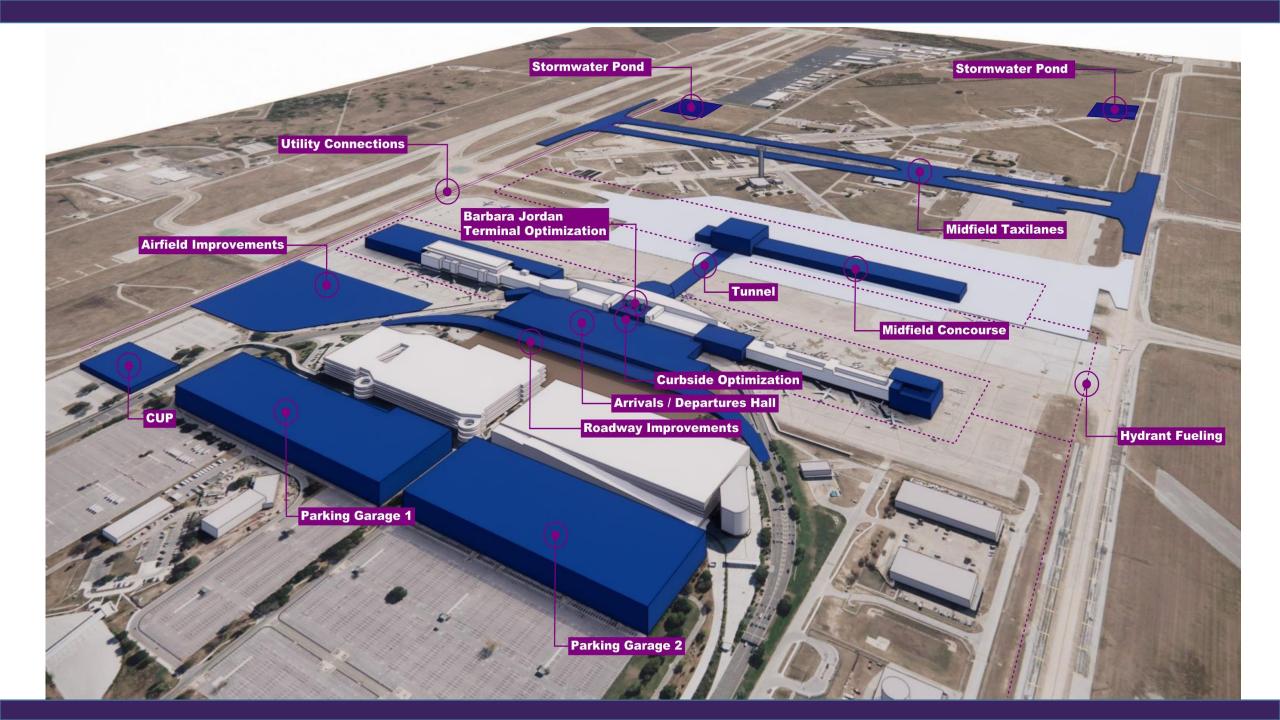


# Upcoming Projects: Midfield Concourse and Tunnel

Ellen Brunjes-Brandt Chris Olson Paul Kim





# **Element: Midfield Concourse and Tunnel Midfield Concourse**

### Scope: Midfield Concourse – Phase 1

- Twenty domestic contact gates:
  - Early delivery of up to six gates
  - Solutions for passenger/baggage transportation to early gates
  - Future ability to expand concourse and add gates
- Vertical transportation node down to connector tunnel
- Baggage handling system to support concourse operations
- Utilities including special systems
- Temporary cooling and heating

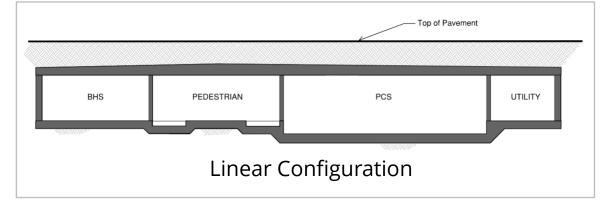


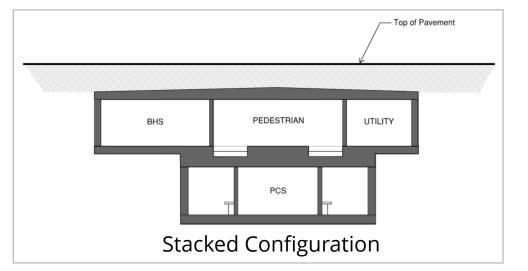




### **Scope: Connector Tunnel**

- Tunnel Includes the following cells:
  - Pedestrian corridor (with moving walkways)
  - Utilities
    - Wet and dry utilities
    - Mechanical/electrical support spaces
  - Baggage handling system
    - Inbound and Outbound ICS baggage system
    - BHS support spaces
  - Passenger conveyance system (shell only)
- Ability to extend to future concourses
- Close coordination with Barbara Jordan Terminal Interface project by others



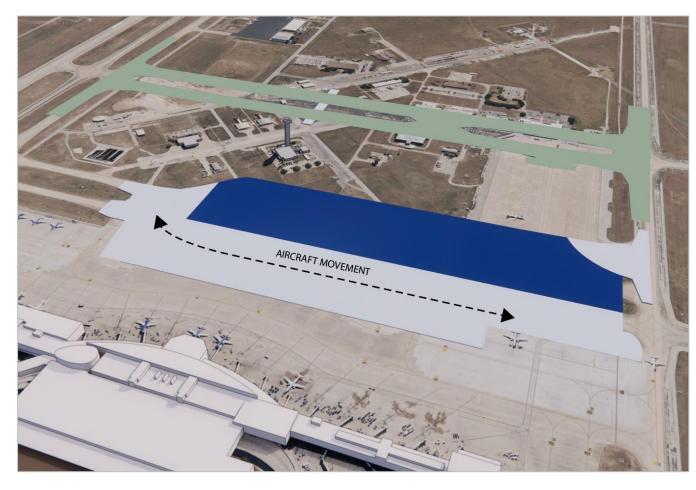






### Scope: Aircraft Apron

- Early delivery of apron pavement
  - Maintain cross-field aircraft flow
  - Create additional remain overnight (RON) parking
- New aircraft apron around concourse
- Underground utilities
  - All major utilities and drainage
  - In-pavement fueling system (by others)







## **Delivery Method**

### **Progressive Design-Build**

- Reasons for choosing delivery method:
  - Shorter procurement period
  - Design and construction teamwork
  - Speed to delivery
  - Innovation
  - Reduced amount of owner resources







### **Keys to Winning**

- Understanding the importance of meeting schedule with examples
- Past success of the design and construction team partnership
- Cohesiveness of the team members
- Collaboration with owner and stakeholders
- Relevant case studies on similar type and scale of projects
- Commitment to developing and fostering growth of the local workforce
- Partnership with MBE/WBE/DBE firms
- Safe and environmentally compliant delivery of similar projects
- Innovative and creative solutions to construction challenges





### Innovation

- Design and construction partnering that promotes MBE/WBE/DBE leadership
- Strategies for the utilization and development of the local workforce
- Design with the capability of adding future gates (possibly by others)
- Speed to delivery (early packages / early gates / new ideas)
- Unique tunnel construction methods that reduce impacts to airport operations
- Sustainable, inclusive design that reflects Austin's character and culture
- Designs that reduce lifecycle costs
- Signature interior design that maintains the AUS Way
- Creative solutions to on-going supply chain challenges





### Challenges

- The need for additional gates as soon as possible
- Transportation solution for passengers to early gates (bussing, other?)
- Providing all required systems / utilities for early gates
- On-going supply chain issues
- Workforce supply and development
- Bonding capacity
- Coordinating the installation of in-pavement fueling system with a 3<sup>rd</sup> party contractor
- Unknowns related to AUS being located on an old Air Force Base
- Undefined soil, groundwater and environmental conditions





### Challenges

- Maintaining cross field aircraft movement
- Maintaining required Aircraft Rescue and Fire Fighting (ARFF) access during construction
- Cranes heights and requirements to maintain sight lines for FAA tower
- Construction access and coordination with on-going midfield taxiway project
- Different periods/phases of airside and landside construction
- Employee/worker transportation, including necessary security screening (as needed)
- Responsible for establishing project offices, contractor staging, parking and batch plant







### **Next Steps**

- Program Definition Document (PDD) development
  - The PDD will be used as the Design Criteria Manual (DCM) for procurement of the progressive design-build team.
  - Will be up to 15% design Not a completely developed concept
  - Start of procurement 1Q 2024
- Establish MBE/WBE/DBE goals
  - Prior to procurement
- AUS Standards publish dates
  - AUS Design Standards Manual: September 2023
  - AUS Sustainability Requirements: August 2023







# Questions

Save the Date – Fall Industry Day November 9, 2023\*

\*Date changed since original presentation