

Introduction

WHAT IS IN AN AIRPORT MASTER PLAN?

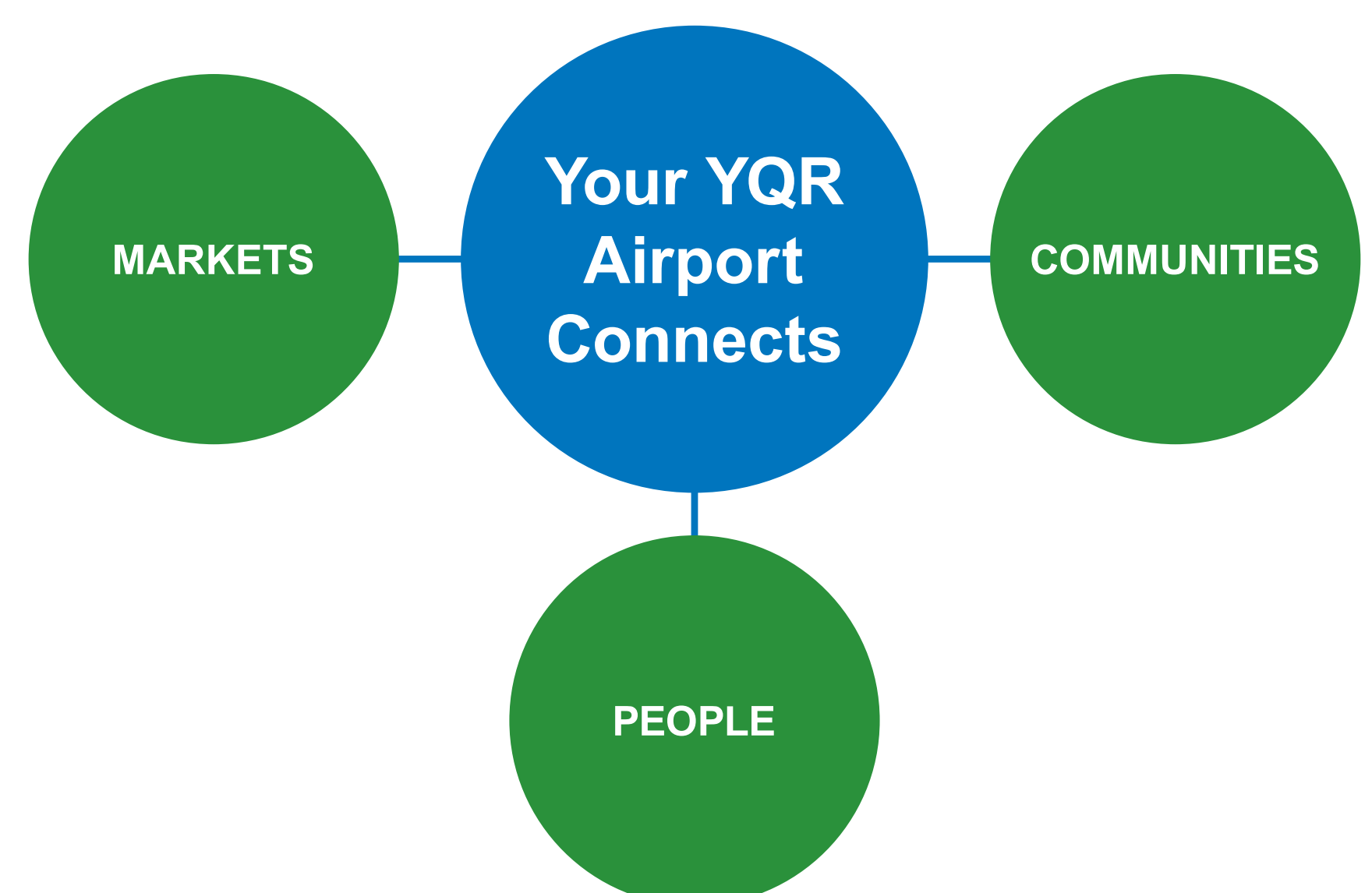
- A high-level vision and road map for development at the Airport for the next 20 years
- A Land Use Plan that designates what type of development may occur on various parcels
- A list of projects that may be needed to:
 - Address standard maintenance and/or replacement
 - Address current deficiencies or problem-areas
 - Accommodate forecasted growth in activity

WHAT IS NOT IN A MASTER PLAN?

- Detailed designs of various facilities to be constructed immediately
- Marketing to airlines to improve service or lower fares
- A guarantee of how future development will occur at the Airport

WHY IS AN AIRPORT MASTER PLAN IMPORTANT FOR THE COMMUNITY?

- Creates a 20-year plan to ensure the most appropriate use of YQR's most fundamental resource... land.
- Coordinated plans with external land owners and municipalities can mitigate the development of incompatible uses next to each other.
- Community benefits:
 - Direct & Indirect Economic benefits:
 - Gateway to the community
 - Crucial transport infrastructure asset (freight hub)
 - Employment location
 - Commercial activity centre
 - Connects markets
 - Supports local employment, businesses, and tourism
 - Social Benefits
 - Connects people and communities



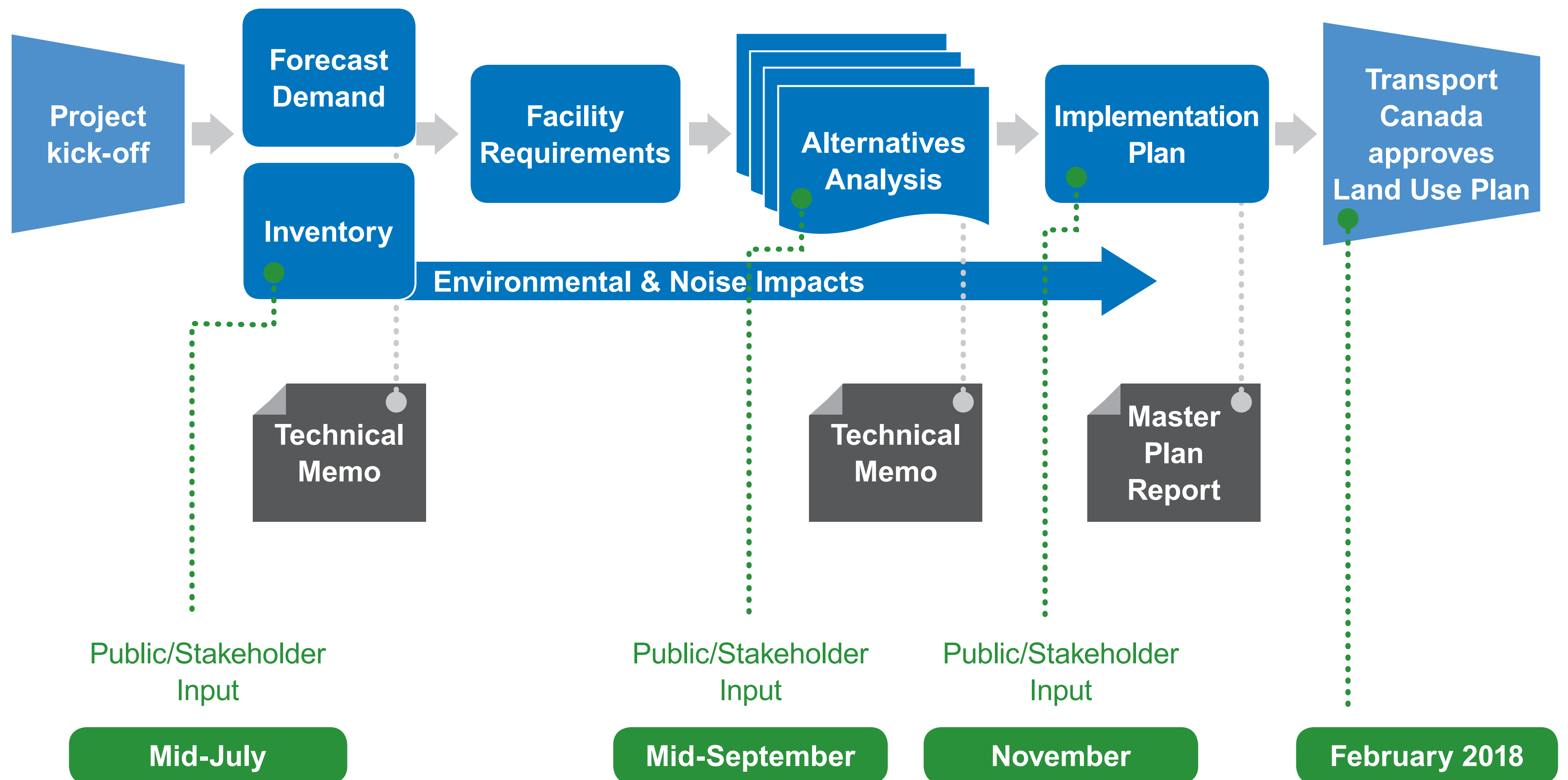
DIRECT Benefits

Include: economic activities carried out at the airport and are directly involved in aviation

INDIRECT Benefits

Include: economic activities generate by on-airport business and off-airport business activities (hotels, restaurant, travel agencies, trade and tourism)

Master Plan Process

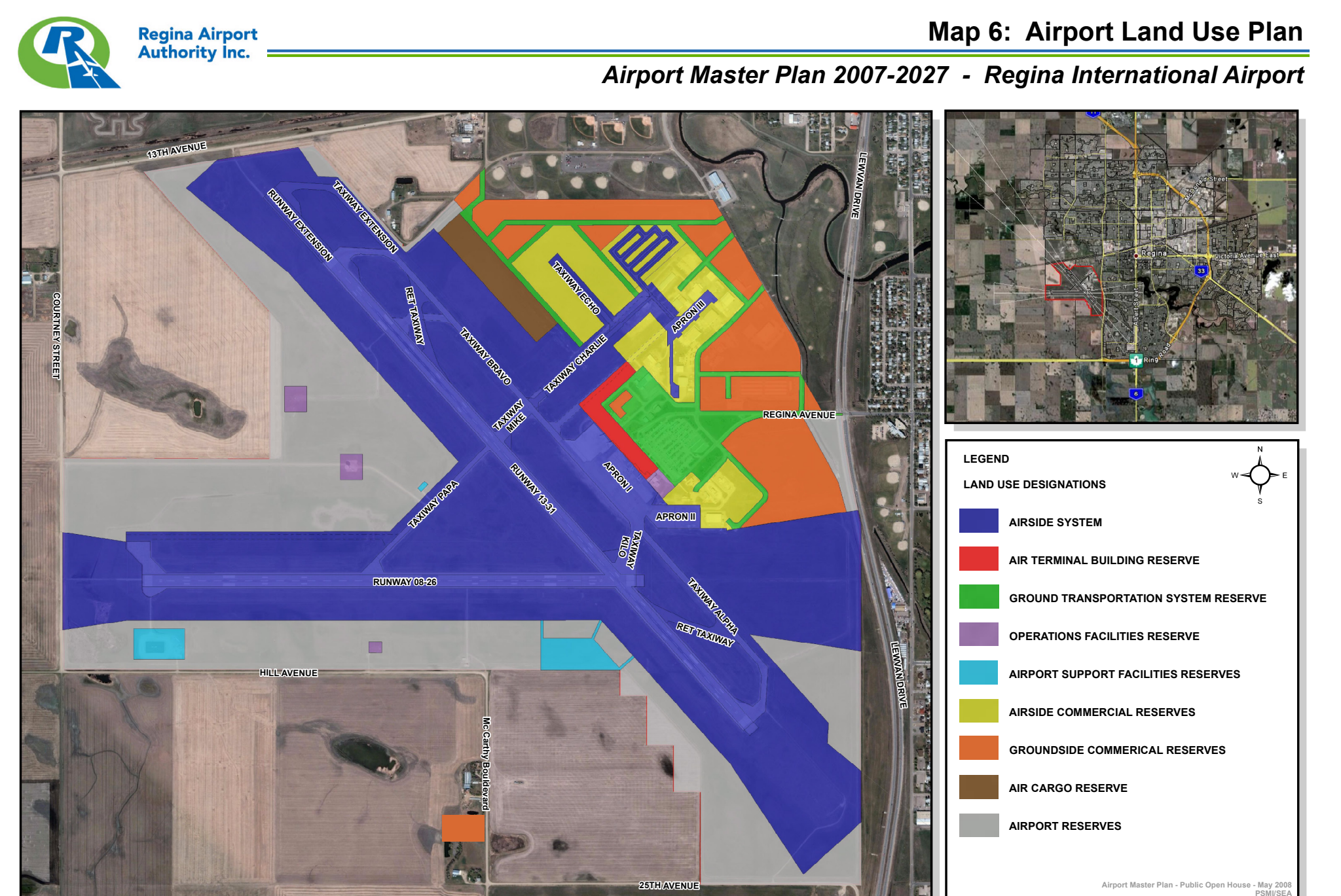


Public & Stakeholders to be consulted include:

- General Public
- Community Advisory
- Airlines
- General Aviation Users
- Air Cargo Users
- Ground Transportation Tenants
- Commercial Tenants
- Safety and Security
- Land Developers
- Regional Municipalities

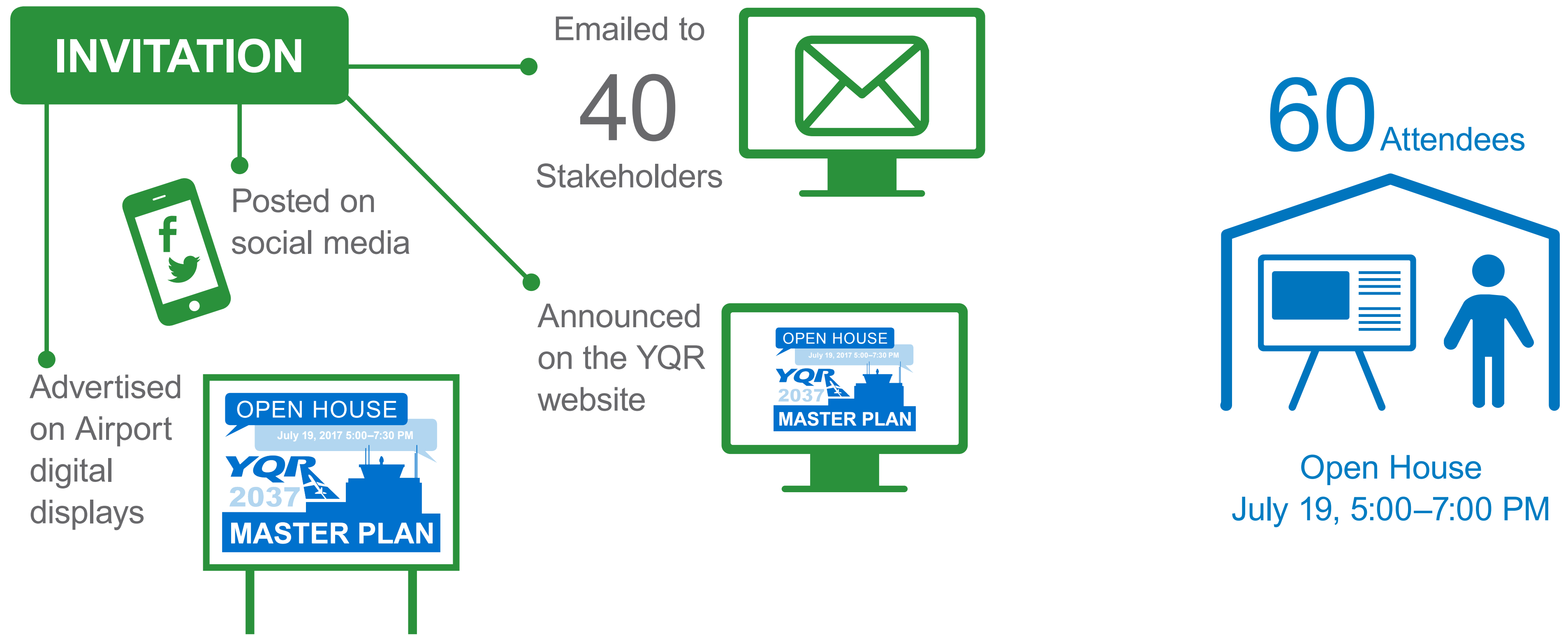
WHAT IS THE RESULT?

An updated Master Plan Report and Land Use Plan

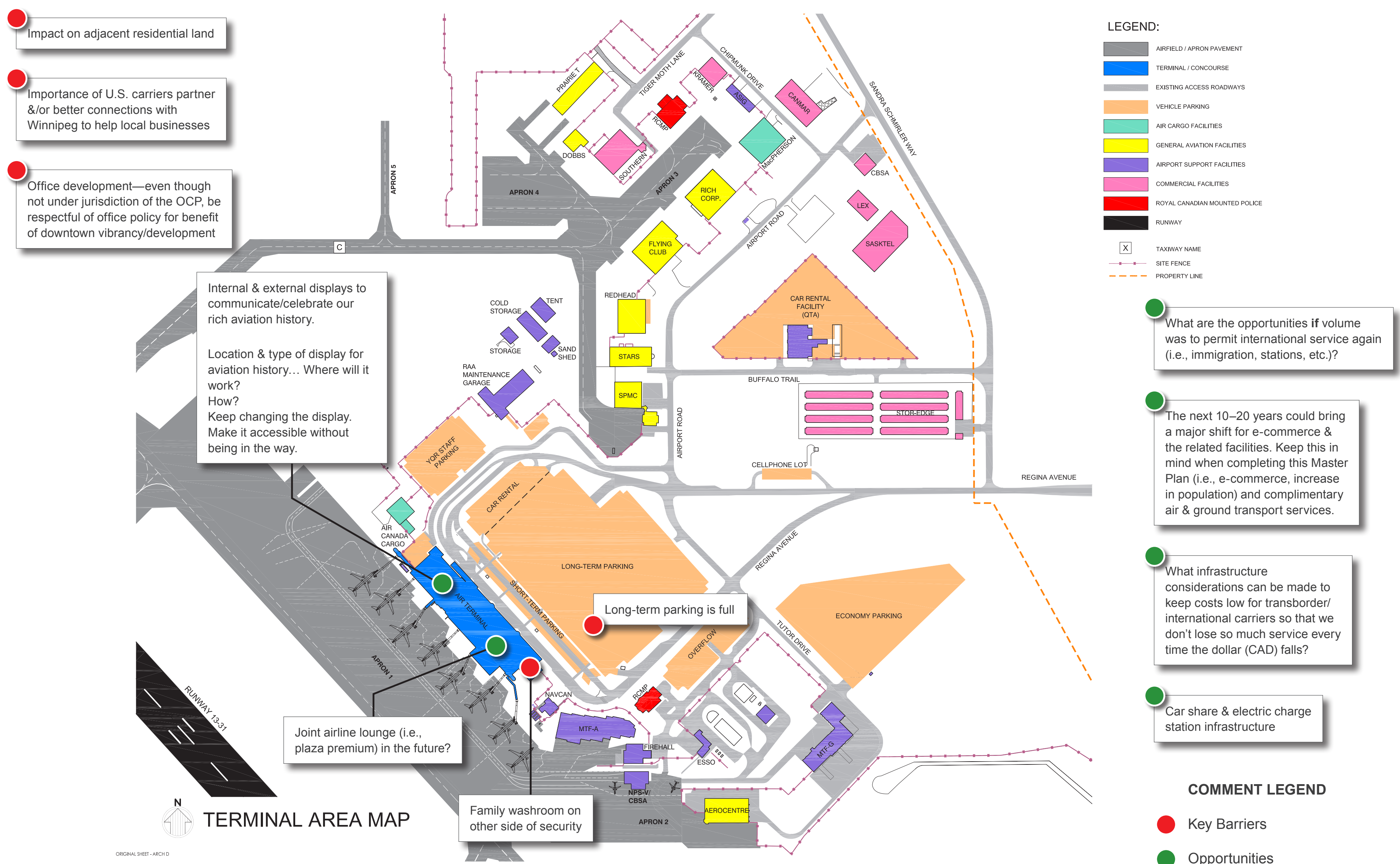


What We Heard

YQR MASTER PLAN ENGAGEMENT #1

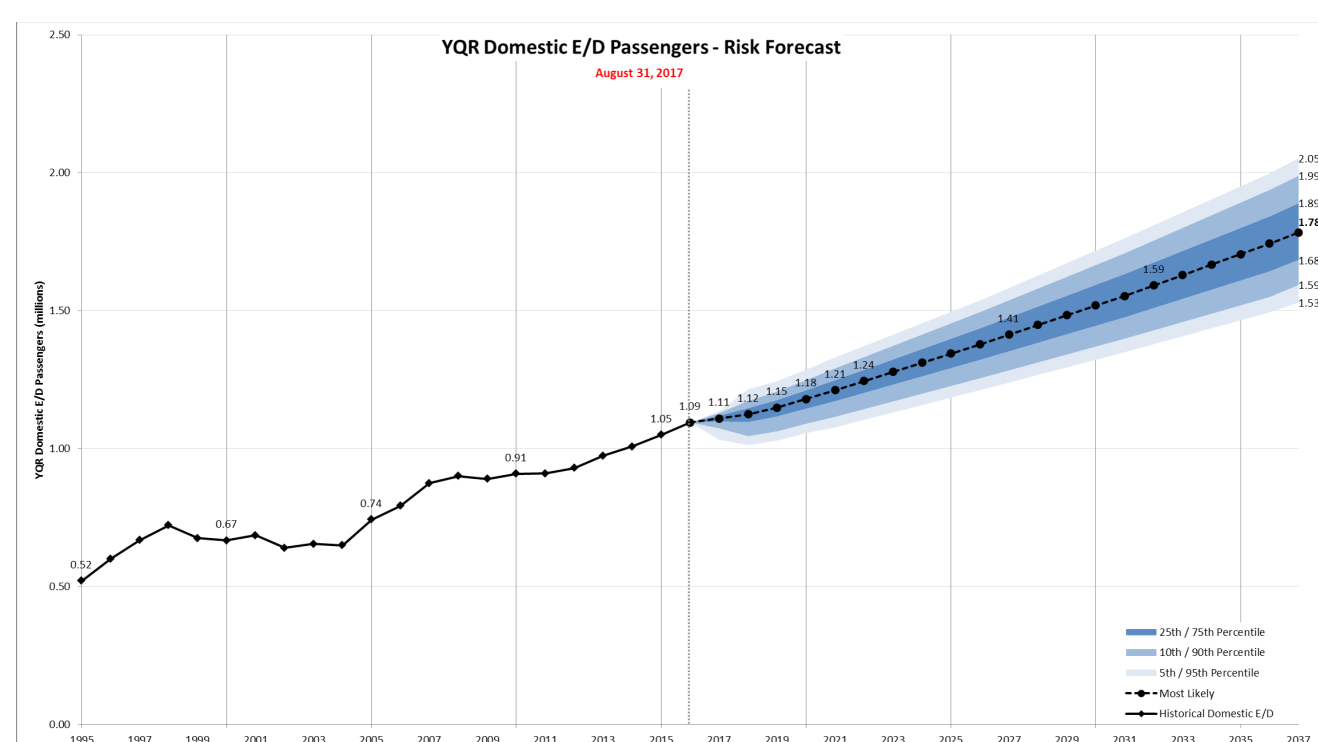


ISSUES & OPPORTUNITIES MAPPING RESULTS TERMINAL AREA

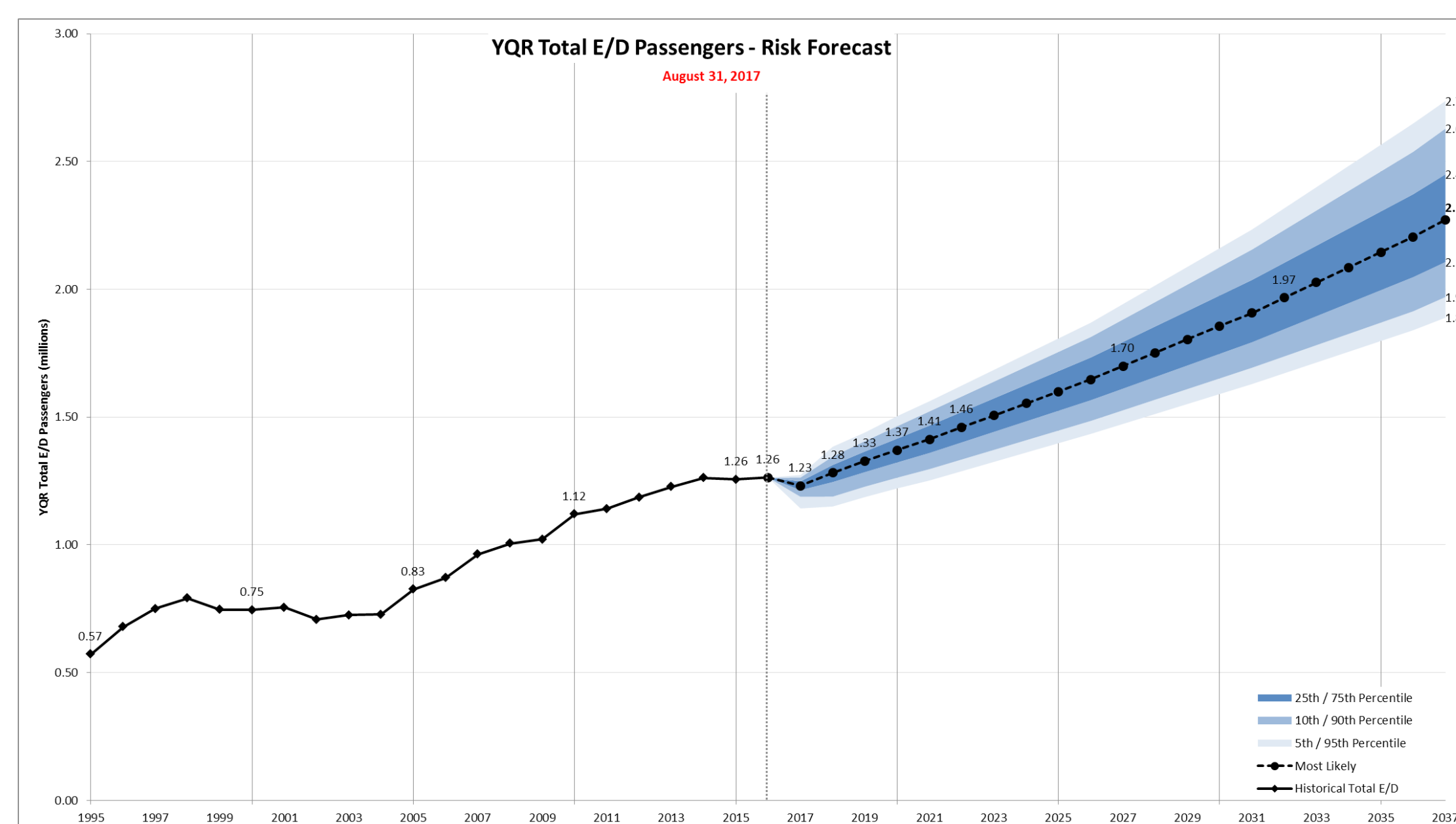


Aviation Demand Forecast

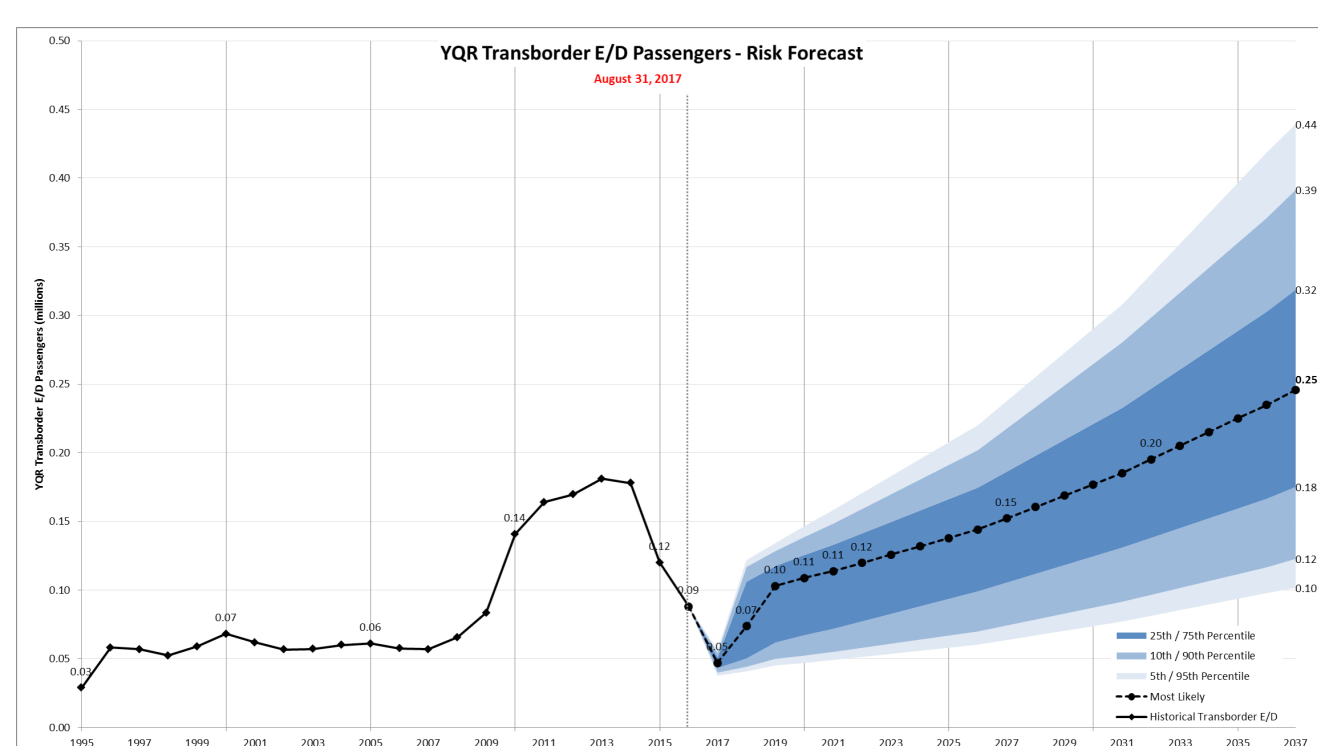
Domestic market has matured and is low risk, but is expected to grow at 2.8% per annum, which is high for a mature market.



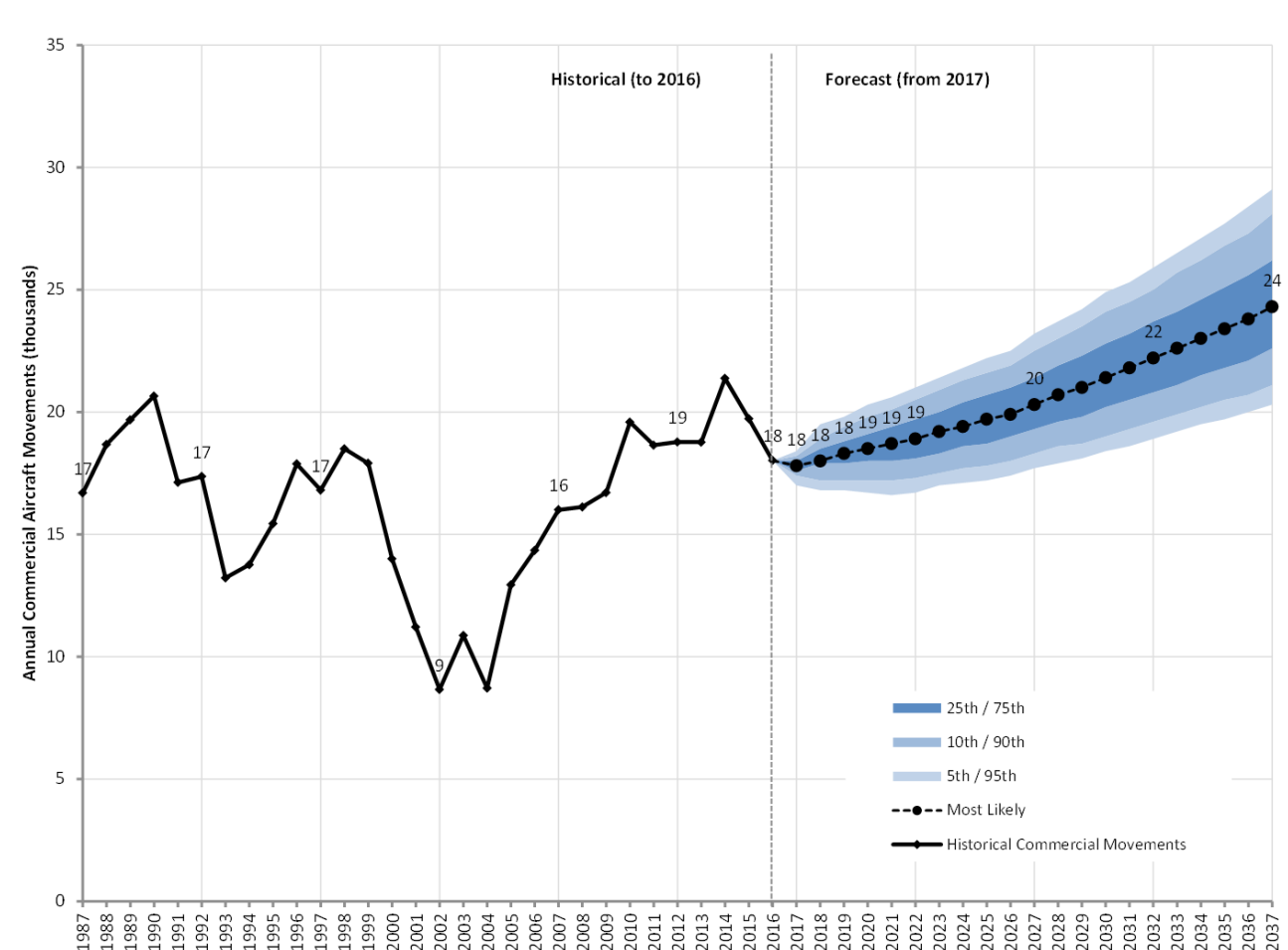
The overall passenger forecast grows at 2.8% per annum, from **1.2 million annual passengers** to **2.3 million annual passengers** in the next 20 years.



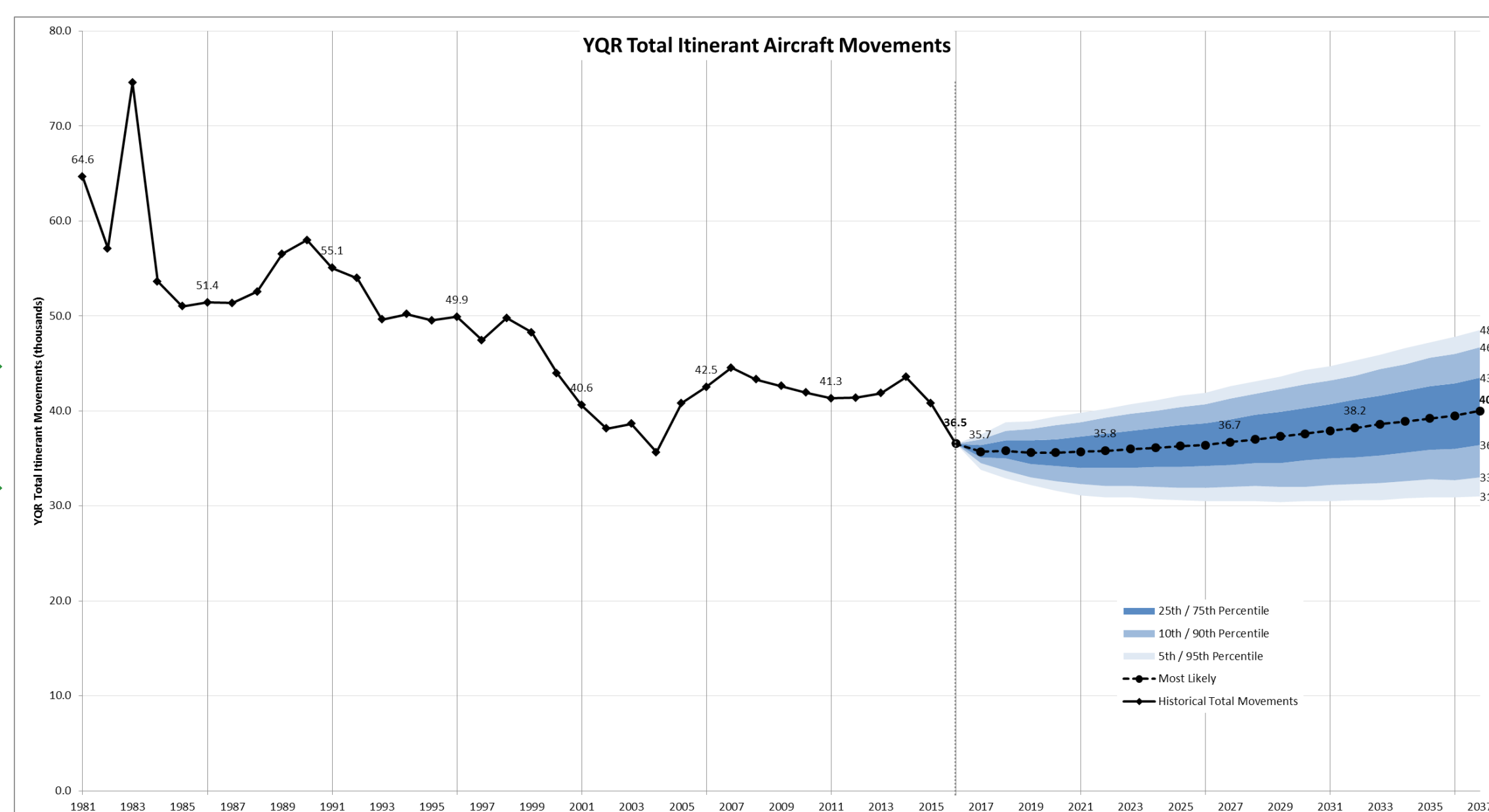
Transborder market was relatively flat from mid-90's to 2009. 2009–2014 experienced an extreme bubble. Transborder service is expected to return, but not guaranteed, and is considered high-risk.



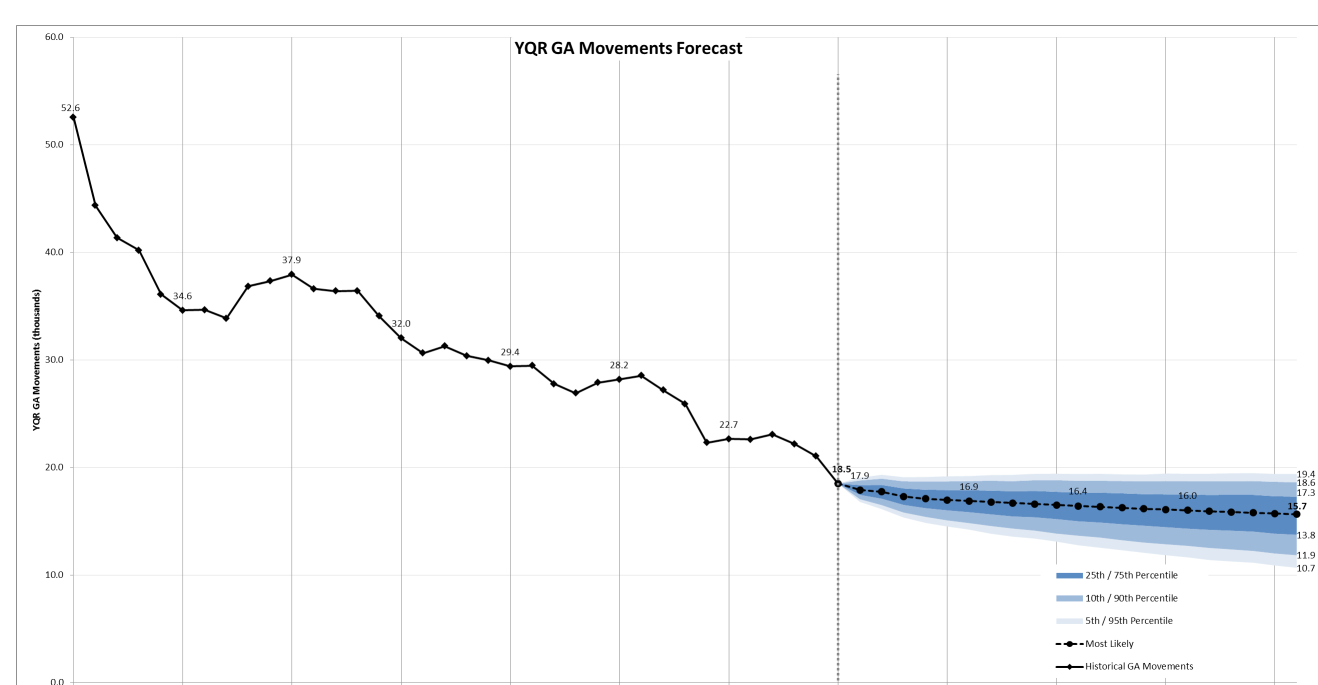
Commercial aircraft movements are expected to grow at 1.4% per annum. It is lower than the growth in passengers due to expected up-gauging in aircraft.



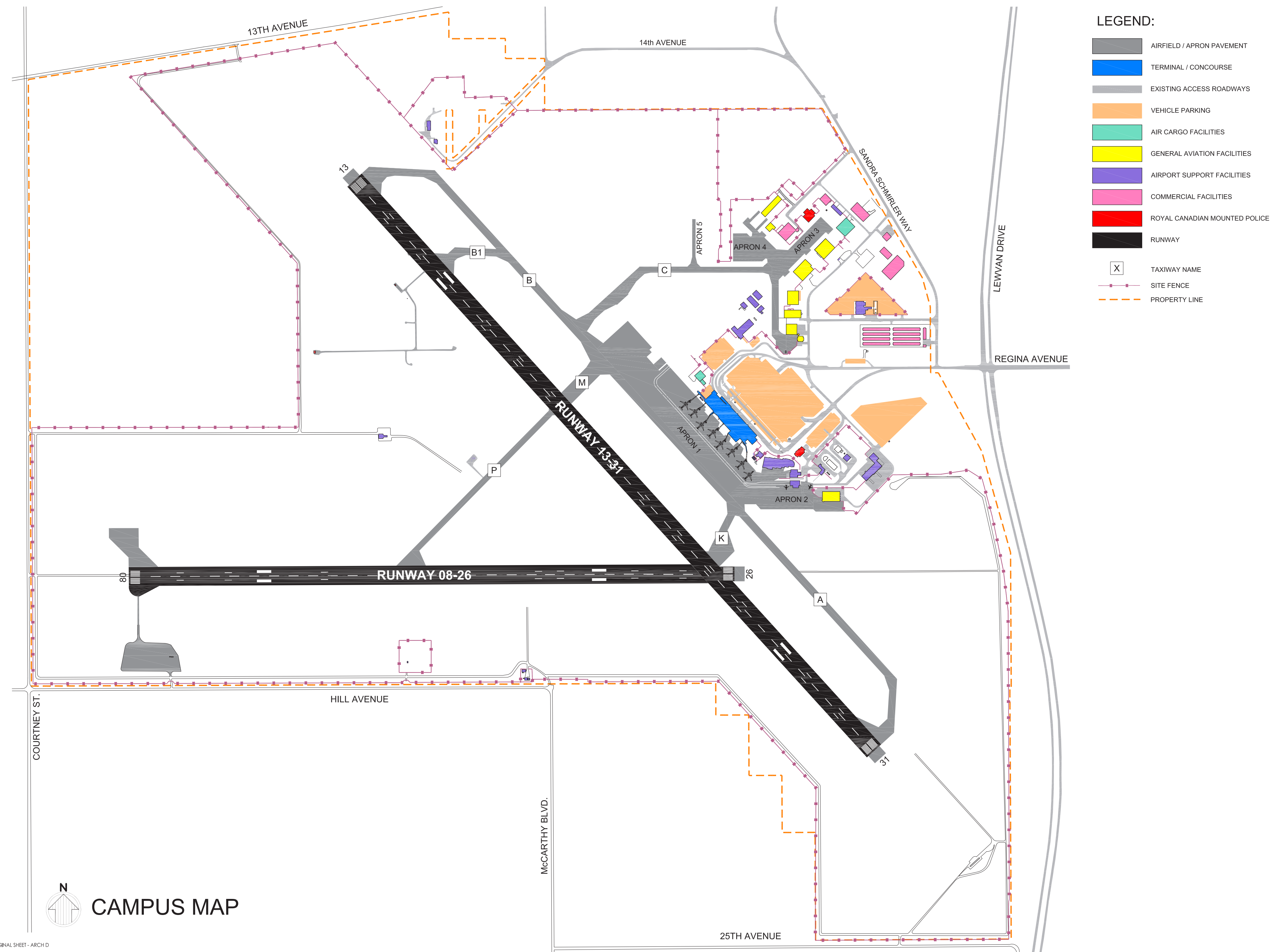
As commercial activity increases and general aviation activity decreases, the total movement at the airport is expected to increase slightly over the next 20 years.



The general aviation movements are expected to continue a long-term decline in general aviation activity.



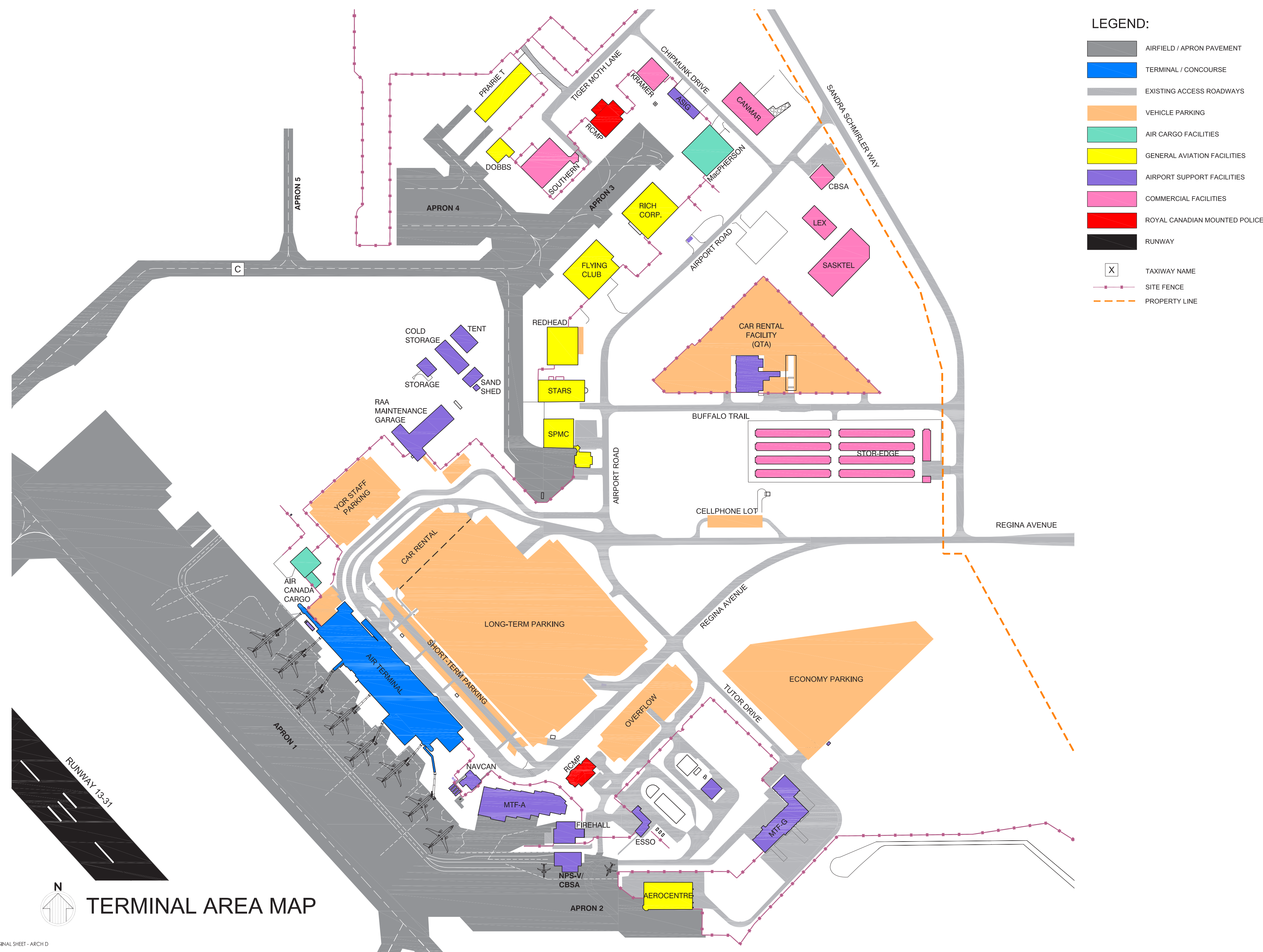
Airport Site Plan–Full Campus



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CAMPUS MAP

ORIGINAL SHEET - ARCH D

Airport Site Plan— Primary Development Area

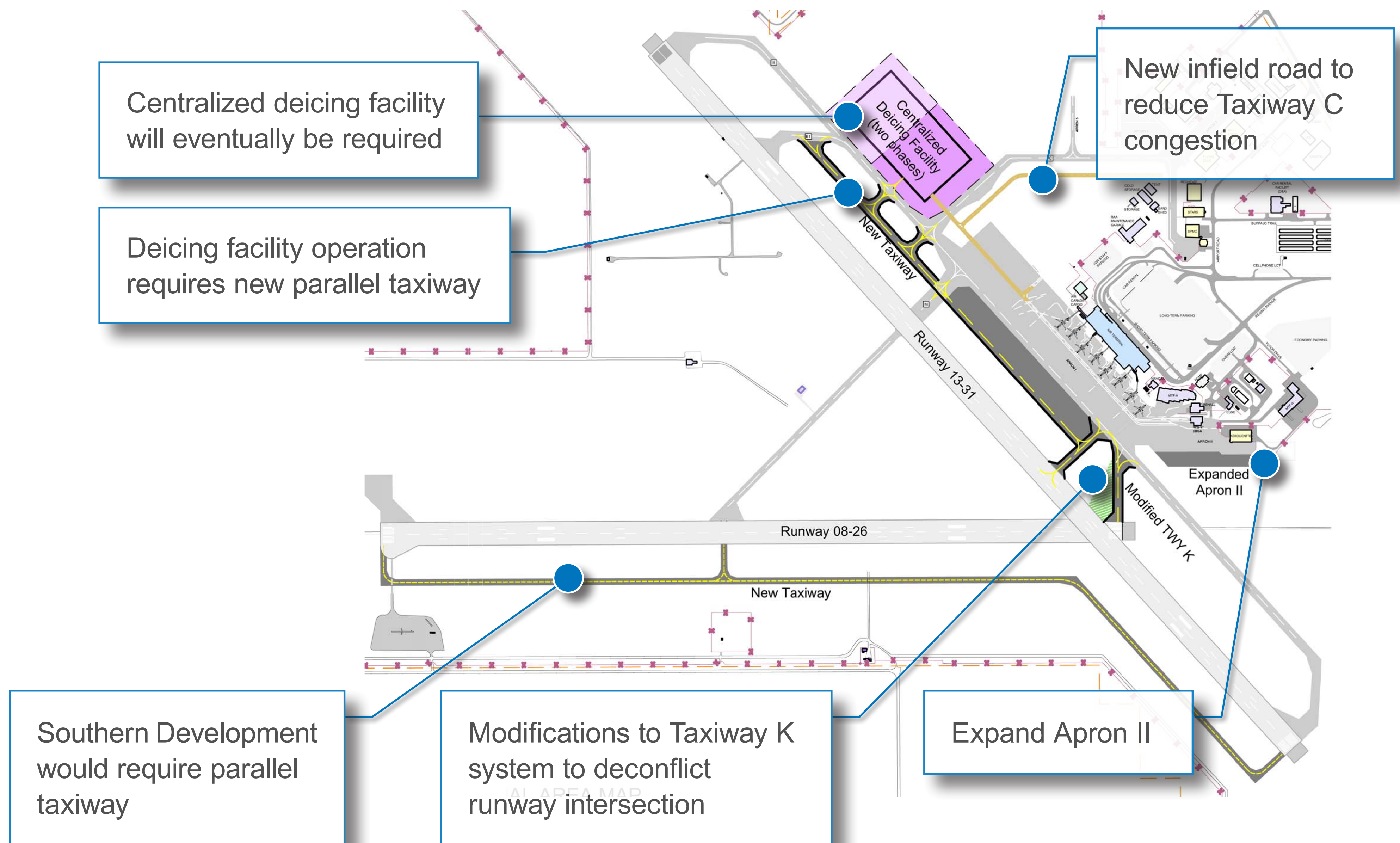


TERMINAL AREA MAP

ORIGINAL SHEET - ARCH D

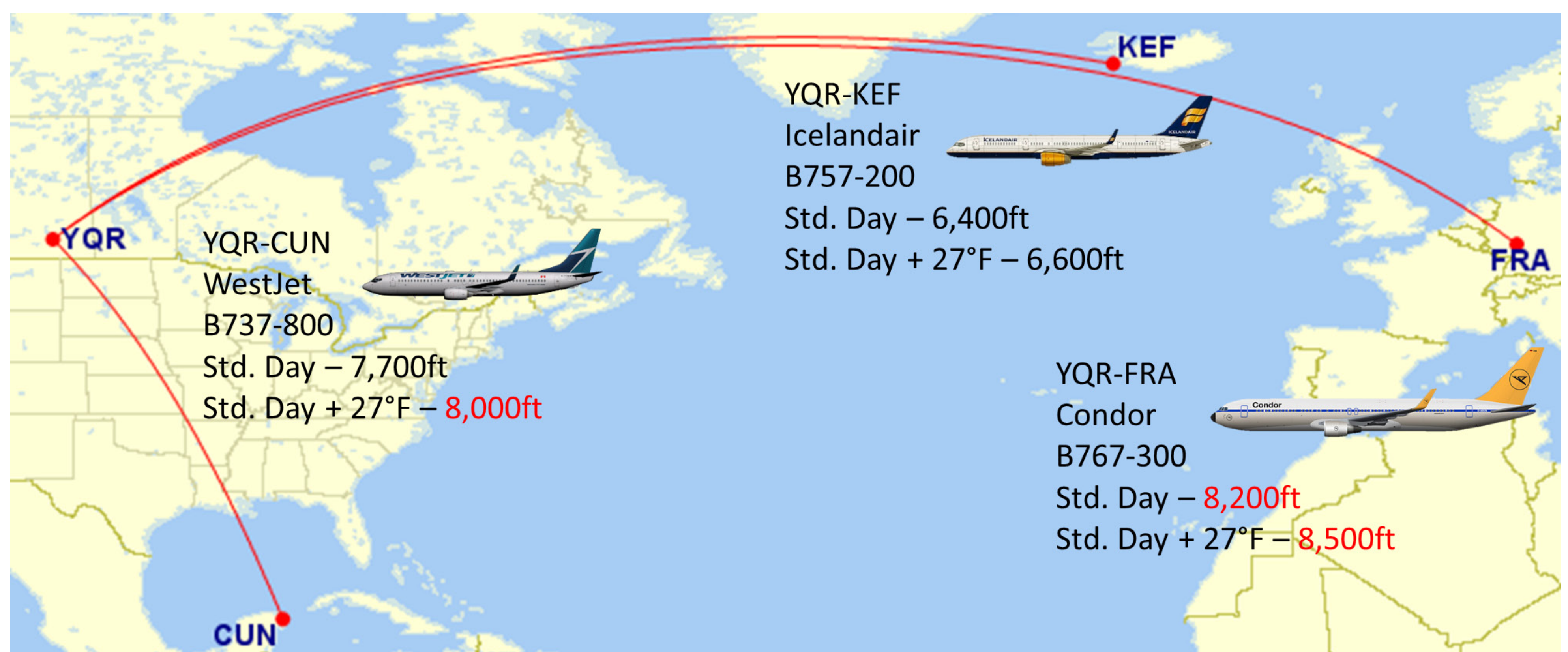
Airfield

Airfield Requirements

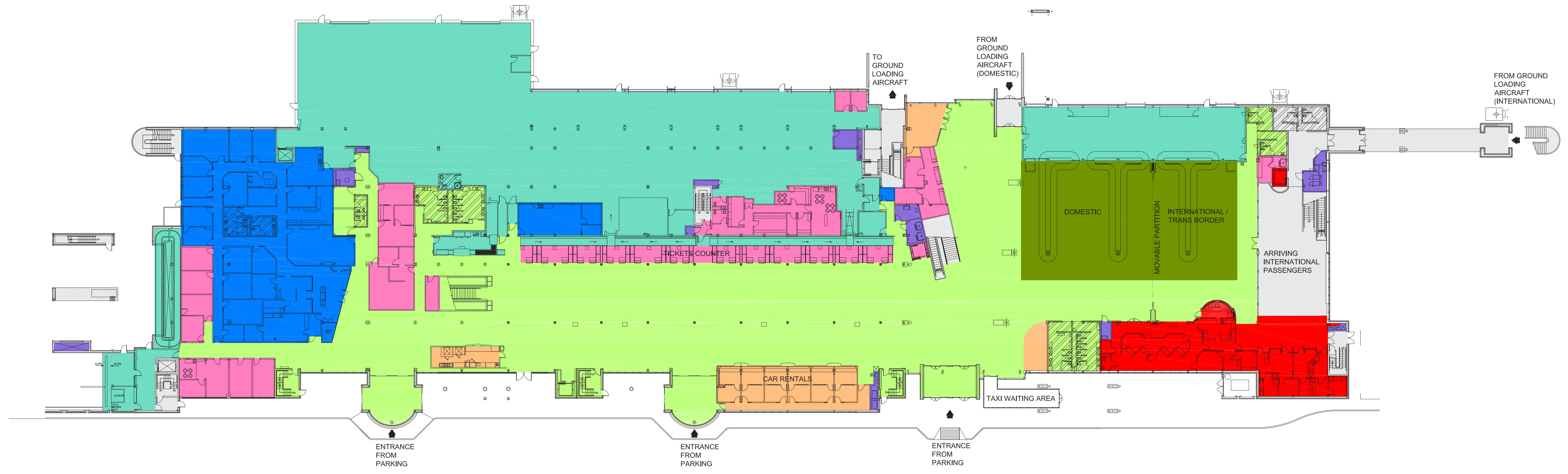


Runway Length Analysis

The existing runway of 7,900 ft. can accommodate most potential feasible routes and an extension is not expected.




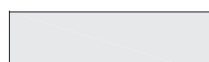

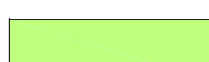








Terminal Floor Plan–Main Level

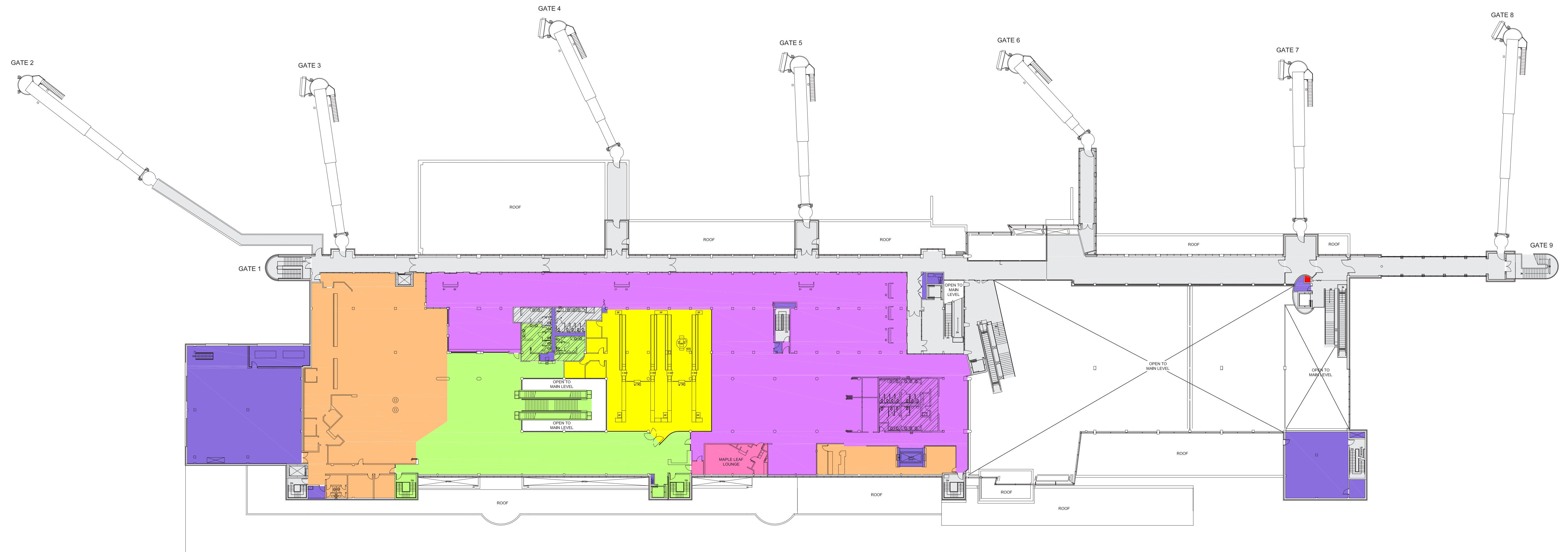


 FLOOR PLAN - MAIN LEVEL

LEGEND:













| | | | |
|---|---|--|---|
|  | AIRLINE OPERATIONS |  | CANADA BORDER SERVICES AGENCY |
|  | CANADIAN AIR TRANSPORT SECURITY AUTHORITY |  | SECURE/STERILE CIRCULATION AREA |
|  | CONCESSION |  | PUBLIC SPACE & CIRCULATION |
|  | AIRPORT ADMINISTRATION |  | BUILDING OPERATIONS, STORAGE & MECHANICAL |
|  | BAGGAGE HANDLING |  | HOLDROOM |
|  | BAGGAGE CLAIM |  | WASHROOM |

Terminal Floor Plan–Second Level



 FLOOR PLAN - SECOND LEVEL

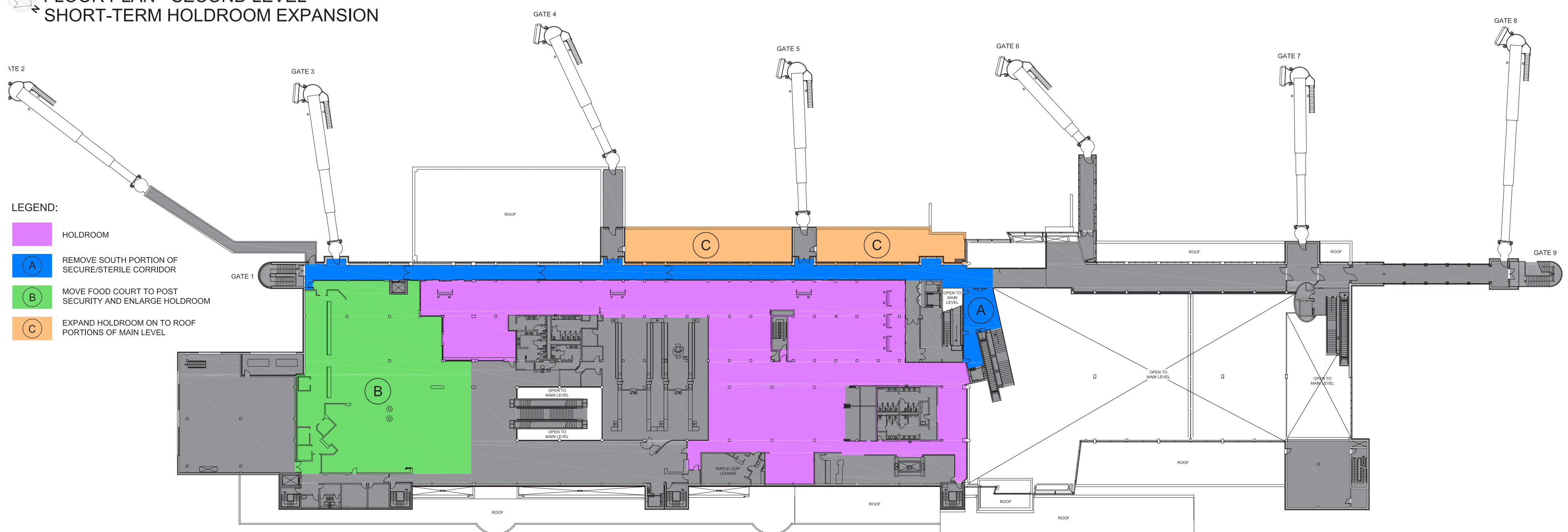
LEGEND:

| | | | |
|---|---|---|---|
|  | AIRLINE OPERATIONS |  | CANADA BORDER SERVICES AGENCY |
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|  | BAGGAGE CLAIM |  | WASHROOM |

Terminal: Short-Term

HOLDROOM EXPANSION OPTIONS

FLOOR PLAN - SECOND LEVEL
SHORT-TERM HOLDROOM EXPANSION



Option A

Remove sterile corridor south of Gate 6 and open domestic arrivals vertical circulation to holdroom to allow for crossflow of passengers

Option B

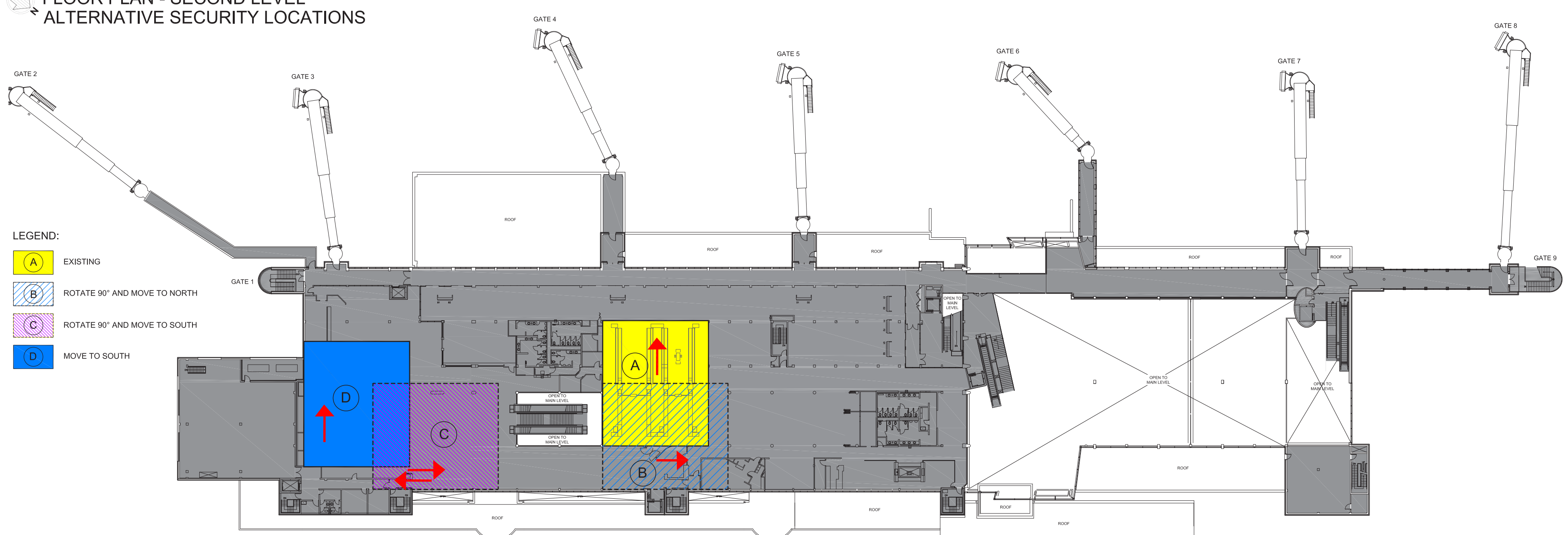
Convert pre-security food court to post-security, maintain concessions, and add holdroom seating

Option C

Expand holdroom onto level 1 roof sections between Gates 4 and 6

PBS SCREENING LOCATIONS

FLOOR PLAN - SECOND LEVEL
ALTERNATIVE SECURITY LOCATIONS



Option A

Remain in place

Option B

Rotate 90°, north of escalator so that passengers enter center of holdroom

Option C

Rotate 90°, south of escalator and convert pre-security food court to post security, which creates additional holdroom west of screening

Option D

Move toward landside concession and remove pre-security concession

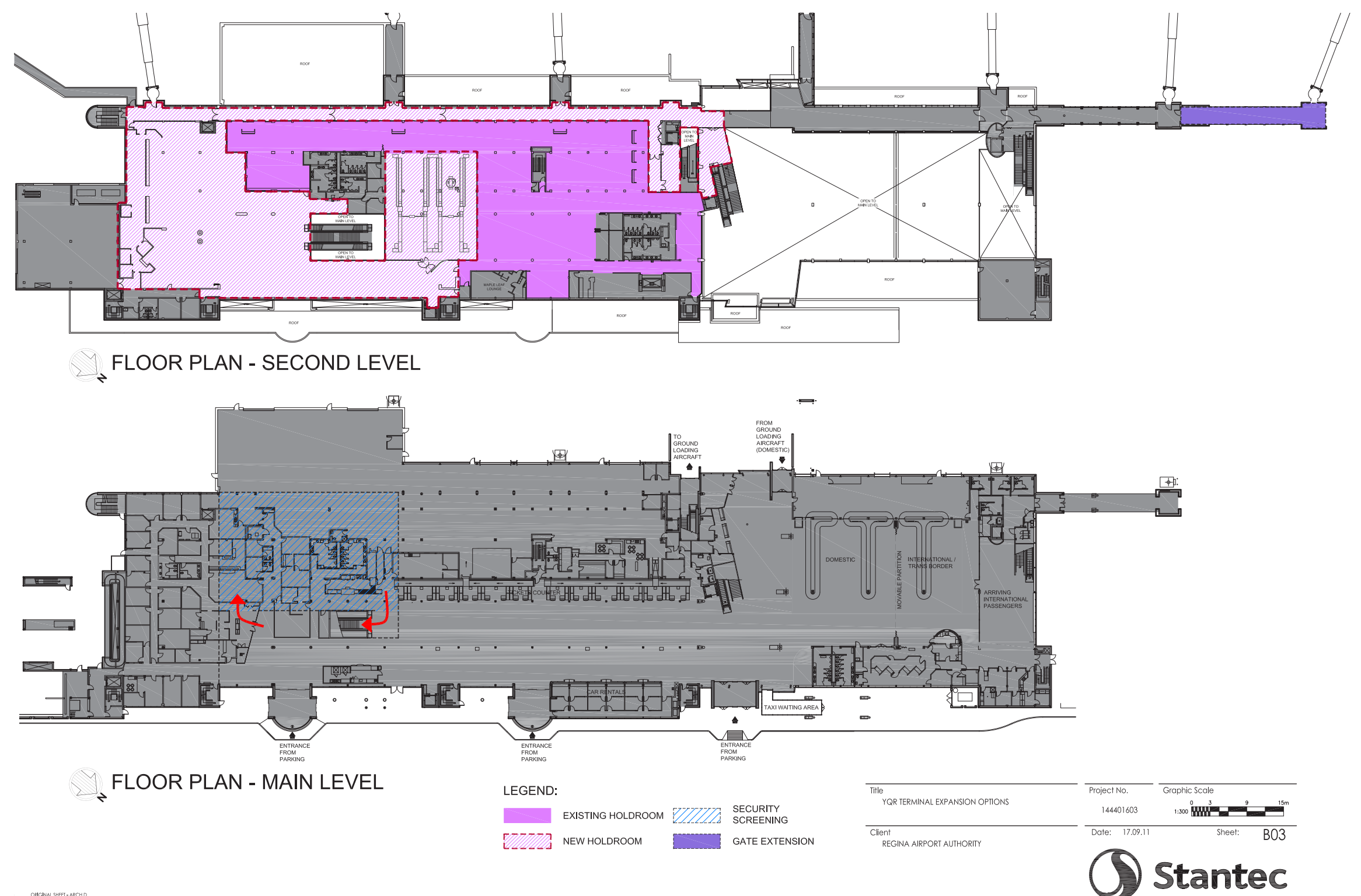
Terminal: Long-Term Alternatives 1 + 2

In the long-term, one additional gate, additional hold room space, and additional baggage claim devices are required.

Five alternatives to provide these requirements are provided on the two Terminal: Long-Term boards.

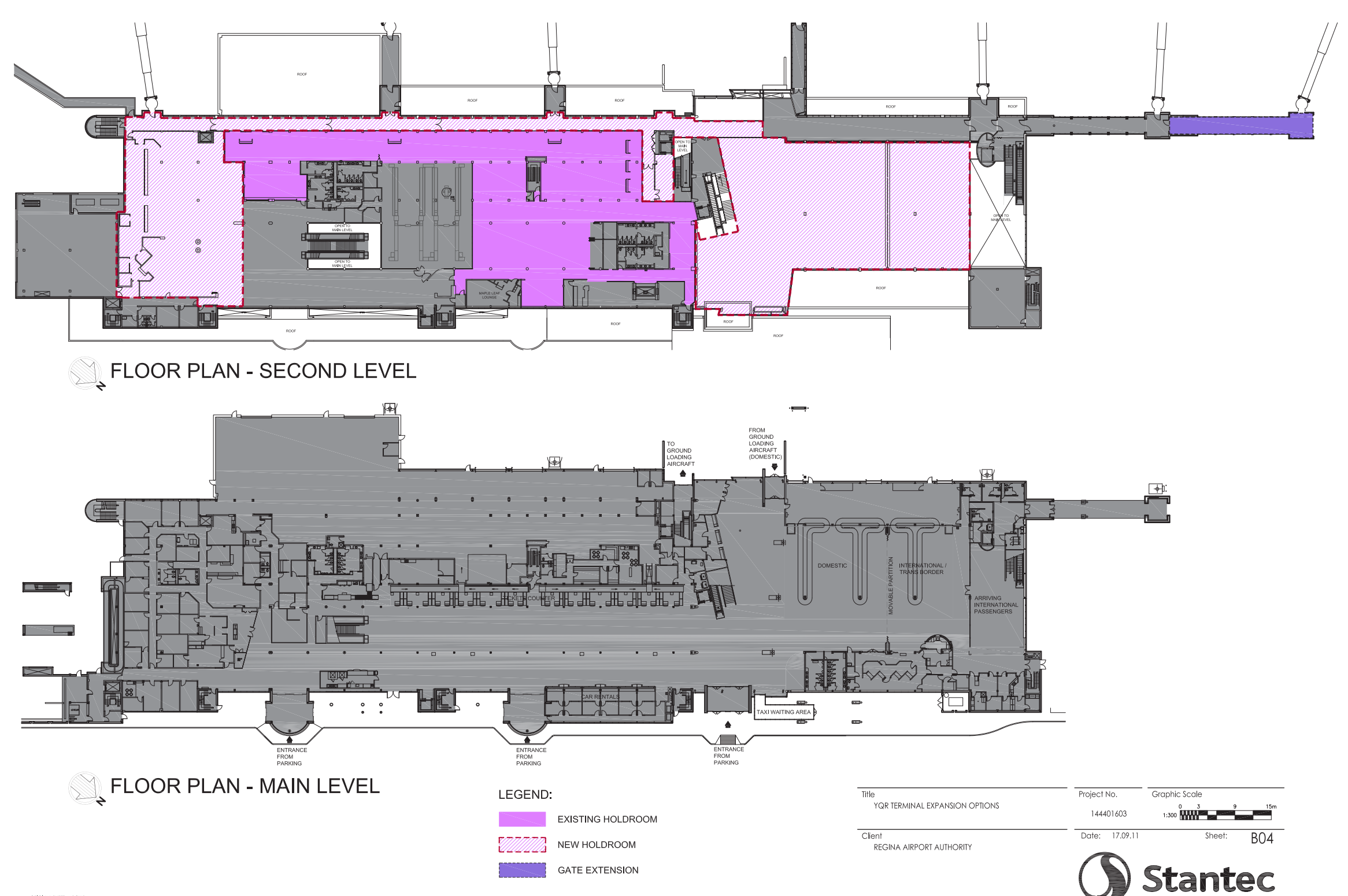
Alternative 1 PBS Screening on Level 1

- + Relocate PBS screening to level 1, south of check-in
- + Relocate existing offices, if necessary
- + Utilize existing vertical circulation



Alternative 2 Expand Over Bag Claim

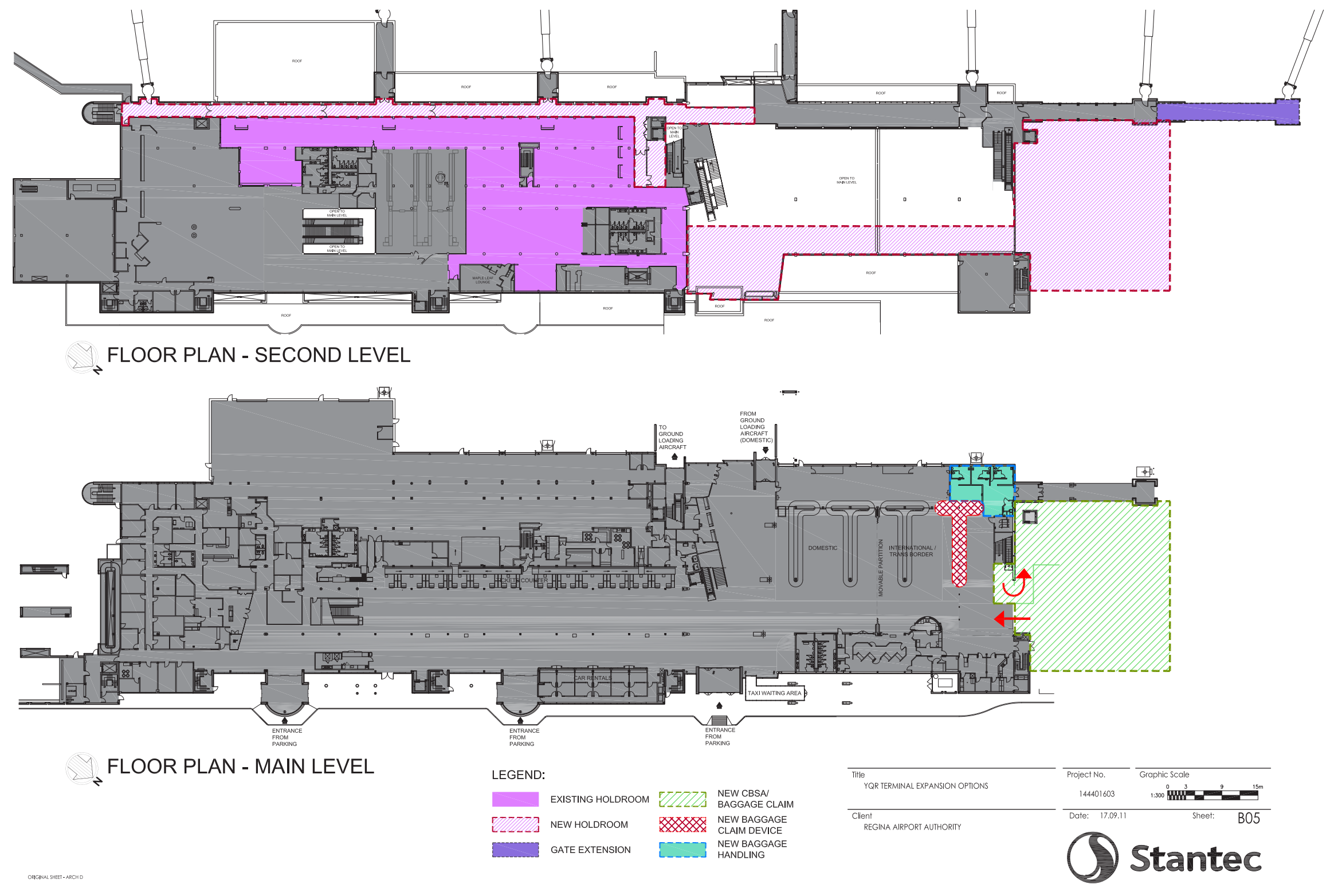
- + Expand holdroom over baggage claim
- + Convert pre-security concession into post-security concessions and holdroom



Terminal: Long-Term Alternatives 3, 4 + 5

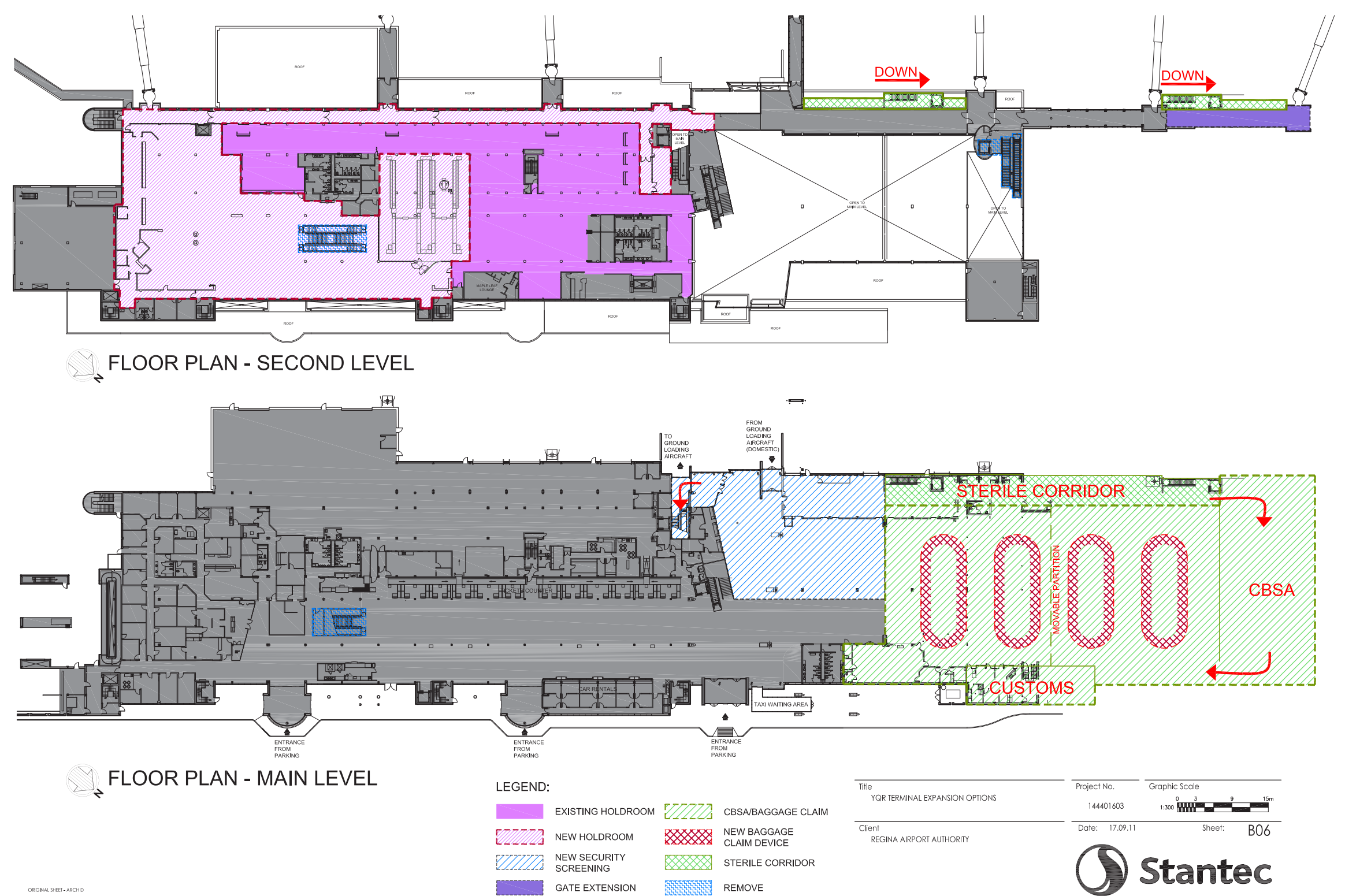
Alternative 3 Holdroom and CBSA North Expansion

- + Construct building addition north of baggage claim
- + Expand holdroom on level 2 and CBSA on level 1
- + Add additional baggage claim unit on existing CBSA queue area



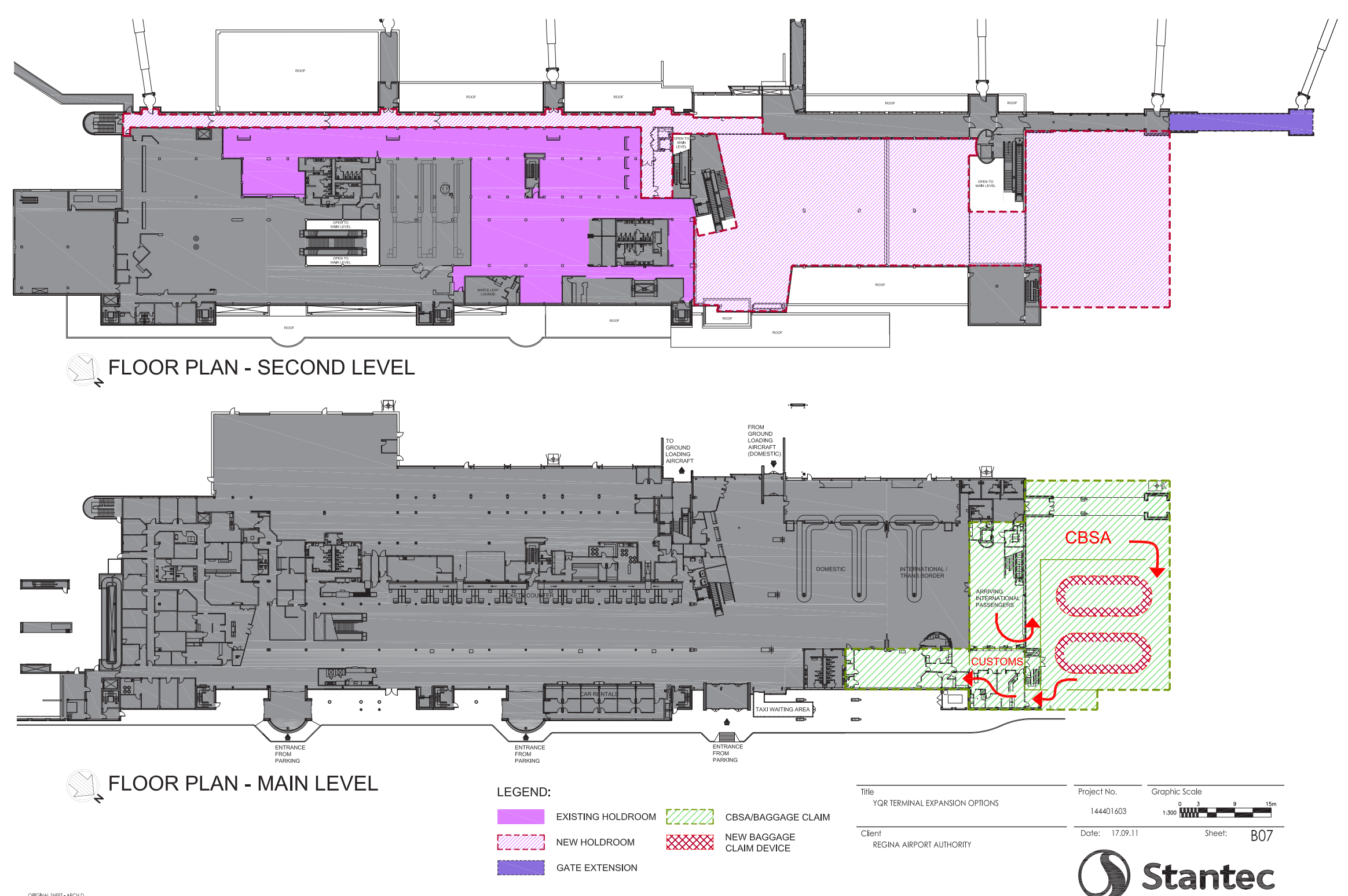
Alternative 4 CBSA North Expansion, PBS on Level 1

- + Relocate PBS screening to level 1, north of check-in
- + Construct sterile vertical circulation cores and corridor on level 1
- + Construct four new sloped-plate baggage claim devices



Alternative 5 Expand over Bag Claim and Building Expansion

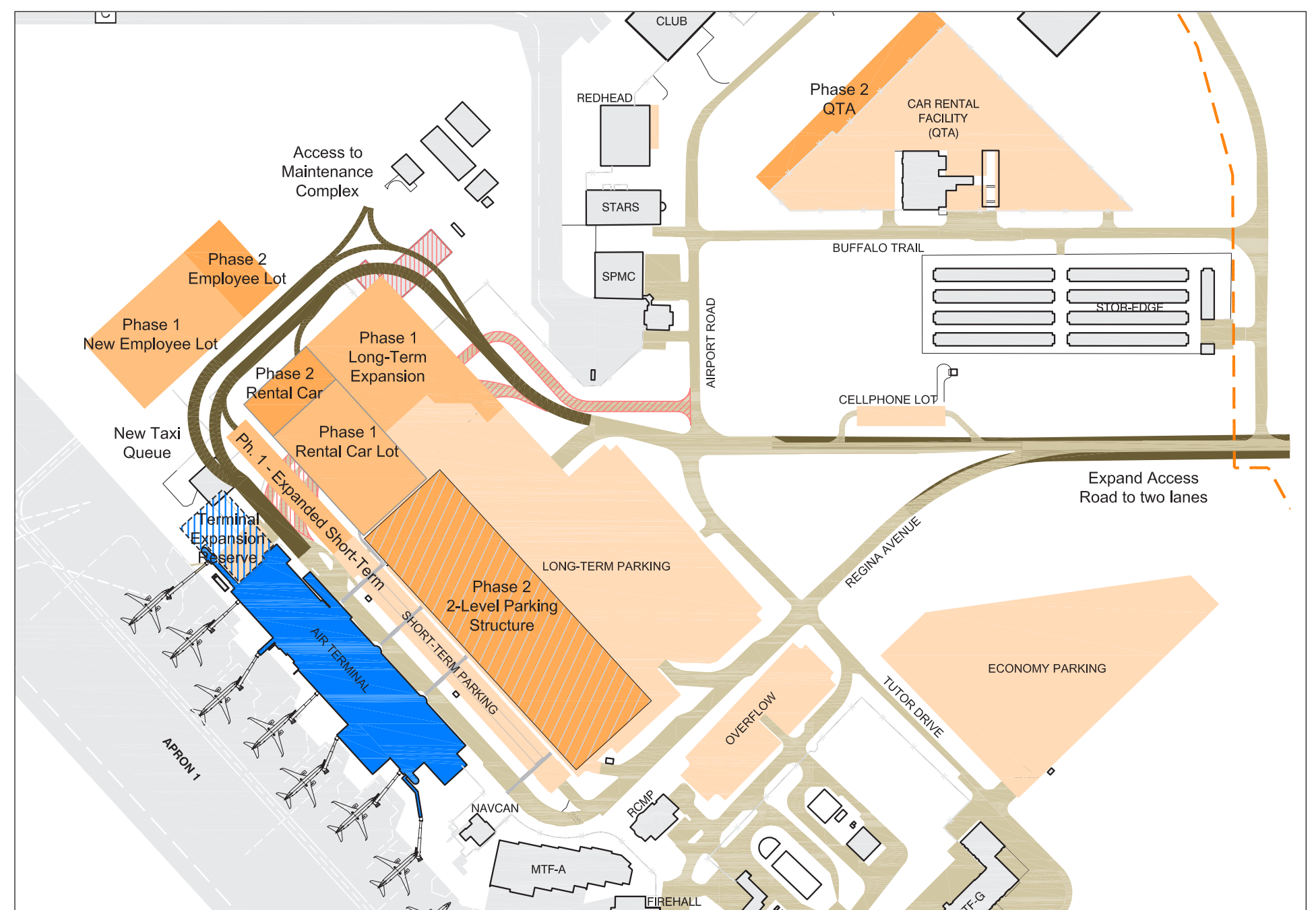
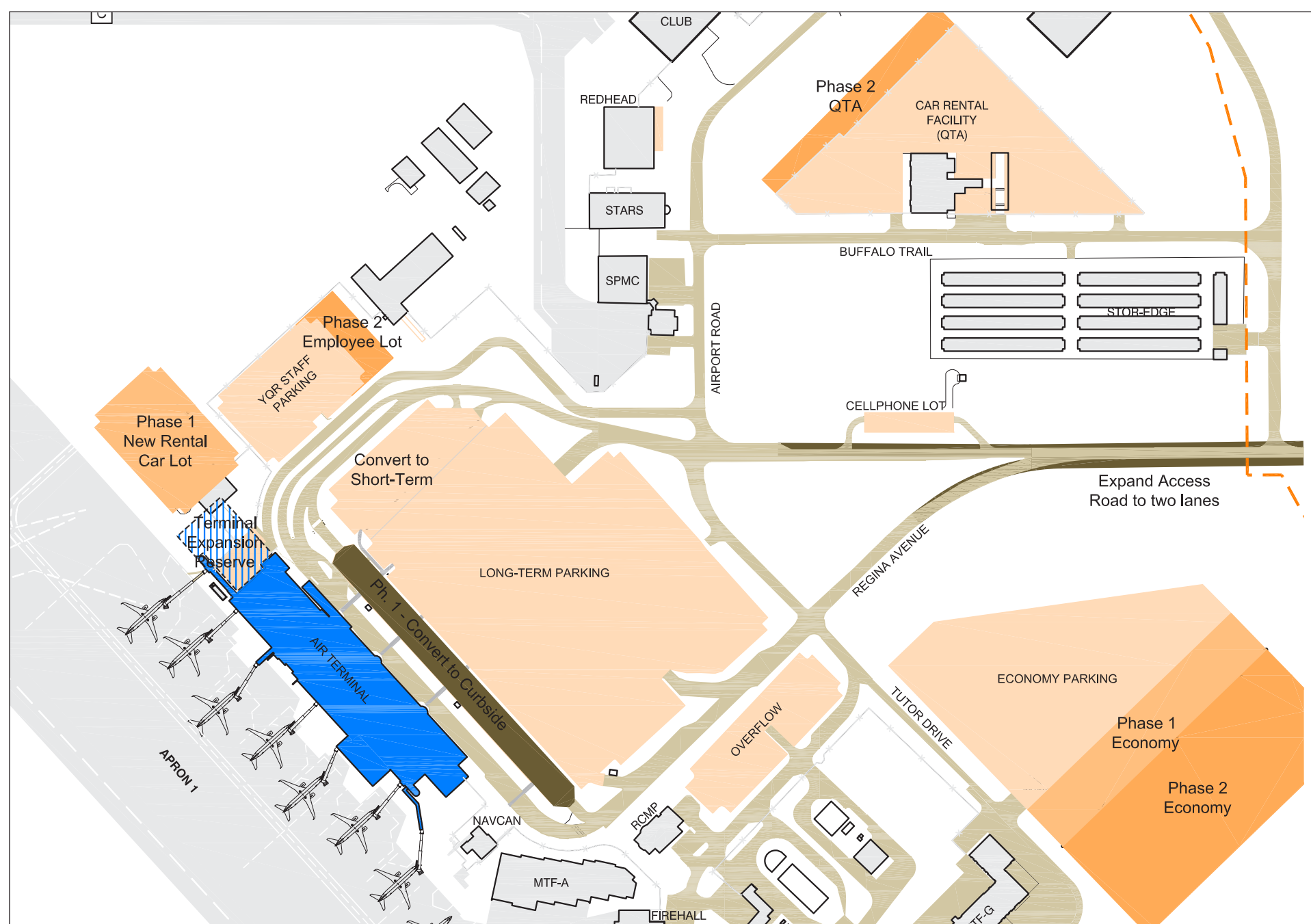
- + Expand holdroom over baggage claim
- + Construct building addition north of existing baggage claim
- + Expand holdroom on level 2 and CBSA on level 1
- + Construct two new sloped plate baggage claim devices exclusively for international arrivals



Ground Transportation

Phase 1: 2022–2027

Phase 2: 2032–2037

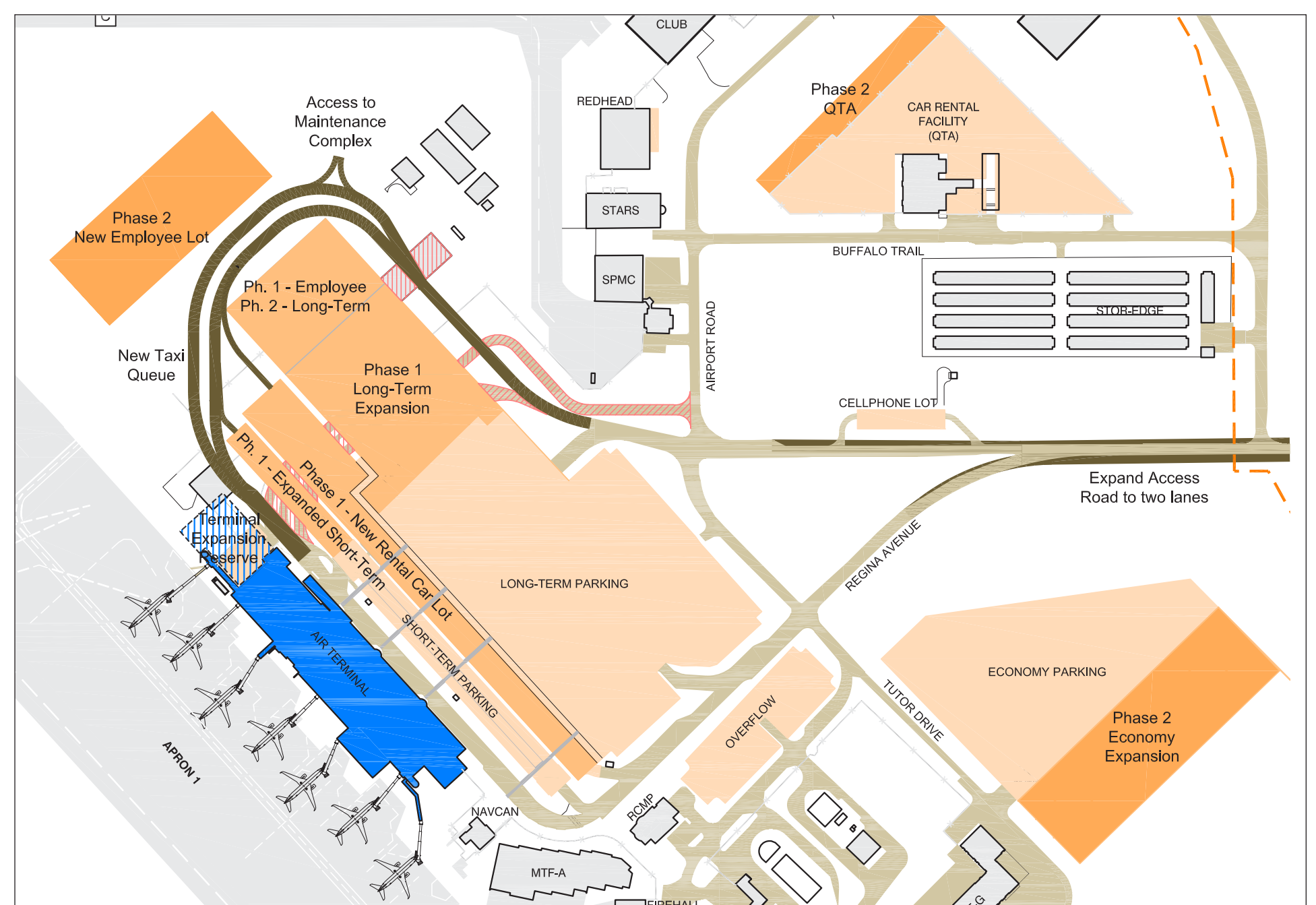
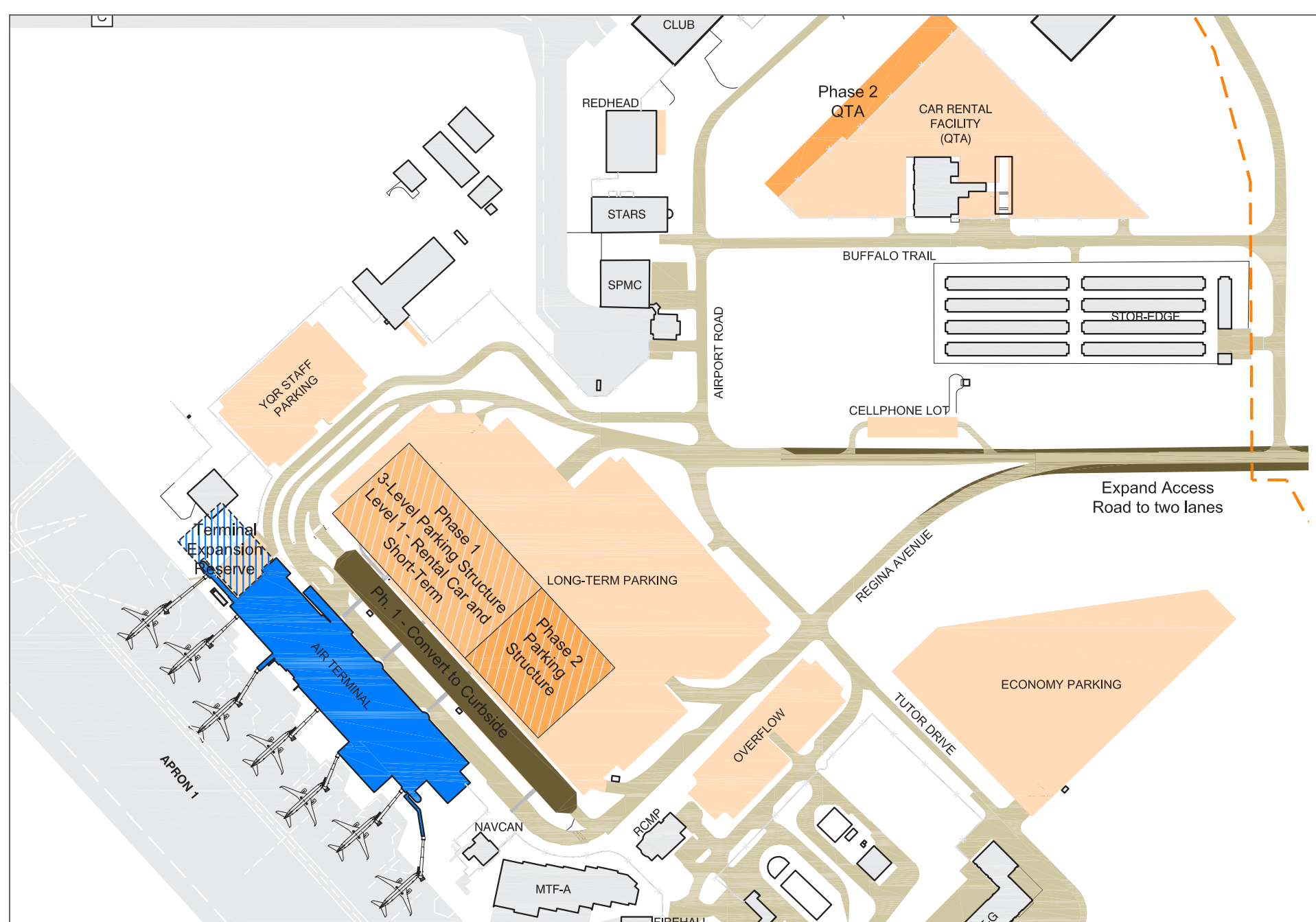


Alternative 1 Expand Existing

- + Construct new Rental Car Lot
- + Convert existing Rental Car Lot to Short-Term Parking in order to add second curbside
- + Expand Economy Lot incrementally as-needed

Alternative 2 Long-Term Garage

- + Extend the roadway loop to the north
- + Construct garage in Phase 2
- + Modify existing Rental Car Lot



Alternative 3 Short-Term Garage

- + Construct 3-Level Garage in Phase 1 that accommodates rental cars and short-term parking on Level 1
- + Convert Short-Term Lot to second curbside
- + Expand Garage in Phase 2

Alternative 4 Big Loop

- + Extend the roadway loop to the north
- + Expand the existing long-term and economy parking lots
- + Move rental car lot to parallel the expanded short-term lot

Utilities



Water

- Existing infrastructure servicing terminal building is old and may need replacement with newer materials for reliability.
- Redundancy to terminal building with another service location would be beneficial.
- Existing loop has both 150 mm and 200 mm diameter mains. Upgrading 150 mm mains to 200 mm for consistency would provide better level of service and meet proper fire flow requirements.
- Some abandoned service connections may need proper abandonment/removal.



Wastewater

- There could be capacity issues with the City of Regina 1,350 mm diameter trunk sewer. Additional development of the airport property may require alternate conveyance to the wastewater treatment plant, or on-site storage infrastructure.



Stormwater

- As development continues, need to evaluate capacity of downstream culverts flowing to Wascana Creek.
- Overland flow to Wascana Creek may be better managed by directing flow along property lines, allowing for development of some additional areas.
- An existing concrete storm pipe is cracked and should be replaced.
- Slough west of Runway 13-31 should have a ditch allowing drainage of the slough.



Transportation

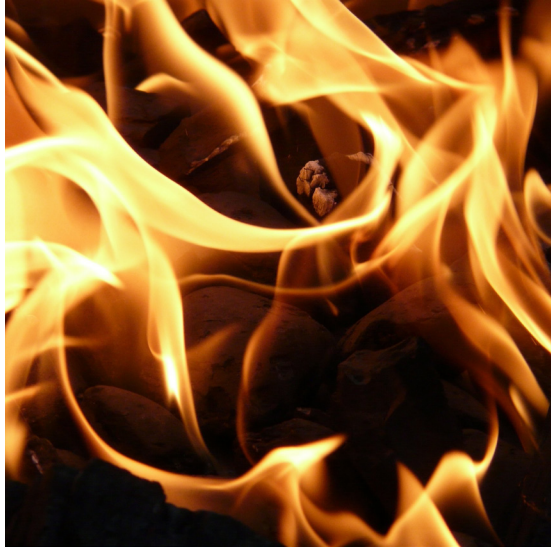
- Intersection at Regina Avenue will require enhancements for both traffic capacity and pedestrian safety. Upgrades and re-surfacing will be required as paving and infrastructure continue to age.



Shallow Utilities

- No immediate concerns with shallow utility servicing. The utility companies have noted that there may be significant lead times and appreciate as much notice as possible to plan for possible upgrades.

Environmental



Fire Training

- Review fire training area and potential contaminants, impacts on community.



Historical Use

- Old facilities on site known to have contaminants—if disturbed will need to manage it.



Glycol Management

- Used in deicing; currently have 3 storage areas; as expand will see volumes increase; plan for storage, drainage, disposal and supply.



Fuel

- Currently have 3 fueling locations and various storage locations. May consider plans for relocation.



Lavatory

- Dump station now goes to municipal sanitary. Not a known issue.



Air Emissions

- Review Federal requirements for GHG emissions reduction. Previous air emission study (2011) showed little impacts from YQR.



Noise

- Noise contours were established and still apply; as expand need to consider airport needs and alignment with City planning; unsure how changes to Nav Canada flight paths may impact noise, or how/ when newer 'quieter' aircraft may be in use.



Wildlife

- Wildlife require active management on site e.g. to control birds; standing water on site, Callie site storm overflow pond and new development may cause issues.



Vegetation

- Converting land cover in some areas to hay. Not a known issue.

Snow Dump Areas

- As the airport expands, may have potential impact on water drainage on site.