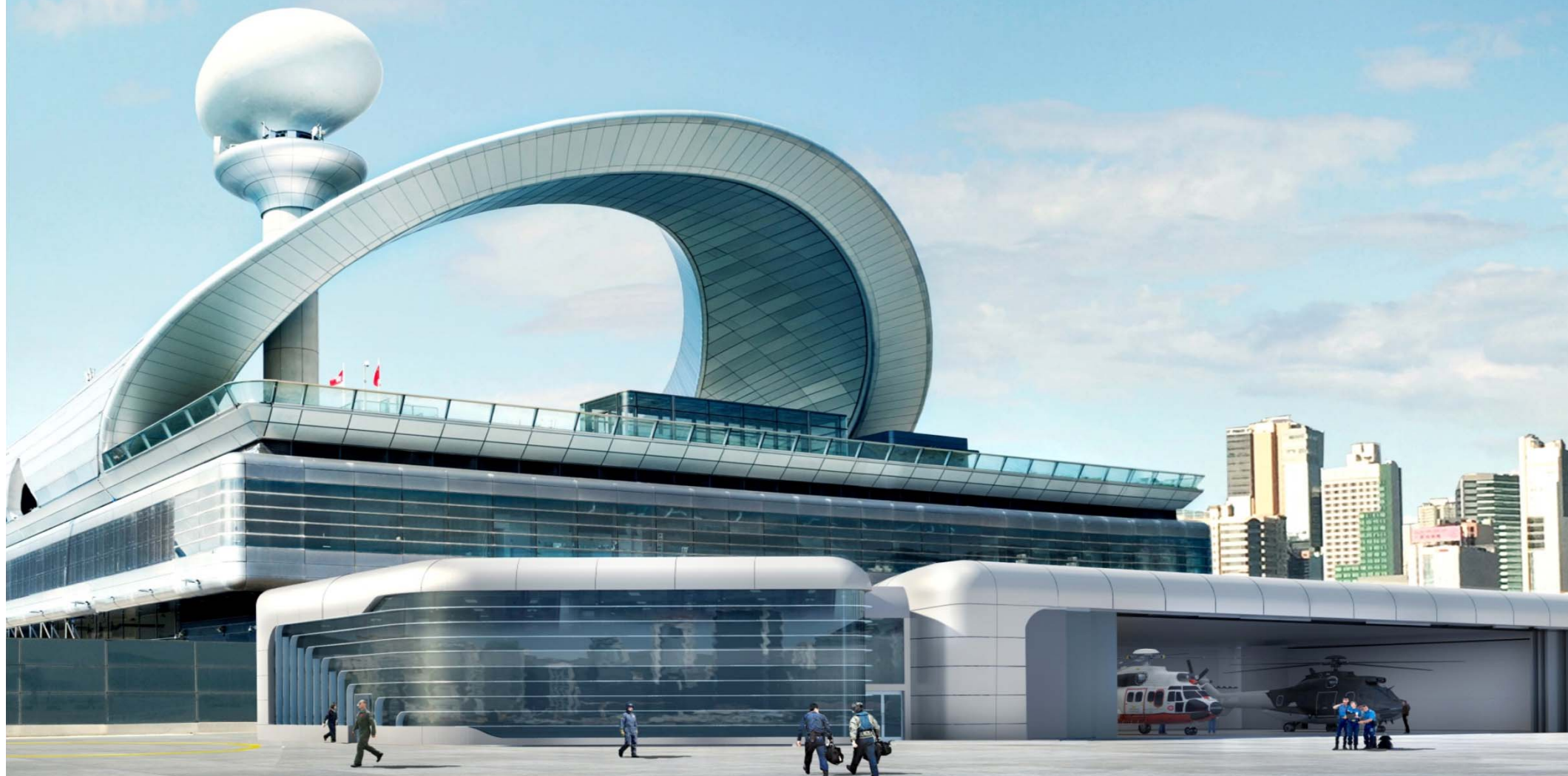


Proposed Establishment of Government Flying Service Kai Tak Division



土木工程拓展署
Civil Engineering and
Development Department

ARUP

AGC

DESIGN LTD

architecture
urban design
interior

- Brief Members on the site selection and preliminary design of the proposed GFS Kai Tak Division
- Invite Members' views on the proposal as input to the detailed design stage
- Plan to commence the construction of the Kai Tak Division by second half of 2018

- Project Background
- Recommended Site at Kai Tak
- Architectural Design Concept

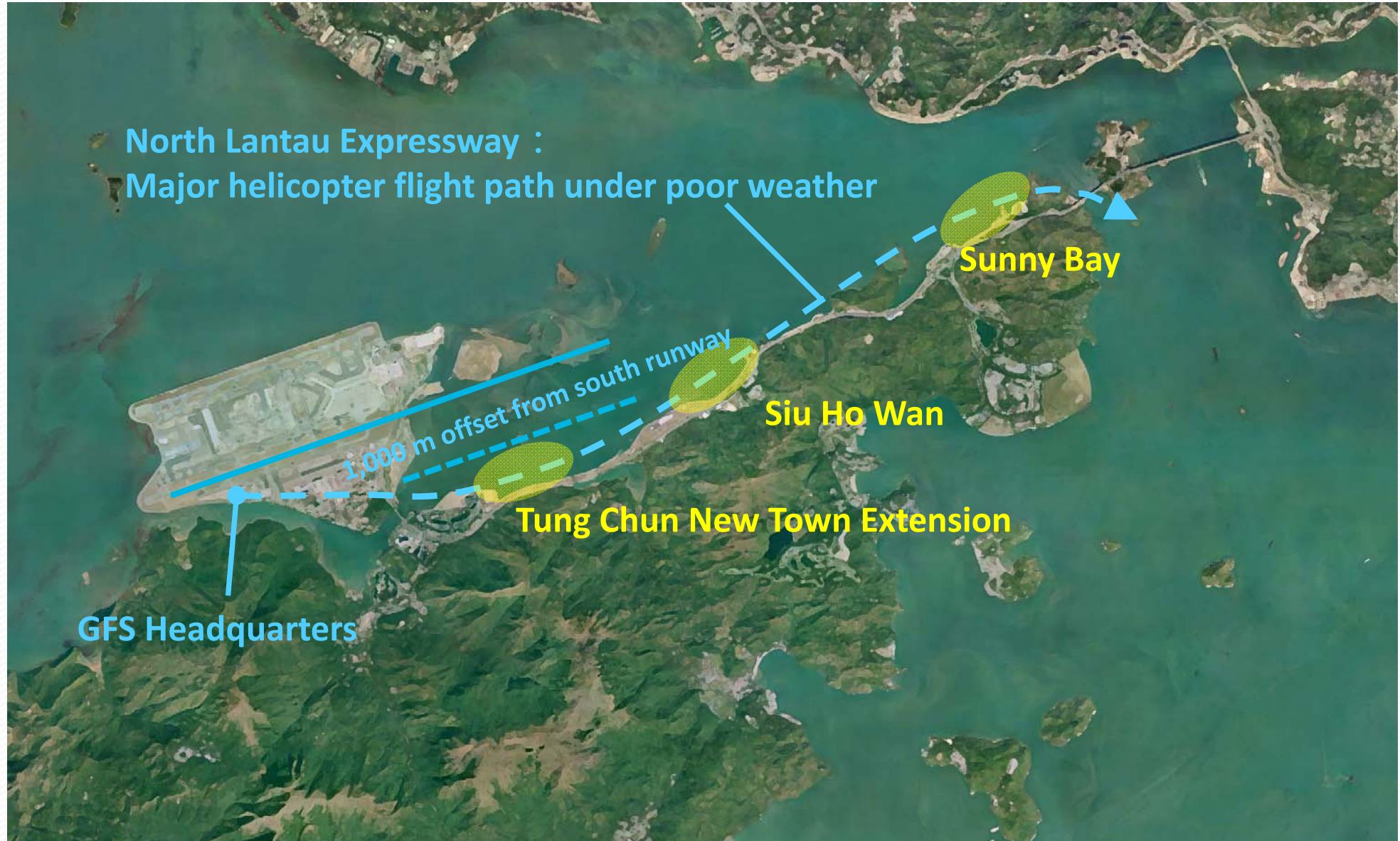


Duties and Responsibilities of Government Flying Service (GFS)

- One of the disciplined services in HKSAR Government
- Existing headquarters at Chek Lap Kok HKIA
- Major duties: Casualty evacuation (CASEVAC), search and rescue (SAR), fire fighting, law enforcement operation



Conflict between Existing GFS Flight Path and North Lantau Development



Feasibility Study by CEDD

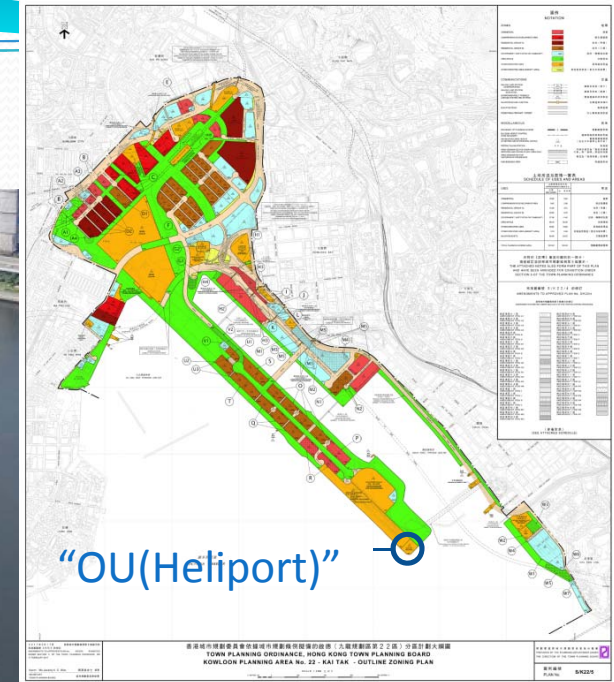
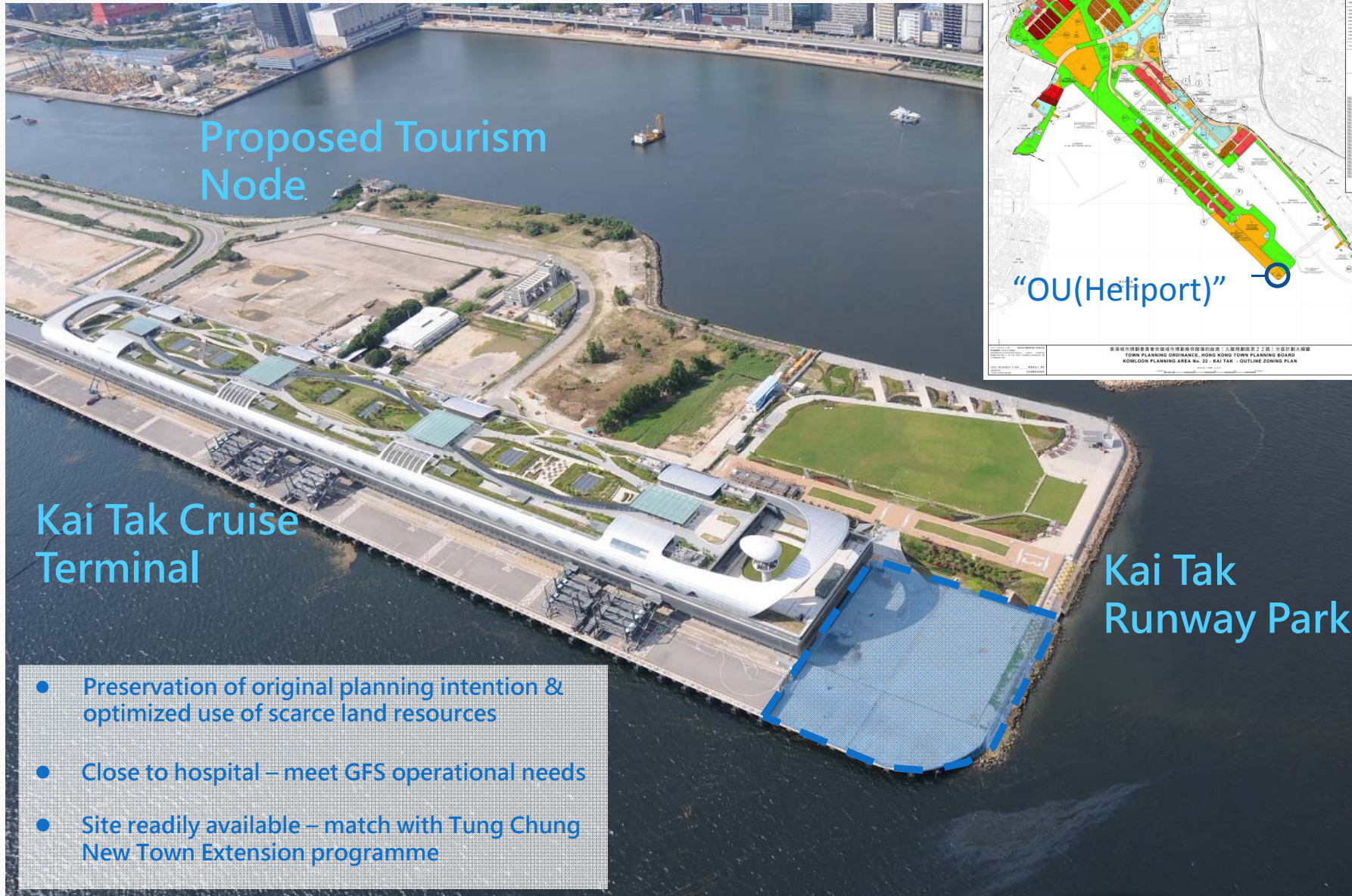
- Identify a suitable site for establishing a division for GFS
- Various technical considerations: Location, aviation safety, environment, accessibility, planned land use, land availability, etc.
- Study result: **Ex-Kai Tak Runway Tip** is the most suitable site



Ex-Kai Tak Runway Tip

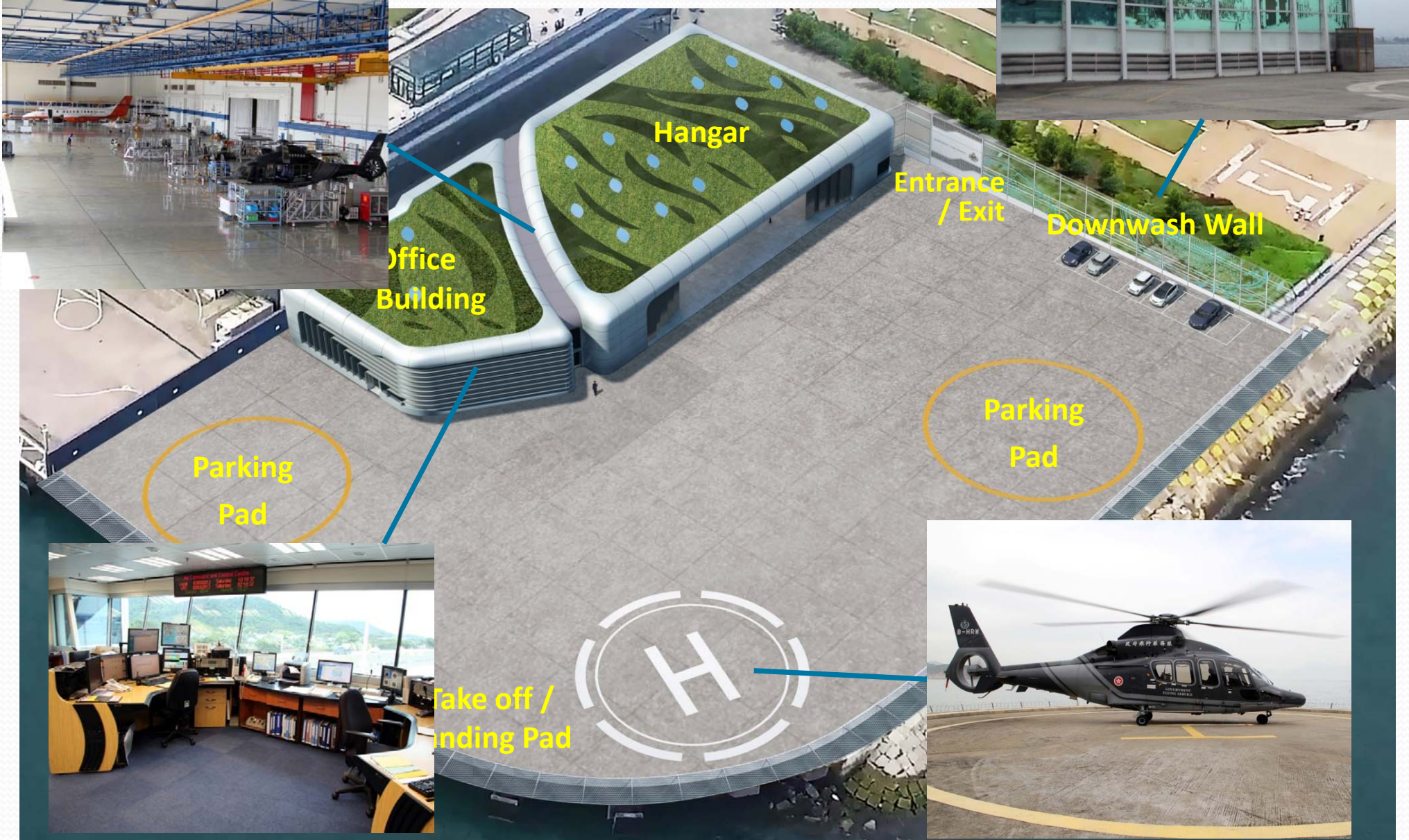


Site Location



- Preservation of original planning intention & optimized use of scarce land resources
- Close to hospital – meet GFS operational needs
- Site readily available – match with Tung Chung New Town Extension programme

Scope of Works



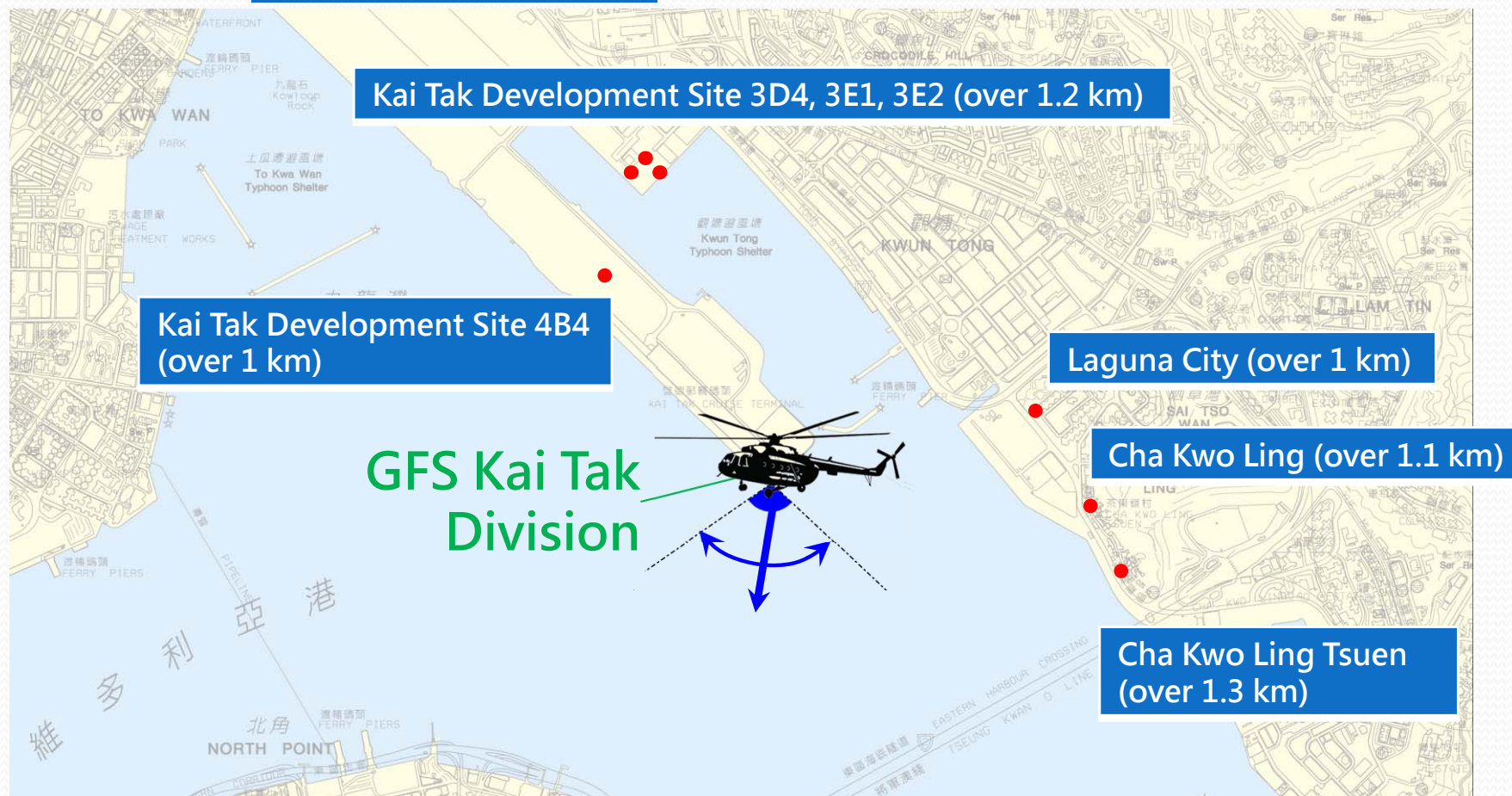
Technical Consideration - Noise Impact Assessment

- Helicopter noise is transient and intermittent
- Number of emergency call-outs: 8 nos. per day only



Technical Consideration - Noise Impact Assessment

- Sufficient separation from residential area. Not Designated Project under EIAO
- Technical assessment: the noise level would not exceed the relevant standards
- GFS will issue procedural guidelines: adopt flight path away from residential area



Technical Consideration - Harbour Planning Principles

- Preserving Victoria Harbour
- Stakeholder Engagement
- Sustainable Development
- Integrated Planning
- Proactive Harbour Enhancement
- Vibrant Harbour
- Accessible Harbour
- Public Enjoyment

Stakeholder Engagement

- Consulted with Kowloon City, Wong Tai Sin and Kwun Tong District Councils and obtained their general support on the proposed establishment of the GFS Kai Tak Division
- Organized site visits to GFS Headquarters in HKIA for DC members

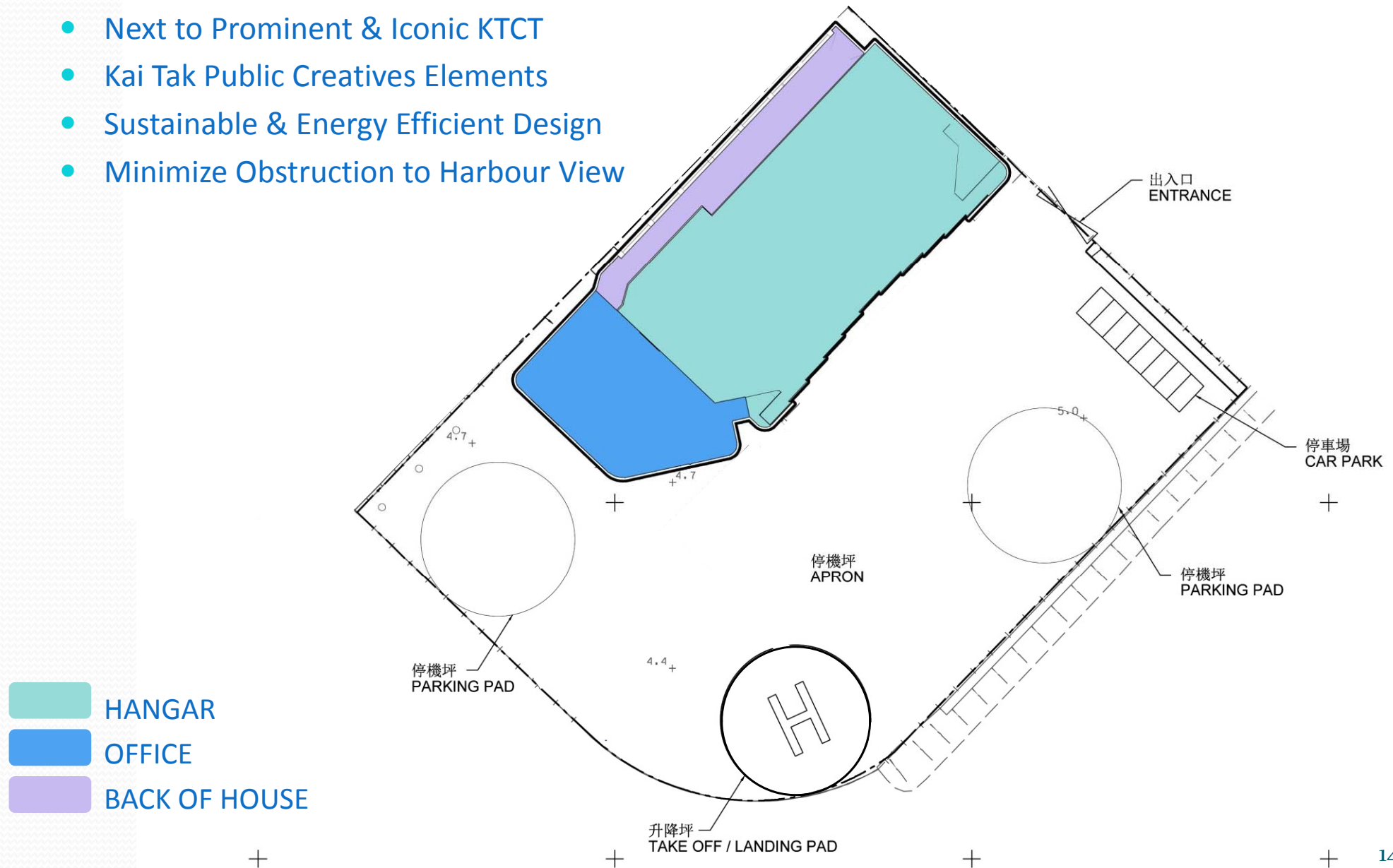




Architectural Design Concept

Design Considerations & Constraints

- Maximum Building Height +13mPD
- Next to Prominent & Iconic KTCT
- Kai Tak Public Creatives Elements
- Sustainable & Energy Efficient Design
- Minimize Obstruction to Harbour View





- The hangar takes its inspiration from the smooth aerodynamic forms of helicopter, that has led to a more refined and sleek form.
- The soft rounded corners and the choice of aluminum cladding and glazing of the adjacent office help blend in with cruise terminal.

Matches Aviation Theme and Pay Homage to Aviation History



- Pay homage to the aviation history of the Ex-Kai Tak Runway.
- Marks and celebrates the memory of the old Kai Tak area as an aviation hub that may have otherwise been lost with the new developments.

Harbour Enhancement

Sympathetic to Kai Tak Cruise Terminal

GFS Kai Tak Division

- Taking cues from the curved architectural features and modern material palette of the KTCT – the GFS Kai Tak Division can be seen as a natural extension of the KTCT.
- The design is sympathetic with its context.



Harbour Enhancement

Sympathetic to Kai Tak Cruise Terminal

- Structural grid of the façade shading fins, as well as the downwash wall, reflect the curvature & window grid proportion of the KTCT.



Harbour Enhancement

Natural Extension of the Kai Tak Cruise Terminal

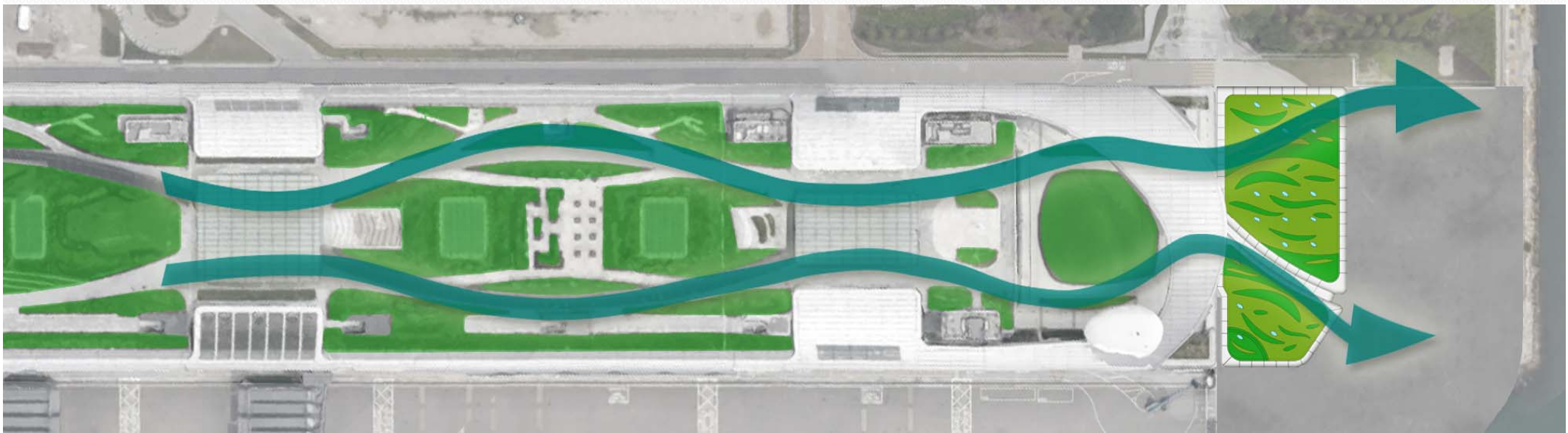
GFS Kai Tak Division



Harbour Enhancement

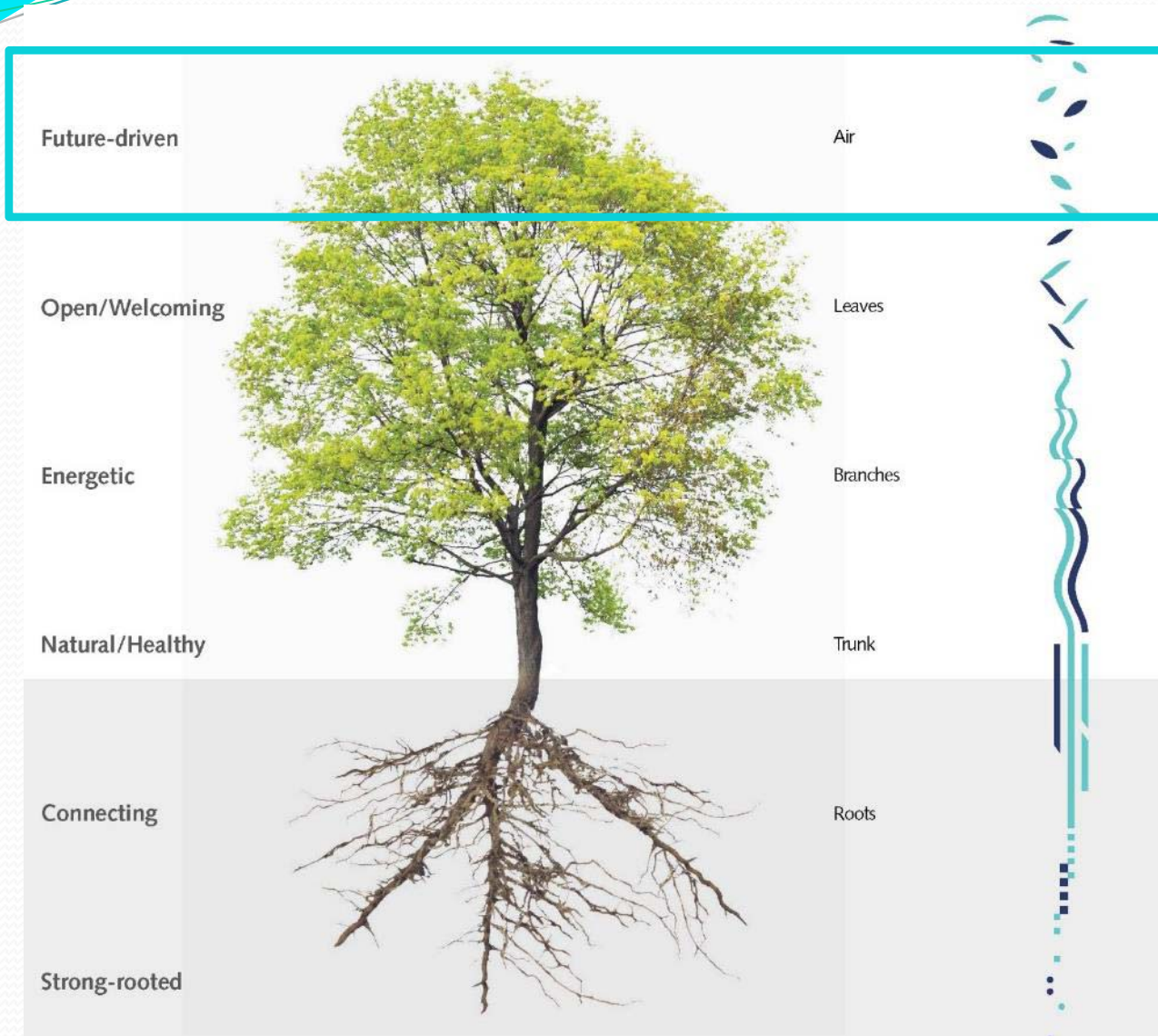
Natural Extension of the Kai Tak Cruise Terminal

- The hangar has a total height of 8m. Stepping-down landscape elaborates the overall landscape of KTCT and enhance visual connectivity towards the water border.
- Green roof pattern echoes with the overall landscape language of KTCT.

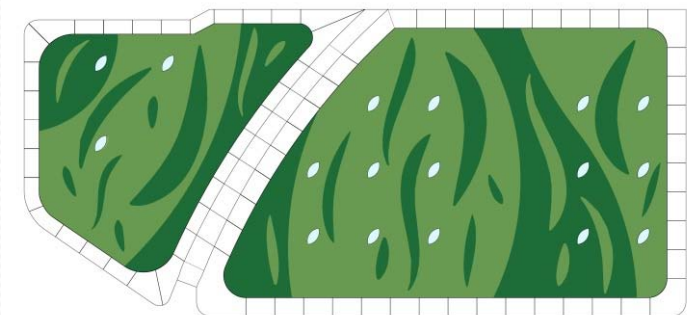
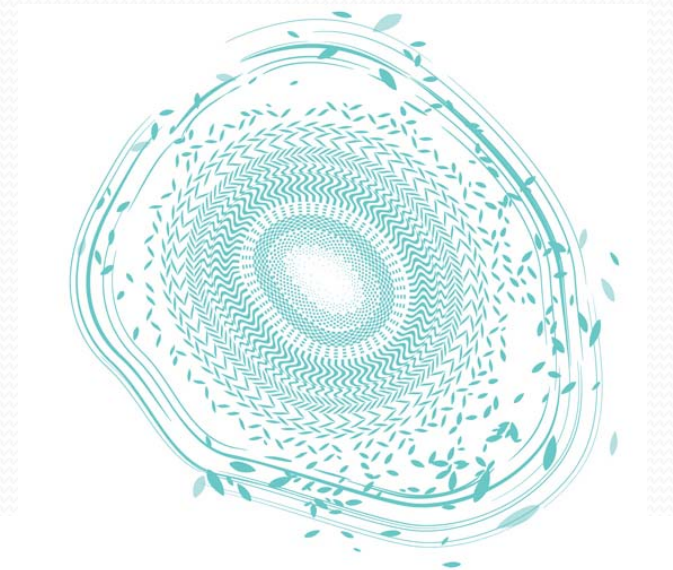


Harbour Enhancement

Kai Tak Public Creatives Elements - Current of Vitality Theme



- Kai Tak Public Creatives - Current of Vitality theme promote a “**future-driven**” brand personality that is “**Energetic, adoptable and State-of-the-Art**”



- Green Roof Plan



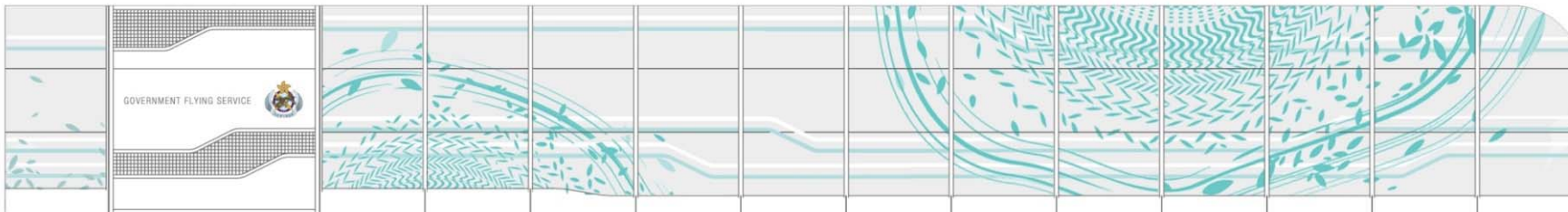
Harbour Enhancement

Kai Tak Public Creatives Elements - Current of Vitality Theme



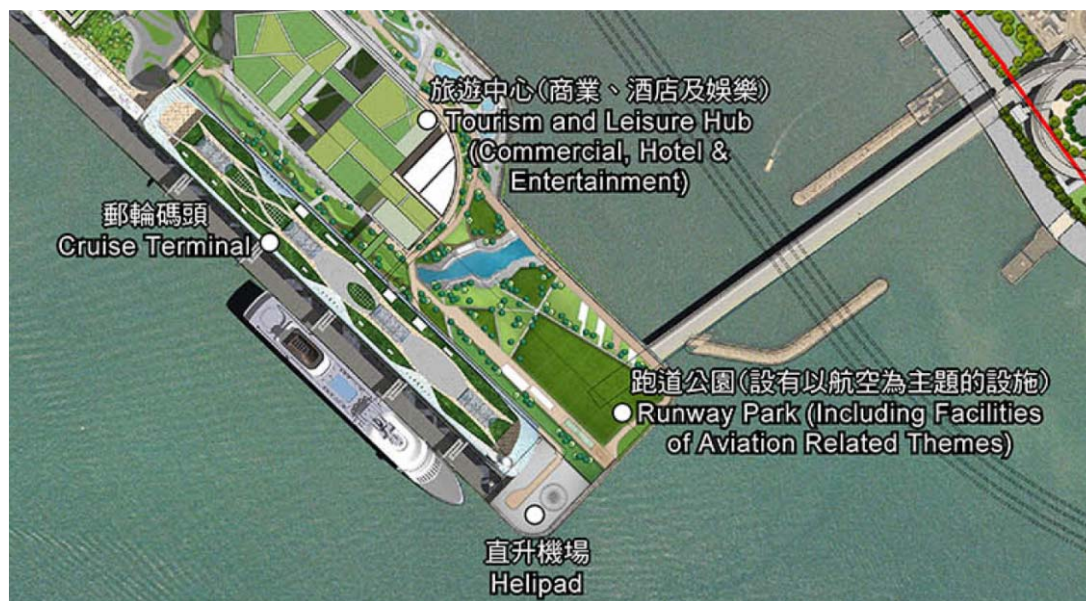
- The green roof celebrates the Kai Tak Theme by using the “air pattern” from Kai Tak Public Creatives elements - Current of Vitality DNA bar as an index for landscaping the roof.
- Graphic motifs from Kai Tak Current of Vitality Theme adopted onto the downwash wall.

GRAPHIC MOTIF ON DOWNWASH WALL



Roof Greening

- Green roof to be provided on building & hangar
- Tie in with the Landscape Master Plan of KTD



Landscape Plan of Kai Tak Development

Roof Greening



- Site Area: 7,400 m²
- Roof Area: 2,080 m²
- Green Roof Area: 1,568 m²
- Green Ratio: 21.2%

- The light tube cover glass on rooftop are in the shape of leaves which echoes with the “AIR – Future-driven” theme and imply a sense of dynamic to the overall roof design.






Minimal Intervention

- The site concerned has been reserved for heliport since 2007.
- The proposed GFS Kai Tak Division has no intervention to the existing accessibility condition.
- Minimized visual intervention to the existing sightline at the tip, in particular the open space of KTCT.



Imaginative Future Condition after GFS Division Extension

Minimal Intervention - Access Arrangement



Existing vehicular and pedestrian accesses in the Cruise Terminal will not be affected.

- Kai Tak Division generates very low traffic demand
- No significant impact on traffic network & pedestrians

* Note: The exact access arrangement is still subject to discussion with relevant departments.

GFS Kai Tak Division

Public Enjoyment

Minimal Impact to Harbour View

- Minimized visual impact through the observation of the height restriction in OZP.
- The semi-transparent downwash wall allows views of the skyline and beyond.



Public Enjoyment

Minimal Impact to Harbour View

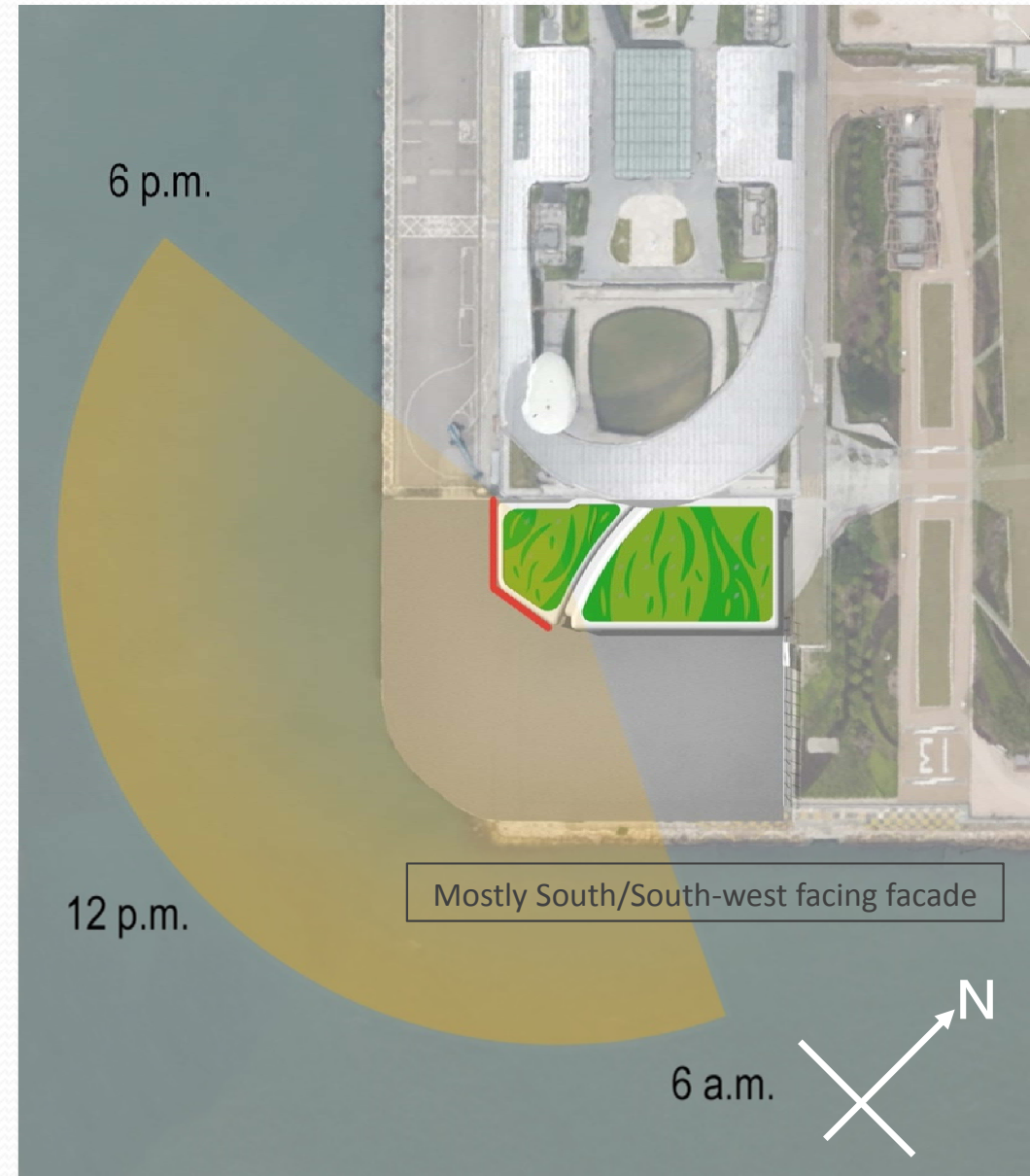
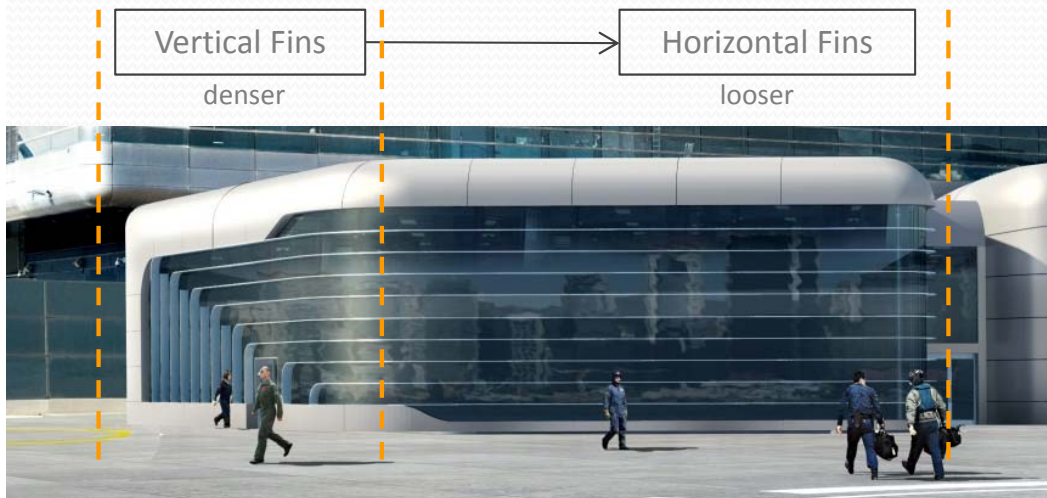


Current Arrangement of Wan Chai Helipad near Golden Bauhinia Square



Passive Design Approach

- Major office area facing South.
- Denser vertical shading devises on West-facing façade, transforming to horizontal fins on South-facing façade.
- Allows more natural light into interior, but avoiding intensive West sunlight. This favours not only the interior comfort for inhabitants, but also the reduction of electricity consumption for heating/cooling.
- Hence, no reflective glazing is needed, which avoid over-heating to the surrounding and glare to public visitors of the harbour front.

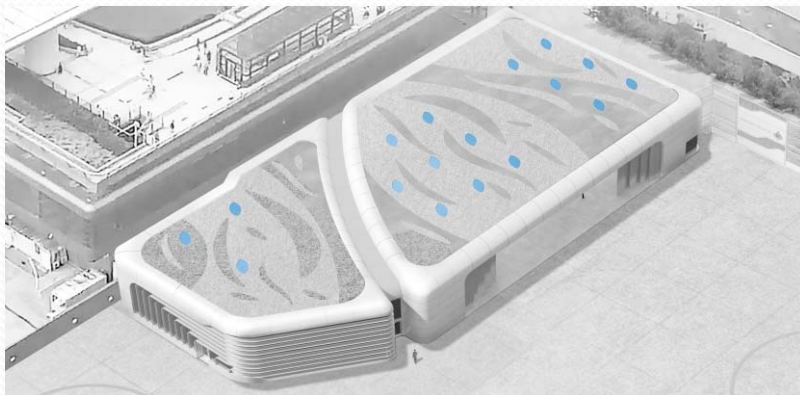
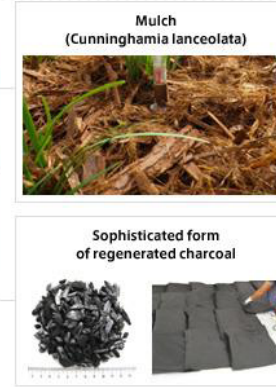
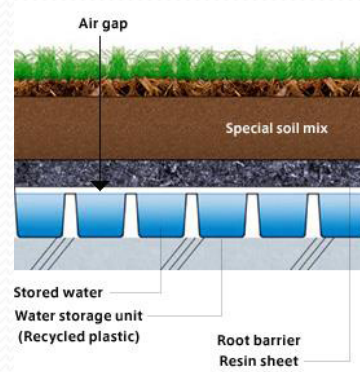


Sustainable Development

Sustainable Design Features



GREEN ROOF

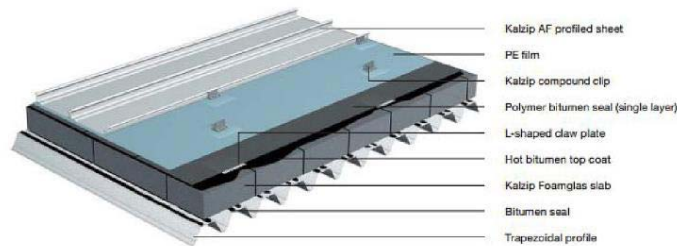


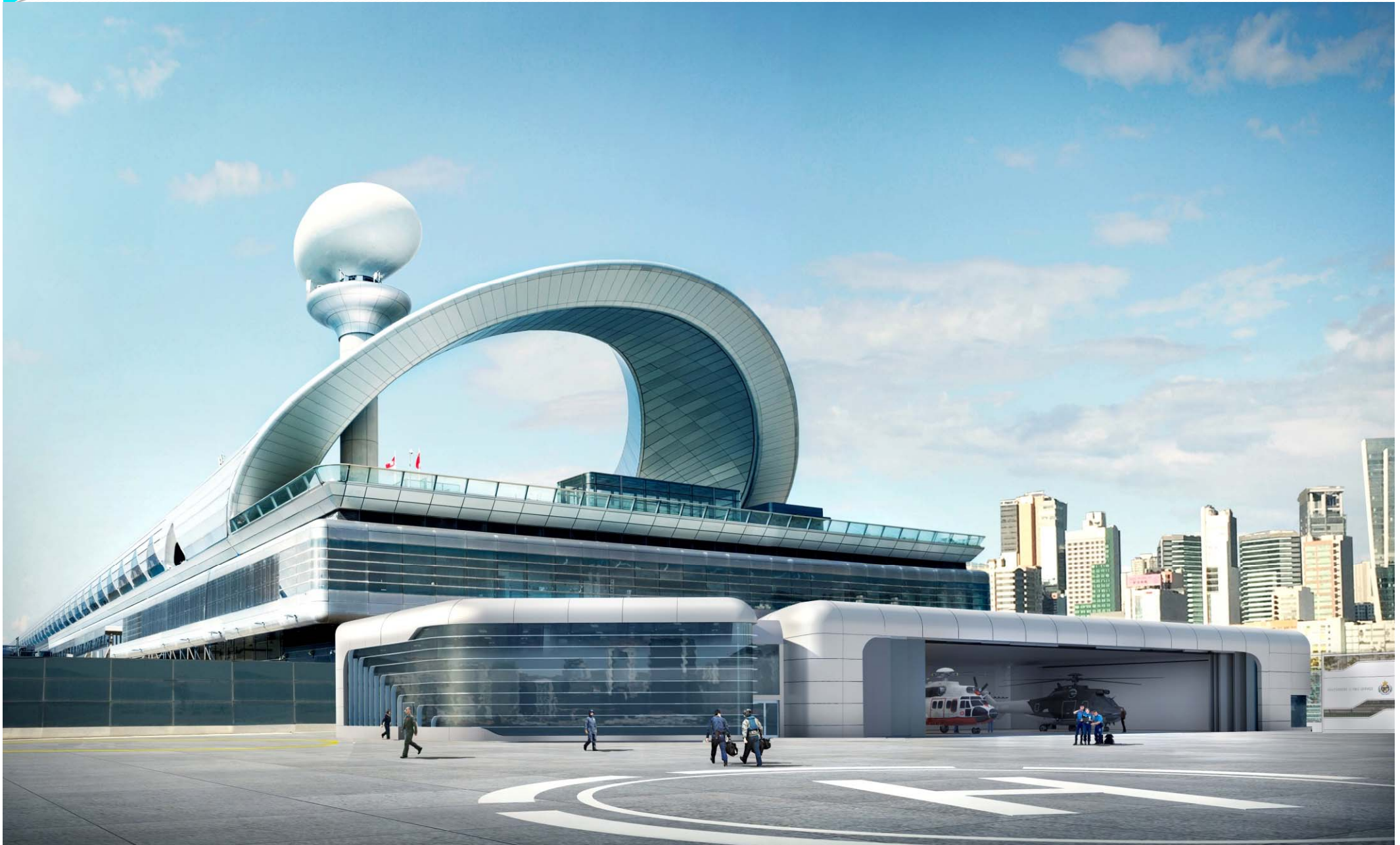
LIGHT TUBES



KALZIP

Kalzip Foamglas System with Kalzip AF Profile







Thank you!