

## PART E - TECHNICAL SPECIFICATION

### E1. DESCRIPTION OF THE WORKS

#### E1.1 Background

The Sydney Catchment Authority (SCA) is a state government agency established in July 1999 to manage and protect the catchments that provide Sydney's water supply and manage a complex network of dams, water storages and pipelines.

The role of the SCA is to:

- Manage and protect the Catchment Special Areas, Braidwood Freehold Lands and catchment infrastructure works including the dams, water storages and pipelines;
- Be a supplier of bulk water to Sydney Water Corporation, local councils and direct customers; and
- Regulate certain activities within, or affecting the outer catchment area as well as the inner catchment area.

#### E1.2 Purpose

The purpose of the work under the contract is to slash and clear existing fire breaks situated along established trails and property boundaries on the Braidwood Freehold Lands and South East Special Areas of the Sydney Catchment Authority. The SCA has responsibility for the fire management issues related to these areas and the annual slashing program is part of a suite of fire management activities that ensures efficient fire prevention and suppression strategies are implemented locally.

#### E1.3 Scope of Works/Services

The Works/Services to be provided in accordance with the Contract shall include, but not be limited to, the slashing of fire breaks along existing trails within Braidwood Freehold Lands and Special Areas managed by Sydney Catchment Authority. The works include slashing of grass and saplings and cutting low branches along the firetrails and clearing fallen trees. The contractor will also be responsible for clearing culvert entrances and clearing debris as required. A description of what is involved in the various activities is:

Activity	Description
Slash firebreaks or fencelines	<p>Clear pre-existing firebreaks to the extent required allowing the road to be used as a safe fire suppression line for firefighting or hazard reduction.</p> <p>Minimal disturbance. Slash or mulch vegetation present on the firebreak. Slash generally up to 20 metres either side of the road/fence.</p> <p>Slashing height to be just above ground level. Slashed material will be left on the break to provide ground cover.</p>
Mulch trees	Material up to 15cm and leave the large established trees.

Slash grasslands around property boundaries	Slash as required to keep grass down, to a width of approximately 20 metres.
Fallen trees	Cut with chainsaw. Where any large trees over 40cm DBH with hollows in them, the first intention will be to roll them back into the bush area. If impractical they will then be cut into lengths (as long as practical but manageable) to allow them to be bushed back into the bush.
Rocky Areas	Small saplings will be hand controlled by cut stump allocation with roundup.
Remove Growth from Culverts	Hand cut with chainsaw and cut stump allocation with roundup.

#### **E1.4 Location of the Works/Services**

Slashing and clearing works will be conducted within the following Special Areas and freehold lands managed by the SCA;

##### **A - Braidwood Freehold Lands**

Colombo Creek Approx 4 km in length and 20m wide

Little Bombay Approx 9 km in length and 20m wide

Cronins Crossing Approx 8 km in length and 20m wide

North Marlowe, Approx 8 km in length and 20m wide

Nulla Nulla Approx 4 km in length and 20m wide

Maxlyn Approx 500m in length and 20m wide

Deane Approx 1.5 km in length and 20m wide

Upper Mongarlowe Approx 2km in length and 20m wide

East Marlowe Approx 3km in length and 20m wide

Spring Valley Approx 5km in length and 20m wide

Sunset Mountain Approx 5km in length and 20 m wide

Baranevan Approx 2km in length and 20m wide

Millended Springs Approx 1km in length and 20m wide

**B – Woronora and Metropolitan Areas**

No 1 Series Fire Roads -Approx 34 km in length and 20m wide

No 2 Series Fire Roads -Approx 21 km in length and 20m wide

No 3 Fire Road -Approx 10 km in length and 20m wide

No 6 Series Fire Roads- Approx 26 km in length and 20m wide

No 7 Series Fire Roads- Approx 26 km in length and 20m wide

No 8 Series Fire Roads- Approx 15 km in length and 20m wide

No 9 Series Fire Roads- Approx 25 km in length and 20m wide

No 14 Fire Road – Approx 3 km in length and 20m wide

No11 Series Fire Roads- Approx 6 km in length and 20m wide

No 13 Fire Road – Approx 3 km in length and 20m wide.

Dam Access Roads - Approx 12 km in length and 20m wide

Adjoining Property Boundary Fences-Approx 10 km in length and 20m wide

Due to possible changes to the SCA operations, new firebreaks may be developed within the contract period, in addition to those indicated above. The SCA may also at its own discretion remove some of the above scope of work. The Contractor shall extend the service under this contract to such newly developed firebreaks at the rates specified in the Payment Schedule – Ancillary Works.

The areas listed above and specific trail locations are identified on the maps contained within Clause E1.11 to Part E, Technical Specification.

**E1.5 Specifications****(a) Slashing of Grass and Saplings**

Slashing shall be carried out mechanically using an appropriate number of 4-wheel tractors simultaneously for each separable portion.

Slashing shall be undertaken to the extent of tree lines as evident by previous slashing programs. In grassland areas the width of slashing and clearing shall be to the existing width or approximately 20m around boundary fences. On fire trails the slashing width shall be taken to tree lines.

Slash cut / depth will depend on the terrain and condition of growth on trails and should be as low as practical and as agreed with the principal's representative.

Near residential properties, established eucalypt or wattle saplings shall be avoided and excluded from slashing or cutting.

**(b) Clearing and Cutting**

The Contractor shall use appropriate tools such as chainsaws and/or hand tools to undertake clearing of logs, fallen trees and low branches from the slashed areas along the trails.

Saplings must be cut around culverts where access by tractor is limited or prohibited. The contractor will also be responsible of clearing culverts entrances and slashing grass and saplings and clearing any plant debris as required.

**(c) Machinery and Equipment**

Each tractor must have a cab (with roll-over bar), heavy-duty slasher, and or mulcher with a blade at the front of the tractor, flashing lights, fire extinguisher and first aid kit. All vehicles used shall be in a good working order, registered and covered by insurance appropriately.

Chainsaws and hand tools appropriate for cutting fallen logs, low branches etc must be carried with the tractors or vehicle provided for this work.

Appropriate safety equipment and safe work practices must be enforced at all times.

**E1.6 Timing**

The work under the Contract should begin in Spring (Beginning of September) each year and be completed by the beginning of Summer (December). The Contractor shall commence works within seven (7) days of a works instruction given by the principal's representative.

All access roads in the Braidwood Freehold Lands Area nominated in the Specification above will be serviced on an annual basis. In the Woronora and Metropolitan Areas Series No 7-14 Fire Roads, the dam access roads and adjoining property boundary fences will be serviced in year one of the Contract. The remaining Series No 1-6 Fire Roads, the dam access roads and adjoining property boundary fences will be serviced in year two of the Contract. The approximate quantities per annum are included in the lump sum payment schedule.

**E1.7 Not Used****E1.8 Special Conditions**

- a) No slashing operations shall be conducted in wet weather. Stop work instructions will be received from the Client Representative.
- b) No work shall be permitted on days with a Total Fire Ban.
- c) Machinery shall not be serviced inside the SCA land except in urgent or emergency circumstances.

**E1.9 Contractor Performance & Evaluation**

The SCA will evaluate the performance of the Contractor on annual basis, taking into account, the cost effectiveness, timeliness and quality of service provided. Job Control

documentation and periodic reports and other tools will be used to closely monitor the performance of the contractor.

### **E1.10 Key Performance Indicators**

The KPI's shall include but not be limited to those below.

KPI	Sub category
1. Overall Contract Performance	Quality of Work, degree of compliance with contract terms and specifications
2. Occupational Health and Safety	Incident/Accident Free work Timely Incident reporting Compliance with OHS&R Act and SCA Safety Policy
3. Relationships	Disputes with SCA Customer focussed attitude and appropriate procedure for complaints resolution Cooperative relationship with adjacent land holders and public
4. Timeliness	Emergency and unscheduled callout response times
5. Environment	Environmental alert work practices Level of cleanliness-personal/vehicle Work practices averting impact on water quality

The Principal's Representative will evaluate the contractor's performance in accordance with the above on an annual basis. A copy of the evaluation report will be provided to the contractor.

## **E2. OHS&R**

### **E2.1 General Requirements**

- (a) The Occupational Health and Safety Act 2000 requires that employers and employees ensure the health, safety and welfare of persons in the workplace. The Contractor is required to observe all statutory/regulatory safety requirements and to provide for the protection of persons and property as part of the Contract.
- (b) While working on SCA's premises and work Sites the Contractor shall also comply with SCA's occupational health, safety & rehabilitation (OHS&R) policies and Corporate Instructions as well as SCA directions.
- (c) The Contractor shall, at all times, exercise any other necessary and reasonable precautions appropriate to the nature of the Work and the conditions under which the Contract is to be performed for the safety of all persons involved in or affected by that Work.
- (d) The Contractor shall prepare a Safe Work Method Statement for all activities associated with the provision of the Works taking into account SCA's Hazard Risk Identification for the Works and the Site in clause F2 to this Contract.
- (e) The Contractor shall include in the Safe Work Method Statement as a minimum:
  - (i) Description of the Work
  - (ii) Name and qualifications of the person or persons who will supervise the Work
  - (iii) Name and qualifications of the person or persons who will inspect, approve and supervise methods for the provision of the Work, protective measures, use of plant & equipment
  - (iv) Potential risks associated with the Work, including without limitation, the risks associated with interfacing with ongoing SCA operations and with any other work persons or contractors on the site/s
  - (v) What OHS&R training is given to persons involved with the provision of the Works
  - (vi) All precautions to be taken to protect health and safety
- (f) The Contractor shall supply the Safe Work Method Statement to the SCA at least 7 days prior to the performance of those portions of the Contract which are to be performed outside the office environment. The responsibility for the adequacy of the Safe Work Method Statement always remains with the Contractor.
- (g) The Contractor shall implement the safe work methods as set out in the Safe Work Method Statement and shall take appropriate measures to ensure they are kept relevant to the carrying out of the Works under the Contract.

- (h) The Contractor may also be required to prepare and comply with a Project Safety Plan or Safe Work Method Statements if the project contains high risk construction work (or equivalent) under the Occupational Health and Safety Regulation (2001).

### **E3. ENVIRONMENTAL REQUIREMENTS**

#### **E3.1 Noise Specifications**

- (a) Equipment supplied and installed may need to provide a quiet working environment for SCA operations personnel and others such as nearby residents. The Contractor shall comply with the Sydney Catchment Authority Procedure 0616 “Noise Management”. The Contractor shall comply with the *Occupational Health & Safety Regulation 2001* and WorkCover Code of Practice, Noise Management and Protection of Hearing at Work.

#### **E3.2 Purchasing**

- (a) The Contractor shall purchase and use recycled content products where appropriate.
- (b) The Contractor shall submit a progress report to the SCA every two months during the Contract Term and a summary report before Completion regarding the purchase of certain materials with details of the total and recycled content tonnages (the “Purchasing Reports”).
- (c) The Purchasing Reports are to be in the format set out in clause F4.1 below.

#### **E3.3 Waste Management**

- (a) The Contractor shall recycle and divert from landfill surplus soil, rock and other excavated or demolition materials, wherever this is practical.
- (b) The Contractor shall separately collect and stream quantities of waste concrete, bricks, blocks, timber, metals, plasterboard, paper and packaging, glass and plastics and offer them for recycling where practical.
- (c) The Contractor shall monitor waste tonnage and record their method and location of disposal and whether or not that location was a place that could lawfully be used as a waste facility for the waste.
- (d) The Contractor shall submit to the SCA a progress report every two months and a summary report before Completion regarding the implementation of waste management measures, including the record of waste tonnage and their method and location of disposal (the “Waste Management Report”). All receipts issued by the waste facility need to be supplied to the SCA.
- (e) The Waste Management Reports are to be in the format set out in clause F4.2 below.
- (f) A failure by the Contractor to provide the SCA with evidence of any and all waste dockets and receipts for payment of waste disposal in relation to the Works may lead to the SCA withholding payment of the Fee until such evidence is satisfactorily produced.

- (g) The SCA promotes use of the recycled paper to protect the environment. The Contractor shall print all documents and reports required by the Authority **on a minimum 50% recycled content paper**. Where it is not practical for the Contractor to use recycled paper for printing of reports and documents, the Contractor shall obtain written approval from the SCA before printing reports or documents on non-recycled paper.

#### **E3.4 Energy Management**

- (a) All supplied or installed equipment that consumes energy shall be sized appropriately and be the most energy efficient of its class. Appropriate fuel shall be used to minimise overall energy use and greenhouse gas emissions.
- (b) Energy star for office equipment and energy ratings for (usually household) appliances can be used where appropriate.

#### **E3.5 Environmental Conditions Approval**

- (a) Prior to commencing any Work the Contractor must check with the SCA as whether any environmental conditions of approval apply to the Work (such as a Work Method Statement or Environmental Management Plan).
- (b) The Contractor must fully comply with any environmental conditions of approval in relation to the Work as notified to it from time to time during the Term.

#### **E4. NOT USED**

#### **E5. ADDITIONAL WORKS REQUIREMENTS**

##### **E5.1 Works Program**

The Works Program shall include:

- (i) mobilisation to Site;
- (ii) the duration and sequence of activities for the Works; and
- (iii) any further requirements stipulated by the Contract or required by the SCA.

##### **E5.2 Not Used**

##### **E5.3 Not Used**

##### **E5.4 Working Hours**

Hours of work are daylight hours only between 7.00am to 8.00pm. The working days shall be Monday to Friday inclusive, but exclusive of public holidays and exclusive of one day every four weeks, usually a Monday, which is a rostered day off.



**E5.5 Customer Complaints**

- (a) SCA has a Customer Complaint Resolution Policy to address complaints and enquiries from customers. The procedures for this policy are applicable to all personnel, including external Contractors engaged by SCA.
- (b) SCA will make available to the Contractor a number of Customer Assistance Cards upon request. The Contractor shall provide a Customer Assistance Card to any SCA customer, member of the public or affected party who complains to the Contractor or who enquires about any SCA activity or associated work under this Contract.
- (c) The Contractor shall advise SCA of the occurrence and nature of any such complaint or enquiry within one week of the occurrence.

**E6. NOT USED****E7. INCIDENT MANAGEMENT**

- (a) The Contractor shall manage all incidents in a manner, which conforms with the requirements of relevant legislation and minimises the adverse effects of the incidents.
- (b) The Contractor shall, before commencing any Work under the Contract, provide to SCA, and obtain its approval of, an Incident Management Plan, which shall deal with issues including:
  - (i) a clear statement of accountabilities;
  - (ii) identification and analysis of the risks;
  - (iii) prevention of incidents;
  - (iv) preparedness for incidents;
  - (v) declaration of incidents;
  - (vi) early notification of incidents;
  - (vii) response to and recovery from incidents;
  - (viii) current contact directories including the names and procedures for 24 hour contact with persons nominated by the Contractor to prevent, prepare for, respond to and recover from incidents. The Contractor shall advise SCA immediately of any changes in the names of persons so nominated.
- (c) The Contractor's Site Incident Manager shall notify each incident to SCA immediately it occurs and manage the incident, unless SCA's Incident Manager takes over the role of Site Incident Manager from the Contractor for that incident. In that event the Contractor shall continue to provide necessary support and assistance to SCA's Incident Manager in managing the Incident.

- (d) “Incidents” shall include, but are not limited to, those events causing or with the potential to cause a threat to or impact upon:
  - (i) the life, health and safety of any persons;
  - (ii) the environment;
  - (iii) public or private property;
  - (iv) interruption to availability and/or quality of services to SCA customers;
  - (v) SCA property or systems;
  - (vi) SCA businesses operations including infrastructure, staffing, major suppliers;
  - (vii) community infrastructure including electricity, gas, telephone, rail, road, footpaths;
  - (viii) prosecution or fines by a regulatory authority;
  - (ix) requirements for urgent action under legislation;
  - (x) the reputation and/or public image of SCA; and
  - (xi) customer expectations (service quality, quantity, duration, damage, social inconvenience).
- (e) “Incidents” shall also include an anticipated imminent incident arising from a flood, fire and/or weather warning, terrorist threat, industrial action, potential electrical failure, etc.
- (f) The Contractor shall manage all incidents in a manner, which conforms with the requirements of relevant legislation, and SCA’s Incident Management Procedures to minimise the adverse effects of each incidents.