



Salt Lake City International Airport



SOUTH CONCOURSE WEST
PDC Render

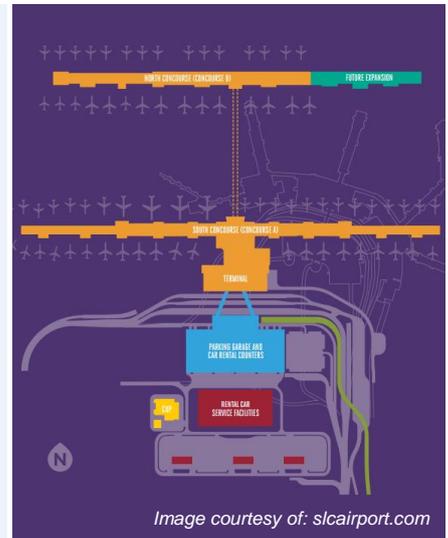


Image courtesy of: slcairport.com

Client ADF Group Inc.
CAPEX \$2.9 Billion

Location Salt Lake City, Utah
Project Duration 2016-2017

PROJECT NARRATIVE

The Salt Lake City International Airport, a civil-military airport operated and managed by the Salt Lake City Department of Airports, is the 21st busiest airport in passenger count in the US. It is one of the largest hubs for Delta airlines, hub for SkyWest Airlines, Southwest Airlines, American Airlines and Alaska Airlines. The airport has 3 terminals with 5 concourses with a total of 83 gates.

The Salt Lake City Terminal Redevelopment program replaces the existing concourses with two linear concourses (North and South Concourse) connected by a passenger tunnel. The project will be built in two phases to be completed in 2020 (Gateway Center, Parking Garage, Terminal, North and South Concourses - West) and 2024 (North and South Concourse - East).

SCOPE OF WORK

PDC's scope of work included the 3D BIM modelling and shop detailing of the structural steel on the terminal, South Concourse West & South Concourse East.

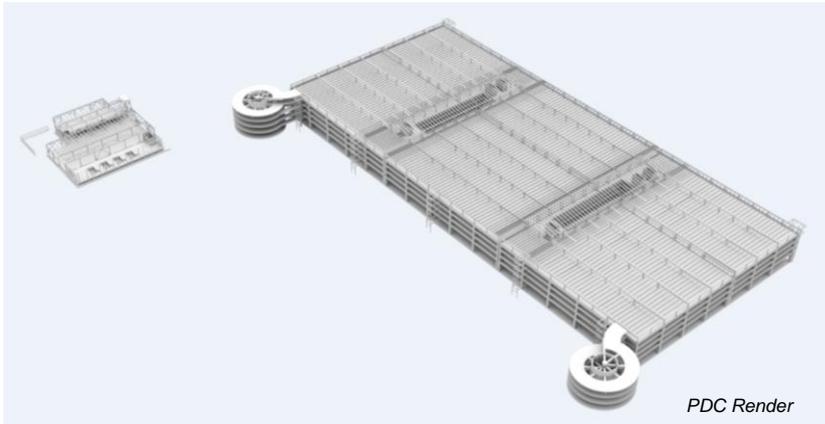
- Structural steel columns, beams and braces;
- Elevator guiderail supports; Beam web penetrations;
- BRB brace stick modelling and connection to column and beams;
- Miscellaneous steel coordination for roof tie offs, curtain wall girts, signage support steel and staircase interfaces;
- Slab/Deck support angle and plates, kicker, outriggers, braces and hanger angles attached to structural steel frame;
- Embeds supporting main steel frame.

PROJECT CHALLENGES / HIGHLIGHTS

- Structural steel mass of over 20,000 Tons.
- The Project is located on the West Coast of the US in an area of high seismic risk and as a result the connections are Engineer mandated under strict criteria.
- This is the first project that PDC has worked with ADF. An understanding of client requirements and reporting methods were developed.
- Project was schedule driven in nature, where multiple design changes were to be incorporated without impact the programming.
- PDC's project management and detailing team were located in Manila with local coordinator support in Vancouver Canada.



Salt Lake City Airport Parking Garage and CUP



Client Schuff Steel - Phoenix

Location Salt Lake City, Utah

CAPEX \$2.9 Billion

Project Duration 2016-2018

PROJECT NARRATIVE

The Salt Lake City International Airport, a civil-military airport operated and managed by the Salt Lake City Department of Airports, is the 21st busiest airport in passenger count in the US. It is one of the largest hubs for Delta airlines, hub for SkyWest Airlines, Southwest Airlines, American Airlines and Alaska Airlines. The airport has 3 terminals with 5 concourses with a total of 83 gates.

The Salt Lake City Terminal Redevelopment program replaces the existing concourses with two linear concourses (North and South Concourse) connected by a passenger tunnel. The project will be built in two phases to be completed in 2020 (Gateway Center, Parking Garage, Terminal, North and South Concourses - West) and 2024 (North and South Concourse - East).

SCOPE OF WORK

PDC's scope of work included the 3D BIM modelling and shop detailing of the structural steel on the following areas:

Parking Garage:

- Structural steel column, beams, trusses and braces
- Structural steel post, hangers, purlins and girts
- Elevator divider beams including its embeds
- Elevator guiderail support tube incl. its connection to steel
- Floor and roof opening, RTU support frames
- Slab Edge Bracket
- Slab edge support/pourstop bent plates and angles (non gage)
- Slab/Deck support angle and plates, kicker, outriggers, braces and hanger angles attached to structural steel frame
- Joist stick modeling and connection to primary steel columns and beams
- Embeds supporting main steel frame
- Joist embeds, bearing and seats

CUP:

- Structural steel column, beams and braces
- Structural steel post, hangers and girts
- WF hoist beams and its connection
- Floor and roof opening and RTU support frames
- BRB brace stick modeling and connection to column and beams
- Cooling Tower enclosure frame including gates
- Electrical yard fence tube framing including its sleeves
- Window wash davits base plate and support elements
- Slab edge support/pourstop bent plates and angles (non gage)
- Sloped deck/roof support bent plate at supporting beams
- Slab/Deck support angle and plates, kicker, outriggers, braces and hanger angles attached to structural steel frame
- Embeds supporting main steel frame

PROJECT CHALLENGES / HIGHLIGHTS

- Garage structure is 900 feet long
- There are approx. 330 No 120 foot long lattice trusses in the roof to co-ordinate connection details for Seismic stability by bolted moment connections
- Roof steel to spiral concrete access ramps at each end of car park.
- Potentially solar panels being introduced on the roof which would result in around 2500 additional support beams between lattice trusses
- The cup building contains Buckling Restrained Braces due to seismic stability requirements which required co-ordination with the brace manufacturer to ensure gusset plates and welds were the correct size and also that the manufacturing dimensions provided did not cause problems.