

MOTION NO. M2016-30

Increase Contingency for the Northgate Link Extension N125 Contract – TBM Tunnels (University of Washington Station to the Maple Leaf Portal)

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Capital Committee	03/10/2016	Recommend to the Board	Ahmad Fazel, DECM Executive Director
			Don Davis, Executive Project Director –
Board	03/24/2016	Final Action	Northgate Link

PROPOSED ACTION

Authorizes the chief executive officer to increase the contract contingency with JCM Northlink LLC, a Joint Venture, for construction of the underground tunnels from the University of Washington Station to the Maple Leaf Portal within the Northgate Link Extension, in the amount of \$44,032,100, for a new total authorized contract amount not to exceed \$506,369,150.

KEY FEATURES SUMMARY

- The proposed action will increase the contract contingency to address remaining project work including changes related to differing site conditions encountered at five cross passages along the project alignment.
- The additional contingency will also cover potential future Requests for Changes.
- The existing contract contingency of 5% of the contract value is not adequate to cover the potential cost of changes through the completion of construction. With this action, contract contingency will be equal to 15% of the base contract value.
- The additional contingency requested is within the 2016 Budget. After allocation of the requested contingency, the projected cost at completion of the tunneling contract will be about \$26 million under budget. The project is also expected to be completed on schedule.

BACKGROUND

Northgate Link extends light rail 4.3-miles from the University of Washington Station north under the campus via twin bored tunnels to an underground U District Station on Brooklyn Avenue NE between NE 43rd and NE 45th Streets, an underground Roosevelt Station on 12th Avenue NE between NE 65th Street and NE 67th Street, and continuing to an elevated station in Northgate on 1st Avenue NE spanning NE 103rd Street. The Northgate Link Extension is scheduled to be completed in September 2021 and will provide an interim terminus for Link at Northgate until the Lynnwood Link Extension is in service, currently anticipated in 2023. In June 2012, the Sound Transit Board baselined the Northgate Link Extension's schedule and budget.

In July 2013 through Motion No. M2013-50, the Board authorized a contract with JCM Northlink, LLC for Northgate Link Extension tunneling from the University of Washington station to the Maple Leaf Portal. At the time of contract award, a contingency fund in the amount of 5% of the contract value was authorized by the Board. For underground work, such as tunneling and deep excavations, it is common to allow a contingency in the range of 10% to 15% of the contract amount due to the risk of encountering unexpected underground conditions. In awarding the contract with JCM Northlink, LLC, the Capital Committee recommended a contingency of only 5% of the contract amount. While acknowledging that this contingency was lower than normal, the

Committee noted a preference that staff come back to the committee for additional authorization should the required contingency exceed the 5% approved at the time of the contract award.

Since the contract was awarded, the contractor has completed excavation for both underground stations as well as for the Maple Leaf Portal. Construction of the twin-bore tunnels is approximately 80% complete and work is progressing on the tunnel interior finishes and cross passages. The project's 23 cross-passages are hand-mined tunnels that connect the twin running tunnels to provide emergency egress between the tunnels.

Recently, the contractor began further exploration of underground conditions where cross-passages between the tunnels are required, and discovered groundwater conditions that differ from those anticipated in the contract documents. These differing site conditions require ground stabilization including freezing the soil around the cross-passages. This specialized work, required at five of the 23 cross-passages, is more expensive than the specified ground treatment anticipated in the contract documents and these expenditures will exceed the currently authorized contract contingency. In conjunction with changes to date and potential changes for the remainder of the work, these differing site conditions will likely require the additional contingency requested by this action.

PROJECT STATUS in SOUND TRANSIT'S PHASE/GATE PROCESS

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Phase I:	Phase II:	Phase III:	Phase IV:	Dhasa V.	Dhasa VII.	
Project	Alternatives	Conceptual	Preliminary	Phase V: Final Design	Phase VI: Construction	
Identification	Identification	Engineering	Engineering			

Projected Completion Date for Construction Contract N125 – TBM Tunnels: February 2018 Project scope, schedule and budget summary located on page 41 of the December 2015 Agency Progress Report.

FISCAL INFORMATION

This action is within the adopted budget and sufficient monies remain after approval of this action to fund the remaining work in the Construction phase as contained in the current cost estimates. Use of Construction phase unallocated contingency is not required for this action.

The lifetime budget in the 2015 Transportation Improvement Plan (TIP) for the Northgate Link Extension is \$1,899,755,500. Within that amount \$532,800,000 has been set aside for N125 TBM Tunnels (UW to Maple Leaf Portal) in the Construction phase. The proposed action would increase the commitment for this line item by 44,032,100 to a revised total commitment of \$506,369,150, leaving a remaining balance of \$26,430,850 for this budget line item.

	Board					
Northgate Link Extension	Board			Approved Plus Uncomm		
•	2016 TIP	Approvals	This Action	Action	(Shortfall)	
Agency Administration	147,879	60,702		60,702	87,177	
Preliminary Engineering	15,077	15,077		15,077	C	
Final Design	129,167	114,164		114,164	15,003	
Right of Way	127,300	93,061		93,061	34,239	
Construction	1,328,023	498,057	44,032	542,089	785,934	
Construction Services	118,310	91,115		91,115	27,194	
Third Party Agreements	11,800	9,930		9,930	1,870	
Vehicles	-	-		-	-	
Contingency	22,200	-		-	22,200	
Total Current Budget	1,899,756	882,106	44,032	926,138	973,618	
Vehicles Contingency		- - 882,106	44,032	-		
Construction						
N125 TBM Tunnels	532,800	462,337	44,032	506,369	26,43	
Other Construction	795,223	35,720		35,720	759,50	
Total Phase	1,328,023	498,057	44,032	542,089	785,93	

	Contract Detail JCM Northlink LLC, a Joint Venture	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
	Contract Amount	440,321	-	-	440,321
	Contingency	22,016	-	44,032	66,048
*	Total	462,337	-	44,032	506,369
	Percent Contingency	5%	0%	100%	15%

Notes:

Amounts are expressed in Year of Expenditure \$000s.

Board Approvals = Committed To-Date + Contingency, and includes pending Board actions.

2016 TIP = Northgate Link Extension project budget located on page 13 of the Proposed 2016 Transit Improvement Plan (TIP) as amended in Board Resolution R2015-36 adopted by the ST Board on 12/17/15.

SMALL BUSINESS/DBE PARTICIPATION

Sound Transit promotes and encourages small business participation, which also includes Disadvantaged Business Enterprises (DBEs). Consistent with Sound Transit Policies and Federal Regulations, Sound Transit has established Small Business/DBE goals for this contract. These goals are based upon an examination of subcontracting opportunities contained in the work of this contract and the number of Small Businesses/DBEs available to perform such subcontracting work.

For this specific contract, the following goals were set and the successful Bidder/Proposer has committed to the following Small Business/DBE Participation:

Small Business and Disadvantaged Business Enterprise Goals

Sound Transit Goal:

Small Business: 10%

DBE: 7% Commitment:

Small Business: 14.5%

DBE: 10%

PUBLIC INVOLVEMENT

Sound Transit has maintained an active community outreach program during construction, which includes a 24-hours/7-days-a-week construction hotline, a variety of written materials, and public meetings.

Sound Transit staff has been notifying affected stakeholders and the public about the construction work related to this project. Staff will continue to work closely with local jurisdictions to coordinate public notification efforts and other outreach activities during construction.

TIME CONSTRAINTS

A delay in approval of this action will delay the planned completion of construction.

PRIOR BOARD/COMMITTEE ACTIONS

Motion No. M2013-50: Authorized the chief executive officer to execute a contract with JCM Northlink LLC, a Joint Venture, to construct underground tunnels from the University of Washington Station to the Maple Leaf Portal for the Northgate Link Extension in the amount of \$440,321,000, with a 5% contingency of \$22,016,050, for a total authorized contract amount not to exceed \$462,337,050.

ENVIRONMENTAL REVIEW

JI 3/2/2016

LEGAL REVIEW

LA 4 Mar 2016



MOTION NO. M2016-30

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to increase the contract contingency with JCM Northlink LLC, a Joint Venture, for construction of the underground tunnels from the University of Washington Station to the Maple Leaf Portal within the Northgate Link Extension, in the amount of \$44,032,100, for a new total authorized contract amount not to exceed \$506,369,150.

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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 increase the contract contingency with JCM Northlink LLC, a Joint Venture, for construction of the underground tunnels from the University of Washington Station to the Maple Leaf Portal within the Northgate Link Extension, in the amount of \$44,032,100, for a new total authorized contract amount not to exceed \$506,369,150.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 24, 2016.

> **Dow Constantine Board Chair**

ATTEST: