

# Jomo Kenyatta International Airport



Development, Design, and Modernization of JKIA



## 02 | Project Overview

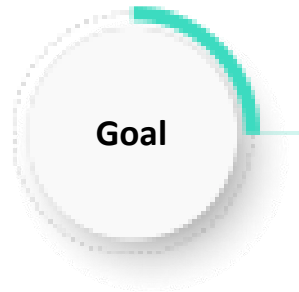
Master Plan | Feasibility Study

# 02 | Master Plan : Overview



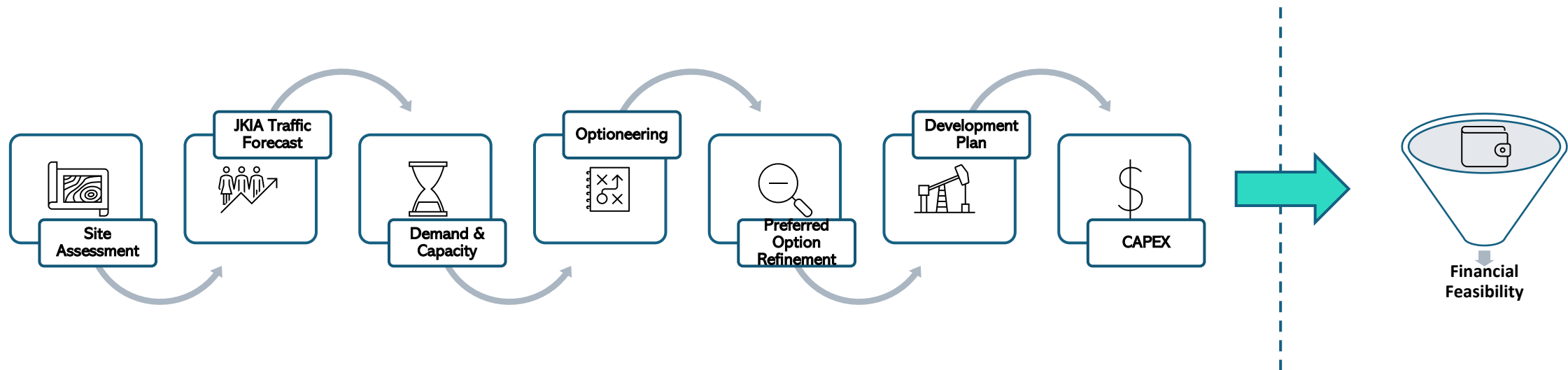
## Initiative

The Kenya Airports Authority (KAA) intends to embark on an extensive, **fully integrated master-planning & feasibility Study for Jomo Kenyatta International Airport (JKIA).**



## Goal

- Assess **long-term aviation demand** and anticipate 20-year growth trajectories
- Formulate integrated strategies to **address demand, capacity, and connectivity**
- Develop a **multimodal mobility framework** for passenger and freight systems across JKIA and Nairobi.
- Define essential infrastructure enabling **airport-city development**
- **Optimize land-use** governance to ensure orderly, sustainable expansion
- Reassert Kenya's position as a premier **African aviation gateway**



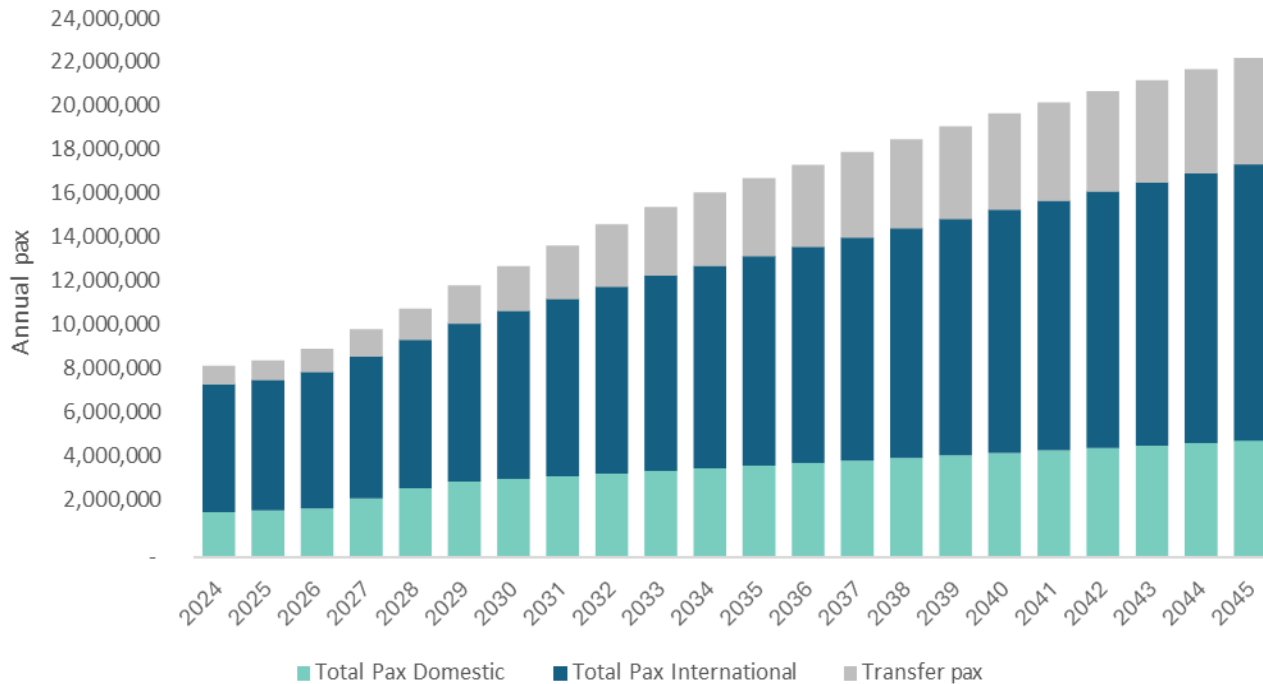


## 03 | JKIA Traffic Forecast

Passenger | ATM | Cargo

# JKIA Forecast: PASSENGER

## Passenger Forecast Results



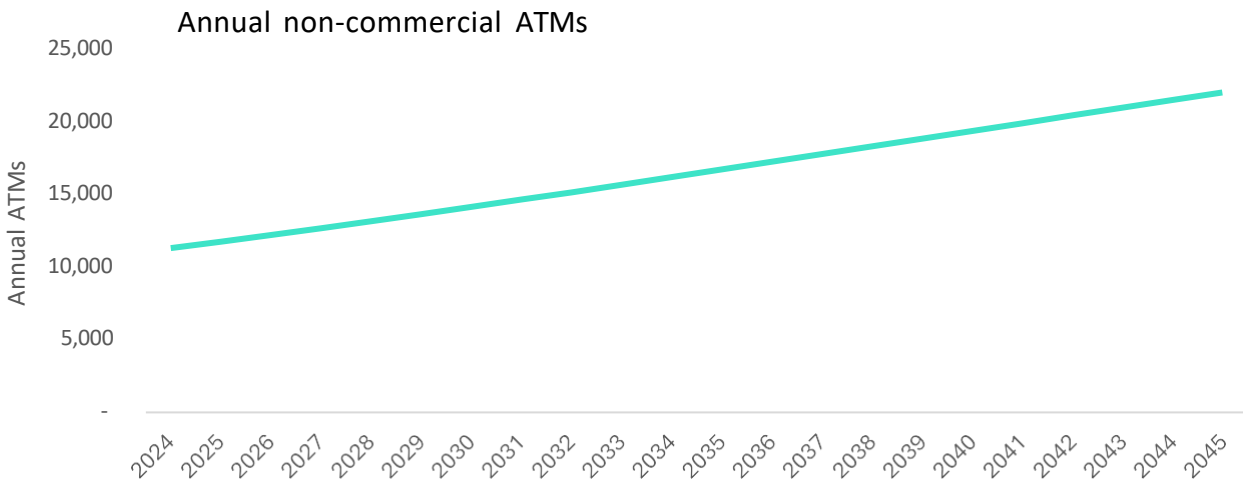
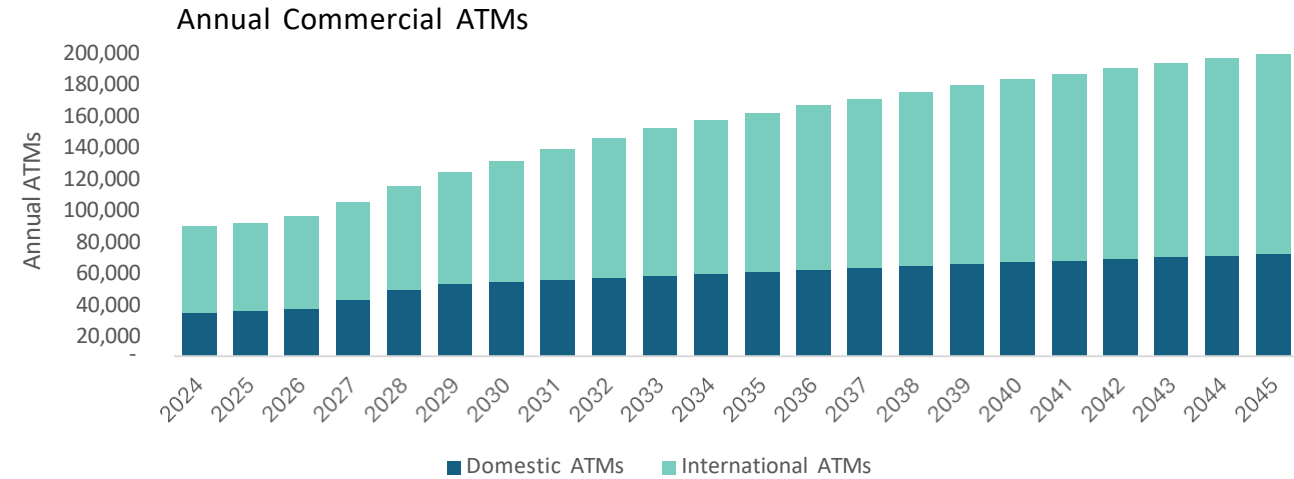
	2025	2030	2035	2040	2045	CAGR
<b>O&amp;D Pax Domestic</b>	2,009,000	3,503,000	4,088,000	4,658,000	<b>5,201,000</b>	4.6%
<b>O&amp;D Pax International</b>	5,742,000	7,529,000	9,387,000	10,879,000	<b>12,367,000</b>	3.7%
<b>Transfer pax</b>	850,000	2,009,000	3,499,000	4,305,000	<b>4,743,000</b>	8.5%
<b>Total Pax</b>	<b>8,601,000</b>	<b>13,041,000</b>	<b>16,974,000</b>	<b>19,843,000</b>	<b>22,311,000</b>	<b>4.6%</b>

### Key Comments

- Strongly growing traffic demand to **22.3 million passengers by 2045** with an overall growth rate of **4.6%**.
- The domestic market is expected to grow at a high rate.
- It is expected that **Kenya Airways** will focus on **international growth** and **Jambo-jet** on the **domestic market**.
- Transfer pax will comprise 21% of total annual traffic including 40% of KQ in 2045.

# 03 | JKIA Forecast: ATM

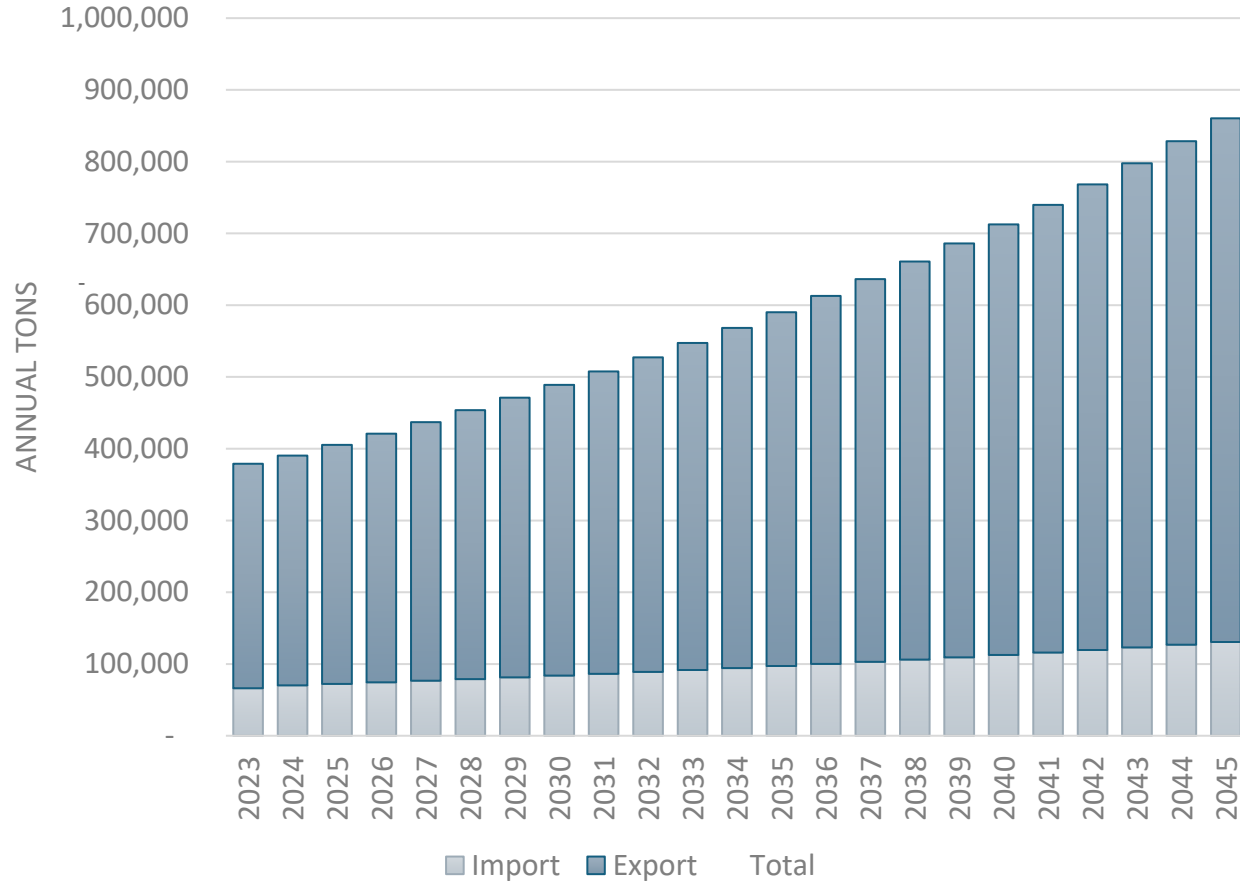
## ATM Forecast Results



## Key Comments

- Commercial ATMs forecast based on passenger growth and load factors. This results in **67,000 domestic ATMs and 133,000 international ATMs**.
- ATMs are expected to grow at a rate of **4.1%** which is slightly low from pax growth due to load factor growth.
- The GA & other ATMs result in a growth from 11,000 movements to 22,000 by 2045, at a 3.2% average growth rate.

## Forecast Cargo



### Key Comments

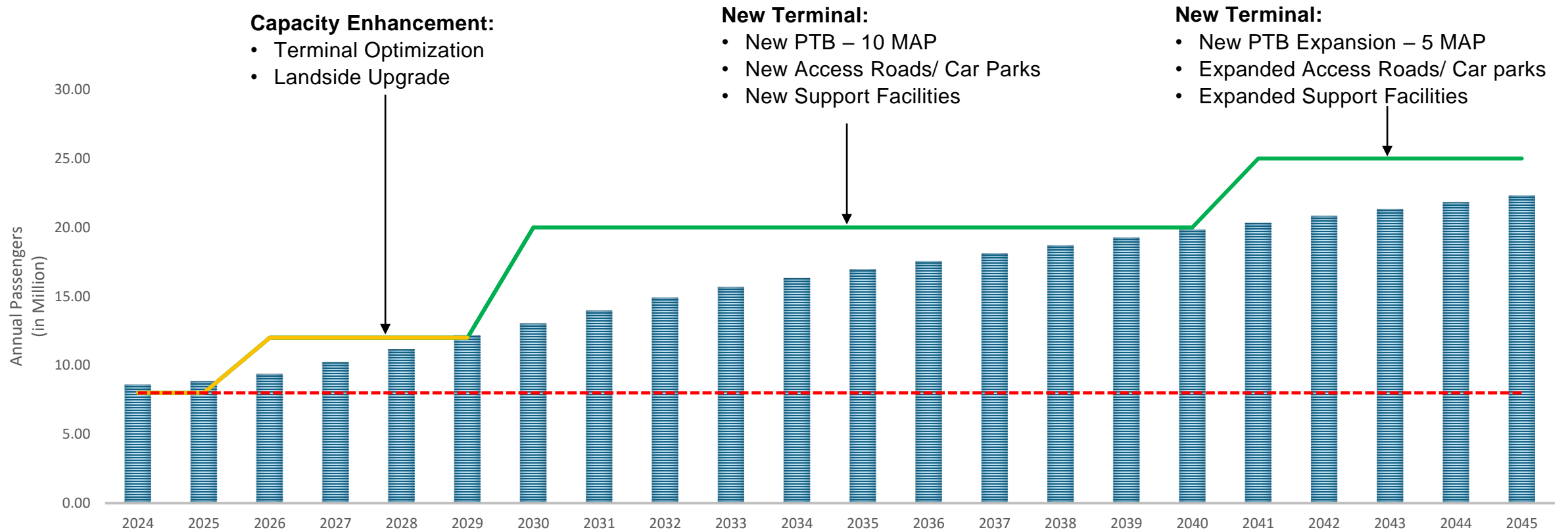
- Cargo volume is expected to grow from 390,000 tons in 2024 to **860,000 tons by 2045** doubling the volume over the forecast period.
- Based on analysis of the schedule of 2025, and maintaining this level, it is expected that 71% is carried on full freighters and the remaining in the belly hold of passenger aircraft.
- **Import** is expected to grow at a steady rate of **3.0%**. However, **Export** cargo volume will grow with faster growth rate of **4.0%**.



## 04 | Master Plan Outcomes

Airfield | Terminal | MP Layout

# 04 | Master Plan Outcomes: **Terminal**



### Capacity Enhancement:

- Terminal Optimization
- Landside Upgrade

### New Terminal:

- New PTB – 10 MAP
- New Access Roads/ Car Parks
- New Support Facilities

### New Terminal:

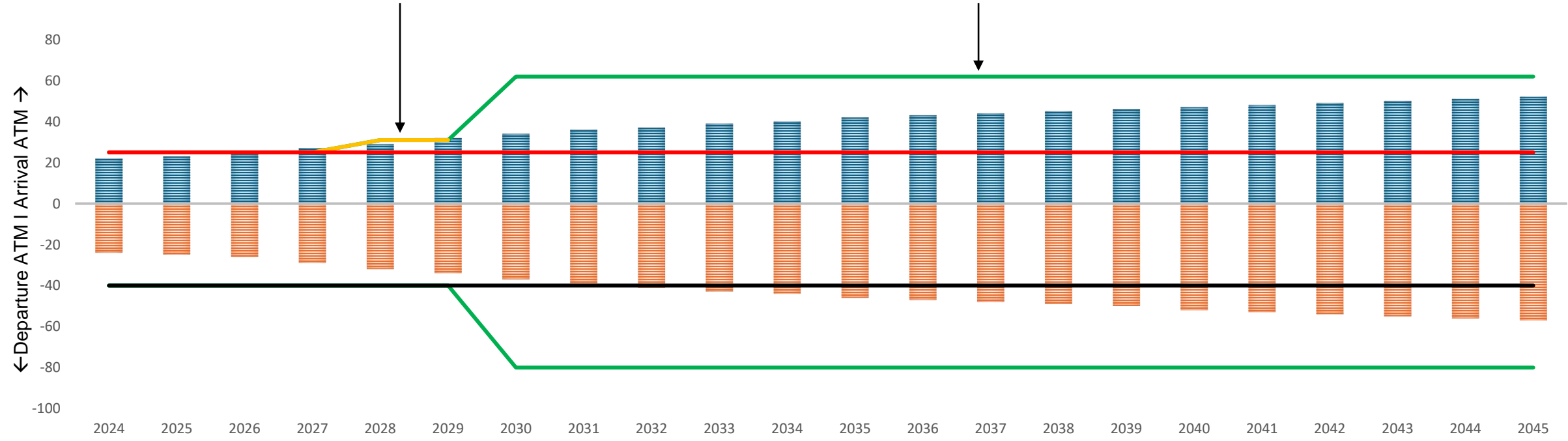
- New PTB Expansion – 5 MAP
- Expanded Access Roads/ Car parks
- Expanded Support Facilities

- Current Terminal Capacity Limit: Saturated
- Earliest possibility for New Terminal, landside and support facilities: 2030
- Immediate capacity enhancement solutions required for catering Demand from 2026 – 2029

# Master Plan Outcomes: **Airfield**

- Capacity Enhancement:**
- New Runway Exit
  - Partial parallel Taxiway

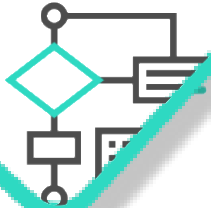
- Airfield Expansion:**
- New Runway (2<sup>nd</sup>)
  - New Taxiway System



- Current Airfield Capacity Limit: 2027
- Earliest possibility for New Runway and Taxiway: 2030
- Immediate capacity enhancement solutions required for catering Demand from 2027 – 2029

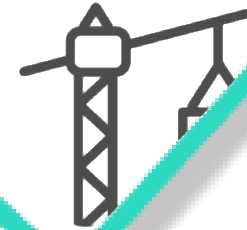
# 04 | Master Plan Outcomes: **Summary**

## Immediate Works



- Existing Airfield Upgrade
- Existing Terminal Optimization
- Existing Landside Upgrade

## Expansion Works



- New Runway
- New Dual Taxiway System
- New Terminal
- New Support Facilities

- New Airfield, Terminal, Landside and support facilities: 2030 – 2039
- Expansion of Apron, Terminal, landside and support facilities: 2040 - onwards
- Airfield upgrade, capacity enhancement solutions for Terminal and Landside to cater Demand from 2026 – 2029



**Aerial View**

# 04 | Master Plan Outcomes: **MP Layout**

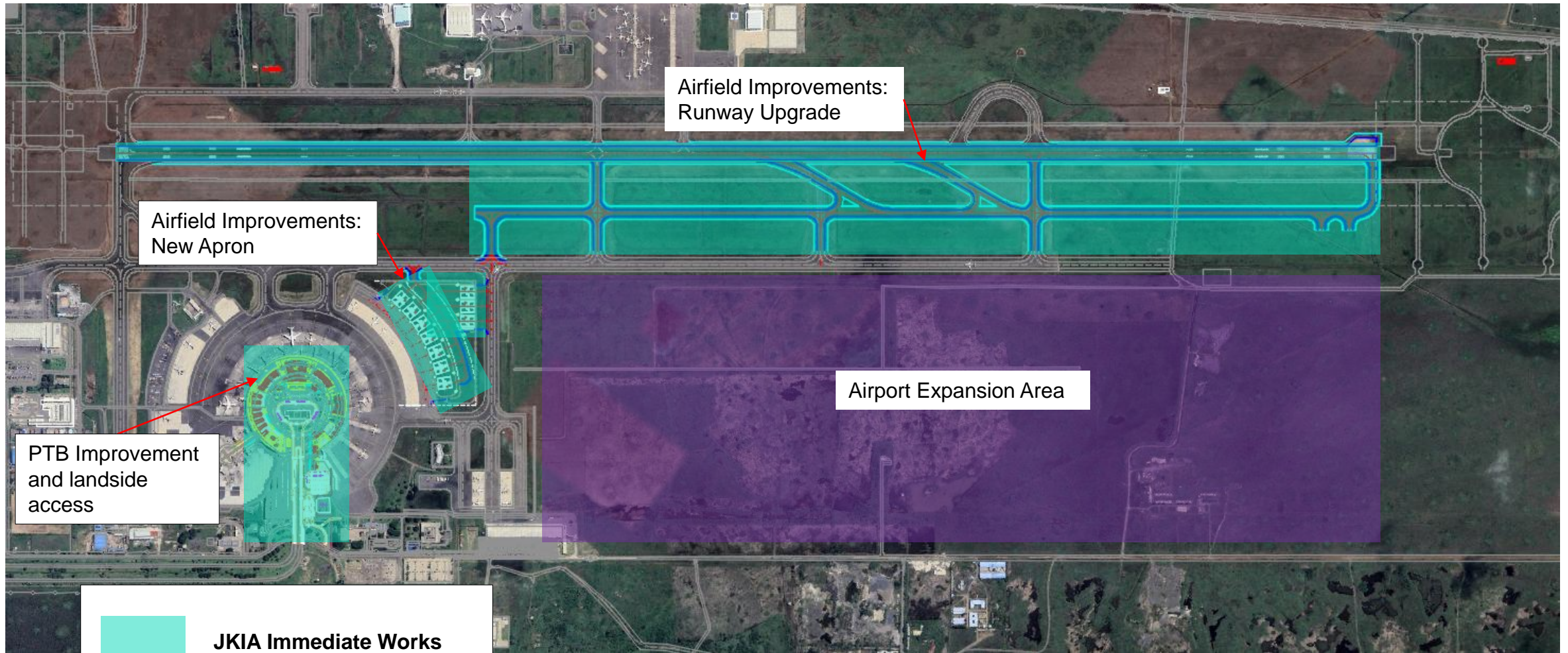




## 04 | COMPONENT 1:

# Improvement of Existing Airfield

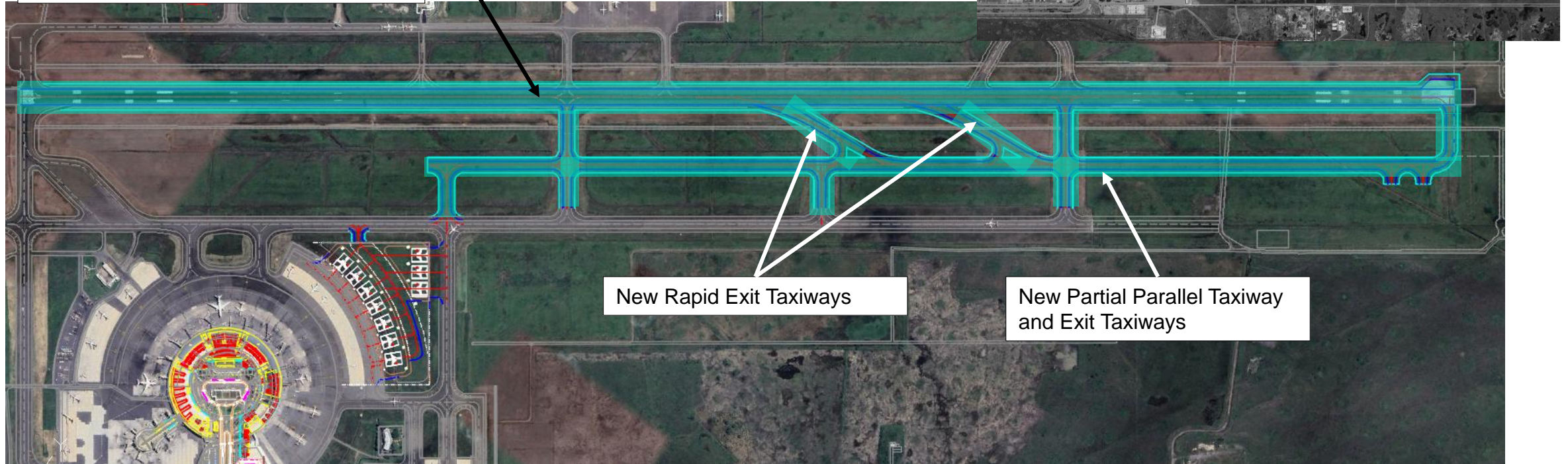
# Component 1 - Summary



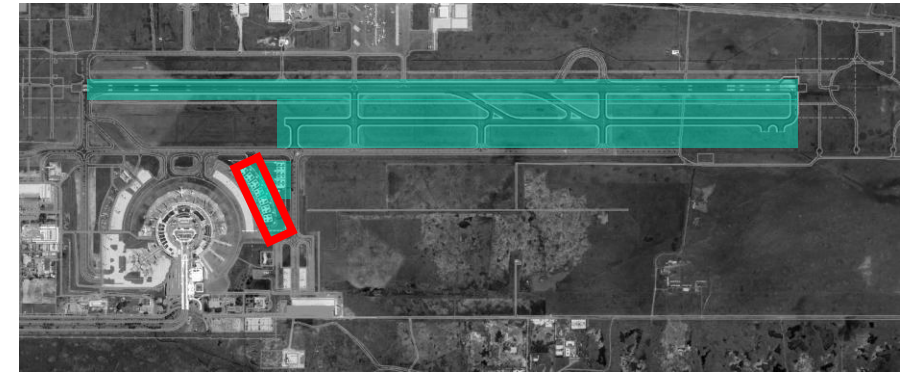
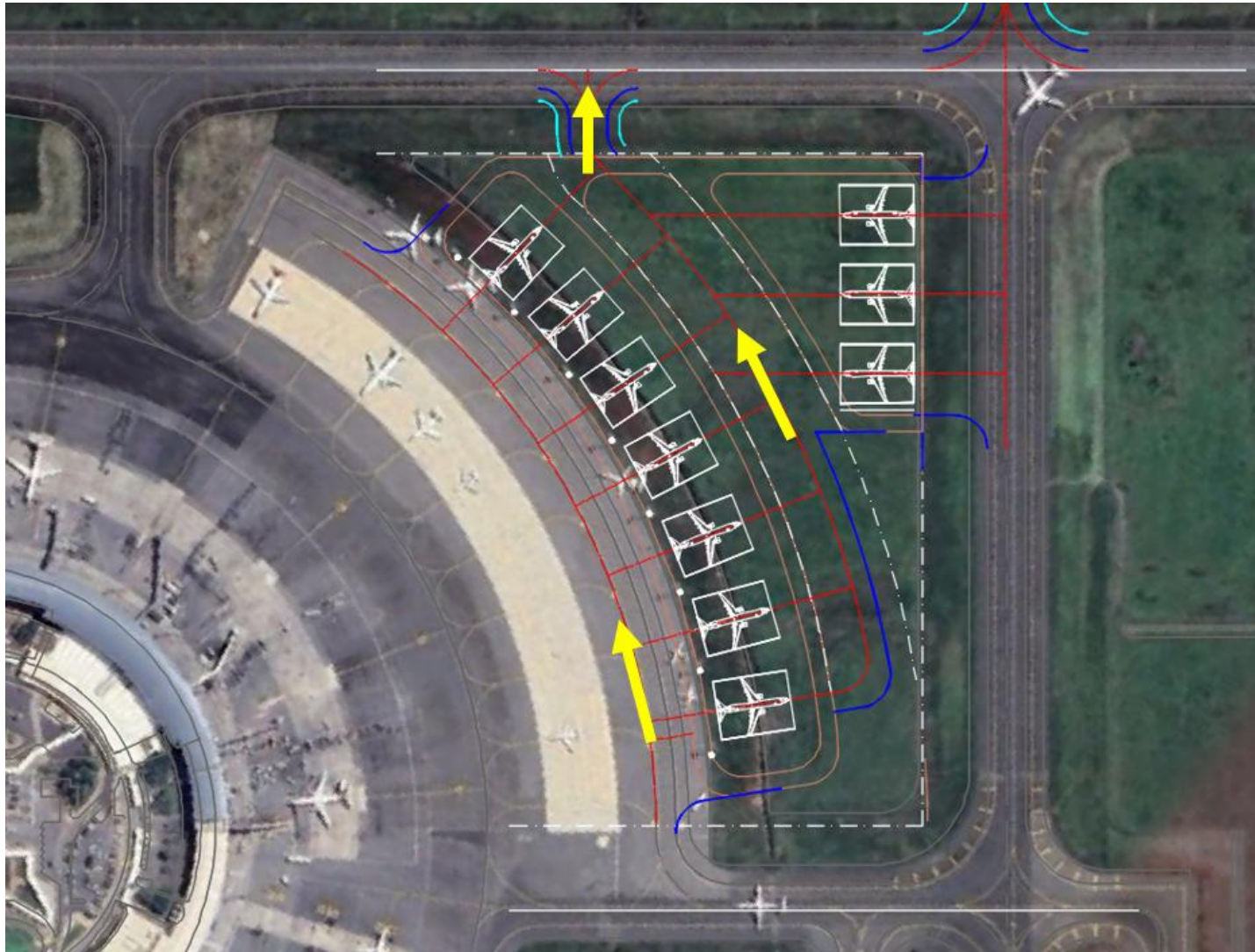
# Component 1 - Airfield Improvements

Runway 06/24 Upgrade: **Code 4F**

- Pavement testing and rehabilitation
- NAVAIDS
- AGL
- Utilities
- New AGL Substations



# Component 1 - New Apron



## New Apron:

- Code C Stands – Taxi in Taxi out Configuration
- Pavement works
- Utilities
- Apron services include:
  - Apron Floodlights
  - Fire hydrants
  - Jet fuel and EFSO
  - CCTV
  - Emergency Phones
- GSE Roads and staging areas

## Important interfaces:

- Existing Floodlights
- Connection with existing PTB



## **05 | COMPONENT 2:**

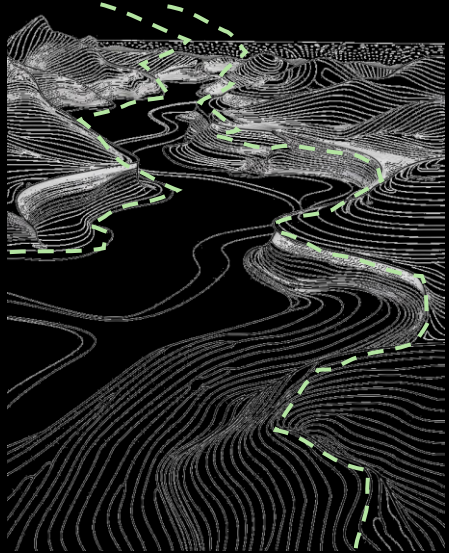
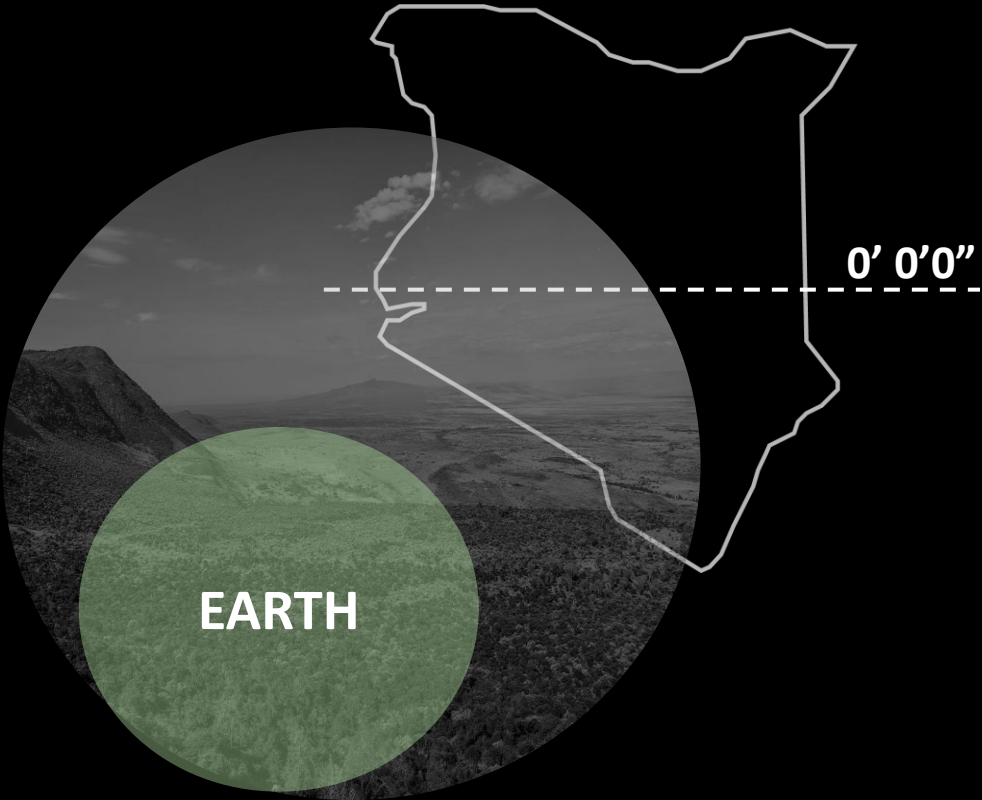
# **Improvement & Renovation of Existing Terminals**

# Project Conceptual Underpinnings

# Concept



# Concept



*A monumental tectonic system defining Kenya's territorial identity — expressed through escarpments, valleys, and layered landforms.*

## **The Great Rift Valley Kenya**

# Concept

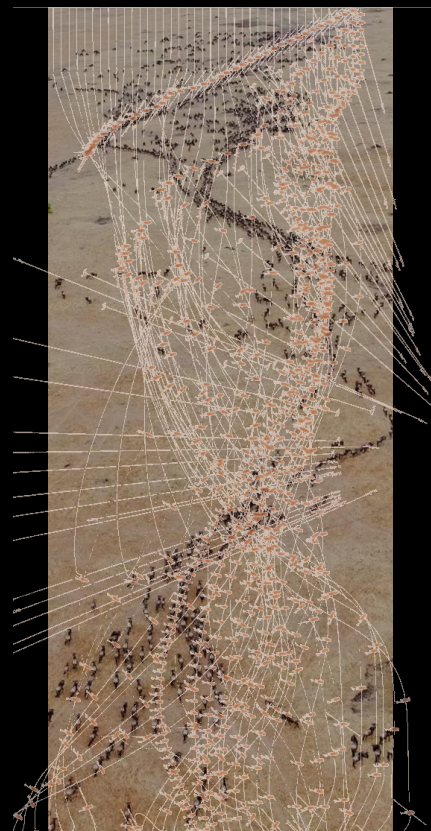


**MOVEMENT**



**LOCAL RHYTHMS**

*Through vibrant attire, intricate beadwork, and ceremonial dance, Maasai culture expresses movement as rhythm — collective and rooted in community.*



**TERRITORIAL FLOW**

*Across the savannah, large-scale migratory paths trace powerful directional systems shaped by landscape and instinct.*



**OPEN HORIZONS**

*Kenya's vast coastlines reflect a landscape defined by continuity, connection, and movement.*

# Concept



PEOPLE

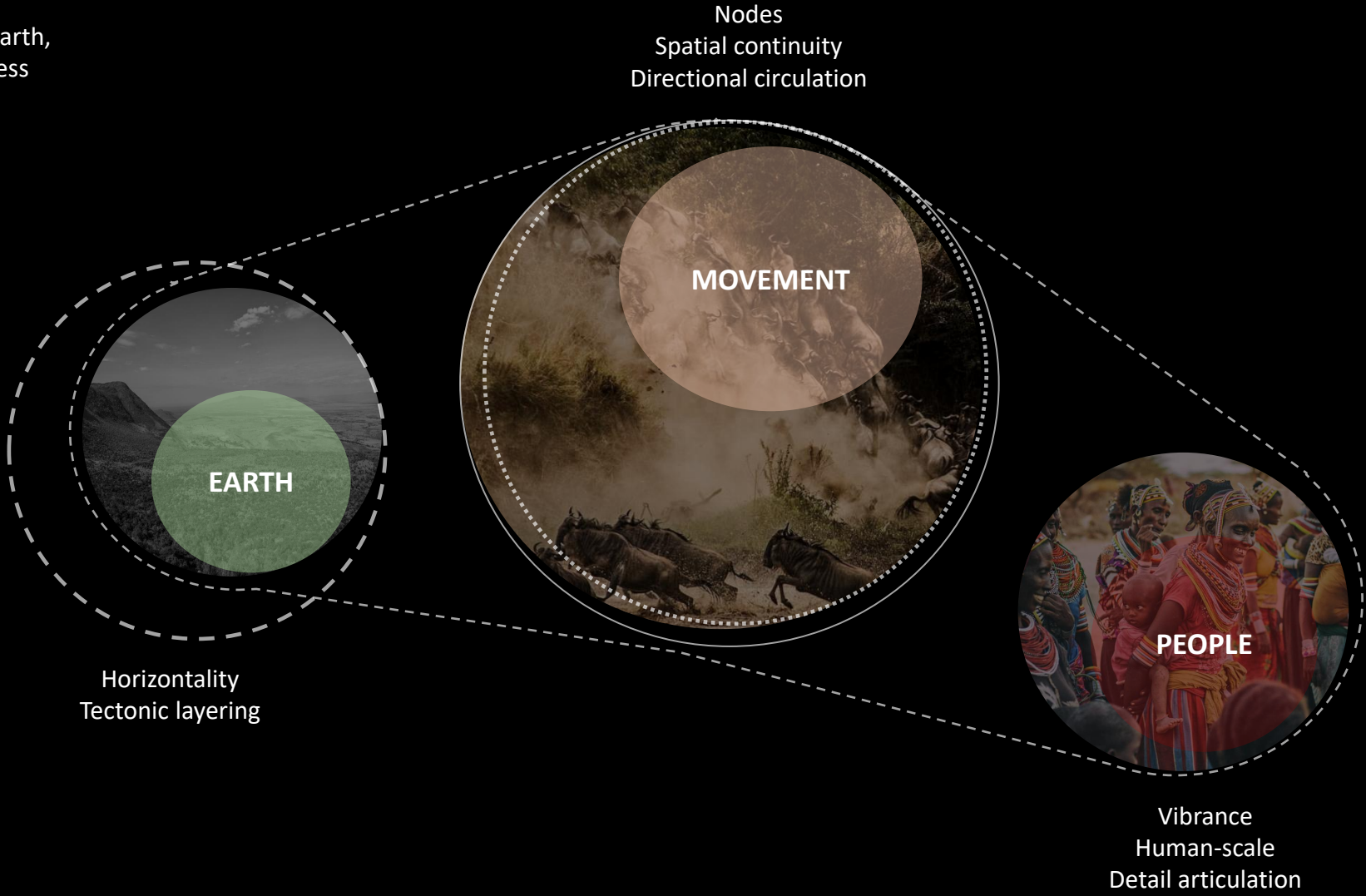


## WOVEN HERITAGE

*Vibrant textiles, intricate beadwork, and rhythmic drumbeats reflect a culture shaped by pattern, craft, and collective expression — where material and movement are deeply intertwined.*

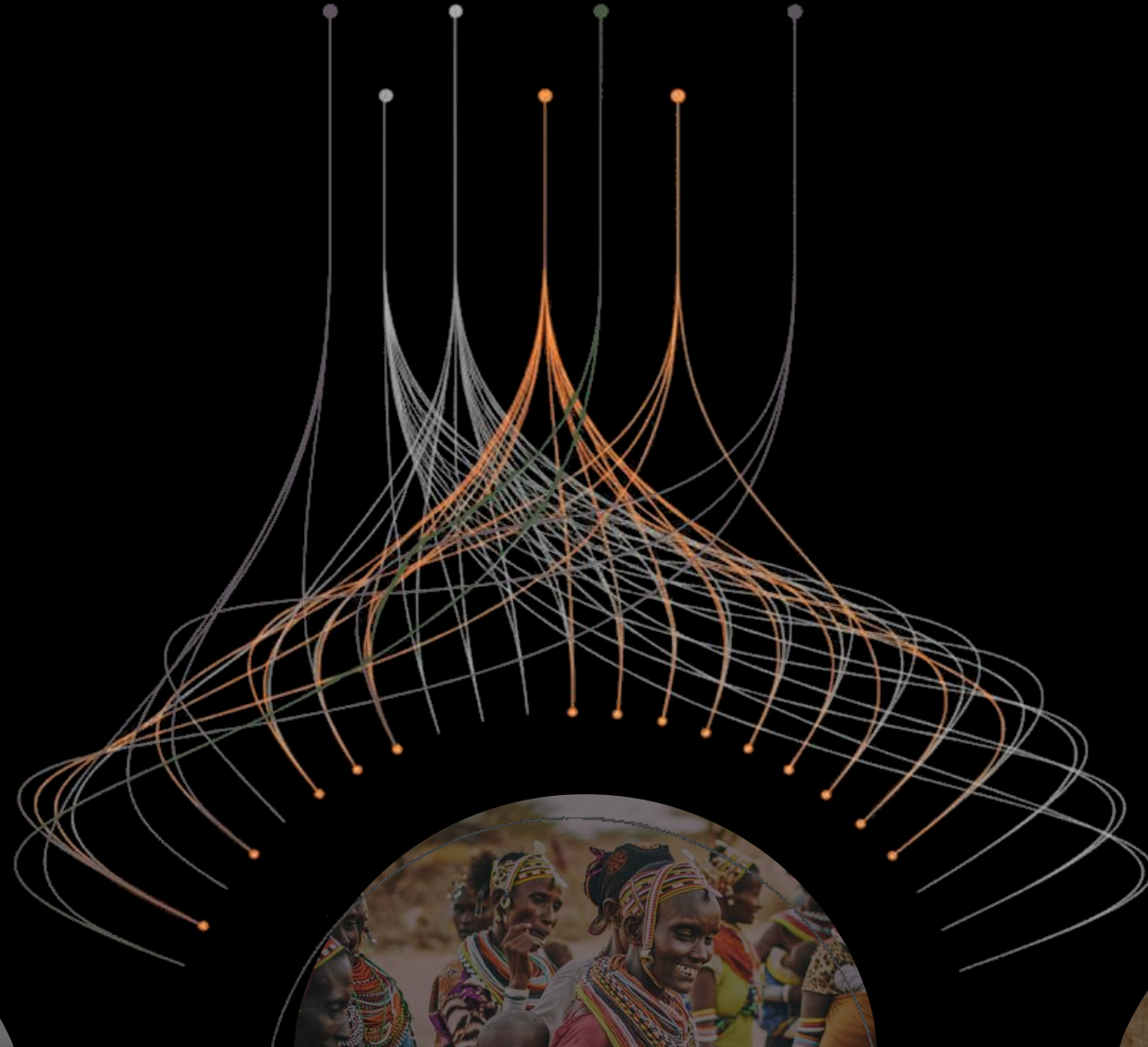
# Concept

Gateway Sculpted by the pulse of the earth, the rhythm of the people, and the endless flow of the migration

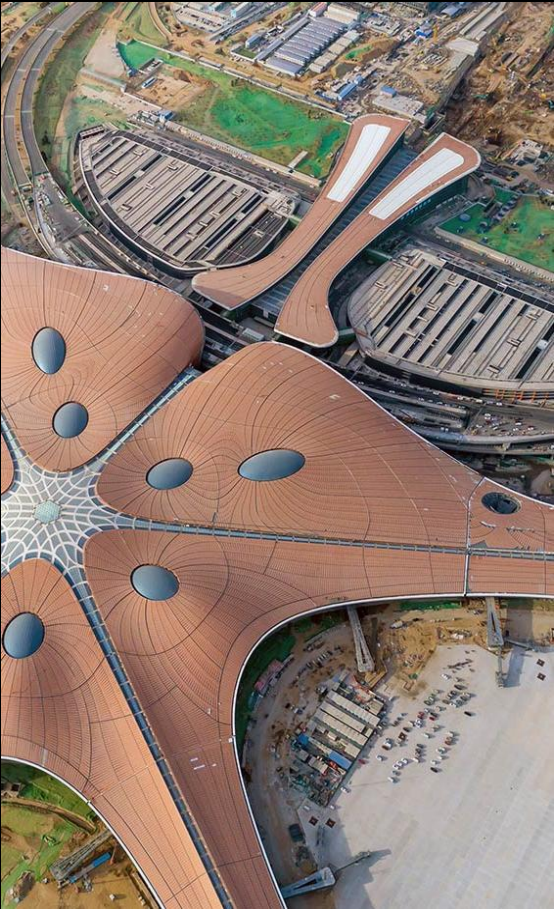


# Concept

***Vibrant central node defined by Local Rhythms***  
*creating a space where the movement of the world meets the heart of Kenya.*



# Benchmarking



Beijing Daxing International Airport – China

*Monumental radial form expressing centralized movement and civic scale.*



Beijing Daxing International Airport – China

*Fluid structural canopy articulating spatial continuity and movement.*



Chhatrapati Shivaji Int. Airport T2 – India

*Cultural abstraction embedded within structural form and ceiling articulation.*



Marrakech Menara Airport – Morocco

*Patterned façade and canopy integrating climatic performance with regional identity.*

# Benchmarking



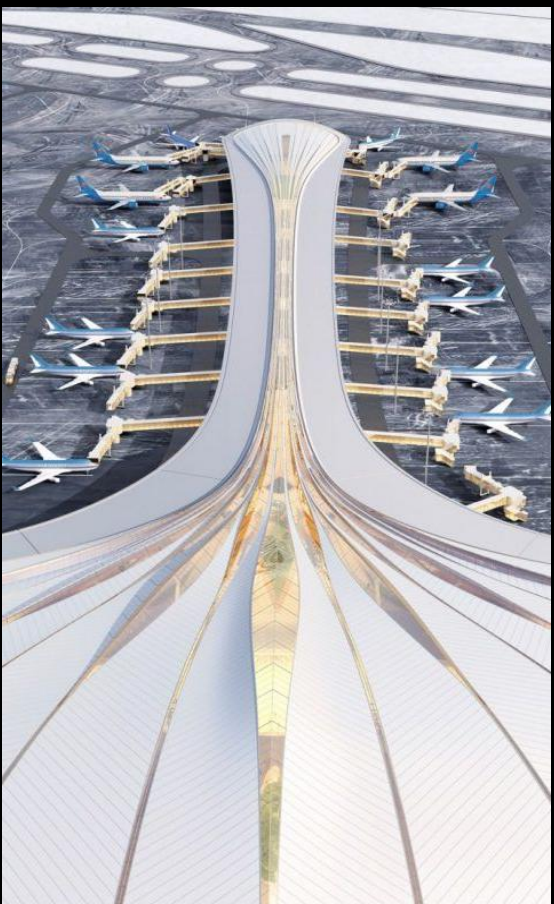
Zayed International Airport – Abu Dhabi

*Fluid terminal form expressing desert flow and global connectivity.*



Madrid-Barajas Airport

*Rhythmic timber ribs merge structural logic with regional material identity.*



Terminal 3 of Changchun airport

*Rhythmic flowing ribs*



Terminal 3 of Harbin Taiping International Airport in China.

*Patterned façade and canopy integrating climatic performance with regional identity.*

# Key Considerations



*Inspiring from the materiality and elements of vernacular Kenyan architecture.*



*Using local flora and fauna to connect the outside landscape with the inside.*



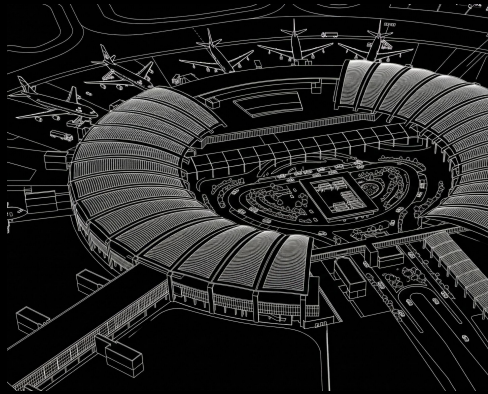
*Natural lighting and solar light filtration, using locally sourced materials.*



*Movement feels **uninterrupted**, rhythmic elements that act as a guide for the users.*

# Design Interventions

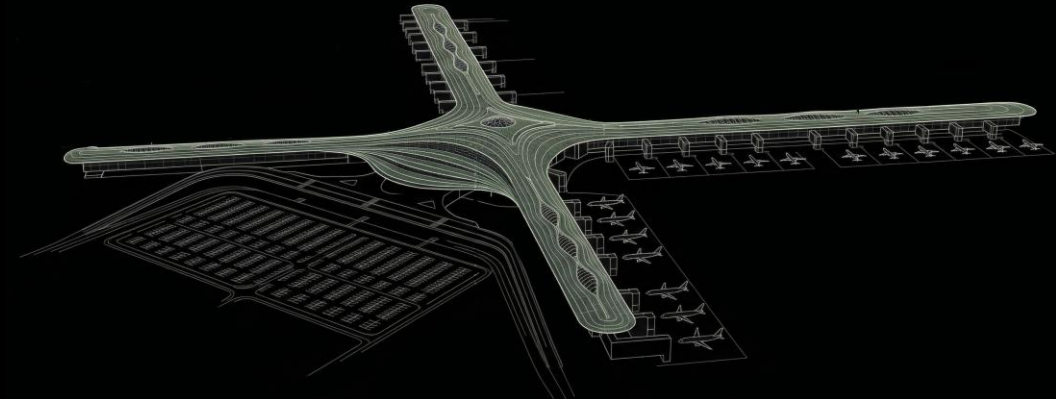
**A**



## ***Existing Airport Adaptation***

*Intended to create a sustainable and long-term solution through Utilizing the existing Terminals and fitting out Centralized facilities*

**B**



## ***Airport Expansion***

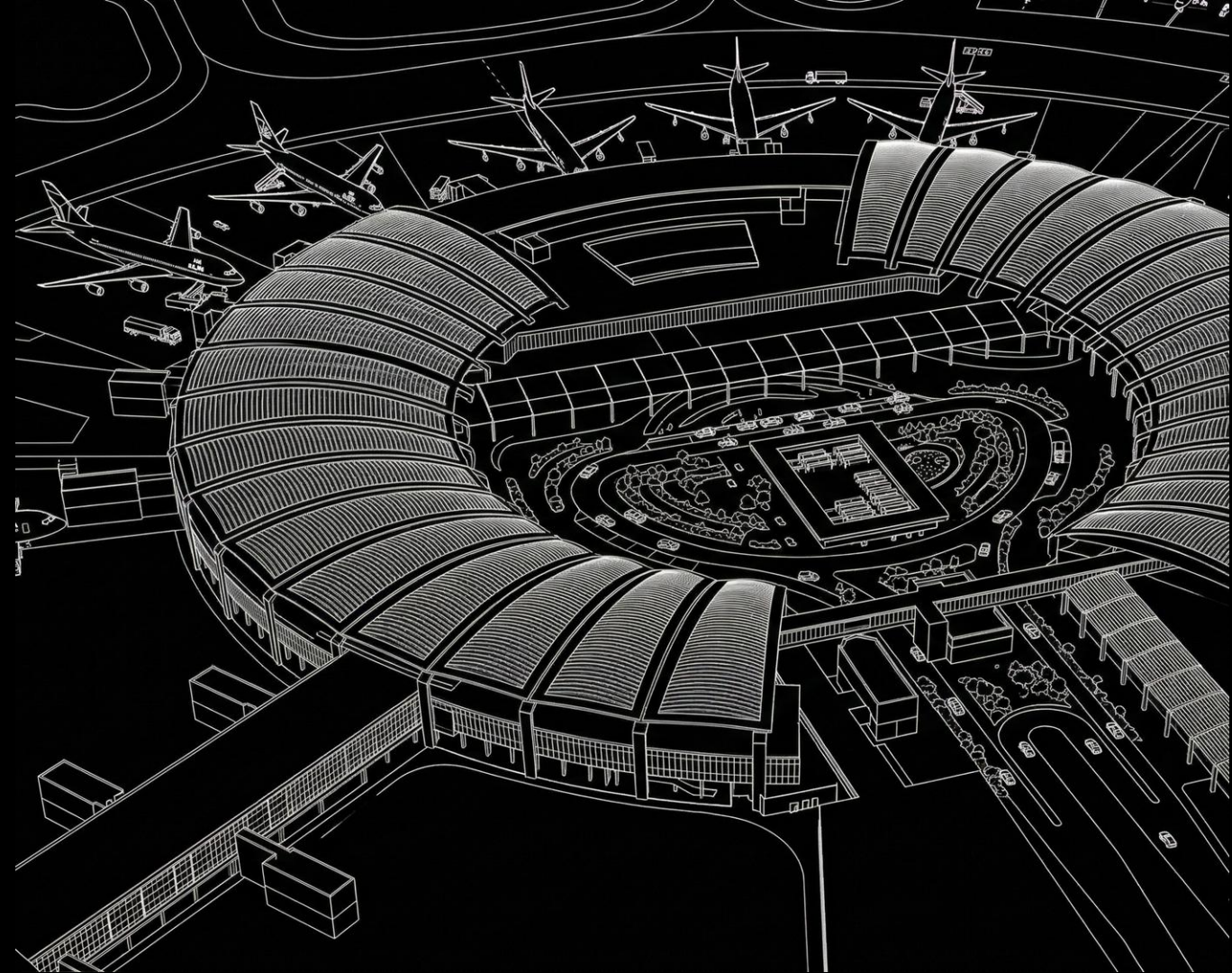
*Intended to enhance overall airport capacity, level of service in line with international standards.*

# Design Interventions

A

## ***Existing Airport Adaptation***

*Intended to create a sustainable and long-term solution through Utilizing the existing Terminals and fitting out Centralized facilities*



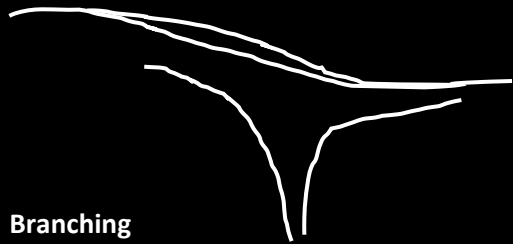
*Intended to enhance overall airport capacity, level of service in line with international standards.*

# Design Approach

## Existing Airport Adaptation



Natural elements



Branching



Modularity



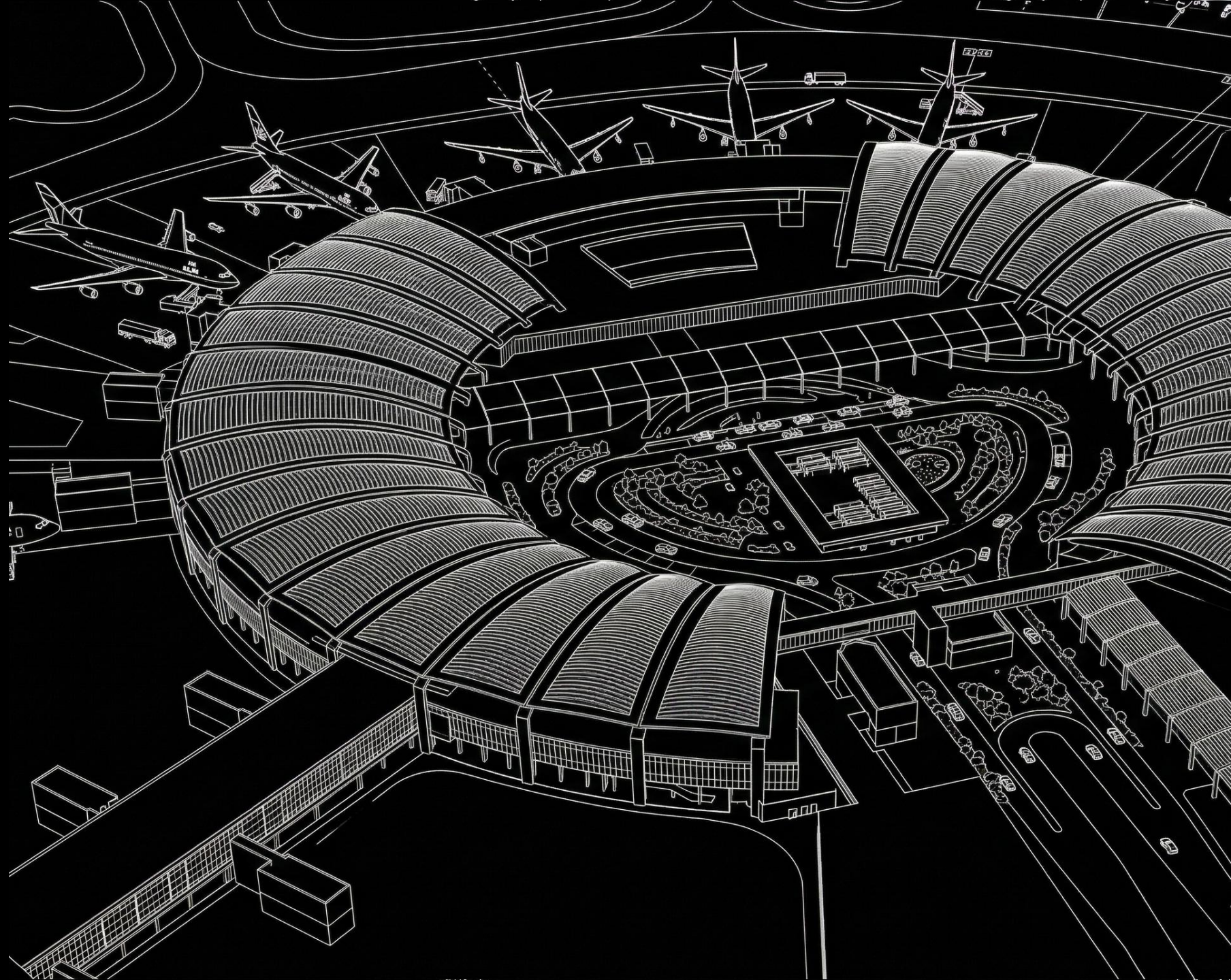
Iterative  
Tectonics

# Design Approach

## *Existing Airport Adaptation*

*Intended to create a sustainable and long-term solution through Utilizing the existing Terminals and fitting out Centralized facilities*

- ▶ *Enhance the airport identity and passenger experience.*
- ▶ *Draw inspiration from natural forms and structural logic.*
- ▶ *Adapt the design to the existing terminal conditions.*



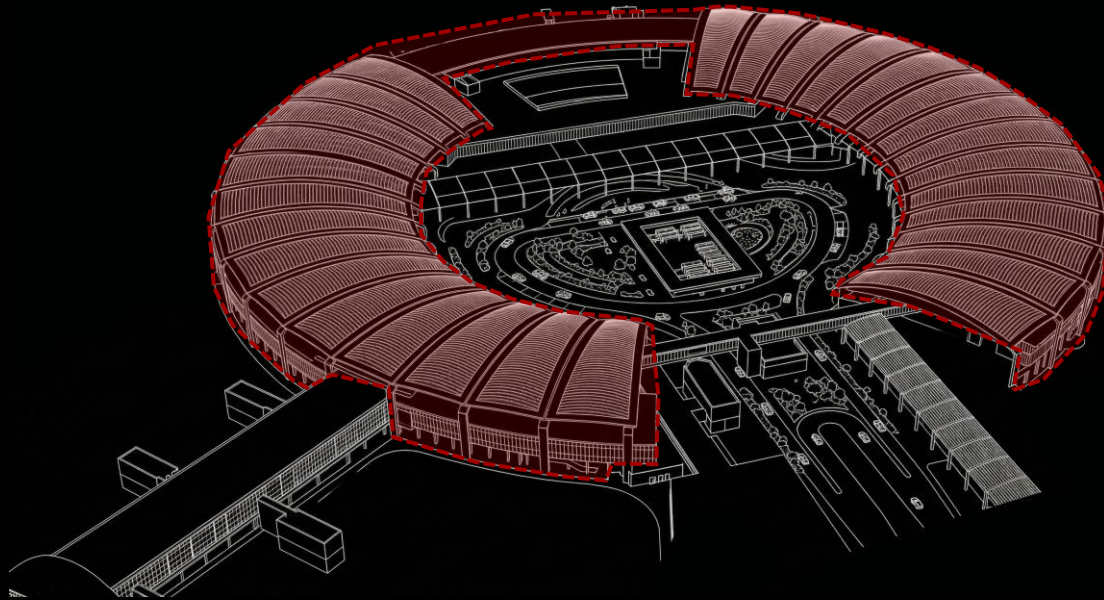
# Design Approach

## Existing Airport Adaptation



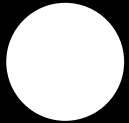
**A.**  
*The Holistic Horizon*

*This design provides complete, immersive overhaul, extending the narrative across the entire internal shell of the terminal—all walls, from the central hub to the outer gate lounges.*



# Design Approach

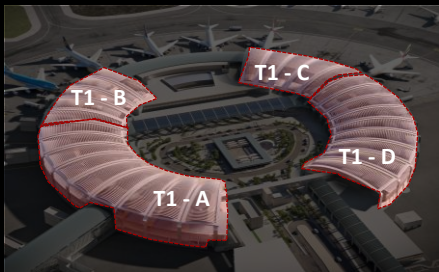
## Existing Airport Adaptation



### A. The Holistic Horizon

This design approach integrates the existing geometry to:

- Reintroduce the terminal using a new holistic architectural expression.
- Replace existing roofs in T1-B, C & D.



# Design Approach

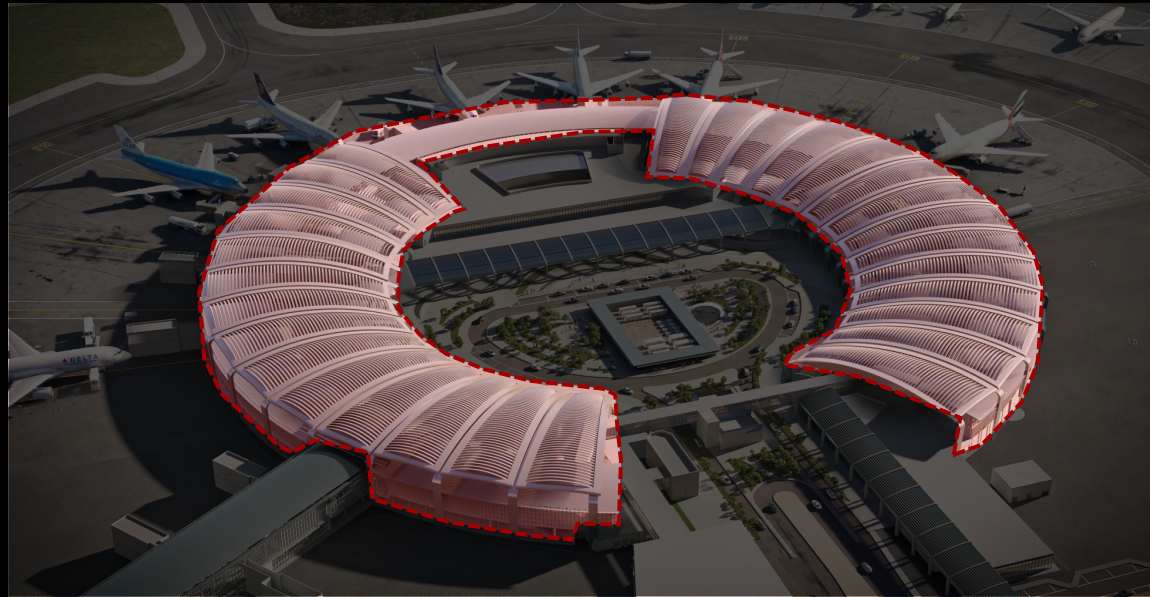
## *Existing Airport Adaptation*



**A.**

*The Holistic Horizon*

Key Strategy

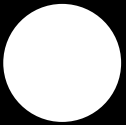


**Extend from  
airside to  
landside**

**Introduce a new  
roof covering the  
entire terminal**

# Design Approach

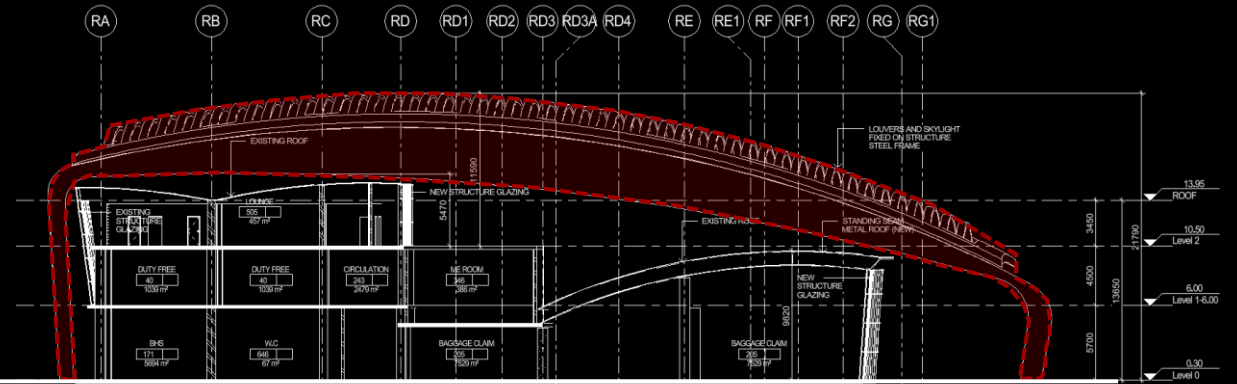
## Existing Airport Adaptation



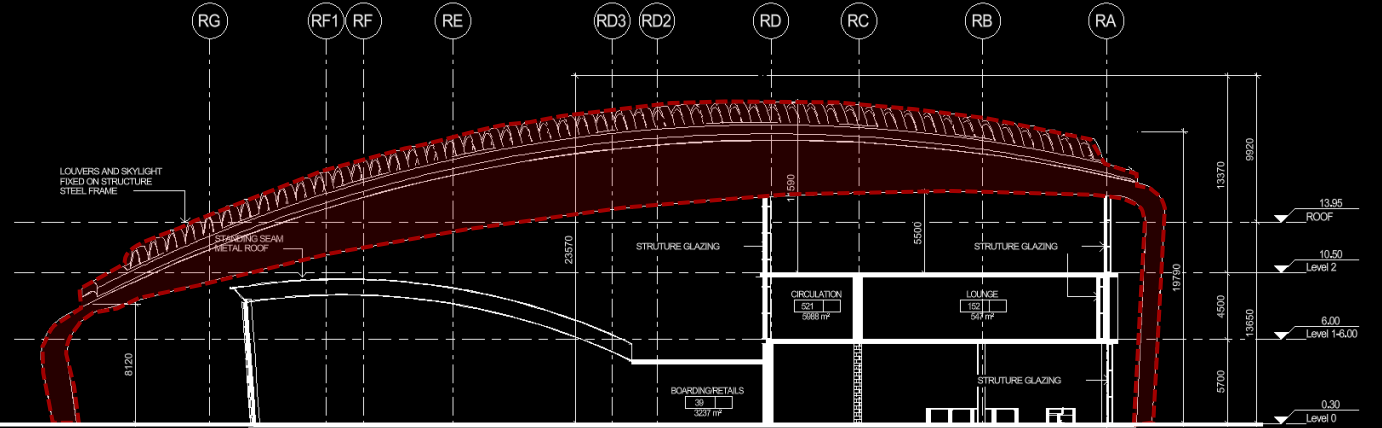
**A.**  
*The Holistic Horizon*

*Independent Full-Span  
Canopy with Minimal  
Intervention*

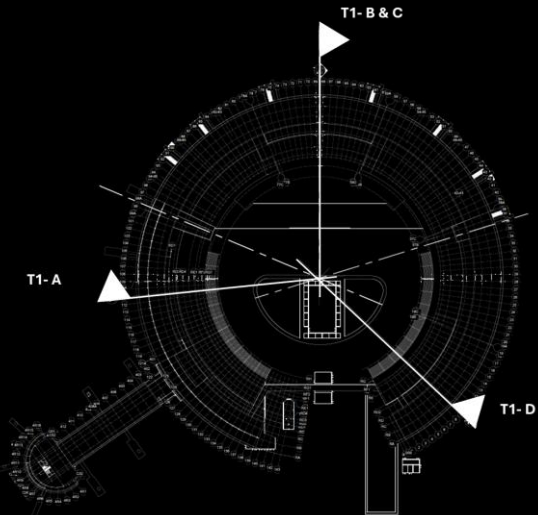
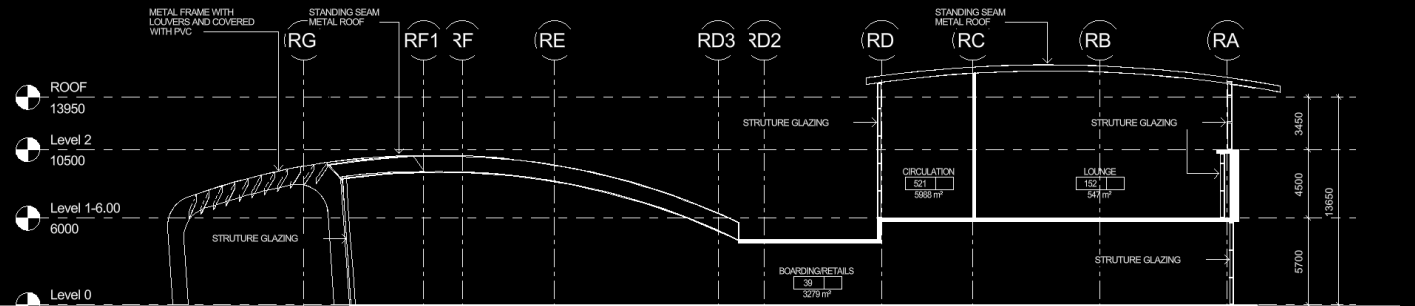
**SECTION  
T1-A**



**SECTION  
T1-D**



**SECTION  
T1-B & C**



- ROOF  
13950
- Level 2  
10500
- Level 1-6.00  
6000
- Level 0  
0300

# Design Approach

*Existing Airport Adaptation*

## Core Interventions

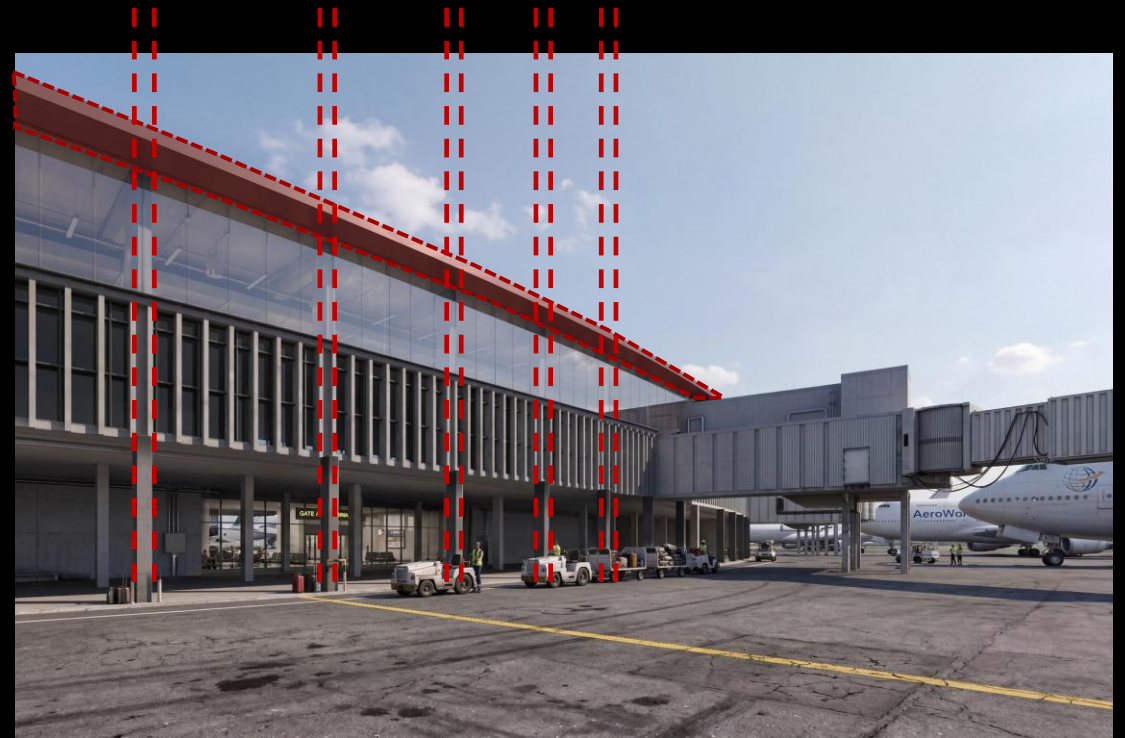
*Fundamental layer transformation addressing core infrastructure and circulation in the existing terminal*

# Design Approach

## *Existing Airport Adaptation*



**Current State**



**After Intervention**

### ***Visual Consistency***

*Implementing a unified material strata across all surfaces to achieve a cohesive identity*

# Design Approach

## *Existing Airport Adaptation*



**Current State**



**After Intervention**

### ***Structural Refurbishment***

*Implementing a unified material strata across all surfaces to achieve a cohesive identity*

# Design Approach

## *Existing Airport Adaptation*



**Current State**



**After Intervention**

### ***The Connector Bridges***

*Upgrading the existing bridges with new cladding, alongside the introduction of additional bridges to directly serve the Level 2 arrival area.*

# Design Approach

## Existing Airport Adaptation



**Current State**



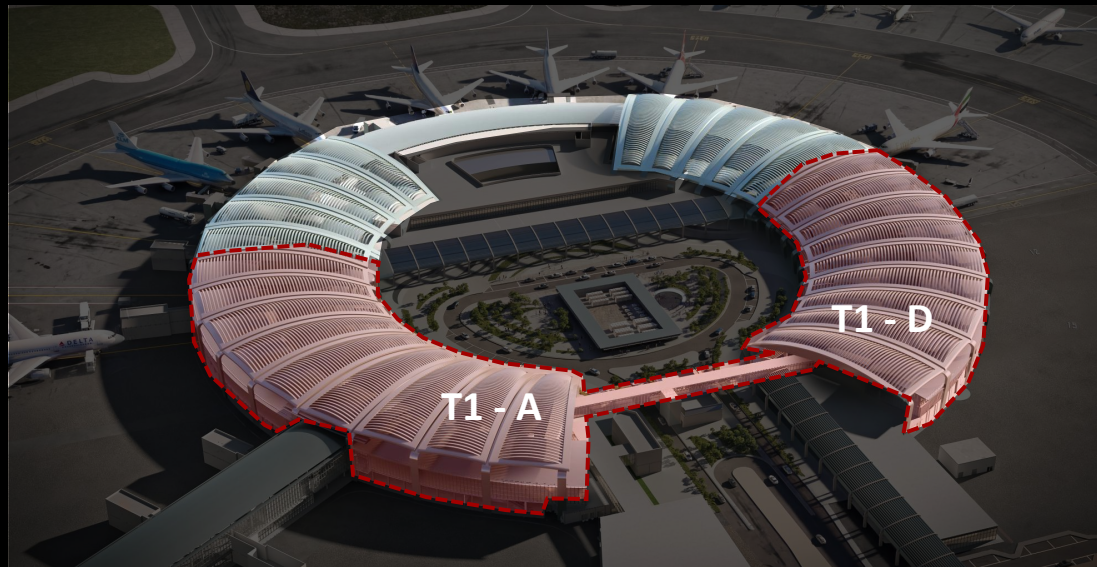
**After Intervention**

### **Connecting T1-A and T1-D**

*Introducing a connecting bridge to provide direct connection between T1-A and T1-D. Optimizing circulation and collapsing travel distances within the terminal volume.*

# Design Approach

## *Existing Airport Adaptation*



**After Intervention**

### ***Connecting T1-A and T1-D***

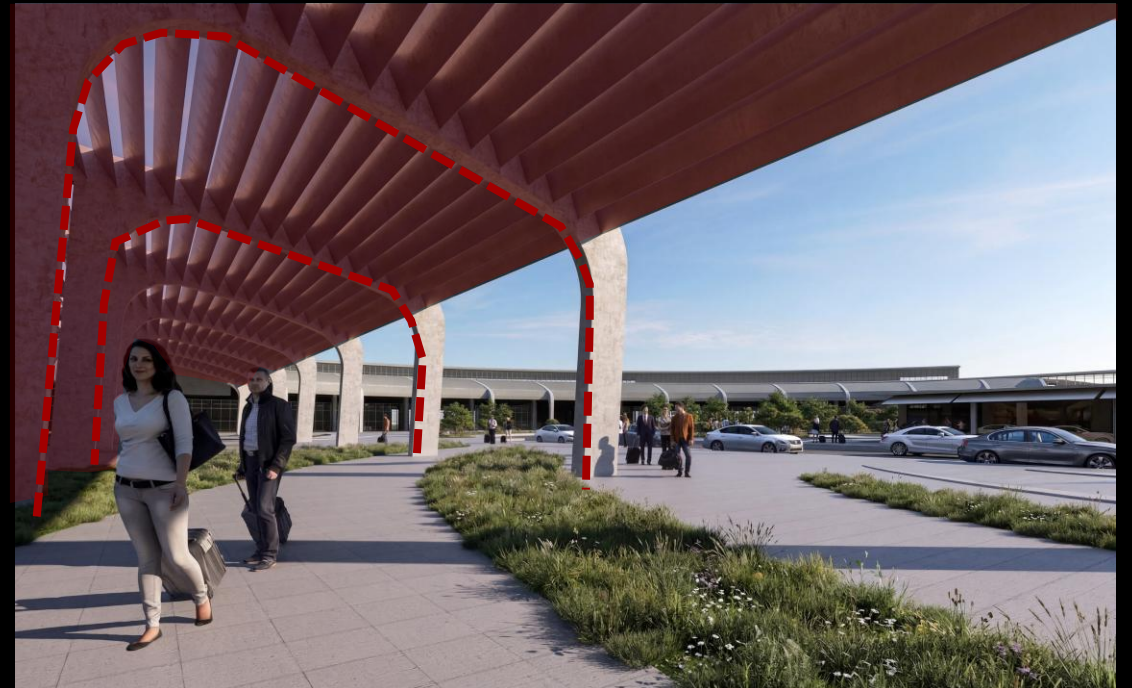
*Introducing a connecting bridge to provide direct connection between T1-A and T1-D. Optimizing circulation and collapsing travel distances within the terminal volume.*

# Design Approach

## *Existing Airport Adaptation*



**Current State**



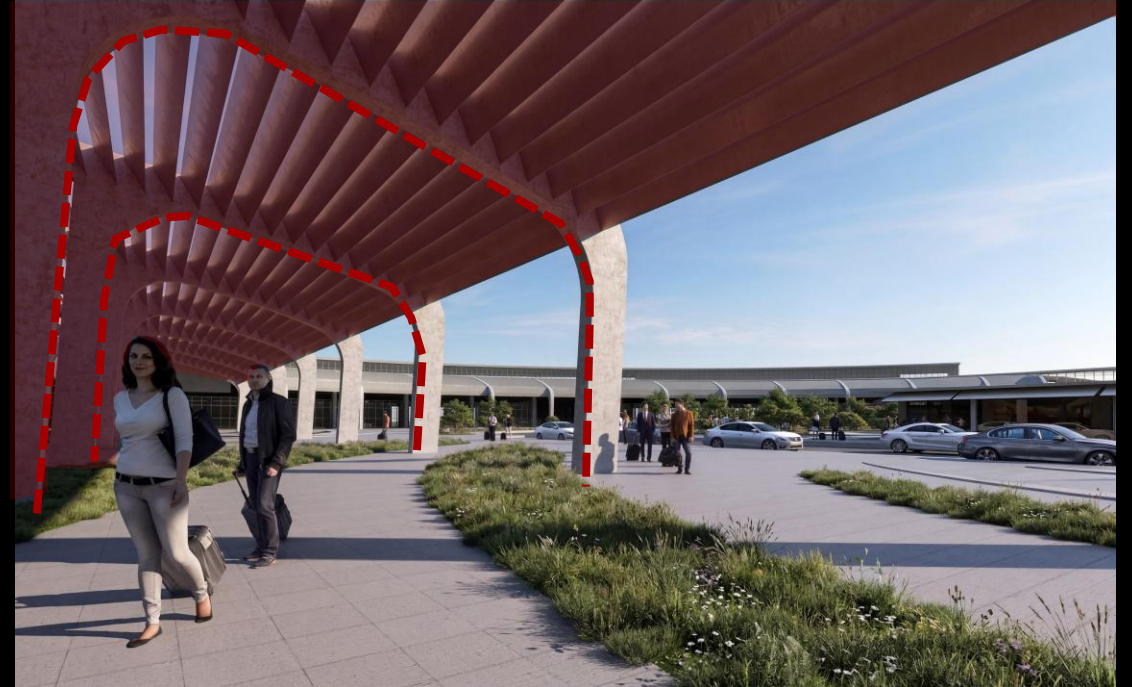
**After Intervention**

### ***New Shade / New Construction Between T1-B & C***

*Setting a clear, defined entrance by introducing new shading elements in front of the new development between T1-B and C. This creates a clear main entrance and improves the overall arrival experience.*

# Design Approach

## *Existing Airport Adaptation*



**After Intervention**

### ***New Shade / New Construction Between T1-B & C***

*Setting a clear, defined entrance by introducing new shading elements in front of the new development between T1-B and C. This creates a clear main entrance and improves the overall arrival experience.*

# PASSPORT CONTROL

# PASSPORT CONTROL

# PAS

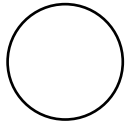


Kenya Airports Authority



# Functional Layouts

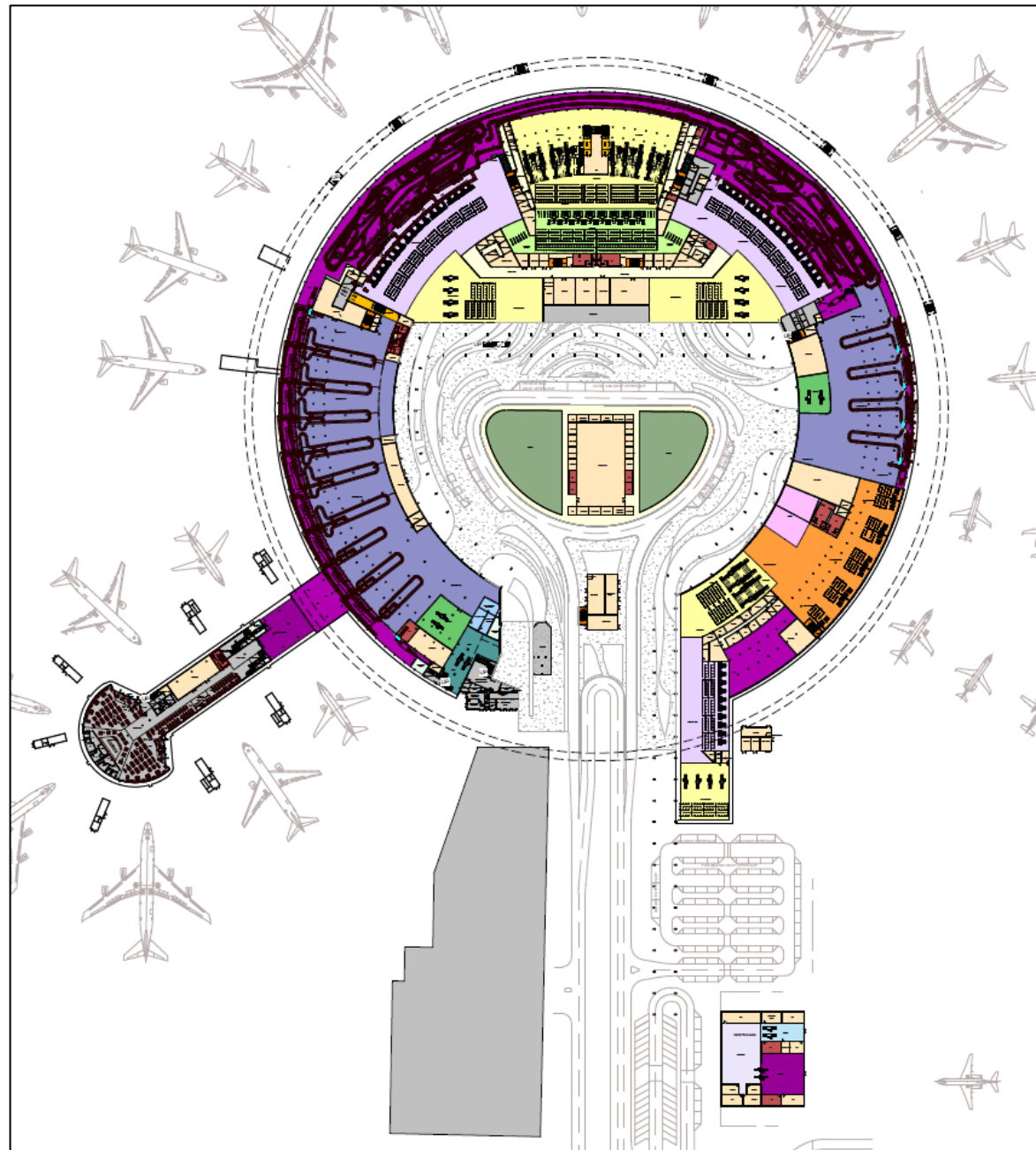
## Existing Airport Adaptation



A.

*The Holistic Horizon*

*Level L0 –  
Apron Level  
Layout*



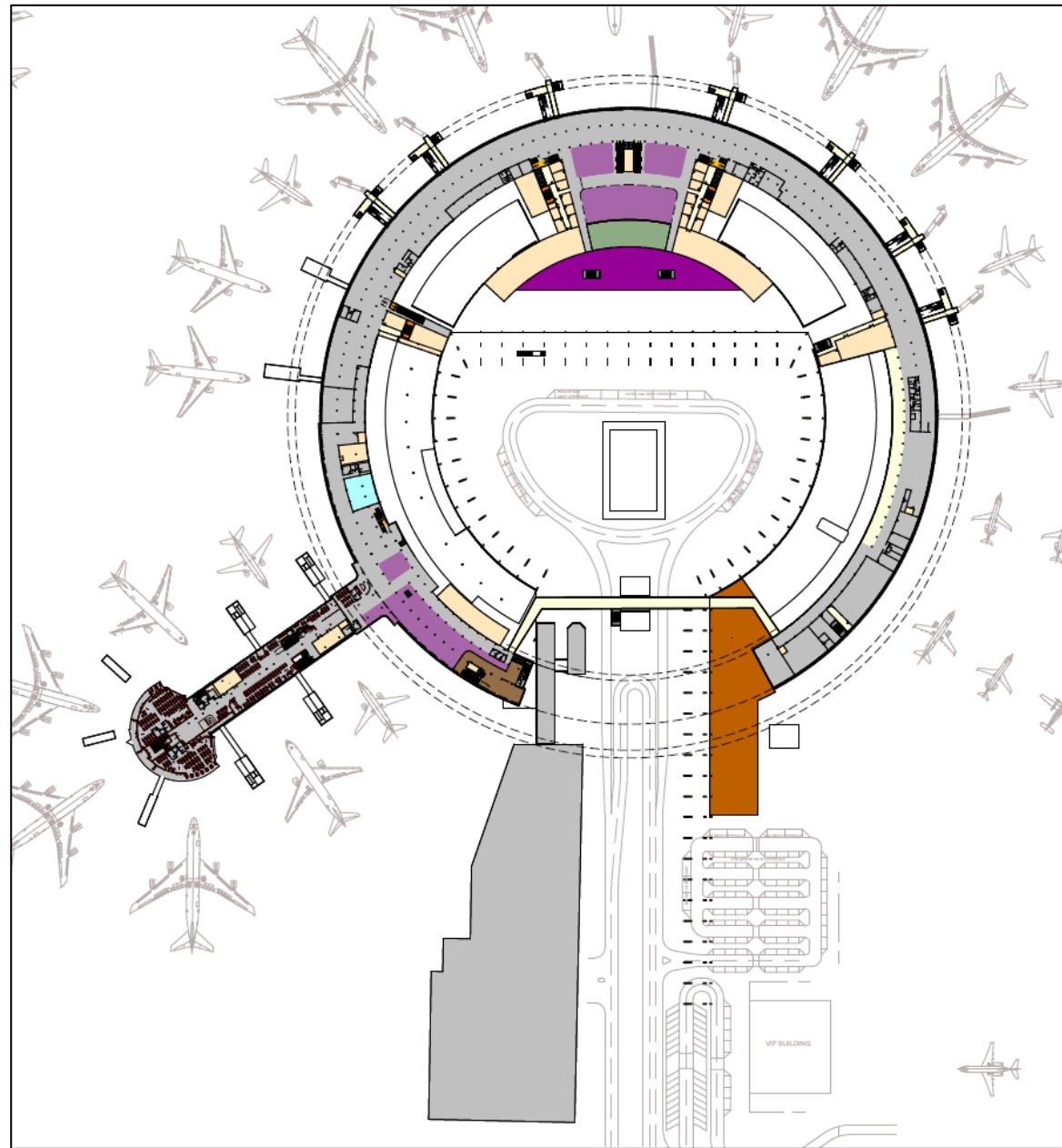
- ARRIVAL
- BAGGAGE CLAIM
- BHS
- BOARDING/RETAILS
- BOH
- BOOTH
- CHECK-IN AREA
- CIRCULATION
- CIRCULATION EXISTING
- CORE & SHELL EXISTING
- CREW
- CUSTOMS
- DEPARTURE
- EL ROOMS
- EXISTING
- GATE EXISTING
- LIFTS
- LIFTS EXISTING
- LIFTS EXITING
- LOBBY EXISTING
- LOST & FOUND
- LOUNGE
- ME ROOM
- ME ROOMS
- MEP/BOH
- MEP/BOH EXISTING
- OFFICES
- PASSPORT CONTROL
- PRE-SCREENING
- REMOTE DEPARTURES EXISTING
- REMOTE LOUNGE
- RETAIL
- ROOF GARDEN
- STAIRS
- STAIRS EXISTING
- STAIRS/ESCALATORS
- STORAGE
- TELECOM ROOM
- W.C
- W.C EXISTING
- WASTE ROOM

# Functional Layouts

## Existing Airport Adaptation

A.  
The Holistic Horizon

Level L1 –  
Departures  
Layout



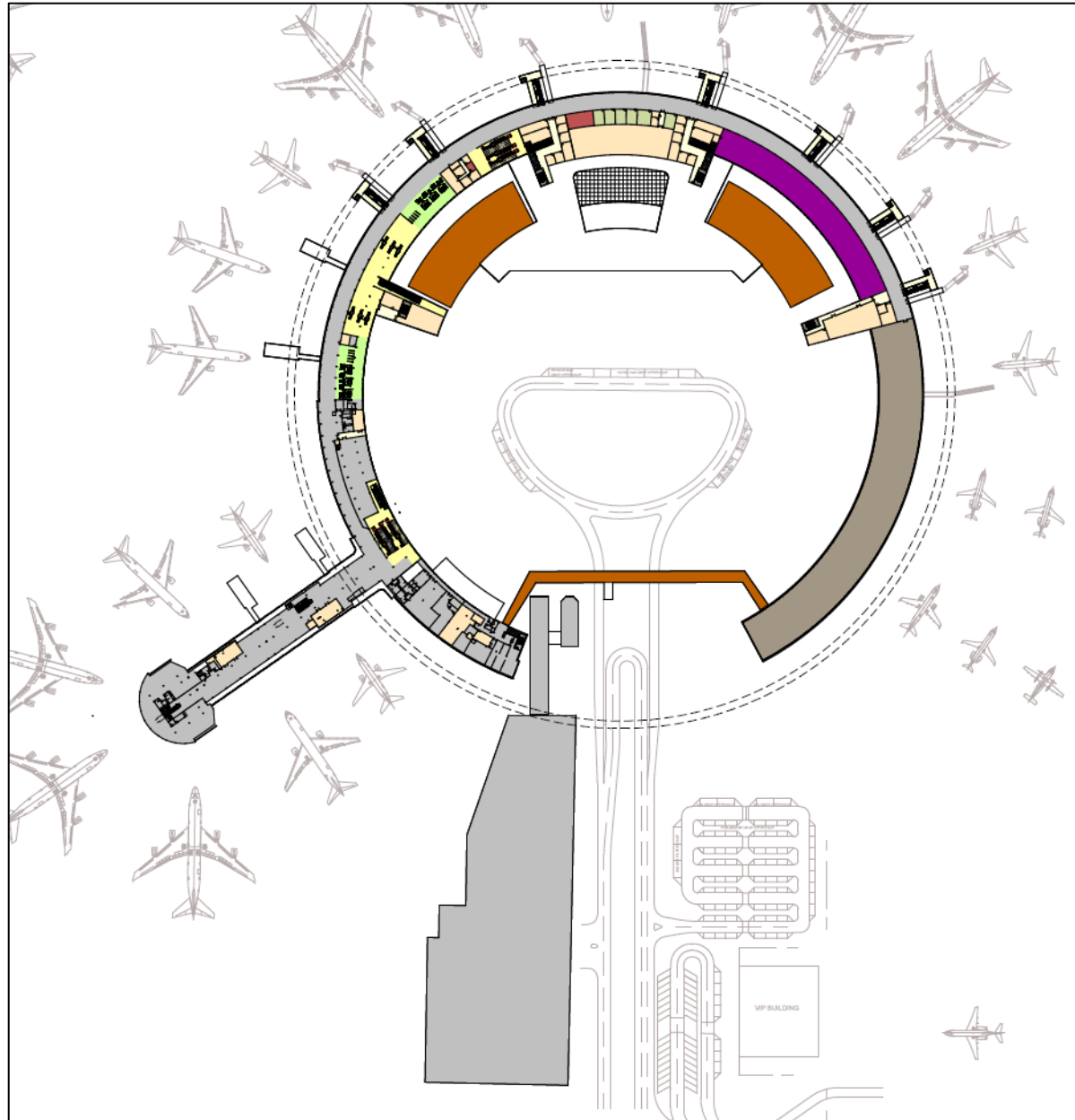
- BOH
- CIRCULATION
- CIRCULATION EXISTING
- DUTY FREE
- EL ROOMS
- GATE EXISTING
- JANITOR EXISTING
- LIFTS
- LIFTS EXISTING
- LOUNGE
- LOUNGE EXISTING
- ME ROOM
- ME ROOMS
- MEP/BOH
- MEP/BOH EXISTING
- OFFICES
- OFFICES EXISTING
- PRAY ROOM
- PRAY ROOM EXISTING
- RETAIL EXISTING
- ROOF GARDEN
- SHAFT EXISTING
- SPA EXISTING
- STAFF EXISTING
- STAFF/GOODS
- STAIRS
- STAIRS/ESCALATOR EXISTING
- STAIRS/ESCALATORS
- TELECOM ROOM
- TRANSFER DESKS EXISTING
- W.C EXISTING

# Functional Layouts

## Existing Airport Adaptation

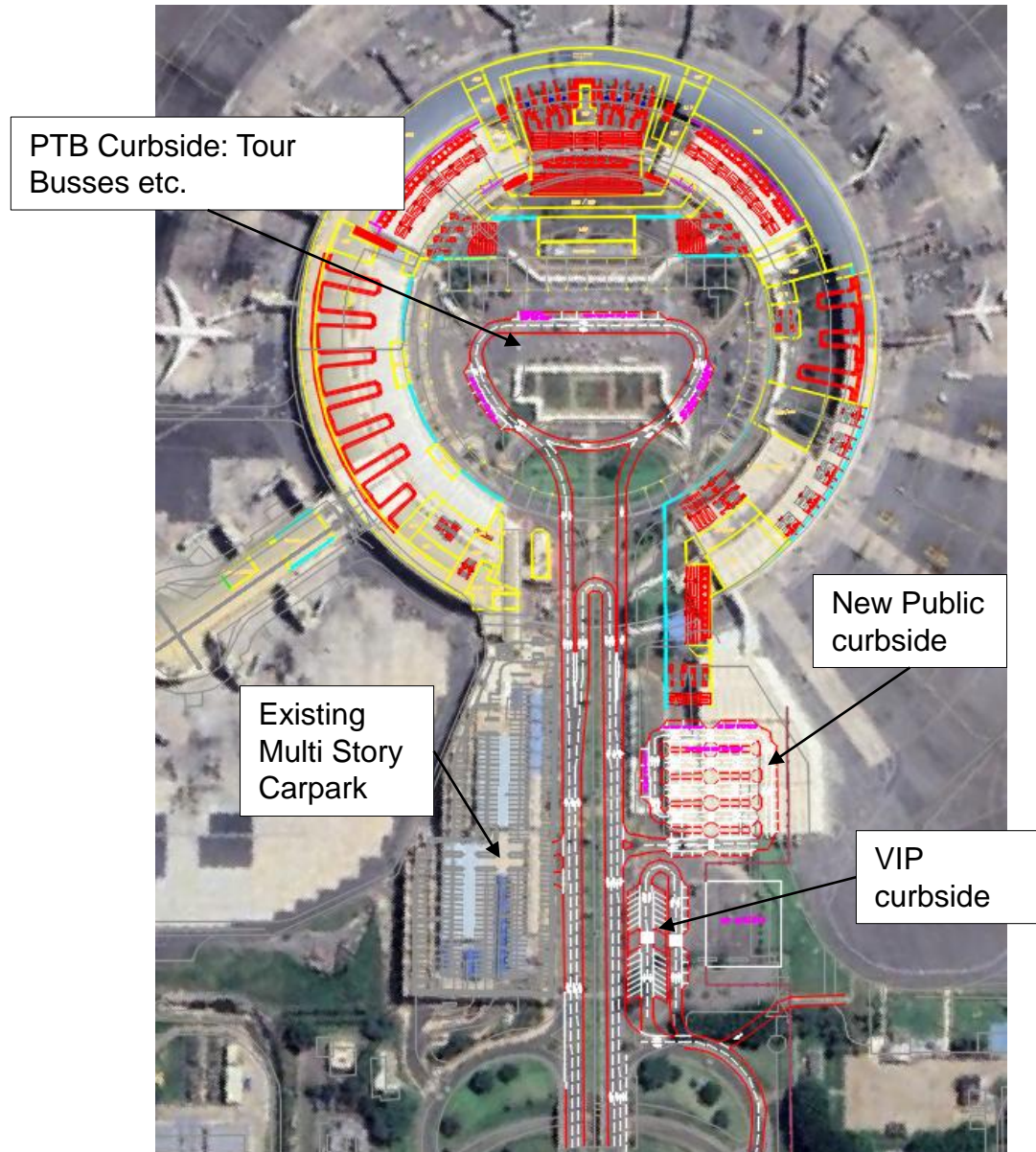
A.  
The Holistic Horizon

Level L2 –  
Arrivals  
Layout



- BOH
- CIRCULATION
- CIRCULATION EXISTING
- CORE & SHELL EXISTING
- FUTURE EXTENSION (TBD)
- JANITOR EXISTING
- LIFTS
- LIFTS EXISTING
- LOUNGE EXISTING
- ME ROOMS
- MEP/BOH
- MEP/BOH EXISTING
- OFFICES
- OFFICES EXISTING
- PASSPORT CONTROL
- PRE-SCREENING
- REMOTE LOUNGE
- REMOTE LOUNGE EXISTING
- SHAFT EXISTING
- SHOPS
- STAFF EXISTING
- STAIRS
- STAIRS/ESCALATOR EXISTING
- STAIRS/ESCALATORS
- STORAGE
- TELECOM ROOM
- W.C
- W.C EXISTING

# Immediate Works – Existing PTB Landside Development



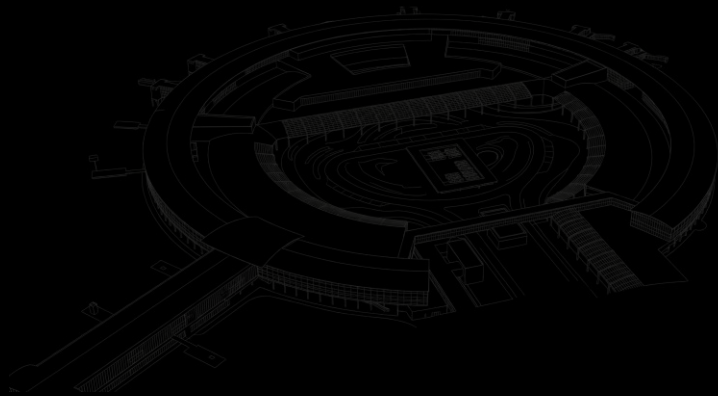


## 05 | COMPONENT 3:

# Development of New Terminal and Associated Facilities

# Design Interventions

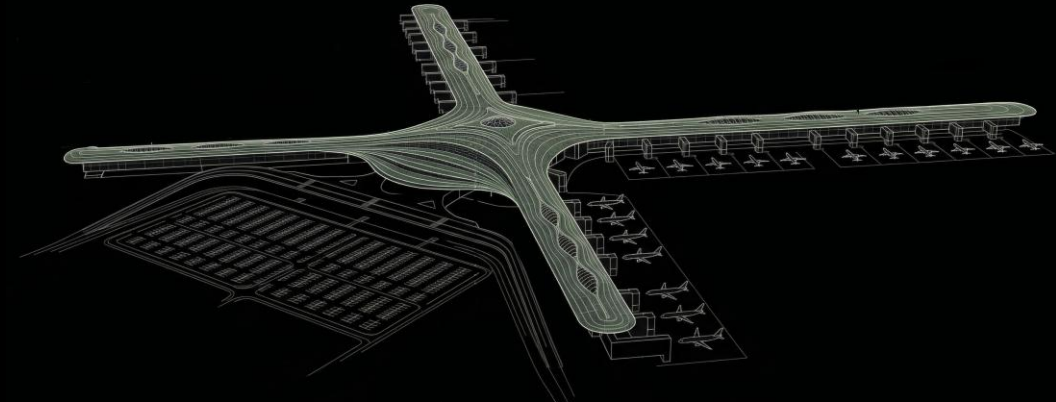
A



## **Existing Airport Adaptation**

*Intended to create a sustainable and long-term solution through Utilizing the existing Terminals and fitting out Centralized facilities*

B



## **Airport Expansion**

*Intended to enhance overall airport capacity, level of service in line with international standards.*

# Design Approach

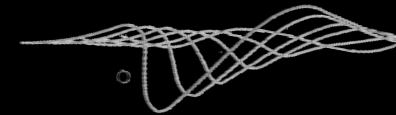
*B. 01*

**Tectonic Plates Movement**



*B. 02*

**Service Buildings**



# Design Approach

*B. 01*

## Tectonic Plates Movement



*B. 02*

## Service Buildings



# Design Approach

## *Airport Expansion*



**B. 01**

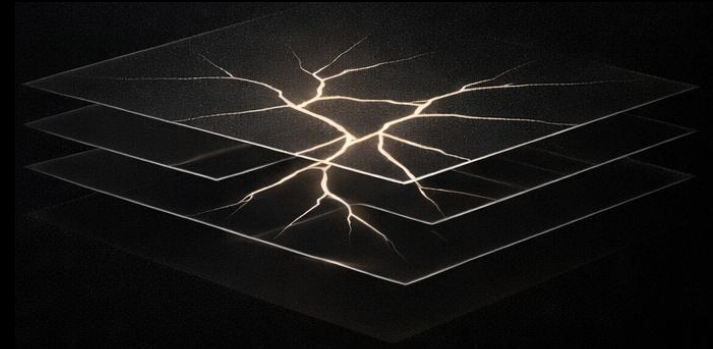
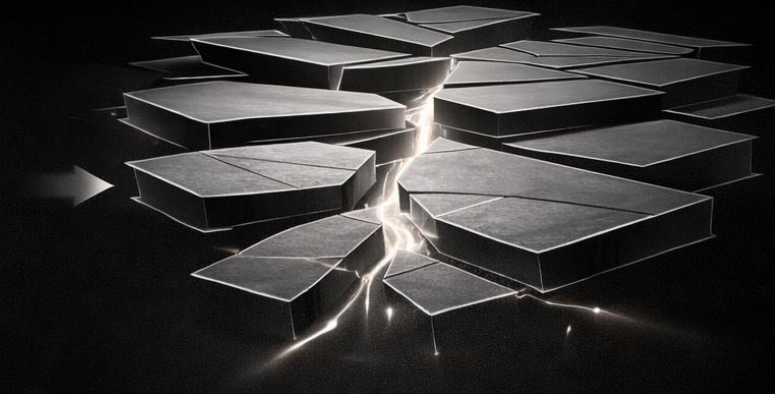
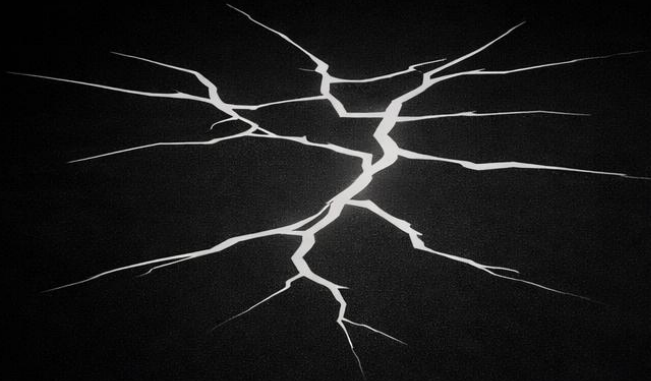
*Tectonic Plate  
Movement*

*Inspired by tectonic plate movement, shaping spatial tension and convergence while expressing raw geological forces through layered form and materiality.*

Fracture

Plates

Layering



# Design Approach

## Airport Expansion



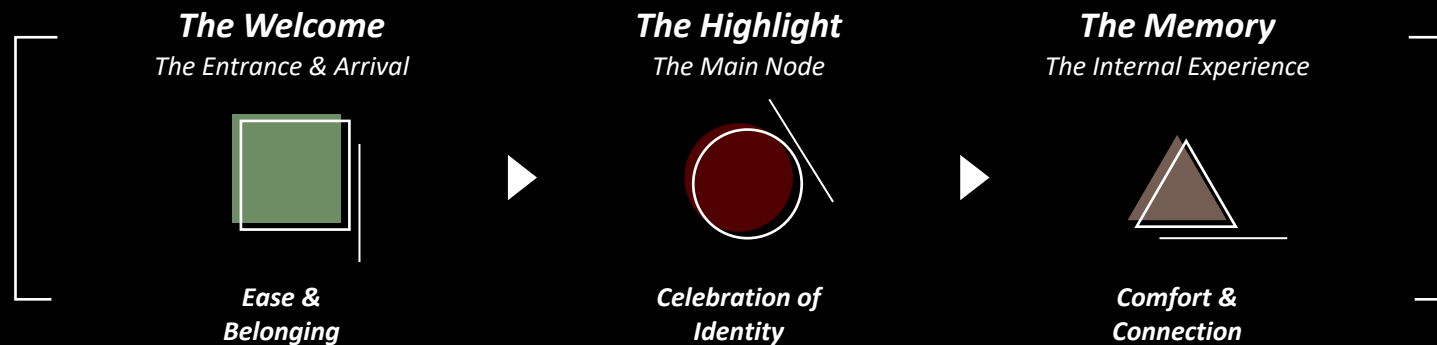
**B. 01**

**Tectonic Plate  
Movement**

*Inspired by tectonic plate movement, shaping spatial tension and convergence while expressing raw geological forces through layered form and materiality.*

### **Three Pivots of the Journey**

*Defining the spatial experience into highlights to ensure the journey remains consistent and impactful.*



**05 | Airport Expansion: New Terminal**



Jomo Kenyatta  
International  
Airport

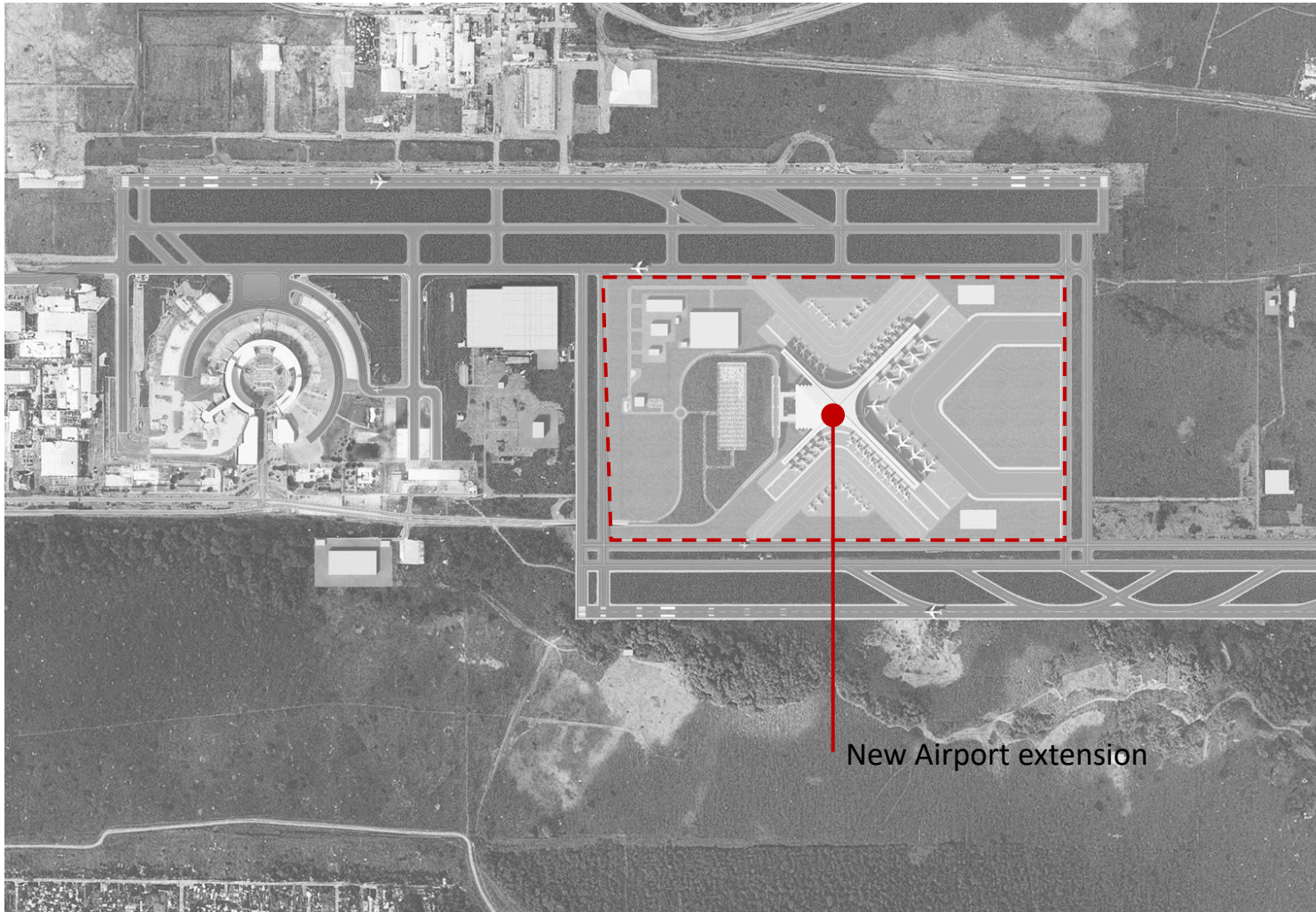
Site Location

**05 | Airport Expansion: New Terminal**



**Airport  
Expansion**

## 05 | Airport Expansion: New Terminal



### Terminal Components

- Capacity : 10 MPAX at phase 1 expandable with additional 5MPAX for Ultimate Phase
- BUA 185,000 SQM Phase 1 and 200.000 SQM for Ultimate Phase
- The Terminal includes a two-level curb, with one level for arrivals (ground level) and one for departures (second level)

The terminal comprises a central processing zone for Departures and Arrivals including the following touchpoints :

- 10 security screening at the entrance
- 28 check-in desks and 56 baggage drop with 12 self check-in .
- 16 Security screening machines
- 22 passport control and 7 E-gates.
- 36 Immigration counters and 14 E-gates
- 2 Baggage claim areas, one for International (10 carousels) one for Domestic (4 carousels)

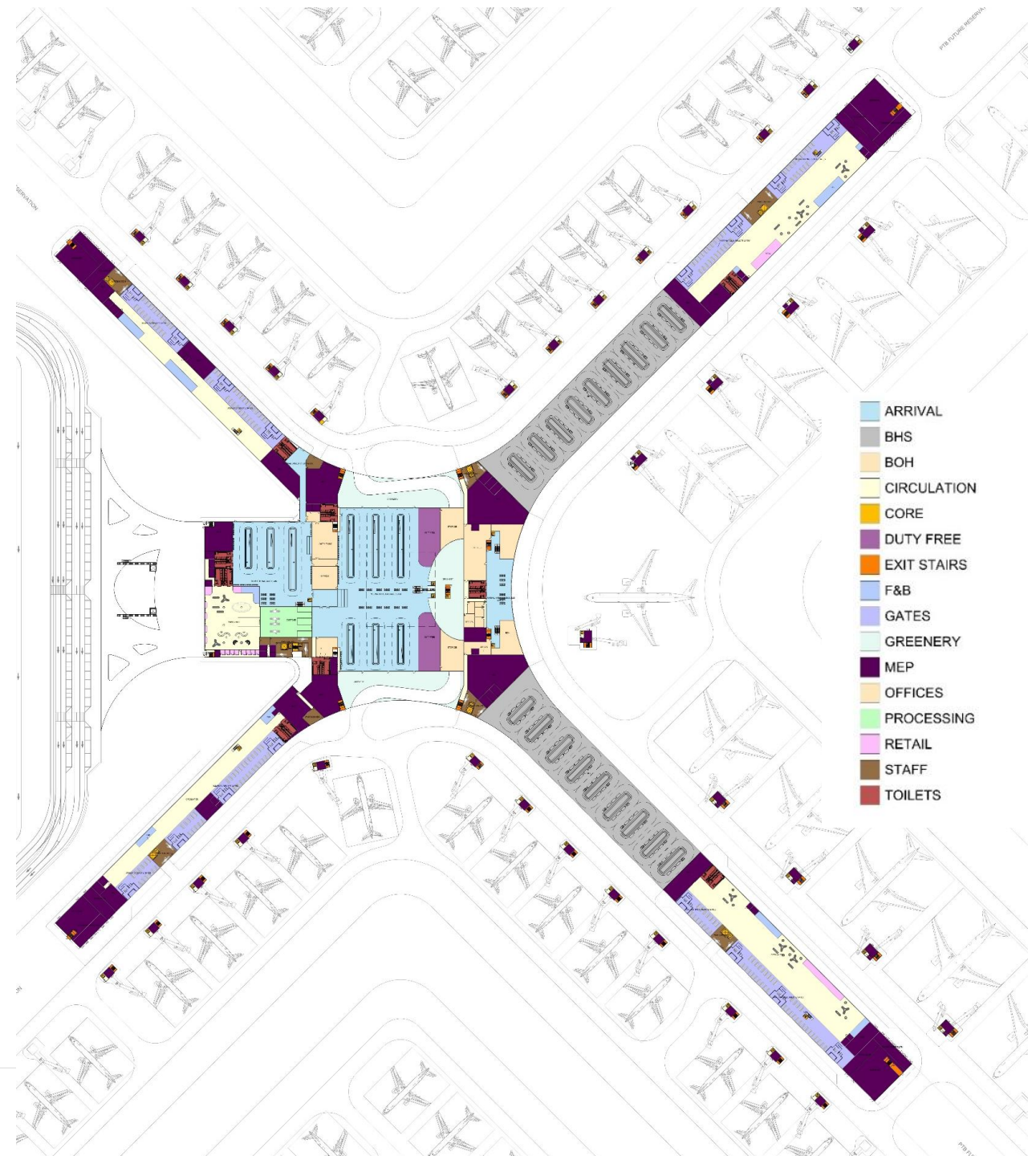
# Functional Layouts

## Airport Expansion



**B. 01**

*Tectonic Plate  
Movement*



*Level L0 –  
Apron Level  
Layout*

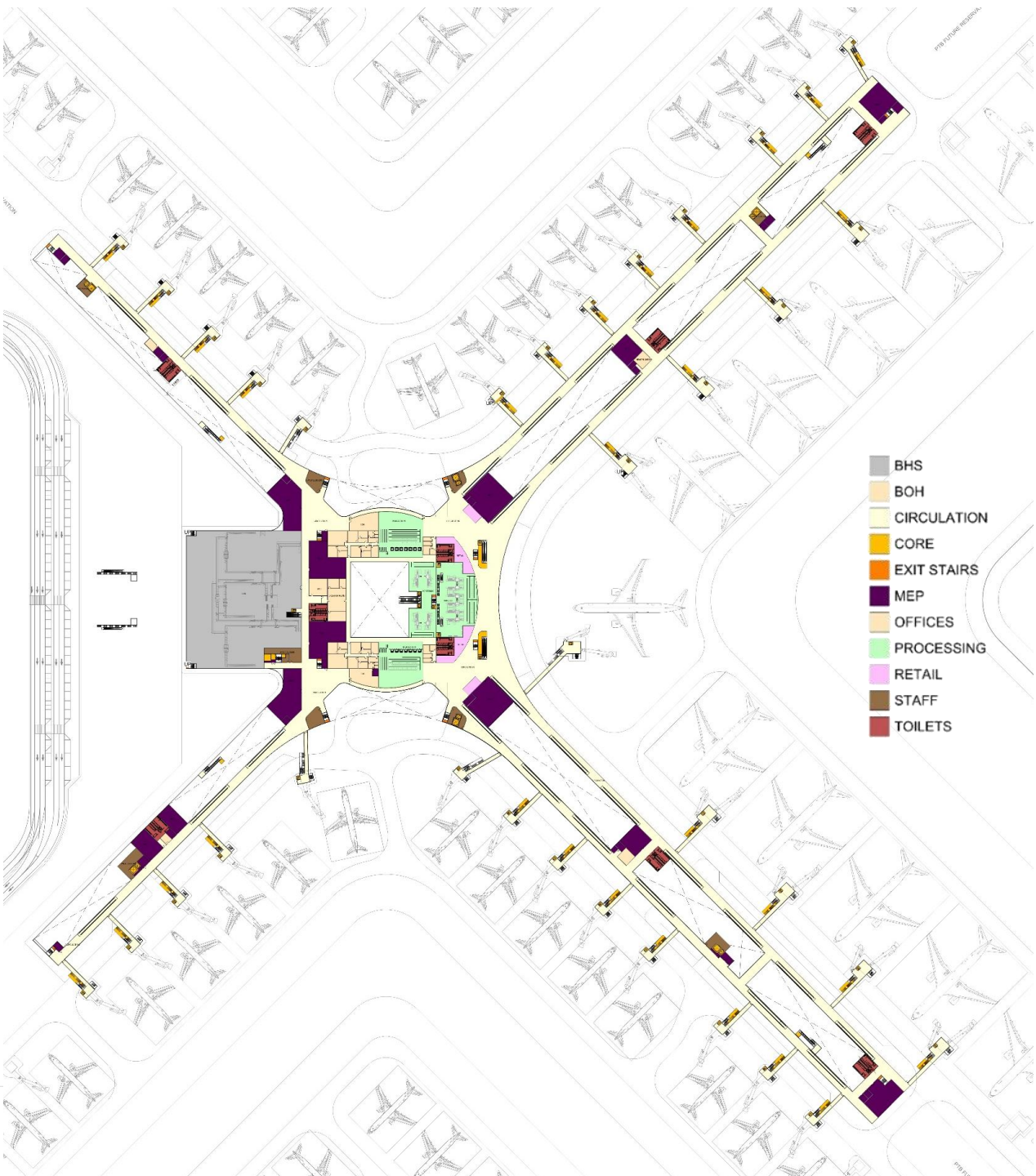
# Functional Layouts

## Airport Expansion



**B. 01**  
*Tectonic Plate  
Movement*

*Level L1 –  
Arrival  
Layout*



# Functional Layouts

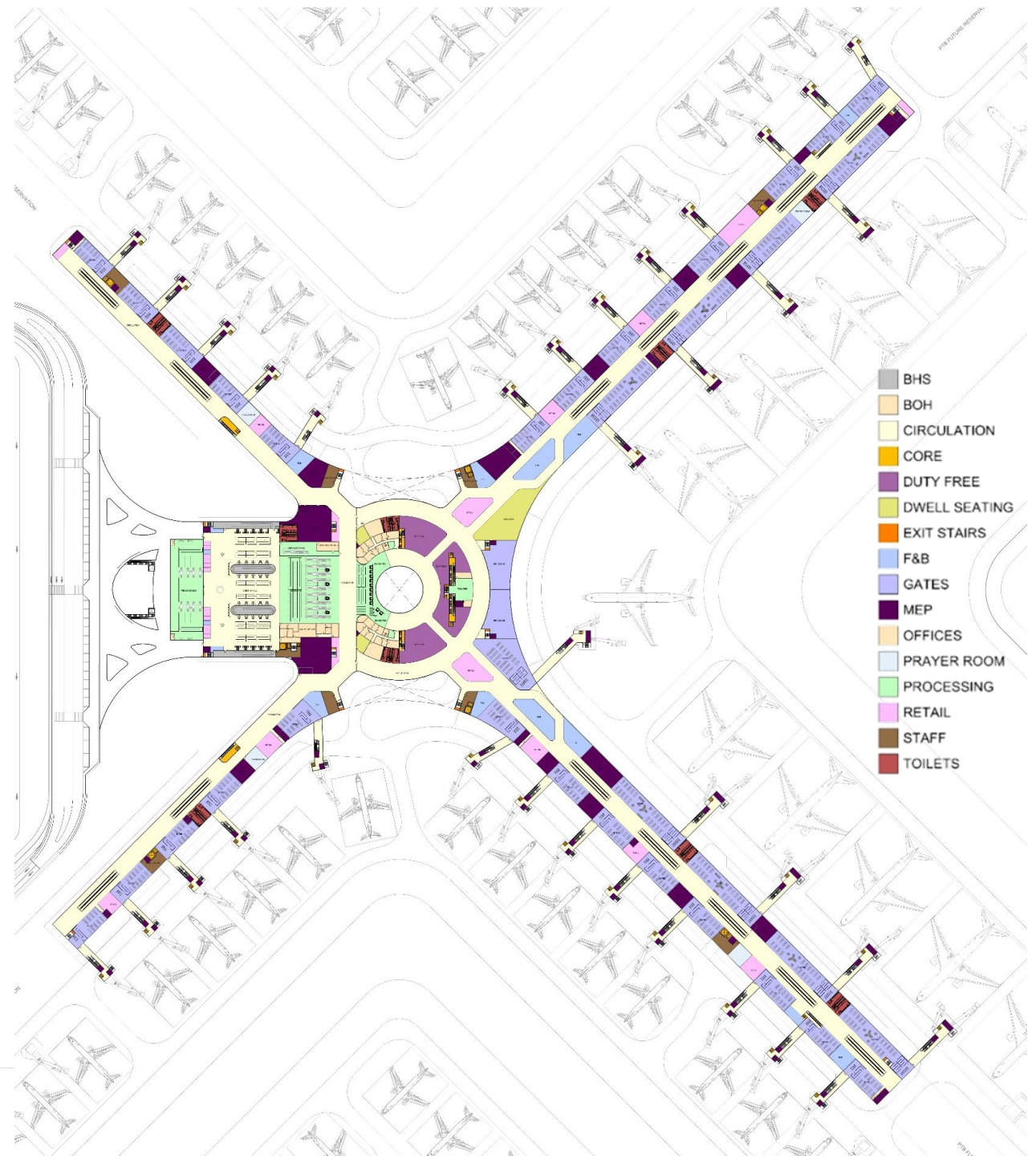
## Airport Expansion



**B. 01**

*Tectonic Plate  
Movement*

*Level L2 –  
Departure  
Layout*





## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.





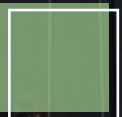
## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.



## The Welcome

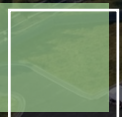
A grounded threshold transitions the user into the textured embrace of the Kenyan earth.





## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.





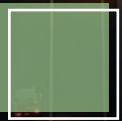
## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.



## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.





Jomo Kenyatta International Airport



## The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.



Jomo Kenyatta International Airport



### The Welcome

A grounded threshold transitions the user into the textured embrace of the Kenyan earth.



DUTY FREE

DUTY FREE

DUTY FREE

DUTY FREE

DUTY FREE



## The Highlight

A spatial epicenter shaped by shifting plates, anchoring movement and memory.



## The Highlight

A spatial epicenter shaped by shifting plates, anchoring movement and memory.





## The Highlight

A spatial epicenter shaped by shifting plates, anchoring movement and memory.





## The Memory

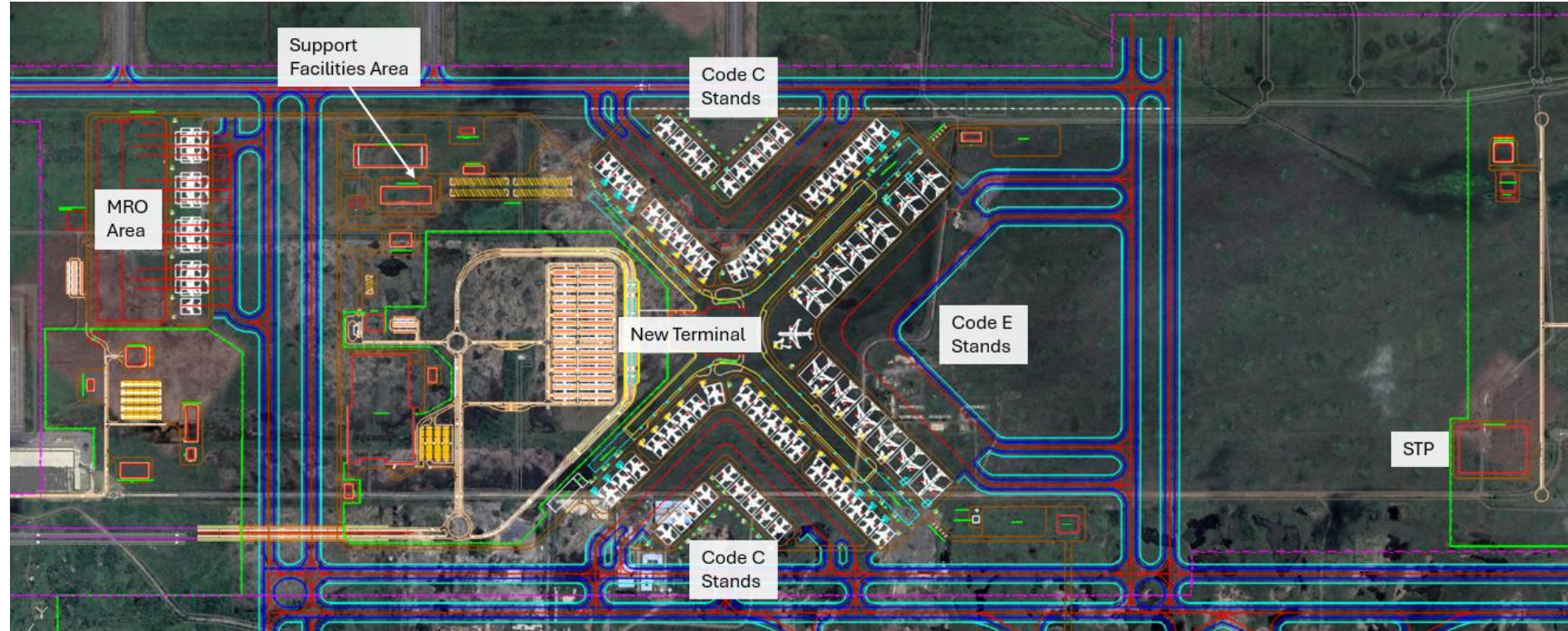
An immersive spatial journey defined by shifting plates and luminous fault seams.

# Airport Expansion – Airside Works

- New passenger apron and apron services
- New MRO apron
- New Taxiways
- Staging Areas
- Infrastructure:
  - Wet utilities and Water Tanks
  - Electrical networks and substations
  - ELV works
  - Jet Fuel
- GSE Road network and airside roads

## Important interfaces:

- **Coordination with PTB design**
- **Coordination with support facilities design**
- **External utility connection**
- **Geotechnical soil conditions**
- **Future runway**

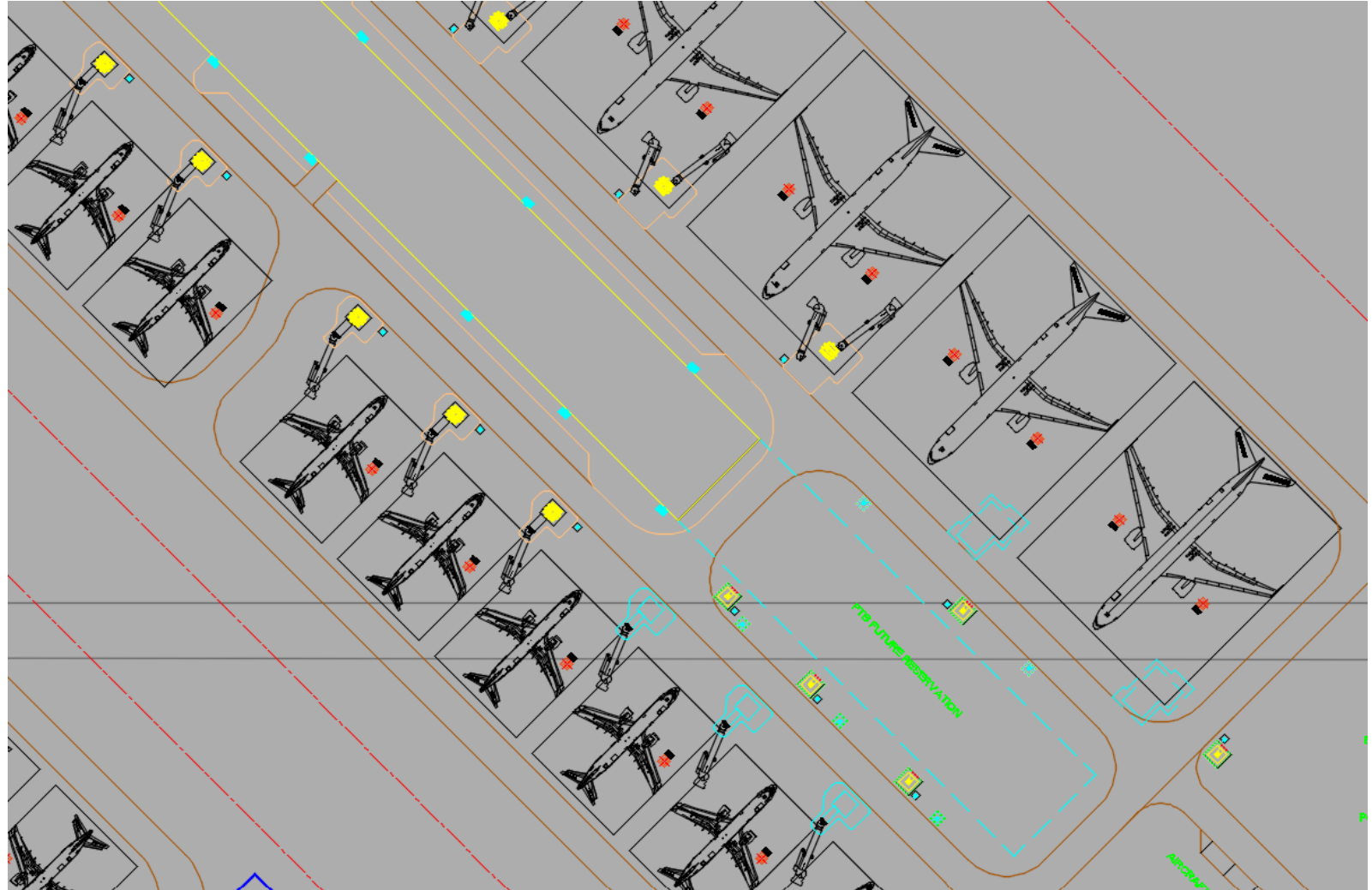


# Airport Expansion – Airside Works

- Apron Services:
  - Passenger boarding bridges
  - VDGS (pole and façade mounted)
  - Fuel hydrant pits and EFSO
  - Apron floodlights (on FLBs or on aprons)
  - Fire hydrants
  - Emergency phones
  - CCTVs
  - PCA and GPUs (on PBBs)

## Important interfaces:

- **Coordination with PTB design**
- **Passenger boarding bridge simulations**
- **Future proofing**

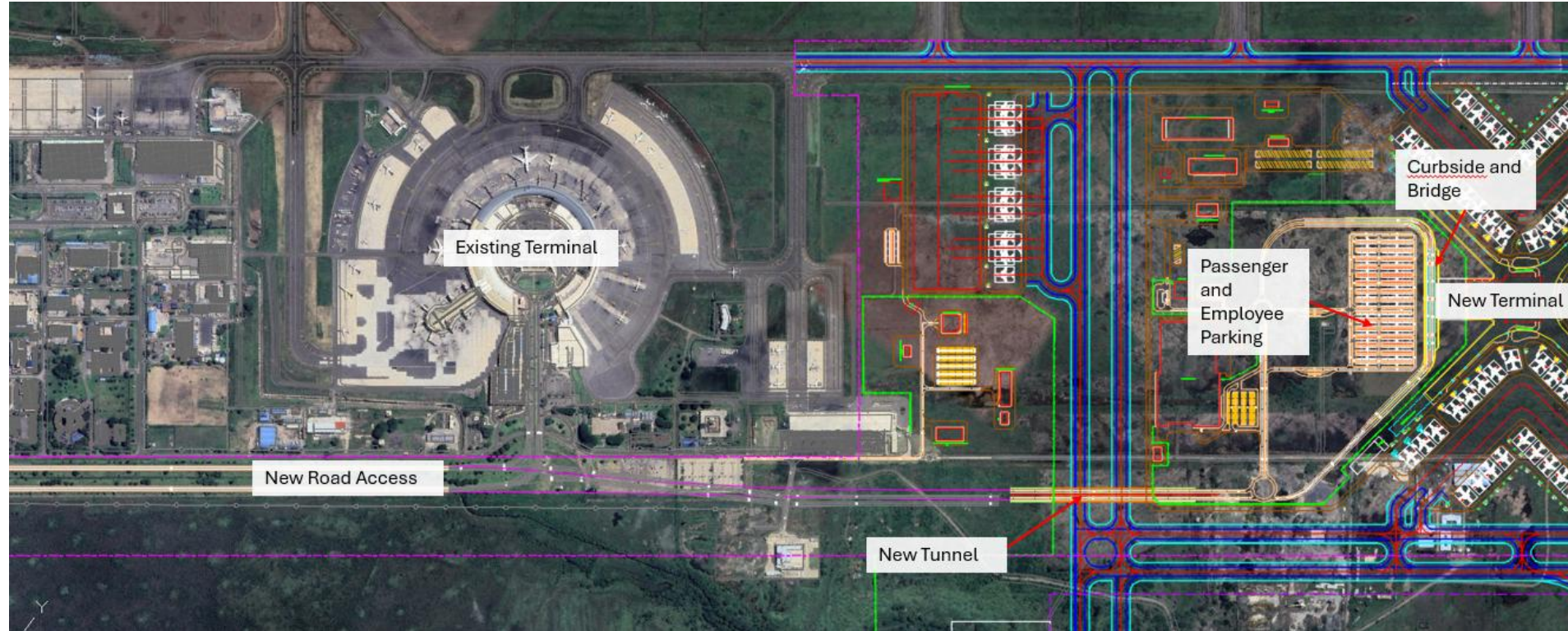


# Airport Expansion – Landside Works

- PTB Road access
- PTB Curbside and bridge
- PTB passengers and employees parking
- Support facilities roads and parking spaces
- Landside Tunnel

## Important interfaces:

- **Coordination with PTB design**
- **Coordination with support facilities design**
- **External utility connection**
- **Geotechnical soil conditions**





**06 | COMPONENT 3:  
Ancillary Facilities**

# Landside and Support Facilities

## Landside Components



➤ **Primary Airport Access Road**  
Widened with one additional lane in each direction to accommodate traffic volumes.



➤ **Parking Lot**  
A. Short-Term Parking: **870 spaces**  
B. Long-Term Parking: **600 spaces**



➤ **Curbside Roads**  
A. Departure Level (L2): Two through lanes plus one dedicated drop-off lane and one friction lane on each side.  
B. Arrival Level (L0): Two through lanes plus one dedicated pick-up lane and one friction lane on the left side only.



➤ **Signalized Intersections**

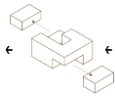
- One T-intersection with three main approach lanes in each direction for existing Terminal T1.
- One four-way intersection for Existing Terminal T2 and the Existing Catering Facility.

## Support Facilities

Facility
Administrative and Operational Offices
ARFF
Aircraft Cleaning Facilities
Data Center
Catering Facility
Aircraft Maintenance Facility
GSE Maintenance Facility
Airside Bus Facilities
Airport Maintenance Hangar
Airside-Landside Gate Building

# Functional Layouts

## Airport Expansion



### B. 02 Service Buildings

#### Administration Building

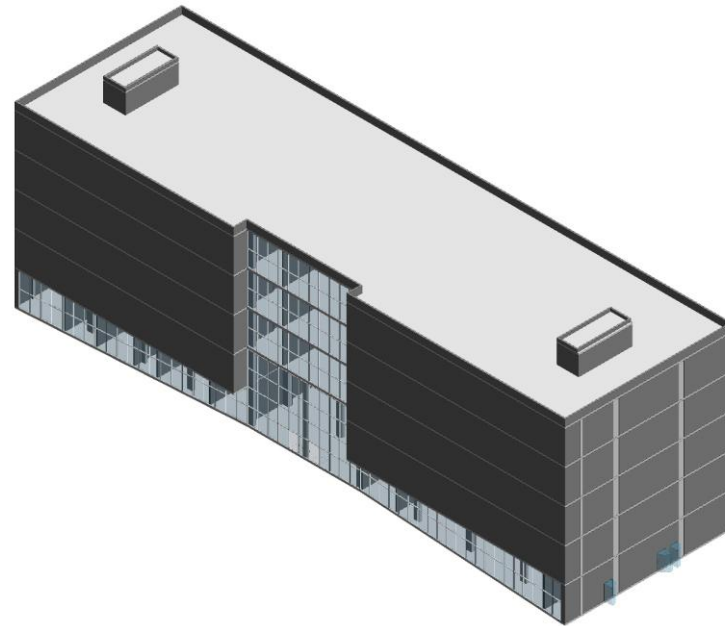
##### Building Description:

A multi-story, non-public facility serving as the central hub for airport management, administrative operations, and staff support services.

##### Functions:

It accommodates administrative and operational offices, safety and technical (MEP) functions, and decision-making spaces. The building also provides staff amenities such as training rooms, meeting and conference spaces, a cafeteria, and a gym to support daily operations and employee well-being.

**Built-up Area:** 8,878 sqm

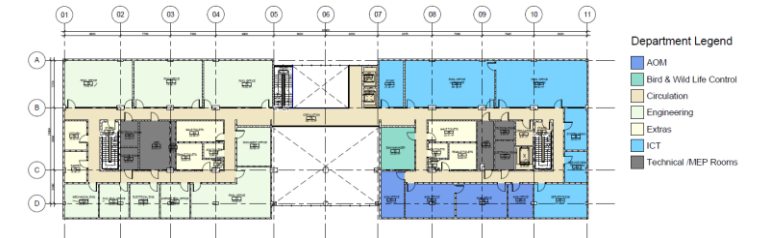


3D view of the Administration Building

GF Level



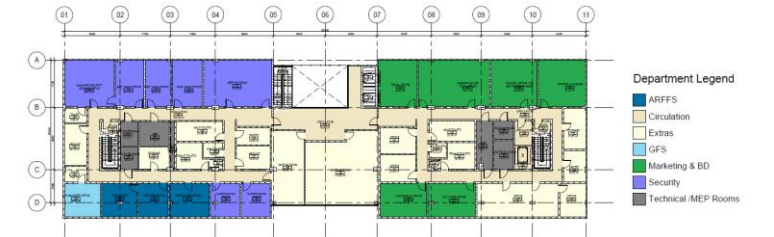
F1 Level



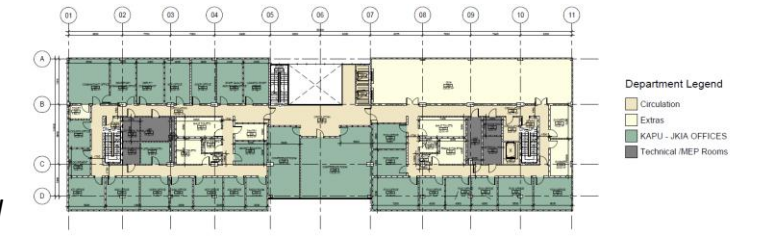
F2 Level



F3 Level

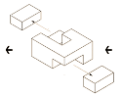


F4 Level



# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### ARFF Station

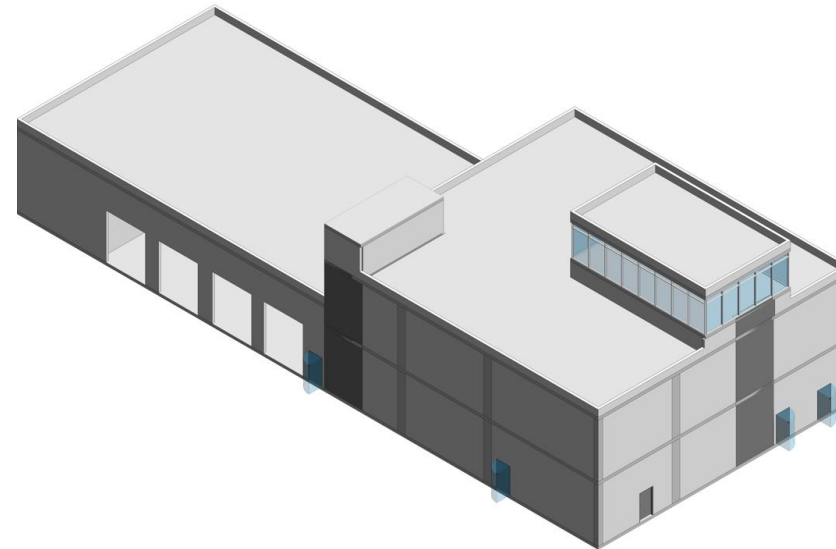
#### Building Description:

A specialized, multi-level emergency response facility located airside, designed for rapid intervention in aviation incidents and fire emergencies.

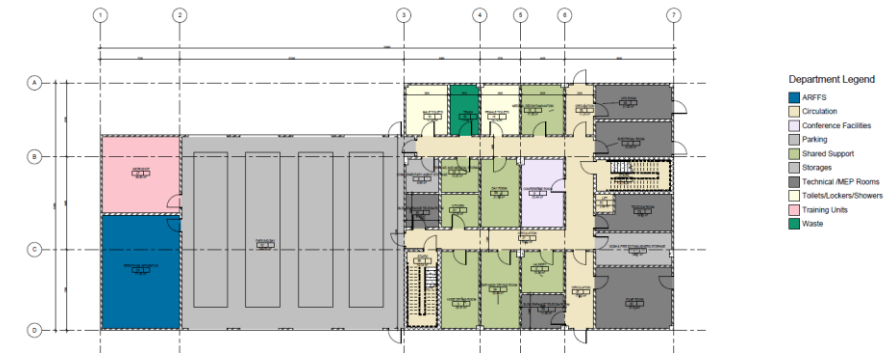
#### Functions:

It supports firefighting and rescue operations with apparatus bays, direct runway access, and integrated alarm systems. The station also includes living quarters, operational rooms, and a watchtower to ensure continuous readiness and fast response times.

**Built-up Area:** 2,144sqm



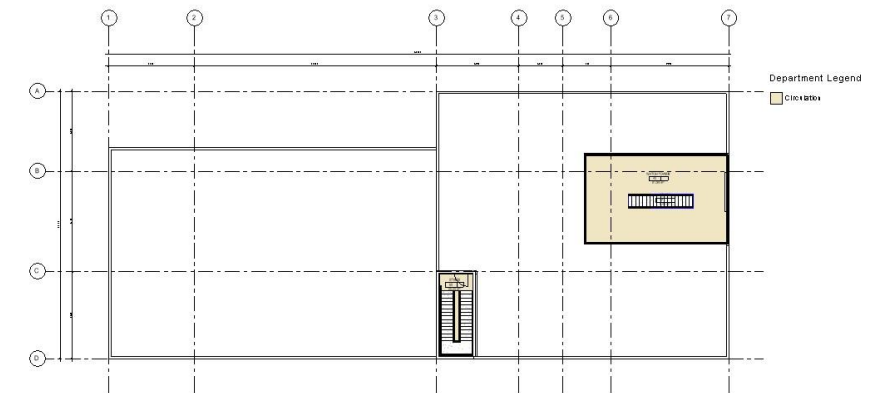
ARFF Building 3D View



ARFF Building GF Level



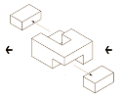
ARFF Building F1 Level



ARFF Building Roof Level

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### Aircraft Cleaning Facility

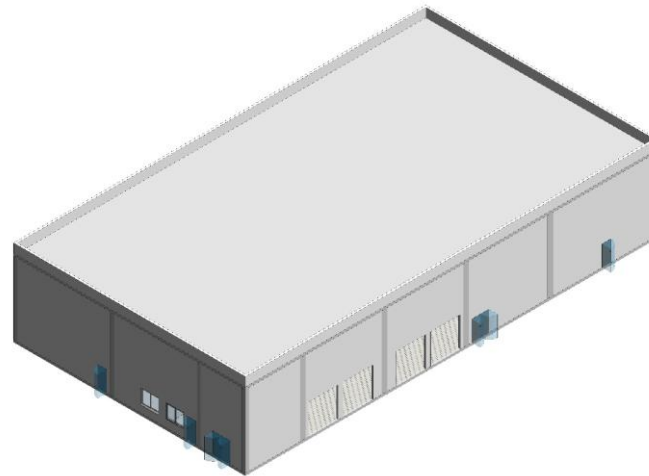
**Building Description:**

A single-story operational facility dedicated to aircraft cleaning, sanitization, and maintenance support within airport turnaround schedules.

**Functions:**

Handles aircraft cleaning, sanitization, and servicing to ensure quick turnaround and operational efficiency.

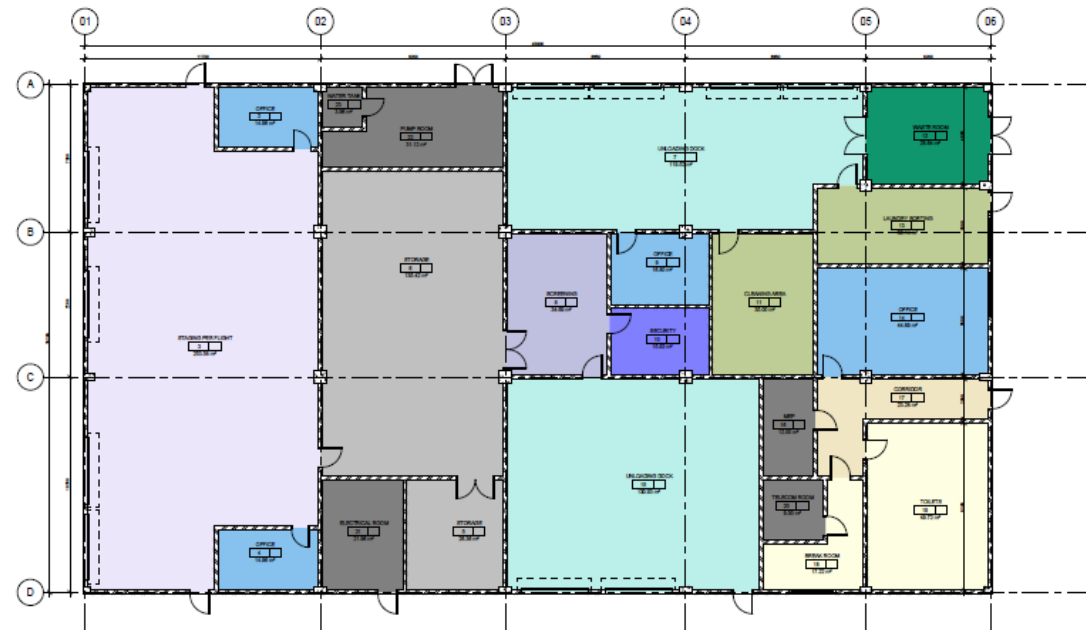
**Built-up Area:** 1,148sqm



Aircraft Facility Building 3D View

**Department Legend**

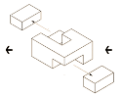
- Circulation
- Dock Area
- Extras
- Offices
- Screening Zone
- Security
- Shared Support
- Staging Area
- Storages
- Technical /MEP Rooms
- Waste



Aircraft Cleaning Facility GF Level

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### Data Centre

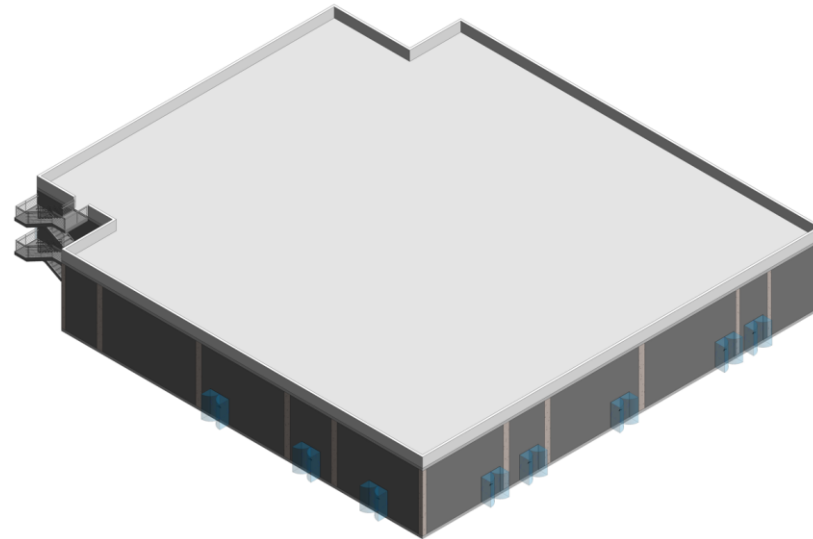
**Building Description:**

A secure, single-story facility designed to house and support the airport's critical IT infrastructure and data systems.

**Functions:**

Manages and protects essential airport data, ensuring continuous and reliable system operations.

**Built-up Area:** 1,731sqm



Data Centre Building 3D View

**Department Legend**

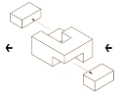
- Circulation
- Conference Facilities
- Offices
- Shared Support
- Technical /MEP Rooms
- Toilets/Lockers/Showers



Data Centre Building GF Level

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### Catering Facility

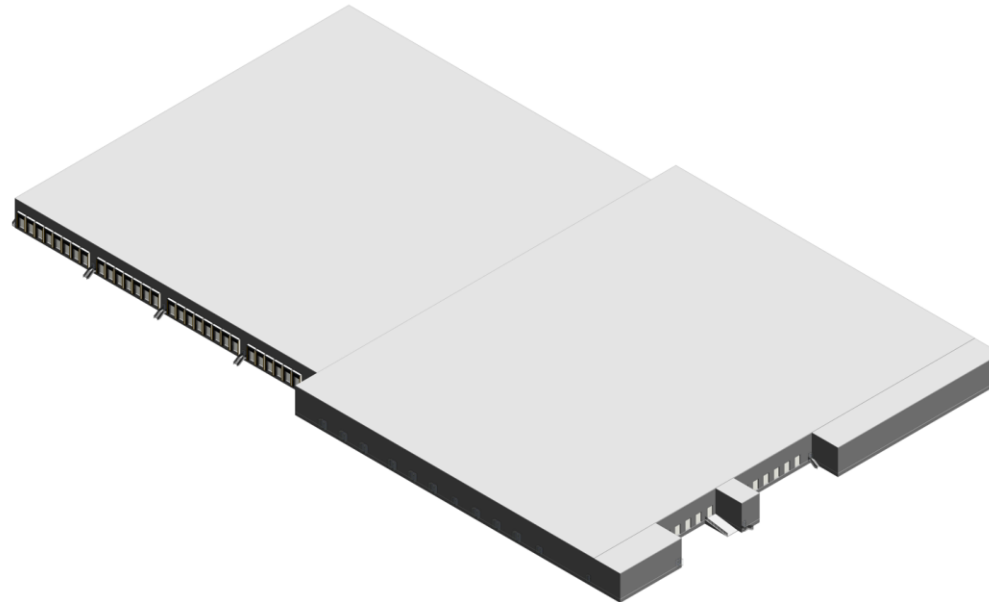
#### Building Description:

A large-scale, specialized production facility designed for high-volume airline meal preparation, assembly, and distribution within continuous 24/7 operations.

#### Functions:

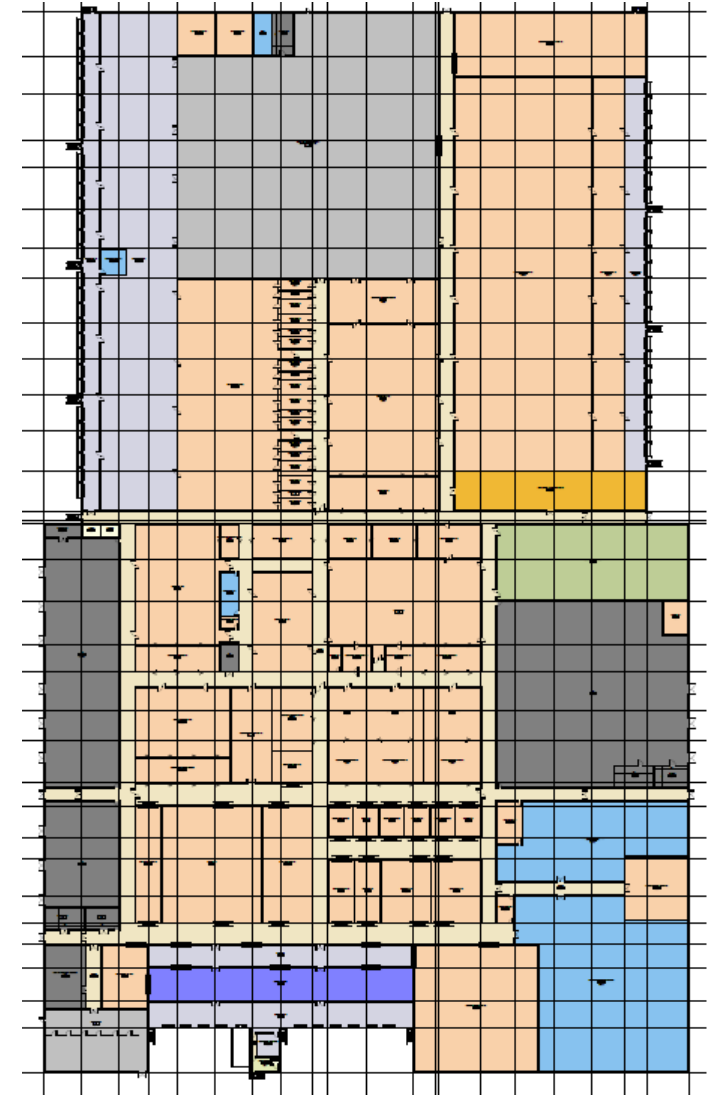
Produces, processes, and assembles airline meals using Tray Set-Up (TSU) systems, including hot and cold kitchens, bakery, ware washing, storage, and logistics to support efficient flight catering operations.

**Built-up Area:** 35,690sqm



Catering Building – 3D view

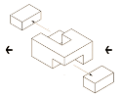
- Department Legend
- BOH Areas/Service Amenities
  - Circulation
  - Driver's Room & Amenities
  - Food & Beverages Facilities(Restaurant,Cafe)
  - Kitchen Area
  - Offices
  - Parking
  - Security
  - Shared Support
  - Storages
  - Technical /MEP Rooms
  - Toilets/Lockers/Showers



Catering Building - GF Level

# Functional Layouts

## Airport Expansion



**B. 02**

Service Buildings

### Airport Maintenance Facility

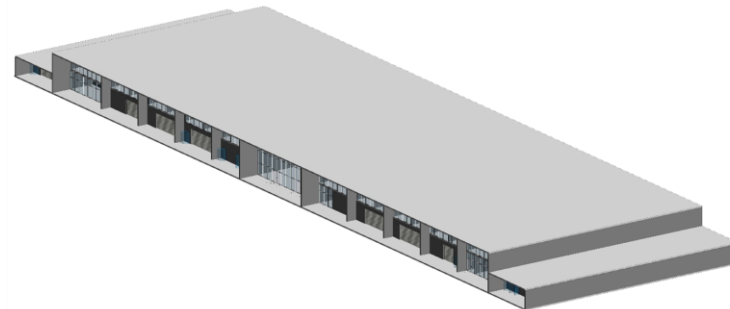
#### Building Description:

A multi-story facility supporting 24/7 maintenance of airside and landside infrastructure, equipment, and operational systems.

#### Functions:

These facilities are essential for motor vehicle repairs, electrical work, painting, and mechanical repairs. Additionally, maintenance facilities should provide storage for materials, replacement parts, and a fireproof area designated for flammable materials.

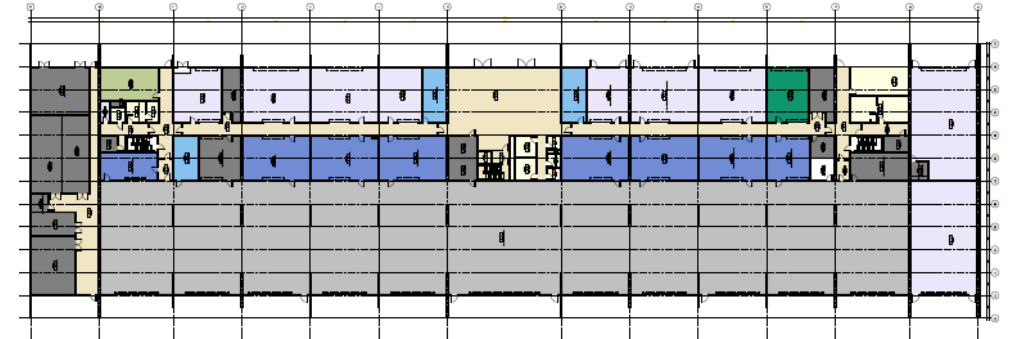
**Built-up Area:** 10,000sqm



Aircraft Maintenance Facility 3D View

Department Legend

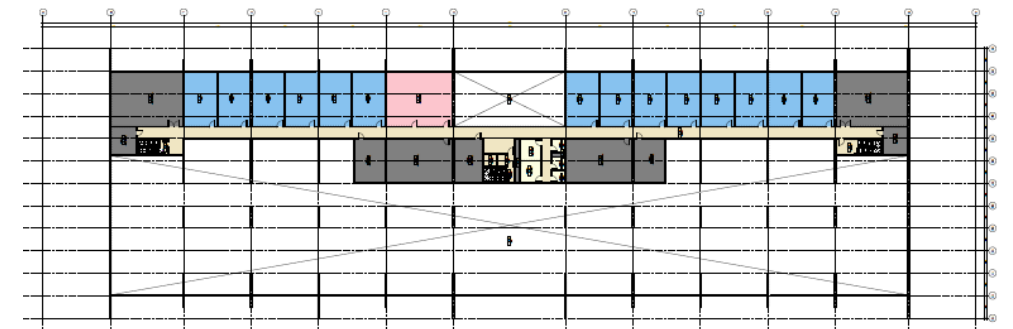
Light Blue	Circulation
Yellow	Extras
Grey	Maintenance Area
Blue	OFFICES
Light Green	Shared Support
Light Purple	Storages
Dark Grey	Technical /MEP Rooms
Light Yellow	Toilets/Lockers/Showers
Dark Green	Waste
Dark Blue	Workshops and speciality rooms



Aircraft Maintenance Facility GF Level

Department Legend

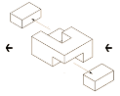
Light Blue	Circulation
Blue	OFFICES
Dark Grey	Technical /MEP Rooms
Light Yellow	Toilets/Lockers/Showers
Pink	Training Units



Aircraft Maintenance Facility F1 Level

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### GSE Maintenance Facility

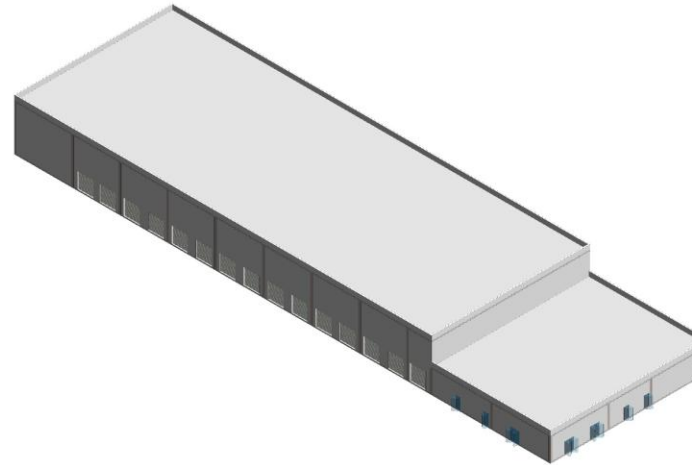
**Building Description:**

A single-story airside facility dedicated to the maintenance, repair, and storage of ground support equipment used in aircraft operations.

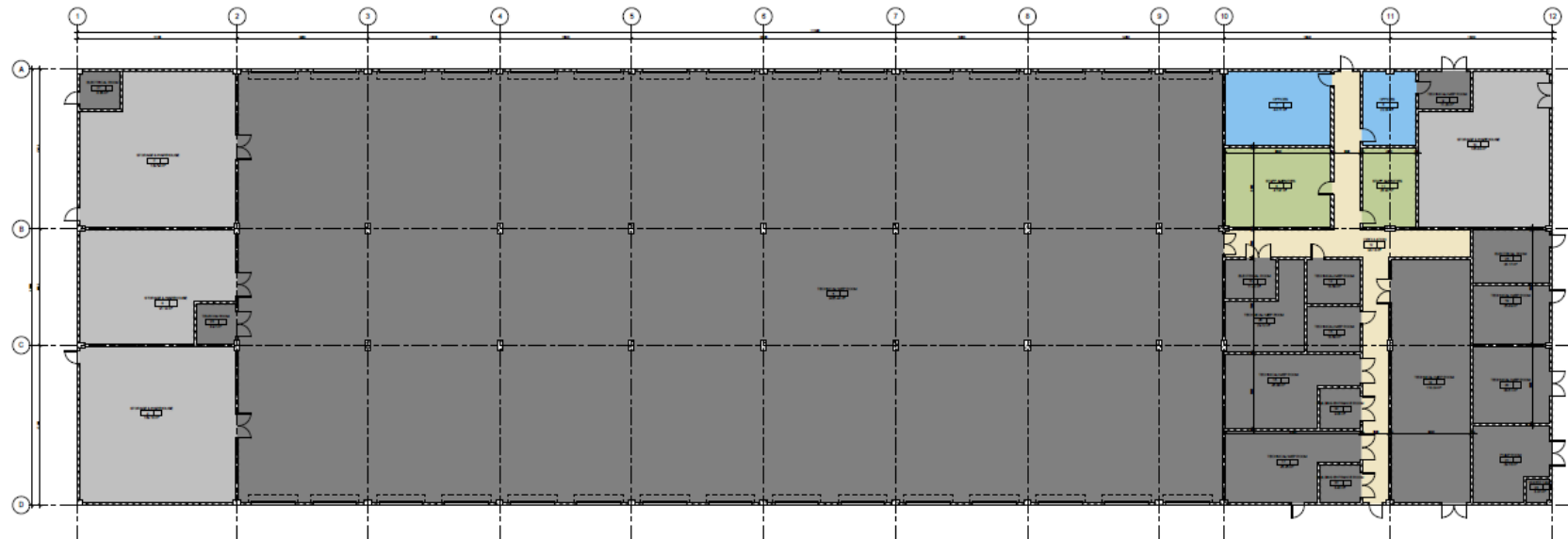
**Functions:**

Performs preventive and corrective maintenance, repairs equipment, and provides storage and staging areas to ensure reliable ground operations.

**Built-up Area:** 3,748sqm



GSE Maintenance Facility 3D View



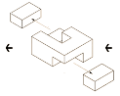
GSE Maintenance Facility GF Level

Department Legend

- Circulation
- Offices
- Shared Support
- Storage
- Technical/MEP Rooms

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### Airside Bus Facility

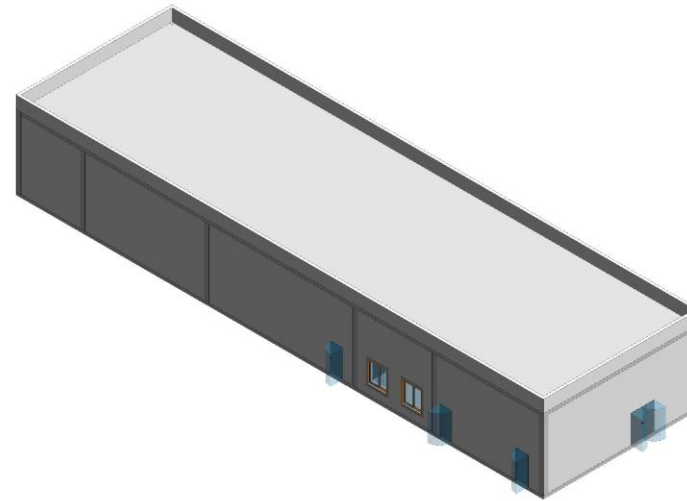
#### Building Description:

A single-story facility supporting the operation and administration of airside buses for passenger transfers to and from remote stands.

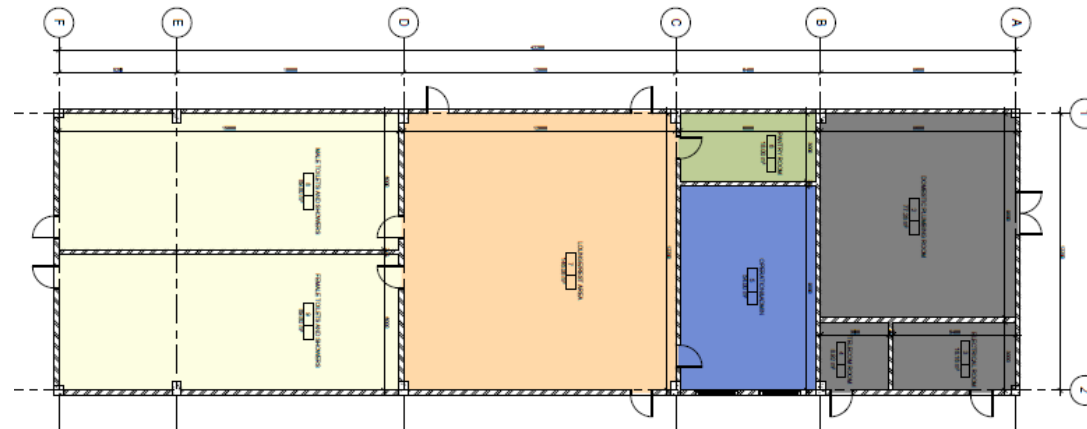
#### Functions:

Provides vehicle operations, staff administration, and passenger transfer support, along with staff lounge and amenities.

**Built-up Area:** 537sqm



Airside Bus Facility 3D View

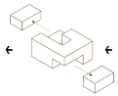


Airside Bus facility GF Level

- Department Legend
- Shared Support
  - Staff Rooms & Amenities(Changing Room,Sitting Room,...)
  - Technical /MEP Rooms
  - Toilets/Lockers/Showers
  - Workshops and speciality rooms

# Functional Layouts

## Airport Expansion



**B. 02**

**Service Buildings**

### Aircraft Maintenance Hangar

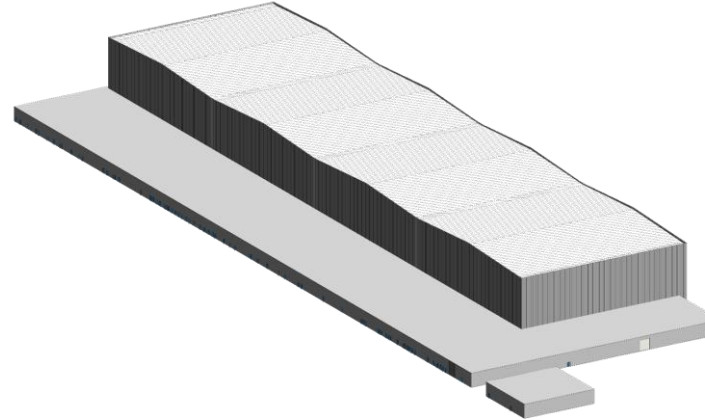
#### Building Description:

A large-span, single-story facility providing sheltered space for comprehensive aircraft inspection, repair, and maintenance, including base-level checks and overhauls.

#### Functions:

Supports heavy maintenance, structural and engine repairs, diagnostics, component overhauls, and staff training, with infrastructure for regulatory compliance and efficient operations.

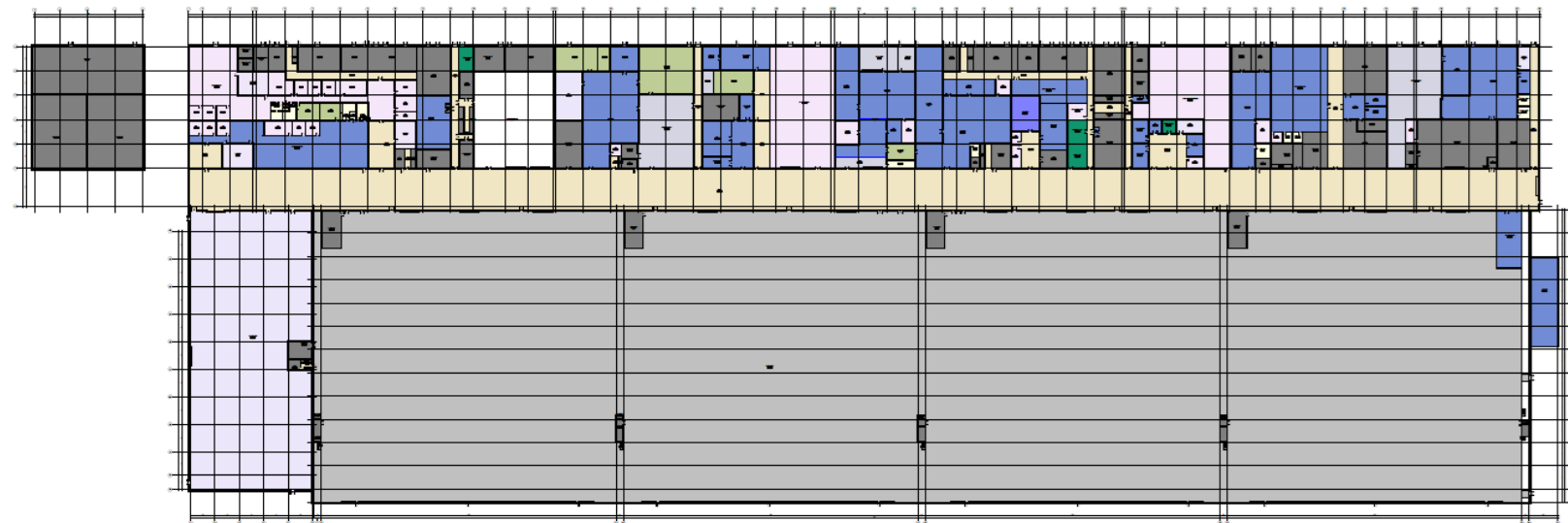
**Built-up Area:** 75,136sqm



Aircraft Maintenance Hangar 3D View

#### Department Legend

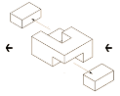
- BOH Areas/Service Amenities
- Circulation
- Conference Facilities
- Offices
- Parking
- Security
- Shared Support
- Storages
- Technical /MEP Rooms
- Toilets/Lockers/Showers
- Waste
- Workshops and speciality rooms



Aircraft Maintenance Hangar GF Level

# Functional Layouts

## Airport Expansion



**B. 02**

Service Buildings

### Airside-Landside Gate Building

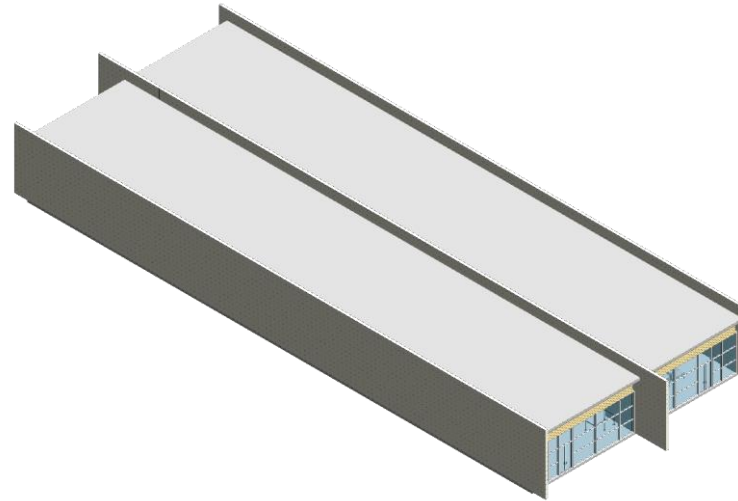
#### Building Description:

A single-story facility serving as the transition point between landside and airside areas, supporting passenger boarding and security operations.

#### Functions:

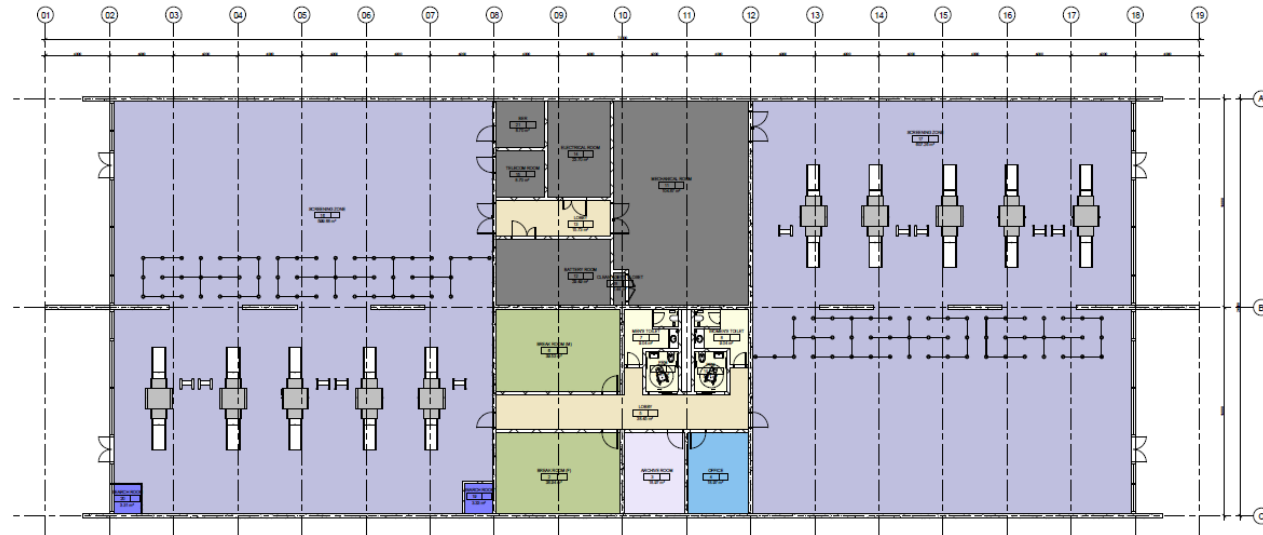
Accommodates offices, screening and search areas, technical support, and staff facilities for smooth passenger flow and security management.

**Built-up Area:** 3,748sqm



Airside-Landside Gate 3D Views

Department Legend	
Light Blue	Circulation
Blue	OFFICES
Light Purple	Screening Zone
Dark Purple	Security
Green	Shared Support
Light Green	Storages
Dark Grey	Technical / MEP Rooms
Yellow	Toilets/Lockers/Showers



Airside-Landside Gate GF Level

**THANK YOU!**