

**THE NORTHWEST SEAPORT ALLIANCE**  
**MEMORANDUM**

**MANAGING MEMBERS**  
**STAFF BRIEFING**

**Item No.** 5A-1  
**Date of Meeting** February 2, 2021

**DATE:** January 19, 2021

**TO:** Managing Members

**FROM:** John Wolfe, Chief Executive Officer

**Sponsor:** Kurt Beckett, Deputy CEO

**Project Manager:** Emma Del Vento, Capital Program Leader, Port of Seattle

**SUBJECT:** Terminal 5 Modernization Program Quarterly Update

**A. BRIEFING REQUESTED**

Regular Terminal 5 Modernization Program Update.

**B. BACKGROUND**

In April 2019, the Northwest Seaport Alliance (NWSA) entered a long-term lease for the redevelopment of Terminal 5 in the North Harbor to create a modern international container terminal for ultra-large container ships. Once the Terminal 5 Modernization Program is completed, the facility will have the capability to handle the largest vessels currently calling the west coast, allowing the NWSA to compete for the super post-Panamax vessels, increasing current container volumes, supporting economic development and both creating and securing current jobs in the region for the next thirty years and likely beyond.

**C. PROGRAM SYNOPSIS**

**Scope**

Scope increases previously reported include:

- Wharf demolition and reconstruction for slope stabilization
- Additional soil removal and related paving
- Lease obligations initial cost uncertainty

Q4 2020 scope increases include:

- Open Lease responsibilities with low level definition
  - North Reefer Demarcation. Financial responsibility for this work is disputed between NWSA and the tenant.
  - South Reefer Repair project for a total of approximately \$800,000. The existing T-5 terminal includes 640 reefers that the tenant will use during Phase 1 operations. A portion of these reefer plugs are not operational due to the existing electrical feeder to the substation and an electrical switch. The program

will repair the feeder and switch as a change order to the existing wharf construction contract. Financial responsibility for this repair is in dispute between NWSA and the tenant.

### **Schedule**

The T-5 Berth Modernization construction project is currently on schedule to complete both phases of the project by the original schedule date of December 31, 2022. Dredging will be completed per contract before March 2023. Contractor is working to deliver Phase 1 by June 15, 2021. Phase 1 north berth will be ready to receive cranes on June 1, 2021. Turnover of south berth for start of work on Phase 2 has been accelerated from June 2021 to September 2020.

- The wharf construction contractor's schedule is showing substantial completion of Phase 1 (north berth) in early June 2021 and not later than June 15<sup>th</sup>, a change due mostly to the slope stabilization (pinch piles) change order and COVID-19 impacts. For purposes of managing contractor cost claims, NWSA has not accepted the schedule to date and is working with the contractor on an agreed-upon substantial completion date. The NWSA issued a letter for forbearance to the general contractor on 01/07/21 reserving NWSA's rights to collect liquidated damages. When this pinch pile item first arose, the impact was estimated to delay the schedule until April 15, 2021. Negotiations are ongoing with the contractor and have not been finalized.
- The toe wall is partially installed and is the underwater wall driven into the sediment to secure the wharf and its slope stabilization piling system. The toe wall must occur before dredging and will allow the berth dredge to -55 ft depth. Toe wall driving could not reach design depth and has stopped for this in-water work season (August 15 – February 15, annually) due to contractor decisions regarding the means and methods of the installation. Additionally, portions of the toe wall that have been installed need to be removed or cut to height. The lease requires berth dredging to be completed no later than March 2023.

### **Budget**

Program Budget of \$340,000,000 was approved in April 2019.

Through November 30, 2020 spent to date amounts of \$143,700,000 are on track with forecasted estimate at completion and progress.

### **Risk**

Recent Stochastic Analysis and Risk Register updates indicate the program has an 85% probability of being sufficient with a value of \$350.0M and a 100% probability of being sufficient with a value of \$360M. The \$340M program budget has a near 20% probability of being sufficient.

The approximate \$11.5M increase in P-85 value over last quarter is due to six main factors in the forecast:

1. Additional soil removal (originally estimated at +\$6-7,000,000 above the bid amount) has increased by approx. \$3-4M. The initial estimate of this change that was reported last quarter and did not include the cost for additional paving related to additional soil removal. Most of the additional work is related to the electrical trenching work. The total is between \$9-11M.

2. South reefer repair project (estimated at \$800,000 - \$900,000), material costs make up the majority of the estimate. The scope includes providing new feeders and installing a new electrical switch.
3. North Marine Building Bid was 40% higher than engineer's estimate which has increased the budget by approx. \$1.6M. This total increase was previously reported but is now included in the update stochastic analysis and is reflected in the probable program estimate.
4. North reefer probable amount has increased by approx. \$600,000 (less than 4% of estimated budget) with the completion of the 60% design for a total range between \$14-19M.
5. Increase in the risk by approx. \$5.5M due to the reefer demarcation negotiation.
6. The stormwater budget has increased this quarter from \$30M to \$35.2M (including construction, soft costs, tenant costs, grant administration and contingency) following the 90% design. This amount has not impacted the risk analysis as it was previously included for a range between \$34 and 38M.

Note that items 2, 5, and 6 are all costs that are the subject of ongoing dispute resolution discussions with the Tenant with regard to financial responsibility for these items.

### **Safety**

Orion Marine Contractors (T-5 Berth Modernization General Contractor) meets POS requirements with Health and Safety Plan, Site Specific Safety plans; and have led the way forward through the 9 months of COVID-19 with continual adjustments and monitoring using additional supervision, access protocols, PPE to include face coverings, and, hand washing. Orion has regularly had after action reviews with crews and has been responsive to all NWSA/POS direction.

During this quarter there have been 6 positive cases of COVID-19 on site which generated about a week stop work for testing of most crews. There have been no near misses and no recordable incidents this quarter for almost 30,000 hours worked.

The project experienced a theft at the new T-5 main electrical substation. Installed copper cables were cut and material removed from the installation. The cost and schedule impacts of these thefts are being determined.

## **D. CURRENT STATUS**

Milestones:

Orion Marine Contractors are moving forward with:

- Above-water dock construction – on schedule, GC is accelerating to make up for delays due to existing cracked piles
- Landside crane rail – on schedule, continuing concrete pours, almost ready to place rail. The landside crane rail concrete is complete. Waterside crane rail concrete is nearing completion and should be complete sometime in February.
- Electrical Substation –Seattle City Light (SCL) started 4-month transformer work in

early November, Transformers were delivered in December.

- Utility: sewer, water, and electrical duct bank - on schedule. The primary duct bank is complete, and work is focused on the secondary duct bank.

Major milestones for Permit Conditions and Lease Obligations Q4 2020 and early Q1 2021 include:

- North Marine Building bid award (December 2020) and Notice to proceed (February 2021)
- Stormwater Treatment System 90% Design (October 2020)
- Rail Quiet Zone 95% and Pedestrian Path design complete (November 2020)
- Implementation of Spokane Street signalization and W Marginal Way Flashing Alert (December 2020)
- North Reefer Infrastructure 60% Design (November 2020)
- South Reefer Study Complete (November 2020)
- South Berth Crane Removal: relocated all 6 cranes to South Harbor (October 2020)
- Management Plans will be in review with Agencies
- Other: PIDP Grant Announcement for \$10.7M Federal match

#### E. BUDGET (to November 30, 2020)

Budget numbers are updated through November 30, 2020. Numbers include overhead are posted the 10<sup>th</sup> of every month.

- Program forecast currently exceeds the overall budget if all risks hit the program at the high end.
- Construction is 66% spent and 42% complete (discrepancy is due to mobilization and early material purchase for Phases 1 and 2).

2020 Quarter 4 Program Budget	Authorized Budget	Quarter 4 Changes	Updated Budget	Spent to Date	Forecast at Completion	Remaining Authorized Budget
Design, Construction, Project Management	\$283.5	\$0.8	\$284.3	\$138.5	\$288.9	\$145.0
Permit Conditions	\$14.0	\$-	\$14.0	\$3.4	\$14.0	\$10.6
Stormwater Treatment	\$30.0	\$-	\$30.0	\$1.8	\$35.2	\$28.2
Management Reserve*	\$12.5	\$(0.8)*	\$11.7	\$-	\$11.9	\$12.5
<b>Total</b>	<b>\$340.0</b>	<b>\$-</b>	<b>\$340.0</b>	<b>\$143.7</b>	<b>\$350.0</b>	<b>\$196.3</b>

\*\$800,000 moved out of Management Reserve this quarter and into construction for South Reefer Repair.

Increases to the forecast at completion in this quarter are below (explanation of future risks are included in paragraph F of this memo):

- Primary construction contract budget increased due to additional soil-related site conditions (+\$6-7M) and the related paving (+3-4M).
- North Marine Building low bid is 40% above the engineer's estimate (previously reported).

## **F. CONTINGENCY AND RISK**

The contingency and risk section provide the Managing Members' early visibility to emerging issues and associated costs in T-5 modernization program implementation.

The following table shows details of:

### 1) Known Costs (already discussed in the forecast)

Known costs are further broken into two sub-categories of:

- a) Executed Known Costs (agreed to) and
- b) Potential Known Costs (known costs but not final, and not agreed to officially).

### 2) Future Costs, based on actual program implementation

Future costs capture issues that currently exist or could exist (the latter are items not always likely but could have a cost should they occur).

These are captured early to closely track all issues that could affect delivering the program within the \$340m program authorization. The future costs are modelled using a three-point average intersected with the likelihood of the event occurring to generate the probable cost and a range.

Contingency Funding – the program has three distinct forms of contingency funding to cover risk:

1. Typical construction contingency of 15%, which for the \$160M contract results in \$24M.
2. A unique management reserve of \$20M was established to cover both program unknowns, like pinch-pile issues, and knowns (but not budgeted for the initial management reserve calculation), such as tenant improvements like the marine buildings.
3. A fortunate bid variance of \$24M from original engineers estimate of the primary \$160M construction contract.

The program will exceed its authorization of \$340M if all the Known Costs (executed & potential) and Future Costs occur at the high end of the range. If this is the case, the program costs will increase by approximately \$20M. This quarter the high-end probability hasn't increased, but the probability has moved significantly.

While these forecasted costs are designed to be comprehensive, conservative and cover all project phases, final program completion is 3 years out and inherent unknown risks may still emerge, and other risks may not occur.

T-5 Berth Modernization Program Contingencies			Balance
	Totals: Construction Contingency (\$24M), Management Reserve (\$20M), Bid Variance (\$24M)		\$68,000,000
	Projected Residual of Construction Contingency, Bid Variance, and Management Reserve between P-20 and P-100 probabilistic risk range	P-20: \$-2,500,000 (\$342,500,000) P-85: \$-10,000,000 (\$350,000,000) P-100: \$-20,100,000 (\$360,100,000)	\$-70,500,000 to -\$88,100,000

Q4 2020 T-5 Construction Contingency (Committed Funds)			
	T-5 Berth Modernization Construction Contingency – committed funds		\$24,000,000
<b>Executed</b>	<b>Total to 12/04/2020</b>	<b>-\$9,106,847</b>	<b>\$14,893,153</b>
<b>Potential</b>	<b>Total to 12/04/2020</b>	<b>-\$19,276,236</b>	<b>-\$4,383,083</b>
<i>Future</i>	<i>Remaining Phase 1 and 2 Construction Risk</i>	<i>-\$5,000,000 to -\$9,000,000</i>	<i>-\$11,380,711 to -\$18,380,711</i>
Q4 2020 T-5 Management Reserve			
	Management Reserve Budget		\$20,000,000
<b>Allocated</b>	<b>Marine Buildings, Clean Truck Gate Equipment, CBP and RPM Power, Reefer Study, North Reefer Infrastructure first phase, Tribal Agreement Modification</b>	<b>-\$9,160,000</b>	<b>\$10,840,000</b>
<i>Future</i>	<i>Quiet Zone Property Acquisition, Seattle City Light Variance and Tax, North Reefer Infrastructure, Stormwater above \$30M, T-5 Access Bridge, Reefer Phase 1 Plus Reimbursement, South Marine Building, Dredging 40' Overlap, Open water disposal, Insurance Premium, South Reefer Repair, Scale Replacement and Repair, North Reefer Demarcation</i>	<i>-\$17,450,000 to -\$57,200,000</i>	<i>\$-7,410,000 to -\$47,160,000</i>
Q4 2020 T-5 Construction Bid Variance			
	Bid Variance Budget (Program Contingency)		\$24,000,000

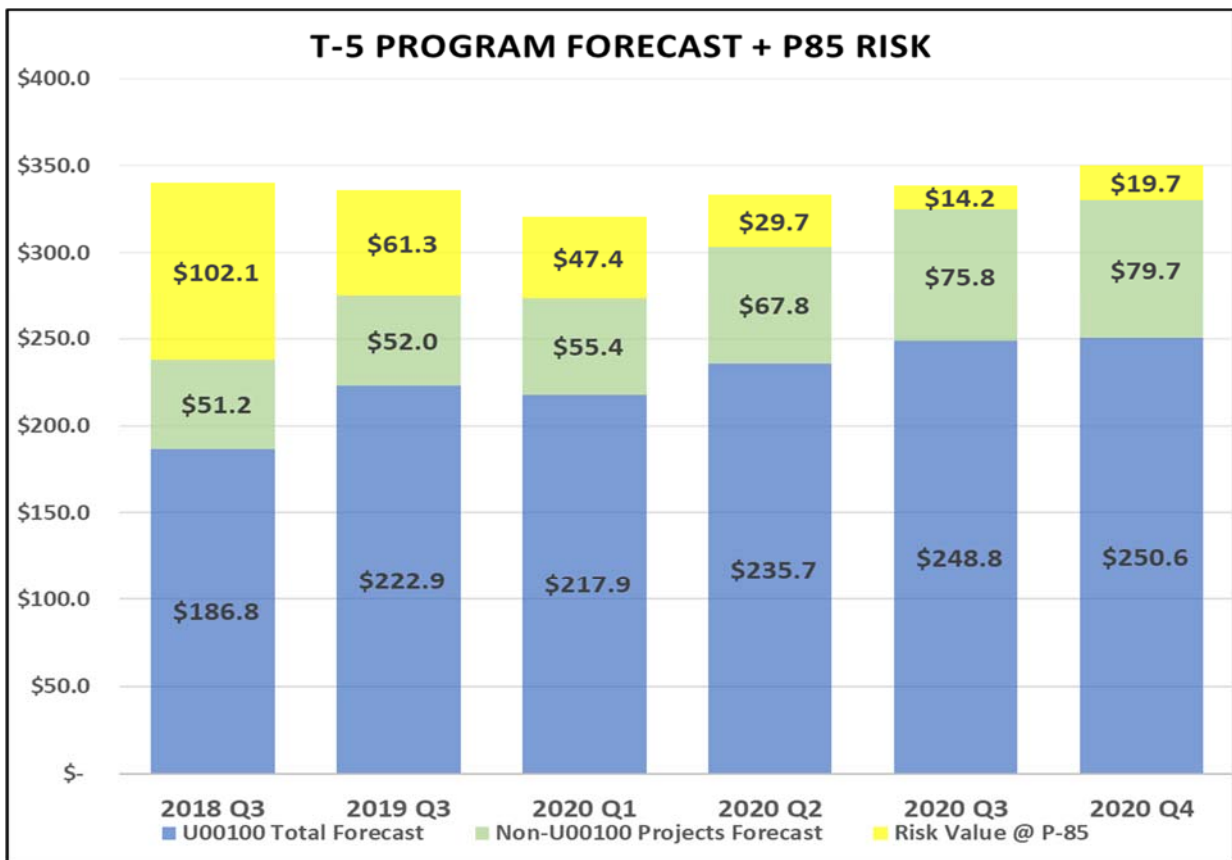
**Stochastic Analysis and Risk Register** (is being updated quarterly in 2021)

T-5 key staff meet quarterly with the T-5 Program risk consultant to model variables around future T-5 risk and update the risk register. Risks are identified by likelihood and impact to generate a score and are modelled into the forecast budget along with the actuals to date.

Recent Stochastic Analysis and Risk Register updates from Q4 2020 indicate:

- The program has P-85 value (85% probability of being sufficient) of \$350.0M
  - Q3 2020 P-85: \$338.8
  - Q2 2020 P-85: \$333M

- Q1 2020 P-85: \$321M
- Q4 2019 P-85: \$336.2M
- The \$340M program budget has a near 20% probability of being sufficient
  - Q3 2020 90% probability
  - Q2 2020 97% probability
  - Q1 2020 100% probability
  - Q4 2019 95% probability



**Programmatic Trends:**

- T-5 Berth Modernization forecast is almost entirely made up of two items: slope stabilization and changes to the soil and pavement quantities. This quarter the risk increased by \$2,000,000, which shows an expected lower rate of increase at this stage of the program that all the major scopes have started construction. A significant tariff increase (\$1.6M) was deleted.
- Lease Obligation planned values are coming in higher as design and bid progresses. The probable budget (Q3 2018) was defined before the lease obligations (Q2 2019), except for the stormwater treatment system, were finalized. T-5 Program was authorized by Managing Members in April and May 2019 for a total of \$20M for these projects. T-5 Program Budget was not adjusted to include the increased scope generated by the lease obligations. The

intent of including the upland project in the authorization without increasing the budget was that the \$20M management reserve would be enough to cover the lease obligations and programmatic reserve. The Lease contained four projects for T-5:

- North and South Marine Buildings
- Reefers
- CBP, RPM
- Clean Truck

The preliminary budgets for these projects are currently between \$26M - \$32M.

- Lease Obligation – Disagreement with the tenant regarding financial obligation for certain project elements under the lease include: South Reefer Repair (\$800,000 - \$900,000). North Reefer Demarcation (\$5,300,000 – \$21,200,000) and Reefer allowance (\$9,000,000). The North Reefer Demarcation cost responsibility is the single largest driver of the risk increase this quarter. If these projects that emerge from lease interpretation are removed, the P-85 would be \$343M.

**Future Potential risks:**

- Quiet Zone Property Acquisition (\$1-2M) and schedule delay

Under the Memorandum of Understanding we have with the City of Seattle, we are responsible for all the costs associated with the Quiet Zone. As part of the project, a property acquisition will need to be made by the City and the project will pay the cost; the City will hold the title to the property. Discussions have begun with property owner. Risks are in the finalization of the costs of the acquisition and in the potential impacts to the schedule.

- Stormwater budget (\$35.2M + soft costs) based on 90% Design

NWSA received the Stormwater 90% design in October 2020 with the updated construction estimate of \$35.2M. Based on known conditions, and similar projects at neighboring locations, we agree with the tenant's estimate range. The estimate will continue to be refined after the construction bids are received. progress. The NWSA and the tenant are in discussions on how to pay for the additional costs. No program costs above \$30M have been agreed to currently.

- North Reefer design, and construction (additional \$9M – \$15M to the \$3M already approved) feasibility study

Lease obligations are for NWSA to install electrical infrastructure in the uplands for the reefer plugs.

- Reefer Scope delineation for definition of responsibilities between NWSA and SSA (\$8M-\$12M) rough order of magnitude (N. Reefer Demarcation project)

Lease obligations are for NWSA to install electrical infrastructure and power to a vault in the uplands for the reefer plugs. Tenant understands the obligation is for NWSA to provide electrical infrastructure and power all the way to the reefers. The parties continue to work through responsibility for this issue.



- Reefer Reimbursement (\$9M) lease condition if Terminal 5 Phase 2 not executed.  
 Lease obligations are for NWSA to reimburse Tenant for reefer infrastructure up to \$9M should tenant elect Phase 1 Plus.

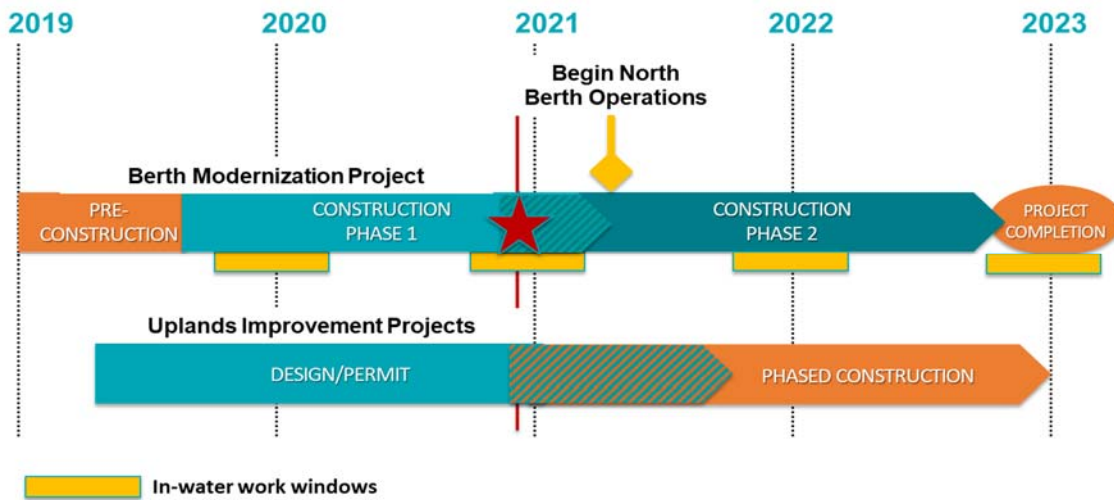
**Retired major risks are:**

- Tribal Agreements and requirement for additional in water work window
- Wharf construction and crane rail
- Redesign of some Tenant projects

**Continuing risks:**

- Encountering in-water obstructions for sheet piles and phase 2 in-water pile driving (significantly reduced)
- Further unknown COVID-19 (impacts have been reduced)
- Lease Obligations: CBP Booth, RPM location, N. Reefer demarcation
- Quiet Zone Property Acquisition
- Stormwater system
- Over-legal load 2 impacts to West Marginal and compliance with City permits (see above T-5 Access Bridge)
- Unforeseen site conditions (have been reduced)
- Other external factors (West Seattle Bridge, wild fire smoke, etc.)
- Toe wall driving and dredging
- South Reefer repairs

**G. PROGRAMMATIC SCHEDULE**



The T-5 Berth Modernization construction project is currently on schedule to complete both phases of the project by the original schedule date of December 31, 2022. Turnover of south berth for start of work on Phase 2 has been accelerated from June 2021 to September 2020.

Phase 1 north berth crane delivery is on schedule to receive cranes between April 1 and June 1, 2021.

The Program team is working with the general contractor on opportunities for targeted acceleration to reach Phase 1 substantial completion on or before June 14, 2021 to meet turnover to SSAT on June 15, 2021.

Other projects tied to Phase 1 include:

**Seattle City Light (SCL):** site turnover to SCL was November 02, 2020 and work is forecast on schedule for Phase 1 completion.

**Rail Quiet Zone:** Permit Condition for the quiet zone technical analysis for submittal to BNSF will be distributed by 2/15/21. Construction will be 2022/23.

**West Marginal Way Closure and Pedestrian Path:** Permit Condition for design for SDOT review and approval to implement when 5-way intersection is closed. Final design will be completed and distributed by 1/31/21. Construction will be 2022/23.

**T-5 Access Bridge restriping** – done.

**Access Road Improvements:** Install striping and signage to surface access route connecting T7 to West Marginal Way SW. Construction will be completed 2022/23.

**Spokane St Signal** – Signal upgrades complete pending one signal that will be impacted by the East Marginal Way Grade Separation Project.

**T-5 Access Bridge Overpass Restriping and Signs** – anticipated completion end 2020.

**West Marginal Way Flashing alert** – anticipated completion end 2020.

**Gate Queue Management Plan** – Agency review and acceptance Q1 2021.

**Gate Time Awareness system** – T-5 connection. Anticipated completion for Phase 1, implementation will be at start of Operations.

**Operational Noise Management Plan** – Agency review and acceptance Q1 2021.

**Establish Noise Complaint Hotline** on schedule for Phase 1 Permit Condition to be met.

**Air Quality Management Plan** – Agency review and acceptance Q1 2021.

**Clean Truck Gate Equipment** – part of Phase 1 lease agreement. On schedule to be completed by April 15, 2021.

**Marine Buildings** – North Marine Building is part of Phase 1 Lease. South marine building construction has been deferred and is scheduled to meet Phase 2 lease obligation on or before December 31, 2023.

**RPM Power Supply** – was part of Phase 1 Lease. The Parties have agreed to delay construction until tenant determines location of their RPMs. Tenant is considering relocating their out gate.

**North Reefer Infrastructure** – was part of Phase 1 Lease. The Parties have agreed to delay construction. Currently forecast for construction completion is Q3 2022.

**South Reefer Repair** – new project. Construction completion forecast for start of north berth operations, July 2021.

## **H. OPPORTUNITIES**

- State budget for shore power infrastructure at Terminal 5 – NWSA’s application to the VW Settlement to support the T-5 shore power project was denied by the Department of Ecology, allowing the NWSA to claim a \$4.4M appropriation in the Washington State budget. Staff is working with the Department of Commerce on the contracting required for the appropriation. The interlocal grant agreement will require Managing Member authorization and will be scheduled for a future Managing Members’ meeting.
- Maritime Administration PIDP grant – award announcement was made in November 2020 for \$10.7M (\$3.2M to SSA and \$7.5M to the NWSA). Amount is reduced from the \$17.7M requested.

## **I. LOOK AHEAD**

- Q1 2021
  - Marine Building Execution and start of construction
  - Completion of Seattle City Light (SCL) work
  - Stormwater Bid Package advertisement
  - Rail Quiet Zone 100% design
  - Permit Conditions in review with Agencies
- Q2 2021
  - North Berth Crane delivery
  - Berth Modernization Phase 1 Substantial Completion
  - Phase 1 Permit Conditions Approved by Agencies and SDOT
  - Phase 1 Lease Obligations complete

## **J. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS**

None

## **K. ENVIRONMENTAL IMPACTS / REVIEW**

No environmental impact/review is being made at this time.

## **L. ATTACHMENTS TO THIS REQUEST**

- Computer slide presentation.

**M. PREVIOUS ACTIONS OR BRIEFINGS**

<b>Date</b>	<b>Action</b>	<b>Amount</b>
October 6, 2020	T5 Modernization - Program Update	\$0
September 1, 2020	T5 Modernization - Tribal Agreement Update	\$0
August 4, 2020	T5 Marine Building - Approval to advertise for North Building construction only	\$0
July 2, 2020	T5 Marine Building - Authorization to advertise for North and South Buildings construction request	\$0
July 2, 2020	T5 Modernization - Program Update	\$0
April 7, 2020	T5 Modernization - Program Update	\$0
January 14, 2020	T5 Modernization - Program Update	\$0
October 1, 2019	T5 Modernization - Program Update	\$0
August 6, 2019	T5 Modernization - Program Update	\$0
June 4, 2019	T5 Program Update	\$0
May 20, 2019	Program Authorization for Construction of Berth Modernization Program	\$0
April 2, 2019	Additional Program Funding and Authorization to Fund T5 Modernization Program	\$314,150,000
February 26, 2019	Authorization to advertise for construction	\$0
February 5, 2019	Pre-authorization Program Briefing	\$0
November 13, 2018	Motion to prepare construction documents for authorization to advertise	\$0
August 1, 2017	Railroad quiet zone funding, tribal payments, and Agreements	\$5,650,000
October 4, 2016	Additional Funding, Seattle City Light Agreement, and Project Labor Agreement	\$8,200,000
June 7, 2016	DEIS Briefing	\$0
November 4, 2015	Additional SEPA and Design Funding	\$2,000,000
October 13, 2015	Test Pile Bids Exceeded Engineer's Estimate	\$0
July 14, 2015	Additional Design Authorization	\$5,000,000



Item No: 5A-1  
Date of Meeting: February 02, 2021

# Quarterly Program Update Terminal 5 Modernization

Presenter: Emma Del Vento  
Capital Program Leader

# Terminal 5 – Program Overview

## Primary Elements of Scope



- **Berth Modernization**

- Crane Rails
- Dock Rehabilitation
- Slope Stabilization
- Berth Deepening
- Power Supply/ Distribution

- **Uplands Improvements**

- Permit Conditions
- Lease Obligations
  - Stormwater
  - Marine Buildings
  - Reefers



# Terminal 5 – Construction Progress



Backfill area between WSCR and asphalt



Pouring curb at substation

# Terminal 5 – Construction Progress



Crane Rail Hardware



Asphalt at LSCR



# Terminal 5 – Q4 2020 Progress

- **Berth Modernization Project**

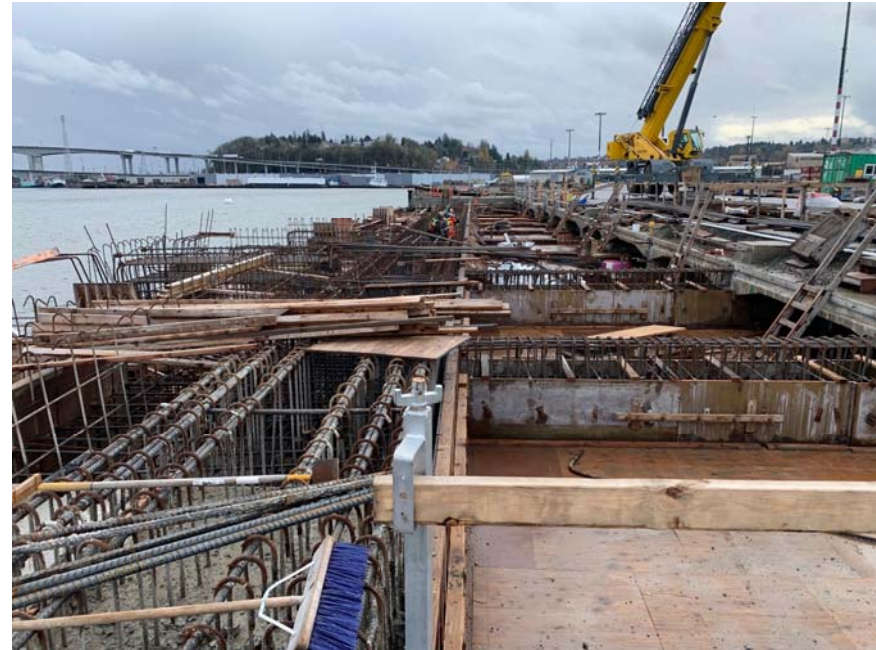
- Above-water dock construction - on schedule
- Landside crane rail – on schedule, almost ready to place rail
- Electrical Substation –Seattle City Light (SCL) started 4 month transformer work in early November
- Utility: sewer, water, and electrical duct bank - on schedule
- In water work: toe wall pile driving is on schedule and dredging will start in mid January

- **Uplands Improvements Projects**

- Permit Condition Progress
  - Rail QZ 95% design
- Lease Obligations
  - Stormwater Treatment: 90% Design October 2020
  - Marine Buildings Award
  - Reefer Design 60% Design

- **Grants**

- PIDP – Awarded November 2020
- Shore Power



Waterside Crane Rail – South end

# Terminal 5 – Construction Progress



Hammer for the toe wall pile



WSCR Stage 2 pours

# Terminal 5 – Budget (November 30, 2020)

Forecast currently over budget – the single biggest risk is the North Reefer Demarcation  
Construction is 66% spent and 42% complete

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<b>Total</b>	<b>\$340.0</b>	<b>\$-</b>	<b>\$340.0</b>	<b>\$143.7</b>	<b>\$350.0</b>	<b>\$196.3</b>

\*\$800,000 moved out of Management Reserve this quarter and into construction for South Reefer Repair.



# Terminal 5 – Construction Progress



ADA Ramp outside admin building



Paving at substation

# Terminal 5 – Berth Modernization Trends

- **Construction Contract**

- Original Contract Amount: \$160M
- Projected Contract Amount: \$189.7  
(New Contract Amount + Potential Risk to construction contract)
- Original Contingency: \$24M
- Remaining Construction Contingency: \$-13.8M

- **Risk Register and Stochastic Model:**

T5 Berth Modernization Program Contingencies			Balance
	Totals: Construction Contingency (\$24M), Management Reserve (\$20M), Bid Variance (\$24M)		<b>\$68,000,000</b>
	Projected Residual of Construction Contingency, Bid Variance, and Management Reserve between P-20 and P-100 probabilistic risk range	P-20: \$-2,500,000 (\$342,500,000) P-85: \$-10,000,000 (\$350,000,000) P-100: \$-20,100,000 (\$360,100,000)	\$-2,500,000 to -\$88,100,000

# Terminal 5 – Construction Progress



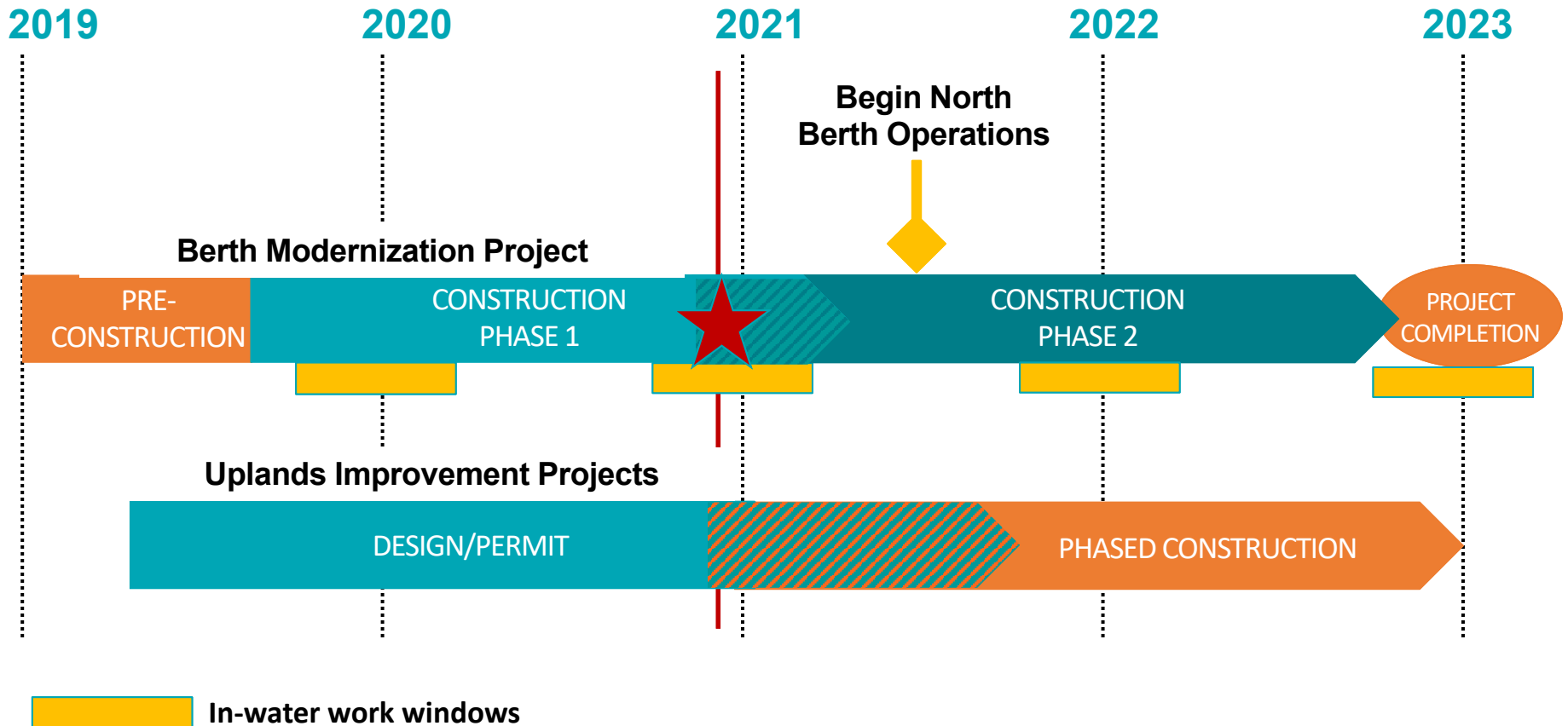
First section dock asphalt



Secondary Ductbank

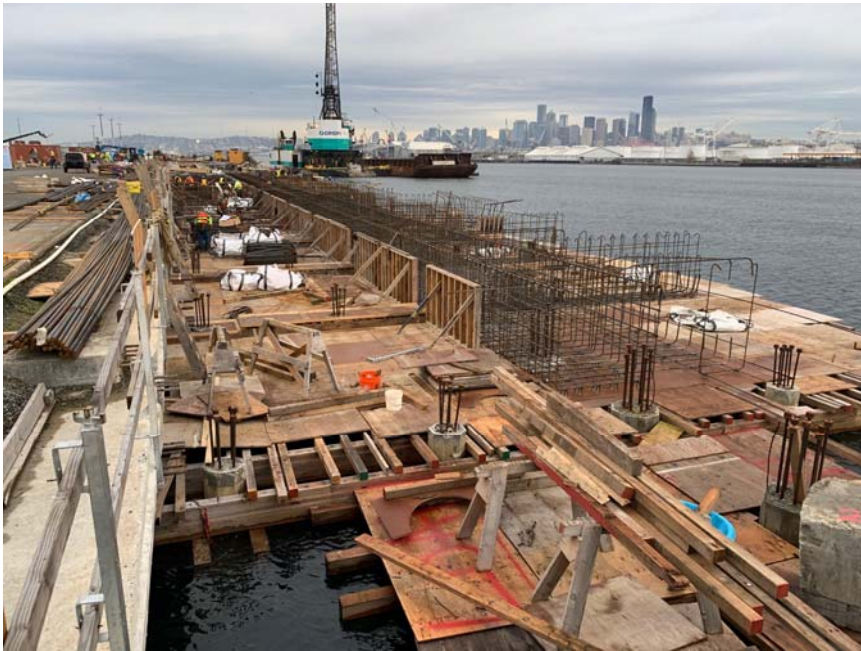
# Terminal 5 – Programmatic Schedule

Construction 42% complete; 41% time elapsed





# Terminal 5 – Construction Progress



Rebar for almost complete 1<sup>st</sup> stage pour



Paving prep at north end



# Terminal 5 – Opportunities

- **State budget for shore power infrastructure at Terminal 5 – \$4.4M Budget Proviso**
- **PIDP Grant – \$10.7M awarded in Nov 2020**

PIDP = Port Infrastructure Development Program



Stowage Sockets North End

# Terminal 5 – Community Outreach

- 11/19: West Seattle Transportation Coalition
- Ongoing dialogue with City agencies highlighting the importance of T5 through the context of WSB work
  - Led to Mayor Durkan’s acknowledgement of the positive significance of the T5 project during the WSB repair announcement
- Outreach planning underway for multiple community group visits Q1 2021, in advance of crane arrival in Q2



LSCR – stop work

# Terminal 5 – Look Ahead

- **Q1 2021**
  - Marine Building Execution and start of construction
  - Completion of Seattle City Light (SCL) work
  - Stormwater Bid Package advertisement
  - Rail Quiet Zone 100% design
  - Permit Conditions in review with Agencies
- **Q2 2021**
  - Berth Modernization Phase 1 Substantial Completion
  - Phase 1 Permit Conditions Approved by Agencies and SDOT
  - Phase 1 Lease Obligations complete



Secondary ductbank at substation