request for approval by the Contractor

- 6. **PROTECTION OF PEOPLE AND PROPERTY** No amendment
- 7. **CARE OF THE WORK AND REINSTATEMENT OF DAMAGE** No amendment
- 8. **DAMAGE TO PERSONS AND PROPERTY** No amendment

9.	INSURANCE OF THE WORK UNDER THE CONTRACT	No amendment
10.	PUBLIC LIABILITY INSURANCE	No amendment
11.	INSURANCE OF EMPLOYEES	No amendment
12.	INSURANCE PROVISIONS	No amendment
13.	SUPERINTENDENT	No amendment
14.	REPRESENTATIVES	No amendment
15.	SITE	No amendment
16.	MATERIALS AND WORK	No amendment
17.	PROGRESS, PROGRAMMING AND SUSPENSION	

Insert a new paragraph -

“The Contractor shall give the Superintendent reasonable advance notice of when the Contractor requires any information, materials, documents or instructions from the Superintendent or the Principal. ”

18.	PRACTICAL COMPLETION	No amendment
19.	EXTENSION OF TIME FOR PRACTICAL COMPLETION	

Express the existing provisions as “**19.1 Claims for Extensions of Time**”

Delete the second paragraph and insert -

“The causes are –

- (a) (i) any act, default or omission of the Principal, the Superintendent or an employee, consultant or agent of the Principal;
- (ii) latent conditions; and
- (b) those other than –
 - (i) breaches or omissions by the Contractor; and
 - (ii) industrial conditions or inclement weather occurring after the Date for Practical Completion.

Where more than one event causes concurrent delays and the cause of at least one of those events but not all of them, is not a cause referred to in (a) above then to the extent that the delays are concurrent, the Contractor shall not be entitled to an extension of time for Practical Completion. ”

Insert new subclauses -

“
19.2 Separable Portions

The interpretations of -

- (a) Date for Practical Completion;
- (b) Date of Practical Completion;
- (c) Practical Completion,

and Clauses 3, 7, 19, 22 and 25 shall apply separately to each Separable Portion and references therein to the Works and to work under the Contract shall mean so much of the Works and the work under the Contract as is comprised in the relevant Separable Portion.

If the Contract does not make provision for the amount of security, retention moneys or liquidated damages applicable to a Separable Portion, the respective amounts applicable shall be such proportion of the security, retention moneys or liquidated damages applicable to the whole of the work under the Contract as the value of the Separable Portion bears to the value of the whole of the work under the Contract.

19.3 Use of Partly Completed Works

If a part of the Works has reached a stage equivalent to that of Practical Completion but another part of the Works has not reached such a stage and the parties cannot agree upon the creation of Separable Portions, the Superintendent may determine that the respective parts shall be Separable Portions.

In using the Separable Portion that has reached Practical Completion, the Principal shall not hinder the Contractor in the performance of the work under the Contract. ”

- 20. **DAMAGES FOR DELAY IN REACHING PRACTICAL COMPLETION** No amendment
- 21. **DELAY OR DISRUPTION** No amendment
- 22. **DEFECTS LIABILITY** No amendment
- 23. **VARIATIONS**

Insert a new paragraph after paragraph three -

“The margin for profit and overheads shall be 12½% for work carried out by the Contractor’s own workers and 7½% for work carried out by others. ”

24. CERTIFICATES AND PAYMENTS

Delete “28” in the first line of the fifth paragraph and insert in its place “21”.

25. CERTIFICATE OF PRACTICAL COMPLETION

Insert “written” in the first line before “request”.

26. EFFECT OF CERTIFICATES

Delete “or a Certificate of Practical Completion”.

27. FINAL PAYMENT CLAIM

Insert after the words “defects liability period,” in the first line “or where there is more than one, the last to expire, ”

28. FINAL CERTIFICATE

Insert at the end of the first paragraph -

“or give the Contractor in writing the reasons for not issuing the certificate”.

- 29. **DEFAULT** No amendment

- 30. **INSOLVENCY** No amendment

31. DISPUTE RESOLUTION

Delete/Insert -

31. SETTLEMENT OF DISPUTES

Not later than 14 days after a dispute has arisen either party shall refer the dispute to the Superintendent. Within 28 days of receiving notice of the dispute the Superintendent shall give to each party the Superintendent’s written decision on the dispute. If the Superintendent fails to give a written decision on the dispute, or if either party is dissatisfied with the decision of the Superintendent the parties shall, within 14 days of the date of receipt of the decision, or within 14 days of the date on which the decision should have been given by the Superintendent, confer at least once to attempt to

resolve the dispute. In the event that the dispute cannot be so resolved the dispute may be referred by either party to arbitration or litigation. Arbitration shall be effected by a single arbitrator who shall be either:-

- (a) mutually agreed upon by the parties in writing; or
- (b) in the absence of agreement, by an arbitrator appointed in accordance with the provisions of the law relating to arbitration in the State of Queensland.

The party requesting arbitration must give notice in writing to the other party within 28 days of the parties conferring.

32. SERVICE OF NOTICES

No amendment

Add the following new clauses -

“

33. LATENT CONDITIONS

33.1 Definition

Latent Conditions are –

- (a) physical conditions on the Site or its surroundings, including artificial things but excluding weather conditions, which differ materially from the physical conditions which should reasonably have been anticipated by a competent and experienced Contractor at the time of the Contractor's tender if the Contractor had –
 - (i) examined all information made available in writing by the Principal to the Contractor for the purpose of tendering; and
 - (ii) examined all information relevant to the risks, contingencies and other circumstances having an effect on the tender and obtainable by the making of reasonable enquiries; and
 - (iii) inspected the Site and its surroundings; and
- (b) any other conditions which the Contract specifies to be Latent Conditions.

33.2 Notification

If, during the execution of the work under the Contract, the Contractor becomes aware of a Latent Condition, the Contractor shall forthwith and where possible before the Latent Condition is disturbed, give written notice thereof to the Superintendent.

33.3 Extension of Time and Cost

Delay caused by a Latent Condition may justify an extension of time under Clause 19.1.

If a Latent Condition causes the Contractor to –

- (a) carry out additional work;
- (b) use additional constructional plant; or
- (c) incur extra cost including but not limited to the cost of delay or disruption,

which the Contractor could not reasonably have anticipated at the time of tendering, a valuation shall be made under Clause 23.

33.4 Time Bar

In making a valuation pursuant to Clause 33.3, regard shall not be had to the value of additional work carried out, additional constructional plant used or extra cost incurred more than 28 days before the date on which the Contractor gives the written notice required by the first paragraph of Clause 33.2.

34. **WORKPLACE HEALTH AND SAFETY ACT 1995**

For the purpose of this clause the words "Principal Contractor", "serious bodily injury", "dangerous event", "work caused illness" and "work injury" have the meanings assigned to them by the *Workplace Health and Safety Act* ("the Act").

Upon acceptance by the Principal of the Contractor's offer -

- (a) the Principal shall be deemed to have appointed the Contractor to be the Principal Contractor pursuant to s.13 of the Act;
- (b) the Contractor shall be deemed to have accepted the appointment; and
- (c) the Contractor shall, in respect of the works to be executed under the contract, be responsible for the performance of the functions of the Principal Contractor within the meaning of the Act and Regulations in force under the Act.

Such appointment as Principal Contractor under the Act shall be in force during the continuance of the contract unless sooner revoked by the Principal giving twenty-one (21) days notice in writing to the Contractor of its revocation or by the Principal taking over or cancelling the contract pursuant to any provision of the contract or according to law.

The Contractor shall indemnify and keep indemnified the Principal against all liabilities which may be imposed under or which may arise out of enforcement of any section of the Act or Regulations.

The Contractor shall notify the Superintendent of every serious bodily injury, dangerous event, work caused illness and work injury which occurs on site as soon as possible but not later than twelve (12) hours after such occurrence.

35. **APPRENTICE /TRAINEE POLICY**

The Contractor, either directly or indirectly through subcontractors, in its execution of the work under the Contract, must employ apprentices/trainees on the site of the works for the number of labour hours no less than the number derived by multiplying the accepted Contract Sum by 0.12%: viz

Contract Sum x .12% = number of labour hours.

For the purposes of this clause, the term "apprentices/trainees" shall include any employees engaged in the following arrangements:

- (a) a formal apprenticeship or formal traineeship as provided for in State vocational education and training legislation that results in a nationally recognised building and construction qualification;
- (b) a cadetship or scholarship incorporating formal tertiary professional or technical education that results in a nationally recognised building and construction qualification.

The Contractor shall:

- (i) within 14 days of the Date of Acceptance of Tender submit to DETIR, with a copy to the Superintendent, a completed Compliance Plan in the form attached to these conditions; and
- (ii) within 7 days of the expiration of each successive thirteen week period commencing from the Date of Acceptance of Tender submit to DETIR, with a copy to the Superintendent, a completed Interim Compliance Report in the form attached to these conditions; and
- (iii) within 14 days of the Date of Practical Completion, or if there is more than one the last occurring Date of Practical Completion, submit to DETIR, with a copy to the Superintendent, a completed Practical Completion Compliance Report in the form attached to these conditions.

The Contractor acknowledges that failure to comply in part or in whole with this requirement for employment of apprentices/trainees will be a substantive factor that will be taken into account in the award of future Contracts by the Principal (the State of Queensland).

For the purposes of this Clause 35 the term DETIR means the Department of Employment Training and Industrial Relations or it's successor in title having responsibility for Employment Policies and Programs.

36. GENERAL RIGHT OF SET OFF

Without limiting the Principal's rights under any other provision in the contract and notwithstanding the provisions of or the issue of a certificate by the Superintendent under clause 24 and 29, the Principal may deduct from any monies due to the Contractor any sum which is payable by the Contractor to the Principal whether or not the Principal's right to payment arises by way of damages, debt, restitution or otherwise and whether or not the factual basis giving rise to the Principal's right to payment arises out of this contract, any other contract, or is independent of any contract. If the moneys payable to the Contractor are insufficient to discharge the liability of the Contractor to pay such sum to the Principal, the Principal may have recourse to retention moneys (whether or not these are held by the Principal in alternate form pursuant to clause 3.1), and if they are insufficient, to security provided under clause 3.1 of the contract. Nothing in this clause shall affect the right of the Principal to recover from the Contractor the whole of such monies or any balance that remains owing.

37. APPLICABLE LAW

The law governing the Contract, its interpretation, any agreement to arbitrate and the conduct of any arbitration or litigation, is the law of the State of Queensland.

38. PAYMENT OF WORKERS AND SUBCONTRACTORS

- 38.1 The Contractor, with each claim for payment, shall provide to the Superintendent a schedule of all subcontractors employed on the Works showing their names, addresses and trade.
- 38.2 All payments to Subcontractors shall be recorded by the Contractor on a Record of Payments form which shall be in the form attached to these conditions. The Contractor shall ensure that, as to any payment to any Subcontractor, such form is fully completed, executed by the Subcontractor concerned, and kept by the Contractor as proof of compliance with this clause.
- 38.3 At the time of making a progress claim under clause 24 the Contractor shall deliver to the Superintendent a statement in the form attached to these conditions, naming any Subcontractor who has failed or refused to execute a Record of Payment form or to whom no payment has yet been made and hereby acknowledges that the Superintendent may thereupon notify any such Subcontractor that the Superintendent proposes to issue a payment certificate to the Principal including such amounts as may be claimed by the Contractor in respect of such Subcontractor.
- 38.4 The Record of Payment forms shall be:
- (i) kept by the Contractor until issuance of the Final Certificate by the Superintendent;
 - (ii) provided to the Superintendent for inspection and copying upon reasonable notice in writing.
- 38.5 At the request of the Contractor and out of moneys payable to the Contractor the Principal may on behalf of the Contractor make payment directly to a worker or Subcontractor.
- 38.6 Before the payment of any money to the Contractor by the Principal, the Superintendent may require the Contractor:
- (a) to deliver to the Superintendent a statutory declaration in the form attached to these conditions by the Contractor, or where the Contractor is a corporation, by the representative of the Contractor who is in a position to know the facts attested to that:
 - (i) all Subcontractors of the Contractor have been paid all that is due and payable to such subcontractors up to the date of submission by the Contractor of a progress claim in respect of the work under the Contract; and
 - (ii) all its workers who at any time have been engaged on work under the Contract by the Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of a progress claim, in respect of their engagement on the work under the Contract;

and, if requested in writing, reasonable supporting documentary evidence thereof,

- (b) to deliver to the Superintendent a Statutory Declaration in the form attached to these conditions by any Subcontractor, or where the Subcontractor is a corporation, by the representative of the Subcontractor who is in a position to know the facts attested to -
- (i) that all workers who have been engaged by a Subcontractor of the Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of a progress claim in respect of their engagement on the work under the Contract; and
 - (ii) that all Subcontractors of the Subcontractor have been paid all that is due and payable to such Subcontractors up to the date of submission by the Contractor of a progress claim in respect of the work under the Contract

and, if requested in writing, reasonable supporting documentary evidence thereof.

- 38.7 The Contractor acknowledges that the Principal may release to a Subcontractor details of payments in percentage terms made by the Principal to the Contractor in respect of the works or any part thereof unless the Contractor shows reasonable grounds why such details should not be released or satisfies the Principal that all payments due and payable to the Subcontractor by the Contractor have been paid.
- 38.8 If a worker or Subcontractor obtains a court order in respect of monies referred to in clause 38.3 and produces to the Principal the court order and a Statutory Declaration that it remains unpaid, the Principal may pay the amount of the order, and costs included in the order, to the worker or Subcontractor and the amount paid shall be a debt due from the Contractor to the Principal.
- 38.9 After the making of a sequestration order or a winding up order in respect of the Contractor, the Principal shall not make any payment to a worker or Subcontractor without the concurrence of the official receiver or trustee of the estate of the bankrupt or the liquidator as the case may be.

39. DESIGN RESPONSIBILITY

If stated in the Annexure to the Conditions of Contract, the following clauses have been added to AS4305 - 1996.

39.1 Design

39.1.1 The Contractor shall:

- (a) complete the design and documentation of the Works including working drawings and trade specifications in accordance with the provisions of the Contract and all relevant Statutory Requirements;
- (b) have the same liability to the Principal as would an Architect designing and documenting the Works independently under a separate contract with the Principal;
- (c) ensure that materials and standards of workmanship prescribed in drawings, trade specifications and other documents are fit for the purpose, consistent with the nature and character of the Works and in accordance with the Contract. Local preferences and trade practices shall be considered in the selection of materials, systems and services.

39.1.2 The Contractor warrants to the Principal that:

- (a) the Contractor will exercise the proper skill, care and diligence expected of a competent design professional;
- (b) the design and the Works complies with this contract and is fit for the purpose in all respects.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975 or any review or approval of the design undertaken by or on behalf of the Principal.

The Contractor acknowledges that the Principal is relying on the Contractor's skill and judgement in undertaking the design and construction of the Works.

39.2 Building Act

39.2.1 The Authority stated in Item 28 shall be the Authority for the purpose of Building Act approval.

The Contractor shall be responsible for obtaining approval under the Building Act 1975 in respect of the design. For this purpose the Contractor shall pay all fees and submit to the Authority all material necessary for obtaining such approval.

The Contractor shall not carry out or cause to be carried out any building work in respect of which the Building Act 1975 requires approval unless such approval has been obtained.

The Contractor shall remain responsible for the design notwithstanding any approval given under the Building Act 1975, nor any review of approval of the design undertaken on behalf of the Principal.

39.2.2 The Contractor shall allow a minimum of twenty-eight (28) days for Building Act approval.

The Contractor shall liaise with the Principal's Supervisor in order to ascertain requirements with respect to Building Act inspections.

During construction, plumbing and sanitary drainage installations shall be inspected by, and shall comply with the requirements of, the applicable Authority's plumbing and drainage Inspectors. Fees for inspections shall be paid by the Contractor.

39.2.3 Approvals and certificates issued by the relevant Authorities shall be surrendered to the Principal following Practical Completion of the Works."

40. COMPLIANCE WITH STATUTES

The Contractor shall comply with all requirements of any Statute or authority having jurisdiction with regards to the Works and shall, at its own expense, obtain all necessary consents required by or under such Statute or authority.

41. GST AND PAYG

41.1 Definitions

(a) Terms defined by the GST Law and PAYG Law and used (without separate definition) in this clause, shall have the meaning given to them by the GST Law or PAYG Law;

(b) For the purposes of this clause:

"GST" means goods and services tax or tax equivalents as imposed by the GST Law;

"GST Law" has the meaning given to that term in A New Tax System (Goods and Services Tax) Act 1999 or, if that Act does not exist for any reason, means any Act imposing or relating to the imposition or administration of a goods and services tax in Australia and any regulation made under that Act, including any Act or arrangement relating to the operation or administration of a voluntary or notional GST or tax equivalents regime referred to in clause 17 of the Intergovernmental Agreement on the Reform of Commonwealth-State Financial relations dated June 1999;

"PAYG Law" means any Act dealing with or relating to the introduction or administration of the PAYG system referred to in Schedule 1 of the Taxation Administration Act 1953;

"registered for GST" means registered as a supplier under the GST Law and in respect of the Contractor, also having provided an ABN to the Principal;

"tax invoice" has the meaning given to that term by the GST Law and includes a recipient created tax invoice for the purposes of clause 41.4.

41.2 GST Included

(a) The Contract Sum includes any GST on taxable supplies to be made under the Contract (as at the Date of Acceptance of Tender);

- (b) Where the Contract Sum includes any provisional sum or provisional delay amount, the Contract Sum shall, in addition to the provisional sum or provisional delay amount, include any allowance for GST for that provisional sum or provisional delay amount;
- (c) Where under the Contract a party is obliged to pay the other party an amount calculated by reference to the cost, expense, loss or other liability suffered or incurred by that other party ("Reimbursable Liability") the party shall pay the aggregate of:
 - (i) the Reimbursable Liability net of input tax credits available to the other party in respect of the Reimbursable Liability; and
 - (ii) GST (if any) incurred by the other party in respect of the recovery by the other party of the Reimbursable Liability under the Contract;
- (d) Where under the Contract a party is obliged to pay the other party an amount (other than the Contract Sum) calculated by reference to an agreed rate or an agreed lump sum, unless the agreed rate or lump sum is expressed to include GST, the party shall pay the aggregate of:
 - (i) the amount calculated by reference to the agreed rate or the agreed lump sum (as the case may be) ("Agreed Amount"); and
 - (ii) GST (if any) incurred by the other party in respect of the recovery by the other party of the Agreed Amount under the Contract;
- (e) No other provision of the Contract shall operate to give the Contractor any claim in connection with GST.

41.3 Notification of GST Registration Status

- (a) The Contractor warrants to the Principal that:
 - (i) the Contractor is registered for GST as at the Date of Acceptance of Tender and shall maintain that registration until the issue of a Final Certificate under the Contract; and
 - (ii) the Contractor's ABN notified by the Contractor to the Principal is correct;
- (b) The Contractor shall immediately notify the Principal if at any time the Contractor ceases to be registered for GST.
- (c) The Principal acknowledges it is registered for GST and shall notify the Contractor if at any time the Principal ceases to be registered for GST.

41.4 Principal Created Tax Invoices

- (a) This clause 41.4 applies in respect of taxable supplies made to the Principal unless:
 - (i) the Contractor is not registered for GST;
 - (ii) the parties are bound by a Voluntary Agreement;
 - (iii) the Principal is not entitled under GST Law to issue tax invoices in respect of taxable supplies made to the Principal; or
 - (iv) the Principal has at any time notified the Contractor that this clause 41.4 is not to apply.
- (b) Whether or not this clause 41.4 is to apply at any time may be determined by the Principal in its absolute discretion;
- (c) Where this clause 41.4 applies:
 - (i) the Principal may issue tax invoices and adjustment notes in respect of taxable supplies made to it;
 - (ii) the Contractor shall not issue tax invoices or adjustment notes in respect of taxable supplies made to the Principal;

- (iii) where the Principal or Superintendent (on the Principal's behalf) issues a tax invoice or adjustment note in respect of any taxable supply made to the Principal, the Principal shall ensure a copy of the tax invoice or adjustment note is provided to the Contractor within 28 days of the Superintendent certifying the amount of the payment or adjustment to be made in respect of the taxable supply;
- (iv) until the Principal notifies the Contractor otherwise, the Principal appoints the Superintendent its agent for the purposes of issuing and providing to the Contractor tax invoices or adjustment notes in respect of taxable supplies made to the Principal; and
- (v) the Contractor shall immediately notify the Principal if it becomes aware of any adjustment event relevant to a tax invoice issued by the Principal.

41.5 Supplier Created Tax Invoices

- (a) This clause 41.5 applies to the extent clause 41.4 does not apply where:
 - (i) the Contractor is registered for GST; and
 - (ii) the parties are not bound by a Voluntary Agreement.
- (b) Where this clause 41.5 applies:
 - (i) despite any other provision of the Contract:
 - A. the Principal shall not be obliged to pay the Contractor any amount certified by the Superintendent to be payable in respect of a taxable supply, until 7 days after the Contractor has provided to the Superintendent a tax invoice in respect of the amount payable; and
 - B. within 7 days after the Superintendent certifies any amount to be payable by the Contractor to the Principal in respect of a taxable supply the Principal shall provide to the Contractor a tax invoice in respect of the payment.

41.6 PAYG Withholding

- (a) This clause 41.6 applies where:
 - (i) the Contractor is not registered for GST; or
 - (ii) the parties are bound by a Voluntary Agreement.
- (b) Whether or not the Principal should bind itself to a Voluntary Agreement at any time may be determined by the Principal in its absolute discretion.
- (c) Where this clause 41.6 applies, the Principal shall be entitled to withhold from any payment otherwise due to the Contractor under or in connection with the Contract tax calculated and to be held in accordance with the PAYG Law.

This Annexure takes the place of the Annexure to the Australian Standard Minor Works Contract Conditions.

ANNEXURE to the Australian Standard Minor Works Contract Conditions

This Annexure shall be completed and issued as part of the tender documents and, subject to any amendments to be incorporated into the Contract, is to be attached to these Contract Conditions and shall be read as part of the Contract.

Item

- | 1 | The Principal: (Clause 1) | Crown in the right of the State of Queensland through the Director General, Education Queensland | | | | | | | | | | | | | | | | |
|--|---|--|-----------------|------------------------------------|-------------------------|---|------------------------------|---|--|---|--|---|---|---|------------------------------------|---|--|---|
| 2 | Address of the Principal: | Education House
30 Mary Street
Brisbane Qld 4002 | | | | | | | | | | | | | | | | |
| 3 | The Contractor: (Clause 1) | As per the accepted tender | | | | | | | | | | | | | | | | |
| 4 | The address of the Contractor: | As per the accepted tender | | | | | | | | | | | | | | | | |
| 5 | The Superintendent: (Clause 1) | As per Letter of Acceptance | | | | | | | | | | | | | | | | |
| 6 | The address of the Superintendent | As per Letter of Acceptance | | | | | | | | | | | | | | | | |
| 7 | The Contract Documents comprise: (Clauses 1 and 4) | <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Document</u></th> <th style="text-align: right;"><u>No of copies to be provided</u></th> </tr> </thead> <tbody> <tr> <td>(a) the accepted Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(b) the Conditions of Tender</td> <td style="text-align: right;">1</td> </tr> <tr> <td>(c) Minor Works Contract Conditions (AS 4305 - 1996)</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(d) the Special Conditions of Contract</td> <td style="text-align: right;">4</td> </tr> <tr> <td>(e) the Code of Tendering (AS 4120 - 1994) as amended by the Conditions of Tender</td> <td style="text-align: right;">0</td> </tr> <tr> <td>(f) the Specification and Drawings</td> <td style="text-align: right;">4</td> </tr> <tr> <td>(g) other documents as are issued and/or referred to by the Principal for the purpose of tendering</td> <td style="text-align: right;">4</td> </tr> </tbody> </table> | <u>Document</u> | <u>No of copies to be provided</u> | (a) the accepted Tender | 1 | (b) the Conditions of Tender | 1 | (c) Minor Works Contract Conditions (AS 4305 - 1996) | 0 | (d) the Special Conditions of Contract | 4 | (e) the Code of Tendering (AS 4120 - 1994) as amended by the Conditions of Tender | 0 | (f) the Specification and Drawings | 4 | (g) other documents as are issued and/or referred to by the Principal for the purpose of tendering | 4 |
| <u>Document</u> | <u>No of copies to be provided</u> | | | | | | | | | | | | | | | | | |
| (a) the accepted Tender | 1 | | | | | | | | | | | | | | | | | |
| (b) the Conditions of Tender | 1 | | | | | | | | | | | | | | | | | |
| (c) Minor Works Contract Conditions (AS 4305 - 1996) | 0 | | | | | | | | | | | | | | | | | |
| (d) the Special Conditions of Contract | 4 | | | | | | | | | | | | | | | | | |
| (e) the Code of Tendering (AS 4120 - 1994) as amended by the Conditions of Tender | 0 | | | | | | | | | | | | | | | | | |
| (f) the Specification and Drawings | 4 | | | | | | | | | | | | | | | | | |
| (g) other documents as are issued and/or referred to by the Principal for the purpose of tendering | 4 | | | | | | | | | | | | | | | | | |
| 8 | This items is not used | | | | | | | | | | | | | | | | | |
| 9 | Payments under the Contract shall be made at: | Brisbane | | | | | | | | | | | | | | | | |
| 10 | This item is not used | | | | | | | | | | | | | | | | | |
| 11 | The period of time for Practical Completion: (Clause 1) | 18 weeks after the date of acceptance of the Mechanical and Electrical tender (as adjusted pursuant to the Contract) | | | | | | | | | | | | | | | | |
| 12 | Security (if provided): (Clause 3.1) | Amount: Not to be provided

Form : Either cash or an undertaking, in a form approved by the Principal, provided by a financial institution approved by the Principal or cash paid in honour thereof. | | | | | | | | | | | | | | | | |

- | | | |
|----|---|---|
| 13 | Time for provision of security: (Clause 3.1) | Not to be provided |
| 14 | Amount of limit of indemnity for damage to persons and property: (Clause 8(a)) | Unlimited |
| 15 | The party to effect a contract works policy of insurance: (Clause 9) | Contractor |
| 16 | The amount of contract works insurance cover: (Clause 9) | The Contract Sum plus 20% |
| 17 | The party to effect a public liability policy of insurance: (Clause 10) | The Contractor |
| 18 | The amount of public liability insurance cover in respect of any one occurrence shall be not less than: (Clause 10) | \$10,000,000 |
| 19 | The time for giving possession of the Site to the Contractor: (Clause 15) | 7 days after the date of acceptance of tender |
| 20 | Liquidated damages: (Clause 20) | \$ 100 per day |
| 21 | Extra cost per day for delay or disruption: (Clause 21) | 8% of the Contract Sum ÷ (7 x the period of time for practical completion at item 11) |
| 22 | The defects liability period: (Clause 22) | 52 weeks |
| 23 | Times for payment claims: (Clause 24) | Monthly |
| 24 | The rate of interest on overdue payments: (Clause 24) | 10% per annum + the rate comprising the annual rate, as published from time to time by the Reserve Bank of Australia, for 90 day bills current at the date the payment became due |
| 25 | This item is not used | |
| 26 | This item is not used | |
| 27 | Special Conditions of Contract for Design Work shall / shall not apply: (Clause 39) | Clause 39 shall apply |
| 28 | The Authority for the purpose of Building Act approval: (Clause 39.2) | The Chief Building Surveyor, Queensland Government, Department of Public Works |

Conditions of Contract
Clause 3.1

Form of Undertaking

CONTRACT for ("the Contract")
At the request of ("the Contractor")
and in consideration of ("the Principal")
accepting this undertaking in lieu of Retention Moneys provided for in the contract and, without limiting the generality thereof, for the provision of security to any Subcontractor of the Contractor in respect of a Subcontractors' Charge under the Subcontractors' Charges Act or any other claims which any Subcontractor has against the Principal pursuant to some other legal entitlement,
.....
("the Financial Institution") unconditionally undertakes to pay on demand any sum or sums which may from time to time be demanded by the Principal to a maximum aggregate of \$
(.....)

The undertaking is to continue

- (i) until notification has been received from the Principal that the sum is no longer required by the Principal; or
- (ii) until this undertaking is returned to the Financial Institution; or
- (iii) until payment to the Principal by the Financial Institution of the whole of the sum.

Should the Financial Institution be notified in writing signed by or on behalf of the Principal that the Principal desires payment to be made of the whole or any part or parts of the sum, it is unconditionally agreed that the Financial Institution will make payment or payments to the Principal forthwith without reference to the Contractor and notwithstanding any notice given by the Contractor not to pay same.

Provided always that the Financial Institution may at any time without being required so to do pay to the Principal the sum of \$
.....)
less any amount or amounts it may previously have paid under this undertaking or such lesser sum as may be required and specified by the Principal and thereupon the liability of the Financial Institution hereunder shall immediately cease.

Dated at day of 200

SIGNED for and on behalf of (Financial Institution)

By its Attorney(s)-

..... (Name)

Pursuant to Power of Attorney No }
who hereby warrant that he has/they have not received }
notification of revocation of his/their appointment. } Attorney

in the presence of - }
..... Witness

Branch of Issue: Telephone:

Conditions of Contract
Clause 5

Confirmation of Subcontracts

(To be submitted to the Superintendent by the Contractor for all subcontracts entered into)

To: The Superintendent

From: *(the Contractor)*

Contract:

Pursuant to clause 5 of the Conditions of Contract I advise that I have entered into a subcontract for

.....
(specify the nature of the work)

The proposed subcontractor is
(specify the Subcontractor's name)

of

.....
(specify the Subcontractor's address)

and the total value of the subcontract is \$
(specify the subcontract value)

I confirm that the subcontract has been entered into in accordance with requirements of clause 5 and that the provisions concerning record of payment required by clause 38 of the conditions of contract have been established.

Signed
(Contractor)

Date: / /

RTI RELEASED



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY

(Conditions of Contract Clause 35)

COMPLIANCE PLAN

(Form to be completed and returned within 14 working days of the Date of Acceptance of Tender)

PRINCIPAL CONTRACTOR

Legal Name:
Trading Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person:

PRINCIPAL

Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person:

CONTRACT DESCRIPTION

Contract Name:
Project Number:

As Contractor, you have given a Contractual commitment to comply with the Apprentice/Trainee Policy. Please provide details of where you intend to source your workers under structured training.

**Note: This is simply a guide to indicate your intentions.*

TENDER PRICE: \$ _____ x 0.12% (Building) (a) = _____ Total hours of compliance
or x 0.06% (Civil) (b) = _____ Total hours of compliance

- Up skilling your existing workers = _____ hrs
- Employing your own apprentices/trainees/cadets = _____ hrs
- Using Group Training Scheme apprentices/trainees/cadets = _____ hrs
- Using Q-Build apprentices/trainees/cadets = _____ hrs
- Using sub-contractor apprentices/trainees/cadets = _____ hrs
- Using RTCS apprentices/trainees/cadets = _____ hrs
- Other (please specify) _____ = _____ hrs

(c) = _____ Total hours of compliance
(should equal either a or b above)

(Signature of Principal Contractor or Authorised Person)

/ /2000

Form to completed and returned to: Project Officer (Construction Industry)
Division of Training
DETIR
LMB 527
GPO Brisbane Qld 4001



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

INTERIM COMPLIANCE REPORT

(To be submitted within 7 days of the expiration of the successive 13 week period commencing from the Date of Acceptance of Tender)

PRINCIPAL CONTRACTOR

Legal Name:
Trading Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person Position:

PRINCIPAL

Name:
Address:
Postcode:
Phone No: () Fax No: ()
Contact Person

CONTRACT DESCRIPTION

Contract Name:
Project Number:

CONTRACT PRICE: \$ _____ x 0.12% (building) = _____ total hours of compliance
or x 0.06% (civil) = _____ total hours of compliance

(1) Structured Training Hours Achieved
For The Period / / to / / = _____ hours

(Signature of Principal Contractor or Authorised Person)

/ /2000

(1) Structured Training Hours as defined in the 10% Training Policy Quick Guide available from DETIR on
ph: (07) 3237 0154 and Qld Purchasing on ph: 1800 631 991 or (07) 3235 4333

Form to be completed and returned to: Project Officer (Construction Industry)
Division of Training
DETIR
LMB 527
GPO Brisbane Qld 4001



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

PRACTICAL COMPLETION REPORT

(To be submitted within 14 days of the Date of Practical Completion, or if there is more than one, the last occurring Date of Practical Completion)

PRINCIPAL CONTRACTOR

LEGAL IDENTITY:
 TRADING NAME: (if different to legal)
 PQC REGISTRATION No PQC LEVEL:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON:

PRINCIPAL

NAME:
 ADDRESS: POSTCODE:
 PHONE No: () FAX No: ()
 CONTACT PERSON:

CONTRACT DESCRIPTION

CONTRACT NAME:
 Project Number:

DEEMED HOURS FOR TRAINING

CONTRACT PRICE: x 0.12% (building) = (Hours)
 or x 0.06% (civil) = (Hours)

TRAINING DETAILS

If insufficient space please see over

Apprentice/Trainee Name (a)	Training Agreement No. (b)	Apprenticeship/ Traineeship/ Cadetship (c)	Period of Engagement on Project (d)	Total Hours (e)	Employer (f)

Form to be completed and returned to:
 Project Officer (Construction Industry)
 Division of Training
 DETIR
 LMB 527
 GPO Brisbane Qld 4001

The above information is true and correct.

 Signature of Principal Contractor or Authorised Agent



Department of Employment,
Training and Industrial Relations

APPRENTICE/TRAINEE POLICY
(Conditions of Contract Clause 35)

PRACTICAL COMPLETION REPORT

(To be submitted within 14 days of the Date of Practical Completion, or if there is more than one, the last occurring Date of Practical Completion)

PRINCIPAL CONTRACTOR Defined as the contractor who was awarded the overall contract If registered under Pre-Qualification Criteria

LEGAL IDENTITY:

TRADING NAME: (if different to legal name)

PQC REGISTRATION No:

ADDRESS:

PHONE No: ()

CONTACT PERSON:

PQC LEVEL:

POSTCODE:

FAX No: ()

PRINCIPAL Defined as the Government department/statutory body you are dealing with in the administration of the contract

NAME:

ADDRESS:

PHONE No: ()

CONTACT PERSON:

POSTCODE:

FAX No: ()

CONTRACT DESCRIPTION As specified on contract - including location Legal or trade name of the employer listed on the training agreement that applies to the apprentice/trainee in column C. This may be a sub-contractor or group scheme.

CONTRACT NAME:

Project Number:

DEEMED HOURS FOR TRAINING Defined as the final contract sum for the whole

CONTRACT PRICE: x 0.12% (building) = (Hours)
or x 0.06% (civil) = (Hours)

TRAINING DETAILS
If insufficient space please see over

Apprentice/Trainee Name (a)	Training Agreement No. (b)	Apprenticeship/ Traineeship/ Cadetship (c)	Period of Engagement on Project (d)	Total Hours (e)	Employer (f)
For the purposes of compliance, the terms apprentices/trainees/cadets shall include any employees engaged in the following arrangements:					
> A formal apprenticeship or formal traineeship as provided for in State vocational education and training legislation (refer to the "Quick Guide" for a detailed list of acceptable trades); and					
> A cadetship or scholarship implying formal tertiary, professional or technical education.					

Form to be completed and returned to:

Project Officer (Construction Industry)
Division of Training
DETIR
LMB 527
GPO Brisbane Qld 4001

The above information is true and correct.

.....
Signature of Principal Contractor or Authorised Agent

Conditions of Contract
Clause 38

Record of Payment Form
(To be submitted to the Superintendent by the Contractor)

(The following to be inserted by the Principal)

1. Contract Description

Contractor

(The following to be inserted by the Contractor / Subcontractor)

2. Subcontractor

Address

Subcontract Description

SUBCONTRACTOR'S DECLARATION

It is hereby declared that the Subcontractor has received all moneys due and payable from the Contractor up to and including / / *(insert date on which payment received was due and payable.)*

Further payment to the Subcontractor from the Contractor is not anticipated to be due until / / *(insert date on which the next subcontract progress payment is anticipated to become due. If no further payment is anticipated to become due insert "N.A.")*

A further Record of Payment Form will be signed by the subcontractor in respect of the anticipated payment when it is received from the Contractor.

Signed *(Signature of Subcontractor or its representative)*

Name of signatory *(Please print)*

Date / /

Instructions:

Pursuant to clause 38 of the Conditions of Contract it is the responsibility of the Contractor to:-

- (i) ensure that sections 1. and 2. above are completed in full upon making any payment to a Subcontractor,
- (ii) notify the Superintendent of any refusal or failure by a Subcontractor to complete this Record of Payment form,
- (iii) retain this Record of Payment form as proof of payment that the Subcontractor has been paid, and
- (iv) provide this form upon request to the Superintendent.

Upon receipt of payment from the Contractor by the Subcontractor the Subcontractor is to:-

- (v) complete Section 2 and sign the "Subcontractor's Declaration" as appropriate, and
- (vi) return this Record of Payment form to the Contractor.

Conditions of Contract
Clause 38

Statement of Contractor

(To be submitted to the Superintendent by the Contractor with each payment claim)

To: The Superintendent

From: *(the Contractor)*

Contract:

Pursuant to clause 38 of the Conditions of Contract you are hereby notified as indicated below of the Subcontractors who have failed or refused to execute a Record of Payment form or to whom no payment has yet been made.

SUBCONTRACTOR NAME AND ADDRESS	SUBCONTRACT DETAILS
1.
2.
3.
4.
5.

Signed
(Contractor)

Date: / /

Conditions of Contract
Clause 38

Statutory Declaration by Contractor

Oaths Act 1867

Queensland
To Wit

I, of
.....
in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the Crown in
right of the State of Queensland through
.....
(the State) and
.....
"the Contractor" for
..... (the Contract).

1. I hold the position of

I am in a position to know the facts contained herein and to bind the Contractor by the terms of this
declaration, and I am duly authorised by the Contractor to make this declaration on its/his behalf.

2. All the Contractor's workers who at any time have been engaged on work under the Contract by the
Contractor have been paid, in accordance with the relevant Award or Industrial Instrument, all moneys
due and payable to them up to the date of submission by the Contractor of Progress Claim No

3. All Subcontractors of the Contractor have been paid all that is due and payable to them up to the date of
submission by the Contractor of Progress Claim No in respect of their part of the work under the
Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of
the Oaths Act 1867.

TAKEN AND DECLARED before me)
.....)
..... *name in full*) Contractor
.....)
.....)
at)
.....)
in the State of)
.....)
this day of 20...)
.....)
.....) A Justice of the Peace

Conditions of Contract
Clause 38

Statutory Declaration by Subcontractor

Oaths Act 1867

Queensland
To Wit

I, of

in the State of Queensland, do solemnly and sincerely declare that, in relation to the Contract between the Crown in right of the State of Queensland through

"the Contractor" for (the Contract)

[name of Subcontractor]

("the Subcontractor") is a Subcontractor to the Contractor for part of the work under the Contract, namely:

1. I hold the position of

I am in a position to know the facts contained herein and to bind the Subcontractor by the terms of this declaration, and I am duly authorised by the Subcontractor to make this declaration on its/his behalf.

2. All the Subcontractor's workers who at any time have been engaged on work under the Contract by the Subcontractor have been paid in accordance with the relevant Award or Industrial Instrument, all moneys due and payable to them up to the date of submission by the Contractor of Progress Claim
No

3. All Subcontractors of the Subcontractor have been paid all that is due and payable to them up to the date of submission by the Contractor of Progress Claim No in respect of their part of the work under the Contract.

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the Oaths Act 1867.

TAKEN AND DECLARED before me)

..... name in full) Subcontractor

at)

in the State of)

this day of 20....)

A Justice of the Peace





TENDER DOCUMENTS

Education Queensland

COOLER SCHOOLS 1999 PROGRAM

CONTRACT NO. 10

SCHOOLS

SAP P/N

Irrelevant 73(2) - refers to other schools

DUNDULA STATE SCHOOL 21779

101177

Irrelevant 73(2) - refers to other schools

SCOPE OF WORK

Subsidy Air-Conditioning
FSC Air-Conditioning Resource Centre
FSC Electrical Upgrade

Tender No: EDCP 0007
Date Issued: Friday, 28th July 2000
Time/Date Closing: **2PM, Tuesday, 15th August 2000**
Enquiries By Fax Only To: Peter Ahern
Fax: (07) 3405 5677

TENDER BOX
Strategic Procurement Section
Education House
Floor 13
30 Mary Street
Brisbane QLD 4002

Addendum No. **2.**

**Cooler Schools 99 Programme
Contract 10**

1. Irrelevant 73(2) **Specification Scope**

Insert

The Consumer Mains to be installed shall be 4 x 95mm².

RTI RELEASE

COOLER SCHOOLS 1999 Programme

M & E CONTRACTS

Education Queensland.
Tender: EDCP 0007
Contract no. 10 – ADDENDUM 1. (4 pages)

25TH August, 2000

The following additions and/or changes will apply to various sections of the documents as described below.

1. Change specification scope for various projects in accordance with attached sheet.

Irrelevant 73(2) - refers to anothe school

3. Closing time for tenders is hereby extended to 2pm, Tuesday 12th September, 2000.

Yours Sincerely,

s.78B

Peter Ahern
Programme Manager, Cooler Schools Programme,
Facilities and Services Branch.

Addendum No. 1

**Cooler Schools 99 Programme
Contract 10**

1. Dundula State School – Specification Scope

Clause 3.5.2

Insert:

The electrical installation work is to include the installation of Ergon conduits, and the supply and installation of the pillar.

Delete:

Upgrading of the existing cables and provision of new cables to supply the projected maximum demand of existing and anticipated buildings as shown in Table 3.3

Delete:

Provide submains to the Resource / Admin Block.

Insert:

Provide submains to the Resource / Admin Block and to the old MSB in Block A.

Insert:

Modify the old MSB as detailed in Table 3.4 Note 6.

Irrelevant 73(2) - refers to other schools

All Work Orders and Tasks for Dundula State School - MIMS13P

DSTRCT_CODE	WORK_ORDER	WO_DESC	STREET	SUBURB	AUTHSD_DATE	TABLE_DESC
WS	25016543	PROV ADDITIONAL STOREROOMS - WS1505	BUILDING 01 DUNDULA SS	BLOCK B	13/02/1997	TEACHING BLD. CONSTRUCT.
WS	25029438	UPGRADE CLASSROOM TO BLOCK B - WS3375	BUILDING 01 DUNDULA SS	BLOCK B	20/04/1999	TEACHING MINOR WORKS
WS	25016648	INSTALL SHELF & 2 XGPO'S - WS1565	BUILDING 02 DUNDULA SS	BLOCK	6/02/1997	MODULAR BLD. CONSTRUCT.
WS	25021353	SUPPLY/INSTALL COMPUTER GPO'S-WS2288	BUILDING 02 DUNDULA SS	BLOCK	9/02/1998	MODULAR BLD. CONSTRUCT.
WS	25061039	RPR FLOOR SHEETING.	BUILDING 02 DUNDULA SS	BLOCK	12/06/1997	MODULAR URGNT MAINTNCE.
WS	25061488	RPR HOLE IN WALL,RPL INDICATOR BOLTS,ETC	BUILDING 03 DUNDULA SS	BLOCK	14/07/1997	TOILET BLOCK URGNT MAINTNCE.
WS	25071339	RPRS TO FIBRO SHEET	BUILDING 03 DUNDULA SS	BLOCK	22/03/1999	TOILET BLOCK URGNT MAINTNCE.
WS	25011433	RPLFANS&LIGHTS;MECH RPRS SWITCHBOARD	BUILDING 04 DUNDULA SS	BLOCK A	4/02/1998	TEACH ACCELERATED MNT
WS	25012157	* EXTERNAL REPAINTING	BUILDING 04 DUNDULA SS	BLOCK A	8/01/1997	TEACH ACCELERATED MNT
WS	25012164	* PREPAINT MAINTENANCE	BUILDING 04 DUNDULA SS	BLOCK A	7/01/1997	TEACH PLANND. MAINT.
WS	25017817	ADMINISTRATION UPGRADE - WS1658	BUILDING 04 DUNDULA SS	BLOCK A	18/04/1997	TEACH BLD. CONSTRUCT.
WS	25022958	INSTALLATION-CLASSROOM UPGRADE - WS2742	BUILDING 04 DUNDULA SS	BLOCK A	2/07/1998	TEACH CL/ROOM UPGRADE
WS	25023806	INTERNAL REPAINT VARIOUS	BUILDING 04 DUNDULA SS	BLOCK A	25/08/1998	TEACH PLANND. MAINT.
WS	25016546	PROV STORAGE SHED - WS1506	BUILDING 05 DUNDULA SS	BLOCK	13/02/1997	STORAGE SHED BLD. CONSTRUCT.
WS	25027741	PROJECT MANAGE NEW MULTI-PURPOSE-WS2937	SITE DUNDULA SS		16/12/1998	BLD. CONSTRUCT.
WS	25028914	INSTALL TEMPORARY BUILDING - D&C	SITE DUNDULA SS		18/03/1999	BLD. CONSTRUCT.
WS	25029810	CONSTRUCT NEW AMENITIES BLOCK	SITE DUNDULA SS		26/05/1999	BLD. CONSTRUCT.

RTI RELEASED

All Work Orders and Tasks for Dundula State School - MIMSOE

DSTRCT_CODE	WORK_ORDER	table_desc	WO_DESC	WORK_GROUP	PC_COMPL	CREATION_DATE	AUTHSD_DATE	CLOSED_DT	ITEM_NAME_1	ITEM_NAME_2	PLANT_NO	WORK_ORDER_EXTENDED_TEXT
CP	55002876	CL/ROOM UPGRADE	CONSTRUCTION - SMART SCHOOL RENEWAL	CPWZS	100	29/04/2004	29/04/2004	24/11/2004	SITE DUNDULA SS		21779000	NULL
CP	55003754	ACCELERATED MNT	COMPLETE EXTERNAL REPAINTING, INCLUDING	CPWZS	100	17/08/2004	17/08/2004	17/12/2004	BUILDING 01 DUNDULA SS	BLOCK B TEACHING	21779001	PRE-PAINT MAINTENANCE (WS7242)
CP	55004485	ACCELERATED MNT	PART RE-ROOF OF BLOCK (WS7518)	CPWZS	100	5/11/2004	5/11/2004	20/05/2005	BUILDING 04 DUNDULA SS	BLOCK A TEACHING	21779004	NULL
												IMAS ELEMENT:Internal PaintingIMAS DEFECT DESCRIPTION:The internal paintwork to Block B is marked and scuffed. IMAS TASK UNIQUE IDENTIFIER:75685IMAS ASSESSMENT DATE: 14/11/01OLD WORK ORDER NUMBER (IF APPLICABLE):WS71005753IMAS COMMENTS:
CP	71017557	PLANNED MAINT	COMPLETE INTERNAL REPAINT (CB7450)	CPWZS	100	22/04/2003	26/08/2004	8/02/2005	BUILDING 01 DUNDULA SS	BLOCK B TEACHING	21779001	PRE-PAINT MAINTENANCE (CB6844) IMAS ELEMENT:External PaintingIMAS DEFECT DESCRIPTION:Block A. The external paintwork is in an extremely poor condition. Large areas of paint have peeled off the walls, leaving bare timber exposed to all weather conditions. IMAS TASK UNIQUE IDENTIFIER:75749IMAS ASSESSMENT DATE: 15/11/01OLD WORK ORDER NUMBER (IF APPLICABLE):WS71005761IMAS COMMENTS:
CP	71017565	PLANNED MAINT	COMPLETE EXTERNAL REPAINTING, INCLUDING	CPWZS	100	22/04/2003	16/02/2004	1/07/2004	BUILDING 04 DUNDULA SS	BLOCK A TEACHING	21779004	31/5/00 W/O APPROVED, WE ARE TO ENSURE QUOTES ARE CALLED & AN ORDER PLACED TO CARRY OUT THE WORK IN THE JULY HOLIDAYS*DO NOT BILL THIS FINANCIAL YEAR - APPROVED FROM 2000/01FUNDING BY GLEN HAYWARD.01 FUNDS. FIONA CLARKE.
WS	25001704	MAJ WKS>\$250K	DEMOLITION OF OLD TOILET BLOCK - WS3634	WSSZA	100	24/11/1999	24/11/1999	19/04/2000	BUILDING 03 DUNDULA SS	BLOCK STORE SHED NO 1	21779003	SUPPLY AND INSTALLATION OF NEW WINDOW AWNING SHEETING TO THE SOUTHERN SIDE OF BLOCK B,
WS	25001897	PLANNED MAINT	REROOFING TO HIGH ROOF	WSSZA	100	8/02/2000	31/05/2000	21/09/2000	BUILDING 04 DUNDULA SS	BLOCK A TEACHING	21779004	SUPPLY AND INSTALLATION OF NEW WINDOW AWNING SHEETING TO THE NORTHERN SIDE OF BLOCK B,
WS	25004510	PLANNED MAINT	REPLACE WINDOW AWNING SOUTH SIDE	WSSZB	100	1/09/2000	11/09/2000	22/12/2000	BUILDING 01 DUNDULA SS	BLOCK B TEACHING	21779001	REMOVE ROOFING TO INSTALL NEW CEILING TILE (SUPPLIED BY QBUILD). PROVIDE NEW SOAKA FLASHING TO ELIVATE FUTURE FLOODING
WS	25004511	PLANNED MAINT	REPLACE WINDOW AWNING NORTH SIDE	WSSZB	100	1/09/2000	11/09/2000	22/12/2000	BUILDING 01 DUNDULA SS	BLOCK B TEACHING	21779001	REMOVE ROOFING TO INSTALL NEW CEILING TILE (SUPPLIED BY QBUILD). PROVIDE NEW SOAKA FLASHING TO ELIVATE FUTURE FLOODING
WS	25004513	PLANNED MAINT	RPL CEILING TILE & FIX LEAK TO VENT PIPE	WSSZB	100	1/09/2000	11/09/2000	22/12/2000	BUILDING 19 DUNDULA SS	BLOCK PREP YEAR UNIT	21779019	COMPLETE INTERNAL REPAINT. COLOURS TO BE OBTAINED FROM SITE.
WS	25005036	MAJ WKS>\$250K	CSP99 BLDG WORKS - CONT 3/10	WSSZA	100	27/11/2000	30/11/2000	24/05/2001	VARIOUS BUILDS DUNDULA SS		217790VB	REPLACE STEP TREADS TO BLOCK A (CB5673)
WS	25009559	MAJ WKS>\$250K	COOL SCHOOL BUILDING WORKS ROUND 3 CON 4	WSSZB	100	6/09/2002	25/10/2002	27/05/2003	SITE DUNDULA SS		21779000	
WS	25029438	MINOR WKS PROG	UPGRADE CLASSROOM TO BLOCK B - WS3375	WSSZA	100	20/04/1999	20/04/1999	24/09/1999	BUILDING 01 DUNDULA SS	BLOCK B TEACHING	21779001	NULL
WS	25029810	MAJ WKS>\$250K	CONSTRUCT NEW AMENITIES BLOCK	WSSZA	100	26/05/1999	26/05/1999	29/06/2000	SITE DUNDULA SS		21779000	4/6/99-COST CENTRE CH FROM ASBP68000 TO ED QLD (KINHILL)-T.TT
WS	71003774	PLANNED MAINT	FULL INTERNAL REPAINT	WSSZA	100	25/09/2001	25/09/2001	15/11/2001	BUILDING 19 DUNDULA SS	BLOCK PREP YEAR UNIT	21779019	COMPLETE INTERNAL REPAINT. COLOURS TO BE OBTAINED FROM SITE.
WS	71007894	PLANNED MAINT	REPLACE REAR LANDING TO ADMIN BLOCK AND	WSSZA	100	9/12/2002	9/12/2002	18/03/2003	SITE DUNDULA SS		21779000	REPLACE STEP TREADS TO BLOCK A (CB5673)

RTI RELEASED