

44

44

MAY 1, 1997



Los Angeles County
Metropolitan
Transportation
Authority

One Gateway Plaza
Los Angeles, CA
90012

213.922.6000

TO: BOARD OF DIRECTORS

FROM: LINDA BOHLINGER
INTERIM CHIEF EXECUTIVE OFFICER

Linda Bohlinger

SUBJECT: APPROVE WORK AUTHORIZATION CHANGE NOTICE
AND INCREASE TO THE AUTHORIZATION FOR
EXPENDITURE FOR GROUND IMPROVEMENT FOR
TUNNEL LINE SECTION TO UNIVERSAL CITY STATION,
METRO RED LINE, NORTH HOLLYWOOD CORRIDOR

RECOMMENDATION

Approve:

- a) Work Authorization Change Notice (WACN) No. 120.00 to Contract No. C0311 for Tunnel Line Section to Universal City with Traylor Bros./Frontier-Kemper, Joint Venture, in an amount not-to-exceed \$2,200,000 to cover additional costs of ground improvement and continuation of hand mining or mining with the Tunnel Boring Machine (TBM) to complete the tunnel just north of the Special Seismic Section for a revised total contract amount of \$141,558,718;
- b) an increase to the Authorization for Expenditure (AFE) in the amount of \$2,200,000 for a total revised AFE amount from \$157,875,426 to \$160,075,426; and
- c) authorize staff to execute a subsequent Change Order if it is within the amount approved above for the WACN No. 120.

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 and allow the safe excavation and completion of the tunnels just north of the Special Seismic Section.

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 \$139,352,104 by \$2,200,000 to \$ 141,552,104. 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 \$2,200,000. 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 ground just north of the Special Seismic Section (SSS) is presently too weak to excavate either by hand mining method or by the Tunnel Boring Machine. Grouting must be performed from the interface of the Special Seismic Section to ensure the safety of the workers and the stability of the tunnel before advancing any further.

BACKGROUND

The existing ground conditions reached near the end of the Special Seismic Section are not suitable for Tunnel Boring Machine (TBM) excavation. Grouting and hand mining are necessary due to the weak ground conditions in this area. The details and extent of the ground improvement and any continuation of hand mining will be determined by the results of an investigation program included under this Change Notice. A probe hole was drilled from near the end of the Special Seismic Section (SSS) on April 21 - 25, 1997 and has provided new geotechnical information and confirmed that the ground is unsuitable for Tunnel Boring Machine (TBM) excavation beyond the end of the SSS. (See Additional Background - Attachment 2)

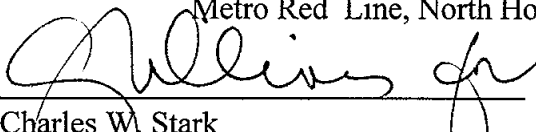
SMALL BUSINESS PARTICIPATION

The Disadvantaged Business Enterprise commitment is \$19,372,000 or 15.57%. This contract is 48.7% complete. Disadvantaged Business Enterprise 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: Special Seismic Section and Reach 1 Sketch

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-72.00

CONTRACTOR: TRAYLOR BROS./FRONTIER-KEMPER, J.V. - LINE SECTION FROM STATION 630+00 TO UNIVERSAL CITY
CHANGE TITLE: TBM BREAKTHROUGH

CONTRACT VALUE STATUS

1.	CONTRACT AWARD AMOUNT:	\$124,421,000.00
2.	PREVIOUSLY EXECUTED CHANGES:	\$6,222,718.30
3.	CURRENT CONTRACT VALUE: (1 + 2)	\$130,643,718.30
4.	AUTHORIZED WACN'S (NTE):	\$8,715,000.00
5.	OBLIGATED CONTRACT VALUE: (3 + 4)	\$139,358,718.30
6.	VALUE OF THIS CHANGE:	\$2,200,000.00
7.	ESTIMATED CONTRACT VALUE: (5 + 6)	\$141,558,718.30

AUTHORIZED FOR EXPENDITURE STATUS

INCREASE IN AFE REQUIRED/REQUESTED:

8.	MTA APPROVED AFE:	\$157,875,426.00	Award + 26.89%
9.	ESTIMATED CONTRACT VALUE: (Line 7)	\$141,558,718.30	
10.	REMAINING AFE (Actual 8-9)	\$16,316,707.70	\$0.00 For current actual costs
11.	OTHER PENDING CHANGES (merited)	\$12,989,028.11	
12.	REMAINING AFE (w/CHANGES 10-11)	\$3,327,679.59	\$0.00 For pending changes
13.	! TRENDS AND CONTINGENCIES (pending merit finding)	\$10,025,494.59	
14.	REMAINING AFE: (w/TRENDS 12-13)	(\$6,697,815.00)	\$6,697,815.00 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	
17.	REMAINING CONTRACT BUDGET: (15-16)	(\$2,323,241.00)	For all potential changes. To be funded from unallocated Project contingency if necessary.

CONTRACT INCREASE PERCENTAGES

18.	% OF ORIGINAL AWARD VALUE (THIS CHANGE)	1.768%
19.	% OF ORIGINAL AWARD VALUE (MERITED CHANGES)	22.445%
20.	% OF ORIGINAL AWARD VALUE (ALL CHANGES)	32.271%
21.	% CONTRACT COMPLETE:	52%

REVIEWED BY MTA PROGRAM CONTROL: T. WILKENS, PROGRAM CONTROL

J. P. Wilkins

DATE: *4/29/97*

ATTACHMENT 2

ADDITIONAL BACKGROUND

This investigation could not have been performed earlier from the surface because of the lack of access to private properties. Just prior to the redesign of the SSS in Spring of 1996, a long probe hole was drilled from the end of the B251 Tunnel after Notice To-Proceed (NTP) was given to Contract C0311 and showed conditions for the SSS, but ground information about conditions beyond was limited by the drilling technology. With the new ground information obtained from the recent probe hole, it is now proposed to initiate a grouting program to improve the ground conditions and facilitate tunneling through the area. To minimize any impact to the project schedule and cost, it is recommended that both the probing, grouting and the excavation of any length of tunnel determined to be unsuitable for the TBMs, be done from the north end of the SSS. "Hand mining" using roadheaders or mechanical excavators with steel rib and shotcrete support may continue from the north end of the SSS until ground suitable for the TBMs is reached. This distance will be determined by the investigation program which will be performed prior to and during grouting. This grouting will significantly reduce the ground water inflow into the tunnel and will mitigate the impacts to the Runyon Canyon Park.

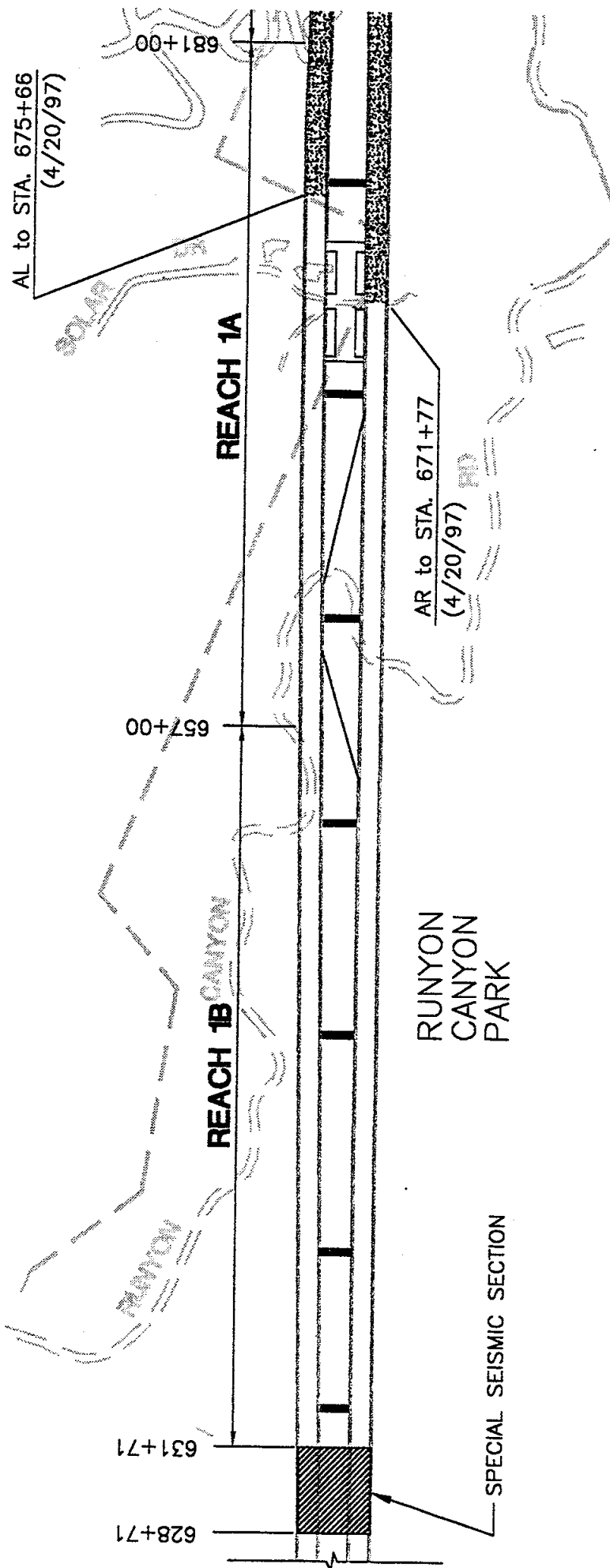
Contract C0311 is a fixed priced, federally funded procurement for the construction of the Line Section from Station 630+00 to Universal City. The work includes boring and finishing existing twin tunnel line structures and cross-passages excavated by others; construction of two single crossovers and 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 an award to Traylor Bros./Frontier-Kemper, Joint Venture, by MTA 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 NTP 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. Fifteen DBE firms have participated to date: R.T. Construction for temporary and permanent electrical (2.71%); Marmelejo Contractors for furnish and install tunnel lining (4.83%); Ugalde Trucking for trucking (.85%); Alpha Corporation for engineering and design (.07%); Malcolm Drilling for drilling and tie-back anchors (.06%); Contractors Barricade for lane closure (.01%); Fence Factory for fencing (.03%); Bravo Environmental for sound blankets (.05%); Mcalpine & Salyer for acoustical attachments & insulation (.05%); Geosystec Consultants for engineering (.13%); Sanders Engineering for vent strapping (.13%); Mejia Steel for welding (.01%); Twining Labs for field and shotcrete testing (.01%) Hayward Bocca for testing (.01%); and Beylik Drilling for drilling (1.39%). A total of 10.28% has been obtained to date.

Attachment 3



AL to STA. 675+66
(4/20/97)

681+00

REACH 1A

AR to STA. 671+77
(4/20/97)

657+00

REACH 1B CANYON

RUNYON
CANYON
PARK

631+71

628+71

SPECIAL SEISMIC SECTION

SOLAR