

## **3. Specification**

## Specification

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### SECTION 1 -- GENERAL SCOPE OF WORK

The South Melbourne Market has two parking lots. There is one on the rooftop of the market, with an access ramp going up from Coventry St. This car park has 275 parking spaces and is where the Council will put the set of boom gates to better control traffic flow and parking abuse.

There is also an at grade parking lot on the west side of the market facing York St. This lot has about 80 parking spaces and is NOT a part of this project.

The Council seeks to implement a conventional car park control system, which includes (but is not limited to),

- a set of boom gates at access ramp to control car entry and exit
- ticket dispenser at the entrance gate
- pay station at designated location within the car park (near central stairwell)
- ticket reader at the exit gate
- control system and software (located in the Market office)
- power and data cabling (tenderers are expected to define the actual dimensions/capacity of both power and communication cables via site visit, their own effort and knowledge, no drawing provided by the Council)
- civil work to secure all the equipments (if deemed to be applicable at site visit)
- all engineering works necessary to be done to connect the system to the bank's interface for credit card transaction
- static sign in front of the access ramp rates of the parking lot
- CCTV cameras to monitor the gates and the pay station
- equipment supply, delivery, installation, and commission of the entire system
- training and O&M manuals
- 12-month consumable supply
- 12-month routine maintenance
- OPTIONAL EXTRA – dynamic sign on Coventry Street that shows the level of occupancy (or number of available spaces) in the car park

The control system, which may include software application, database, etc, should be installed and operated on a standalone PC (or 2 PCs if tenderer by knowledge recommends separating the application from the database) that sits in the South

Melbourne Market operation's office, with stand-alone VDU (visual display unit). The PC will not be connected to the Port Phillip City Council network.

## **SECTION 2 – TIMELINE REQUIREMENT**

The project delivery time for this project is considered as one of the most important factors of the project. Tenderers are required to submit proposals showing a timeline to complete the project within the shortest time possible.

The work program (preferably in MS Project format) should list the milestone tasks throughout the whole period of contract and the lead time (incl. but not limited to, main product order & delivery, onsite works, commissioning, etc). **Tenderers must submit nominated milestones and milestone deadlines. Milestone and work program deadlines do not have to be expressed as an actual date (eg '22 October 2010') but can be expressed in general terms (eg '15 days after commencing contract milestone 2 will be reached').**

## **SECTION 3 – SPECIFIC USER REQUIREMENT**

### **3.1 Business Requirements**

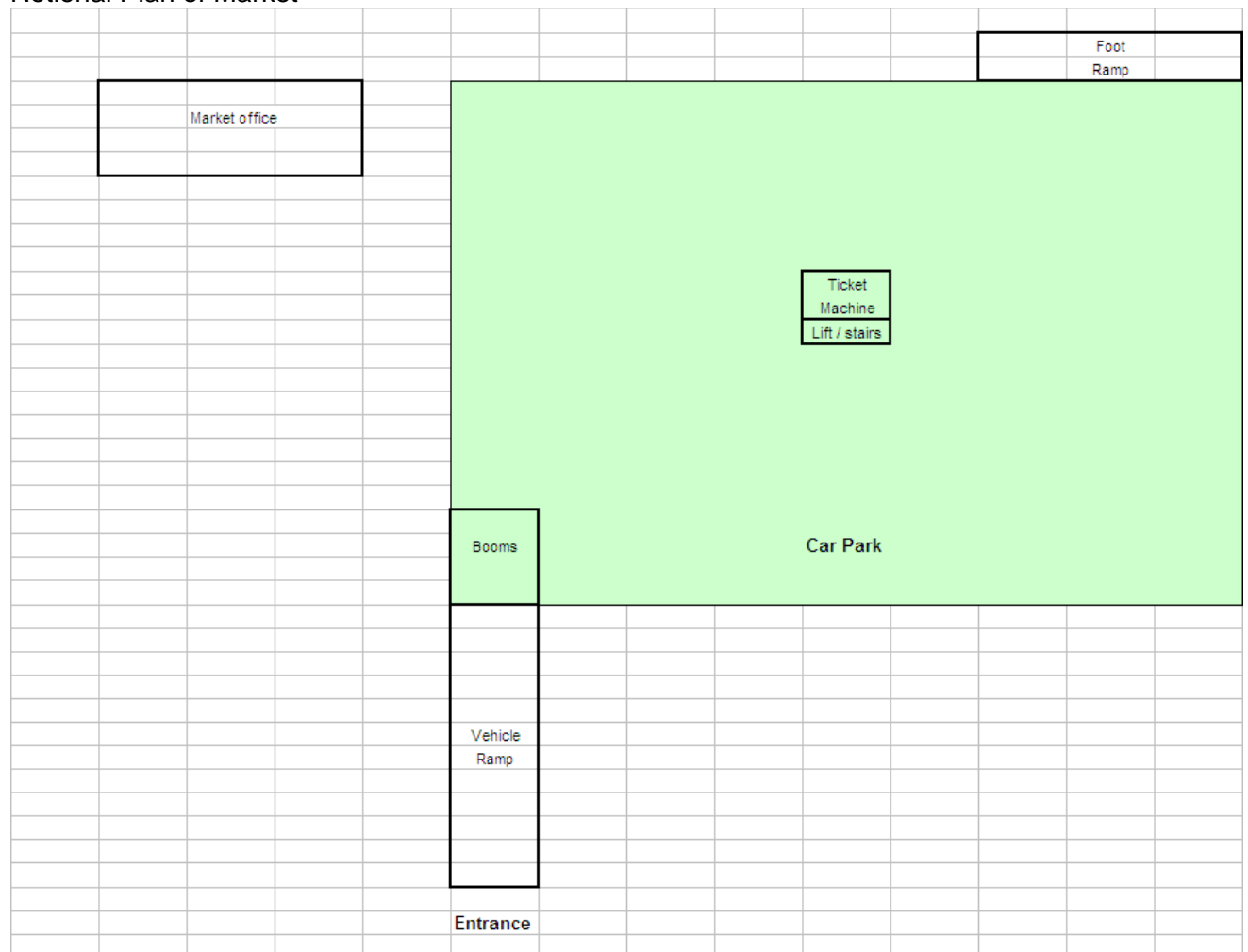
The Market has two car parks. Both are available to shoppers on Market days at no charge but with a two hour limit. Car parks at the South Melbourne Market are available to anyone at an hourly or daily charge for the three days (Monday, Tuesday, and Thursday) the Market is not open. The Market wants to have a boom gate system installed on the one with 275 spaces, so that the gate system can be used to discourage people from parking there all day and displacing shoppers when the market is opened. (It has been observed that as many as a third of all spaces are occupied all day by people who work in the area.) The car park is located on the rooftop and there is only one vehicular entrance, with one lane in and one lane out. The rooftop car park is often in intensive usage during market days. According to statistic, it accommodates an average between 1500-2000 cars on a market day. As a result, the Contractor is expected to take into consideration the high usage of the boom gate system.

The 'system' required by the Market should do the following (or its equivalent – if provided by different technology):

- Have booms to regulate cars coming and going
- Issue tickets
- Validate that the first two hours is free and allow free parking
- Charge at a climbing rate beyond the second hour.
- Charge a different rate for non Market days.
- Be able to be changed if a public holiday changes Market days
- Take payments in cash or 'credit' form
- Send payment as direct to the bank
- Send a daily statement to the Market for daily reconciliation against the bank
- Have support for break downs, maintenance, data back ups etc
- Stop people from cheating by taking a substitute ticket just before they leave.
- Display real time data of available car parking spaces at the VDU located in market office

- Ability to be integrated to potential future dynamic parking advisory signage system (which has not been determined), which the Council is considering to implement in the market surrounding area to guide drivers to designated off-street big car parks.
- Generate data into exportable report about the total number of parked cars in a day and the duration of each car has parked.
- Generate data into exportable report about the net number of spaces available for parking at any particular timing.
- Have a way of monitoring the payment machine and boom gates from the Market office, via the combination of physical CCTV and software application.

### Notional Plan of Market



### 3.2 Site Briefing

A compulsory site briefing is scheduled for Thursday 30 September 2010 at 1.30pm and will run for 30 minutes. Potential tenderers must meet at the Food Court entrance off York Street from the York Street car park. It is a **mandatory requirement** to attend the site briefing. Attendance will be noted by Port Phillip City Council staff at the Market office just prior to the briefing. Tenders submitted without tenderer having attended the site briefing will be considered a non conforming tender submission will not be evaluated.

### **3.3 Location of Boom Gate**

The gates would need to be installed away from the top of ramp into the car park to ensure drivers can obtain a ticket without danger of accidentally rolling down the ramp. The final dimension and location of boom gate should be determined by the tenderer based on their own expert knowledge and actual site condition for what's most suitable, and agreed with the superintendent prior to actual implementation.

### **3.4 Performance Requirement**

The Council has the following performance requirements for the system and its components

#### **Boom gate**

- Remote access and control features (for control from the Market office).

#### **Pay station**

- The pay station should be able to read/scan/validate tickets, take cash/credit card/coins, print receipt, have a screen to display information, and all other relevant common features.

#### **CCTV cameras**

- The cameras need to have a clear view of vehicle license plates at the gates of both entry & exit (from only one end is enough)
- The cameras need to have a clear view of the pay station and the person who is standing in front
- The cameras should be installed at minimal cost and disruption to existing facilities
- The cameras need to be integrated with the existing CCTV system.

#### **Consumables, Maintenance & Guarantee**

- Life expectancy – during the defects liability period of the contract, a unconditional warranty on parts is required (except in the case of wilful damage). Any breakdown within the first year of operation is required to be repaired within 48 hours.
- Support – the tender is required to provide details of after-sales customer support contractors, their hourly rates (including Sunday call-out) and hours of availability.
- Consumables – an estimate of the cost of consumables, assuming 260,000 vehicles per annum, is to be provided for one year.

## **SECTION 4 – ELECTRICAL AND COMMUNICATION CABLING SPECIFICATION**

### **4.1 Electrical Works**

## 4.1.1 GENERAL

All materials and workmanship are to comply with the Port Philip City Council Structured Cabling Standard for Data and Voice and Services Consultants Specifications.

### 4.1.1.1 Quality Assurance

- A. Only licensed electrical technicians may perform required work of the project. Licences are those issued by the State Authority having direct control or interest in the work.
- B. Perform the entire installation in accordance with the requirements of the Statutory Authority having jurisdiction.

### 4.1.1.2 References

Comply with applicable portions of the following Australian Standards:

- AS/NZS 2053 2001 Conduits and fittings for electrical installations  
*There are 8 parts to this standard*
- AS/NZS 3000 2000 Electrical Installations (AS/NZS wiring rules)  
*This standard is in constant revision*

### 4.1.1.3 Submissions

On request of the Superintendent, submit for approval any item related to the installation, including: data sheets on materials; wiring diagrams - plans; samples of products; licence certificates and obtain written approval of each item so requested.

### 4.1.1.4 Delivery, Handling and Storage

Deliver, unload and store in a secure area, in accordance with manufacturer's instructions where applicable, to prevent damage, deterioration and loss.

### 4.1.1.5 Warranty

Provide a warranty covering aspects of required work of this Section, for the defects liability period from the date of Practical Completion.

### 4.1.1.6 Fees and Notices

Pay fees, and submit notices to Supply Authority  
Arrange for inspections by Authority Inspector and obtain final certificate.

## 4.1.2 MATERIALS

### 4.1.2.1 General

Supply only products which bear the required indication of approval of the Statutory Authority having jurisdiction.

At Superintendent's request supply list of proposed materials, showing name of manufacturer.

### 4.1.2.2 Fabrication

Components manufactured off-site are to be compatible with the requirements of the project and to Superintendent's approval.

Refer to Superintendent for approval of finishes of components where item will be exposed to view after installation.

#### **4.1.2.3 Source Quality Control**

Where Superintendent requires, submit data relating to manufactured components in the form of:

- A. Test Reports.
- B. Certificates issued following inspection of products.
- C. Verification of Performance Statement.

### **4.1.3 EXECUTION**

#### **4.1.3.1 Examination**

Request rectification of existing work or preparation of additional or new work by Contractor where necessary to facilitate electrical installations.

#### **4.1.3.2 Preparation**

Provide necessary safety or security controls where required to ensure safe practices and installations.

- A. Slab penetrations for floor-mounted G.P.O.'s, telephone outlets etc.
- B. Chasing and making good for conduit access for skirting
- C. Chasing and wiring duct, G.P.O.'s switches etc.
- D. Supply and installation for access opening where required.
- E. Provision of electrical riser.
- F. Provision of signwriting to Main Switchroom & Distribution board.
- G. Forming, trimming, patching and making good of openings for luminaries to sizes required by the Electrician.
- H. Provision of concrete
- I. Making good existing roadway.

#### **4.1.3.3 Installation**

Comply with Regulatory requirements relating to installation methods and systems.

Ensure that installations are within the Regulatory maximum loads and tolerances.

- A. Chases  
Form chases, in co-operation with Contractor, where necessary in structural items within limits set by Superintendent and Contractor.
- B. Cable  
Secure cable at centres recommended by Regulations and/or manufacturer.
- C. Conceal wiring and cable equipment. Conduit cable where necessary or required in approved material.

#### **4.1.3.4 Field Quality Control**

- A. Where requested by Supply Authority supply test data obtainable from component manufacturer.
- B. Arrange for inspections by component manufacturer's representative to ensure correct application, use and installation.

#### **4.1.3.5 Adjust and Clean**

Adjust installations of components to ensure proper fit and alignment.

Remedy items of inefficient operation or of doubtful performance.

Clean visible items to original condition.

Remove debris from installation in concealed spaces.

#### **4.1.3.6 Protection**

Protect installed items from damage from any source until Practical Completion.

#### **4.1.3.7 Completion**

Complete contracted work in accordance with contract documents.

## **4.2 Communication Cabling**

### **4.2.1 GENERAL**

#### **4.2.1.1 Quality Assurance**

Perform work employing experienced tradespeople familiar with the quality of work required and who are AUSTEL-licensed in accordance with requirements of TS009.

Arrange for a conference with relevant other trades to decide upon matters which affect them.

#### **4.2.1.2 References**

Comply with applicable portions of the following Australian Standards:

AS/NZS 3085	Telecommunications installations- Administration of communication cabling systems
AS 3086 1996	Telecommunications installations - Integrated telecommunications cabling systems for small office/home office premises
AUSTEL TS 008	Requirements for authorised cabling products
AUSTEL TS 009	Installation Requirements for customer cabling (Wiring Rules)

#### **4.2.1.3 Submissions**

On request of the Superintendent, submit for approval any item related to the installation, including: data sheets on materials; wiring diagrams - plans; samples of products; licence certificates and obtain written approval of each item so requested.

#### **4.2.1.4 Delivery, Handling and Storage**

Deliver, unload and store in a secure area, in accordance with manufacturer's instructions where applicable, to prevent damage, deterioration and loss.

#### **4.2.1.5 Warranty**

Provide a warranty covering aspects of required work of this Section, for the defects liability period from the date of Practical Completion.

#### **4.2.1.6 Fees and Notices**

Pay fees, and submit notices to Supply Authority

Arrange for inspections by Authority Inspector and obtain final certificate.

### **4.2.2 MATERIALS**

### **3.2.2.1 Acceptable manufacturers**

Refer to AS/NZS 3086. [Provide Certification by Conduit on all equipment, cabling and associated cable management systems.

## **4.2.3 EXECUTION**

### **4.2.3.1 Examination**

Examine carefully the proposed route for cable installation and installation of other components. Obtain Superintendent's approval before executing the work.

Start of work means total acceptance of conditions.

### **4.2.3.2 Preparation**

Provide necessary safety or security controls where required to ensure safe practices and installations.

Provide needed penetration, openings, chases and structures for safe secure and effective installation of cable.

If installation is required in the electrical riser, co-operate with the Electrician.

### **4.2.3.3 Installation**

Comply with AS/NZS 3086. Refer also to installation clauses for each item.

### **4.2.3.4 Marking and Identification**

Comply with AS/NZS 3086

### **4.2.3.5 Administration**

Comply with AS/NZS 3086

### **4.2.3.6 Field Quality Control**

A. Where requested by Supply Authority supply test data obtainable from component manufacturer.

B. Arrange for inspections by component manufacturer's representative to ensure correct application, use and installation.

### **4.2.3.7 Adjust and Clean**

Adjust installations of components to ensure proper fit and alignment.

Remedy items of inefficient operation or of doubtful performance.

Clean visible items to original condition.

Remove debris from installation in concealed spaces.

### **4.2.3.8 Protection**

Protect installed items from damage from any source until Practical Completion.

### **4.2.3.9 Completion**

Complete contracted work in accordance with contract documents.