

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2002-09

Contract modification with Hatch Mott MacDonald/Sverdrup (HMM/S) Joint Venture to provide additional Civil Engineering Final Design Services for Central Link

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	2/7/02	Discussion/Possible Action to Recommend Board Approval	Joe Gildner, Link Construction Manager	206-689-3350
Board	2/14/02	Action	Ahmad Fazel, Link Light Rail Director	206-398-5389

OBJECTIVE OF ACTION

- To complete final design of civil facilities for Beacon Hill Tunnel, including final design of civil facilities for a complete and fully operational Beacon Hill Station.

ACTION

- Authorize the Executive Director to execute a contract amendment with Hatch Mott MacDonald/Sverdrup (HMM/S) Joint Venture to provide additional Civil Engineering Final Design Services in the amount of \$3,355,269 plus a contingency of \$287,293 for a contract amount of \$3,642,562 and for a new total authorized contract amount not to exceed \$9,444,562.

KEY FEATURES

- Allows for completing all necessary final design of civil facilities for a complete and fully operational station. (Present contract includes only for design of a partial station shell to allow for completion of the station at a later date.)
- Allows for minor modification to the tunnel alignment to reduce the risk of contaminated soils being encountered in the running tunnel excavations.
- Allows for modifying the configuration of the station to conform to the modified tunnel alignment.
- Includes M/W/DBE of 13%

BUDGET

On November 29, 2001, the Board adopted Resolution No. R2001-16, which selected the initial segment for the Central Link, project. This resolution identified an estimated capital cost for the initial segment of \$2,070,000,000. On December 13, 2001, the Board adopted the 2002 Agency Budget (Resolution No. R2001-17). Within the budget resolution, amendment 9 incorporated this estimated capital cost for the initial segment as the adopted budget.

Within that budget, the activity contemplated within this motion is identified within the Final Design phase. This activity was included within the cost estimate and there are sufficient funds identified for work identified within this motion. The budget for this activity is \$9,500,000, including previously completed work. There is a remaining budget surplus of \$55,438 for this activity.

Table A - Initial Segment Budget (as adopted by the Board on December 13, 2001)

Column A	Column B	Column C	Column D	Column E
Total Project Budget	Budget for this Task (B)	Obligated To Date (C)	Total Amount Requested (D)	Shortfall* or Surplus (B-[C+D])
\$ 2,070,000,000	\$9,500,000	\$5,802,000	\$3,642,562	\$55,438

Column B based on Link estimate to complete

FINANCIAL IMPACTS

Impact on Current Year Budget: This action is included within the 2002 Adopted Budget and will not have any additional impact on the current year budget beyond that contemplated within the 2002 Adopted Budget.

Impact on Sound Move Budget: The total budget for Central Link is higher than the original Sound Move budget. This request will not further increase the Sound Move budget variance.

Impact on Cost-to-Complete: The amount requested is included within the cost at completion for the Initial Segment.

Impact on Subarea(s) Budget(s): According to the current financial plan, North King will have additional capacity. This action will not further impact the North King County subarea budget beyond that contemplated within the 2002 Adopted Budget.

HISTORY OF PROJECT

An Agreement for Professional Services RTA/LR 109-99 with Hatch Mott MacDonald/Sverdrup Joint Venture was executed on August 1, 2000, for final design of the civil facilities for the Beacon Hill Tunnel – D710, including design of a limited portion of the shaft and tunnel structures for Beacon Hill Station whose completion was to be deferred to a future construction phase.

As the design progressed, contaminated soils from a discontinued dry-cleaning facility were identified at the planned location of the station's west shaft. Alternative tunnel alignments and design concepts for the station were starting to be developed when the final designer was directed to pause all work on February 23, 2001, as Sound Transit focused design efforts to the north on University Link. Subsequent Board actions have now refocused on initial construction to the south, including construction of Beacon Hill Tunnel and a station at Beacon Hill to be fully completed and opened for service in the initial construction phase.

During the pause in work, Sound Transit, through an existing agreement with its consultant Puget Sound Transit Consultants (PSTC), developed alternative running tunnel alignments to direct the tunnel excavations away from the known area of contaminated soil. PSTC also developed alternative configurations for the Beacon Hill tunneled station to conform to the alternative running tunnel alignments. These alternative station configurations were designed to function with a single station elevator access shaft located on the site planned for the future

eastern shaft in the original design, avoiding the need for the western shaft located at the contaminated site. Sound Transit staff selected a preferred tunnel alignment and station configuration on October 15, 2001.

The final designer was directed to restart work on November 14, 2001, and has been proceeding on an interim work-order basis utilizing existing authorized contract funds. Board action is required to authorize the additional funds required to complete civil facilities design for the fully complete and operational station, with the revised configuration and tunnel alignment, to allow a construction Notice-to-Proceed no later than July 29, 2003.

The original Board Approved Amount for final design of the running tunnels, and for design of a minimum part of the station underground structure that would allow future construction of the station without interrupting service was \$5,275,000 with a contingency of \$527,000 for a Board approved total of \$5,802,000. It should be noted that this left final design of the future above-ground station entrance structures, and a substantial portion of the station underground structures to be completed in a future design contract, following future Board authorization to complete the station.

The additional funds that would be authorized by this present Board Motion are \$3,355,269 to complete the final design of the complete station at this time, with an additional \$287,293 design contingency for a total of \$3,642,562 additional funds. Expenditures prior to the re-start of work on November 14, 2001 amount to \$1,444,562, which results in an overall total of \$9,444,562.

	Amount	Contingency	Total
Original Board Approved Amount	5,275,000	527,000	5,802,000
New Requested Amount	3,355,269	287,293	3,642,562
Total Contract Amount	8,630,269	814,293	9,444,562

The additional funds being requested, when added to the balance remaining from the initial authorization would provide a design cost to complete as of November 14, 2001 of \$7.4 million and a design contingency of \$600,000 (8%) for a total of \$8 million.

Future Work (Estimate to Complete as of November 14, 2001)	Amount	Contingency	Total
Original Contract Remaining	4,044,731	312,707	4,357,438
New Requested Amount	3,355,269	287,293	3,642,562
Total Estimate to Complete	7,400,000	600,000	8,000,000

It should be noted that the additional funds requested are not to complete the final design as originally conceived, but to re-design the running tunnels on a modified alignment, to design the complete and reconfigured underground station structures including substantial additional tunnel ventilation facilities necessary to allow the station and tunnel to operate with a single elevator access shaft and new separate utility shaft, and to provide the structural and civil designs for the above-ground station entrance structures and associated basements.

Total M/W/DBE participation for this contract is 13%.

**Prior Board or Committee Actions
and Relevant Board Policies**

Motion or Resolution Number	Summary of Action	Date of Action
Reso No. R2001-16	Selected the initial segment of the Central Link Light Rail Project to be constructed and operated by 2009.	11/29/01
Motion No. M2001-103	A motion of the Board of the Central Puget Sound Regional Transit Authority identifying the preferred initial segment to be constructed and operated for Central Link Light Rail.	9/27/01
Motion No. M2000-55	A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the Executive Director to execute a contract with Hatch Mott Macdonald-Sverdrup for civil engineering final design services associated with construction of the Beacon Hill tunnel segment for the Central Link Light Rail project for a contract amount of \$5,275,000 with a 10% contingency of \$527,000 for a total authorized amount not to exceed \$5,802,000.	7/13/00

CONSEQUENCES OF DELAY

- Significant delay in board action would result in a delay of completion of the final design of Beacon Hill Tunnel and Station, when existing authorized funds are expended. This could delay completion of the construction of the tunnel and station, which could lead to a delay to start of revenue service in 2009.

REGIONAL PARTNERSHIP AND COOPERATION

- Staff have and are continuing to work with WSDOT to coordinate the design of the light rail structures where they cross WSDOT property and pass beneath the I-5 viaducts adjacent to the tunnel's west portal. Cooperation continues with City of Seattle agencies such as SeaTran, Seattle City Light and the Seattle Light Rail Review Panel, and with the City's fire and police departments in design of the station and tunnels.

PUBLIC INVOLVEMENT

- A community meeting took place at Beacon Hill on July 31, 2001 to show possibilities being considered for alternative tunnel alignments and for alternative station designs should Board direction be received to complete the station in the initial construction phase. Further meetings with the community are planned through the continuing Final Design phase.

LEGAL REVIEW

JDW 1/25/02

SOUND TRANSIT

MOTION NO. M2002-09

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the Executive Director to execute a contract amendment with Hatch Mott MacDonald/Sverdrup (HMM/S) Joint Venture to provide additional Civil Engineering Final Design Services in the amount of \$3,355,269 plus a contingency of \$287,293 for a total of \$3,642,562 and for a new total authorized contract amount not to exceed \$9,444,562.

Background:

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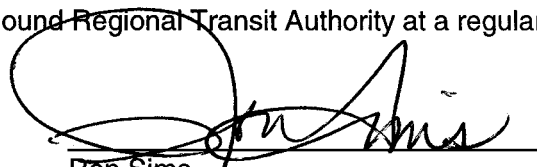
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Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the Executive Director is authorized to execute a contract amendment with Hatch Mott MacDonald/Sverdrup (HMM/S) Joint Venture to provide additional Civil Engineering Final Design Services in the amount of \$3,355,269 plus a contingency of \$287,293 for a total of \$3,642,562 and for a new total authorized contract amount not to exceed \$9,444,562.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on February 14, 2002.



Ron Sims
Board Chair

ATTEST:



Marcia Walker
Board Administrator