PROPOSAL: That the Board authorizes staff to negotiate four (4) 3-year General Services Contracts with the firms of RAM Industrial Services, LLC; Sherwood Electromotion, Inc.; Swiger Coil Systems, A Wabtec Company; and Walco Electric Company for the repair of transit car traction motors. The total cost of these four (4) General Services Contracts shall not exceed $10,500,000 over a three-year term.

All firms shall be advised, in writing, that no firm will be guaranteed any portion of the $10,500,000 over the three-year term. For example, if no traction motor repairs are needed by PATCO in the first year of the contract, then no monies will be expended and the $10,500,000 allocation will be available for use in years two and three, as needed.

The n-t-e $10,500,000 contract value is based on an average yearly expenditure (based on three years of historical data) averaging approximately $3,500,000 per year for traction motor repairs. For budgetary purposes, we intend that these funds will be budgeted in the amount of $3,500,000 per year over the 3-year contract term. If all budgeted funds are not expended in any given year, the unexpended funds will be moved to the following budget year. Conversely, if more than $3,500,000 is needed in the first contract year, the additional monies required for traction motor repairs will be deducted from the remaining total contract amount and thus the allocations for years 2 and 3 will be adjusted accordingly.

AMOUNT: not to exceed $10,500,000 (three-year term)

Firms: RAM Industrial Services, LLC
2850 Appleton Street, Suite D
Camp Hill, PA 17011
PURPOSE: To retain firms to repair transit car traction motors for PATCO on an as-needed basis in support of PATCO’s operations.

BACKGROUND: Approval of this resolution authorizes staff to enter into General Services Contracts to provide transit car traction motor repairs. These General Services Contracts will cover up to thirty-four (34) types of repair operations that could be required on a typical PATCO transit car traction motor.

PATCO currently owns 563 motors and requires 480 to operate our fleet of railcars. The average cost for a traction motor repair is $12,219.31, whereas the estimated replacement cost is $45,320 per new motor, based on a minimum quantity of 100 units. The original manufacturer, General Electric, no longer makes the motor; their successor who could make the motors is Swiger Coil Systems, A Wabtec Company, one of the proposed vendors.

Traction motors can be rebuilt indefinitely, because the parts that are replaced are largely made with industry standard machinery and do not become obsolete. In addition, motors are upgraded with better insulating materials when they become available. When we have a motor completely rewound, it is essentially new. The motor frame, end bell, shaft, bearing housings and so on, do not wear and are not degraded in service. The commutator, windings, winding insulation and bearings are the parts that are replaced, and this replacement is identical to the process of building a new motor.

The largest cause of failure in our motors is flashover. Flashover is a phenomenon in which an electrical arc forms inside the motor between internal components. The resulting heat damages internal components
and weakens the motor’s insulation. A flashover is caused by dirt, control system defects, overvoltage, vibration introduced by the track or wheel defects. In addition to flashover, which can happen at any time, snowy conditions can cause problems as snow is drawn into the motor by the motor’s cooling fan, where the snow melts and degrades insulation. All the motors now in use are the original motors furnished with the cars, motors furnished as spares when the cars were received, or used motors we have bought from other transit agencies. This situation is not unique to PATCO, as it is industry practice.

On April 16, 2019, the Authority issued a Request for Qualifications to retain traction motor repair manufacturers, on an as-needed basis. We publicly advertised the RFQ on our website and invited interested firms to submit responses to the RFQ, with statements of qualification due no later than 2:00 PM local time on May 7, 2019.

A review team was assembled to evaluate the technical proposals. The team members included: at PATCO, Equipment Division Director John Barrett, Equipment Electrical Manager Steve Kennedy, and Equipment Mechanical Manager Al Profico; and at DRPA, Contract Administrator Amy Ash. All members of the review team were cleared of any conflicts by the Inspector General.

The Inspector General’s Office confirmed that all proposers submitted the required Political Contribution Disclosure & Certification Forms.

The entire RFQ process was overseen by the Contract Administration Department.

We received statements of qualification from the following four (4) firms:

- **RAM Industrial Services, LLC**
  2850 Appleton Street, Suite D
  Camp Hill, PA 17011

- **Sherwood Electromotion Inc.**
  20 Barnes Court
  Concord, Ontario
  Canada, L4K 4L4
All qualified firms were technically evaluated and recommended by the review committee to fill PATCO’s need for traction motor repairs because they were the most responsive to the Authority’s present need. The selection of these four recommended firms provides a diversity of skills and a level of experience in the industry that will allow PATCO to continue providing and meeting the needs for safe and secure transportation infrastructure in the region.

On June 25, 2019, all four (4) firms were notified that PATCO will be adding three (3) additional DC electric motors to the work scope and requested to submit Pricing. Each of the firms were required to submit pricing no later than July 18, 2019.

**Stone Safety DC electric motors**
T-8411 – AC compressor  
T-8181 – HVAC compressor (Budd)  
T-8392 - HVAC compressor (Vickers)

In accordance with PATCO’s qualification-based selection procedure, the Unit Price Proposals were evaluated for the firms being recommended and found to be fair and reasonable.

Staff is recommending that General Services Contracts be awarded to four (4) firms: RAM Industrial Services, LLC; Sherwood Electromotion, Inc.; Swiger Coil Systems, A Wabtec Company; and Walco Electric Company. Using four (4) firms gives staff the flexibility needed to choose the best qualified firm to complete the motor repairs required. Assignments will be issued to one (1) of the four (4) firms depending on their particular expertise and type of motor repair.

Upon approval, all firms will be advised that the total amount of the General Services Contracts is $10,500,000 for a three-year term, and that no one firm is guaranteed any amount thereof.
It is recommended that the General Services Contracts be negotiated with the four (4) repair manufacturers for the costs and associated fees not to exceed $10,500,000.00 for three (3) years to provide traction motor repairs in accordance with the Request for Qualifications. Upon approval of the Board, agreements will be executed with these firms to provide the general services required.

SUMMARY:  
Amount:  Not to exceed $10,500,000 over 3 year term  
Source of Funds:  2018A Revenue Bonds/General Fund  
Operating Budget:  N/A  
Capital Project #:  Project #PD.31904  
Master Plan Status:  N/A  
Other Fund Sources:  N/A  
Duration of Contract:  Three Years  
Other Parties Involved:  N/A
RESOLUTION

RESOLVED: That the Board of Commissioners of Port Authority Transit Corporation authorizes staff to negotiate four (4) General Services Contracts for a term of three (3) years with RAM Industrial Services, LLC; Sherwood Electromotion, Inc.; Swiger Coil Systems, A Wabtec Company; and Walco Electric Company for repairs to transit car traction motors and be it further,

RESOLVED: The total cost of the four (4) General Services Agreements shall not exceed $10,500,000 over the three-year term, and no one firm is guaranteed any amount thereof; and be it further,

RESOLVED: The Chair, Vice Chair and the President must approve and are hereby authorized to approve and execute all necessary agreements, contracts, or other documents on behalf of PATCO. If such agreements, contracts, or other documents have been approved by the Chair, Vice Chair and President and if thereafter, either the Chair or Vice Chair is absent or unavailable, the remaining Officer may execute the said document(s) on behalf of PATCO along with the President. If both the Chair and Vice Chair are absent or unavailable, and if it is necessary to execute the said document(s) while they are absent or unavailable, then the President shall execute such documents on behalf of PATCO.

SUMMARY:

Amount: Not to exceed $10,500,000 over 3-year term
Source of Funds: 2018A Revenue Bonds/General Fund
Operating Budget: N/A
Capital Project #: Project #PD.31904
Master Plan Status: N/A
Other Fund Sources: N/A
Duration of Contract: Three Years
Other Parties Involved: N/A