

Society of American Military Engineers (SAME)

CDA DESIGN AND CONSTRUCTION

Constructing a new future
Not just runways

Frank Grimaldi- Assistant Commissioner

April 9-10, 2018

O*HARE21



TERMINAL AREA PLAN

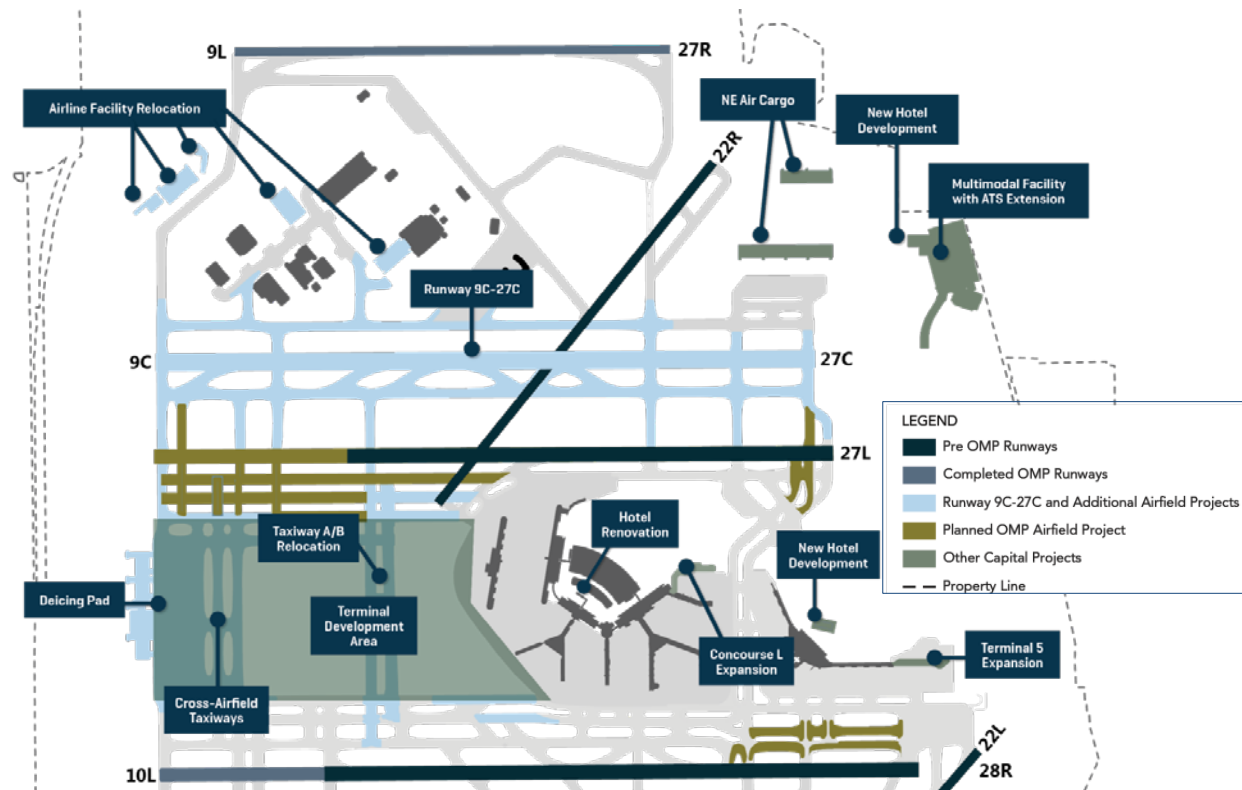
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O'HARE CAPITAL PROGRAMS OVERVIEW



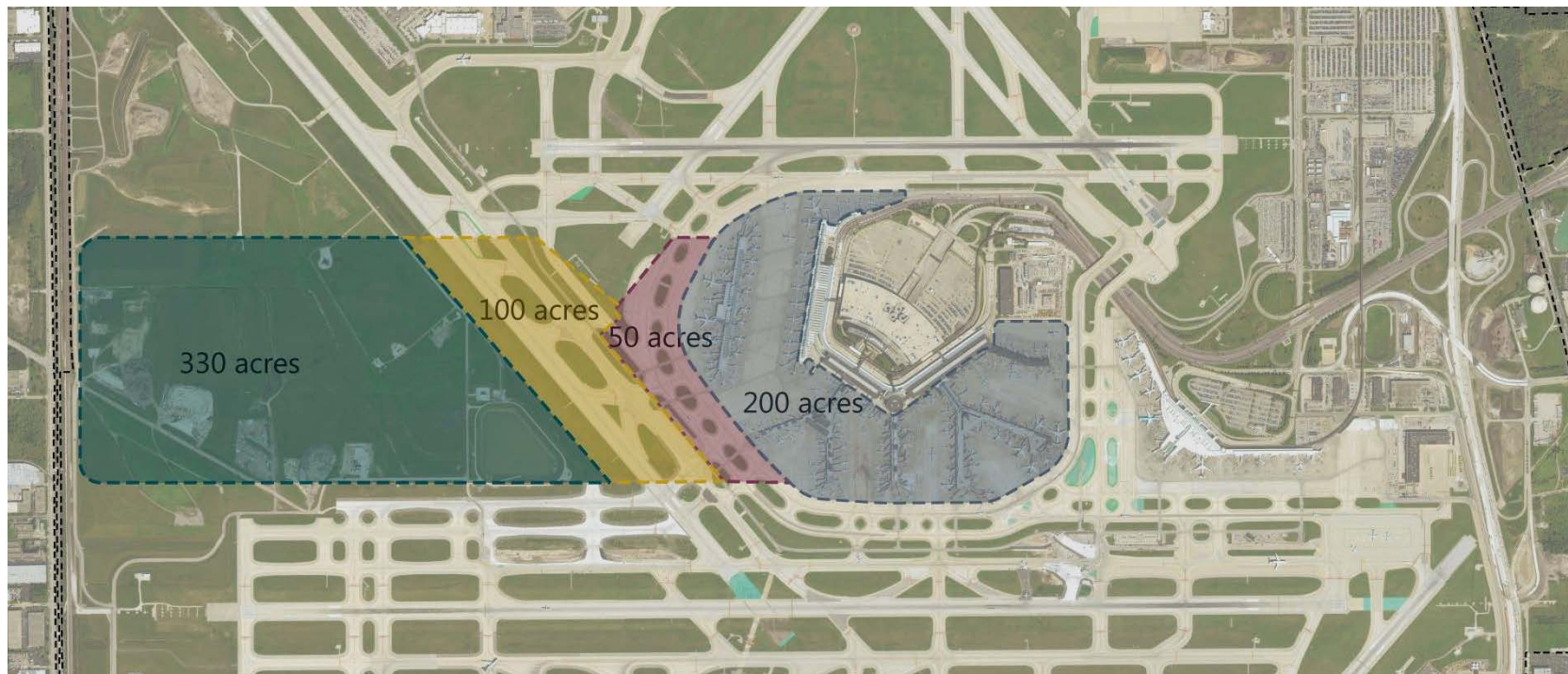
- O'Hare is taking steps to reconfigure and modernize for long-term growth
- Working in partnership with United, American and other domestic and international airlines on facility needs
- Projects are funded with multiple sources



POTENTIAL CONFIGURATION FOR NEW CONCOURSES



Terminal Area Development - TAP



- Over 400 acres available for gate expansion
- Taxiways comply with FAA guidance to eliminate irregular geometry

TERMINAL EXPANSION

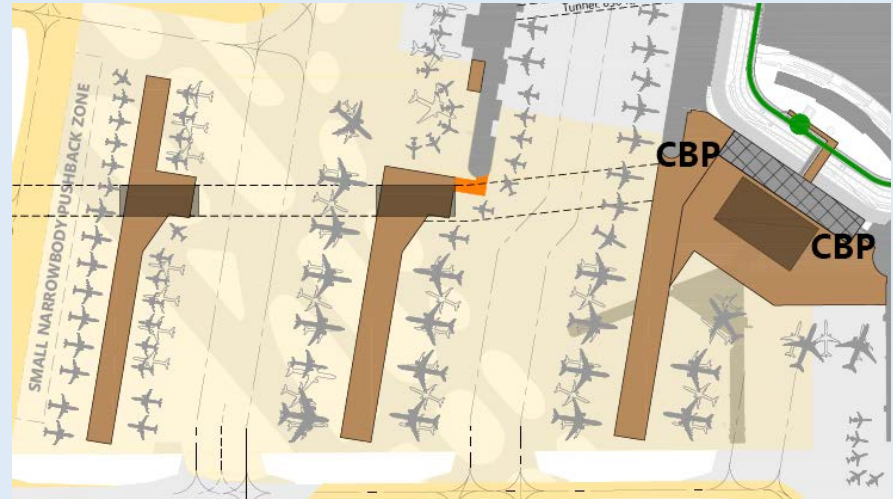


O'Hare Global Terminal

- Redevelopment of existing Terminal 2 with a new multi-level expansion comprised of approximately 1,800,000 sq. ft.
- New areas for ticketing, bag check, security check points, domestic and international baggage handling and screening systems, concessions, bag claim
- Includes the demolition of Concourses E and F
- 2 new Group VI Gates

Satellite Terminal 1

- New multilevel concourse to be built south of, and in the same north south orientation of existing Concourse C
- Provides approximately 2,365 linear feet of usable gate frontage
- Approximately 600,000 sq. ft. of new building space
- All gates being designed for a Multiple Aircraft Ramp System (MARS) configuration
- Provides for a maximum of 2 Group VI gates



Satellite Terminal 2

- New multilevel concourse to be built West of the new Satellite Terminal 1
- Provides approximately 3,355 linear feet of usable gate frontage
- Approximately 500,000 sq. ft. of new building space
- All gates being designed for a Multiple Aircraft Ramp System (MARS) configuration
- Secure bus facility

TERMINAL 5 EXTENSION



TERMINAL 5 M EXTENSION - PROJECT SCOPE

TO T1, T2, T3
HILTON HOTEL
CTA CAR PARKS

TO FUTURE CONRAC + HOTEL

TO CITY

WEST CONCOURSE
DOMESTIC OPERATION

DOMESTIC BAGGAGE CLAIM

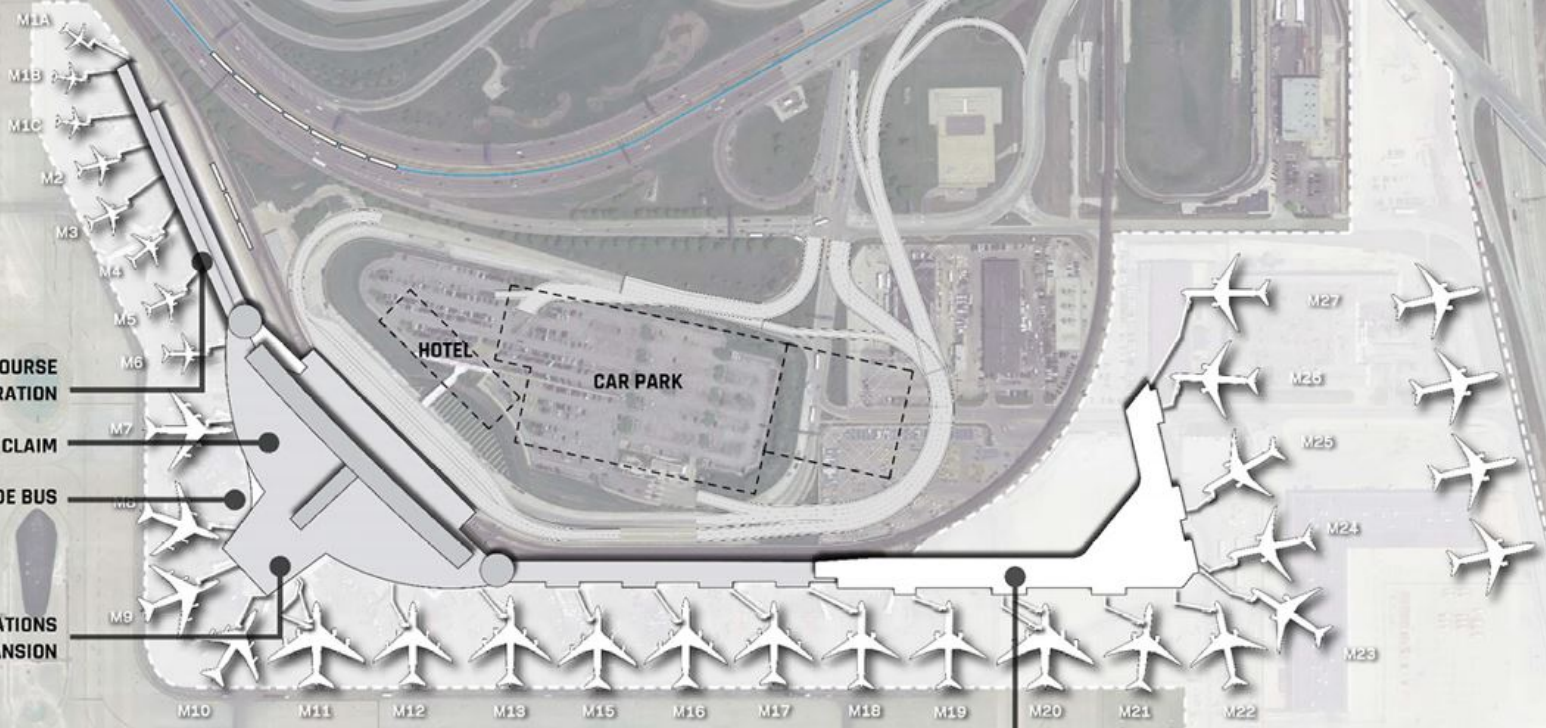
AIRSIDE BUS

FIS MODIFICATIONS
SECURITY EXPANSION

M - EXTENSION

HOTEL
CAR PARK

AREA OF REDEVELOPMENT

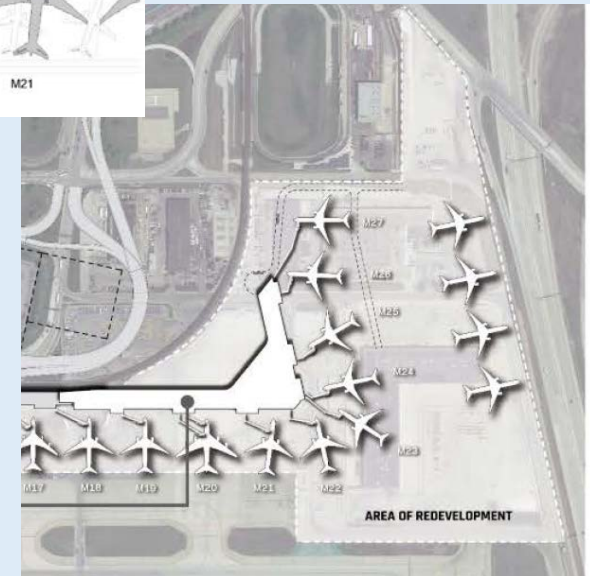
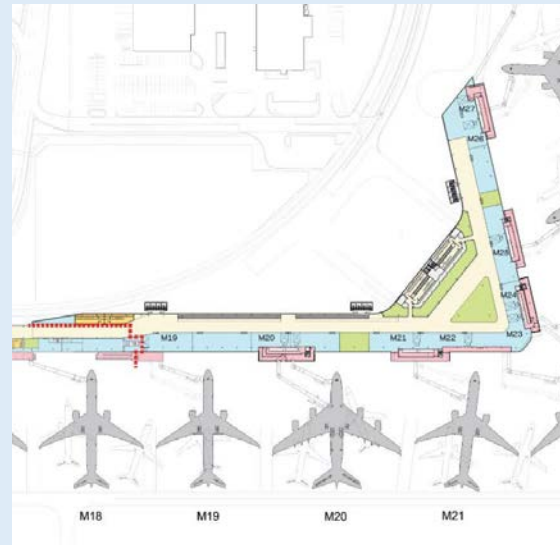


TERMINAL 5 EXTENSION



Project Description

- 9 new wide-body gates
- Provides a second A380 capable gate at O'Hare
- 4 new hardstand locations
- Addresses near-term demand and capacity of International Terminal gates and facilities
- Provides additional capacity for domestic flights
- Includes expanded security screening and Federal Inspection Services (FIS) facilities
- Modifications throughout the building including Checkpoint, Ticketing, FIS Areas, Baggage areas, airside bus connection
- Renovation of Gates M1 to M6 to add two additional contact gates for future operations

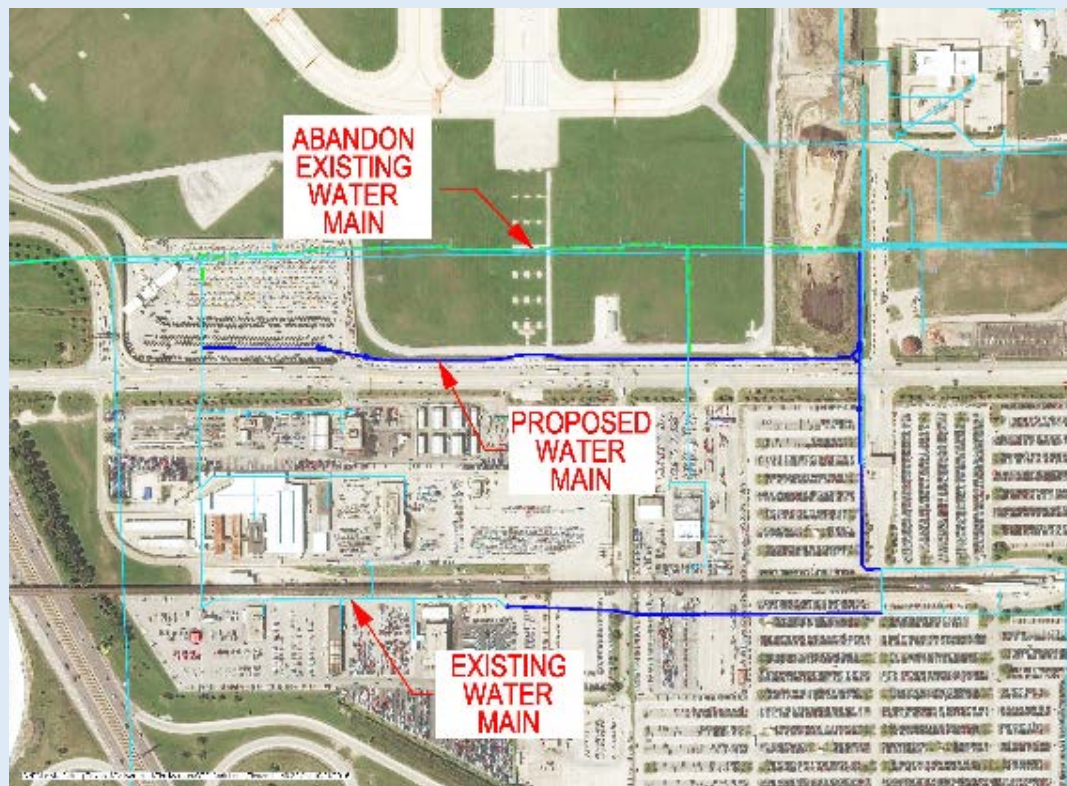


O'Hare International Airport Capital Improvement Program

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BESSIE COLEMAN WATERMAIN REPLACEMENT



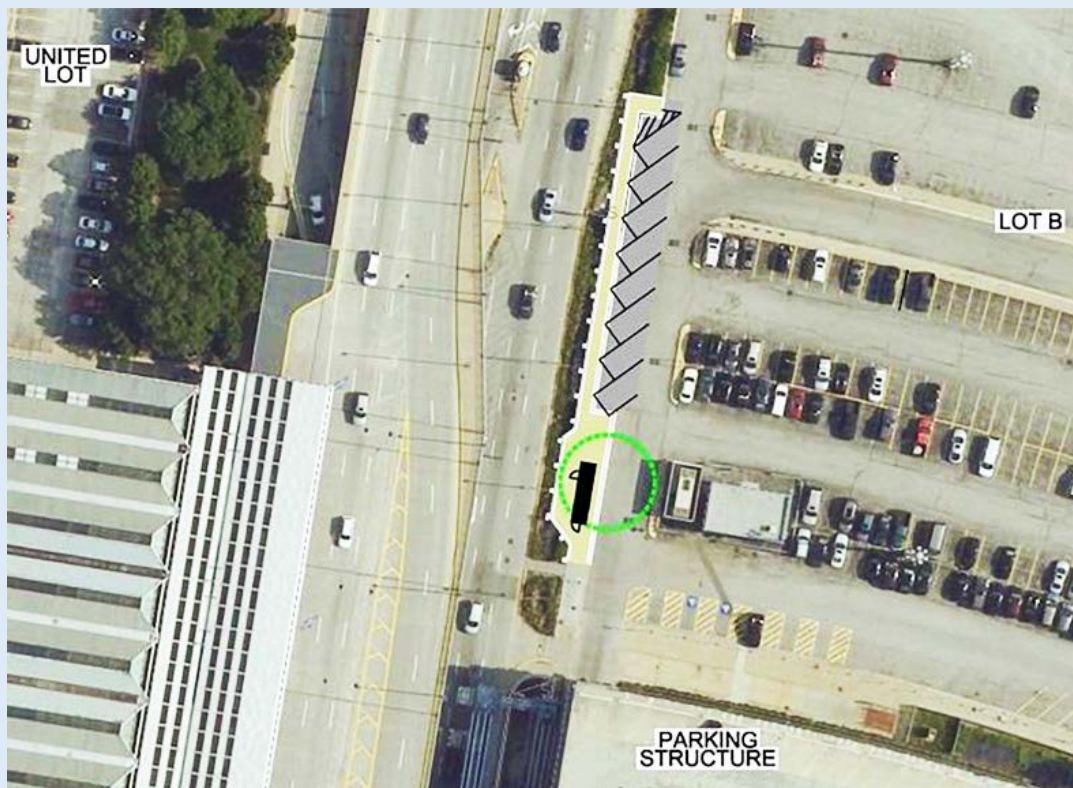
- Replacement of approximately 5,000 LF of water main along Bessie Coleman, a connection to the existing 12" service line adjacent to the E Lot ATS Station, and abandoning the existing water main running underneath I-190.
- Lateral runs to fire hydrants, isolation valves, valve boxes, fire hydrants, cathodic protection

NORTH AIRFIELD SANITARY SEWER REPLACEMENT



- Construction of a sanitary sewer system that will serve the North Airfield buildings. Existing flow that travels NW to the MWRD Kirie Plant will be intercepted and sent to an existing forcemain sewer on airport property near Building 850.
- A new lift station will be included as well as approximately 6400LF of gravity pipe and forcemain.

MIAMI BEACH LIFT STATION IMPROVEMENT



- Demolish existing Lift Station and specified equipment, erosion control and paving.
- Site utility installation, including jacked sanitary sewer, excavation and construction of the new Lift Station Facility in the SW corner of LOT B, electrical and communications duct bank installation.
- SMS installation and tie-in, and C1 Electrical Vault Switchboard replacement and lighting upgrades.

PEDESTRIAN TUNNEL REPAIRS



- Remediation of water infiltration throughout the pedestrian tunnels below the concourses and roadways. Scope also includes interior remodeling and updating of pedestrian tunnels.
- New finishes will allow for a back-up drainage system as a second line of defense to any possible water migration through the tunnel structure.
- New energy efficient lighting and mechanical distribution is included. Project area extends into the area of the tunnels under the Hilton for finishes continuity.

RECIRCULATION BRIDGE RECONSTRUCTION



- The project includes the replacement of the three-span entrance roadway recirculation bridge and associated ramp and approaches for the structure.
- Structure, Substructure, and superstructure will all be replaced

But We are Still Building Runways....

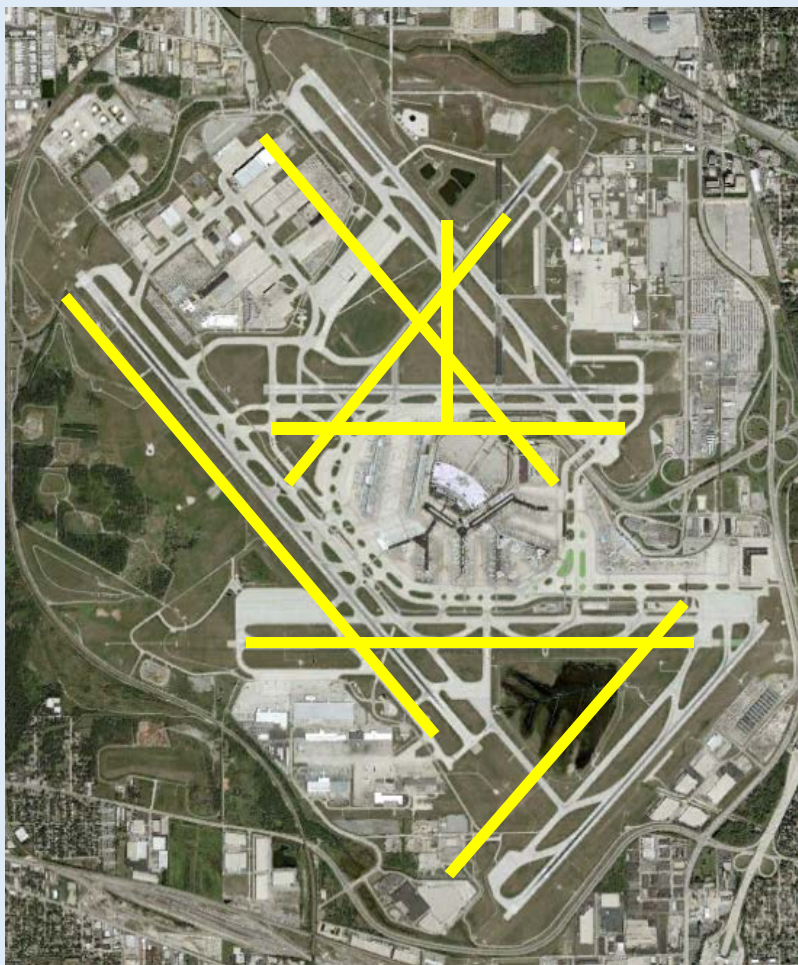
O'Hare Modernization Program

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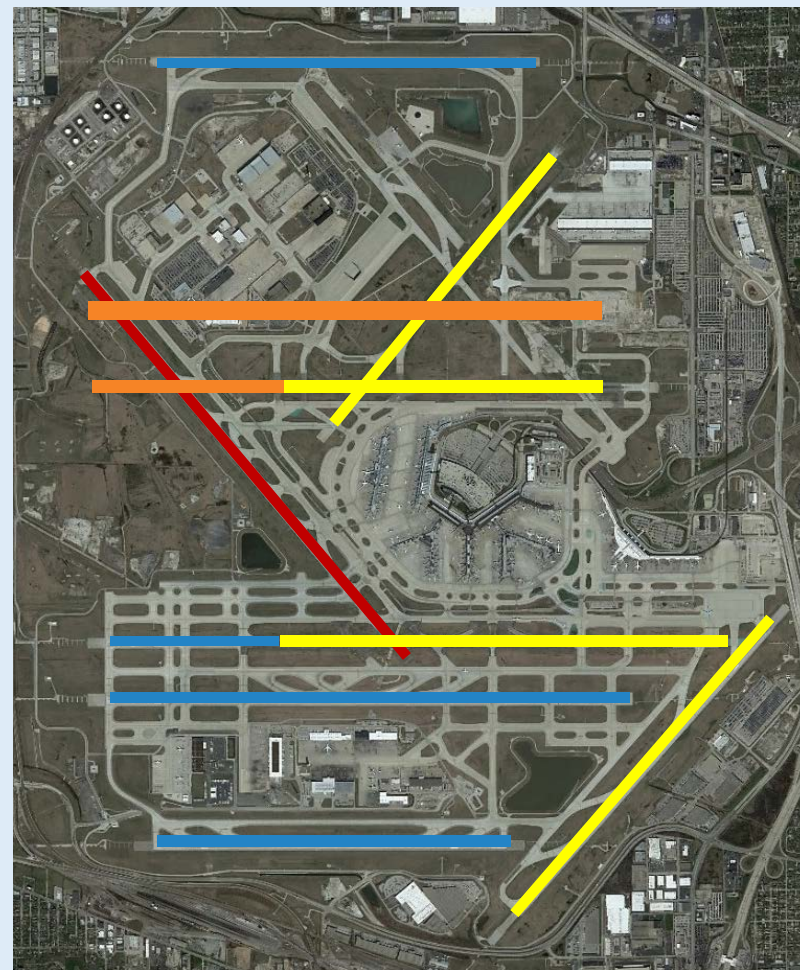




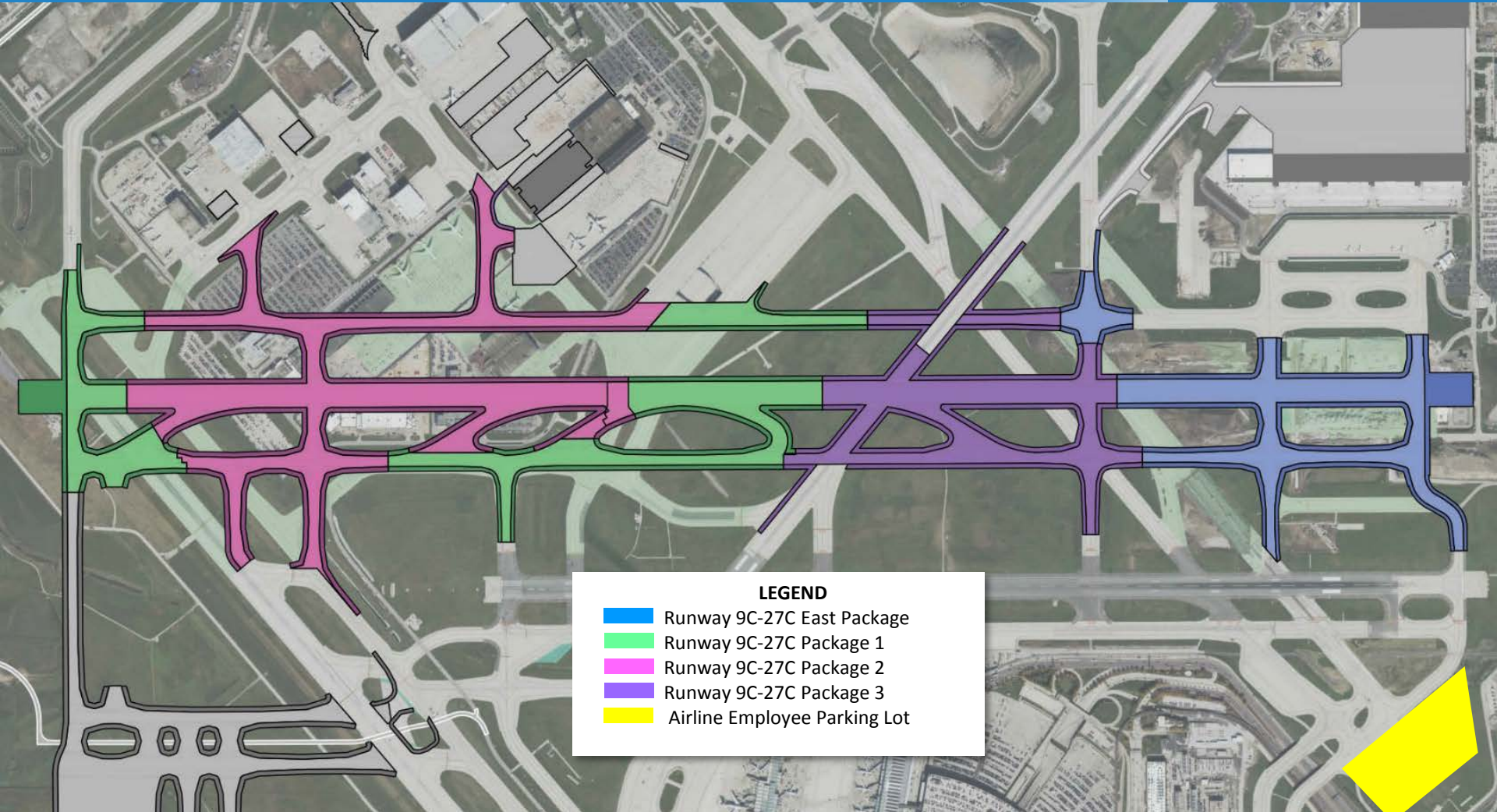
2005 AIRFIELD

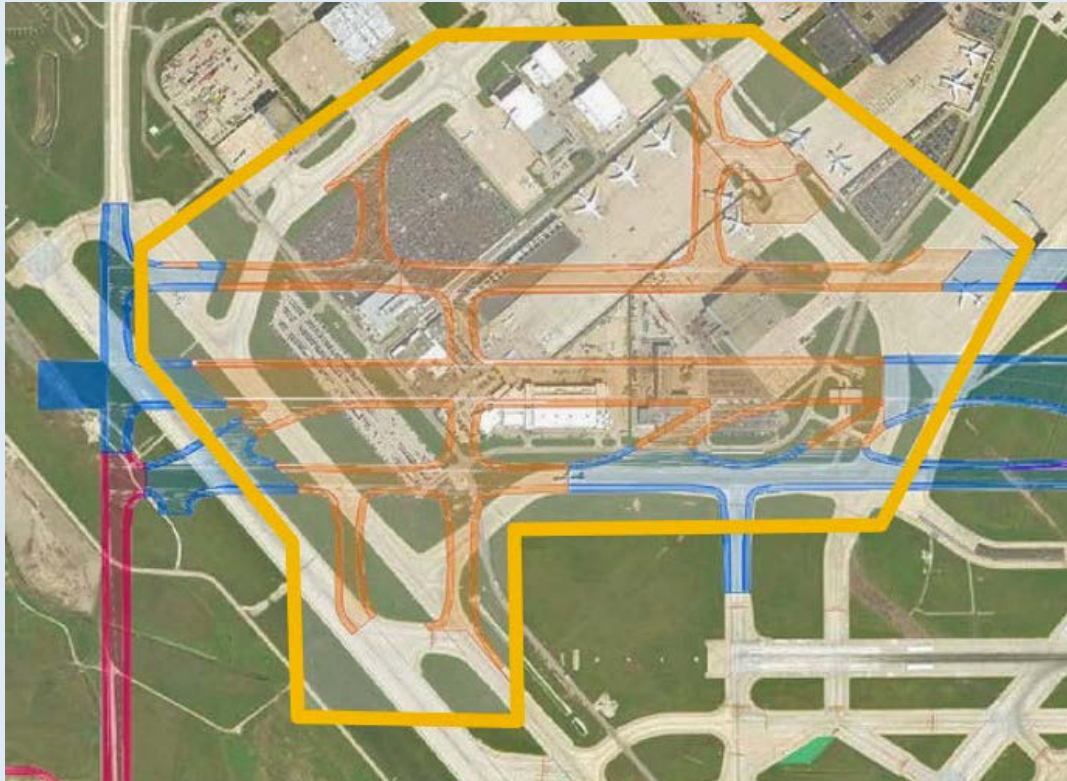


FUTURE AIRFIELD

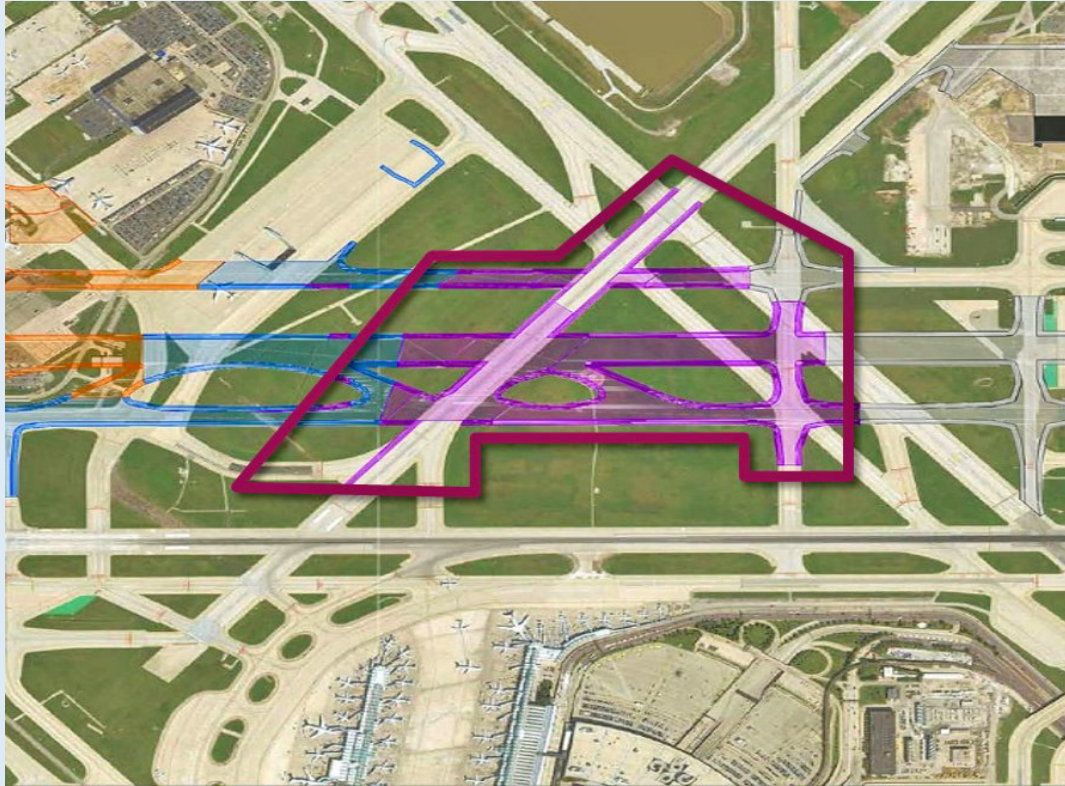


RUNWAY 9C/27C – CONSTRUCTION PACKAGES





- Construction of airfield pavements, PCC and AC, airfield lighting and signage
- Demolition of existing structures and underground utilities and other improvements
- Site preparation, grading and drainage, site restoration, utilities and other appurtenances and incidental work.
- Project site is located in the Air Operations Area (AOA).

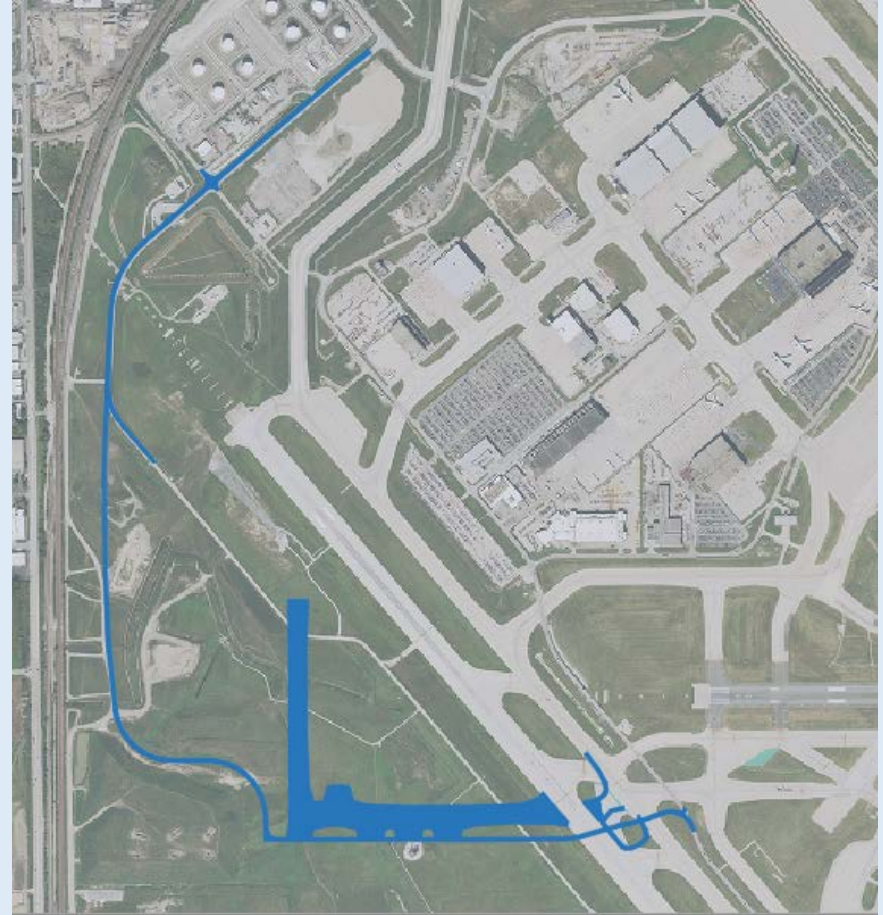


- Project cannot start until VOR is relocated
- Phased construction of airfield pavements, PCC and AC, airfield lighting and signage
- Site preparation, grading and drainage, site restoration, utilities and other appurtenances and incidental work.
- Project site is located in the Air Operations Area (AOA).

TAXIWAY Z/J & TANK FARM ROAD



- Construct the tie in for the new 9C approach to the (future named) Taxiways Z/J
- The relocation of tank farm road around the new runway
- Majority of work is done outside of Runway Critical Areas



CENTRAL DEICING FACILITY (PAVING AND UTILITIES)

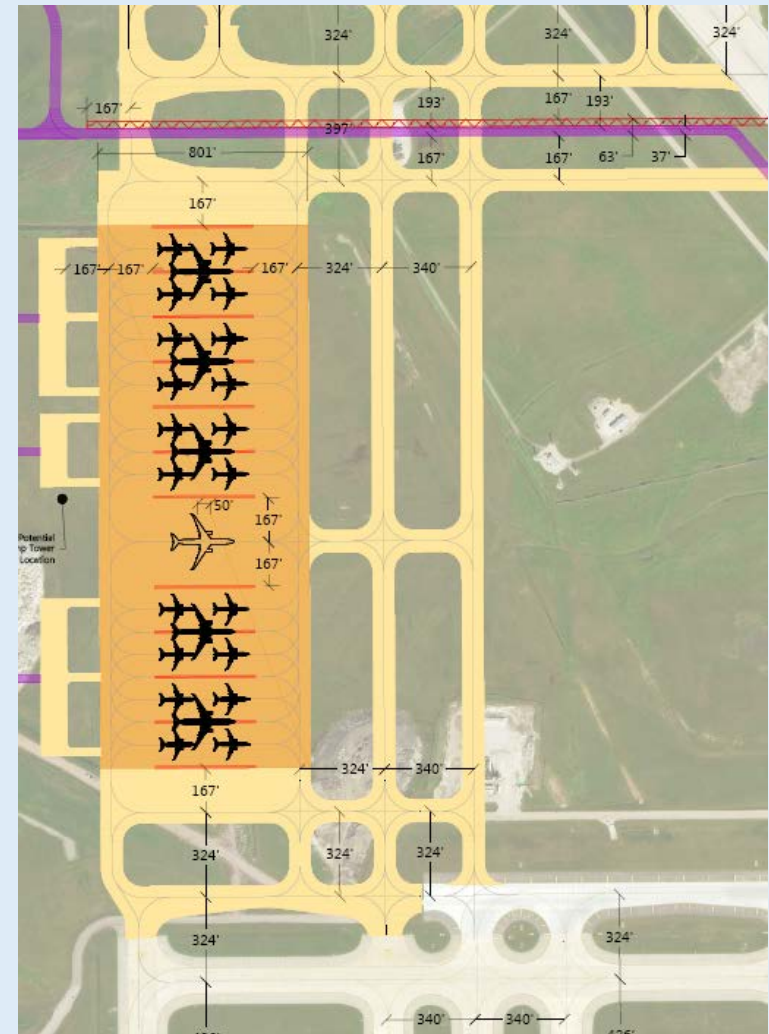


Project Description

- Two ground support equipment staging areas
- Snow Dump Area
- Airfield Lighting
- High mast perimeter lighting and variable message boards
- Mainline paving
- Shoulders with tie-in to existing airfield taxiways
- The facility is designed to hold up to 20 ADG III aircraft or 5 ADG VI aircraft

Duration

- September 2017 - December 2018



CDF CONTROL TOWER



Construction of a building to serve as an operations control tower for airlines management of their winter deicing operations at the Centralized Deicing Facility.

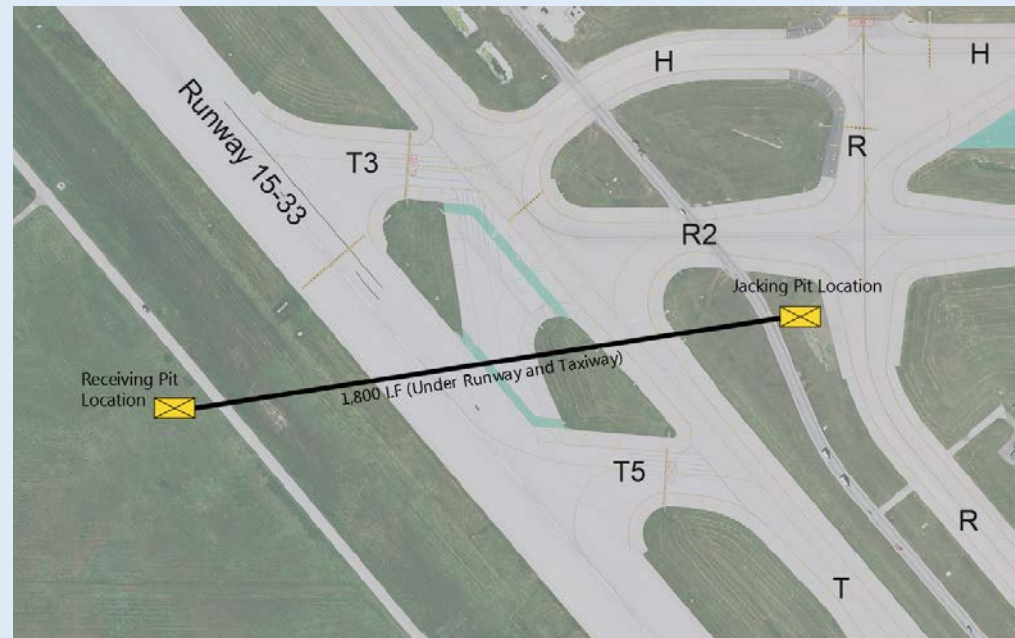


- Modifications to the Central and South Basins to accommodate the future terminal developments.
- Earthwork, large diameter deep tunnel construction, modifications to mechanical equipment, including an existing pump station.
- Project may be delivered as design-build.

FUEL LINES TRANSMISSION MAIN RELOCATION



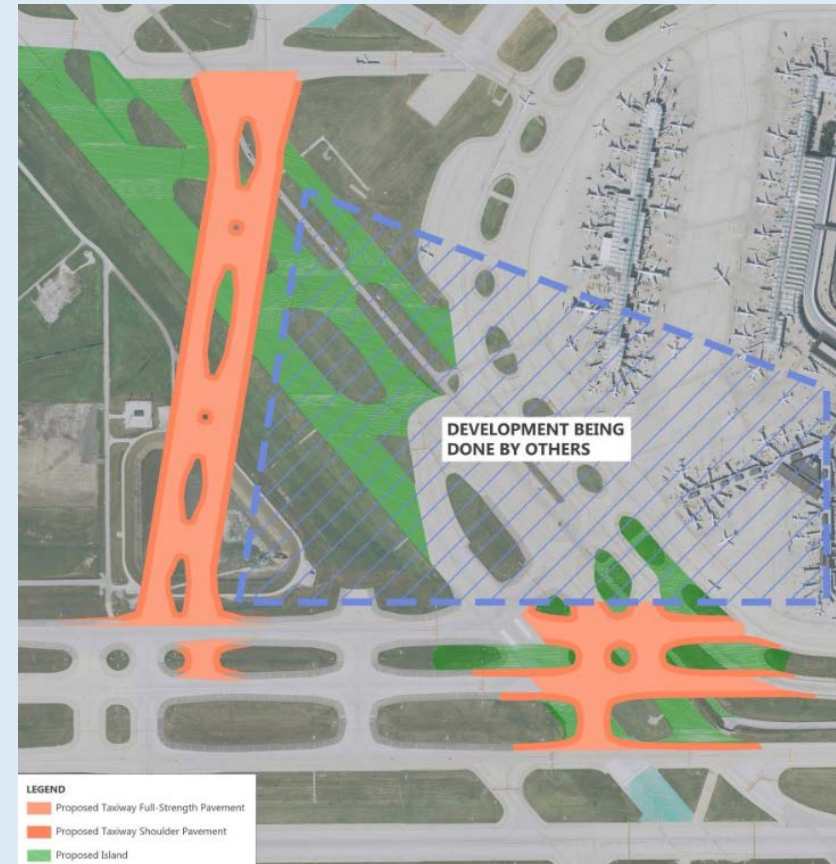
- Reroute (2) 24" main fuel lines coming from the North Fuel Farm, around the footprint of the new runway (9C-27C), into the main system at Taxiway J2
- Removal of rerouted fuel lines



RELOCATION OF TAXIWAYS A&B



- The relocation will realign the existing segments of Taxiways A and B to the West of the primary terminal complex to connect to East-West Taxiways
- Relocation of A & B Taxiways are needed to allow future construction of Satellite Terminals 1 & 2
- Geometry is aligned with current drawings of Satellite Terminals 1 & 2
- The North-South Segment of the Taxiway A-B Relocation will allow the circular taxiway flow to be maintained around the expanded terminal complex



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SIGN UP FOR
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