

STAFF REPORT

**SOUND TRANSIT
MOTION NO. M2000-86**

**Authorization of Change Order No. 1 to contract RTA/CR 44-98
with Raul V. Bravo & Associates for Quality Control, Quality Assurance, and Inspection
Services for Sounder Rolling Stock**

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	9/21/00	Discussion/Recommended Action	Noel Peck, Program Manager – Operations	(206)398-5115

PROPOSED ACTION:

A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing Change Order No. 1 to contract RTA/CR 44-98 with Raul V. Bravo & Associates (Bravo) in an amount not to exceed \$1,052,358. Contract RTA/CR 44-98, with an original value not to exceed \$1,944,250, provided Quality Control, Quality Assurance, and Inspection services for Sound Transit's original order of 38 commuter rail passenger coaches and six locomotives. Change order No. 1 will extend these services to the already Board-approved Sounder vehicle options of 20 additional passenger coaches and five locomotives, and will increase the contract value to an amount not to exceed \$2,996,608.

KEY FEATURES:

Highlights of Proposed Action:

- ◆ Authorizes continuation of a Quality Control, Quality Assurance, and Inspection Program for Sounder rolling stock purchased under the procurement options approved by the Board during the third quarter of 1999 for 20 additional passenger coaches and five locomotives.
- ◆ Extends a successful contract with Bravo, a DBE firm that has performed their original scope of work for 38 coaches and six locomotives without a single change order. Additionally, the cumulative effect of change orders to the passenger coach and locomotive procurement contracts has been a slight reduction in cost.
- ◆ Completes the Quality Control, Quality Assurance, and Inspection Program under a beneficial cost structure: \$42,000 per unit of rolling stock, compared to the original contract cost of over \$44,000 per unit (a 5% reduction).
- ◆ Allows Sound Transit to fully comply with Federal Transit Administration (FTA) project management guidelines (49 CFR 633.5) requiring a Quality Assurance/Quality Control program for federally-funded procurements with a dollar value as large as Sounder's rolling stock. Of the entire Sounder program, only the rolling stock procurement falls within the FTA Quality Guidelines.

DISCUSSION OF PROPOSED ACTION

Through formal actions taken by the Board and Finance Committee in Summer 1998 and Autumn 1999, Sound Transit has entered into contracts and options with the Electro-Motive Division of General (EMD) for the purchase of 11 locomotives and with Bombardier Transit Corporation (Bombardier) for the purchase of 58 cab cars and passenger coaches. As the Sounder Commuter Rail system is implemented and extended, one of the largest capital cost components, and one of the most visible components of the system from the riders' perspective, is the fleet. The fleet is also the largest driver of ongoing, long-term operations and maintenance (O&M) costs. It is imperative that the quality, reliability, and maintainability of the vehicle fleet (referred to as "rolling stock") be monitored, adjusted, and controlled.

Through a competitive process in August 1998, via Motion No. M98-61, the Finance Committee authorized execution of a contract with Bravo for Quality Control, Quality Assurance, and Inspection services for the original orders of 38 passenger coaches and six locomotives. At that time, staff briefing materials indicated that "the contract calls for options (change orders) for 20 additional cars and 5 additional locomotives for the Tacoma to Lakewood and Seattle to Everett segments of Sounder." Given that: (1) the program appears successful by every measure available, (2) Bravo has completed their work to date within budget, and (3) the Bravo team has provided these critical services without requiring a single change order, at this time staff recommends authorization of Change Order No. 1 as described here.

If authorized, Change Order No. 1 will increase the Bravo contract to a value not to exceed \$2,996,608. This represents 2% of the total purchase price of the Sounder rolling stock.

Because rolling stock is the primary Sounder component for which federal funds are programmed, FTA project management guidelines (49 CFR 633.5), specifically requiring a Quality Assurance/Quality Control (QA/QC) program, apply to the vehicle procurement. Both the Sound Transit Program Management Plan and the Sounder Project Management Plan, required by the FTA, commit to establishing an FTA-approved QA/QC program for rolling stock procurement. The scope of Bravo's services are intentionally compliant with, and in fulfillment of that commitment. To date, Bravo's implementation of this program has been reviewed and concurred with by the FTA's own project management oversight consultant team.

BUDGET

The total budget available for vehicle procurement, funded out of the larger Track & Facilities projects (projects 100, 110, 120 and 130 on pages 79-82 of the "Adopted 2000 Budget"), and for the QA/QC & Inspection sub-components are detailed in the two tables below. As shown, there is adequate funding available, and there is no known or projected funding shortfall within the overall rolling stock procurement program. Agency staff plan to recommend a re-programming of surplus rolling stock budget to other Sounder program elements in the proposed budget for year 2001.

Table 1 – Rolling Stock Budget and Commitments

Equity Area/ Project #	Total Project Budget	Budget for Vehicle Phase (A)	Expenditures /Commitments to Date ¹ (B)	Total Amount Requested (C)	Surplus ² (A-[B+C])
Snohomish (#100)	\$74,657,000	\$ 30,364,000	\$ 29,093,646	\$ 210,472	\$1,270,354
South King (#110)	\$ 210,409,000	\$ 56,765,000	\$ 54,611,538	\$ 395,075	\$ 2,153,462
Pierce (#120/130)	\$ 201,569,000	\$ 63,911,000	\$ 61,763,047	\$ 446,811	\$ 2,147,953
Total	\$ 486,635,000	\$151,040,000	\$ 145,468,231	\$1,052,358	\$5,571,769

¹ Commitments include this action.

² Surplus is being re-programmed in the 2001 Proposed Budget.

Table 2 - Bravo Agreement for Rolling Stock QA/QC/Inspection Services

Approved Contract Value ¹ (A)	Approved Contract Contingency (B)	Approved Contract Value Available (C)=(A+B)	Proposed Action: <u>Cost for Change</u> <u>Order No. 1</u> (D)	Total Contract: Not to Exceed (C+D)
\$ 1,851,667	\$ 92,583	\$ 1,944,250	\$ 1,052,358	\$ 2,996,608

¹ Per Motion No. M98-61.

ALTERNATIVES

- (1) Complete the Sounder Quality Control, Quality Assurance, and Inspection Program using in-house staff resources instead of consultant support.

Not Recommended: Sounder currently lacks adequate staff resources or requisite expertise to perform this work.

- (2) Hire a new consulting team to perform the Quality Control, Quality Assurance, and Inspection services.

Not Recommended: The Bravo team has performed very well, and in a demonstrably cost-effective manner. Bringing another team on would pose delays to the program that may also have cost repercussions to the contracts with EMD and Bombardier.

- (3) Proceed with rolling stock manufacture, delivery, and testing/certification without a Quality Control, Quality Assurance, and Inspection Program.

Not Recommended: Not only is a QA/QC program required by FTA, it is essential to ensuring that the rolling stock procurements represent an appropriate, cost-effective and beneficial expenditure of Sound Transit funds.

CONSEQUENCES OF DELAY

Rolling stock manufacture at EMD and Bombardier plants is proceeding. Any significant delay to securing Quality Control, Quality Assurance, and Inspection services poses two choices for Sound Transit: (1) proceed with manufacture without the benefit of an on-site QA/QC process; or (2) request that EMD and Bombardier delay manufacture until such time that Sound Transit is able to resume QA/QC activities.

In the first instance above, Sound Transit assumes significant risk regarding the quality, reliability, and maintainability of the vehicles manufactured during the period without a Quality Control, Quality Assurance, and Inspection Program. In the second instance, there would almost certainly be quite significant additional expenses experienced on the contracts with EMD and Bombardier.

Insignificant delays to this action (such as a few weeks, should the Finance Committee members desire additional information or time to consider the action recommended by staff) are unlikely to have any serious cost or other negative consequences to the Sounder rolling stock procurement.

REGIONAL PARTNERSHIP AND COOPERATION:

To date, through the FTA, the federal government has awarded Sound Transit over \$100M for the procurement of Sounder rolling stock. Through their own Project Management Oversight program the FTA has been a partner in developing and reviewing the Quality Control, Quality Assurance, and Inspection Program.

PUBLIC INVOLVEMENT:

Beyond the numerous times formal actions pertaining to the Sounder rolling stock procurement and the Quality Control, Quality Assurance, and Inspection Program have been before the Sound Transit Board and Finance Committee, and the opportunities for public comment those actions present, this recommended action has not specifically been the subject of any public involvement effort.

LEGAL REVIEW:

MBL, 9/7/00

SOUND TRANSIT

MOTION NO. M2000-86

A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing Change Order No. 1 to contract RTA/CR 44-98 with Raul V. Bravo & Associates (Bravo) in an amount not to exceed \$1,052,358. Contract RTA/CR 44-98, with an original value not to exceed \$1,944,250, provided Quality Control, Quality Assurance, and Inspection services for Sound Transit's original order of 38 commuter rail passenger coaches and six locomotives. Change order No. 1 will extend these services to the already Board-approved Sounder Commuter Rail vehicle options of 20 additional passenger coaches and five locomotives and will increase the contract value to an amount not to exceed \$2,996,608.

Background:

Through previous formal Board and Finance Committee actions, Sound Transit has entered into contracts and options with the Electro-Motive Division of General (EMD) for the purchase of eleven locomotives and with Bombardier Transit Corporation (Bombardier) for the purchase of fifty-eight passenger cars. As the Sounder Commuter Rail system is implemented and extended, the fleet is one of the largest capital cost components, and one of the most visible components of the system from the riders' perspective. The fleet is also the largest driver of ongoing, long-term operations and maintenance (O&M) costs. It is imperative that the quality, reliability, and maintainability of the rolling stock be monitored and controlled.

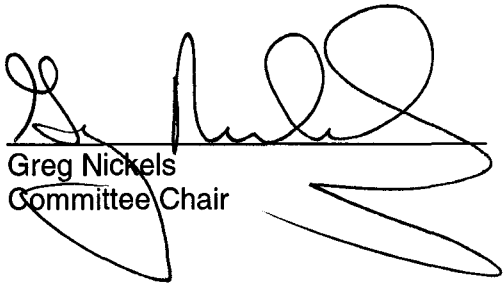
Through a competitive process in August 1998, via Motion No. M98-61, the Finance Committee authorized execution of a contract with Bravo for Quality Control, Quality Assurance, and Inspection services for the original orders of 38 passenger coaches and six locomotives. At that time, it was understood that one or more change orders would be necessary to obtain QA/QC services for the 20 additional cars and five additional locomotives needed for the Tacoma to Lakewood and Seattle to Everett segments of Sounder." To date, the Quality Control, Quality Assurance, and Inspection Program conducted by Bravo appears successful by every measure available. Bravo has completed their work to date within budget and provided these critical services without requiring a single change order.

Change Order No. 1 increases the Bravo contract to a value not to exceed \$2,996,608, representing 2% of the total purchase price of the Sounder rolling stock. Change Order No. 1 completes the Quality Control, Quality Assurance, and Inspection Program under a beneficial cost structure of \$42,000 per unit of rolling stock, compared to the original contract cost of slightly more than \$44,000 per unit (a 5% reduction).

Motion:

It is hereby moved by the Finance Committee of the Central Puget Sound Regional Transit Authority that Change Order No. 1 to contract RTA/CR 44-98 with Raul V. Bravo & Associates be authorized in an amount not to exceed \$1,052,358. Change order No. 1 will extend Quality Control, Quality Assurance, and Inspection services for Sound Transit's Sounder Commuter Rail passenger coaches and locomotives to the already Board-approved Sounder vehicle options of 20 additional passenger coaches and five locomotives. Change Order No. 1 will increase the original contract value (\$1,944,250) to an amount not to exceed \$2,996,608.

APPROVED by the Finance Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on the 21st day of September 2000.



Greg Nickels
Committee Chair

ATTEST:



Marcia Walker
Board Administrator