

**MOTION NO. M2010-96**
**Amend the Systems Engineering Final Design Services Contract for the University Link Project**

<b>MEETING:</b>	<b>DATE:</b>	<b>TYPE OF ACTION:</b>	<b>STAFF CONTACT:</b>	<b>PHONE:</b>
Capital Committee	11/04/10	Recommendation to Board	Ahmad Fazel, DECM Executive Director	206-398-5389
Board	11/18/10	Final Action	<b>Justin Garrod, Senior Systems Engineer</b>	206-398-5384

**PROPOSED ACTION**

Authorizes the chief executive officer to execute a contract amendment with LTK Engineering Services, LLC to (1) provide additional systems engineering final design services for the University Link project and (2) exercise an option for design services during construction in the amount of \$5,360,000, with a 10% contingency of \$536,000, totaling \$5,896,000, for a new total authorized contract amount not to exceed \$22,681,872.

**KEY FEATURES**

- LTK Engineering Services, LLC (LTK) will provide additional systems engineering final design services for University Link.
- LTK will provide bid support for the University Link systems construction contracts.
- This motion authorizes amendment of the existing contract to exercise a contract option for design services during construction (DSDC) for University Link.
- Concurrent with Board consideration of this action, staff is seeking Board approval in Motion 2010-95 to exercise an option under this contract for systems engineering final design services for the North Link – UW Station to Northgate project.

**PROJECT DESCRIPTION**

University Link (U-Link) is a 3.15-mile light rail extension of Link Initial Segment, located entirely underground with tunnels traveling east from Pine Street, under the I-5 freeway to an underground station at Capitol Hill, continuing north beneath SR 520 and the Lake Washington Ship Canal to an underground station on the University of Washington campus, near Husky Stadium.

**FISCAL INFORMATION**

**Budget Table**

(Year of Expenditure \$000)

University Link	Adopted 2010 Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
Agency Administration	115,229	41,368		41,368	73,861
Preliminary Engineering	24,388	24,267		24,267	121
Final Design	82,944	70,159	5,896	76,055	6,889
Right of Way	152,332	127,172		127,172	25,160
Construction	1,180,033	562,953		562,953	617,080
Construction Services	78,526	66,250		66,250	12,276
Third Party Agreements	18,646	11,407		11,407	7,239
Vehicles	103,909	99,185		99,185	4,724
<b>Total Current Budget</b>	<b>1,756,007</b>	<b>1,002,760</b>	<b>5,896</b>	<b>1,008,656</b>	<b>747,351</b>
<b>Final Design Phase</b>					
Systems Final Design	9,788	8,291	1,056	9,347	441
Systems DSDC	6,302	518	4,840	5,358	944
Other Final Design	66,854	61,350		61,350	5,504
<b>Total Phase</b>	<b>82,944</b>	<b>70,159</b>	<b>5,896</b>	<b>76,055</b>	<b>6,889</b>

Contract Amount	Board Approvals to Date (F)	Current Approved Contract Value (G)	Proposed Action (H)	Proposed Total for Board Approval (I)	Proposed Contract Value (J)
Contract Amount	15,260	16,046	5,360	20,620	21,406
Contingency	1,526	740	536	2,062	1,276
<b>Total Contract</b>	<b>16,786</b>	<b>16,786</b>	<b>5,896</b>	<b>22,682</b>	<b>22,682</b>
Percent Contingency	10%	5%	10%	10%	6%

(B) COMMITTED TO DATE amounts are from Link WBS Report as of August 2010 + approved and pending board actions not recorded as of 8/31/10, or submitted after that date, and include allocated contingencies.

**SMALL BUSINESS PARTICIPATION**

Sound Transit Goal: 18%  
Commitment: 18%

Subconsultant/Subcontractor	Business Type	% of Work	Dollar Value
Bolima Drafting & Design, Inc.	DBE	1.7%	\$93,274
Hatfield & Dawson Consulting Engineers	Small Business	3.2%	\$170,274
The Greenbusch Group	DBE	3.0%	\$163,173
Triunity	DBE	5.3%	\$284,260
Virginkar	DBE	4.3%	\$229,826
Moniz	DBE	0.3%	\$16,817
Pacific Communications	DBE	0.1%	\$6,800
<b>Total</b>		<b>18%</b>	<b>\$964,424</b>

**EQUAL EMPLOYMENT WORKFORCE PROFILE**

280 employees; 21% women; 15% minorities

## **BACKGROUND**

On April 27, 2006, the Sound Transit Board adopted Resolution No. R2006-07, which (1) selected the University Link project to be advanced to final design and property acquisition followed by construction and operation, and (2) approved a revised lifetime project budget.

Preliminary engineering for University Link was completed in spring 2006. Sound Transit transmitted a request for final design approval to the Federal Transit Administration (FTA) in May 2006. The Record of Decision for North Link (including University Link) was issued by the FTA in June 2006, completing the environmental review process. Permission from the FTA to enter into final design for University Link was received on December 11, 2006.

LTK Contract Amendment includes:

Additional Final Design Services – Consistent with lessons learned over one year of operating experience, and as a result of an industry review of our communications systems design, certain additional design services including contract repackaging for the communications system have become necessary. These changes are intended to enhance the quality and reliability of our system elements and better phase and integrate the construction with the tunnel construction.

Bid Support – Bid support services for five system contracts.

Design Services During Construction – As the designer of record, LTK Engineering will provide design services during construction for all system construction contracts for University Link. This team will work directly with the civil and systems construction management teams providing design review of submittals as well as supporting qualification testing of the system design. Technical scope includes systemwide electrical, signaling system, traction power and overhead catenary system, radio system, electro-magnetic and vibration monitoring, supervisory control and data acquisition (SCADA) for controlling train operations, emergency ventilation system controls, and network.

## **ENVIRONMENTAL COMPLIANCE**

JI 10/11/10

## **PRIOR BOARD/COMMITTEE ACTIONS**

Motion No. M2010-95 – Authorizing the chief executive officer to exercise an option with LTK Engineering Services, LLC to provide systems engineering final design services for the North Link – UW Station to Northgate project in the amount of \$6,239,000, with a 10% contingency of \$623,900, totaling \$6,862,900, for a new total authorized contract amount not to exceed \$16,785,872.

Motion No. M2009-65 – Authorized the chief executive officer to execute a contract amendment with LTK Engineering Services, LLC to provide additional systems engineering final design work, design services during construction, and light rail vehicle inspection and test support services required for the University Link project in the amount of \$1,579,576, with a contingency of \$158,023, totaling \$1,737,599, for a new total authorized contract amount not to exceed \$9,922,972.

Motion No. M2008-52 – Authorized the chief executive officer to execute a contract amendment with LTK Engineering Services to complete systems design and contract documents to the Issue-for-Bid level (100%) for the University Link project in the amount of \$844,357, with a 10% contingency of \$84,436 totaling \$928,793, for a new total authorized contract amount not to exceed \$8,185,373.

Motion No. M2007-51 – Authorized the chief executive officer to execute a contract with LTK Engineering Services, LLC to provide systems engineering final design services for the University Link Project in the amount of \$6,596,891 with a 10% contingency of \$659,989, for a total authorized contract amount not to exceed \$7,256,580.

## **TIME CONSTRAINTS**

A one month delay would not create a significant impact to the project schedule.

**PUBLIC INVOLVEMENT**

Not applicable to this action

**LEGAL REVIEW**

LA 11/1/10

**MOTION NO. M2010-96**

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, LLC to (1) provide additional systems engineering final design services for the University Link project and (2) exercise an option for design services during construction in the amount of \$5,360,000, with a 10% contingency of \$536,000, totaling \$5,896,000, for a new total authorized contract amount not to exceed \$22,681,872.

**BACKGROUND:**

On April 27, 2006, the Sound Transit Board adopted Resolution No. R2006-07, which (1) selected the University Link project to be advanced to final design and property acquisition followed by construction and operation, and (2) approved a revised lifetime project budget.

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**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, LLC to (1) provide additional systems engineering final design services for the University Link project and (2) exercise an option for design services during construction in the amount of \$5,360,000, with a 10% contingency of \$536,000, totaling \$5,896,000, for a new total authorized contract amount not to exceed \$22,681,872.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on November 18, 2010.

  
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Aaron Reardon  
Board Chair

ATTEST:

  
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Marcia Walker  
Board Administrator