SOUND TRANSIT STAFF REPORT

MOTION NO. M2008-10

Contract Amendment for Systems Design Services for the Central Link Light Rail Initial Segment and Airport Link Extension

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	1/17/08	Discussion/Possible Action to	Ahmad Fazel, Link	(206) 398-5389
		Recommend Board Approval	Executive Director	
Board	1/24/08	Action	Steve Procter, Link	(206) 370-5509
			Systems Engineering	, ,
			Manager	

Contract/Agreement Type:	✓	Requested Action:	✓
Competitive Procurement	✓	Execute New Contract/Agreement	
Sole Source		Amend Existing Contract/Agreement	✓
Agreement with Other Jurisdiction(s)		Budget Amendment	
Real Estate		Property Acquisition	

PROJECT NAME

Central Link Initial Segment and Airport Link

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract amendment with LTK Engineering Services to provide systems construction management, design services during construction, rail activation services during testing and startup, and agency safety, security, and quality assurance support for the Central Link Initial Segment and Airport Link projects in the amount of \$5,337,073 with contingency in the amount of \$182,796 totaling \$5,519,869, for a new total authorized contract amount not to exceed \$55,755,714.

KEY FEATURES of PROPOSED ACTION

The proposed action would increase the authorized expenditure amount for LTK Engineering Services (LTK) to provide systems construction management (CM) and support services by \$5,519,869, which includes: \$3,139,815 with no contingency for the Central Link Initial Segment; \$2,132,258 plus a \$182,796 contingency totaling \$2,315,054 for Airport Link; and \$65,000 to support agency safety, security, and quality assurance.

Central Link Initial Segment:

- This amendment extends staff support through completion of installation of all systems elements, estimated to be early 2009, and continues support of start-up operations through June 2009.
- This amendment includes additional support for systems integrated scheduling as requested by the Project Management Oversight Consultant/Federal Transit Administration (PMOC/FTA) and initial safety oversight in support of rail activation as requested by Sound Transit.

- This amendment addresses the expenditures for tasks that require additional resources, such as increased vehicle inspection in Japan, additional systems inspectors, and providing the resident engineer for the communications contract.
- The current construction management contract provided funding for CM and design services during construction (DSDC) staffing through June 2008. Funding for systems integration testing and start-up support was not included in this contract. This contract amendment, in addition to supporting funding for systems integration testing and start-up support, extends CM and DSDC services through July 2009.

Airport Link Extension:

- This amendment is requested to provide budget for systems CM and DSDC activities for civil construction, systems installation and testing, and operations start-up activities concluding with the start of Airport Extension start-up service in December 2009.
- This amendment provides for staff support for installation of all systems elements, estimated to be late 2009, and continues in support of start-up operations through December 2009.
- Previous LTK authorization did not include funding for CM or DSDC services required during civil construction, systems installation and testing, and operations start-up tasks.

BUDGET IMPACT SUMMARY

Current Project Phase: Construction

Projected Completion Date: 2009

Action Outside of Adopted Budget:	✓	Comments on Checked Items
This Project		
This Phase		
This Task	✓	Proposed action would require funding from unallocated contingency within the construction services phase of the Airport Link project.
Budget Amendment Required		

Key Financial Indicators:	✓	Comments on Checked Items
Contingency Funds Required		
Funding required from other parties (other than what is in financial plan)		

Not checked = action is assumed in current Board-adopted budget. No budget action or adjustment to financial plan required.

BUDGET and FINANCIAL PLAN DISCUSSION

The Adopted 2008 Budget for the Central Link Initial Segment is \$2.07 billion. Within that amount:

\$17.5 million has been set aside for testing and startup within the construction phase.
 When added to current commitments of \$14,621,922, the proposed action would increase this amount by \$132,496 to a revised total of \$14,754,418, and leave a remaining balance of \$2,609,582 for this budget line item.

• \$19.5 million has been set aside for systems construction management (CM), including design services during construction (DSDC). When added to current commitments of \$16,499,597, the proposed action would increase this amount by \$3,007,319 to a revised total of \$19,506,916, leaving no remaining balance for this budget line item.

The Adopted 2008 Budget for the Airport Link is \$243.6 million. Within that amount:

- \$331,148 has been set aside for preliminary engineering services (by LTK) within the
 preliminary engineering phase. The proposed action would reduce the current
 commitments of \$364,220 for this budget line item by \$33,072 to a revised total of
 \$331,148, leaving no remaining balance.
- \$2.1 million has been set aside for final design services (by LTK) within the final design phase. The proposed action would reduce the current commitments of \$2,063,553 for this budget line item by \$419,378 to a revised total of \$1,644,175, and leave a remaining balance of \$455,825.
- \$1.0 million has been set aside for testing and startup within the construction phase. When added to current commitments of \$818,333, the proposed action would increase this amount by \$7,504 to a revised total of \$825,837, and leave a remaining balance of \$174,163 for this budget line item.
- \$2.5 million has been set aside for Systems construction management (CM), including
 design services during construction (DSDC) within the construction services phase.
 The proposed action would add a commitment of \$2,760,000 for this budget line item,
 and result in a budget shortfall of \$260,000, which would be funded from construction
 services unallocated contingency.
- Within the construction services phase, \$600,000 has been set aside for unallocated contingency. Should the proposed action be approved that amount would be reduced by \$260,000, and leave a remaining balance of \$340,000.

The Adopted 2008 Staff Operating Budget for agency safety, security, and quality assurance includes \$100,000 for consultant services. The proposed action would commit \$65,000 of this amount for support services, and leave a remaining balance of \$35,000 for this budget line item.

The proposed action is consistent with the Adopted 2008 Budget and is affordable within the agency's long-term financial plan and subarea financial capacity. The action will have no new revenue impact on Sound Transit.

BUDGET TABLE

Action Item: LTK Engineering Services (provide systems construction management, design services during construction, and rail activation services during Testing and Startup for the Initial Segment and Airport Link projects, and to provide agency Safety, Security and Quality Assurance support)

(Year of Expenditure \$000) Initial Segment	Adopted 2008 Budget	Committed To Date	This Action	Total Committed & Action	Uncommited (Shortfall)
	(A)	(B)	(C)	(D)	(E)
Agency Administration	193,274	147,034		147,034	46,240
2 Preliminary Engineering	33,310	33,310		33,310	-
3 Final Design	147,213	146,511		146,511	702
4 Right of Way	208,396	204,426		204,426	3,970
5 Construction	1,191,768	1,152,204	132	1,152,337	39,431
6 Construction Services	100,317	93,969	3,007	96,977	3,341
7 Third Party Agreements	63,414	62,543		62,543	87
8 Vehicles	132,307	131,799		131,799	508
9 Total Current Budget	2,070,000	1,971,797	3,140	1,974,937	95,063
Construction Phase Detail					
10 Testing and Startup	17,364	14,622	132	14,754	2,610
11 Other Construction	1,174,404	1,137,582		1,137,582	36,82
12 Total Phase	1,191,768	1,152,204	132	1,152,337	39,43
Construction Svcs Phase Detail					
	10 507	16 500	2.007	10 507	
13 Systems CM	19,507	16,500	3,007	19,507	- 0.044
14 Other Construction Services	80,810	77,470		77,470	3,34
15 Total Phase	100,317	93,969	3,007	96,977	3,34
	Adopted	Committed To		Total Committed &	Uncommited
Airport Link	2008 Budget	Date	This Action	Action	(Shortfall)
, port Enik	-				, ,
A C. A common A characteristic transfer	(A)	(B)	(C)	(D)	(E)
16 Agency Administration	5,000	2,809		2,809	2,19
17 Preliminary Engineering	4,693	4,726	(33)	4,693	
18 Final Design	14,785	16,590	(419)	16,170	(1,38)
19 Right of Way	20,000	17,639		17,639	2,36
20 Construction	163,522	144,129	8	144,136	19,380
21 Construction Services	11,500	6,457	2,760	9,217	2,283
22 Third Party Agreements	2,600	1,853	_,	1,853	74
23 Vehicles	15,500	14,587		14,587	910
		14,567			
24 Contingency	6,000				6,000
25 Total Current Budget	243,600	208,790	2,315	211,105	32,49
Prelim Engineering Phase Detail					
26 Prelim Engineering (LTK)	331	364	(33)	331	•
27 Other Preliminary Engineering	4,362	4,362		4,362	
28 Total Phase	4,693	4,726	(33)	4,693	
Final Design Phase Detail					
29 Final Design (LTK)	2,100	2,064	(419)	1,644	450
30 Other Final Design			(413)		
	12,685	14,526	(440)	14,526	(1,842
31 Total Phase	14,785	16,590	(419)	16,170	(1,38
Construction Phase Detail					
32 Testing and Startup	1,000	818	8	826	174
33 Other Construction	162,522	143,310		143,310	19,212
34 Total Phase	163,522	144,129	8	144,136	19,386
Construction Svcs Phase Detail					(00)
Construction Svcs Phase Detail 35 Systems CM	2,500	-	2,760	2,760	(20)
35 Systems CM		- 6.457	2,760		
35 Systems CM 36 Other Construction Services	8,400	- 6,457 -	2,760	2,760 6,457	1,943
35 Systems CM			2,760	6,457	1,943 600
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase	8,400 600 11,500	- 6,457	2,760	6,457 - 9,217	1,943 600 2,28 3
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall	8,400 600 11,500 \$Shortfall	- 6,457 Potential F	2,760 Resources	6,457 - 9,217 Sou	1,943 600 2,28 3 rce
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs	8,400 600 11,500 \$Shortfall (K)	- 6,457	2,760 Resources	6,457 - 9,217 Sou (N	1,943 600 2,28 3 rce 1)
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall	8,400 600 11,500 \$Shortfall	- 6,457 Potential F	2,760 Resources	6,457 - 9,217 Sou (N Unallocated continger	f) ency in the
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM	8,400 600 11,500 \$Shortfall (K)	- 6,457 Potential F	2,760 Resources	6,457 - 9,217 Sou (N	1,94: 600 2,28: rce 1) ency in the
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs	\$,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget	Potential F	2,760 Resources) 600 This Action	6,457 9,217 Sou (N Unallocated continge construction services Total Committed & Action	1,943 600 2,283 rce 1) ency in the phase Uncommited (Shortfall)
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM	\$,400 600 11,500 \$Shortfall (K) 260	- 6,457 Potential F (L	2,760 Resources .) 600	6,457 9,217 Sou (N Unallocated continge construction services Total Committed &	1,943 600 2,283 rce 1) ency in the phase Uncommited (Shortfall) (E)
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM Agency Safety/Sec/QA	8,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget (A)	Potential F	2,760 Resources) 600 This Action (C)	6,457 9,217 Sou (N Unallocated contings construction services Total Committed & Action (D)	1,94: 600 2,28: rce 1) ency in the phase Uncommited (Shortfall) (E)
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM Agency Safety/Sec/QA	8,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget (A) Board Approvals to Date	Committed To Date (B) - Current Approved Contract Value	2,760 Resources) 600 This Action (C) 65 Proposed Action	6,457 9,217 Sou (N Unallocated contings construction services Total Committed & Action (D) 65 Proposed Total for Board Approval	1,943 600 2,283 rce 1) ency in the phase Uncommited (Shortfall) (E) 38 Proposed Contral Value
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM Agency Safety/Sec/QA 40 Agency Safety Contract Amount	8,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget (A) Board Approvals to Date (F)	Committed To Date (B) - Current Approved Contract Value (G)	2,760 Resources) 600 This Action (C) 65 Proposed Action (H)	6,457 9,217 Sou (N Unallocated continge construction services Total Committed & Action (D) 65 Proposed Total for Board Approval (I)	1,945 600 2,283 rce f) ency in the phase Uncommitted (Shortfall) (E) 35 Proposed Contrar Value (J)
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM Agency Safety/Sec/QA 40 Agency Safety Contract Amount	8,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget (A) 100 Board Approvals to Date (F) 49,082	Committed To Date (B) - Current Approved Contract Value (G) 49,082	2,760 Resources) 600 This Action (C) 65 Proposed Action (H) 5,337	6,457 9,217 Sou (N Unallocated continge construction services Total Committed & Action (D) 65 Proposed Total for Board Approval (I) 54,419	1,943 600 2,283 rce 1) ency in the phase Uncommited (Shortfall) (E) 35 Proposed Contract Value (J) 54,415
35 Systems CM 36 Other Construction Services 37 Construction Svcs Unalloc Contingency 38 Total Phase Budget Shortfall Task Level - Construction Svcs 39 Systems CM Agency Safety/Sec/QA 40 Agency Safety Contract Amount	8,400 600 11,500 \$Shortfall (K) 260 Adopted 2008 Budget (A) Board Approvals to Date (F)	Committed To Date (B) - Current Approved Contract Value (G)	2,760 Resources) 600 This Action (C) 65 Proposed Action (H)	6,457 9,217 Sou (N Unallocated continge construction services Total Committed & Action (D) 65 Proposed Total for Board Approval (I)	1,945 600 2,283 rce f) ency in the phase Uncommitted (Shortfall) (E) 35 Proposed Contrar Value (J)

⁽B) COMMITTED TO DATE amounts are from Agency WBS Report as of November 2007 + approved and pending board actions not recorded as of 11/30/07, or submitted after that date.

SMALL BUSINESS PARTICIPATION

Prime Consultant/Contractor

LTK has committed to 20.59% Small Business participation. To date, LTK has achieved 21.57% participation on this contract.

The small business participation for this contract amendment is 19.06%. LTK is projecting to complete this contract with 21.15% participation.

Utilization Breakdown Table

Subconsultant	Business Type	% of Work	Dollar Value
Hatfield & Dawson Consulting Electrical	Small Business	1.60%	\$ 108,318
Engineers			
Pacific Communication Consultants	MWBE	0.22%	\$ 15,203
Eskilsson Architecture	W/DBE	6.52%	\$ 441,316
Bolima Drafting and Design, Inc.	M/DBE	3.90%	\$ 264,060
Virginkar and Associates, Inc.	M/DBE	13.77%	\$ 931,677
Total		26.02%	\$ 1,760,573

EEO Commitment

LTK Engineering Services' workforce demographics are 22% women and 14% minorities.

Apprentice Utilization Commitment

There are no apprentice utilization requirements since this is a professional services contract.

PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION

On December 15, 1997, Sound Transit advertised and issued a Request for Proposals (RFP) for Systems Preliminary Engineering Design Services for Phase I of the Central Link light rail project. The RFP provided notice that the contract may be amended in the future to include final design and construction management. On April 23, 1998, the Board authorized the Executive Director to execute a contract with LTK.

On November 18, 1999, the Board adopted Resolution No. R99-34 selecting the alignment, station locations, and the maintenance base to be built for the Central Link Project. The Board action was supported by the Central Link Light Rail Project Final Environmental Impact Statement (November 1999).

On March 14, 2002, the Board authorized a contract amendment with LTK Engineering Services for systems final design for Central Link Initial Segment, conceptual and preliminary systems design for North Link alternatives, and systems construction management, design support services during construction and start-up for Tacoma Link.

As the Tacoma Link and Central Link projects have advanced through the preliminary design, final design, and construction phases, the Board has authorized incremental amendments to the LTK contract to cover specific systems tasks. This approach has allowed staff to effectively

inform the Board, maximize oversight of the contract, minimize costs, and respond more effectively to changing project conditions.

A contract amendment with Hatch Mott MacDonald for additional design support services during construction and additional civil and architectural design services is also being presented to the Sound Transit Board for approval in January 2008.

Prior Board/Committee Actions

Motion/ Resolution Number & Date	Summary of Action
M2005-65 6/23/05	Executed a contract amendment with LTK Engineering Services to provide preliminary systems engineering services for the Airport Link preferred alternative and to provide final design services following the Board's selection of the Airport Link project to be constructed, in the amount of \$1,362,280 with a 5% contingency, for a new total authorized contract amount not to exceed \$50,235,845.
M2004-24 3/25/04	Executed a contract amendment with LTK Engineering Services to provide systems construction management services for the Central Link Light Rail Project Initial Segment in the amount of \$15,420,184, with a 7% contingency of \$1,079,413, totaling \$16,499,597, for a new total authorized contract amount not to exceed \$48,805,451, and to extend the term of the contract through December 2009.
M2002-25 3/14/02	Executed a contract amendment with LTK Engineering Services for systems engineering final design for Central Link Initial Segment, conceptual and preliminary systems engineering design for North Link alternatives, and systems construction management, design support services during construction and startup for Tacoma Link through December 31, 2002, in the amount of \$2,281,884 plus a 10% contingency of \$228,188 for a total of \$2,510,072 and for a new total authorized contract amount not to exceed \$32,305,854.
M2000-20 3/9/00	Executed a contract amendment with LTK Engineering Services for systems engineering final design for Central and Tacoma Link, and systems construction management and services during construction and start-up for Tacoma Link Light Rail Project in the amount of \$20,516,347 with a 10 percent contingency of \$2,051,635 for a total amount not to exceed \$22,567,982.
R98-17 4/23/98	Executed a contract to LTK Engineering for conceptual and preliminary work, not to exceed \$5,856,500.

CONSEQUENCES of DELAY

A significant delay in approval of this contract amendment may delay the opening of light rail service to both Initial Segment and Airport Link by July 2009 and December 2009.

PUBLIC INVOLVEMENT

Not applicable for this action.

ENVIRONMENTAL REVIEW

JI 12/11/2007

LEGAL REVIEW

JW 1/10/08

SOUND TRANSIT

MOTION NO. M2008-10

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract amendment with LTK Engineering Services to provide systems construction management, design services during construction, rail activation services during testing and startup, and agency safety, security, and quality assurance support for the Central Link Initial Segment and Airport Link projects in the amount of \$5,337,073 with contingency in the amount of \$182,796 totaling \$5,519,869, for a new total authorized contract amount not to exceed \$55,755,714.

Background:

On December 15, 1997, Sound Transit advertised and issued a Request for Proposals (RFP) for Systems Preliminary Engineering Design Services for Phase I of the Central Link light rail project. The RFP provided notice that the contract may be amended in the future to include final design and construction management. On April 23, 1998, the Board authorized the Executive Director to execute a contract with LTK.

On November 18, 1999, the Board adopted Resolution No. R99-34 selecting the alignment, station locations, and the maintenance base to be built for the Central Link Project. The Board action was supported by the Central Link Light Rail Project Final Environmental Impact Statement (November 1999).

On March 14, 2002, the Board authorized a contract amendment with LTK Engineering Services for systems final design for Central Link Initial Segment, conceptual and preliminary systems design for North Link alternatives, and systems construction management, design support services during construction and start-up for Tacoma Link.

As the Tacoma Link and Central Link projects have advanced through the preliminary design, final design, and construction phases, the Board has authorized incremental amendments to the LTK contract to cover specific systems tasks. This approach has allowed staff to effectively inform the Board, maximize oversight of the contract, minimize costs, and respond more effectively to changing project conditions.

A contract amendment with Hatch Mott MacDonald for additional design support services during construction and additional civil and architectural design services is also being presented to the Sound Transit Board for approval in January 2008.

Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract amendment with LTK Engineering Services to provide systems construction management, design services during construction, rail activation services during testing and startup, and agency safety, security, and quality assurance support for the Central Link Initial Segment and Airport Link projects in the amount of \$5,337,073 with contingency in the amount of \$182,796 totaling \$5,519,869, for a new total authorized contract amount not to exceed \$55,755,714.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on January 24, 2008.

Aaron Reardon Board Vice-Chair

ATTEST:

Marcia Walker Board Administrator