



Metro

CONSTRUCTION COMMITTEE
JULY 15, 2004

PROJECT: METRO ORANGE LINE
CONTRACT: C0675 DESIGN/BUILD
SHIMMICK CONSTRUCTION CO., INC./OBAYASHI
CORPORATION, J.V.
ACTION: ISSUE CHANGE ORDERS IN AN AMOUNT NOT-TO- EXCEED
\$2,000,000 FOR DESIGN AND CONSTRUCTION TO UPGRADE
THE BUSWAY PAVEMENT STRUCTURAL SECTION

RECOMMENDATION

Authorize the Chief Executive Officer to issue Change Orders to Contract No. C0675 with Shimmick Construction Co., Inc./Obayashi Corporation, J.V. (SOJV) for the design and construction to upgrade the busway pavement structural section for the Metro Orange Line Project in an amount not-to-exceed \$2,000,000, increasing the total contract value from \$156,577,600 to \$158,577,600.

Within Construction Committee authority: Yes No N/A

RATIONALE

Contract No. C0675 requires completion of final design and construction of a 26-foot wide at-grade busway pavement that will run for approximately 13-miles within the Metro right of way between the North Hollywood Metro Red Line Station and Variel Avenue in the West Valley.

This authorization will allow MTA to enter into an agreement with the Contractor for the increase in pavement thickness required for a Traffic Index (TI) of 11.0 for the remaining portions of the busway for a not-to-exceed amount of \$2,000,000. The Contractor's current proposal for this work is \$2,280,151 and a request for a 41-day time extension. The schedule impacts and its costs, if any, will be addressed in a separate Contract Modification as part of a global schedule recovery plan.

The C0675 contract documents specified pavement structural material and thickness for the busway based on a Traffic Index (TI) of 9.5. TI is one of two major parameters used in the calculation of pavement thickness. TI is calculated based on weight and number of bus trips

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projected over the design life of pavement. Heavier or more frequent traffic will result in higher TI and thicker pavement sections. STV Inc., MTA's Preliminary Engineering Consultant, calculated TI of 9.5 based on twenty years design life and the Caltrans Highway Design Manual, which is an empirical procedure based on experience.

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During review of SOJV's design of the busway crossing the City streets, the City of Los Angeles expressed their concern that the projected weight of the 60 foot articulated buses was not taken into consideration as part of the calculation of TI using the Caltrans method. Accordingly, the TI value was re-evaluated. Based on the results of the re-evaluation, the TI of 9.5 was determined insufficient for a 20 year busway life and that a TI of 11.0 was more appropriate.

The City of Los Angeles Pavement Evaluation Design Unit, and Caltrans Headquarters Division of Design Office of State Pavement Design, have been consulted on this issue and also concur with the revised TI calculation method. In addition, MTA has obtained an independent review of the design calculation and methodology from Carter and Burgess Inc., Construction Management Support Services Consultant, concluding that TI of 11.0 is the appropriate design parameter to use for the busway.

To reduce potential delays, MTA executed Contract Modification No. C0675-MOD-19 in the amount of \$88,500 for the re-design and construction of the pavement based on TI of 11.0 for the busway east of Whitsett Ave, which has now been paved. To avoid suspending work prior to Board authorization, MTA issued Change Order No. 35.01 in the amount not-to-exceed \$600,000 to allow SOJV to commence redesign and initial pavement construction of the remaining portion of busway pavement west of Whitsett Avenue. During May 2004, SOJV submitted cost and schedule proposals, for the re-design and construction of the pavement based on TI of 11.0 for the remaining portion of the busway in the amount of \$2,280,151 and a 41 day time extension.

IMPACTS TO OTHER CONTRACTS

For the amount identified within this Board action, only this contract, Contract No. C0675 is impacted. If, however, future Contract No. C0675 actions require funding for any delays extending Contract Milestones; there may be an impact to Contract No. MC067, Construction Management Support Services Consultant to increase the Contract No. MC067 CWO No. 1.

FINANCIAL IMPACT

Original Contract Award	\$150,717,038
Current Cumulative Contract Value	\$156,577,600 as of 6/1/04
This Action	\$2,000,000
New Cumulative Contract Value	\$158,577,600

The funds for this contract action are available within the FY05 Capital Budget of \$144,341,000 within budget Cost Center No. 8510 for Project 800112 Metro Orange Line Project. The life of project budget adopted by the Board in February 2003 is \$329,500,000. This recommendation will increase the current Contract No. C0675 Total Contract Value by \$2,000,000. Since this is a multi-year project, the Cost Center Manager and appropriate Executive Officer will be accountable for budgeting the project costs in future years consistent with the MTA Board adopted total project budget. Funding sources for Project 800112 are a combination of State and local funding sources.

COST RECOVERY

Potential for Cost Recovery: Yes No N/A

A portion of the costs for this contract action may be recovered from STV, Inc. for a possible error in calculating the TI value. This issue has been referred to County Counsel for further analysis.

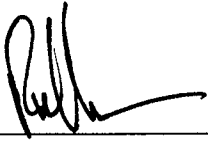
ALTERNATIVES CONSIDERED

The MTA Board may reject staff Recommendation and not approve changing the Traffic Index. Staff is not recommending this option; as this action will result in a significant reduction in the useful life of the busway pavement, an increase to the maintenance costs and frequency, unpredictable pavement performance, and potential impacts to bus operations.

ATTACHMENTS

- A. Procurement Summary
- A-1. Procurement History
- A-2. List of Subcontractors

Prepared By: Hitesh Patel, Director, Construction Management
Roger F. Dames, Deputy Executive Officer



Richard Thorpe
Chief Capital Management Officer
Construction Project Management



Roger Snoble
Chief Executive Officer

**BOARD REPORT ATTACHMENT A
PROCUREMENT SUMMARY**

**Contract C0675 – San Fernando Valley
East-West Corridor Bus Rapid Transit Project**

1.	Contract Number: C0675, Change Notice/Change Order 35.01		
2.	Recommended Vendor:	Shimmick Construction, Inc./Obayashi Corporation, JV	
3.	Cost/Price Analysis Information: See Attachment A-1		
	Bid/Proposed Price: \$ 2,280,151	Recommended Price: \$TBD	
4.	Contract Type: Fixed Price		
5.	Procurement Dates:		
	Issue d: Change Notice 35 Issued on December 24, 2003		
	B. Advertised: N/A		
	C. Pre-proposal Conference: N/A		
	D. Proposals Due: January 2004		
	E. Pre-Qualification Completed: N/A		
	F. Conflict of Interest Form Submitted to Ethics: Yes		
6.	Small Business Participation:		
	A. Bid/Proposal Commitments: N/A	Date Small Business Evaluation Completed: N/A	
	Small Business Commitment:	27.83% Design 36.52% Construction	
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
8.	Evaluation Information:		
	Bidder/Proposer Names: N/A	<u>Bid/Proposal Amount:</u> N/A	<u>Best and Final Offer Amount:</u> \$ N/A
	B. Evaluation Methodology: Cost Analysis and Technical Evaluation		
9.	Protest Information:		
	A. Protest Period End Date: N/A		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: Robert P. Sechler	Telephone Number: 213-922-7334	
11.	Project Manager: Roger F. Dames	Telephone Number: 213-922-7280	

**BOARD REPORT ATTACHMENT A-1
PROCUREMENT HISTORY**

A. Background on Contractor

Shimmick-Obayashi is a joint venture of two firms. Shimmick Construction Company, founded in 1990, is a general engineering contractor based in Hayward, California. It has considerable experience in heavy public works construction, including the Alameda Corridor. Obayashi Corporation, founded in 1892, is an internationally known contractor based in Japan. Its relevant experience includes subways, dams, power plants, rail lines, bridges, highways, and design-build type contracts.

B. Procurement Background

Contract No. C0675 is a fixed price contract, state and locally funded, for a design-build delivery system for the San Fernando Valley East-West Metro Rapidway, plus a federally funded bikeway and pedestrian path, and up to eight (8) Contract Options under a Contractor-Controlled Insurance Program. Contract No. C0675 was awarded to Shimmick Construction Company, Inc./Obayashi Corporation, A Joint Venture (SOJV) on April 3, 2003, in the amount of \$150,717,038, which included five Contract Options. The Notice to Proceed (NTP) was issued on May 2, 2003, with a completion date 776 calendar days from the Commencement Date of May 2, 2003 set forth in the NTP.

C. Proposal Evaluation

N/A

D. Cost/Price Analysis

The MTA Estimates are not being disclosed at this time in order not to compromise MTA's ability to negotiate a fair and reasonable price for these Changes. Negotiations will be based upon the Contractor's Cost/Schedule Proposals, MASD Audit, MTA Independent Cost Estimate, fact finding and technical analysis of the work scope against proposed and estimated costs.

CN No.	Proposal Amount	MTA Estimate	Negotiated Amount
35.01	\$2,280,251	\$TBD	\$TBD

**ATTACHMENT A-2
LIST OF SUBCONTRACTORS**

SMALL BUSINESS PARTICIPATION (CO675)

This Contract has a Disadvantaged Business Enterprise (DBE) participation goal of 27.83% for Design and a DBE goal of 36.52% for Construction. The Contract was awarded on April 3, 2003 and is approximately 88% complete for Design and 15% complete for Construction. Current DBE attainment¹ based on the relevant amount² is 15.2 % for Design and 3.3% for Construction. Current DBE participation³ based on total actual amount paid-to-date to Contractor and total actual amount paid-to-date to DBEs is 32.8% for Design and 12.2% for Construction. The Diversity & Economic Opportunity Department (DEOD) will evaluate Change Order No. 35 to determine DBE participation upon receipt of the required cost information.

DEOD is currently auditing the activity shown below as reported by SOJV through March 2004. DEOD will continue to monitor this project to ensure SOJV's compliance with prompt payment requirements.

Design

Original Award Amount (Design)	\$ 11,677,268
Relevant Contract Amount² (Design)	\$ 12,662,302
Total Actual Amount Paid to Date to Prime (Design)	\$ 5,862,397

* DBE firms added to project by SOJV for additional DBE attainment.

DESIGN				
<u>Total Commitment</u>	<u>% Complete</u>	<u>Total Current Attainment</u>	<u>Total Current Participation</u> 32.83%	<u>Compliance Status</u>
27.83%	87.86%	15.20%		PERFORMING

Subcontractor Name	% Commitment	% Complete	% Current Attainment	% Current Participation
KATZ OKITSU & ASSOCIATES	8.56%	65.90%	5.20%	11.24%
TATSUMI & PARTNERS	6.74%	69.93%	4.20%	9.07%
RICHARD CHONG	2.97%	100.0%	3.48%	7.51%
WILLIAM YANG	0.81%	34.26%	0.25%	0.55%
ASAHI SURVEYING	3.91%	54.19%	0.77%	1.66%
ANTICH SURVEYING	1.96%	52.09%	0.94%	2.03%
FPL & ASSOCIATES *	0.00%	26.92%	0.20%	0.43%
SANCHEZ DESIGN	1.60%	0.00%	0.00%	0.00%
THE SIERRA GROUP	1.28%	13.44%	0.16%	0.34%
TOTAL	27.83%	-	15.20%	32.83%

Construction

Original Award Amount (Construction) \$ 135,719,520
 Relevant Contract Amount² (Construction) \$ 138,026,167
 Total Actual Amount Paid to Date to Prime (Construction) \$ 32,628,838

CONSTRUCTION				
<u>Total Commitment</u>	<u>% Complete</u>	<u>Total Current Attainment</u>	<u>Total Current Participation</u>	<u>Compliance Status</u>
36.52%	14.89%	2.88%	12.18%	PERFORMING

Subcontractor Name	% Commitment	% Complete	% Current Attainment	% Current Participation
ROMERO GENERAL CONSTRUCTION	9.54%	1.03%	.10%	0.41%
RAINBOW CONSTRUCTION	5.56%	30.98%	1.69%	0.00%
WESTERN PAVING	4.81%	0.00%	0.00%	0.00%
WC BROWN WELDING	4.76%	0.00%	0.00%	0.00%
ACE FENCE	2.43%	2.20%	0.05%	0.22%
CUT CORE DEMOLITION	0.72%	91.65%	0.61%	2.57%
BCB STEEL	0.59%	8.57%	0.05%	0.21%
CONRAD CONSTRUCTORS	0.22%	63.80%	0.12%	0.50%
BLUE SKY AKA UNITED TRAFFIC	0.05%	0.00%	0.00%	0.00%
PW TRUCKING	0.01%	10.92%	0.00%	0.01%
ROSE SUPPLY	1.96%	0.94%	0.02%	0.08%
INDUSTRIAL WHOLESALE	0.80%	6.87%	0.05%	0.23%
LOOP MASTERS	0.16%	0.00%	0.00%	0.00%
DI CARLOS ASSOCIATES (A DBE SUPPLIER)	0.66%	0.00%	0.00%	0.00%
IMPERIAL IRRIGATION	0.59%	0.00%	0.00%	0.00%
GALLO'S	2.10%	0.00%	0.00%	0.00%
FAREAST LANDSCAPE	1.27%	0.00%	0.00%	0.00%
TRISTAR TRANSPORTATION	0.06%	0.00%	0.00%	0.00%
WESTERN PAVING	0.13%	0.00%	0.00%	0.00%
CUT CORE DEMOLITION	0.08%	0.00%	0.00%	0.00%
ABRATIQUE & ASSOCIATES *	0.00%	100.00%	0.14%	0.57%
MORGNER TECHNOLOGY MGT *	0.00%	54.63%	0.02%	0.09%
WAGNER ENGINEERING *	0.00%	26.23%	0.03%	0.13%
TOTAL	36.52%	-	2.88%	12.18%

¹Current Attainment = Total Actual Amount Paid-to-Date to DBE Subs ÷ Total Current Contract Amount

²Relevant Contract Amount = Original Contract Value + Contract Cost Modifications

³Current Participation = Total Actual Amount Paid-to-Date to DBE Subs ÷ Total Actual Amount Paid-to-Date to