



Metropolitan  
Transportation  
Authority

One Gateway Plaza  
Los Angeles, CA  
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**PROJECT: BETTERMENT AGREEMENT BETWEEN THE LOS ANGELES TO PASADENA METRO BLUE LINE CONSTRUCTION AUTHORITY AND THE LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**

**ACTION: APPROVE THE LIFE OF PROJECT BUDGET AND EXECUTE BETTERMENT AGREEMENT PCO 194 TO PROCURE AND DELIVER FOUR TRACTION POWER SUBSTATIONS**

### RECOMMENDATIONS

- A. Approve life of project budget in the amount of \$8.7 million for installation of four Gold Line Traction Power Substations.
- B. Authorize the Chief Executive Officer to execute a Betterment Agreement No. PCO 194 between the Los Angeles to Pasadena Metro Blue Line Construction Authority (PBLCA) and the Los Angeles County Metropolitan Transportation Authority (MTA) for the procurement and delivery of four traction power substations in the amount of \$4,733,190.

### RATIONALE

Traction power substations provide the conversion from high voltage utility power to usable power by the light rail vehicle. The ten existing substations supplied on the Metro Gold Line are adequate to support current revenue operations. The current substation mix (nine mainline and one yard) operate two-car consists with ten-minute peak service. Enhancing the system by adding four additional traction power substations will allow operation of a mix of two and three-car consists at up to ten-minute headways.

Secondly, the power delivery system as installed does not provide the redundancy that is available throughout the rest of the operating rail system. As a result, the line could experience restrictions to service capacity if one or more substations are offline due to utility outages, system failure, service incidents, and/or routine maintenance. Therefore, the MTA is seeking to purchase four additional traction power substations to establish redundancy on the Metro Gold Line.

The purchase will benefit the MTA by permitting us to utilize the same vendor the previous ten substations were purchased from and at the same cost. This will establish consistency among the substations.

The total estimated life of project cost is \$8.7 million, of which \$4,733,190 is for procurement and delivery of the substations. The other costs include site preparation, substation installation, environmental clearance, and acquisition of two property sites. Two properties are currently owned by MTA and two will need to be purchased. MTA is also working with the Pasadena Metro Blue Line Authority to reduce the contingency cost. Staff will return to the Board at a future date for the award of site preparation and the installation of the substations.

### **FINANCIAL IMPACT**

Funds of \$4,733,190 for this acquisition are available in the FY04 budget due to savings from Project # 800007, Gold Line Pre-Revenue Operations, and will be transferred to create this new project, Gold Line Traction Power Substations. The funds programmed for this project are Proposition C 25%. Funds for site acquisition, environmental clearances and installation will be identified through deferment or deletion of other rail capital projects.

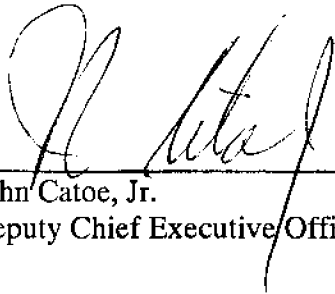
### **ALTERNATIVES CONSIDERED**

The MTA could choose not to procure these four traction power substations. This is not recommended because of the impacts to reliability of service and restrictions on the ability to perform maintenance. Additionally, it would restrict the ability to increase service for projected ridership growth.

### **ATTACHMENTS:**

A. Cost Proposal for four (4) additional Traction Power substations.

Prepared by: Robert Chappell, Director, Wayside Systems



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John Catoe, Jr.  
Deputy Chief Executive Officer



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Roger Snoble  
Chief Executive Officer

**Betterment Agreement PCO 194  
Goldline Traction Power Substations**

<b>Item</b>	<b>Description</b>	<b>Cost</b>
1	Purchase and Delivery of Four Power Traction Substations	\$4,302,900
2	PBLCA Overhead Costs (10%)	\$ 430,290
3	<b>Subtotal Cost for Procurement and Delivery</b>	<b>\$4,733,190</b>
		<b>Other Costs (Estimated)</b>
4	Environmental, Acquisition, Installation, Integration	\$3,000,000
5	MTA Staff	\$500,000*
6	Contingency (5%)	\$466,810
7	<b>Total Project (Estimated)</b>	<b>\$8,700,000</b>

\* MTA staff estimate is not a net increase to the Enterprise Budget. It is a cost transferred from the operating budget to the capital budget. Therefore, there is no impact to the operating labor.