ASHTON

COMPLETE Concrete Solutions

IAH AIRPORT EXPANSION ®

WHY USING ONE CONCRETE PROVIDER SIMPLIFIES A JOB WITH MULTIPLE MOVING PARTS... AND PLANES

ASHTON CASE STUDY: SEPTEMBER 2022



BACKGROUND

The summer of 2022 brought a resurgence of travelers to US airports, highlighting the need for expansion projects. As the number of flights ramp up to pre-COVID levels, George Bush Intercontinental Airport in Houston, TX (IAH) is taking the opportunity to add another gate in Terminal A, Gate A20.

OBJECTIVES

- Prepare the terminal building and surrounding area concrete for a gate and jetway
 - Create an opening for the gate
 - Install a pier that will support the jetway
- Mobilized, executed, and cleaned up between 9 pm and 8 am daily within a short timeframe
- Operated with tightened security and safety precautions





SOLUTION

To prepare the concrete, Ashton used various tactics to remove and pour it back, creating a doorway opening and pier that will support a jetway for years to come.

STEP 1: CORE DRILL

- To create an opening in the concrete wall of the airport for the new gate A20, Ashton first had to core various 6-inch holes.
- Ashton drilled six holes so that corners were created for the wall saw and to avoid over cuts

STEP 2: WALL SAW AND REMOVE

- Ashton cut the new doorway using a wall saw at the required dimensions of 7 feet by 9 feet
- When cuts were final, the concrete was ready to be lifted out by a forklift using the core drilled holes

STEP 3: DIESEL SAW AN OPENING FOR PIER DRILLING

Ashton cut a large opening in existing concrete to drill the depth needed for a pier.

 Fifty-three 3-inch cores were required to avoid over cuts

STEP 4: DRILL FOR THE PIER

The pier required a drill depth of 33 feet and a diameter of 60 inches.

SOLUTION

- 2 Ashton Divisions
- 8 Steps
- 1 Week









STEP 5: INSERT PIER CASING

To add stability, Ashton inserted a permanent steel casing into the hole before rebar and concrete.



STEP 6: INSTALL PIER CAGE

A cage of rebar is used inside the casing to add another level of stability to the concrete pier.

STEP 7: POURING CONCRETE

Now that Ashton has added a permanent casing and rebar cage, the pier is ready to be poured.

STEP 8: ADDING A PIER CAP

As the final step, Ashton added a pier cap to bear the load of the jetway. It is at the top of the pier, and, in addition to supporting the weight transfer, the cap contains anchor bolts that the jetway will attach to.





THE ASHTON DIFFERENCE



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