

# INDUSTRY DAY



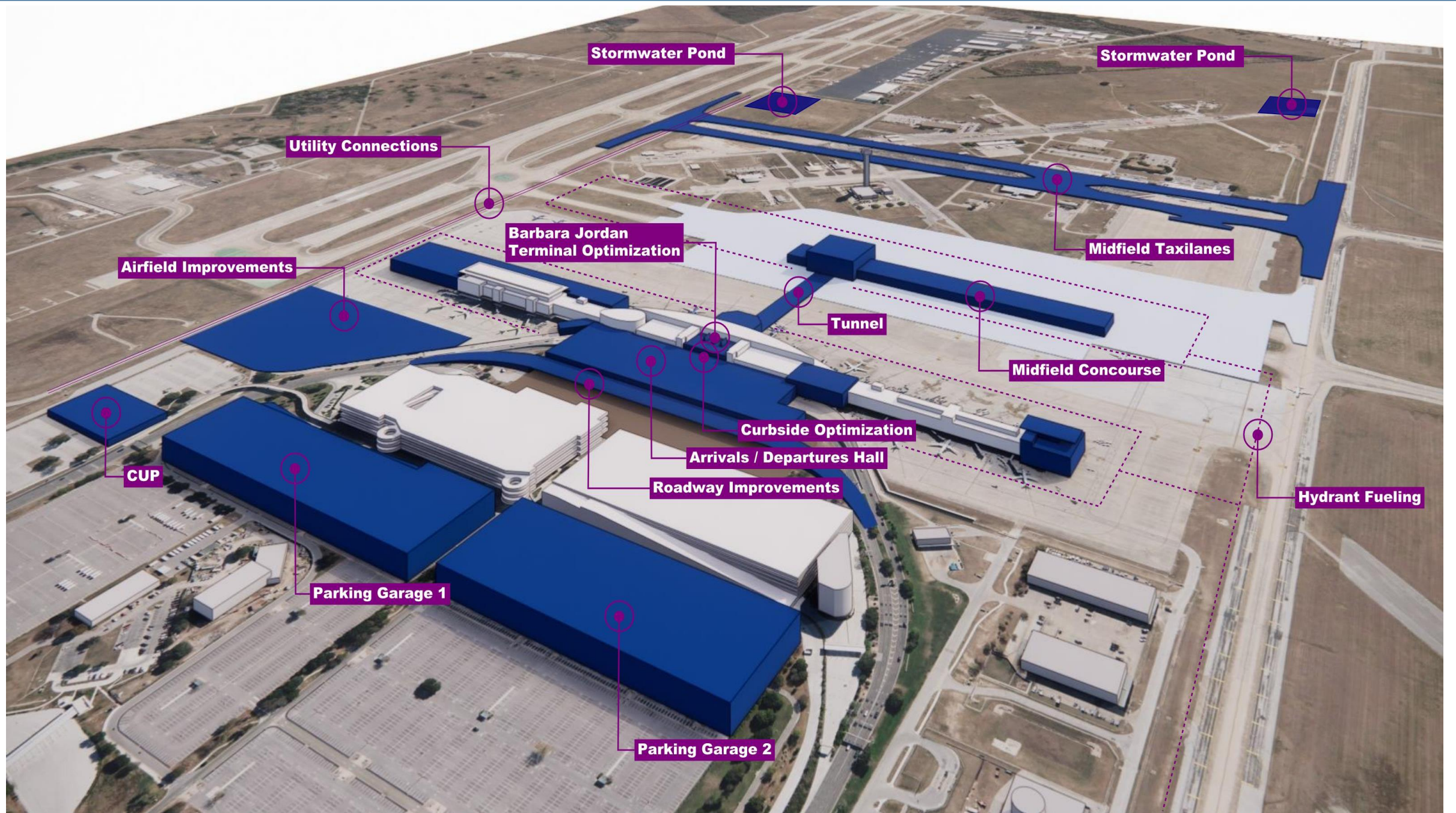
## Upcoming Projects: Utilities and Infrastructure

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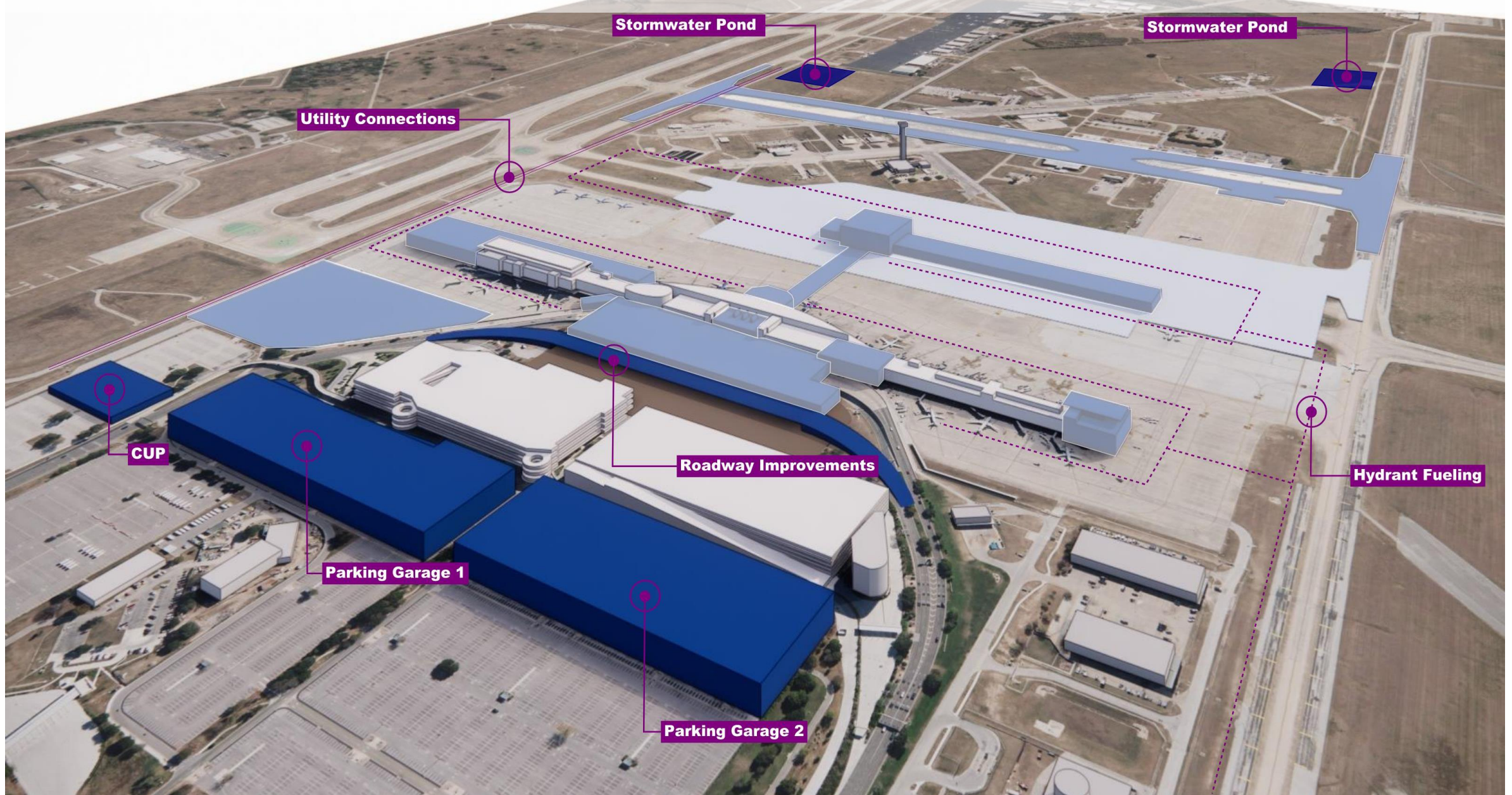
Rich Wilkes







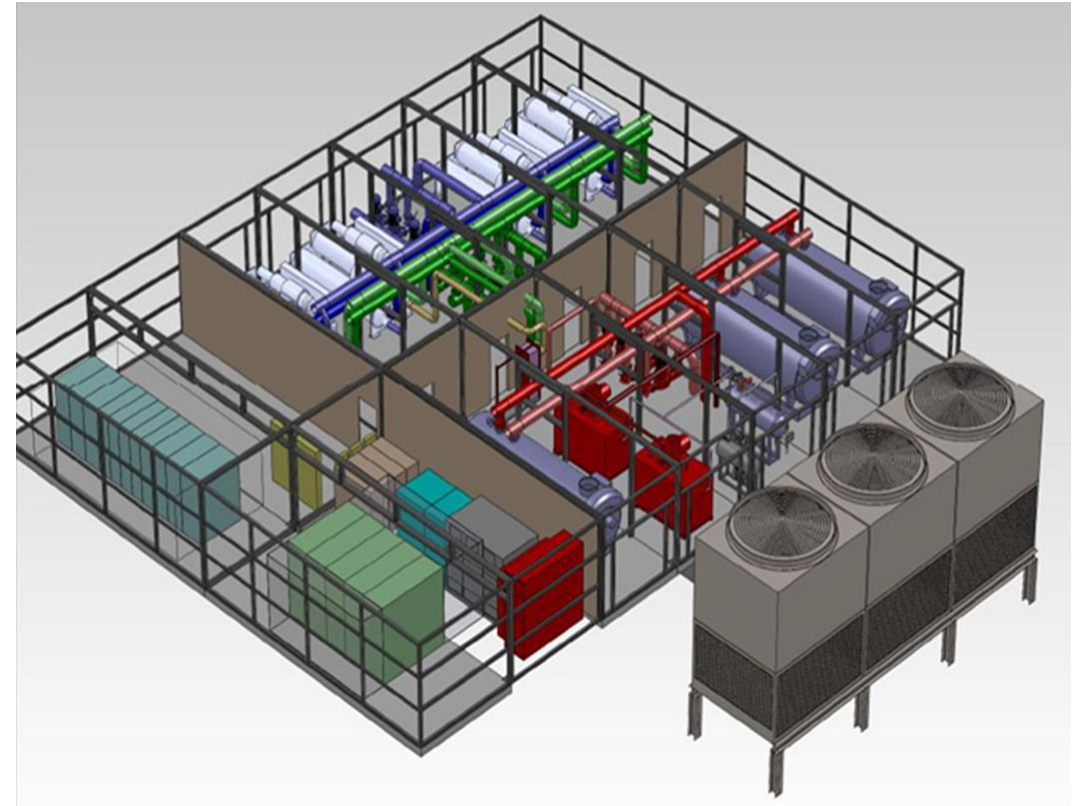
# Element: Utilities and Infrastructure





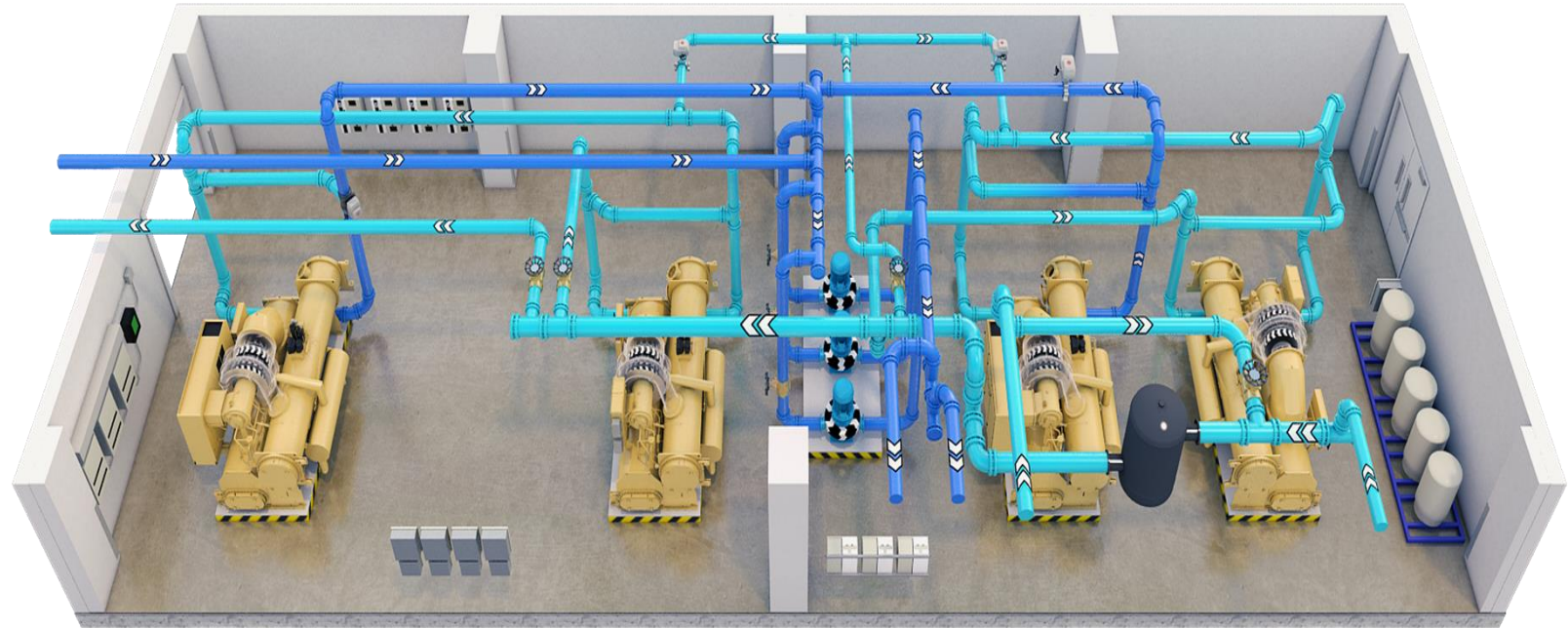
# Scope: Central Utility Plant

- New Central Utility Plant (CUP) to support ultimate buildout of AUS
  - Mix of heat recovery and traditional chillers and hot water boilers
  - Backup power generation
  - Innovative designs expected
  - Modular designs allowed
  - Commissioning of new plant from old one



# CUP – Innovation

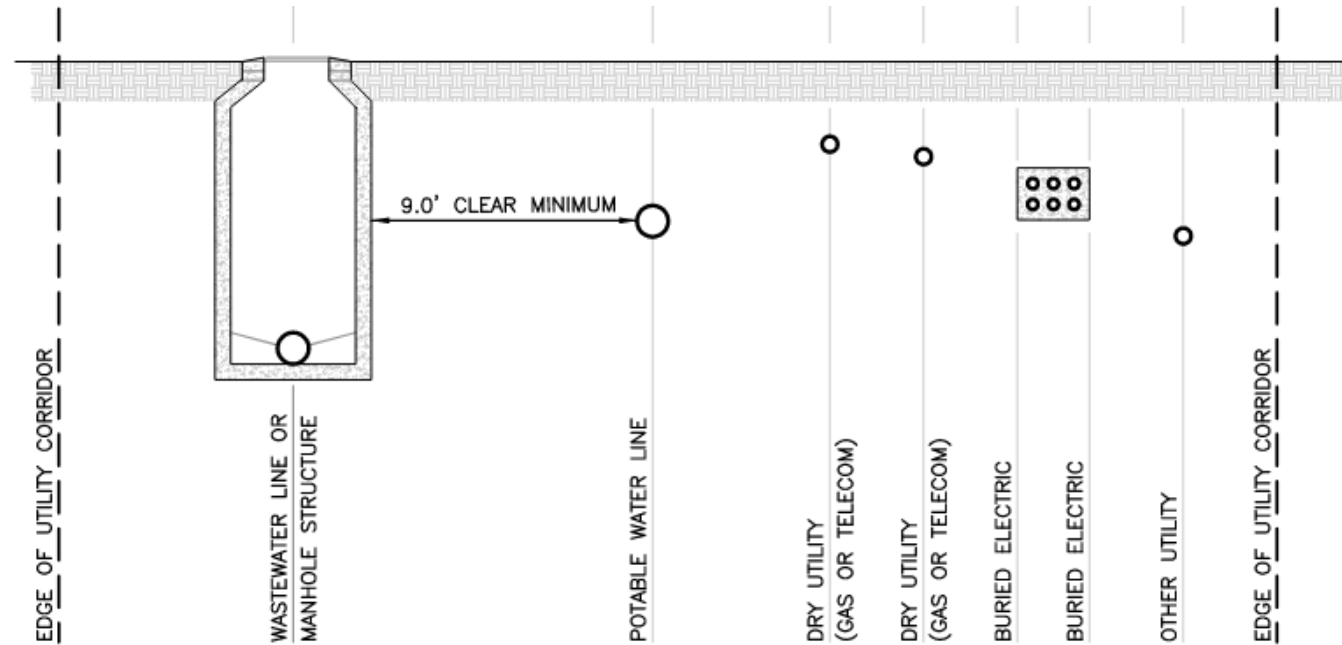
- Maximize energy efficiencies of plant equipment
- Minimize water usage
- Ground Source Heat Exchange
- Other ideas welcomed



# Scope: Utility Infrastructure

## New Utility corridors and distribution systems

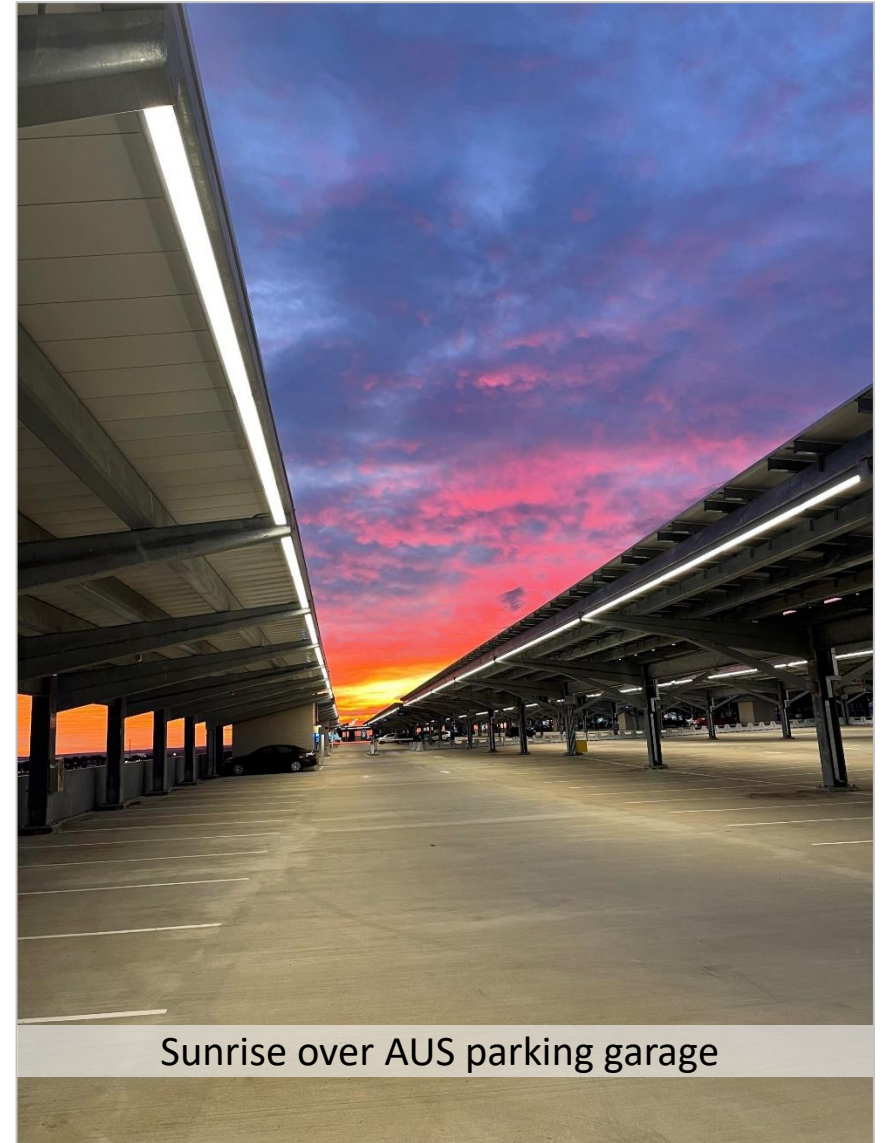
- New wet and dry systems
- Potential of drilling under existing runways and taxiways
- Removal of existing systems
- Connections to existing systems
- Interface with multiple facilities, equipment rooms and data rooms
- Phasing of work to minimize the impact on the airport
- Design and construct south stormwater utilities and ponds
- Coordination of fueling system by others





# Scope: Parking

- Improvements to multiple existing surface lots to provide parking relief for the demolition of the Red Garage (-3,500 spaces).
- Construction of new employee parking lot to provide added capacity need as well as displacement of spaces due to the Central Utility Plant location.
- Construction of new multi-story public parking garage ~ 6,500 spaces – possibly two – under analysis



Sunrise over AUS parking garage



# Scope: Demo Red Garage

- Create phasing plan for demolition and routing of traffic
- Modification of south toll plaza
- Logistic planning
  - Create safe walkway(s) from other garages, CONRAC and surface parking areas
  - Disconnect and remove all utilities

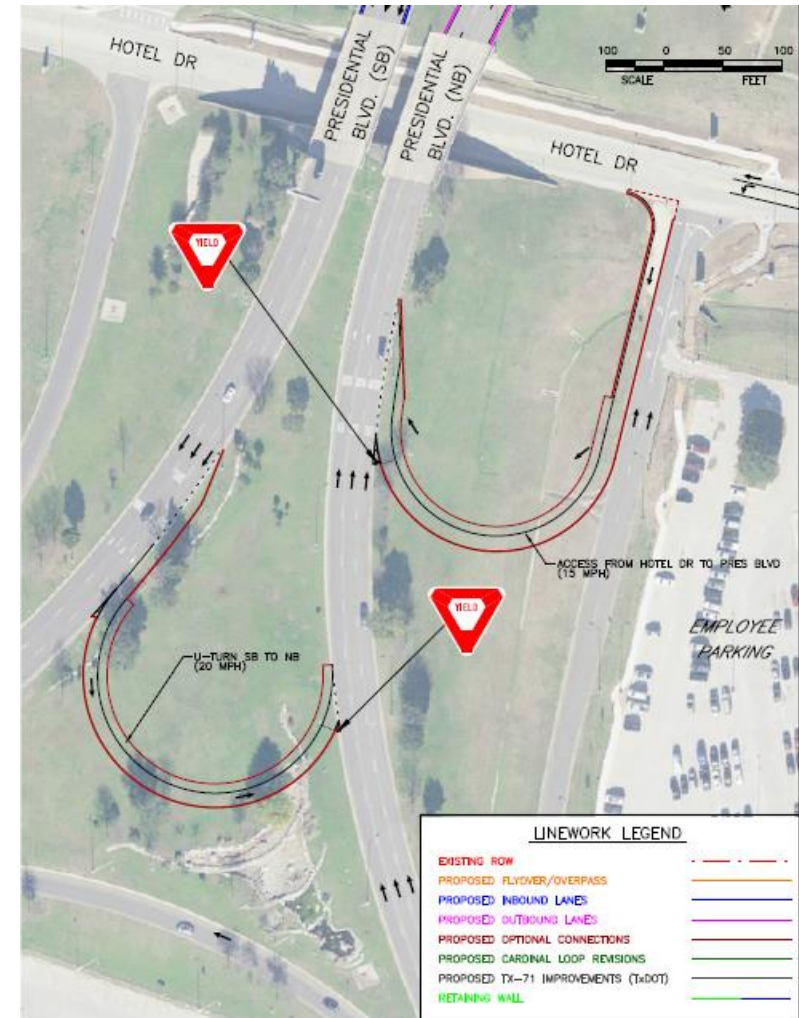




# Scope: Landside Roadways

## Landside Roadways

- Construction of a new on-ramp from Hotel Drive to Presidential Blvd
- Construction of a reconfigured entryway into the long term parking, rental car return, parking garage area
- New Arrival / Departure Road
- Remove existing Arrival / Departure road
- Other modifications as required



# Delivery Methods

## Progressive Design Build

- Central Utility Plant
- Parking Garage(s)

## Design / Construction Manager at Risk (CMR)

- Utility Infrastructure
- Roadways Improvements
- Surface Parking Lots

## Progressive Design-Build

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





# Innovation

- Design and construction partnering that promotes MBE/WBE/DBE leadership
- Strategies for the utilization and development of the local workforce
- Minimize workforce at the site
- Speed to delivery (early packages / new ideas)
- Sustainable, inclusive design that reflects Austin's character and culture
- Designs that reduce lifecycle costs
- Creative solutions to on-going supply chain challenges



# Challenges

- Design – Multiple stakeholders involved
- Many design and construction interface points
- Permit Process
- Utility connections to existing facilities
- Utility construction on both landside and airside
- Minimize impacts to landside passenger flow
- Minimize impacts to airside operations
- Coordinating with utility companies
- Unknown underground infrastructure
- Potential boring of new utilities under an operational runway and taxiways
- Undefined Soil, Groundwater and Environmental Conditions
- Workforce Supply and Development
- Supply Chain Issues
- Bonding Capacity
- Areas for project offices, material staging areas and batch plant





# Delivery Methods and Procurement Schedule

	Design	Construction
Demo Existing Red Parking Garage	Sept 2023 via Rotation List	Construction Manager at Risk: Q3 2024
Replacement Parking – Public	Dec 2023 via Rotation List	Construction Manager at Risk: Q4 2024
Replacement Parking – Airport Employees	Dec 2023 via Rotation List	Construction Manager at Risk: Q4 2024
Utility Infrastructure – Airside and Landside	Dec 2023 via RFQ, Profession Services Agreement	Construction Manager at Risk: Q1 2024
New Central Utility Plant	Progressive Design Build: Dec 2023	Progressive Design Build: Dec 2023
New Parking Garage	Progressive Design Build: Q1 2024	Progressive Design Build: Q1 2024
Curbside Roadway Reorientation for Terminal expansion	Q3 2024	Q4 2024



# 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.
  - The PDD will be used as the Preliminary Engineering Report (PER) to support the procurement of the design/Construction Manager at Risk team.
  - Will be up to 15% design – Not a completely developed concept
- Establish MBE/WBE/DBE goals
  - Prior to procurement
- AUS Standards publish dates
  - AUS Design Standards Manual: September 2023
  - AUS Sustainability Requirements: August 2023





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## Questions

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

\*Date changed since original presentation