



13.1 PROCUREMENT OF STREET SWEEPERS

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CONTRACTS AND OPERATIONS

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1. PURPOSE

1.1 To seek Council approval to procure three (3) specialised street sweepers from Garwood International Pty Ltd.

2. EXECUTIVE SUMMARY

- 2.1 Street sweepers provide street cleaning operations morning and night, 365 days a year. They form an integral asset group for municipal services and must be able to perform heavy duty cleaning operations effectively. Such important works performed are seasonal heavy leaf programs, general leaf litter programs, emergency debris sweeping, and programmed tram line cleaning requirements.
- 2.2 The existing street sweepers were initially procured in 2016 for a contract period of five (5) years. Three (3) sweepers were leased under a fixed-term lease agreement. The sweepers came to the end of their contracted lease terms in May 2021 and are currently managed under a month by month payment arrangement.
- 2.3 Street sweeper vehicles requirements are specialised. The truck combination with the sweeper body design, size and capacity must meet heavy duty standards to be able to manage the required workloads.
- 2.4 An assessment was undertaken to consider the purchase of electric or hybrid powered street sweepers. Unfortunately, at this stage there are limited options for large scale street sweepers. The cost to procure such units (not sold locally) was determined to be cost prohibitive and impractical at this stage. Council maintains its commitment to transition the fleet to zero emissions in line with the Act & Adapt Strategy. Future sweeper purchases, including for smaller scale units, will consider hybrid or fully electric options.
- 2.5 A whole of lifecycle analysis was undertaken to determine the most cost-effective procurement method for the street sweepers going forward. It was found that outright purchase of the sweepers was preferable to further leasing arrangements. Suitable suppliers were then approached for bids through Vendor Panel's Specialised Trucks and Equipment Category ST20092) in May 2021.
- 2.6 The three (3) proposed new sweepers from Garwood International Pty Ltd are fit for purpose and built to suit varied road conditions. The Schwarze designed regenerative air sweeper (fitted to an Isuzu heavy duty truck) is currently used by Council and meets the required service needs.





3. RECOMMENDATION

That Council:

- 3.1 Endorses the procurement of three (3) Schwarze GS6 street sweepers from Garwood International Pty Ltd for a total cost of \$1,036,795.00 inc. GST and stamp duty.
- 3.2 Notes that the procurement process was undertaken using Vendor Panel (Specialised Trucks and Equipment Category ST20092) in full compliance with the provisions of the Local Government Act.

4. KEY POINTS/ISSUES

- 4.1 The existing street sweepers were leased five (5) years ago and all agreements ended in May 2021. The units are still in use via a month to month agreement with the respective leasing companies.
- 4.2 Three (3) sweepers are required to meet operational needs as they service the municipality 365 days a year. The street sweepers provide street cleaning operations morning and night; therefore, the number of sweepers procured must be able to accommodate the service delivery targets.
- 4.3 It has been identified that a total of six (6) heavy duty capacity sweepers are required to meet the continual service requirements by Street and Beach services. This includes the three (3) sweepers requested to be procured.
- 4.4 Additionally, the sweepers need to be transitional in order to meet schedule changes such as emergency works or replacing a sweeper unavailable due to service or repairs, and by doing so will alleviate unnecessary downtime and maintain street cleaning requirements for the municipality.
- 4.5 Specific truck and sweeper model variants are limited for sweeping as they need to support heavy duty requirements; therefore, only a small number of manufacturers are available in Australia who can produce the required specification of sweeper. At present, only diesel optioned trucks and sweeper bodies are available.
- 4.6 Two procurement options were considered for the replacement street sweepers; Option 1 Leasing and Option 2 Outright Purchase.
 - Option 1: In accordance with the Victorian Local Government Best Practice Guidelines, Financial leases (whereby Council does not assume ownership at the end of the lease term) are not subject to the provisions of Section 186 of the Local Government Act 1989. In line with Council's Procurement Policy, an indicative quote for the required sweeper unit was obtained from one of the existing lease companies. An estimate was supplied for a 48-month period based on an asset value of \$344,000.00. The financial formulation results indicated that leasing would cost Council \$268,214.00 over the life of the asset.
 - Option 2: A quote was obtained from an industry provider for outright purchase of the required sweeper unit. This was evaluated using the financial formulations for ownership. Results showed that outright purchase would cost Council \$244,339.00 over the life of the asset.
- 4.7 As the analysis supported Option 2, a procurement plan was initiated on that basis in May 2021. Given the specialised nature of the sweepers, Vendor Panel was selected as the most appropriate method to approach the market. Submissions were invited



from approved suppliers in their Specialised Goods Category, ST20092 in May 2021 for the purchase of three (3) street sweepers.

4.8 Table 1 below shows the composition of the assessment panel:

Table 1		
Position	Name	
Assessment Chair	Catherine Singh, Senior Fleet Officer	
Assessment Panel member	Wayne Moore, Head of Procurement, Contracts and Fleet	
Assessment Panel member	Darren Brownscombe, Coordinator Street and Beach Cleaning	

No conflicts of interest were identified.

The applicable evaluation criteria and weightings are shown in Table 2:

Table 2		
Criteria	% Weighting	
Price (Best Value)	50	
Capability (Fit for Purpose)	30	
Credibility (Manufacturer Reputation)	20	

4.9 Although submissions were invited from three (3) companies, only two (2) responses were received by the closing date 19 May 2021. Details are shown in Table 3:

Table 3		
Respondent Name	Price inc. GST	
Garwood International Pty Ltd	\$1,036,795.00 – three (3) Schwarze GS6 model, Isuzu truck	
Respondent B	\$1,044,150.00 - three (3) Rosmech R6 model, Hino truck	

- 4.10 In assessing the submissions, the panel noted the following:
 - The Schwarze GS6 street sweepers proposed by Garwood International Pty Ltd are the model currently in use within the municipality.
 - The Rosmech R6 street sweepers proposed by Respondent B have been trialled and used in the past by Council.
 - End users have previously expressed a preference for the cabin and body combination of the Isuzu truck and the Schwarze GS6 model over the Rosmech R6 and Hino truck option. The former is viewed to have on balance, better driving manoeuvrability, sweeping functionality and parts reliability.



4.11 Table 4 provides a summary of the evaluation result:

Table 4 – Weighted Scores		
Respondent Name	Score (out of 1000)	
Garwood International Pty Ltd	970	
Respondent B	900	

5. CONSULTATION AND STAKEHOLDERS

- 5.1 Council's Senior Fleet Officer engaged in communication with all relevant users of Street and Beach Cleaning services in April 2021.
- 5.2 The sweeper specifications were also reviewed by end users and the Coordinator Street and Beach Cleaning to ensure that the documentation covered service requirements, environmental objectives and OH&S considerations.

6. LEGAL AND RISK IMPLICATIONS

- 6.1 The existing street sweepers are aged and require more frequent maintenance. Continuing with the existing sweepers long term will lead to delays, downtime and reduced service delivery for the community.
- 6.2 It is estimated that the build and delivery timeframes for the new sweepers will be approximately 16 weeks from the date of order (as the parts are purchased overseas and assembled in Australia).
- 6.3 As per the quotation; pricing may be subject to variations. Changes may be necessary due to variations in material and labour costs, foreign exchange rates, and other factors beyond the supplier's control. The supplier has confirmed that the quoted price will be honoured and as of September 2021, no price changes are scheduled to be made.
- 6.4 The new street sweepers comply with all Australian Design Rules, Statutory Requirements, Work Cover and all National Road Traffic Authority Requirements.
- 6.5 An OH&S risk assessment and safety procedure provided by Garwood International Pty Ltd will form as a key part of the induction process for end users.

7. FINANCIAL IMPACT

- 7.1 Funds for the new sweepers have been allocated within the 2021/22 capital program budget for fleet renewal.
- 7.2 The total price for all three street sweepers will be \$1,036,795, inc. GST and stamp duty fees. Operational costs for the sweepers will be funded from within existing operational budgets.

8. ENVIRONMENTAL IMPACT

- 8.1 Engagement with Council's sustainability team has been undertaken as part of the procurement process. The following considerations of sustainability attributes have been considered:
 - The inclusion of a regenerative air powered sweeper body in the technical specification. It has the ability to clean a larger path, remove smaller debris more



- efficiently and release less exhaust and particulates back into the environment.; and
- An assessment and review of truck emission standards as part of the evaluation process. The responses received outlined comparable Euro 5 specifications – which meet Australian emission standards. (The Euro 5 standard relates to reduced emission of diesel particulates).
- 8.2 In preparing the specification for the new units, sustainable trucks (hybrid or electric) have been considered. Unfortunately, vehicles of sufficient capacity needed for heavy duty street sweeping are currently unavailable in Australia at this point in time.
- 8.3 There are emerging products internationally that in the future may be suitable for heavy duty street sweeping. These products are grappling with the complexities associated with a large mechanical unit. For a fully electric capacity street sweeper; a complete redesign of a trucks size and sweeper body capacity will be required in order to accommodate the battery power needed to run the truck and sweeper motors simultaneously. Based on current technology, the development of an electric sweeper would mean that the running time would be significantly reduced; although fast charging functionality is not impossible in future to accommodate battery re-charging needs.
- 8.4 The introduction of smaller capacity electric or hybrid street sweepers will be investigated in future as these are currently being manufactured and supplied to Australia; with a substantial running time that is likely to meet Council's operational needs. These small capacity sweepers are known as compact sweepers, and are used for carparks, footpaths and shopping precincts.
- 8.5 A key consideration in procurement of a fully electric compact sweeper will be the cost, as they currently cost around 50% more than an equivalent diesel run sweeper. This may change in future as the market and demand increases. Although maintenance costs would be reduced, the asset analysis would still need to be re-evaluated to determine optimal lifecycle, residual value and relevant operating cost formulation.
- 8.6 Council's current replacement program for 2021/22 year has planned for significant investment in hybrid and electric vehicles. This includes:
 - Around 20 replacement passenger vehicles for business and pool use that will be hybrid or fully electric.
 - The procurement of a hybrid tipper-truck for the use of the rapid response cleaning crew.
- 8.7 A reduction in fleet vehicles has also begun, in order to be more environmentally sustainable:
 - Dedicated private vehicles will be reduced by around 50-75% in order to minimise emissions and avoid underutilisation of vehicles.
 - In addition; a small percentage of Pool cars will be procured in order to accommodate the abovementioned reduction; as pool cars will continue to be the primary option for work related travel by staff during business hours. These cars will be fully electric options and produce no tailpipe emissions.



8.8 Council's future replacement forecast has taken into consideration sustainable options for all assets, including possible hybrid plant and electric battery-operated small plant and equipment.

9. COMMUNITY IMPACT

- 9.1 Street sweeping is an integral service in the municipality, providing cleaning operations every day, all year round.
- 9.2 The new sweepers are of the same type currently used by Council (i.e. a Schwarze designed regenerative air sweeper). The sweepers meet required specifications and are designed / constructed to accommodate the diverse range of sweeping conditions around the municipality.

10. ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

- 10.1 The procurement of street sweepers meets the following organisational outcomes and strategies:
 - Strategic Direction 2 Liveable Port Phillip: community services such as street cleaning must be undertaken. The procurement of the new sweepers will ensure service continuity.
 - Fleet Replacement Strategy: replacements of assets are driven by lifecycles and required budget planning forecasts. The sweepers meet replacement timing based on end of life lease agreements.
 - Fit for Purpose: the proposed Schwarze designed regenerative air sweeper is currently used by Council and meets required service needs for the municipality.
 - Budget Requirements: the replacement program has substantial budget to accommodate forecasts, such as high valued assets.
 - Fleet Maintenance Requirements: the new sweepers can effectively cope with required heavy demands for service delivery.

11. IMPLEMENTATION STRATEGY

11.1 TIMELINE

- It is recommended that Council purchases the three street sweepers from Garwood International Pty Ltd.
- Following endorsement of this approach, a purchase order with the necessary conditions will be raised in One Council and forwarded to Garwood International Pty Ltd within 5 business days.
- Delivery of the new sweepers is estimated for December 2021 if ordered in September. The continuation of the current leased sweepers will be managed in accordance with maintenance needs and any costs incurred using operational budgets in Street and Beach services.
- The current leased sweepers will be returned to the relevant lease companies upon delivery of the new sweeper units.

11.2 COMMUNICATION

11.2.1 Council's Senior Fleet Officer engaged in communication with all relevant users of Street and Beach cleaning services, in April 2021.



- Specifications were discussed and drafted. A key focus was understanding the service requirements for street sweeping needs in order to develop the required specification document for tender.
- 11.2.2 A tender evaluation plan was developed in May 2021, and procurement methods decided on. A vendor panel procurement method was decided on based on the specialised nature of the assets.
- 11.2.3 A Vendor Panel request for quotation (RFQ) was initiated in May 2021; seeking three comparable quotes.
- 11.2.4 Evaluation of submissions took place in May 2021. Two submissions were received for evaluation.
- 11.2.5 Budget considerations were finalised in July 2021, in order to fund the sweepers in the 2021 22 financial year.

12. OFFICER DIRECT OR INDIRECT INTEREST

12.1 No officers involved in the preparation of this report have any material or general interest in the matter.

ATTACHMENTS NII