

### **3. Specification**

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# **Annual Supply Contract Specification - Services**

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## **1. DEFINITIONS**

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In this Specification:

1.1 terms defined in the accompanying Services General Conditions have the same meaning in this Specification, unless inconsistent with the context; and

1.2 the following terms have the meanings indicated, unless inconsistent with the context:

**Municipal District** means the municipal district of the Council.

**Specification** means this Annual Supply Contract Specification – Services.

**Specified Services** means the work described in Schedule 1.

## **2. OBLIGATION TO PROVIDE SERVICES**

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2.1 Contractor's Obligation

The Contractor must provide the Specified Services in accordance with this Specification during the Contract Term when directed to do so by the Supervisor.

2.2 No Obligation on Council

The Council is under no obligation to obtain:

1.1.1 any of the Specified Services from the Contractor; or

1.1.2 the Specified Services exclusively from the Contractor.

## **3. TIME**

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3.1 Period of Notice

The Supervisor must give the Contractor any period of notice stated in Schedule 2 when the Specified Services are to be provided.

3.2 Commencement of Specified Services

Subject to the required notice having been given under sub-clause 3.1, the Contractor must commence providing the Specified Services on the date specified by the Supervisor and -

1.1.3 at the time; or

1.1.4 between any times -  
specified by the Supervisor.

### 3.3 Time Limits

The Specified Services must be provided expeditiously and within any time limits that the Supervisor may reasonably specify.

## 4. **QUALITY**

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It is a term of the essence of this Contract that all Specified Services supplied by the Contractor to the Council must -

4.1 be in the form described; and

4.2 conform to all other criteria specified -

in Schedule 1.

## 5. **QUANTITY**

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### 5.1 Contractor's Obligation

Except as provided in sub-clause 5.2, the Council may require the supply of any quantity of any of the Specified Services.

### 5.2 Notice

If the Council requires a quantity of Specified Services greater than that specified in Schedule 2 within the period specified in Schedule 2, the Supervisor must give the Contractor the period of notice stated in Schedule 2. Any notice required under this clause will run concurrently with and not in addition to any period of notice under sub-clause 3.1.

## 6. **LOCATION**

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The Specified Services must be provided at any site within the Municipal District directed by the Supervisor, unless a specific location at which the Specified Services are to be provided is stated in Schedule 2. The Council must ensure that the Contractor has any access to the site reasonably necessary to enable the Specified Services to be provided.

## 7. **DOCUMENTS**

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The Council must, prior to any date on which the Contractor has been directed to commence providing the Specified Services, supply to the Contractor any plans, drawings, specifications or other documents (the Documents) reasonably necessary to enable the Specified Services to be provided and which are not otherwise to be supplied by the Contractor. The Documents must be returned to the Council by the Contractor at the conclusion of the provision of any Specified Services or on demand by the Supervisor.

## 8. **REJECTION OF SERVICES**

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### 8.1 Supervisor's Determination

The Supervisor may determine if work performed by the Contractor complies with the requirements of this Specification.

## 8.2 Acceptance or Rejection of Work

If the Supervisor determines that any work does not comply with this Specification under sub-clause 8.1, the Supervisor may accept or reject the work.

## 8.3 Rectification of Faults

The Contractor must immediately remedy any faults in work which has been rejected by the Supervisor under sub-clause 8.1, if directed to do so by the Supervisor.

## 8.4 Acceptance of Work

Any acceptance of work by the Supervisor under sub-clause 8.2 will only relieve the Contractor from the obligation to remedy faults in the work concerned and will not relieve the Contractor from any other obligations under this Contract or negate any express or implied warranty or condition in respect of the work.

## 8.5 Quality of Work

If any work which does not comply with this Specification is accepted by the Supervisor under sub-clause 8.2, the Supervisor must determine if the quality of the work is superior, inferior or the same as that specified in Schedule 1.

If the quality of the work is inferior, an amount determined by the Supervisor as reflecting the difference in the value between the work performed and the Specified Services described in Schedule 1 must be deducted from any payments to the Contractor in respect of the work concerned or must be paid on demand by the Contractor to the Council if payment has already been made for the work concerned.

If the quality of the work is the same or is superior, no additional amount will be payable by the Council to the Contractor in respect of the work concerned, unless otherwise agreed by the Council.

## 8.6 Compensation

The Contractor must pay to the Council, on demand, the amount of any loss or damage caused to the Council, or for which the Council may become liable, due to any work not being in accordance with any of the requirements of this Specification. The Supervisor must determine the amount of any loss, damage or liability incurred by the Council for the purposes of this clause.

## 8.7 Supervisor's Obligation

The Supervisor must exercise any powers conferred on the Supervisor, including the power to make a determination on any issue, under sub-clauses 8.1, 8.5 and 8.6 reasonably and independently of the parties.

9. **PAYMENTS**

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9.1 Rates

The Council must pay the Contractor at the rates specified in Schedule 1 for the Specified Services provided.

9.2 Additional Payments

The Council must pay the Contractor at the rates specified in Schedule 3 in respect of any event, condition or circumstance there specified which is encountered in the provision of the Specified Services, provided that any pre-condition of such payment specified in Schedule 3 is met. Except as provided in Schedule 3, no additional amounts will be payable to the Contractor in respect of any event, condition or circumstance encountered in the provision of the Specified Services, including, without limitation, any latent condition or cause of delay, whether or not the event, condition or circumstance is caused by any default of the Council under this Contract, or any other cause within the control of the Council or the Council's staff, sub-contractors or agents. It is intended by the parties that the Contractor will bear any risk not addressed in Schedule 3.

9.3 Invoices

The Contractor must issue Tax Invoices to the Council, itemised to the satisfaction of the Supervisor, each month for all amounts payable to the Contractor under sub-clause 9.1 in the preceding calendar month. The Council must, unless the amount of an invoice is disputed, pay to the Contractor the amount specified within 30 days of receipt of the Tax Invoice.

## **Schedule 1**

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### **BACKGROUND TO SERVICE REQUIREMENTS**

#### **Introduction**

This contract is for the supply and installation of Pay and Display Parking Machines ("P & D Machines") to the Port Phillip City Council ("Council") for the next three years.

Currently the Council has a combination of 498 P & D Machines and it is intended to replace or install approximately 200 to 220 additional P & D Machines during the contract term.

The Council may choose more than one tenderer for the supply and installation of the P & D Machines.

### **SPECIFIC PROVISIONS AND REQUIREMENTS**

#### **Technical Specifications**

The following is a technical requirement for the P & D Machines.

#### **General Description**

The pay and display system shall consist of on-site P & D Machines and a central control unit for data transmission and tariff / parameter programming.

A control centre on a PC that stores, processes and reports data may be considered as an option.

The P & D Machines shall issue a receipt against payment, which will be coin enabled with the capability option of credit card.

The P & D Machine will have a GPRS compliant wireless communication system that transmits information to the control centre regarding the P & D Machine status .

The P & D machine will be secure from tampering and vandalism.

## **Functional Description**

### **General**

The P & D Machines shall be built as a vandal resistant unit with a front panel consisting of:

- a. LED indicators;
- b. graphic display;
- c. coin insertion slot;
- d. action buttons;
- e. optional Credit Card reader slot;
- f. information labels area;
- g. money returned and receipt slot;
- h. coin compartment door; and
- i. Installation / service door.

### **Information**

Signage giving information to the user about tariffs, operating hours, general instructions, capacity and permitted coins shall be included in the front panel.

### **Visual displays**

The P & D Machines shall be equipped with a graphic or an alphanumeric display that combines the real time display and the information display. The display size shall be a minimum 110 x 30mm. Minimum character size shall be 8mm. The information shall comprise a minimum of four lines of 20 characters.

When not in action, the display shall show the current time and programmed messages.

When the system is out of order the information display shall display an out of order message.

During payment with coins or optional credit card/mobile phone the following information shall be displayed:

- a. maximum permitted parking fee;
- b. end of parking time for which payment has been made; and
- c. actual payment.

## **Action buttons**

The P & D Machine shall be equipped with a minimum of two action buttons:

- a. "issue" button; and
- b. "cancel" button.

## **Openings in the front panel**

The P & D Machine coin slot shall be protected against the insertion of foreign objects such as paper, chewing gum, paper clips. Liquid coming in through the coin slot shall be diverted to the foundation of the machine without causing any damage.

For the optional card reader, the slot shall be protected against penetration of dust and water.

The money returned and receipt slot shall be protected from rain and wind.

The P & D Machine shall be protected against the penetration of dust and liquids.

## **Methods of payment**

### **General**

The P & D Machines shall accept payment by Australian Coin denomination, 10c, 20c, 50c, \$1 or \$2 with the capacity for any new coin denomination.

Optional:

- a. credit cards; and
- b. mobile phones.

### **Payment with coins**

The P & D Machine shall recognize a minimum five different coins.

The P & D Machine shall be equipped with an escrow for returning inserted coins in case of a malfunction or cancellation of purchase.

A receipt is issued when the "Issue" action button is pressed. If the "Issue" action button is not pressed within 30 seconds from the insertion of the last coin, the operation is cancelled automatically.

The P & D Machine shall be programmed for a minimum and maximum permitted payment.

While the payment is below minimum permitted payment, the amount inserted is to be displayed. If the "Issue" action button is pressed the money inserted is returned and a message is displayed.

The maximum payment and time are defined automatically according to the information inserted in the tariff parameters in regard to date, day of week and time of day.

## **Tariffs**

### **General**

The P & D Machine is to support a wide variety of tariffs based on time of day, day of week, date, parking zone, discounts and method of payment.

Payment made before the start of the hours of operation for the day

The P & D Machine tariff tables shall allow the definition of payment made before the start of hours of operation for that day as prohibited or as payment from the commencement of the hours of operation for that day.

If payment is allowed the parking time is calculated from the beginning of the day.

### **Parking Receipts and administrative reports**

#### **Issuing of receipts and reports**

Receipts shall be issued by the P & D Machine following a proper payment and pressing of the "Issue" button.

The machine shall be capable of issuing administrative reports but will be restricted by security clearance of the contract manager.

Special control reports shall be printed after:

- a. emptying the machine's coin box;
- b. downloading of new tariffs; and
- c. requests for special reports during maintenance.

#### **Parking Receipts**

The receipt shall include the following data:

- a. end of parking period in 24 hours format;
- b. tariff code;
- c. date;
- d. serial number;
- e. location;
- f. issue time;
- g. paid amount and payment code;
- h. a message requiring the receipt to be displayed under the windshield of the vehicle.

Ticket dimensions to be sufficient to allow all of the requested data to be clearly readable.

End of parking period, tariff code and date shall be readable from a distance greater than two metres, under normal daylight conditions when placed behind the vehicle's windshield.

The rest of the information is to be readable from a distance greater than one metre under normal daylight conditions, when placed behind the vehicle's windshield.

Text on the ticket shall be programmable without replacing the E-Prom.

The issue of a ticket shall be faster than four seconds.

As an option, it shall be possible to program advertisement texts on the ticket.

The paper used for the ticket shall be standard thermal paper without any patent rights and shall have a security strip / foil on the side.

### **Inspection and control reports**

A minimum of three types of control report shall be produced by the P & D Machine.

#### **Inspection report**

This report shall include the following items:

- a. time and date;
- b. serial number of the machine;
- c. location;
- d. warnings such as "paper warning", "low battery warning";
- e. maintenance information of the last 10 service operations;
- f. out of order information of the last 10 events;
- g. number of receipts issued; and
- h. other statistical information.

#### **Report produced after emptying coin box**

This report shall include the following items:

- a. time and date;
- b. serial number of machine;
- c. location;
- d. number of receipts issued since last emptying operation;
- e. total money collected since last emptying operation;
- f. details of money collected per coins;
- g. details of transactions using credit card or mobile phone if enabled;
- h. previous collection data; and

- i. tariff structure and version.

### **Tariff Report**

This report includes the following items:

- a. time and date;
- b. serial number of machine;
- c. location; and
- d. overview about the programming tariffs.

### **Assembly**

#### **Materials**

The P & D Machine shall be made out of rigid and durable materials, fit for their purpose. All materials shall be resistant to extremes of Australian weather, corrosion, heat and humidity.

#### **Security**

The P & D Machine shall be fixed to its base from the inside of the machine with bolts which cannot be easily removed.

Locks used in the P & D Machine shall be hidden. The lock for the coin compartment shall be resistant against "picking tools" and drilling.

#### **Environmental conditions**

The P & D Machine shall work correctly under the following environmental conditions:

- a. ambient temperature of -15°C to 50°C;
- b. direct sun light with housing temperatures up to 70°C; and
- c. humidity up to 100% (condensing).

#### **Reliability and Availability**

The P & D Machine is to operate with no deterioration in performance below specification for a minimum period of eight years.

The P & D Machine is to be designed to have less than four failures per year. Average repair time for a typical malfunction to be less than 30 minutes.

#### **Housing**

All action buttons, slots and openings to be on the front. All user interface items, (card slot, receipt dispenser, action buttons, displays etc) shall be located at height between 500mm and 1200mm to comply with Australian disabled access standards.

According to the Australian Standards for Disabled Accessibility AS1428.2 §29.1, the “height of the operative components shall be between 500mm and 2100mm above the trafficable surface”.

The housing shall be made out of non-corrosive material (preferably stainless steel).

The coin compartment shall be separated from the rest of the machine. Staff responsible for the exchange of the coin box shall not have access to the electronic compartment.

All access to the machine for maintenance and installation shall be from inside the machine through lockable doors.

All door hinges to be concealed.

Lock combination of all locks will be in accordance with the requirements of the purchaser.

The P & D Machine shall be installable next to walls and in corners.

All action buttons shall be able to operate more than 300,000 times without failures.

### **The coin compartment**

The P & D Machine coin compartment shall be resistant against break-ins:

- a. a removable coin box shall be installed inside a safe; and
- b. the safe walls shall be at a minimum 4mm thick steel or equivalent strength material.

When the box is removed from the safe it automatically locks the entry slot. Once removed the box cannot be re-installed in the P & D Machine until it is opened and mechanically triggered.

### **Power supply**

Power supply shall be by a rechargeable accumulator, recharged by a solar module integrated in the hood of the machine. When fully charged the accumulator shall supply the machine for at least three months, assuming average of 300 operating days per year and 100 receipts issued per day.

A lithium battery to prevent data loss, even when the primary accumulator is discharged shall back up the P & D Machine data memory and real time clock.

The P & D Machine shall comply with electricity commission regulations on interference suppression and resistance to electronic disturbance.

### **Printer and paper**

The P & D Machine shall be equipped with a thermal printer with cutter, capable of producing more than 200,000 receipts without failure.

The printer shall be capable of printing graphics (e.g. logos).

The printed receipt shall remain legible and paper shall not become significantly darker for:

- a. at least seven days when exposed to direct sunlight during typical summer conditions; and
- b. at least one day when kept in temperatures above 80°C.

The parking receipt issuing time depends on the receipt design. For a single ticket without receipt, it shall be quicker than four seconds.

The printer shall be equipped with one paper roll that is enough for issuing a minimum of 3000 receipts of the defined design.

Paper thickness shall be at a minimum of 80 microns.

Tensile strength shall be greater than 25 Nt.

### **The coin acceptor unit**

Coin acceptor unit is to accept all predefined coins and reject any other coins.

The coin acceptor unit shall be programmable and fully electronic.

The unit shall accept at least five coins.

The coin acceptor shall not return change.

The coin acceptor shall have an additional Escrow that contains the inserted coins until a decision is made to return the coins or to validate them. The Escrow shall hold as a minimum 20 coins in each of the coin types accepted.

The unit accepts coins only when the coins are enabled.

Coin recovery before a receipt is issued is to be possible when using the "Cancel" button. Coins shall automatically be rejected after a programmable time out.

Overpayments shall be possible after the user is informed and the operation is confirmed by the "Issue" button.

When coins are jammed in the acceptor, pressing the "Cancel" button shall activate a mechanical release that opens the coin acceptor entry area and drops the coins into the coin slot.

When the P & D Machine is out of order the coin acceptor shall be blocked and coins inserted shall be returned to the coin slot.

When the P & D Machine is closed the coin acceptor shall be blocked and coins inserted shall be returned to the coin slot.

During a free parking period the coin acceptor shall be blocked and coins inserted shall be returned to the coin slot.

The machine is to record each coin validated for each transaction.

The coins acceptor shall accept test tokens, recognize them and return them to the coin slot.

### **The digital processor**

Tariff and data shall be kept in static RAM with a lithium battery backup of six years, when the power is off.

The digital processor real time clock shall have a divergence of less than 30 seconds per month.

The P & D Machine shall produce statistical reports of sales.

Other reports based on the data downloaded from the P & D Machine shall be generated by monitoring software.

Data shall be downloaded from the P & D Machine either using a portable terminal based on a memory card or equivalent, or via wireless communication (e.g. SMS).

All data required shall be downloadable.

Data such as system software, tariff tables, black lists and system parameters shall be loaded into the P & D Machine using a portable terminal based on a memory card or equivalent or by wireless communication.

### **Communication and alarms**

Optionally the P & D machine shall be equipped with unidirectional or a semi-duplex wireless communication.

This communication is activated when necessary and can send an indication of event or selected data to a central computer.

Data is transferred at regular intervals to and from the P & D Machines and the system clock is updated every 24 hours.

### **Installation**

The P & D Machine shall be installed into a reinforced concrete foundation and to any specification provided by the Council.

## **CENTRAL MANAGEMENT AND CONTROL**

### **General**

The central management and control unit shall be based on a personal computer running software to program the machines and hold all tariff and parameter information in a database. Other software shall control all P & D Machines with wireless communication or similar.

All the data and tariffs and any other information are stored in the central computer.

The system and data files shall be protected.

The central management and control unit software is to perform the following tasks:

- a. data acquisition from the P & D Machines;
- b. status messages such as warnings, failures;
- c. master data management;
- d. modifying the P & D Machine display messages; and
- e. modifying the ticket messages

The monitoring software shall collect statistical data from the meter and synchronize the meter real time clock.

The programming software shall define the operating parameters of the P & D Machines such as:

- a. time out definitions;
- b. coin box capacity (to limit the amount that is collected by a machine);
- c. date format;
- d. operations to be carried out for overpayment;
- e. lighting conditions; and
- f. limits on card purchase.

### **Communication module**

With the communication module, complete files shall be capable of being transferred from P & D Machines to the control centre, including:

- a. credit card transactions;
- b. statistic files on transactions;
- c. event file (of the last 500 transactions);
- d. tariff and parameter files; and
- e. machine settings.

## **Communication and statistics**

The P & D Machine shall have a comprehensive, easy to use two way communication software with the control centre, as well as detailed daily, monthly and cumulative annual reports which can be easily downloaded into management reporting software. The software shall be proven to download credit card information in a format specified by the major local banks. Examples of these are to be provided and demonstrated by suppliers.

## **Demonstration**

The P & D Machines and their software and reporting capabilities are to be comprehensively demonstrated by the tenderers. This may include:

- a. payment;
- b. cash collections;
- c. fault diagnostics and rectification;
- d. servicing;
- e. transmission of data;
- f. amendment of machine settings;
- g. use of the control centre;
- h. wireless communication options;
- i. automatic reports; and
- j. optional reports.

## PERFORMANCE LEVELS AND MONITORING

### General methods by which contractor performance will be monitored

To enable the Council to assess the Contractor's performance, monitoring methods will be applied to all work components.

The general method to be employed by Council will be a review of reliability and performance of equipment provided by the Contractor.

### Contractor Performance

A set of Key Performance Indicators ("KPIs") will be used to measure the Contractor's performance.

The Contract Manager will, in consultation with the Contractor establish a range of measures for all components of the KPIs. These will generate and provide data, information and will demonstrate satisfactory performance and achievement against all approved KPIs, through agreed periodic reporting.

KPIs will continue to be enhanced by both parties as a measure of the success of the Contract, thereby ensuring continuous improvement is achieved. Initially, the KPIs will include those shown in *Table 1*.

	KPI	Unit of Measure	Target
1.	Performance	<ul style="list-style-type: none"><li>The proportion of all machines per day are functioning for the available operating hours</li></ul>	<ul style="list-style-type: none"><li>Exceed 97% operational capacity performance</li></ul>
2.	Reporting	<ul style="list-style-type: none"><li>On time as agreed</li><li>Integrity of data</li><li>Ability to keep Council's Database up to date</li></ul>	<ul style="list-style-type: none"><li>100% compliance</li><li>100% compliance</li><li>100% compliance</li></ul>

Table 1

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## **Schedule 2**

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**The period of notice is required (sub-clause 3.1):**

1 month

**The quantity of the Specified Services is (sub-clause 5.2):**

Refer to detail in Schedule 1 Specification

**The notice required is (sub-clause 5.2):**

n/a

**The location at which the Specified Services are to be provided is (clause 6):**

Within Municipality District

### Schedule 3

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Event, condition or circumstance	Rate of Payment	Pre-condition of payment