



Metro

Metropolitan Transportation Authority

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**OPERATIONS COMMITTEE
SEPTEMBER 18, 2008**

SUBJECT: RAIL OCS REHAB & REPAIR EQUIPMENT

ACTION: ESTABLISH LIFE-OF-PROJECT BUDGET

RECOMMENDATION

- A. Establish a life-of-project (LOP) budget for the Rail Overhead Contact System (OCS) Rehab & Repair Equipment Capital Project (CP) #211012, in the amount of \$4,700,000;
- B. The Board finds that there is only a single source of procurement for Rail OCS Rehab & Repair Equipment and purchase is for the sole purpose of replacing the existing high rail OCS maintenance equipment already in use. The Board hereby authorizes purchase of the Rail OCS Rehab & Repair Equipment pursuant to Public Utilities Code section 130237;

Requires Two-Thirds Vote
- C. Authorize the Chief Executive Officer to:
 - 1. Award a firm fixed price contract to Modern Track Machinery, Inc. for the purchase of three specialized heavy-duty high-rail platform/bucket trucks for rehabilitation and maintenance of the light rail overhead contact system for an amount not to exceed \$4,120,000, inclusive of sales tax, pursuant to Public Utilities Code section 130237; and
 - 2. Execute contract modifications in the amount not to exceed \$412,000.

ISSUE

Rail is in the midst of major expansion of its light rail system with the imminent addition of the Gold Line Eastside Extension followed closely by Exposition Line. To keep pace with maintenance, emergency response and, most importantly, rehabilitation due to wear of the OCS systems, we must procure specialized equipment to meet all these demands. At the same time, to maintain the OCS systems on all light rail lines we must be able to perform rehabilitation and emergency maintenance tasks with minimal impact to daily revenue operations. Procurement of specialized maintenance equipment designed to perform major

rehabilitation and respond to major emergency demands within the four-hour work window available during non-revenue hours is a necessary forecast for our expanding rail system.

The Rail OCS Rehab & Repair Equipment project will allow for the procurement of three specialized heavy-duty high-rail platform/bucket trucks. Each truck will be equipped with a double articulated three-man basket, rotating & elevating work platform (two trucks), two-way transmission, a light rail vehicle-style pantograph to measure and align the overhead wires (one truck), a generator and area lighting package (two trucks), a jib crane (one truck), and a hybrid electric drive (one truck). One truck will be equipped with a specialized opto-electronic system installed on the roof known as MAGIC-SC to make precise measurements (height, stagger and wear) of the existing OCS that is needed to plan rehabilitation work and to provide advanced warning of potential weak points before failure occurs.

Blue Line, our oldest light rail system, is due for major rehabilitation of its OCS system, requiring replacement of large sections of OCS wire. This equipment is needed for the rehabilitation program, which will begin in FY '09. The vehicles will also be used for maintenance and emergency repairs to the OCS and for maintenance of tunnel lighting. The combination of both an elevated platform and articulated bucket will allow independent work in two locations simultaneously. The special two-way transmission will allow for extended high-rail operation in reverse. The hybrid electric drive is for use within the tunnels on the Blue Line and Gold Line.

POLICY IMPLICATIONS

Presently, we use a combination of non-specialized hi-rail vehicles owned by us together with specialized equipment that is rented when required. For example when 1-½ miles of Metro Gold Line catenary wire came down on August 19, 2007, Wayside Systems had to contract with outside contractors to supply required specialized hi-rail equipment.

Our current support equipment can only perform repairs to small segments of the wire without major down time impacting revenue service. The existing platform truck is not certified as an insulated truck for operation under live OCS. The availability of this equipment is crucial to the timely completion of emergency repairs and scheduled rehabilitation of the OCS. Having these vehicles will provide staff the ability to respond, without delay, to incidents and perform critical rehabilitation while minimizing the impact to patrons.

These pieces of equipment use the vehicles' rubber tires for propulsion, which offers the risk of derailment on our tight radius turns, particularly when, operated in reverse. Only one firm, Modern Track Machinery, Inc. offers a line of vehicles with fully powered hi-rail, "bogies" that allow safe operation in both directions on tight radius turns and avoid significant impacts to revenue service due to emergency repairs.

OPTIONS

The alternative would be to not procure this equipment. This is not recommended due to the extremely high cost of renting this equipment when needed and risking the probability of unavailability at the time of need. Additionally, the ability to perform a more accurate inspection of the OCS would insure that staff maintains operation of a safe rail line.

FINANCIAL IMPACT

The funding for this project is included in the proposed FY '09 budget in capital project #211012 (Rail OCS Rehab & Repair Equipment), cost centers 3434, 3910, 3927, 3928, 3960, 6310, 8610 and 8640.

This action will establish a LOP budget of \$4,700,000 for the acquisition of OCS rehabilitation equipment funded by Proposition A 35% funds planned for rail rehabilitation. The full funding plan has been included as Attachment A.

BACKGROUND

On August 19, 2007, the Metro Gold Line sustained significant damage when the pantograph of a Gold Line train became entangled in the 750 Volt overhead catenary systems, subsequently pulling down the contact and messenger wires. This caused a total shutdown of a 1-½ mile segment of the line, which took seven days for staff to repair and restore. The equipment required to perform the critical repair was not part of the current rail support vehicle inventory and it was necessary for us to rent this same type of equipment from the Gold Line Eastside Extension contractor, Balfour Beatty Inc., who fortunately had the necessary equipment in Los Angeles and allowed us to rent it to perform our repairs.

In the recent past, there have been several OCS breakdowns, which resulted in lost revenue service hours. At present we are seeking proposals for professional services to perform optical scanning of the OCS on all three light rail lines. This is necessary to investigate the cause of repetitive OCS failures and prepare a remedial action plan. The estimated cost for this one-time service is \$200,000, which is one-third of the cost of the MAGIC-SC system.

NEXT STEPS

The Contracting Officer will negotiate and award a contract to purchase three specialized rehab and repair vehicles at a fair and reasonable price.

ATTACHMENTS

- A. Capital Project Funding & Expenditure Plan
- B. Procurement Summary
- B-1. Procurement History
- B-2. List of Subcontractors

Prepared By: Suresh Shrivavle, Rail Fleet Services Manager
Wyman Jones, Supervising Engineer



Michael J. Cannell
General Manager, Rail Operations



Roger Snoble
Chief Executive Officer

Attachment A

RAIL OCS REHAB & REPAIR EQUIPMENT – CP 211012

CAPITAL PROJECT FUNDING & EXPENDITURE PLAN

	FY08	FY09	FY10	FY11	TOTAL	% of Total
Uses of Funds						
Vehicles		\$ 944,110	\$ 2,832,330		\$ 3,776,440	80%
Labor		\$ 60,000	\$ 53,600		\$ 113,600	2%
Equipment			\$ 5,000		\$ 5,000	0%
Travel Expense			\$ 27,000		\$ 27,000	1%
Contingency			\$ 777,960		\$ 777,960	17%
Total Project Cost	\$ -	\$ 1,004,110	\$ 3,695,890	\$ -	\$ 4,700,000	100%
Sources of Funds						
Prop A35% Funds	\$ -	\$ 1,004,110	\$ 3,695,890	\$ -	\$ 4,700,000	100%
Total Project Funding	\$ -	\$ 1,004,110	\$ 3,695,890	\$ -	\$ 4,700,000	

Attachment B

PROCUREMENT SUMMARY

RAIL OCS REHAB & REPAIR EQUIPMENT

1.	Contract Number: OP39602176		
2.	Recommended Vendor: Modern Track Machinery, Inc.		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price: NTE \$ 4,120,000	Recommended Price: NTE \$ 4,120,000	
	B. Details of Significant Variances are in Attachment B-1.D		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates:		
	A. Issued: N/A		
	B. Advertised: N/A		
	C. Pre-proposal Conference: N/A		
	D. Proposals Due: N/A		
	E. Pre-Qualification Completed: N/A		
	F. Conflict of Interest Form Submitted to Ethics: August 22, 2008		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: To Be Reviewed	Date Small Business Evaluation Completed: N/A	
	B. Small Business Commitment: N/A Details are in Attachment B-2		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: 1
8.	Evaluation Information:		
	A. Bidders/Proposers Names: Modern Track Equipment, Inc. 1415 Davis Road Elgin, Il 60123-1375	<u>Bid/Proposal Amount:</u> NTE \$ 4,120,000	<u>Best and Final Offer Amount:</u> \$ TBD – Subject to audit & negotiation
	C. Evaluation Methodology: Single Source Procurement, Technically Acceptable, Reasonable Price Details are in Attachment B-1.C		
9.	Protest Information:		
	A. Protest Period End Date: Sept. 23, 2008		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: Amy Ly / David Vila	Telephone Number: (213) 922-2632 / (213) 922-1028	
11.	Project Manager: Wyman Jones / Harold Torres	Telephone Number: (213) 922-3282/ (562) 658-0231	

Attachment B-1

PROCUREMENT HISTORY

RAIL OCS REHAB & REPAIR EQUIPMENT

A. BACKGROUND ON CONTRACTOR

Modern Track Machinery Inc. is a manufacturer and distributor of railway maintenance equipment with two facilities in North America. It is a wholly owned subsidiary of Geismar Corporation of France. The U.S.A. facility, Modern Track Machinery Inc. is located in Elgin, Illinois just outside Chicago. Modern Track Machinery Canada Ltd. is located in Mississauga, Ontario near Toronto.

Geismar Corporation was founded in 1924 in Colmar, France. Geismar and Modern Track Machinery offer a full selection of maintenance of way equipment from gas, hydraulic and electric tools, measurement instruments, OHL equipment, tampers, tie-inserters as well as a range of road-rail and steel-wheeled personnel and material transport vehicles. Geismar products are now used worldwide in over 120 countries.

Modern Track Machinery Inc. has had several smaller purchase orders with us and has performed contracts for BART, NJ Transit, US Department of Transportation, MARTA, Metro-Dade Transit Agency and Amtrak totaling \$15.9 million.

B. PROCUREMENT BACKGROUND

Pursuant to Public Utility Code 130237, sole-source procurement is warranted if the item is only available from a single source and it is for the purpose of duplicating or replacing existing equipment. Based on information provided by Rail System Engineering, the purchase of the three specialized heavy-duty high-rail platform/bucket trucks, meets these requirements.

The Diversity and Economic Opportunity Department (DEOD) will review impending contract action for small business participation after budget authorization and prior to contract award.

C. EVALUATION OF PROPOSALS

A technical evaluation will be performed to ensure the vehicles conform to our specifications and operating requirements.

D. COST/PRICE ANALYSIS EXPLANATION OF VARIANCES

The recommended not to exceed price of \$4,120,000 for the three specialized heavy-duty high-rail platform/bucket trucks was determined to be a fair and reasonable ceiling price

for this sole source procurement based on an initial review of the market prices for these types of vehicles. A thorough cost and/or price analysis as required by our procurement policy will be conducted, including audit as required, and a reasonable price agreed to, prior to contract award.

Attachment B-2

**LIST OF SUBCONTRACTORS
RAIL OCS REHAB & REPAIR EQUIPMENT**

PRIME CONTRACTOR –

Modern Track Machinery, Inc.
1415 Davis Road
Elgin, Il 60123-1375

Small Business Commitment
To Be Reviewed

Other Subcontractors
Not Applicable

Total Commitment: TBD%