



 **SOUNDTRANSIT**

# ***Design-Build Re-Certification***

***May 24, 2018***

## *Sound Transit and Design Build*

*Linneth Riley-Hall, DBIA, CPPO*

## *Utilizing Design Build at Sound Transit*

*Nick Datz, Assoc. DBIA, CPPB*

## *Design Build Project Experience*

*Jon Mihkels, DBIA, AIA*

## *Sound Transit Small & Disadvantaged Business Utilization*

*Leslie Jones*

## *Questions*

# *Presentation Overview*



# ***Sound Transit and Design Build***

***Linneth Riley-Hall, DBIA, CPPO***

***Deputy Project Director, Federal Way Link Extension***

Link Light Rail  
  
 Sounder Rail  
  
 ST Express Bus  




# Current Service



## Light rail

- University of Washington, Capitol Hill, Downtown Seattle, Sea-Tac Airport, Angle Lake
- Tacoma Dome to Theater District



## Sounder rail

- Everett to Seattle
- Lakewood/Tacoma to Seattle



## ST Express bus

- 28 regional bus routes

# Alternative Delivery Opportunities



## Light rail

- West Seattle to Ballard Ext.
- Everett Ext.
- Federal Way to Tacoma Ext.
- Issaquah to Kirkland Ext.



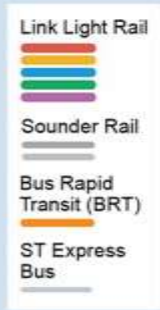
## Bus

- Bus Rapid Transit



## Sounder

- Sounder Capital Improvements





Operations & Maintenance Facility: East



Federal Way Link Extension



Downtown Redmond Link Extension



Puyallup / Sumner Station Access Improvements



Sounder Maintenance Base

Over \$2 Billion in Approved Design-Build Projects

*Design-Build Projects Since Certification*

A photograph of two men in a transit station. The man on the left is wearing a light-colored sweater and has a backpack. The man on the right is wearing a dark jacket and glasses. They are both smiling and appear to be in conversation. The background shows a transit station with glass doors and a person sitting on a bench.

# *Utilizing Design Build at Sound Transit*

*Nick Datz CPPB, Assoc. DBIA*

*Manager, Design and Construction Contracts*



*Contract  
Packaging  
Workshop*

*Recommend  
Delivery Method*

*Phase Gate  
Review*

*DB Project  
Review  
Request*

*Design-Build Delivery Selection Process*



## Evaluate Project

- Evaluate delivery methods against criteria and packages
- Determine best delivery method & contract packaging

## Review Project Goals

1

3

2

## Establish Evaluation Criteria

- Define criteria for each category
- Score risk of each category (+/-)
- Prioritize categories
- Evaluate contract packaging options

*Based on TCRP-131 Model*

# **Contract Packaging Workshop**

## Previous Phase Gate Process

- *No Delivery Method Gate*
- *Not Built to Handle Alternative Delivery, including Design Build*

## Revised Phase Gate Process

- *Added Gate 2 – Select Delivery Method*
- *Occurs:*
  - *After Contract Packaging Workshop*
  - *Before Formal Approval of Delivery Method*

***Phase Gate Improvements***

**Over 100  
Staff with  
Design-Build  
Experience**

**DBIA  
Certifications**

- *30+ Certified Staff  
and Growing*

**Industry  
Trainings**

- *AGC Design-Build*
- *DBIA*



**Design-  
Build  
Workgroup**

***Agency and Staff Experience***

## Preliminary Design Contracts

- *Experience Writing Performance/Prescriptive Project Requirements*
- *Experience Assisting With DB Procurements*

## DB Project Management Consultants

- *Design Build Experience*
- *Similar Complex Negotiating Experience*
- *Managing Integrated Teams*

***Supplemental Consultant Experience***



# ***Design Build Project Experience***

***Jon Mihkels, AIA, DBIA***

***Deputy Project Director, Facility Design***

# 3 Contracts, One Integrated Result



## South 200<sup>th</sup> Link Extension

- \$176M Design-Build
- PCL / HDR
- Sept 2016



## Angle Lake Parking Garage

- \$32.5M Design-Build
- HPG / Berger ABAM
- Sept. 2016



## Roadworks

- \$12M Bid Build
- Johansen
- Sept 2016

**South 200<sup>th</sup> Link Extension**

## SeaTac/Airport Station to South 200th



# South 200th St Link Extension

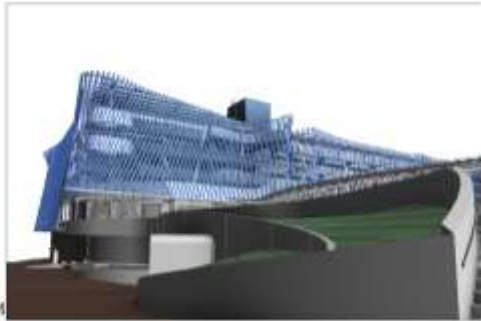
- *1.6 miles elevated double track guideway includes train systems and elevated station (Angle Lake Station)*
- *Pre-cast segmental construction, including a 380-foot long span*
- *1.5 year procurement, 4-years design & construction (2011-2016)*
- *LEED Gold Certified Station – One of the first in the County*
- *2018 ACEC National Honor Award Engineering Excellence*





# *Angle Lake Station Parking Garage*

- *7-story 1,100 stall commuter parking garage – first one associated with Link light rail.*
- *Cast in-place concrete moment frame parking garage with iconic façade of blue anodized aluminum planks on curved girt system*
- *10,000 SF public plaza*
- *50 KW photovoltaic array*
- *Created a 35,000 SF Transit Oriented Development parcel*



BergerABAM



BergerABAM



***Assisted In Delivering Project 4-years Earlier Than Planned***

***Total Project Completed \$40M Dollars Under Budget***

***Quicker Responses To Challenging or Changed Conditions***

***Low Change Orders & Claims***

- ***S200th Station Contract***
- Awarded At \$169M, Completed At \$176M (4.1% Change Orders)
- 3 Claims Filed – 2 Denied & 1 Negotiated
- ***S200th Garage Contract***
- Awarded At \$30M, Completed At \$32.5m (8.3% Change Orders)
- 2 Claims, Both Negotiated

***Successful Design Build Management***



## ***Design Build Lessons Learned***

- *The Procurement Is The Critical Period To Capture Value – Design It Accordingly.*
- *Including Members Of The Jurisdiction In Developing Project Criteria And Selection, Benefits All Parties.*
- *Colocation & Collaboration With DB Team Is Critical.*
- *Allow For Innovation & Creativity In The Procurement.*
- *Clarify And Communicate Roles And Responsibilities For Construction Quality Program Between Entities.*

The future of Link Light rail  
Operations and Maintenance Facility East

April 1, 2017

OMF EAST

# ***OMF East Program Highlights***

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***\$218 DB Contract – NTP issued June 2017***

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***Facility to service, deploy and store 96 LRVs, supported by 250 FTE.***

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***Vehicle maintenance shop with 14 service bays***

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***Mainline track, systems & station maintenance functions (Maintenance of Way)***

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***LRV parts storage and car wash***

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***Includes all systems, equipment and furnishings – “turn-key” delivery***

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***24/7, 365 day operations***

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***Operational Fall 2020***





***OMF East – Overall Site Plan***

# *Lessons Implemented*

## *Integrated Jurisdiction Throughout Process*

- *Procurement Development And Selection*
- *Resulted In Advanced Permitting Timeline*

## *Design Build Team Responsible For Land Use Permits*

## *Extensive One-on-one Meetings*

## *Pre-proposal Submittal With Written Feedback*

## *Negotiation / Concept Validation Period*

## *2-year Warranty w/ Energy & Water Performance Guarantee*



A blue high-speed train is stopped at a station platform. Several people are walking along the platform, some towards the train and others away. The train has the number '105' visible on its side. The scene is captured in a slightly desaturated, blue-tinted style.

# *Sound Transit Small & Disadvantaged Business Utilization*

*Leslie Jones*

*Director, Small Business Development and Labor Compliance*



*• To influence stakeholders so that Sound Transit improves mobility for Central Puget Sound in ways that include the diverse people of the region.”*



## ***Our Responsibilities:***

- *Disadvantaged Business Enterprise Program*
  - *Small Business Program*
- *Title VI Program*
- *Project Labor Agreement*

## ***Overall Agency Goal***

- *Agency Goal for FFY 2018 - 16.1%*
- *Estimated Attainment - 19.8% (Finalized June 1st)*

***Program Overview***

Project	Goal Type	Goal	Attainment	Project Status
<b>S. 200<sup>th</sup> Link Extension</b>	DBE	5%	10.1%	Complete
	SBE	18%	19%	
<b>Angle Lake Garage</b>	DBE	5%	6.8%	Complete
	SBE	16%	40.6%	
<b>Maintenance of Way</b>	DBE	4%	4.25%	Complete
	SBE	12.5%	13.4%	
<b>Bel-Red to Overlake</b>	DBE	6%	15.0%	27%
	SBE	22%	15.6%	
<b>OMF: East</b>	DBE	6%	6.0%	21%
	SBE	12%	17%	

***Design Build S/DBE Utilization***

*Questions?*

