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APRIL 1, 1997

TO: BOARD OF DIRECTORS

FROM: LINDA BOHLINGER, *Linda Bohlinger*
INTERIM CHIEF EXECUTIVE OFFICER

SUBJECT: APPROVE WORK AUTHORIZATION CHANGE
NOTICE AND INCREASE TO AUTHORIZATION FOR
EXPENDITURE FOR ADDITIONAL TYPE C-4 SUPPORT
TO REPLACE TYPE C-3, C-2 & C-1 FOR TUNNEL LINE
SECTION TO UNIVERSAL CITY STATION METRO RED
LINE, NORTH HOLLYWOOD CORRIDOR

Los Angeles County
Metropolitan
Transportation
Authority

One Gateway Plaza
Los Angeles, CA
90012

213.922.6000

RECOMMENDATION

Approve:

- a) Work Authorization Change Notice (WACN) No. 118.00 to Contract No. C0311 for Tunnel Line Section to Universal City with Traylor Bros./Frontier-Kemper, Joint Venture, in the amount of \$700,000 to cover additional costs of initial tunnel support for a revised total contract amount of \$139,281,105;
- b) an increase to the Authorization for Expenditure (AFE) in the amount of \$700,000 for a total revised AFE amount from \$156,375,426 to \$157,075,426; and
- c) authorize staff to execute a subsequent Change Order if it is within the NTE amount approved above for the WACN No. 118.

Within Construction Committee authority : Yes No

ORGANIZATIONAL IMPACT

Issuance of this WACN is essential to prevent an impact to the project schedule for the Metro Red Line, North Hollywood Corridor.

BUDGET IMPACT

The funds for this action are available within the Board approved project budget of \$1,313,848,000. This recommended action will increase the current Contract C0311 value of \$138,581,105 by \$700,000 to \$ 139,281,105. The forecast and final cost including this Change Notice and other anticipated changes for this

contract, is shown in Attachment 1. Project contingency will be reduced by \$700,000. This recommended action does not impact the MTA Fiscal Year Budget or the Sources of Funds, either in the fiscal year or over the life of the project.

Potential for Cost Recovery : Yes No

ALTERNATIVES CONSIDERED

There are no viable alternatives. The anticipated ground conditions in the remaining portions of the running tunnels are clearly described in the Geotechnical Design Summary Report (GDSR) as requiring Type C-4 tunnel support (6-inch ribs). A shear zone is expected to be encountered. These conditions clearly indicate that the stronger Type C-4 support is required for the remainder of the tunnels.

BACKGROUND

This change is necessary to increase the quantities of Type C-4 support to insure that the proper sized support is installed in the remainder of the running tunnels. An increase in quantities does not infer that any change of conditions exist in the tunnels.

The contract documents provided an estimate of the quantities for different types of support for the running tunnels. This change is only for the differential cost of using the heavier support of C-4 over the lighter Type C-1, 2 & 3 support (4-inch ribs) (See Additional Background - Attachment 2).


SMALL BUSINESS PARTICIPATION

The DBE commitment is \$19,372,000 or 15.57%. This contract is 48.7% complete. DBE participation has not been a problem (See Additional Small Business Participation - Attachment 2).

ATTACHMENTS

- Attachment 1: Contract Value Status
- Attachment 2: Additional Background/Small Business Participation
- Attachment 3: Tunnel Grouting Support Drawings

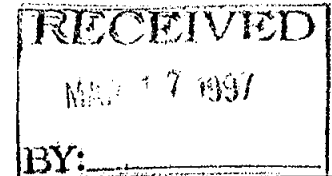
Prepared by: Stan Lotterman , Manager of Contracts
John J. Adams, Interim Deputy Executive Officer, Construction
Metro Red Line North Hollywood Corridor



CHARLES W. STARK
Interim Executive Officer, Construction

ATTACHMENT 1 CONTRACT VALUE STATUS

R82 Metro Red Line - Segment 3 - N
CHANGE ORDER : C0311-CO-69.00



CONTRACTOR: TRAYLOR BROS./FRONTIER-KEMPER, J.V. - LINE SECTION FROM STATION 630+00 TO UNIVERSAL CITY
CHANGE TITLE: ADDITIONAL TYPE C-4 SUPPORT TO REPLACE TYPE C-3, C-2 & C-1 SUPPORTS

CONTRACT VALUE STATUS

1.	CONTRACT AWARD AMOUNT:	\$124,421,000.00
2.	PREVIOUSLY EXECUTED CHANGES:	\$6,050,105.00
3.	CURRENT CONTRACT VALUE: (1 + 2)	\$130,471,105.00
4.	AUTHORIZED WACN'S (NTE):	\$8,110,000.00
5.	OBLIGATED CONTRACT VALUE: (3 + 4)	\$138,581,105.00
6.	VALUE OF THIS CHANGE:	\$700,000.00
7.	ESTIMATED CONTRACT VALUE: (5 + 6)	\$139,281,105.00

AUTHORIZED FOR EXPENDITURE STATUS

INCREASE IN AFE REQUIRED/REQUESTED:

8.	MTA APPROVED AFE:	\$156,375,426.00	Award + 25.68%
9.	ESTIMATED CONTRACT VALUE: (Line 7)	\$139,281,105.00	
10.	REMAINING AFE (Actual 8-9)	\$17,094,321.00	\$0.00 For current actual costs
11.	OTHER PENDING CHANGES (merited)	\$16,645,294.26	
12.	REMAINING AFE (w/CHANGES 10-11)	\$449,026.74	\$0.00 For pending changes
13.	TRENDS AND CONTINGENCIES (pending merit finding)	\$8,646,841.74	
14.	REMAINING AFE: (w/TRENDS 12-13)	(\$8,197,815.00)	\$8,197,815.00 For possible changes

CONTRACT BUDGET STATUS

15.	CURRENT CONTRACT BUDGET:	\$162,250,000.00	
16.	FORECAST CONTRACT VALUE: (9 + 11 + 13)	\$164,573,241.00	For all potential changes. To be funded from unallocated Project
17.	REMAINING CONTRACT BUDGET: (15-16)	(\$2,323,241.00)	contingency if necessary.

CONTRACT INCREASE PERCENTAGES

18.	% OF ORIGINAL AWARD VALUE (THIS CHANGE)	0.563%
19.	% OF ORIGINAL AWARD VALUE (MERITED CHANGES)	24.759%
20.	% OF ORIGINAL AWARD VALUE (ALL CHANGES)	32.271%
21.	% CONTRACT COMPLETE:	52%

REVIEWED BY MTA PROGRAM CONTROL T. WILKENS, PROGRAM CONTROL

T. Wilkens

DATE: 3/18/97

ADDITIONAL BACKGROUND

The contractor is responsible for selecting the type of support that is installed based on the GDSR and the Technical Specification which estimates the type of support that will be required in each of the tunnel Reaches. The contractor has chosen to install Type C-4 support throughout all of the Reaches. This decision was made based on the actual ground conditions encountered and the desire to ensure maximum stability to the tunnel until the permanent liner is installed. In the Reaches in which the tunnels have been completed to date the quantity of Type C- 4 (6 inch ribs) support exceeds the individual quantities for the particular Reach as given in the GDSR but does not yet exceed the total quantity given in the technical specification. The GDSR details the ground conditions and recommends the type and quantity of support that are required in each of the running tunnels. The Alignment Left (tunnel - inbound) and Alignment Right (tunnel - inbound) tunnels are now in Reach 2 proceeding south. Reach 2 states 100% Type C-4 with 20% Type C-4 jump-sets. Reach 1A states 25% Type C-4 for approximately 600 feet. Reach 1B states 80% Type C-4 with 20% Type C-4 jump-sets.

Contract C0311 is a fixed priced, federally funded procurement for the construction of the Line Section from Station 630+00 to Universal City. The work includes boring and finishing existing twin tunnel line structures and cross-passages excavated by others; construction of two single crossovers and track-level rooms in a mined configuration; providing the north access shaft; and excavation and support of a crossover structure site at the Universal City station.

Contract C0311 was recommended for award to Traylor Bros./Frontier-Kemper, Joint Venture, by Metropolitan Transportation Authority Construction Committee at its December 14, 1994 meeting, and was approved by the MTA Board on December 21, 1994. The Total awarded Contract Price was \$124,421,000. The Notice-To-Proceed date was January 23, 1995, with an anticipated completion date of July 5, 1998.

SMALL BUSINESS PARTICIPATION

The majority of the DBE value is in the permanent electrical work which is to start in January 1998 and be completed by June 1998 time frame. The DBE subcontractors for the project are R.T. Construction for (1.96%) for Temporary and Permanent Electrical; Marmolejo Contractors (2.81%) for Furnish and Install Tunnel Lining; Alpha Corporation (.42%) for Trucking; and Ugalde Trucking Co., Inc. (.07%) for Engineering and Design. The contractors current attainment is 5.26%. It is anticipated that the contractor will meet the DBE goal.

**ATTACHMENT 3
TUNNEL GROUTING
SUPPORT DRAWING**

