Item No. 8e_supp
Meeting Date: January 12, 2021

Passenger Loading Bridge (PLB) Replacement Phase 3

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Background

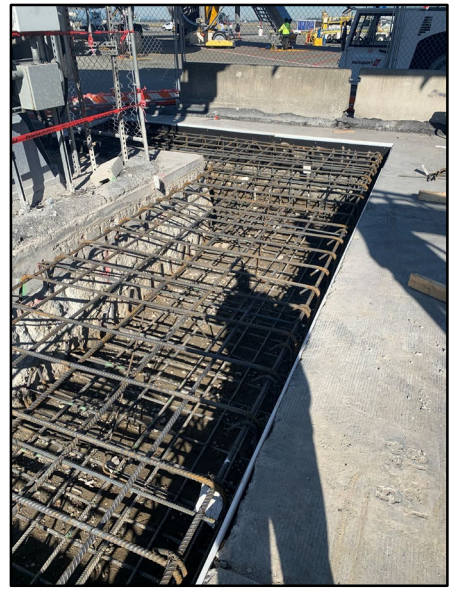
- PLBs are one of the highest used pieces of equipment at SEA.
  - Approximately 75 active bridges in 2019, SEA saw an average of 336,000 passengers per PLB.
  - Compared to a national average of 220,000 passengers per PLB for the top 20 airports.
- Bridges have a 25-year service life
  - Bridge failures have a significant impact to operations and customer experience.
- New technologies to improve turnaround time and customer experience.
  - Safedock, Improved Wifi, and JetDock.
- 2021 Construction season
  - Opportunity with NSAT
- 2022 Construction season
  - Looking for opportunities with airfield pavement project

Location & Overview

- Replace 7 Passenger Loading Bridges
- 4-Year Program (2021-2024)
- Concourse C & D

What is Involved? – Foundation

Bridge foundations are being brought up to the current building code.



Drilled shaft
(35’-45’ deep with 8’x8’x4’ Cap)

Expanded footing
(18’x18’ foundation)

What's Involved? – Bridge

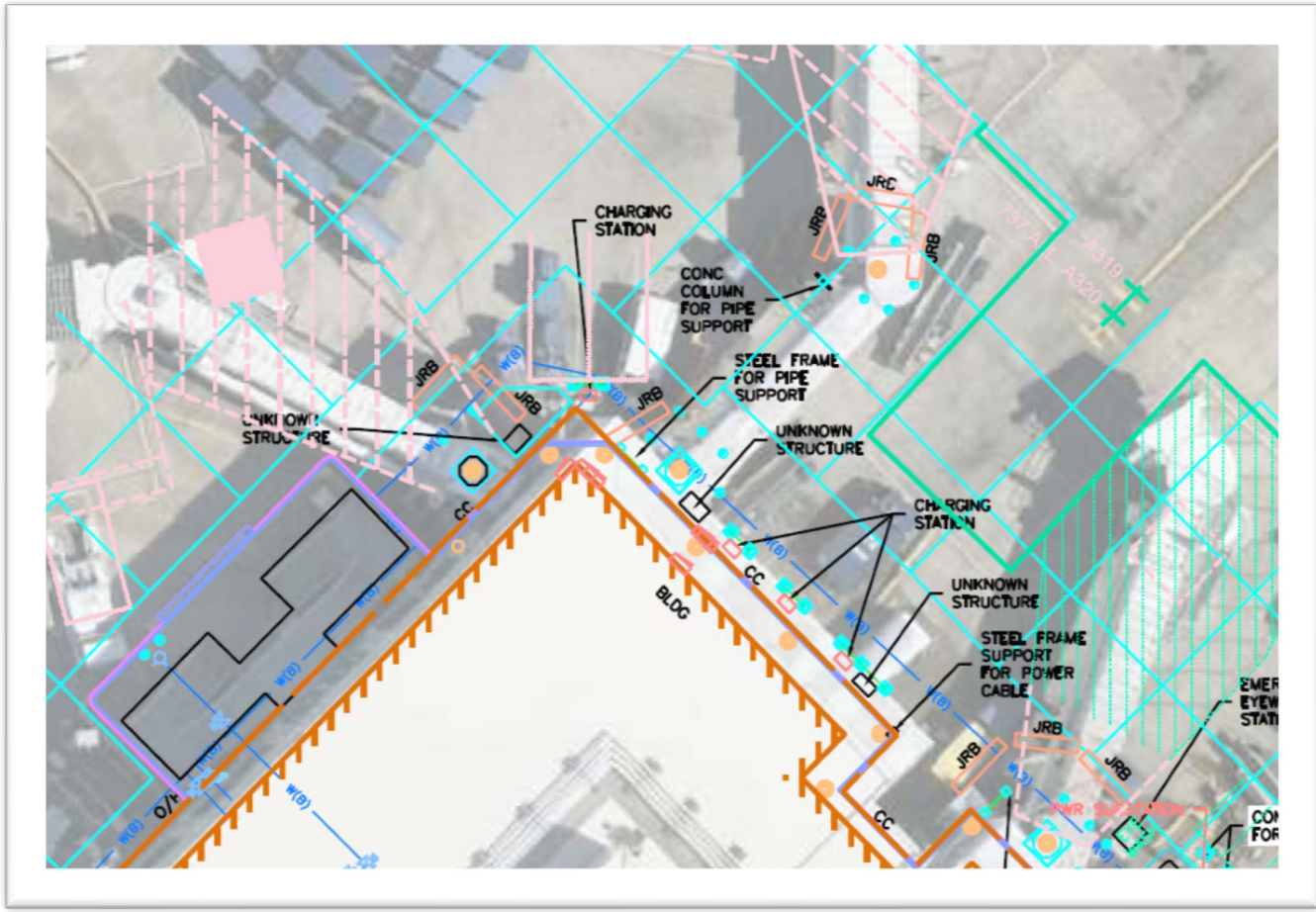
What is new?

- Fixed walkway section
- Bridge section
- Support columns
- Control/Communication boxes
- 400 Hz system refresh – New Gate boxes
- Ethernet connections
- Upgraded Controls and safety sensors
- Prep for future improvements
- New interior! No carpet!

Risks

- Gate outage scheduling
  - Limited number of gates that can be out for construction and other project delays can affect the PLB replacement schedule.
  - Competing projects for the dry weather construction window.

- Unknown Subgrade
  - Foundation excavations have uncovered unknown structures not identified during the survey activities.
  - Underground piping was identified prior to construction. However, it was not where it had been identified.

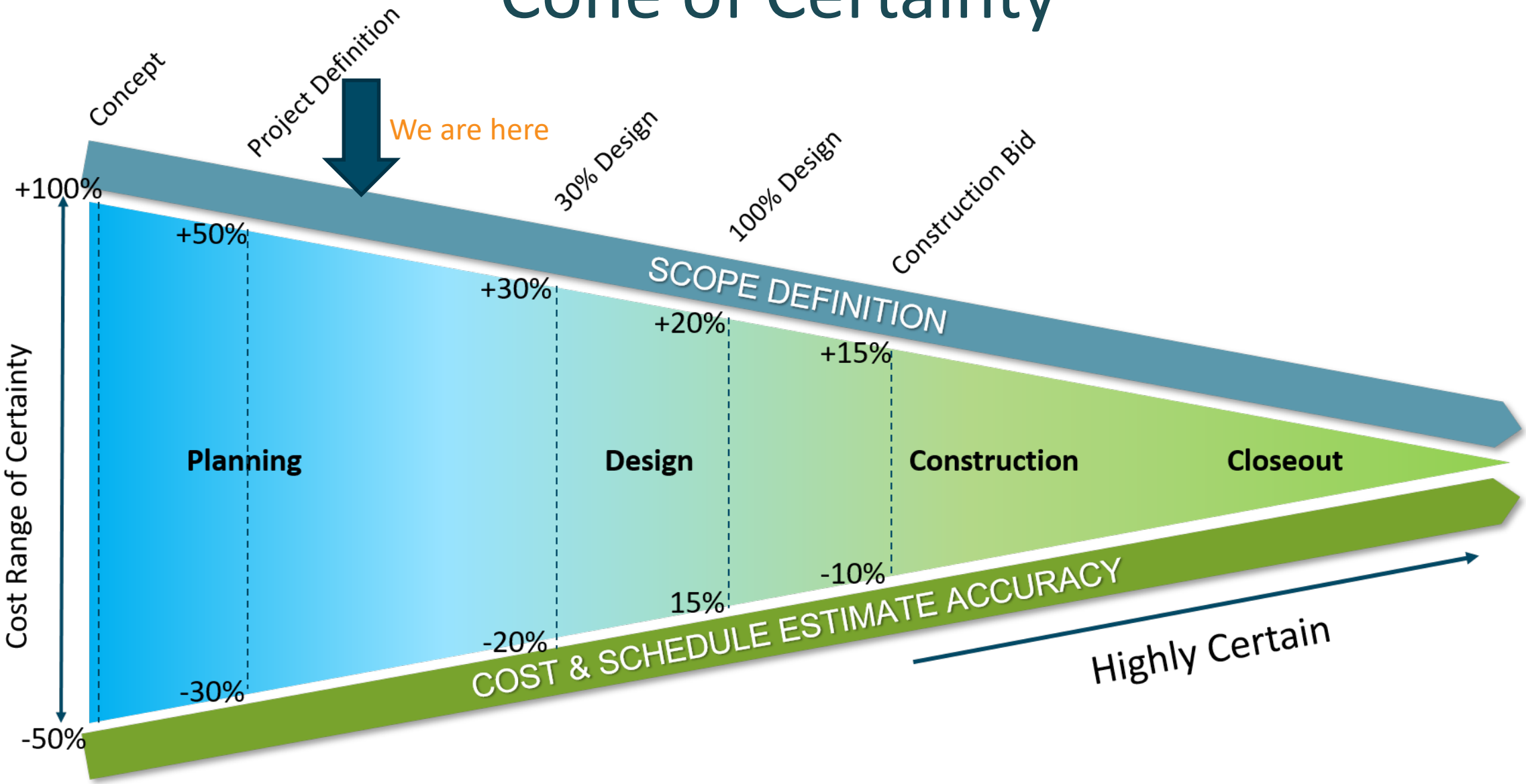


Opportunities

- Gate Outage Scheduling
  - Potential for overlapping project schedules with gate outages (Airfield pavement and Mega projects).
  - Changing bridge replacement order to align with other projects.
  - Frequent coordination meetings with AV-Ops and other projects that have gate outages.
  - Gates C18 and C20 are being accelerated to take advantage of gates opening at the north satellite

- Alternative procurement methods
  - Design Build approach to increase the number of replacements in a year.

Cone of Certainty



Alternative 1 – Delay Project

Cost Implications: Approximately $20,000 would need to be expensed; potential for additional costs if PLB fails during delay and is rushed to be replaced.

- Pros:
  - Delayed capital investment

- Cons:
  - Bridges will be operating beyond their service life
  - Increased replacement cost and time if replaced as an emergency
  - Future replacement projects may cost more
  - Increased risk of gate outages
  - Other projects will be needed to replace smaller components of the bridge to keep functional
  - Outdated technology may not support other bridge improvements (Safedock, Jetdock)

Alternative 2 – PLB Bridge Replacement Only

Cost Implications: $13,500,000

- Pros:
  - Replace all 7 PLBs that are at end of service life
  - Upgrade bridge foundations to meet current code
  - Install new equipment with capacity for future improvements

- Cons:
  - Higher capital investment
  - Does not replace the 400 Hz gate boxes that are near or beyond end of life
  - A future project and shutdowns will be required to replace 400 Hz gate boxes

Alternative 3 – PLB Bridge Replacement and New 400 Hz Gate Boxes

Cost Implications: $14,000,000

- Pros:
  - Replace all 7 PLBs that are at end of service life
  - Upgrade bridge foundations to meet current code
  - Install new equipment with capacity for future improvements
  - Replace 7 Aging 400 Hz gate boxes

- Cons:
  - Highest capital investment