#### SOUND TRANSIT STAFF REPORT

#### **MOTION NO. M2005-27**

# Contract Award for Link Construction of the South Boeing Access Road to S. 154th Street (C755)

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	3/03/05		Ahmad Fazel/Director Rod Kempkes/Senior	(206) 398-5389 (206) 398-5374
Board	3/10/05	Action	Civil Engineer	· · ·

Contract/Agreement Type:	✓	Requested Action:	$\checkmark$
Competitive Procurement	✓	Execute New Contract/Agreement	✓
Sole Source		Amend Existing Contract/Agreement	
Interagency Agreement		Contingency Funds (Budget) Required	
Purchase/Sale Agreement		Budget Amendment Required	

# <u>ACTION</u>

Authorizes the Chief Executive Officer to execute a contract with PCL Construction Services, Inc. for the construction of the Central Link Light Rail Initial Segment light rail guideway between Boeing Access Road and South 154th Street in the City of Tukwila, including the Tukwila International Boulevard station and park and ride facility, in the amount of \$231,675,340, with a contract contingency of \$23,167,534 for a total authorized contract amount not to exceed \$254,842,874.

## KEY FEATURES

- This contract includes the construction of the approximately 4.9 mile long Tukwila Freeway Route light rail alignment between just north of Boeing Access Road in the City of Seattle and South 154th Street in the City of Tukwila (Contract C755). The contract includes:
  - 4.2 miles of pre-cast segmental elevated guideway, including long-span bridge structures over Interstate 5 just south of the Boeing Access Road bridge and the Duwamish River;
  - 0.7 miles of at grade and retained cut and fill guideway; and
  - the elevated Tukwila International Blvd light rail station and park-ride facility.
- Sound Transit used a two-phase, pre-qualification, low-bid procurement process for this contract. Based on statements of qualification requested from contractors with relevant experience, Sound Transit identified five pre-qualified contractors and invited them to submit bids. Four of the five pre-qualified contractors submitted bids on February 15, 2005. PCL Construction Services, Inc. submitted the lowest bid and was determined to be responsive and responsible.
- The bid from PCL Construction Services in the amount of \$231.7 million is 10%, or approximately \$24.7 million, below Link's engineer's estimate of \$256.4 million.
- Sound Transit has adopted a number of key risk mitigation measures in connection with the Tukwila Freeway Route Light Rail Construction:

- Conflicts between existing utilities along Southcenter Boulevard, East Marginal Way and the light rail facilities to be constructed as part of the C755 Contract are being resolved as part of the ongoing advance utility relocation contract (Contract C757);
- In light of the recent steel price volatility, the C755 Contract includes an allowance that addresses potential steel price increases that allowed bidders to reduce bid contingencies; and
- The C755 Contract includes requirements for the contractor to perform additional geotechnical investigations at guideway column foundation locations in advance of the construction in order to reduce the risk of construction delays posed by the discovery of unexpected ground conditions.
- Based on a quantitative construction cost and schedule analysis, staff recommends assignment of a 10% contract contingency for the C755 contract.
- Sound Transit has obtained all critical property required in connection with the Tukwila Freeway Route Construction. Any outstanding property acquisitions are on track to be completed in advance of construction access requirements.
- Sound Transit has obtained or is finalizing key construction permits from the City of Tukwila, the City of Seattle, the Washington State Department of Transportation (WSDOT), the Federal Aviation Administration, the Army Corps of Engineers, the Washington Department of Fish and Wildlife, and the Washington State Department of Ecology and has incorporated permit conditions into the C755 Contract. Contract documents also include detailed traffic control plans prepared by WSDOT for work along the SR 599, I-5, and SR 518 freeways.
- Under the terms of the C755 Contract, the Sound Transit Board is able, at its sole discretion, to exercise an option at a future date to add to the scope of this contract the construction of portions of the light rail extension from South 154th Street to SeaTac International Airport. In the event that such an option is exercised, such work would be performed and tracked as part of the Airport Link project, and would not impact the Initial Segment project scope, schedule, and budget.

## BUDGET IMPACT SUMMARY

There is no action outside of the Board-adopted budget; there are no contingency funds required, no subarea impacts, or funding required from other parties other than what is already assumed in the financial plan.

## **BUDGET DISCUSSION**

The proposed action would authorize the execution of a contract with PCL Construction Services, Inc. for the construction of the South Boeing Access Road to S. 154th Street (C755) Light Rail project for a total authorized contract amount not to exceed \$254,842,874.

The adopted 2005 lifetime capital budget for the Initial Segment is \$2.07 billion. Within that budget \$275,408,000 has been set aside for the construction of C755 Tukwila Freeway Route in the construction phase. Should the proposed action be approved there will be a remaining balance of \$20,564,140 for this budget line item.

# **REVENUE, SUBAREA, AND FINANCIAL PLAN IMPACTS**

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

# BUDGET TABLE

Action Item: TBD Contractor (construction of the South Boeing Access Road to 154th Street (C755 Tukwila Freeway Route) project in the Central Link Initial Segment)

Initial Segment	Amended 2005				
Initial Segment	Amended 2005			Total Committed &	Uncommited
initial boginerit	Budget	Committed To Date	This Action	Action	(Shortfall)
	(A)	(B)	(C)	(D)	(E)
Agency Administration	218,780	112,318		112,318	106,46
Preliminary Engineering	34,000	33,610		33,610	39
Final Design	143,523	140,688		140,688	2,83
Right of Way	225,516	176,413		176,413	49,10
Construction	1,172,066	783,109	254,843	1,037,952	134,11
Construction Services	83,892	80,631		80,631	3,26
Third Party Agreements	58,916	53,452		53,452	5,46
Vehicles	133,307	131,799		131,799	1,50
Total Current Budget	2,070,000	1,512,019	254,843	1,766,862	303,13
Construction Phase Detail C755 Tukwila Freeway Route	275,408	1	254,843	254,844	20,56
Other Construction	896,658	783,108	-	783,108	113,55
Total Phase	1,172,066	783,109	254,843	1,037,952	134,11

0%

254,843

254,843

10%

254,843

10%

## M/W/DBE - SMALL BUSINESS PARTICIPATION

#### Prime Consultant/Contractor

16 Percent Contingency

15 Total

The following Small Business and M/W/DBE participation goals have been established for this contract in the solicitation for bids: Small Business overall goal of at least 20%, to be accomplished utilizing M/W/DBE participation of at least 12%. For the purposes of bidding, the Bidder had to demonstrate that it has achieved participation equal to or greater than a Bid Submittal Goal for Small Businesses of 10% of the Total Bid Price, to be accomplished utilizing M/W/DBE firms for at least 6%. During the performance of the C755 contract, approximately 33 months, the contractor is to work with Sound Transit to develop and implement a Small Business and M/W/DBE Participation Plan to achieve not less than the Small Business and M/W/DBE participation goals applicable to the contract price.

0%

At this time, PCL Construction Services, Inc. has committed to 11.19% M/W/DBE and Small Business participation, with 9.97% to be performed by M/W/DBE. This represents over one-half of the overall Small Business goal of 20%, and over one-half of the M/W/DBE participation goal of 12%. PCL Construction Services, Inc. has committed to the utilization of M/W/DBE and Small Businesses throughout the duration of the project to meet or exceed the overall Small Business and M/W/DBE participation goals.

#### Utilization Breakdown Table

Subcontractor	Business Type	% of Work	Dollar Value
Rebar International, Inc	WBE/DBE	7.06	16,377,340
Salinas Construction, Inc.	MBE/DBE	0.76	1,751,000
Grandston Mechanical	Small Business	0.40	907,700
Metal Benders, Inc.	MBE/DBE	1.40	3,242,000
Stephens Enterprises, Inc.	MWBE	0.58	1,334,000
Queen City Sheetmetal and Roofing	WBE	0.17	396,432
SS Landscaping	Small Business	0.82	1,896,000
Total		11.19%	\$25,904,472

#### EEO Commitment

PCL Construction Services, Inc. has agreed to adhere to the EEO provisions contained in the contract documents. The EEO goals are 21% people of color and 12% women of the total labor hours worked on the contract.

#### Apprentice Utilization Commitment

PCL Construction Services, Inc. has committed to meet the 20% Apprentice Utilization goal as contained in the contract documents. Under the terms of the contract, people of color and women are to comprise at least 50% of all first-year apprentice hours, and 33% of all apprentice hours worked.

## **HISTORY OF PROJECT**

On November 29, 2001, the Sound Transit Board adopted the Tukwila Freeway Route as the preferred alternative for the alignment of the portion of the Initial Segment covered by the C755 contract. A procurement procedure was carried out from October 2001 to February 2002 to select a design team for the civil final design of the Tukwila Freeway Route, South Boeing Access Road to South 154th Street. Final design work began in November 2002. Early in the final design process, the design team recommended that a precast segmental design be used for this section of elevated guideway construction, which was accepted by Link staff. The precast segmental method of construction offers significant benefits to the project in terms of cost, schedule, and reduced environmental impact.

The construction of the South Boeing Access Road to South 154th Street project requires the underground relocation of a number of overhead utilities. In August 2003, Link staff concluded that the risk of schedule delay to the aerial guideway construction work would be significantly reduced by undertaking these critical under-grounding activities under an advance utility relocation contract. In September 2003, Sound Transit and the City of Seattle executed a Construction Services Agreement to cover the costs of completing the Seattle City Light electrical work associated with the advance utility relocation.

The advance construction of underground infrastructure and procurement of transmission poles was packaged as Contract C757 and issued for bid in May 2004. On July 23, 2004, Sound Transit received only one bid for this utility relocation work. After analysis by Sound Transit staff, the bid was determined to be responsive and responsible. The bid exceeded the engineer's estimate by 4% but was within the assigned budget. On September 9, 2004, the Board approved the award of the C757 contract to Frank Coluccio Construction Company.

A two-phase, pre-qualification, low-bid procurement process was used for the selection of the contractor for Contract C755. On June 4, 2004, Sound Transit requested statements of

qualifications from contractors experienced in precast segmental bridge/guideway construction, deep shaft construction, deep steel pipe piled foundations and direct fixation trackwork. Because the precast segmental method of construction is highly specialized, Sound Transit advertised the Request for Qualifications in national publications. On July 29, 2004 Sound Transit received Statements of Qualifications from six firms; one of which later withdrew. On August 23, 2004, a selection panel considered the written proposals and the interviews, and pre-qualified five firms to submit bids on Contract C755. Prior to issuing formal bid documents, Sound Transit invited each pre-qualified bidder to participate in a confidential review of the draft bid documents with Sound Transit staff, with the goal of improving the final contract documents. The formal bid documents were issued to the five pre-qualified firms on October 29, 2004. On February 15, 2005 Sound Transit received four bids. The lowest, responsive and responsible bid was received from PCL Construction Services, Inc. Sound Transit's engineer's estimate for this contract was \$256,411,570.

The approved schedule for the Central Link Light Rail Initial Segment assumes the start of construction for this segment in March of 2005. All required environmental compliance to support the Board's approval of this contract has been completed.

Prior Board or Committee Actions and Relevant Board Poli	cies
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Motion or Resolution Number	Summary of Action	Date of Action
M2004-104	Executed a Development and Transitway Agreement with the City of Tukwila specifying the terms and conditions for development of the Tukwila Freeway Route (TFR) Project and to allow the use of City of Tukwila street right-of-way; and to execute all other subsequent agreements as may be necessary to implement this Agreement, subject to approval of the 2005 budget	10/21/04
M2004-84	Executed a contract with Frank Coluccio construction company, for advance utility relocation work for Central Link from Boeing Access Road to South 154th Street station in the amount of \$5,776,128 with a 15% contingency of \$866,419, for a total authorized contract amount not to exceed \$6,642,547, which includes reimbursements to Sound Transit by Qwest, Comcast, and Seattle City Light for work in the amount of \$198,812.	9/9/04
M2003-91-1	Authorized the Chief Executive Officer to execute an interlocal agreement with the City of Seattle to provide construction support services for the Central Link Light Rail Initial Segment in the amount of \$37,969,043, with a contingency of \$3,255,019, for a total authorized amount not to exceed \$41,224,062. This action also authorizes a task limit of \$45,574,062 before City of Seattle credits to Sound Transit of \$4,350,000 and supersedes Motion No. M2003-91.	9/25/03
M2002-45	Executed a contract with AMEC-Hatch Mott MacDonald Joint Venture for civil engineering final design services associated with construction of the S. Boeing Access Road to S. 154th Street segment for the Central Link Light Rail project for a contract amount of \$13,000,000 with a 10% contingency of \$1,300,000 for a total authorized amount not to exceed \$14,300,000.	4/25/02
M2001-02	Approved the Tukwila Freeway Route as the Preferred Alternative for purposes of completing the Final Supplemental Impact Statement and that staff be directed to identify alternatives for financing the additional costs of the TFR and develop the terms of a potential agreement with the City of Tukwila as related to the Preferred Alternative for the board to consider in the spring following issuance of the final SEIS.	2/8/01
R2001-16	Selected the initial segment of the central Link Light Rail Project to be constructed and operated by 2009.	11/29/01

# **REGIONAL PARTNERSHIP AND COOPERATION**

Sound Transit has worked closely with the City of Seattle, the City of Tukwila, the City of SeaTac, and the Washington State Department of Transportation in the final design and permitting for this contract. The light rail facilities are being partially constructed on property owned by the WSDOT, the City of Seattle and the City of Tukwila.

# **CONSEQUENCES OF DELAY**

The Tukwila Freeway Route construction is near the critical path of the overall Initial Segment project schedule. A delay in the award of this construction contract could directly impact the overall project completion and the start of light rail service.

# PUBLIC INVOLVEMENT

Not applicable for this action.

# **LEGAL REVIEW**

JW 2/16/05

### SOUND TRANSIT

#### **MOTION NO. M2005-27**

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to execute a contract with PCL Construction Services, Inc. for the construction of the Central Link Light Rail Initial Segment light rail guideway between Boeing Access Road and South 154th Street in the City of Tukwila, including the Tukwila International Boulevard station and park and ride facility, in the amount of \$231,675,340, with a contract contingency of \$23,167,534 for a total authorized contract amount not to exceed \$254,842,874.

#### **Background:**

This contract includes the construction of the approximately 4.9 mile long Tukwila Freeway Route Light Rail alignment between just north of Boeing Access Road in the City of Seattle and the South 154th Street park-ride in the City of Tukwila (Contract C755). The contract includes: (a) 4.2 miles of pre-cast segmental elevated guideway, including long-span bridge structures over Interstate 5 just south of the Boeing Access Road bridge and the Duwamish River; (b) 0.7 miles of at grade and retained cut and fill guideway; and (c) the elevated Tukwila International Blvd light rail station and park-ride facility.

Sound Transit has adopted a number of key risk mitigation measures in connection with the Tukwila Freeway Route Construction: (a) conflicts between light rail facilities to be constructed as part of the C755 Contract and selected existing utilities are being resolved as part of the ongoing advance utility relocation work; (b) the C755 Contract includes an allowance that addresses potential steel price increases that allowed bidders to reduce bid contingencies; and (c) the C755 Contract includes requirements for additional geotechnical investigations at selected locations in advance of the construction in order to reduce the risk of construction delays.

Based on a quantitative construction cost and schedule analysis, staff recommended assignment of a 10% contract contingency for the C755 contract.

Sound Transit has obtained or is finalizing key construction permits from the City of Tukwila, the City of Seattle, the Washington State Department of Transportation (WSDOT), the Federal Aviation Administration, the Army Corps of Engineers, the Washington Department of Fish and Wildlife, and the Washington State Department of Ecology and has incorporated permit conditions into the C755 Contract. Contract documents also include detailed traffic control plans prepared by WSDOT for work along the SR 599, I-5, and SR 518 freeways.

Under the terms of the C755 Contract, the Sound Transit Board is able, at its sole discretion, to exercise an option add a future date to add to the scope of this contract the construction of portions of the light rail extension from South 154th Street to SeaTac International Airport. In the event that such an option is exercised, such work would be performed and tracked as part of the Airport Link project, and would not impact the Initial Segment project scope, schedule, and budget.

#### 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 with PCL Construction Services, Inc. for the construction of the Central Link Light Rail Initial Segment light rail guideway between Boeing Access Road and South 154th Street in the City of Tukwila, including the Tukwila International Boulevard station and park and ride facility, in the amount of \$231,675,340, with a contract contingency of \$23,167,534 for a total authorized contract amount not to exceed \$254,842,874.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 10, 2005.

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Kevin Phelps Board Chair Pro Tem

ATTEST:

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Marcia Walker Board Administrator