

SOUND TRANSIT

MOTION NO. M98-52

Amend Contract No. RTA/CR 27-97 by Increasing the Original Contract Price from \$199,825.53 to \$247,225.53, in order to cover the cost for the Pre-Manufacturing Planning Process for the Manufacture of Rail Transit Vehicles

BACKGROUND AND COMMENTS

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Board of Directors	7/9/98	Canceled	Paul W. Price, Director of Commuter Rail	206-689-4760
Finance Committee	7/16/98	Discussion/Possible Action	Judy Crow, Contract Specialist	(206) 689-4796

ACTION:

Amend Contract No. RTA/CR 27-97 between Sound Transit and Raul V. Bravo & Associates, to Refine Public Domain Commuter Rail Vehicle Specifications, by increasing the contract price by \$47,400.00, for a total contract amount not to exceed \$247,225.53, for additional related work to include the Pre-Manufacturing Planning Process for the Manufacture of Rail Transit Vehicles.

Raul Bravo & Associates was selected through a competitive Request for Proposals process in October, 1997 for the development of the specifications and subsequent assistance in the rail equipment procurement.

Ordinarily, this action would be taken by the Finance Committee, however, because the July 2, 1998 Finance Committee Meeting was canceled, staff requested and received Finance Committee concurrence that this action could be brought before the full Board.

BACKGROUND:

The contract for the manufacture of commuter rail cab cars/coaches and locomotives provides for a Pre-Manufacture Planning Process, which requires that the Contractor perform the following activities:

- A) Identify and organize the Contractor's work team.
- B) Develop a quality assurance/quality control program.
- C) Develop a design schedule.
- D) Coordinate the manufacture activities with Sound Transit, the design engineer and other stakeholders, as required.
- E) Prepare and deliver priority submittals.
- F) Develop a manufacturing and fabrication schedule.
- G) Identify items that require long lead times, which may require expedited procurement in order to meet delivery schedules.

These activities are designed to assure that the Contractor has a well thought out and organized plan for the design and manufacture of the rail vehicles, before supplies are ordered, equipment fabricated, and actual manufacturing works begins. A key component of this effort is to ensure that the spirit and intent of the design documents get translated from the design engineer to the manufacturer. This assures that, as much as possible, the information the design engineer has accumulated and analyzed during the design process gets transferred effectively to the manufacturer. This process allows the manufacturer to proceed without wasting time, energy and money on second-guessing design intent. It minimizes the potential for misinterpretations of the technical specifications and, therefore, minimizes the potential for change orders and claims.

Accordingly, a mandatory participant in the Pre-Manufacture Planning Process is the design engineer. In the case of the Commuter Rail Cab Car/Coach and Locomotive procurement, Raul V. Bravo & Associates (RVB) is the design engineer firm. RVB was hired to develop the technical design specifications for the procurement of the commuter rail vehicles. RVB analyzed the documents available in the public domain, researched new standards with the appropriate regulatory agencies, and conducted outreach efforts with the rail industry to learn about new industry means and methods related to rail vehicle design and manufacture. These efforts combined to create the technical specifications for procurement of rail cab cars/coaches and locomotives.

The procurement documents gave the potential bidders/proposers an opportunity to ask questions, suggest changes and otherwise participate in the development of the final technical specifications through what is called the Request for Information (RFI) process. Further, pursuant to the original contract, RVB responded to these RFIs by evaluating the inquiries and providing technical responses. As a result of this effort, RVB is intimately familiar with issues and concerns that the industry raised about Sound Transit's technical specifications.

As part of the original scope of work, RVB participated in the evaluation of the bids for the cab cars/coaches and the proposals for the locomotives. RVB also participated in the process which led to receiving the Best and Final Offers for the locomotives and the subsequent evaluation process. As a result of these efforts, RVB is intimately familiar with the peculiarities of the vehicles that each bidder/proposer has offered to Sound Transit. RVB has also been involved with the contract negotiation, as it relates to technical issues, with the vehicle manufacturers.

Its history with these procurements makes RVB uniquely qualified to represent the technical issues in the Pre-Manufacture Planning Process. RVB's presence during the Pre-Manufacture Planning Process is therefore highly desirable to ensure that the manufacturer of the vehicles fully understands the background, intent and spirit of the design documents.

The scope of work for RVB's efforts during the Pre-Manufacture Planning Process includes, but is not limited to, the following:

1. Coordinating pre-manufacture planning kick-off workshop
2. Identifying design issues related to the technical specifications
3. Reviewing submittals that are required to be made by the Contractor such as:
 - Manufacturing Schedule
 - Schedule of Values
 - Manufacturing Plan

- Work Breakdown Structure
 - Quality Assurance/Quality Control Plan
 - Equipment Delivery Schedule
 - Submittal Control Document
 - Priority Material Submittals
4. Developing a project control system
 5. Developing a project administration system.

While staff hoped to undertake this task within the existing contract amount of \$199,825.23, the extended bidding time frames, large number of “Approval Equals” requests, and additional requested information to quantify issues around fuel consumption, train weights, and cost/price analysis due to a single bid, expended the budget. Staff, therefore, requests authorization to increase the contract by \$47,400 for the performance of the above described scope of work.

RELEVANT BOARD POLICIES AND PREVIOUS ACTIONS TAKEN:

- *Sound Move, The Ten-Year Regional Transit System Plan* (calls for start-up of commuter rail service by year-end 1999)
- Board vehicle type-direction of October 1997.
- Executive Committee release of specifications for bid in February 1998
- Implementation Guide Adopted June 12, 1997 (Motion No. 32)
- Commuter Rail Action Plan presented at July 24, 1997 Board Meeting
- Board award of *Sounder* Equipment Contract on June 11, 1998 (Resolution No. R98-25)

KEY FEATURES:

- Identify and organize the Contractor’s work team.
- Develop a quality assurance/quality control program.
- Develop a design schedule.
- Coordinate the manufacture activities with Sound Transit, the design engineer and other stakeholders, as required.
- Prepare and deliver priority submittals.
- Develop a manufacturing and fabrication schedule.
- Identify items that require long lead times, which may require expedited procurement in order to meet delivery schedules.

FUNDING:

This component is funded from the \$144 million allocated to the procurement of *Sounder* cars and locomotives. The total expected cost of equipment is approximately \$136.5-\$139.5 million. This allows sufficient residual funds to accomplish the task.

ALTERNATIVES:

- Rely solely on the manufacturer's interpretation, rather than having Raul V. Bravo & Associates accomplish this task.
- Develop new RFPs for this task.

CONSEQUENCES OF DELAY:

If the decision was made to develop a new RFP, the equipment delivery for *Sounder* could be delayed 6-8 weeks. Delays at this stage have a proportional delaying effect on the opening of service.

SOUND TRANSIT

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A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing the Executive Director to amend Contract RTA/CR 27-97 between Sound Transit and Raul V. Bravo & Associates to Refine Public Domain Commuter Rail Vehicle Specifications, by increasing the contract price of \$199,825.53 by \$47,400.00, for a total contract amount not to exceed \$247,225.53, for the purpose of the "Pre-Manufacturing Planning Process for the Manufacture of Rail Transit Vehicles."

Background:

The contract for the manufacture of commuter rail cab cars/coaches and locomotives provides for a Pre-Manufacture Planning Process, which requires the Contractor to perform various activities, e.g., identification and organization of the Contractor's work team; the development of a quality assurance/quality control program; development of a design schedule; coordination of the manufacturer activities with Sound Transit, the design engineer and other stakeholders; preparation and delivery of priority submittals; development of a manufacturing and fabrication schedule; identification of items that require long lead times, possibly requiring expedited procurement in order to meet delivery schedules.


In order to complete the above-stated activities, design documents must be accurately translated from the design engineer to the manufacturer. Thus, the design engineer's participation is highly desirable to ensure accurate translation of the design documents. The firm, Raul V. Bravo & Associates, wrote the design specifications for the commuter rail cab cars/coaches and locomotives for Sound Transit and has history in the procurement of the commuter rail vehicles.

Motion:

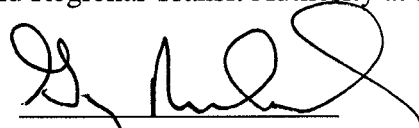
It is hereby moved by the Finance Committee of the Central Puget Sound Regional Transit Authority that the Executive Director is authorized to amend the contract with Raul V. Bravo & Associates by increasing the contract price from \$199,825.53 to an amount not to exceed \$247,225.53, for the purpose of the "Pre-Manufacturing Planning Process for the Manufacture of Rail Transit Vehicles."

Approved by the Finance committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof on the 16th day of July, 1998.

ATTEST:



Marcia Walker
Board Administrator


Greg Nickels
Finance Committee Chair