

3. Specification

Table of Contents – Specification

1 PRELIMINARIES	24
1.2 Approved Suppliers And Subcontractors	24
1.3 Scope Of Works	24
1.4 Documents	24
1.5 Contractural.....	25
1.6 Permits, Regulations And Authorities.....	26
1.7 MATERIALS.....	27
1.8 CONTRACTOR'S PROJECT MANAGEMENT	27
1.9 Limitation Of Work Area	28
1.10 Defects Liability, Practical & Final Completion	28
1.11 Traffic And Access.....	29
1.12 Existing Conditions	29
1.13 Services	30
1.14 Contact Arrangements And Records	31
1.15 Access And Loading.....	31
1.16 SITE IDENTIFICATION AND SIGN BOARDS.....	32
1.17 TEMPORARY HOARDING AND SAFETY FENCES	32
1.18 HOURS OF WORK.....	33
1.19 MAKING GOOD.....	33
1.20 NOISE AND DUST	34
1.21 FIRE SAFETY.....	35
1.22 Variations.....	35
1.23 CONTRACTOR'S CONSTRUCTION PROGRAMME	35
1.24 CONTRACTOR'S REPRESENTATIVE	36
1.25 Occupational health and safety	37
1.26 CLEANING	39
2 SITE PREPARATION	40
2.1 REMOVAL OF TREES.....	40
2.2 WORK NEAR TREES	40
2.3 RETENTION & PROTECTION OF EXISTING TREES.....	41
2.4 MAKING GOOD	41
3 GATES.....	41
3.1 Materials.....	41
3.2 Design	41
3.3 Security of gardens	42
3.4 Connection of existing fence	42
3.5 Practical & Final Completion	42
3.6 Maintenance.....	42
3.7 Miscellaneous	42

1.2 Approved Suppliers And Subcontractors

All sub contractors shall be qualified and experienced in the scale and nature of works to be completed. The Contractor must submit the names of any proposed sub contractors for approval of the Superintendent before entering into subcontract arrangements.

1.3 Scope Of Works

The Works include construction of all work necessary for the proper completion and functioning of the Works described in this Specification.

The Works include the provision of all materials, plant, and labour of whatever kind necessary for the complete and proper undertaking of the Works.

The Contractor shall be fully familiar with the type of work necessary and have visited the site to ensure a full understanding of site requirements and therefore the extent of the Works.

Where the Works are continuous with adjacent existing works, the Contractor is responsible for making the proper junction between the two sections and for making good any damages caused to adjoining works.

The Works include but are not limited to:

- a) detailed design of four gates, including provision of construction documents necessary for manufacture and installation of the gates;
- b) demolition and removal of up to four of the existing gates;
- c) manufacture of up to four gates;
- d) delivery and installation of up to four gates, including all necessary footings and support structures.
- e) making good any damage to the existing infrastructure, including existing fence, paths, pavement or any underground utilities;
- f) coordination and project management of works; and
- g) provision of a Maintenance Manual.

1.4 Documents

1.4.1 The Drawings

The Contractor must submit detailed design drawings for acceptance by the Superintendent prior to manufacture of the gates. Council will retain ownership of design drawings, even in the case if one or more gates are not built.

1.4.2 On site drawings

Retain one complete and current set of contract documents for the duration of the Works for inspection by the Superintendent.

1.4.3 As-built Drawings

During construction, keep accurate as-built records of sizes, locations and depths of footings, support structures and gates. Before Practical Completion, submit the as-built drawings to Superintendent.

1.5 Contractural

1.5.1 Definitions used in the Specification

Defined expressions in the Contract shall have the same meaning in the Specification and the following expressions used in this Specification shall have the meanings shown in *Table 1*.

Approval	Means approval by the Superintendent in writing.
Approved	Means such approval by the Superintendent has been obtained, or is required before commencing the applicable work.
directed	Means directed by the Superintendent.
Give notice	“Give notice”, “submit”, “advise”, “inform” and similar expressions mean “give notice (submit, advise, inform) in writing to the Superintendent”.
including	Means including but not limited to.
indicated	Means indicated or described in the Contract Documents.
inspected	Means inspected by the Superintendent.
provide	Means supply, deliver and install, and includes manufacture, fabricate, finish, test and commission as applicable.
required	Means required by the Contract Documents, or by a relevant authority, or by law, or as required by site conditions to complete the whole or part of the Works, or directed by the Superintendent.
Samples	Includes samples, prototypes and sample panels.
Submit	Means submit to the Superintendent for approval, unless indicated as required for information only.

Table 1

1.5.2 General Conditions Of Contract

The Works shall be carried out under the terms and conditions of the Contract (AS 2124 1992) which shall take precedence over these preliminaries.

1.5.3 Insurance

Insurance shall be effected before the Works are commenced and maintained until the end of the maintenance period.

The Contractor shall have the following insurance cover:

- a) public liability to the value of \$10,000,000;
- b) workers' compensation insurance to cover any person employed by the Contractor and extending to cover any sub contractors that are not covered by their own workcover insurance; and
- c) goods in transport to the value of \$200,000.00.

No Works will be permitted to commence until the Superintendent has approved the insurances.

1.6 Permits, Regulations And Authorities

1.6.1 Generally

The Works shall comply with all relevant legislation, Australian Standards and Codes and the local laws, requirements and regulations of relevant authorities.

The expression "relevant authority" means any statutory or other organisation, and its employees and agents, having jurisdiction over the Works, and includes the authorities which supply services, including electricity, water, telephone, gas, sewerage, drainage and the like.

Except in the case of the building permit and the heritage permit, the Contractor shall make all applications and pay all fees required by any relevant authority. The Contractor shall prepare and submit applications including those which are required to be signed by the Principal.

The Contractor shall submit progressively evidence of applications made and fees paid, and submit copies of permits received by it from the issuing authorities.

1.6.2 Payments

The Principal shall pay for the following as appropriate:

- a) application fees (except in relation to the building permit) and inspection fees;

- b) water supply contribution, meter fees, and tapping fees (applicable only if the water meter/back flow valve is to be moved); and
- c) the Contractor shall arrange required inspections by the relevant services authority (if and when required) and submit associated documentation and records to the Superintendent.

1.6.3 Public Roads, Paths and Crossovers

The Contractor shall apply for and pay for refundable amounts and permits for use related to closure of adjacent public roads, paths and crossovers (if required). The Contractor shall arrange required preliminary and final inspections with the relevant authority and obtain all relevant clearance certificates.

1.7 MATERIALS

1.7.1 Samples

Submit representative samples of all materials used in manufacture and installation of the gates to the Superintendent for approval prior to use.

1.7.2 Usual, incidental and necessary work

Where an item or process is usual, incidental or necessary, or is reasonably and properly to be inferred from the contract documents, and items not expressly indicated but necessary for the completion of the Works, shall be deemed to be included, whether described or indicated in the Contract Documents, or not.

Include all work required by the condition of existing infrastructure, whether indicated in the Contract Documents, or not.

1.7.3 Ordering

No extension of time will be granted if any material or product is not available because of late ordering.

1.8 CONTRACTOR'S PROJECT MANAGEMENT

1.8.1 Site meetings

Attend site meetings with the Superintendent to review progress, co-ordination and other matters.

Site meetings shall be held at a regular time and place each fortnight, or at regular intervals determined by the Superintendent.

Site meetings shall be chaired and minuted by the Superintendent. Distribute minutes to those present within seven days.

Arrange the attendance of relevant site personnel, and other parties if directed.

1.9 Limitation Of Work Area

The Contractor shall ensure, as practically possible, that all plant, equipment and materials are kept or stored within the construction area only.

Under no circumstances shall paths, gardens or roads outside the construction area be disturbed or encroached upon as part of the Works.

1.10 Defects Liability, Practical & Final Completion

1.10.1 Defects Liability

The Contractor shall be responsible for and make good any defects in materials or workmanship associated with the hard surface elements as advised by the Superintendent for a **fifty two (52) week** period after the date of Practical Completion.

Any elements that show defects in materials or workmanship shall be repaired or replaced to the satisfaction of the Superintendent and all costs of repair or replacement shall be born by the Contractor.

The Defects Liability Period shall commence on the date of Practical Completion.

1.10.2 Practical Completion

The Contractor shall ensure that all Works are complete prior to expiration of the period for Practical Completion.

A Certificate of Practical Completion shall be provided only when all the contract conditions have been met.

A Certificate of Practical Completion shall only be valid if all designated documents are provided within 14 days of the inspection date.

1.10.3 Final Completion

For the purposes of issuance of the Final Certificate, all Works shall be completed (including the satisfactory completion of all defects indicated at Practical Completion).

1.10.4 Delays and Stoppages

All delays and stoppages, in the progress of the work arising from disputes regarding quality of materials or workmanship, damage or injury as a result of the actions of the Contractor shall be solely and entirely at the risk and cost of the Contractor.

1.11 Traffic And Access

1.11.1 Adjacent roads, paths and land

Provide and maintain continuous pedestrian access to public areas. Do not close or obstruct any path unless required by the contract documents and carried out in accordance with the requirements of the relevant authorities.

Make arrangements with the relevant authorities for access to and from the site for personnel, goods and materials, and constructional plant and equipment.

1.12 Existing Conditions

1.12.1 Existing conditions survey

Before commencing the Works, arrange with the Superintendent to carry out a complete and detailed existing conditions survey of the immediate area, as a basis for resolving possible future claims regarding damage or defects attributable to the Works. The survey shall include clear photographs of existing conditions, including visible defects and damage.

The expression 'adjacent properties' means the whole or part of services, roads, footpaths, land, kerbs, channels, road openings, footpath crossings, parking areas, nature strips, garden beds and other facilities.

Submit two copies of the survey to the Superintendent. Provide each adjacent owner with a copy of the complete or relevant parts of the survey. Obtain and submit receipts or other records of providing such copies to each adjacent owner.

Regardless of any information provided by the Principal, the accuracy of the survey shall be the responsibility of the Contractor. Failure to carry out such a survey will be deemed as evidence that the Contractor acknowledges that there are no defects or damage to adjacent properties before commencement of the Works.

Progressively monitor any change in conditions to adjacent properties. Measure and mark any changes in cracks and record any level changes or out of plumb conditions.

1.12.2 Trees to be retained and/ or relocated

Generally

Before commencing work on site, assess and identify on site with the Superintendent all trees which are indicated to need partial cutting back or other work. No trees are to be removed.

The Superintendent shall arrange for Council arborist to approve any works proposed to any trees.

Existing trees outside the line of works shall be retained and protected during construction. Do not remove or cut back any trees for site sheds, storage, or access unless and before approved in writing by the Superintendent. Provide temporary protection to all trees in close proximity to construction work which may be damaged by such work. Protection may include fencing, barricades or other suitable procedures.

Excavation near trees to be retained

Notify the Superintendent and arrange a joint inspection before carrying out excavation within the root zone of all trees to be retained. Root zone shall be equal to the diameter of the tree canopy (drip line).

Notify the Superintendent if roots greater than 40 mm will be cut by excavation. Unless otherwise approved, excavation within the root zone shall be carried out by hand digging to minimise damage to the roots. Carry out initial digging to locate roots, cut roots by sawing, and apply approved tree wound sealant ('Steriprune' or equivalent). Do not use axes for cutting roots.

Damage to trees to be retained

Notify the Superintendent and arrange a joint inspection of any damage to trees to be retained. At the Superintendent's discretion, damaged trees shall be repaired by approved procedures or replaced.

Arrange and pay for all cutting back and repairs by an approved experienced specialist arborist. The Superintendent reserves the right to determine a monetary amount for the loss of amenity due to damaged trees and deduct that amount from the Contract Sum.

1.13 Services

1.13.1 General

Identification and protection of existing services

The Contractor must carry out all investigations necessary (including utilising the Melbourne One Call Service / Dial Before You Dig and physically detecting services on site using suitable electronic equipment) to locate and mark the location of all services within the works area and to retain and protect those services throughout the Contract term.

All damage to existing services which occurs during the Contract Term will be repaired or rectified at the Contractor's expense to the satisfaction of the Superintendent and the responsible authority.

Do not excavate by machine within 1 m of existing underground services.

Do not obstruct or damage roadways and footpaths, drains and watercourses and other existing services that are to remain in use on or adjacent to the site. Determine the location of such services. Rectify immediately any obstruction or damage to such services and provide temporary services whilst repairs are carried out.

Do not interfere with or damage property which is to remain on or adjacent to the site, including adjoining property, structures, trees or shrubs encroaching onto the site. Rectify immediately any interference or damage to such property.

Attend to existing services as follows:

- a) if the service is to be continued, repair, divert or relocate as required. If such a service crosses the line of a required trench, or will lose support when the trench is excavated, provide permanent support for the existing service; and
- b) clean and repair damage caused by installation or use of temporary work and restore existing facilities used during construction to original condition.

1.13.2 Light and Power

The Contractor is responsible to supply any light and power needed to manufacture and install the gates.

Cold water from existing supply points where not required for use by the occupants of the site may be used for work under the Contract at no cost to the Contractor.

1.14 Contact Arrangements And Records

1.14.1 TELEPHONE CONTACT

Supply the Superintendent with a telephone number for emergency contact.

1.15 Access And Loading

1.15.1 Parking

There shall be no car parking on the grounds of parks or reserves unless approved in writing by the Superintendent. Comply with imposed conditions, if any.

Make arrangements for car parking in legally designated areas which do not cause nuisance or obstruction to adjacent properties.

1.15.2 Loading

Set aside and clearly indicate on site loading and unloading areas where practicable. Coordinate location of loading areas with the Superintendent.

Where loading cannot take place on site, designate areas of adjacent roads and paths approved by the Superintendent and relevant authorities. Comply with all conditions for such use.

Do not store goods and materials on adjacent roads and paths unless approved in writing by the Superintendent and relevant authorities. Keep loading areas in a clean and safe condition at all times.

1.15.3 Skips and Bins

The Contractor must obtain a permit for any bin or skip to be located on the Principal's land or within a road reserve.

1.15.4 Security

The Contractor shall be responsible for all activities on the Site including providing access for authorised persons and restricting the access of unauthorised persons. The Contractor shall take all necessary precautions to secure the site, works, materials, plant and equipment during working and non-working hours from the date of commencement on-site to 4.00pm on the Date of Practical Completion.

1.16 SITE IDENTIFICATION AND SIGN BOARDS

1.16.1 Contractor's sign

Except where a Community Information Board is required, the Contractor may erect a sign or signs to identify itself and its subcontractors and suppliers. Such signs may be free-standing or attached to hoardings, fences or structures. All such signs shall be subject to the Superintendent's approval. Unless directed in writing, do not identify the Principal or any information regarding the Works. Remove any unauthorised advertisements or signs immediately discovered or as directed. Remove all signs before Practical Completion. The Principal reserves the right to display any sign on hoardings or elsewhere.

1.17 TEMPORARY HOARDING AND SAFETY FENCES

1.17.1 General

Enclose the Works with suitable temporary barriers and protection, prevent the entry of unauthorised persons onto the site, and prevent injury, damage, vandalism and theft. Supervise openings and access points to the Works during working hours. Any gates that are not at lock up stage during non-working hours must be secured with chain mesh fencing or temporary secure gate at no cost to the Principal.

1.17.2 Public access

Inconvenience to the general public shall be kept to a minimum at all times. The Contractor shall refer all community questions and comments directly to the Superintendent.

Where it is necessary that the site is closed to the public to facilitate the works, a safe alternate route shall be supplied by the Contractor including all signage, hazard and safety equipment as required and to the satisfaction of the Superintendent.

It shall be the Contractor's responsibility to maintain safe access around and within the site at all times.

1.18 HOURS OF WORK

Do not carry out on-site work outside working hours notified unless approved by the Superintendent. The Superintendent reserves the right to direct that working hours be further modified or restricted.

1.18.1 Working hours:

Working hours shall be between 7.00 a.m. to 5.30 p.m. Monday to Friday (excluding public holidays) subject to approval by the Superintendent.

Should the Contractor fall behind the Construction Programme by more than 1 week, the Superintendent may instruct the Contractor to work Saturdays to accelerate the works without variation or addition to the contract sum.

If the Contractor refuses to do so, the Superintendent shall be entitled engage a third party to carry out works as necessary to bring the Construction Programme back on schedule and all costs shall be borne by the Contractor

1.19 MAKING GOOD

1.19.1 General

Ground surfaces damaged during delivery, erection or installation of equipment shall be repaired to approval. Lawn shall be top dressed and reinstated to match existing condition to the approval of the Superintendent.

All damage shall be repaired to its as existing condition, and appearance, prior to damage.

1.19.2 Site Cleanliness

The Contractor must progressively:

- a) keep the Works, adjacent common areas and adjacent properties affected by the Works, clean and tidy at all times. Clear and remove dirt and debris from the site progressively. Provide sufficient personnel and equipment for cleaning operations; and
- b) provide and regularly empty disposal containers for demolished materials, debris, discarded and surplus goods and materials generated by the Works. Locate containers as close as practicable to the relevant work area. Containers shall not be located on public

roads or paths unless approved by the relevant authority and all required permits have been obtained and fees paid.

The Superintendent may require any area to be immediately cleaned during the construction period at no additional cost to the Principal.

Remove all dirt and debris attributable to the Works from adjacent roads, paths and properties in accordance with the requirements of the relevant authorities.

1.19.3 Vehicles and transportation:

Use trucks that will not spill or deposit dirt or debris on adjacent public roads, paths or properties. Clean the tyres and underside of trucks before leaving the site. Provide and maintain effective truck wash down and silt retention pits where required, and dispose of silt to a legal disposal location.

1.19.4 Completion

Before arranging handover inspections, finish, clean, and make good the Works including:

- a) clear and remove surplus materials, dirt, debris and the like;
- b) repair damage and defects to adjacent properties resulting from the Works;
- c) repair damage, stains and blemishes, or replace work where required.

1.19.5 Excavations

Protect excavations, groundworks and exposed slopes to ensure the safety of site personnel, adjacent property, and the general public at all times.

Provide temporary supports, bracing, shoring, planking and strutting as required.

Provide covers over holes. The Superintendent reserves the right to require additional temporary supports at no additional cost to the Principal. No direction by the Superintendent shall relieve or modify the complete responsibility of the Contractor.

1.20 NOISE AND DUST

Prior to the commencement of the Works the Contractor shall advise the Superintendent as to all equipment that the Contractor intends to utilise in carrying out any on-site works under this Contract. All such equipment shall comply with all relevant statutory and regulatory requirements including all applicable occupational health and safety ("OH&S") requirements.

Minimise nuisance to the public and adjacent properties from noise and dust from the Works. If directed, submit proposed procedures to minimise and control such nuisance and carry out approved procedures. Re-submit progressively any proposed changes to the approved procedures.

Limit noise-producing activities to normal working hours unless otherwise approved by the Superintendent. All constructional plant and equipment shall be fitted with noise suppressers, acoustic linings or screens. Sirens and loud hailers shall not be used except in an emergency. Use suitable equipment and procedures, screens and water spraying to reduce dust nuisance.

Spray dust-producing materials before loading in trucks or open containers. Use trucks with suitable covers for transporting dust-producing materials or materials that could be dislodged by wind.

1.21 FIRE SAFETY

Comply with the fire safety requirements of the relevant statutory authorities, Building Code of Australia and relevant codes and standards including AS 1851 Maintenance of fire protection equipment.

Carry out work affecting the continuity of existing services, at the most convenient time to minimise the duration of any interruption.

Where the work affects the continuity of the fire protection to the site:

- a) advise the local fire brigade of the extent and period of the interruption to the services;
- b) advise the Superintendent in writing of the extent and period of the interruption to the services; and
- c) implement the precautions required in the relevant codes.

Provide and maintain all required temporary fire protection equipment. Coordinate and comply with all Principal's existing fire safety procedures, if any. Store flammable materials safely in accordance with industry standards and relevant codes.

Remove flammable debris at the end of each day, including debris subject to spontaneous combustion. Do not light fires on or adjacent to the site.

1.21.1 Certificate of Compliance and Trade Warranty

The Contractor shall provide the Superintendent with copies of all certificates of compliance and trade warranties applicable to the Works before the Certificate of Practical Completion is issued.

1.22 Variations

Where the Contractor considers that there is an addition or reduction to the Works required the Contractor may propose a variation to the Contract. The Contractor shall not vary the work under the Contract except as directed in writing by the Superintendent.

1.23 CONTRACTOR'S CONSTRUCTION PROGRAMME

Within seven (7) working days of the Letter of Acceptance, provide to the Superintendent a detailed Construction Programme (“the Construction Programme”) for approval which illustrates how the project program will be met.

The Construction Programme shall include, in detail, dates and periods for work commencement, equipment inspections, hold points, delivery dates, testing and commissioning and date for practical completion of the work, etc.

Should the Contractor require trades personnel to work in excess of normal working hours to achieve the work program, the Contractor will be deemed to have allowed for this in the tender and no payment for such overtime, etc., will be granted.

The Contractor shall carry out the Works in accordance with the Construction Programme, unless prior written approval has been obtained from the Superintendent.

The Construction Programme shall include details regarding the commencement of, resources allocated to, and duration of the individual tasks or activities associated with the Works. The Construction Programme shall include, but not be limited to:

- a) site access and occupation for construction purposes;
- b) submission and approval of samples;
- c) delivery of materials and equipment to site;
- d) staging of the construction;
- e) inspection and approval;
- f) date for Practical Completion; and
- g) Defects Liability Period.

1.24 CONTRACTOR’S REPRESENTATIVE

The Contractor shall nominate a representative who shall:

- a) be responsible for the supervision of all of the Works to ensure that the workmanship and materials provided comply with the Contract and fall within acceptable building standards;
- b) be responsible for taking delivery, storing and protection of materials and equipment for the work under the Contract;
- c) be available (by telephone) at all times whilst work under the Contract is being performed;
- d) attend all on-site meetings requested by the Superintendent; and

- e) have the authority to receive and execute directions and notices under the Contract from the Superintendent. Any direction given to the Contractor's Representative shall be deemed to have been given to the Contractor.

1.25 Occupational health and safety

1.25.1 General

As a condition of this Contract, The Principal requires that the Contractor's employees or sub contractors engaged to perform a service on its behalf, will at all times identify and exercise all necessary precautions for the health and safety of all persons, including the Contractor's employees, the Principal's employees and members of the public.

The Contractor will inform itself of all OH&S policies, procedures or measures implemented or adopted by the Principal and/or the occupiers of any premises at or within which the Contractor will perform Works. The Contractor will comply with all such policies, procedures or measures; and in the event of any inconsistency, will comply with such procedures or measures as may produce the highest level of health and safety.

The Contractor will forthwith comply with any and all directions by the Principal relating to OH&S.

Promptly notify details of all accidents to the Superintendent, and provide monthly reports stating total hours worked, number of accidents and time lost, rehabilitation reports and other relevant information.

Remove from the site any person not wearing or using required safety clothing and equipment, or any person who refuses to carry out OH&S or related instructions

1.25.2 LEGISLATIVE COMPLIANCE

The Contractor must comply with and ensure that all its employees, sub-contractors and agents comply with any Acts, regulations, local laws, Codes of Practice, Australian Standards and the Principal's OH&S policy and procedures which are in any way applicable to this Contract or the performance of the Works.

1.25.3 Contractor OH&S Management Systems

The Contractor's OH&S Management System ("the OH&S Management System") must as a minimum, demonstrate compliance with all duties of an employer specified in the *Occupational Health and Safety Act 2004*.

The Contractor must when requested by the Superintendent, submit a complete copy of the OH&S Management System documentation that must include as a minimum requirement:

- a) OH&S policy and objectives;

- b) organisation structure and responsibilities;
- c) safe work practices and procedures;
- d) OH&S training and induction;
- e) OH&S auditing and inspection procedures;
- f) OH&S consultation procedures; and
- g) OH&S performance monitoring.

1.25.4 Incident Notification

If the Contractor is required under the provisions of the *Occupational Health and Safety Regulations 2007* or by any other regulations, to give any notice of an accident occurring during the performance by the Contractor, the Contractor shall immediately provide the Superintendent with a copy of the notice. The Contractor must promptly notify the Superintendent of any accident, injury, property or environmental damage that occurs during the carrying out of the Works. All lost time incidents shall be immediately notified to the Superintendent. The Contractor must, within three, (3), days of any such incident provide a report giving complete details of the incident, including results of investigations into its cause, and any recommendations or strategies for prevention in the future.

1.25.5 Non Compliance

If during the performance of Works the Principal informs the Contractor that it is the opinion of the Principal that the Contractor is:

- a) not conducting the work in compliance with the Contractor's OH&S Management System, relevant legislation or health and safety procedures provided by the Principal from time to time; or
- b) conducting the work in such a way as to endanger the health and safety of the Contractor's employees or the Principal's or its contractors' and sub-Contractors' employees, plant, equipment or materials;

the Contractor shall promptly remedy that breach of health and safety.

The Superintendent may direct the Contractor to suspend the work until such time as the Contractor satisfies the Principal that the work will be resumed in conformity with applicable OH&S provisions.

During periods of suspension referred to above, the Principal shall not be required to make any payment whatsoever to the Contractor.

If the Contractor fails to rectify any breach of health and safety for which the work has been suspended, or if the Contractor's performance has involved recurring breaches of health and safety, the Principal may as its option terminate the work forthwith, without further obligation to the Contractor. In this event, the Principal's liability shall

be limited to payment for the work performed and costs incurred by the Contractor up to the time of termination or an earlier suspension of Works.

1.25.6 OH&S Risk Assessment

The Contractor shall prepare and submit a risk assessment prior to commencing the Works. The risk assessment shall be used to record the risk assessment and risk control methods to be employed by the Contractor. The completed risk assessment shall be submitted to the Superintendent for review and approval prior to the commencement of Works. The Contractor must take responsibility and ensure the health and safety of all employees.

1.25.7 References

The Contractor must be aware of and comply with the statutory OH&S obligations and relevant acts, regulations and codes, including but not limited to:

Acts

the *Accident Compensation Act 1985*;
the *Dangerous Goods Act 1985*;
the *Equipment (Public Safety) Act 1994*; and
the *Occupational Health and Safety Act 2004*.

Regulations

The *Occupational Health and Safety Regulations 2007*.

1.26 CLEANING

1.26.1 Progressively

Keep the Works, adjacent common areas and adjacent properties affected by the Works, clean and tidy at all times. Clear and remove dirt and debris from the site progressively.

Provide sufficient personnel and equipment for cleaning operations.

Provide and regularly empty disposal containers for demolished materials, debris, discarded and surplus goods and materials generated by the Works. Locate containers as close as practicable to the relevant work area.

Containers shall not be located on public roads or paths unless approved by the relevant authority and all required permits have been obtained and fees paid.

The Superintendent may require any area to be immediately cleaned during the construction period at no additional cost to the Principal.

Remove all dirt and debris attributable to the Works from adjacent roads, paths and properties in accordance with the requirements of the relevant authorities.

1.26.2 Completion

Before arranging handover inspections, finish, clean, and make good the Works including:

- a) clear and remove surplus materials, dirt, debris and the like;
- b) repair damage and defects to adjacent properties resulting from the Works;
- c) repair damage, stains and blemishes, or replace work where required;
- d) clean all surfaces; and
- e) commission, test and ensure services and equipment are connected and operating properly.

1 SITE PREPARATION

2.1 REMOVAL OF TREES

No trees are to be removed as part of these works unless directed by the Superintendent.

2.2 WORK NEAR TREES

Protection: Protect existing trees from damage by works. Take necessary precautions, including the following:

- a) **Harmful materials:** Do not store or otherwise place bulk materials and harmful materials under or near trees. Do not place spoil from excavations against tree trunks. Prevent wind-blown materials such as cement from harming trees and plants;
- b) **Damage:** Prevent damage to tree bark. Do not attach stays, guys and the like to trees;
- c) **Work under trees:** Do not add or remove topsoil within the drip line of trees. If it is necessary to excavate within the drip line, use hand methods such that root systems are preserved intact and undamaged. Open up excavations under tree canopies for as short a period as possible;
- d) **Roots:** Do not cut tree roots exceeding 40mm diameter unless authorised by Superintendent. Where it is necessary to cut tree roots, use means such that the cutting does not unduly disturb the remaining root system. Immediately after cutting, apply a bituminous fungicidal sealant to the cut surface to prevent the incursion of rot or disease;
- e) **Backfilling:** Backfill to excavations around tree roots with a mixture consisting of three parts by volume of topsoil and one part of well rotted compost with a neutral pH value, free from weed growth and harmful materials. Place the backfill layers, each of 300 mm maximum depth, compacted to a dry density similar to that of the original or surrounding soil. Do not backfill around tree trunks to a height greater than 300 mm above the original ground surface. Immediately after backfilling, thoroughly water the root zone surrounding the tree; and

- f) **Compacted ground:** Avoid compaction of the ground under trees. If compaction nevertheless occurs, for example from the operation of heavy constructional plant, notify the Superintendent and obtain instructions.

2.3 RETENTION & PROTECTION OF EXISTING TREES

Protect all existing trees.

2.4 MAKING GOOD

Generally after all demolition and works by all sub-trades, make good the surrounding surfaces with materials to match.

The Contractor shall be responsible for containing the extent of demolition strictly to the task and area required. Variations for additional making good after careless or excessive demolition shall not be entertained. The Contractor should allow generally for cutting as required to ensure an even and neat match with existing elements to be retained.

2 GATES

3.1 Materials

- All materials used in construction of gates shall be durable for a period of at least 50 years and resistant to vandalism.
- Gate finish should be durable, resistant to rust and graffiti.

3.2 Design

- Minimum height of gates shall be 2.1 metres.
- Each gate should be equipped with a locking mechanism or other provision for locking.
- Design of gates shall not create hand and foot traps in the event a person should attempt to climb them.
- Gates shall be free-standing and self-supporting, not relying on support of the existing posts or fence.

Foundations

The Contractor shall engage an Engineer to design foundations for gate support structures (i.e. columns, etc) to assure support and functioning of gates for at least 50 years.

3.3 Security of gardens

The gates shall contribute to security of gardens. Gate design should prevent easy climbing of the gates.

3.4 Connection of existing fence

The existing fence should be connected to the support structures of the new gates or to a separate support pole (in which case the gap between the gate and fence support pole shall be less than 100mm).

3.5 Practical & Final Completion

Practical Completion

The Contractor shall ensure that the Works are complete prior to the Date of Practical Completion.

Final Completion

The Contractor shall be solely responsible for the maintenance of the Works within the site area, in accordance with this Specification. For the purposes of issuing of the Final Certificate, all outstanding works shall have been completed (including the satisfactory completion of all maintenance items).

3.6 Maintenance

To the extent practicable, gates should be designed to be low-maintenance. A Maintenance Manual shall be provided as part of the final as-built documents. Maintenance Manual shall detail all the materials, colours and finishes used in construction of the gates, maintenance methods, and maintenance frequency at the minimum).

3.7 Miscellaneous

- Geotechnical report will be provided by Council for each of the four proposed gate locations
- Dial before you dig report shall be provided for all gate locations. The contractor shall be responsible for obtaining updated information prior to installing gates.