A nighttime photograph of the Hong Kong skyline, featuring numerous illuminated skyscrapers and buildings. The scene is set against a dark blue sky with some clouds. In the foreground, the water of the harbor is visible, with several boats and their lights. A semi-transparent teal rectangular overlay is positioned on the left side of the image, containing white text.

PWP Item Nos. 4444DS, 4442DS & 4451DS Construction of Dry Weather Flow Interceptors at Wan Chai East, Causeway Bay and Shau Kei Wan

**Harbourfront Commission
Task Force on Harbourfront
Developments on Hong Kong Island**

Date: 1 December 2022

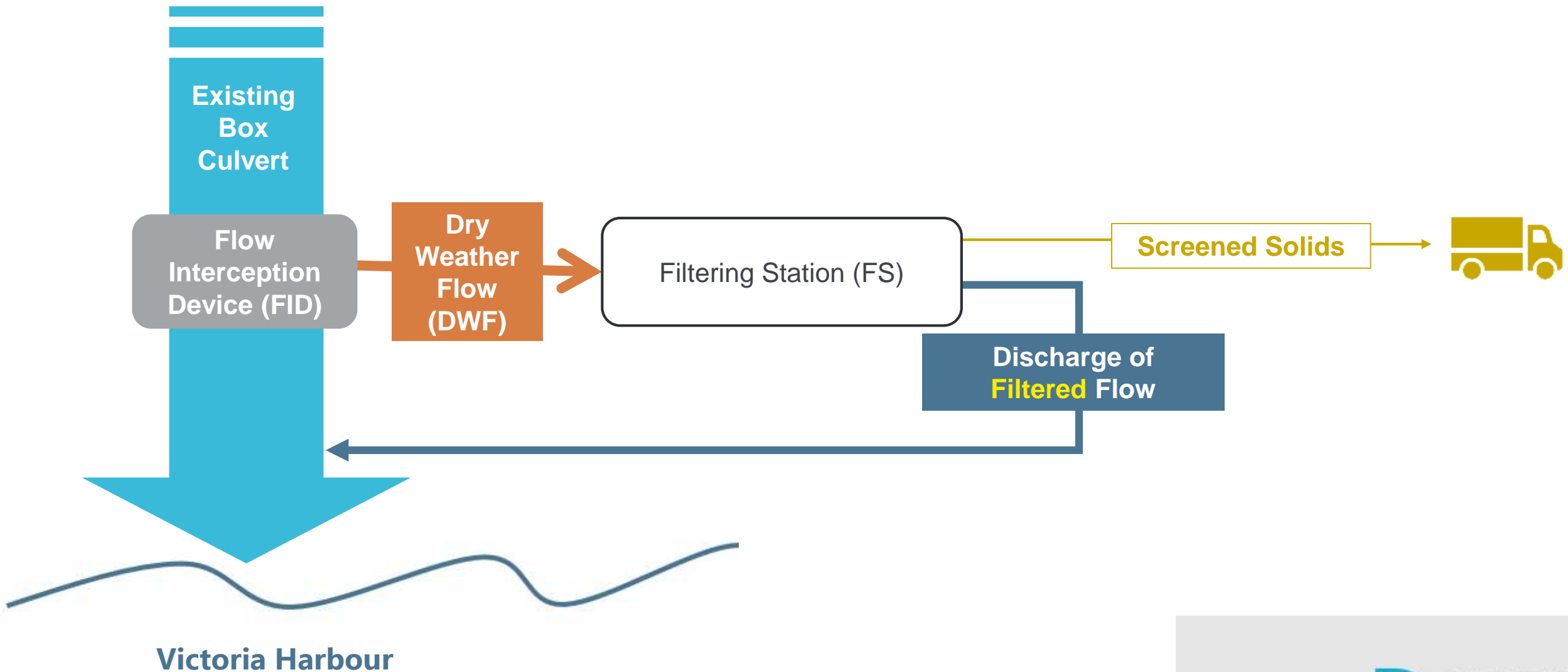
Agenda

1. Project Background
2. Wan Chai East DWFI
3. Causeway Bay DWFI
4. Shau Kei Wan DWFI

Project Background

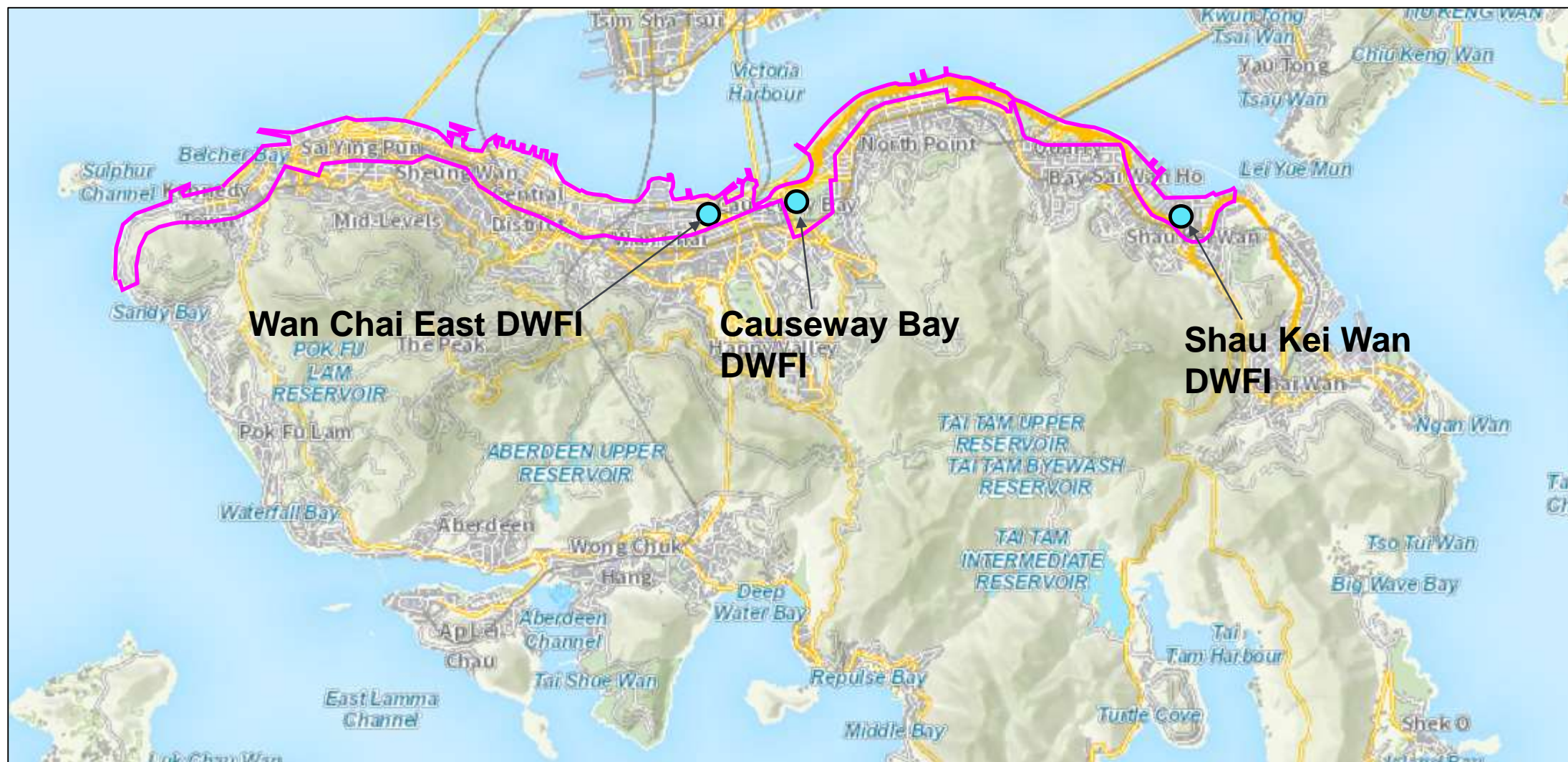
- Dry Weather Flow
 - Polluted water and matters from some buildings and streets together with the stormwater base flow and groundwater infiltration have been discharged into the stormwater drains.
 - The organic materials which were accumulated inside the storm water box culverts will decay and generate odour, affecting the waterfront.
- To address the pollution and odour nuisance at urban coastal waters, the Government is planning to construct DWFI each at Wan Chai East, Causeway Bay and Shau Kei Wan.
- Upon completion of the DWFIs, the near-shore water quality and the general environment at Wan Chai East, Causeway Bay and Shau Kei Wan waterfront will be improved.

Dry Weather Flow Interceptor (DWFI)



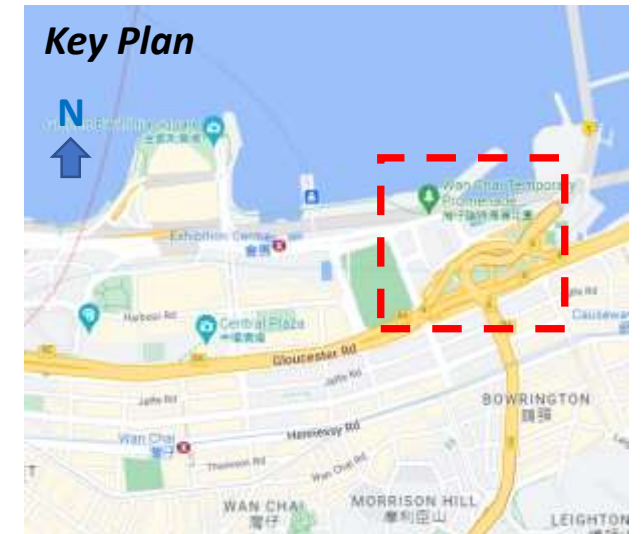
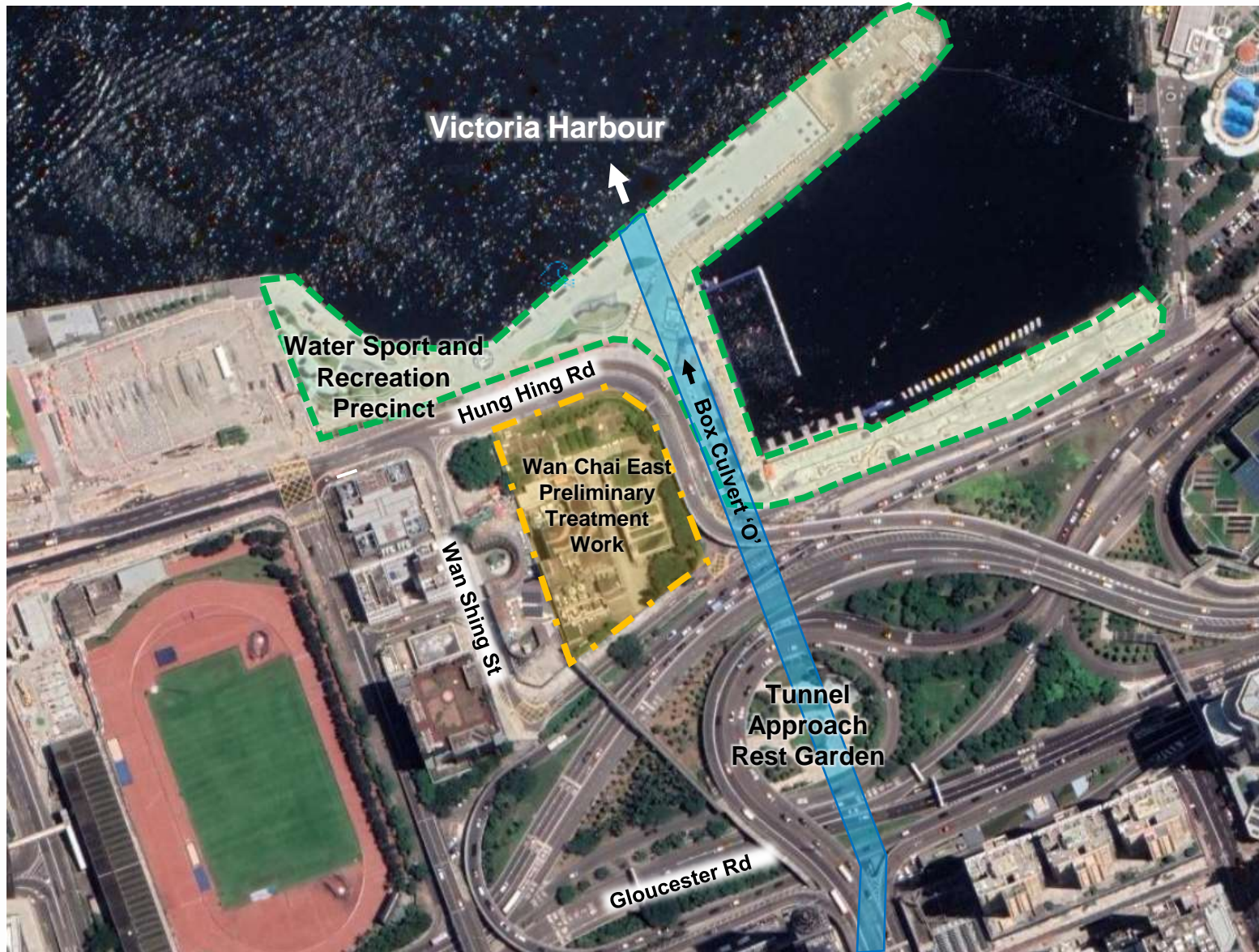
Victoria Harbour

Project Location

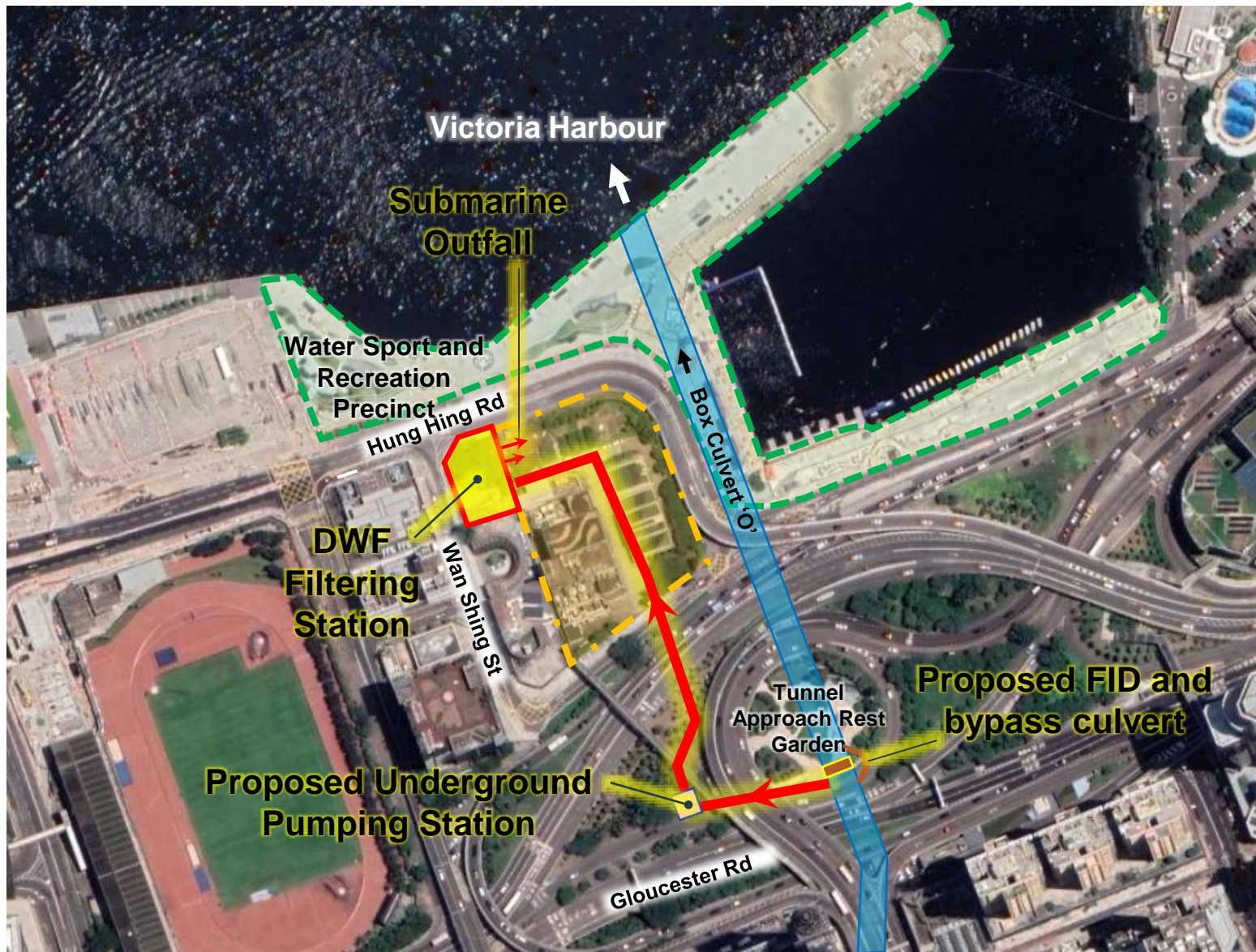


Wan Chai East DWFI

Location



Layout



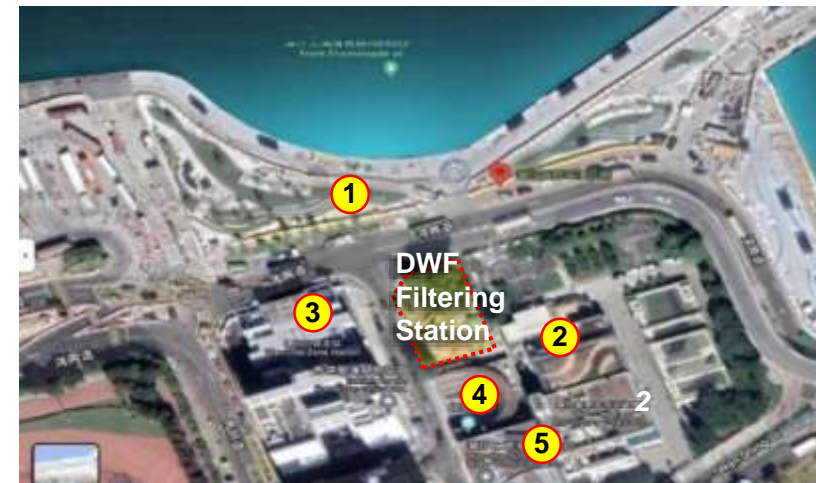
The proposed DWFI comprises:

1. Filtering Station (Co-use with Coach Parking Area)
2. Flow Interception Device (FID)
3. DWF Pumping Station
4. Connection pipe
5. Bypass Culvert

Neighbourhood

Factors Affecting the Design of DWF Filtering Station

- Transition from the adjacent Wan Chai Green Community Centre with its **organic vertical roof and wall fins**
- Façade exposure of DWF filtering station primarily from Hung Hing Road and Wan Shing Street
- The façade of filtering station facing east which is exposed to the Wan Chai East Preliminary Treatment including Hung Hing Road
- Facade exposure from the newly developed Wan Chai Promenade area



1 Wan Chai Promenade



2 Wan Chai East Preliminary Treatment



3 Wan Chai Zone Station



4 GREEN@WAN CHAI



5 Wan Chai Salt Water Pumping Station

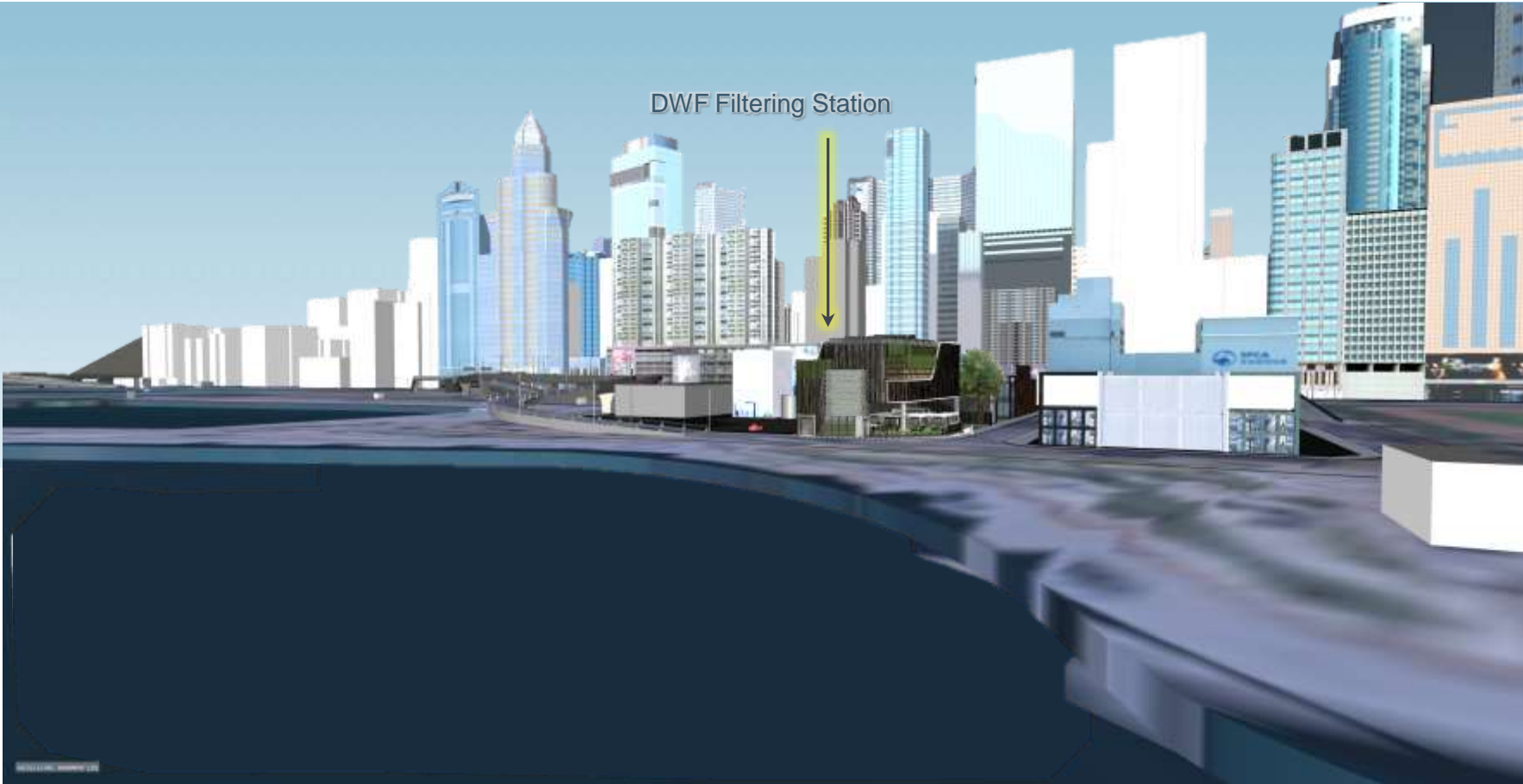
Filtering Station

Existing Site View



Dry Weather Flow Filtering Station

Revised Design (Overall View)



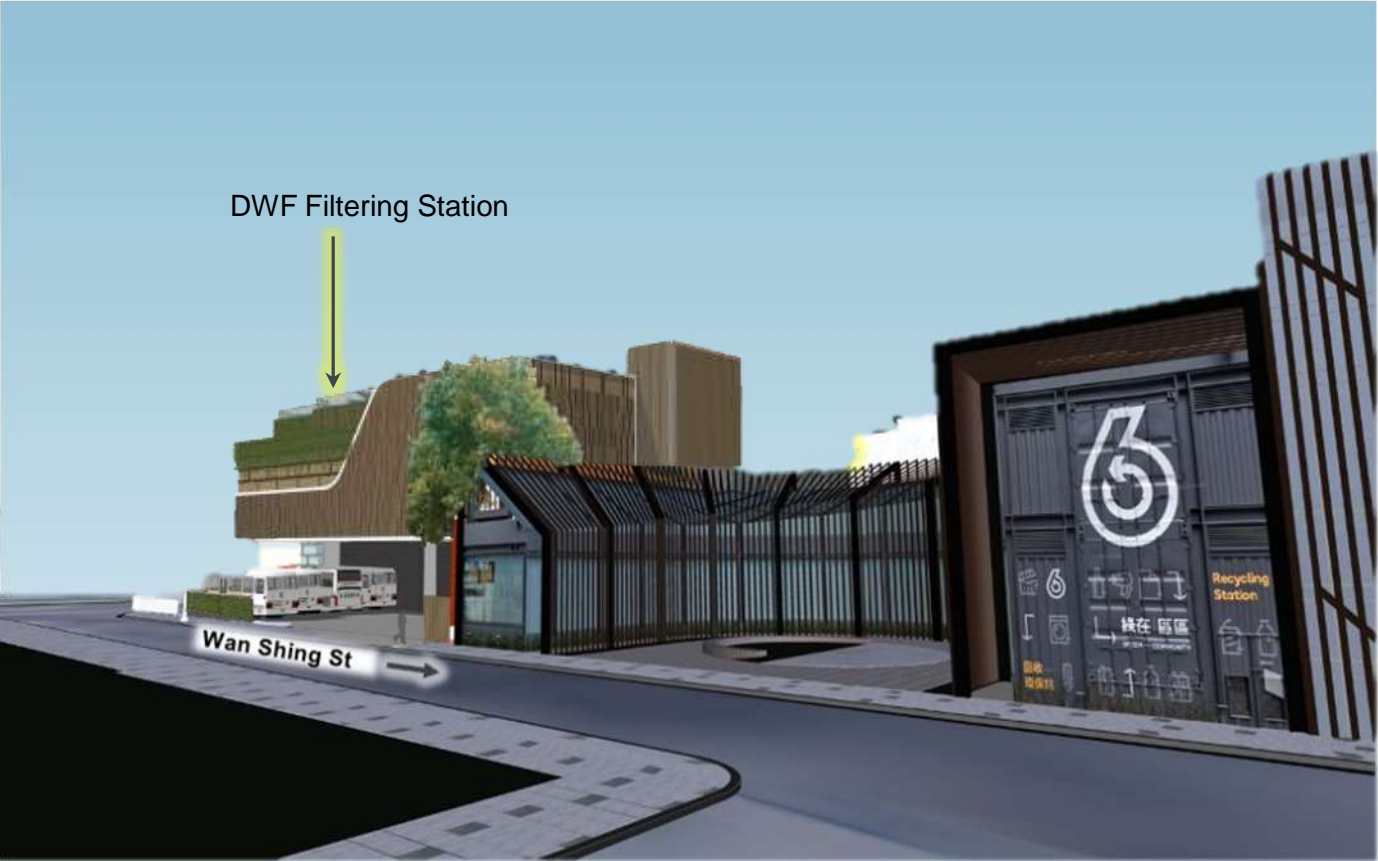
Dry Weather Flow Filtering Station

Revised Design (View from Hung Hing Road)



Dry Weather Flow Filtering Station

Revised Design (View from Wan Shing Street)



Dry Weather Flow Filtering Station



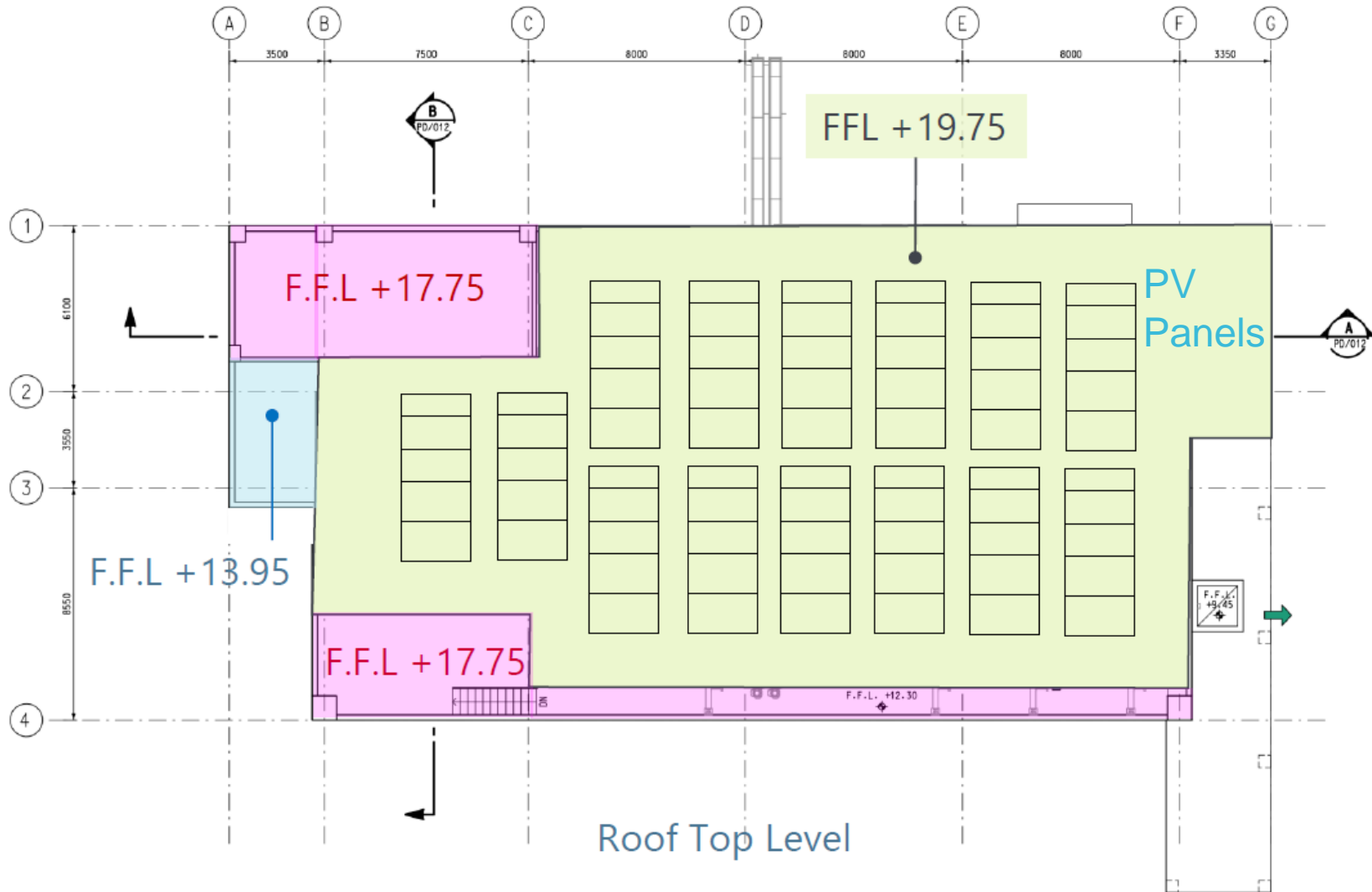
Filtering Station

Conceptual Design (Revised Design)

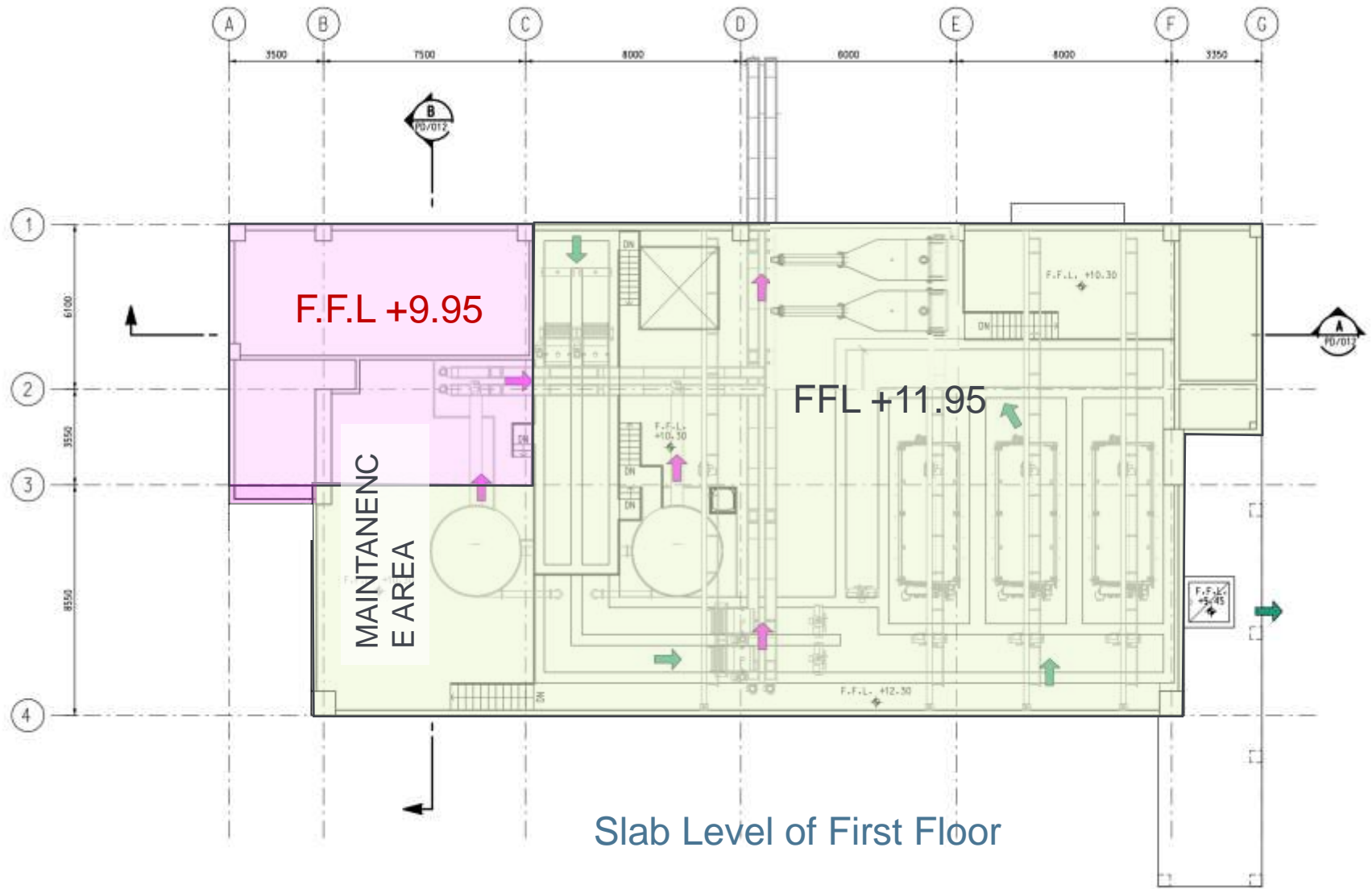


The building façade takes the design language of surrounding architecture and implements organic curves to smoothen the transition of materials.

Dry Weather Flow Filtering Station

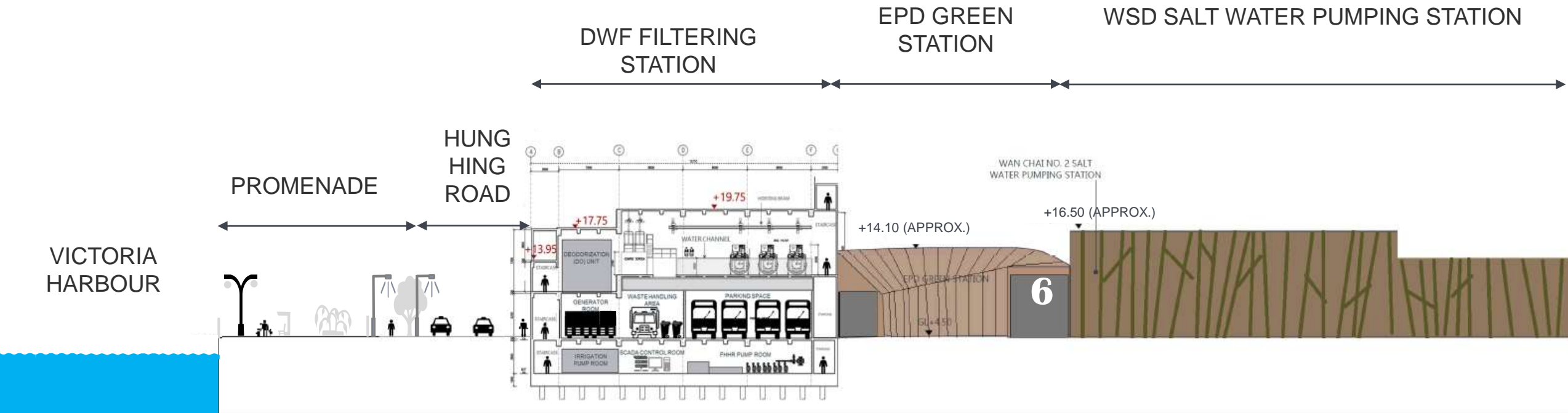


Dry Weather Flow Filtering Station



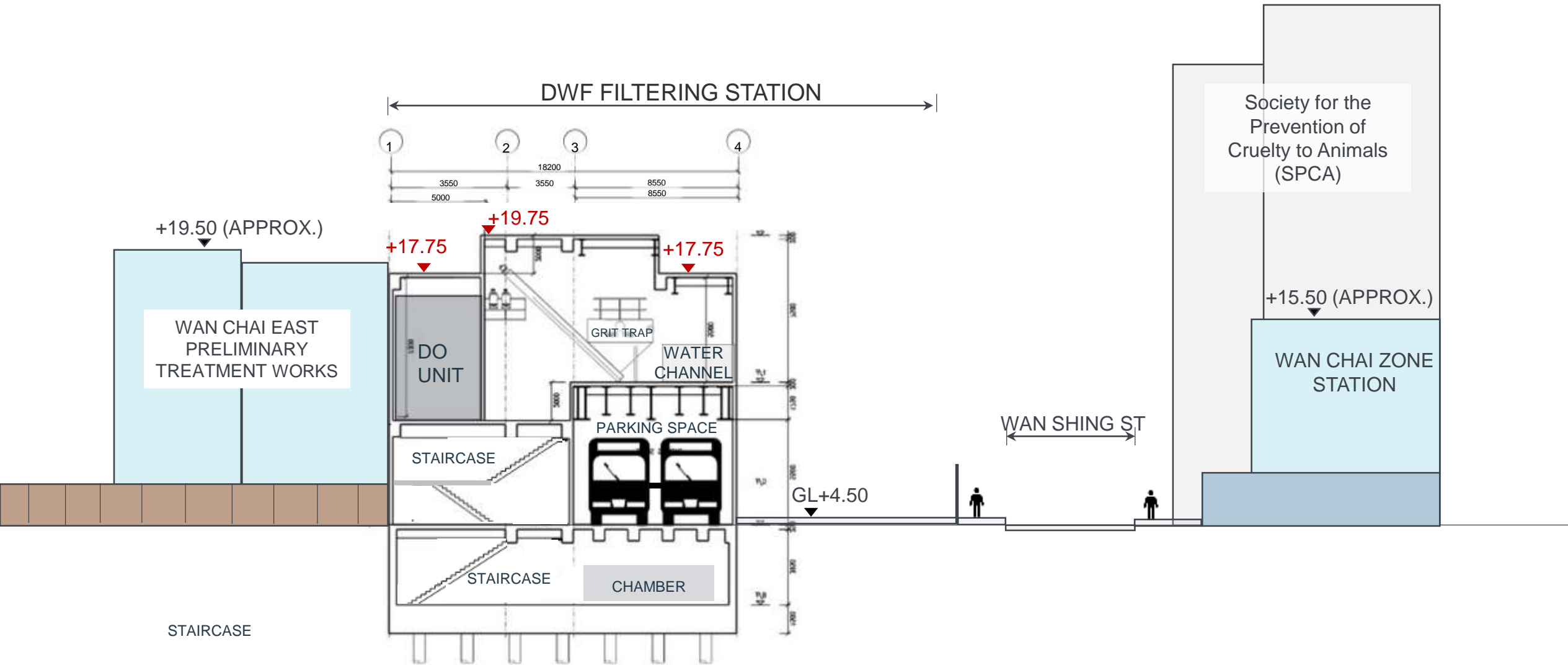
Slab Level of First Floor

Dry Weather Flow Filtering Station



Sectional view from Wan Shing Street

Dry Weather Flow Filtering Station



Connect to Promenade

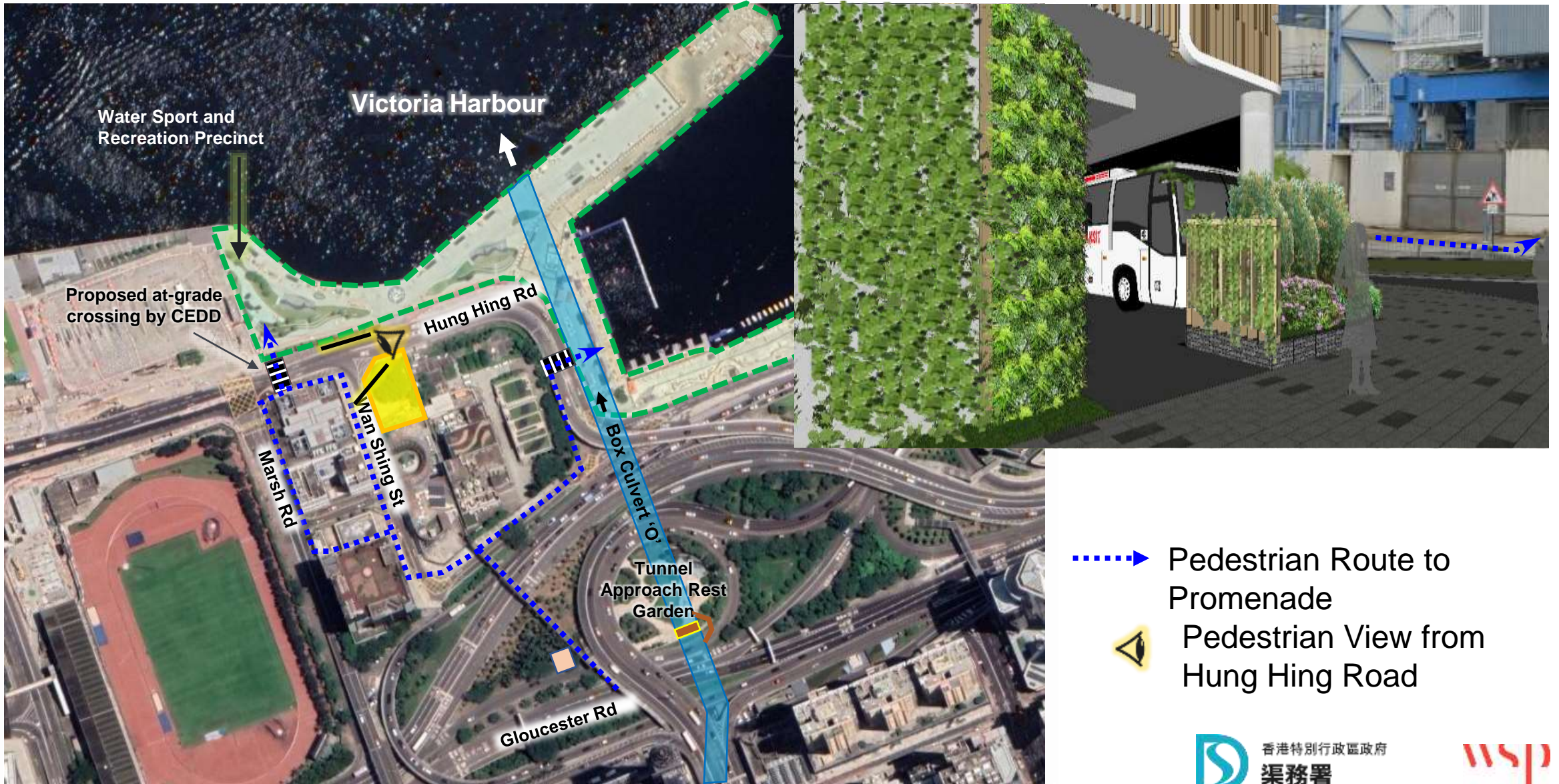


Planting features at filter station to enhance walking quality and harmonize the promenade environment

— Pedestrian Route to Promenade

▲ Pedestrian View from the promenade

Connect to Promenade



- Pedestrian Route to Promenade
- △ Pedestrian View from Hung Hing Road

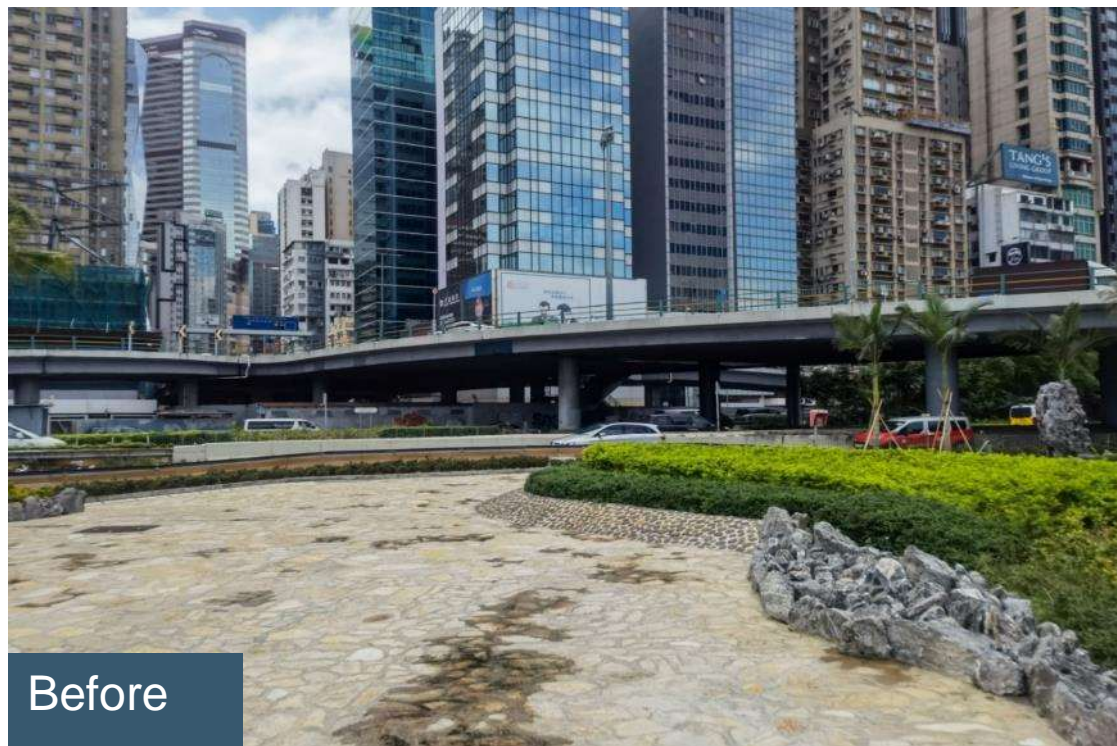
Connect to Promenade



- Pedestrian Route to Promenade
- △ Pedestrian View from Wan Shing Street

Flow Interception Device at Tunnel Approach Rest Garden

Landscape Treatment



Flow Interception Device at Tunnel Approach Rest Garden



Limit the works space to minimize disturbance to public as much as possible during construction



Flow Interception Device at Tunnel Approach Rest Garden

Landscape Treatment



- ① **Solar PV Panel to support lighting and charging mobile devices**



Ref. Photo: Jordan Valley



Ref. Photo

- ② **Soft Landscape to screen out the hardcore installations and Blend with Surrounding**

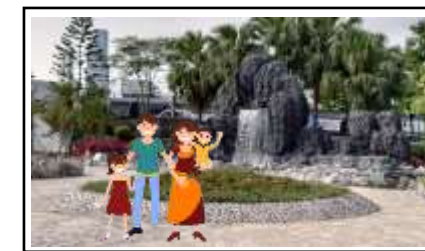


- ③ **Sheltered Sitting Bench**



Ref. Photo

- ④ **Selfie Stand, Table, Cup Holder**



Public Consultation & Implementation Programme

- Development, Planning and Transport Committee of WCDC consultation on 22 Nov 2022
- Local Area Committee consultation in 2023 Q1
- Works to be commenced in 2024
- Estimated Construction Duration : 4 years

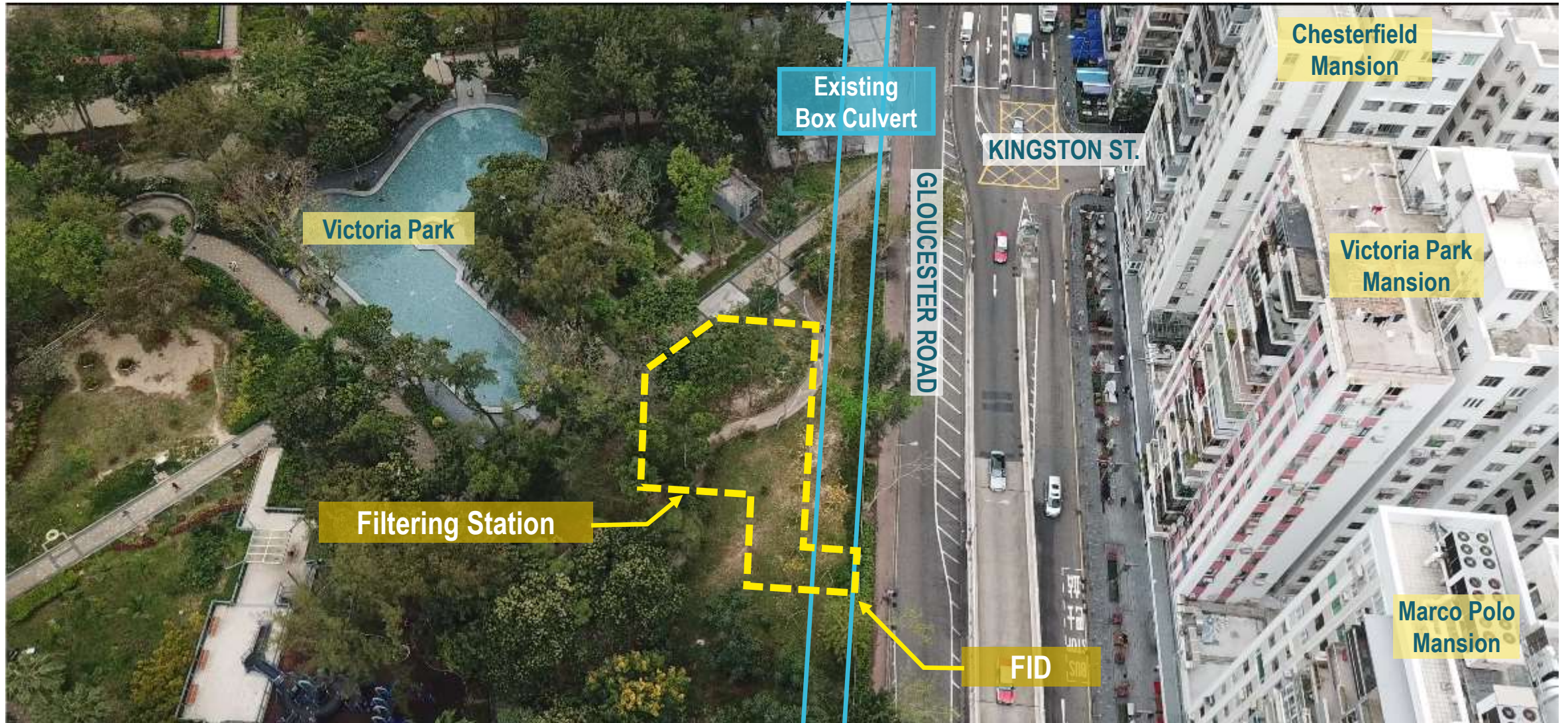
	Tentative Schedule
Commencement of Agreement	Dec 2020
DC Consultation	22 Nov 2022
Harbourfront Commission	1 December 2022
Local Area Committee Consultation	2023 Q1
Contract commencement	2024
Commissioning	2028

Causeway Bay DWFI

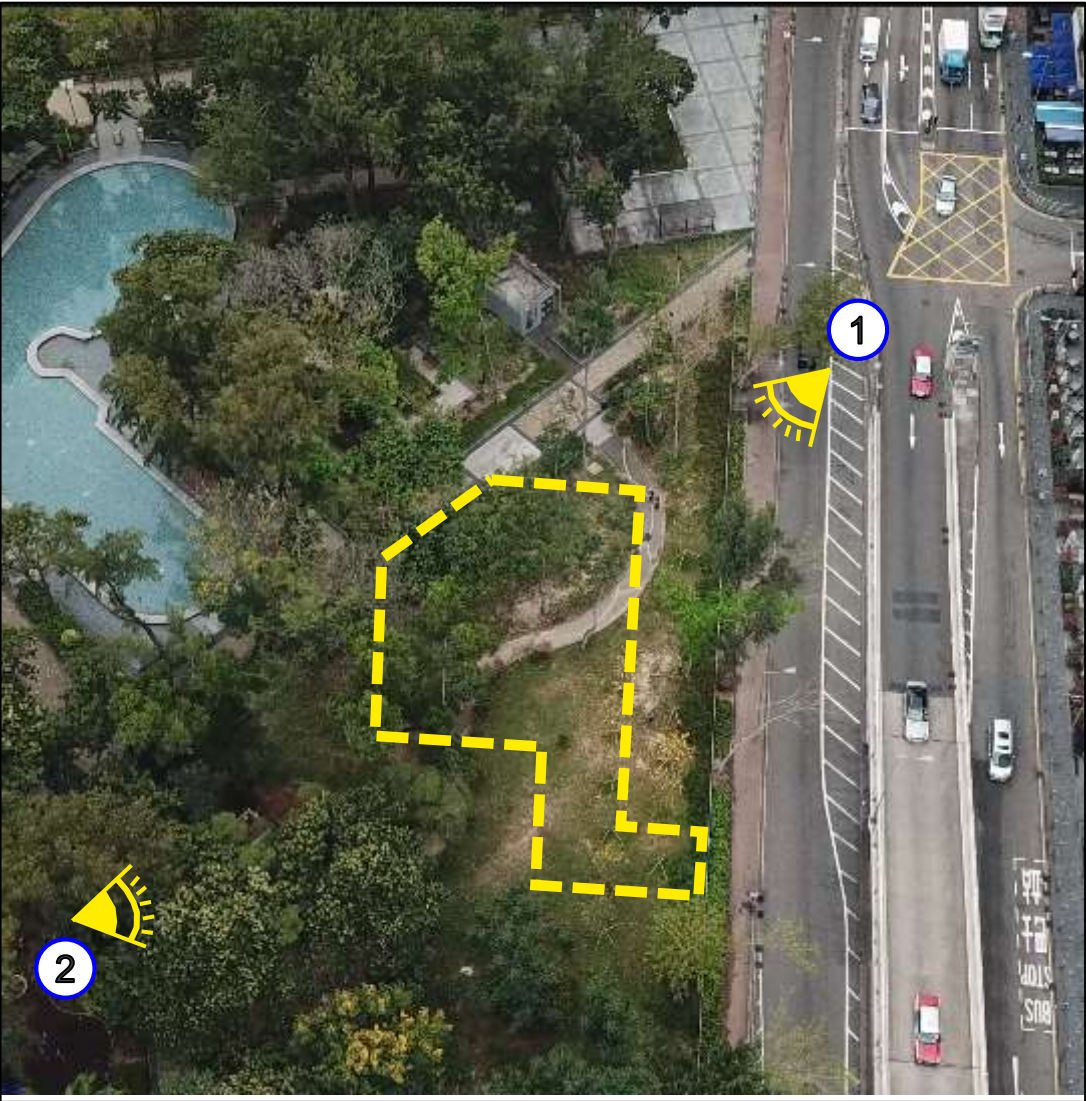
Location



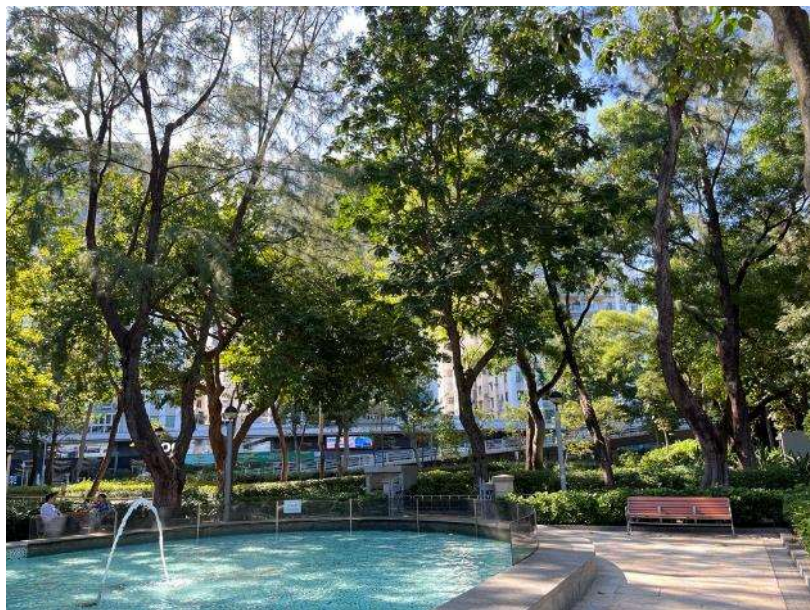
Location



Existing Site View



Surroundings



Conceptual Design

Draft



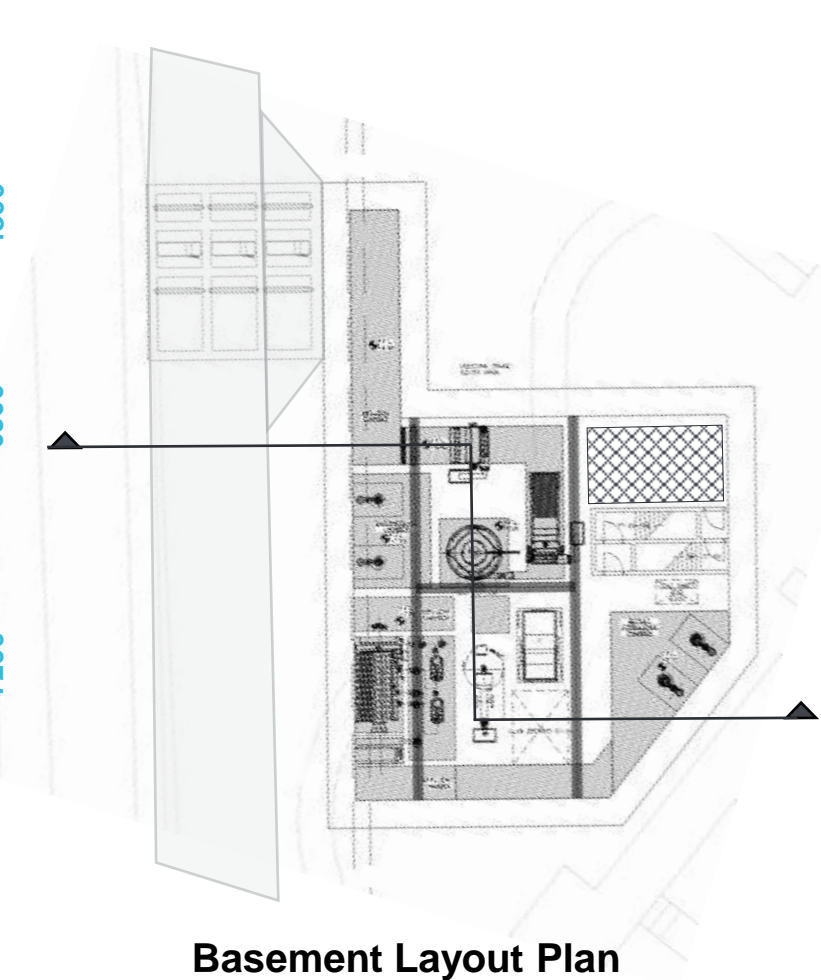
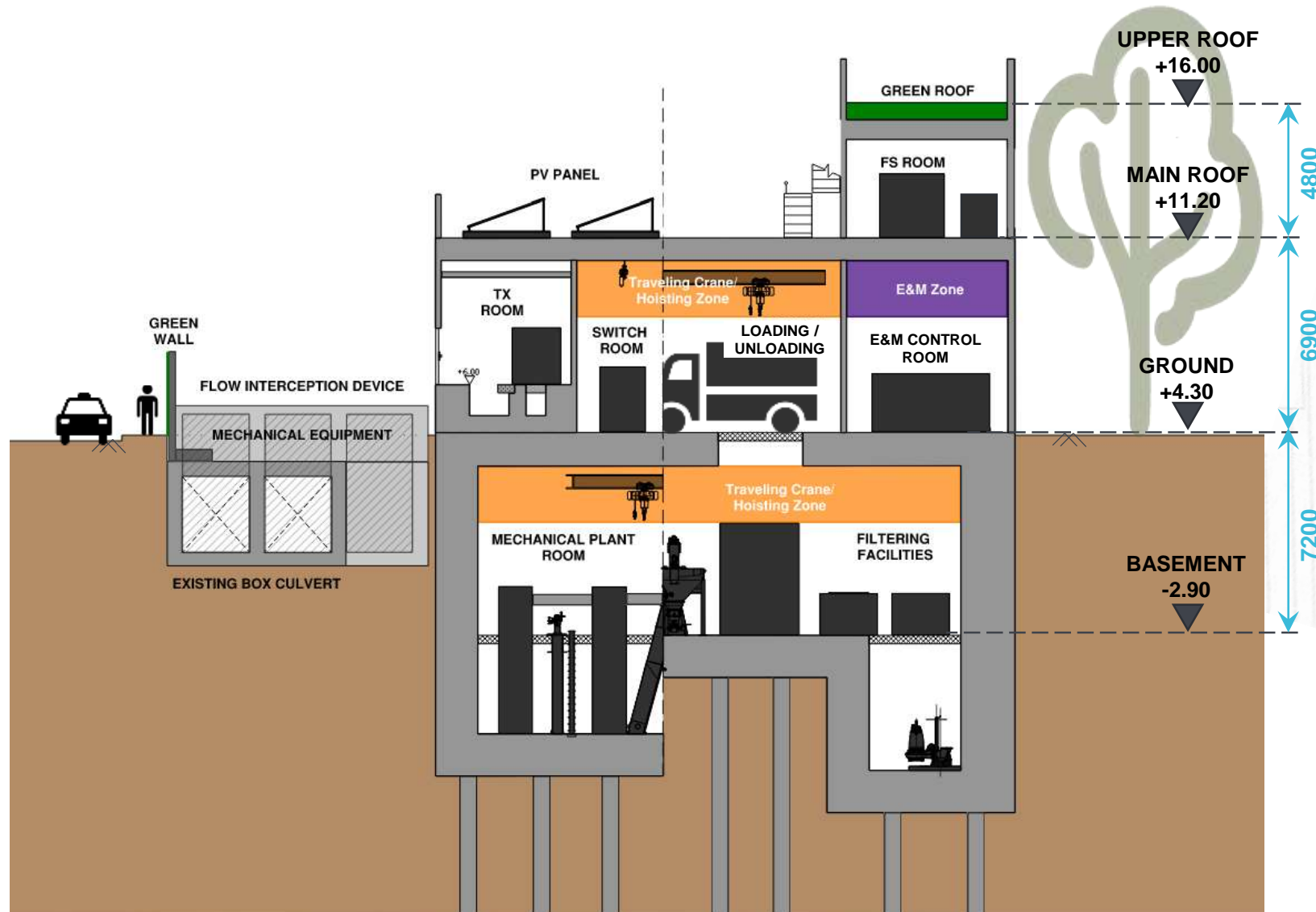
Conceptual Design

Draft

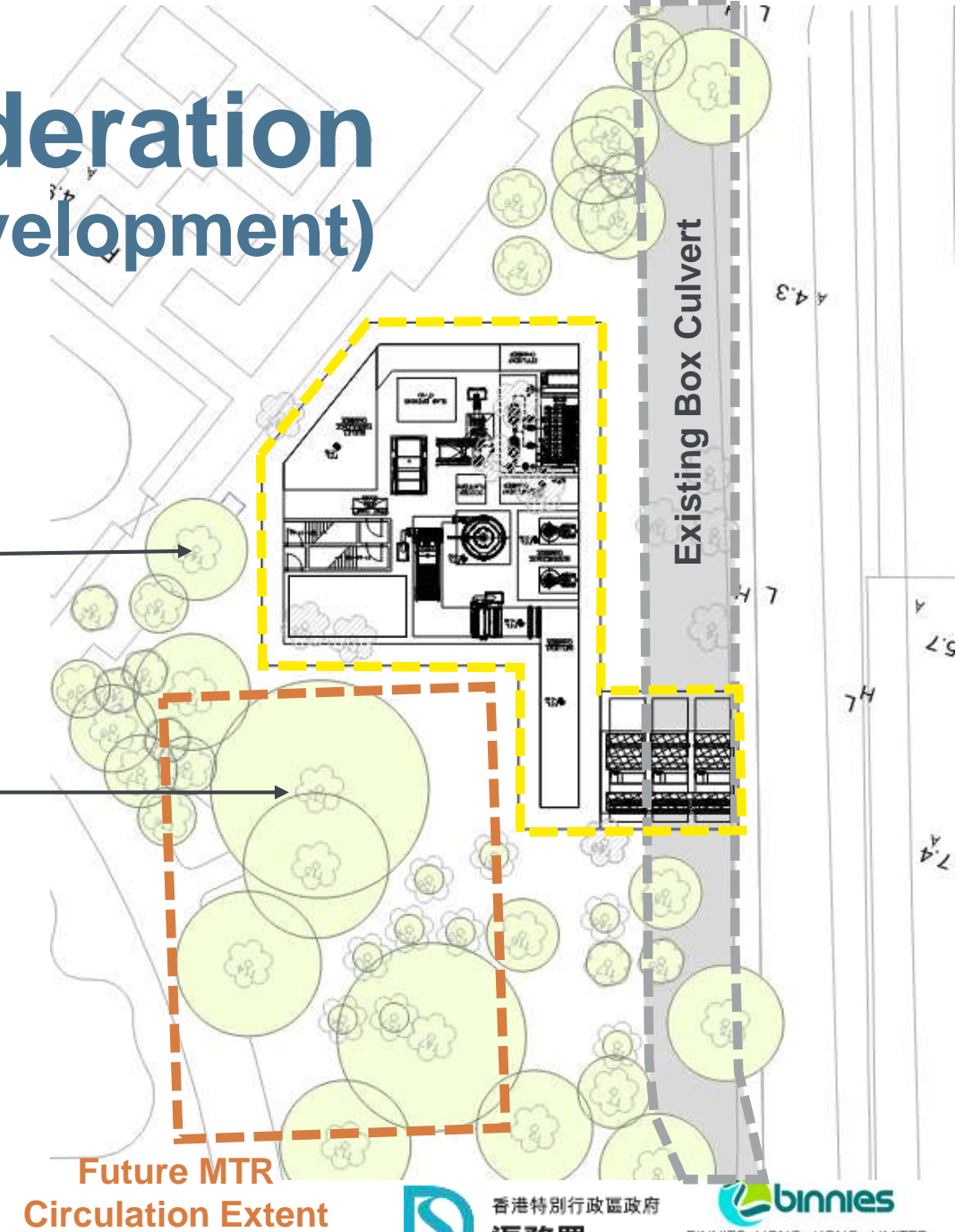


After

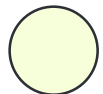
Sectional View of Filtering Station



Building Layout Consideration (Tree Preservation & Future Development)



LEGEND

-  Trees to be retained

Potential Additional Tree Planting Location (Public Enjoyment)



Potential Tree Planting Site
for Public Enjoyment

Public Enjoyment

- Proposed public engagement activity (flowering tree planting) in Victoria Park (under discussion with LCSD)



Public Consultation & Implementation Programme

- Development, Planning and Transport Committee of WCDC on 12 July 2022
- Consulting Local Area Committee in Nov 2022
- Works to be commenced in 2023 at earliest
- Estimated Construction Duration : 4 years

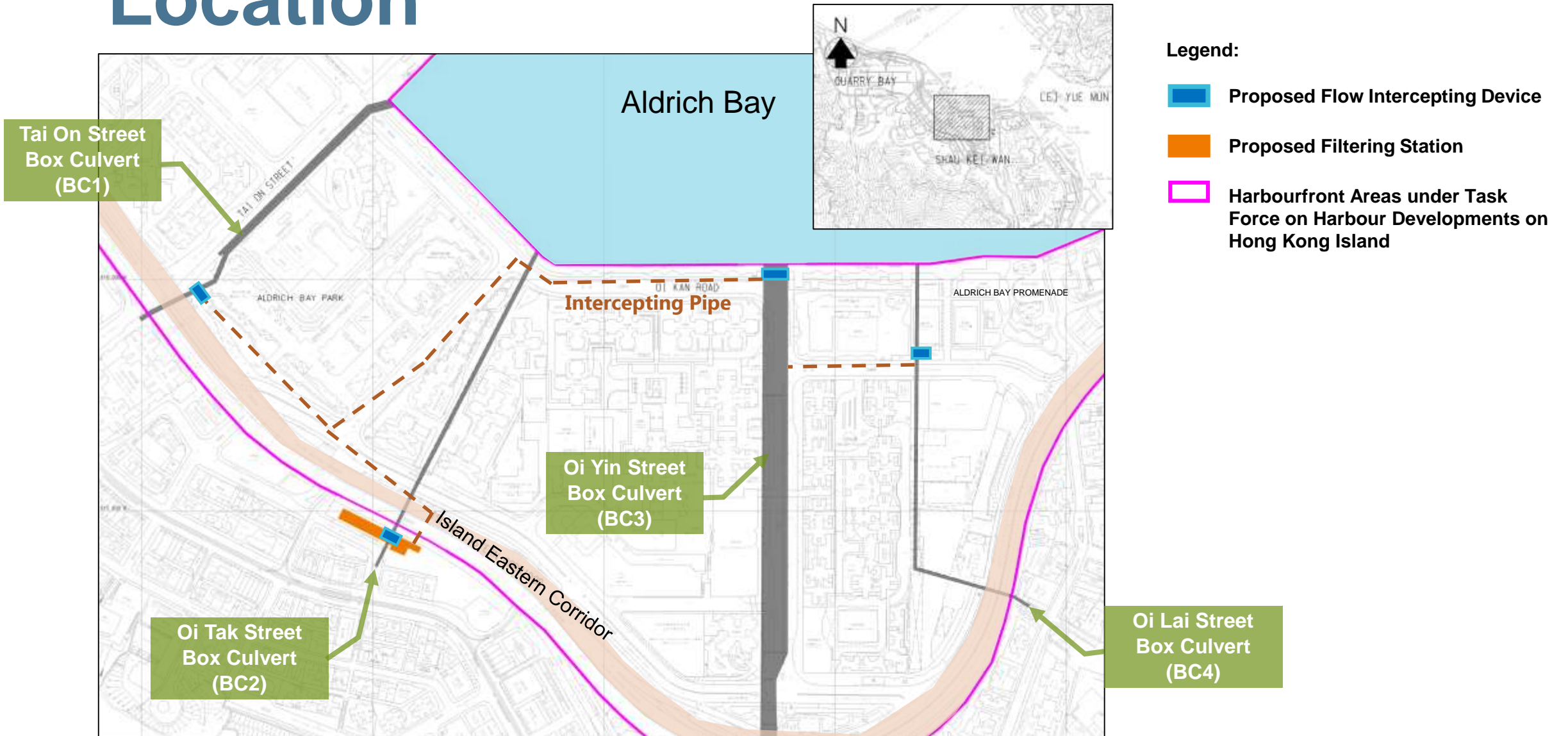
	Tentative Schedule
Commencement of Agreement	Jun 2020
DC Consultation	12 Jul 2022
Local Area Committee Consultation	Nov 2022
Harbourfront Commission	1 December 2022
Contract commencement	2023
Commissioning	2027

Shau Kei Wan DWFI

Aerial View



Location

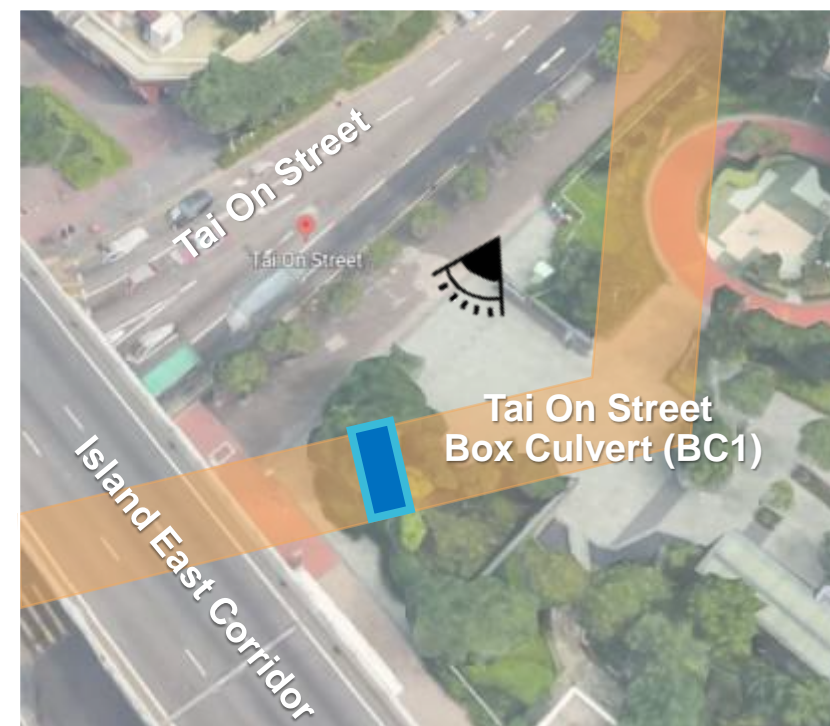


Legend:

- Proposed Flow Intercepting Device
- Proposed Filtering Station
- Harbourfront Areas under Task Force on Harbour Developments on Hong Kong Island

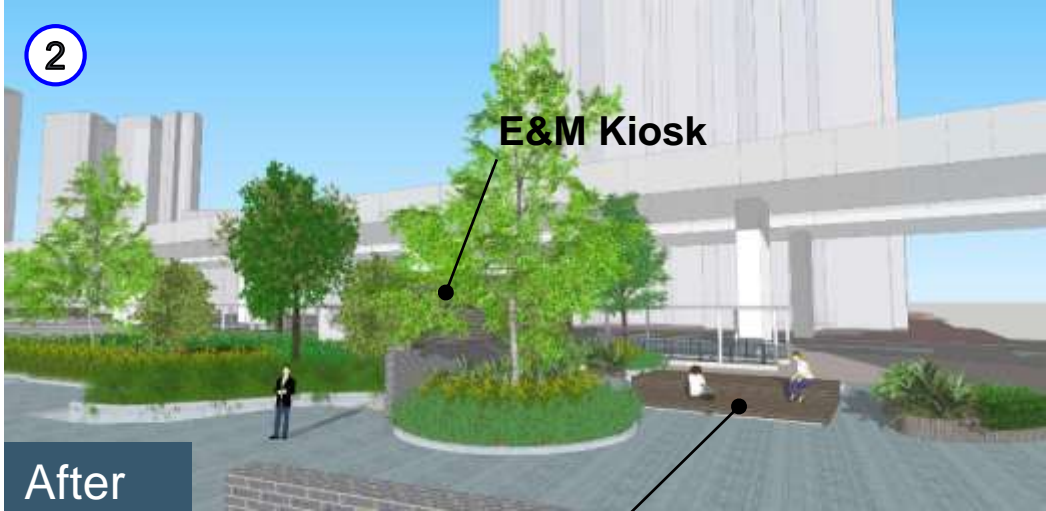
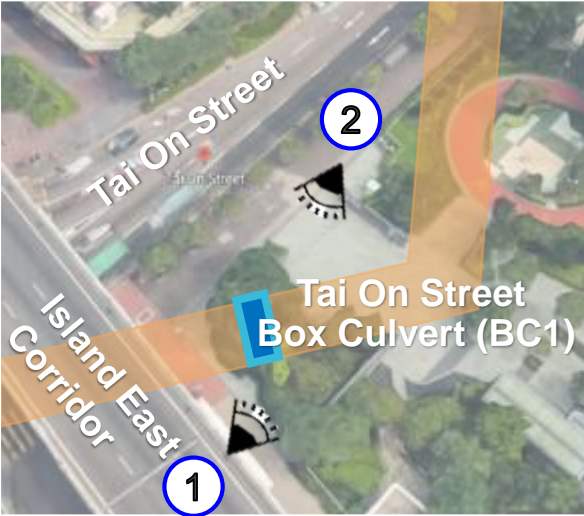
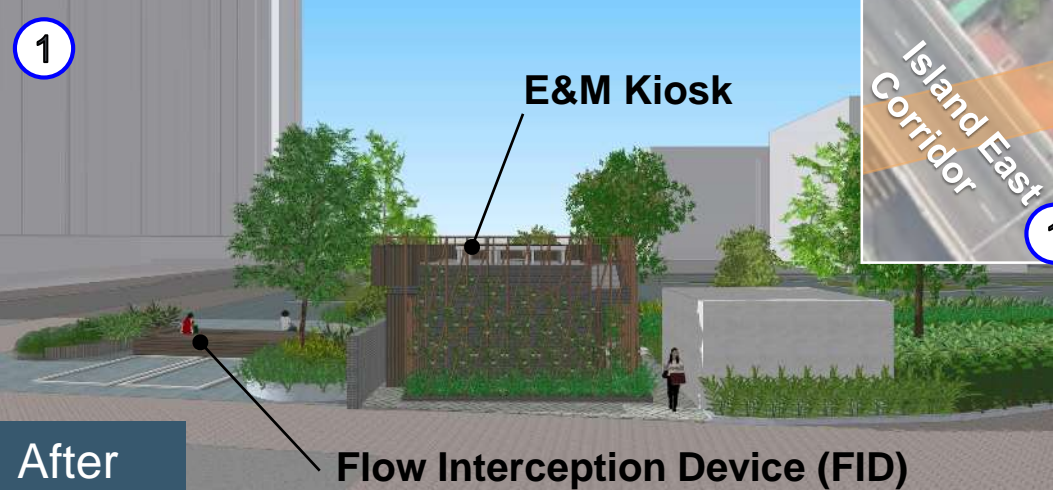
FID at Tai On Street Box Culvert (BC1)

Existing Site View



FID at Tai On Street Box Culvert (BC1)

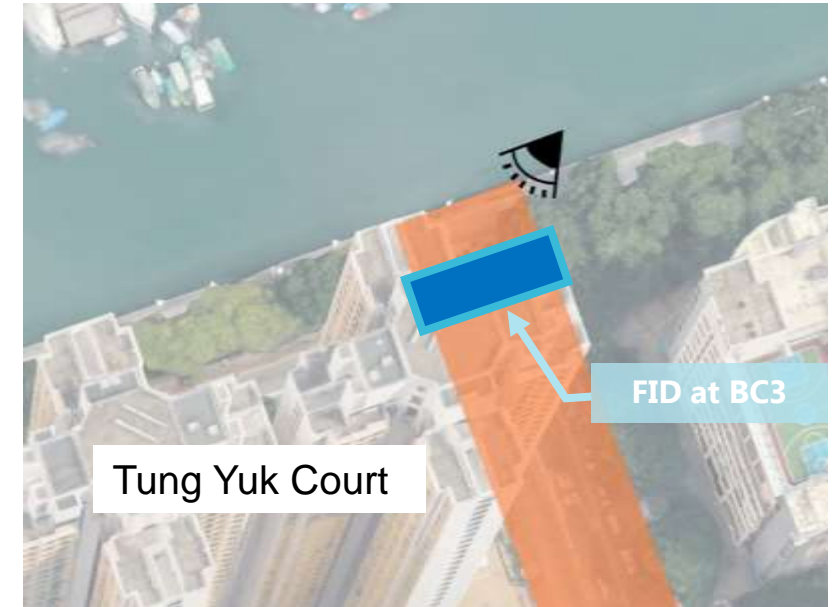
Conceptual Design



Draft

FID at Oi Yin Street Box Culvert (BC3)

Existing Site View



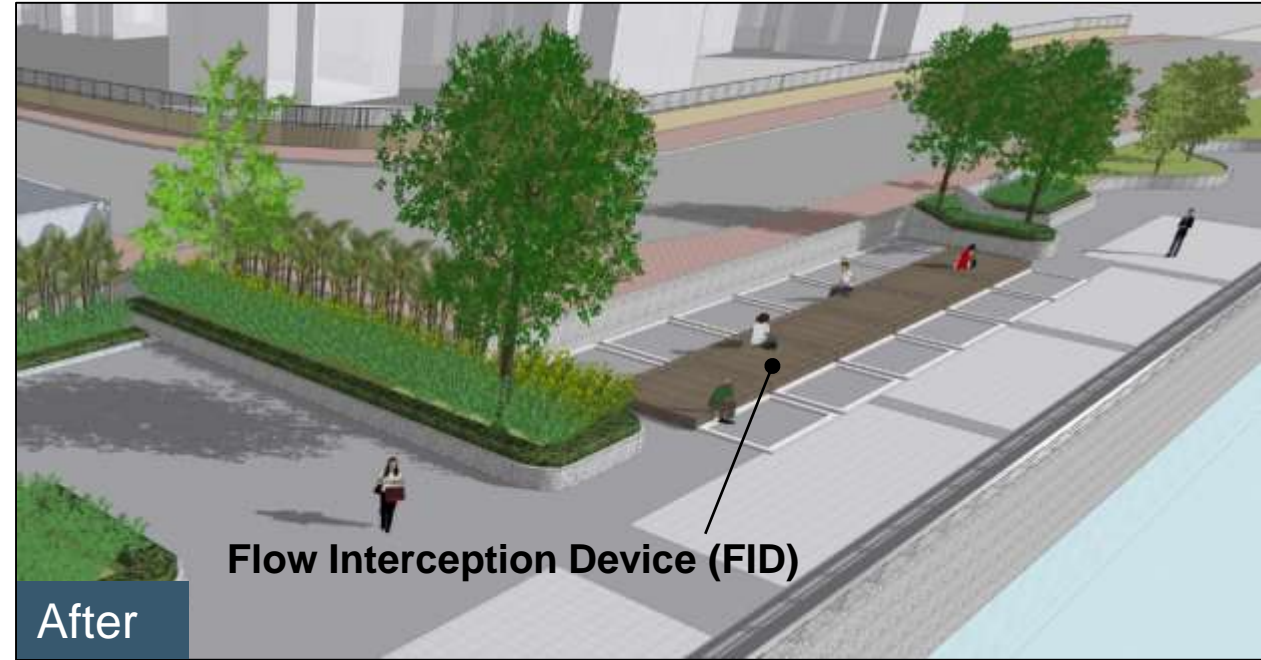
FID at Oi Yin Street Box Culvert (BC3)

Conceptual Design

Draft



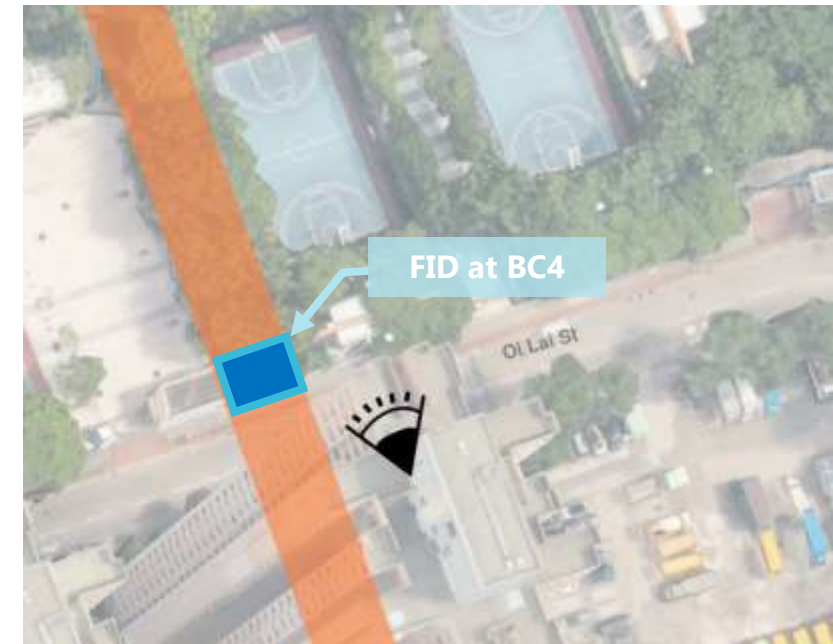
Before



After

FID at Oi Lai Street Box Culvert (BC4)

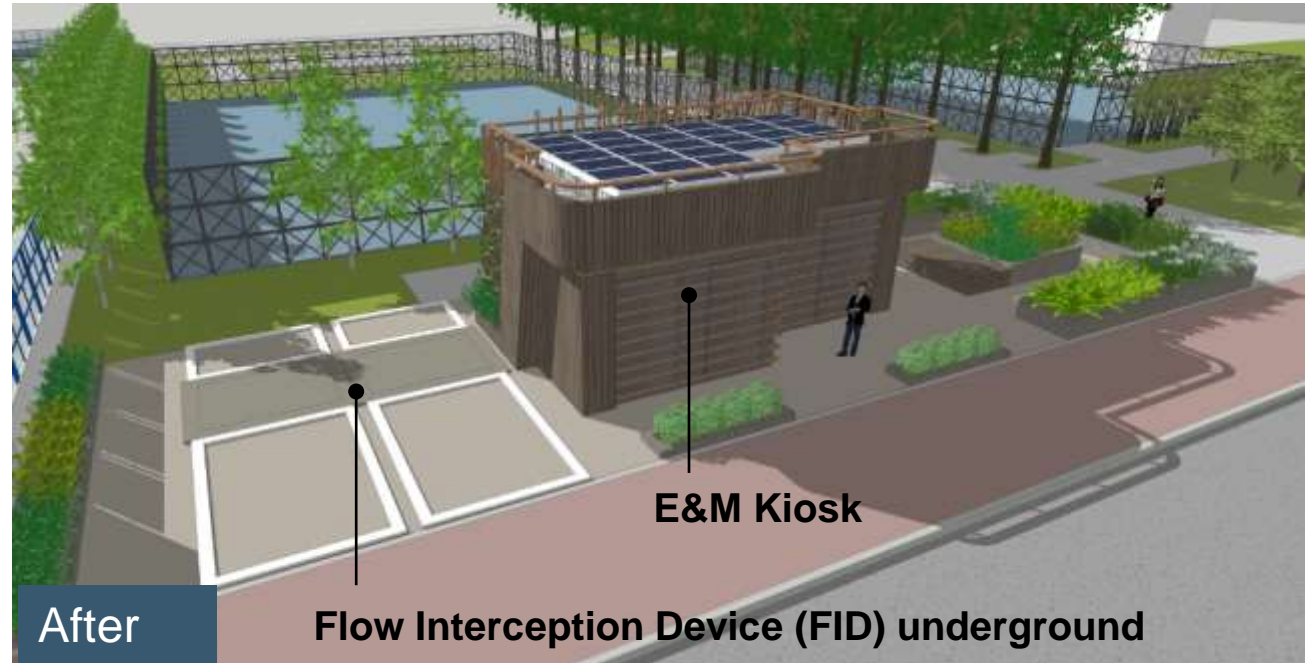
Existing Site View



FID at Oi Lai Street Box Culvert (BC4)

Conceptual Design

Draft



Public Consultation & Implementation Programme

- Works to be commenced in 2024 at earliest
- Estimated Construction Duration : 4 years

	Tentative Schedule
Commencement of Agreement	Mar 2021
Harbourfront Commission	1 December 2022
DC Consultation	Q1 2023
Contract commencement	2024
Commissioning	2028

Thank you

