32QJ - Relocation and expansion of Hong Kong Maritime Museum [PWSC(2010-11)23]

Supplementary Note

Purpose

This note provides supplementary information as requested by some members at the Public Works Subcommittee (PWSC) meeting on 17 January 2011.

I. Space open to free public access

2. The Hong Kong Maritime Museum (HKMM) has seriously considered views received regarding open space and will make available as much space as possible for public access in its new museum at Central Pier 8 as far as the requirements of museum operation allows. Specifically, the public will have free access to the following areas:

Roof Viewing Deck	Café, outdoor terrace	418.115 m ²
Public Viewing Deck	Public Gallery, Museum Shop	188.17 m ²
Lower Deck	Public toilets	44.278 m ²

A site plan highlighting in red these areas accessible by the public is at Appendix A.

- 3. At present, the public viewing deck and roof viewing deck are managed by the Star Ferry. According to past arrangements, these areas were closed to the public during firework displays at the request of the Police due to crowd control and safety reasons.
- 4. When the above areas are taken over by the HKMM, the management responsibilities will be taken up by the HKMM, which will be set out in detail in the tenancy agreement between Government and the HKMM. As regards maintenance, the HKMM will be responsible for repairing and maintaining the whole interior of the museum, building services and for those parts of the external structure constructed by the HKMM in this relocation and expansion project, and the arrangements will be set out in detail in the tenancy agreement. The relevant Government departments will be responsible for the repair and maintenance of the structure of Central Pier 8, including the foundation,

structure below the Lower Deck slab, fender system and mooring facilities, superstructure on and above the Lower Deck slab as well as the electrical and mechanical system and other structure of Central Pier 8.

II. Design of the HKMM

(i) The use of glazed windows

- 5. In designing the new museum at Central Pier 8, the HKMM has purposely adopted an extensive use of glazed windows as far as the operation of museum permits in order to give maximum view of the harbour. Specifically, 100% of the windows on the Roof Viewing Deck and the Public Viewing Deck levels will be glazed windows. As regards the Lower Deck level and the Upper Deck level, technically it is not suitable to install glazed windows as the Lower Deck level contains the plant room and some externally mounted air conditioning units and the Upper Deck level contains facilities where sensitive paintings, charts, textiles and paper based material must be entirely protected from sunlight and temperature variations.
- 6. Artistic impressions showing the harbour views from the Public Viewing Deck and the Roof Viewing Deck levels are attached at **Appendix B**. An aerial perspective of the harbour views freely available to the public from, or within a short distance of, Central Pier 8 is attached at **Appendix C**.

(ii) External Signage

7. The design of the external signage has taken into consideration town planning considerations, aesthetic judgments, technical considerations and the need for a strong museum visual presence. The proposed signage will be lit at night which should improve visibility. The HKMM recognizes the importance of high visibility and would consider the feasibility of appropriately increasing the size of the English name of its museum on its signage to enhance visibility. It will also explore whether there are any other ways of further improving the visibility of the new museum at Central Pier 8 to attract visitors.

III. Public Toilets

8. At the design stage of the new HKMM at Central Pier 8, the HKMM has expanded the toilet facilities and included a disabled toilet on the lower

deck east level. The public will have free access to the above toilet facilities. Due to the limited space available for the museum, the above arrangement is the best available option the HKMM could provide as far as the requirements of museum operation allows.

IV. Energy Conservation Measures

- 9. HKMM, as a responsible corporate organization, is fully committed to the use of energy saving technology at Central Pier 8. The Government supports this approach in the design of the Museum.
- 10. Consideration has been given to the installation of a solar energy harvesting system at the new museum at Central Pier 8. It is found that this is neither suitable nor practical due to the following reasons:

(i) Technical feasibility

- 11. The following technical considerations are relevant:
 - (a) Disruption to existing roofing system and concrete structure

Since the existing metal roof is not designed for supporting any additional loading, the new solar panels have to be fixed by anchor bolts onto the concrete structure underneath. Anchor bolts will weaken the integrity of the concrete structure and incur expenses on structural strengthening works.

Moreover, such works would impair the existing roof, which needs to be replaced with new metal roofing and waterproofing layers. As the existing roofing system at Central Pier 8 is still in good conditions, it would be rather wasteful to replace the whole roofing system for the provision of solar panels.

(b) Environmental implication

The additional works involved would generate five tonnes of construction waste which are mainly due to the replacement of the new metal roof and associated structural works.

(c) Serious maintenance/operation problem

Given the location of Central Pier 8, corrosion to the solar panel and its supporting frames by seawater mist is more serious than in other locations. If major repair work is required, the daily operation of the museum will be adversely affected.

(d) Time implication

The additional construction time required for the solar panel system installation is approximately four months. Interior fitting-out works cannot be commenced until completion of the new roof to ensure no water leakage from the roof. If there is a delay, the proposed construction time for completing the museum works will be extended, and the scheduled opening date of the museum will also be postponed.

(ii) Visual Impact

- 12. The HKMM is mindful of the town planning consideration on preserving the visual integrity of Star Ferry Piers on the waterfront. The current design is in accordance with the scheme approved by the Town Planning Board which retains similarity with Central Pier 7 and has no provision for solar power installation.
- 13. If solar panels are installed on the pitch roof, it is necessary to provide maintenance platform and safety handrail on the roof for safety of conducting maintenance works. As shown at **Appendix D**, the provision of the solar panels would seriously affect the appearance of Central Pier 8 resulting in different outlook from the adjacent Central Pier 7.

(iii) Cost effectiveness

14. It is estimated that the installation of the solar energy harvesting system will cost about \$9.8 million (including photovoltaic panels, replacement of existing roofing system and associated structural works, maintenance platform and safety devices) whereas the annual energy so generated is only about 2% of the annual energy consumption. The total estimated additional cost for the energy efficient features adopted in the current design is around \$0.57 million and will achieve 5.5% energy savings in the annual energy consumption.

V. Historic Ship

- 15. The HKMM is fully committed to doing whatever it can to help directly or indirectly the preservation of Hong Kong's maritime heritage, including vessels. It has considered the suggestion of berthing a historic ship beside the new Museum at Central Pier 8, but so far found it not feasible in view of the following considerations:
 - (i) Engineers have advised the HKMM that the Central Pier 8 wharf structure was designed to accommodate vessels the size of those in the existing Star Ferry fleet. Significant engineering intervention would be required to alter this situation to allow the long term berthing of, for example, a "tall ship". Without the construction of a marina style facility adjacent to Central Pier 8, there would be significant problem in berthing small vessels at Central Pier 8 due to sea conditions in the harbour. If the HKMM took responsibility for one or more historic vessels, the organization would also need to obtain routine access to shipyard facilities and a typhoon shelter, neither of which are readily available at present.
 - (ii) Satisfying the requirements for the licensing, berthing and operation of any historic vessel may preclude the acquisition of any historic vessel or, where a solution could be found, would incur significant capital costs to the possible detriment of the historic/authentic characteristics of the vessel, as well as entailing impossibly high subsequent operating costs; and
 - (iii) The HKMM has conducted extensive research of international museums and have inspected and/or considered individual historic ships put on the market (e.g. Madame Maurine, Wayfoong). It is noted that some museum owners have had to sell their historic ships because they could no longer afford the huge costs involved. At least three maritime museums have recently had to be rescued from near bankruptcy as a result of the cost of historic ships.
- 16. The HKMM considers that, at present, its priority should be given to the successful completion of the Central Pier 8 project by December 2012 and

the project is now progressing under a very tight timeframe. It is however prepared to revisit the issue of historic ship in future.

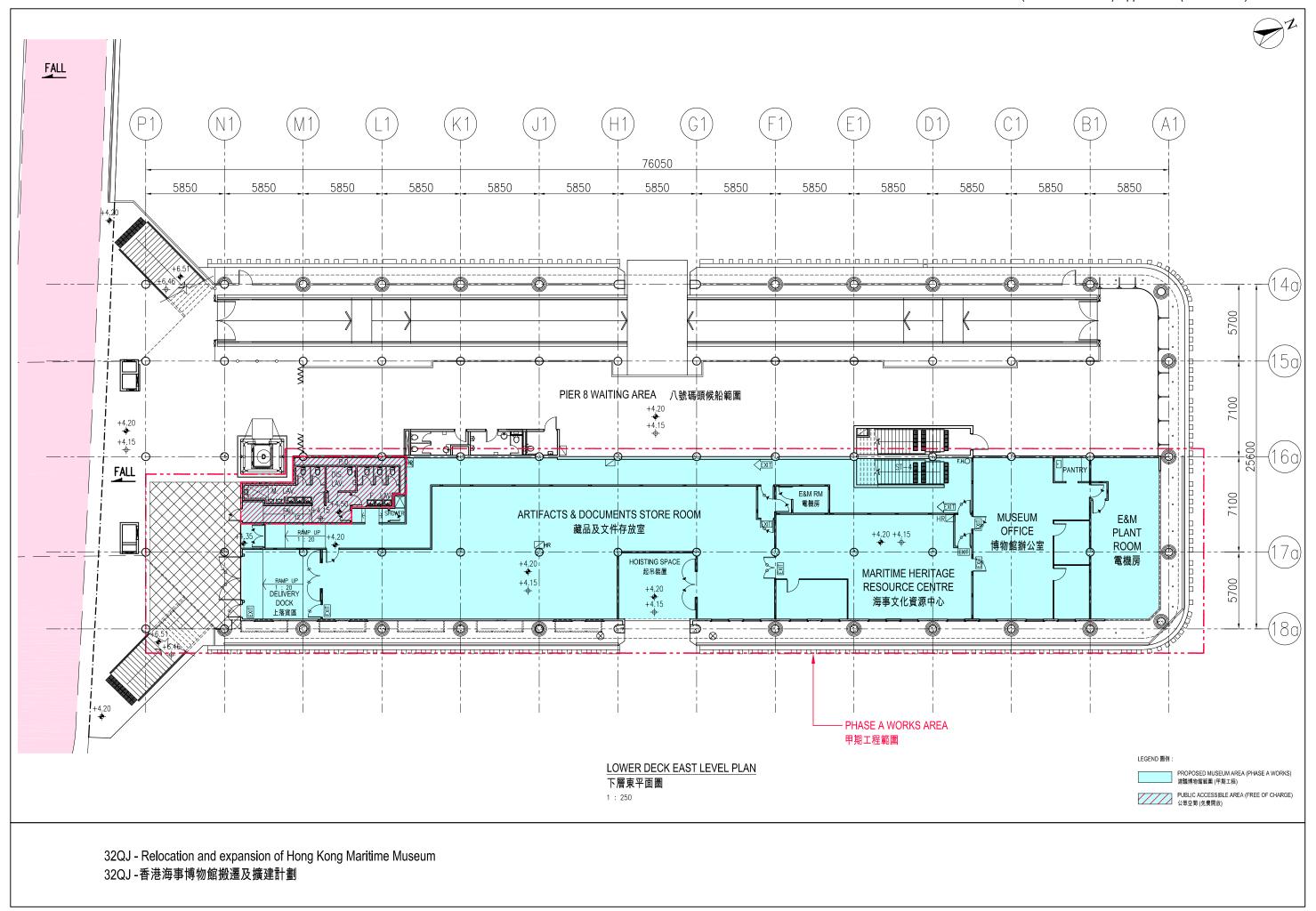
VI. Public Engagement by the HKMM

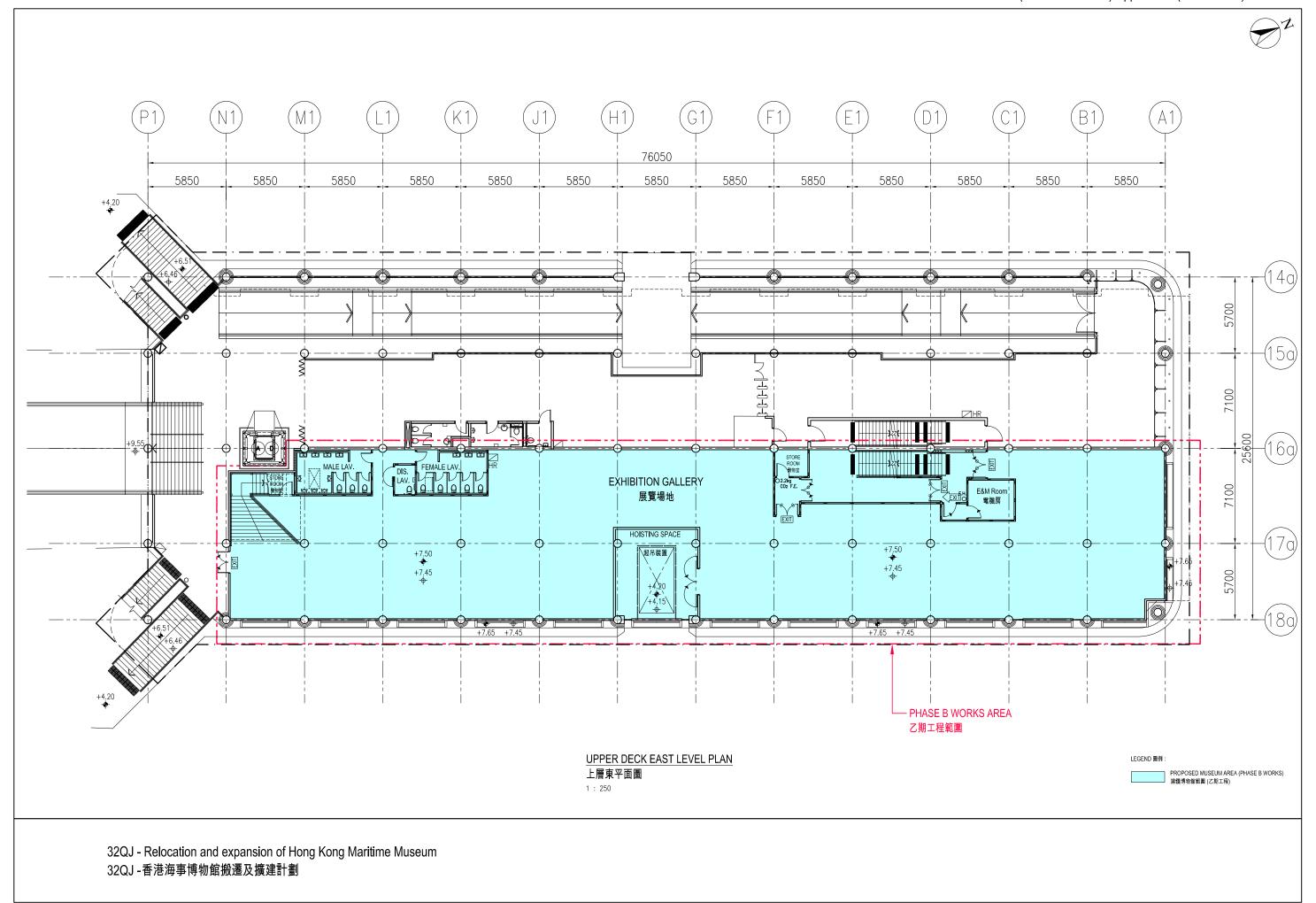
17. Communication with the public is a high priority for the HKMM as it attaches great importance to maintaining community goodwill. The HKMM has been engaging the community informally through different means, including surveys and extensive discussions with specialist community-based interest groups, especially in the development of new exhibits. It will actively consider what more can be done to communicate with the community including District Councillors to gauge their views about the operation of the museum on a more regular basis. Also, the HKMM is actively considering the creation of a new membership-based "Friends of the Museum" to provide opportunities for interested members of the public to support museum projects.

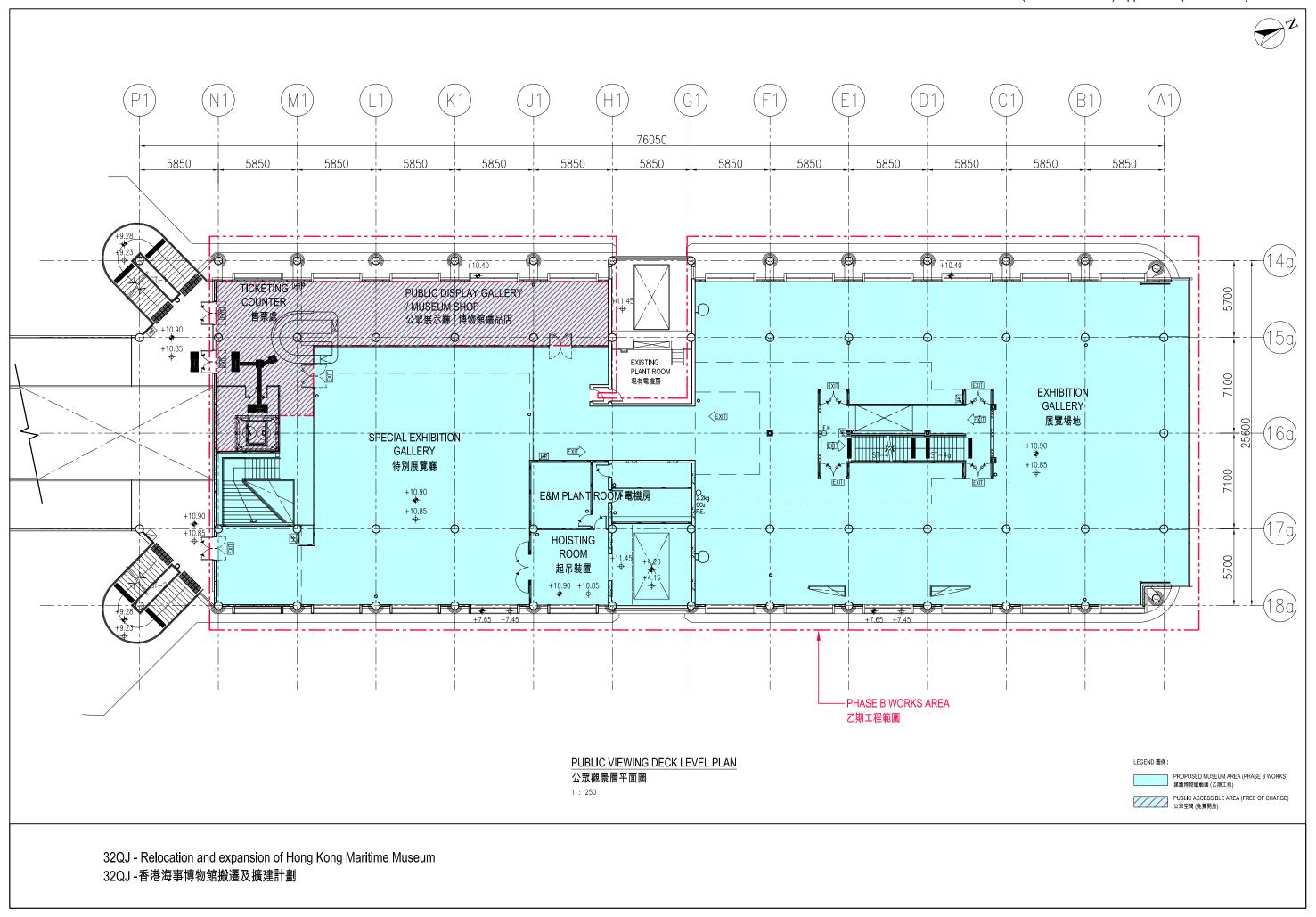
VII. Plan about the public transport interchange near Central Pier 8

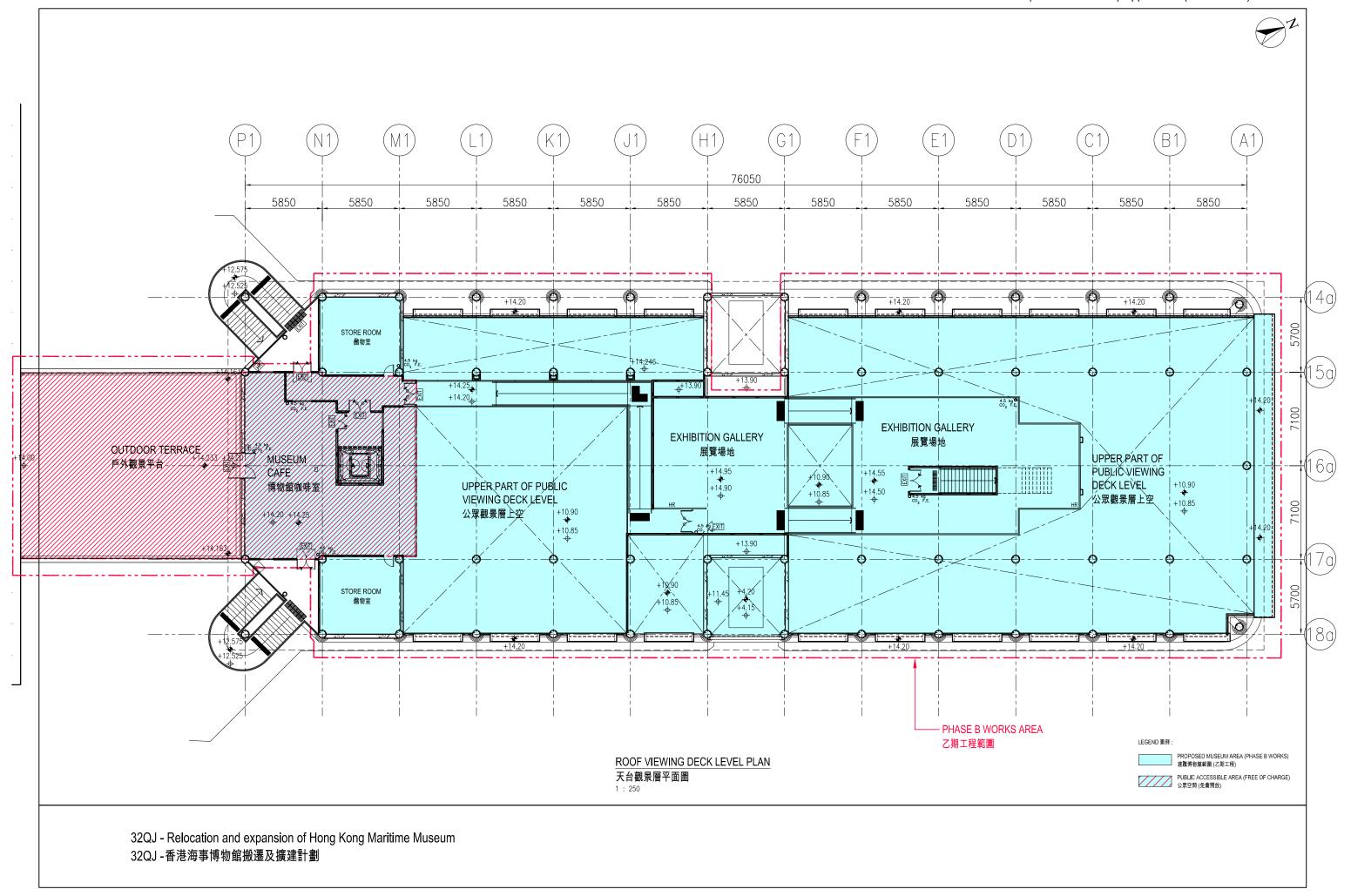
18. The Urban Design Study for the New Central Harbourfront (UDS) undertaken by Planning Department recommends that the existing public transport interchange (PTI) to the north of the International Financial Centre (IFC) be replaced by a number of bus stops located in the area fronting the Central Piers and other locations in the vicinity in order to provide a more pedestrian-oriented and pleasant waterfront environment. At present, there is no implementation programme for redistributing the PTI as it will be subject to further review and the availability of individual new locations for the bus stops. Under the UDS, the development at Site 3 to the south of Central Piers 7 and 8 will also provide some public loading/unloading spaces, taxi stand and green minibus terminating facilities. In drawing up the programme for redistributing the PTI, appropriate complementary measures will be put in place to cater for the transport needs of the local community and other commuters travelling to and from the harbourfront.

Home Affairs Bureau February 2011







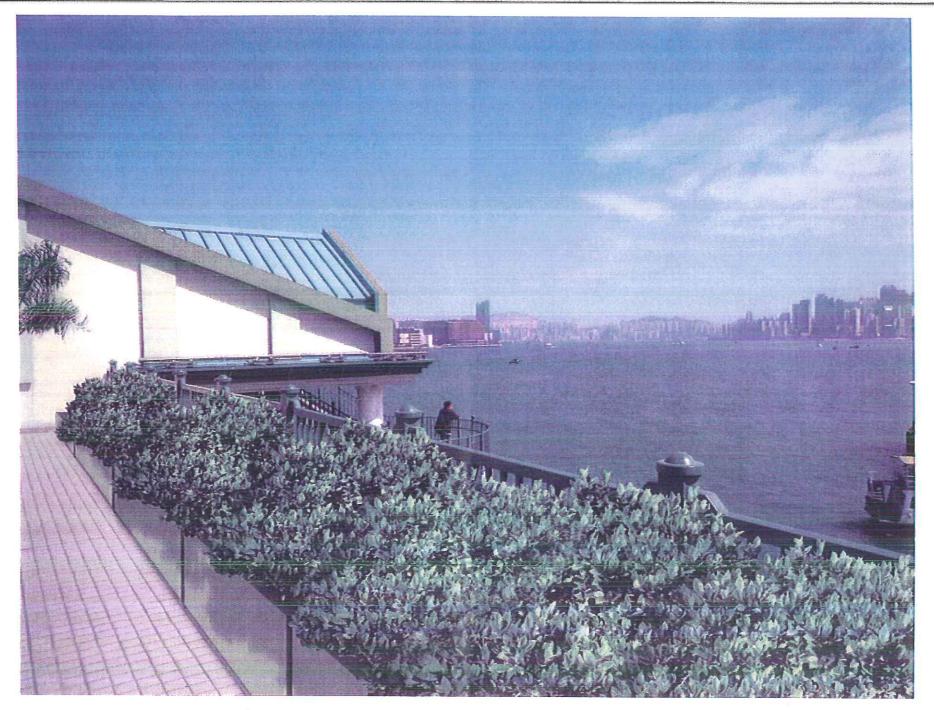




從博物館公眾觀景層北面所看到的維多利亞港的構思圖 View of Victoria Harbour from the northern end of Public Viewing Deck Level of the Museum (artistic impression)

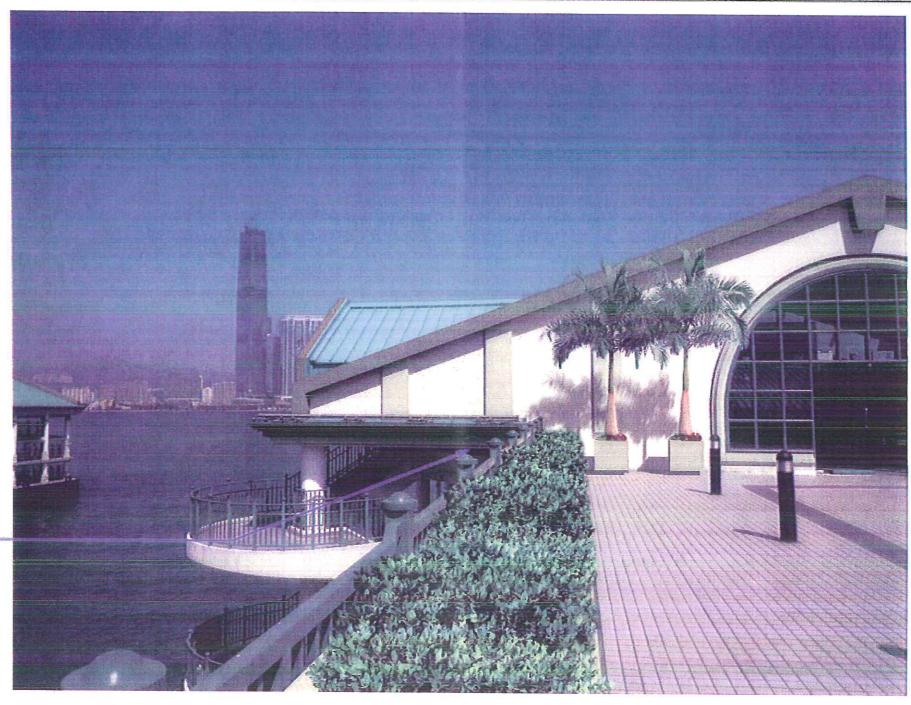
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從戶外觀景平台東面看到的維多利亞港的構思圖 View of Victoria Harbour from eastern side of Outdoor Terrace on Roof Viewing Deck (artistic impression)

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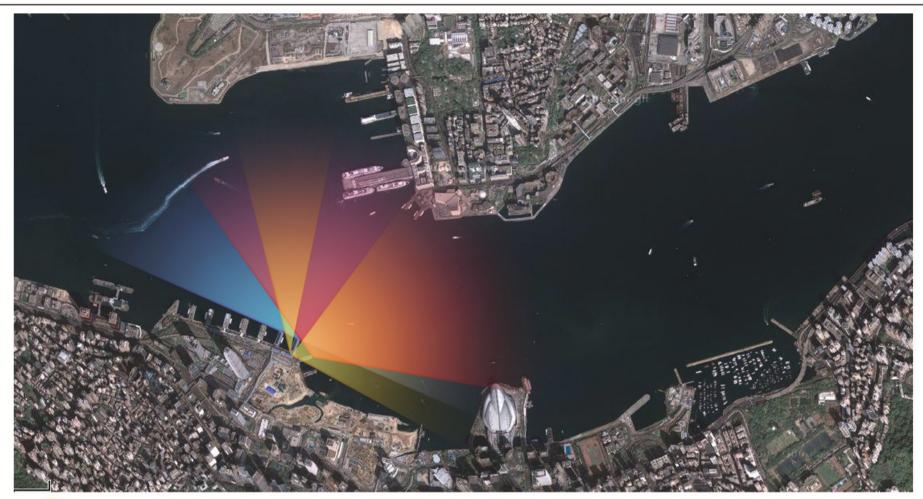


Location of public diplay allery at Public Viewing Deck which shares the same Harbour view as Roof Viewing Deck but in lower altitude. 在公眾觀景層的公眾展覽廳

港景色,只是地處較低。

從戶外觀景平台西面看到的維多利亞港的構思圖 View of Victoria Harbour from western side of Outdoor Terrace on Roof Viewing Deck (artistic impression)

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Victoria Harbour View from Outdoor Terrace of Pier 8 (25° + 84°) = 109° (57.4% of original Pier 8 190° viewing arc)



Victoria Harbour View from the end of Pier 9 = 180 ° (94.7% of original Pier 8 190° viewing arc)



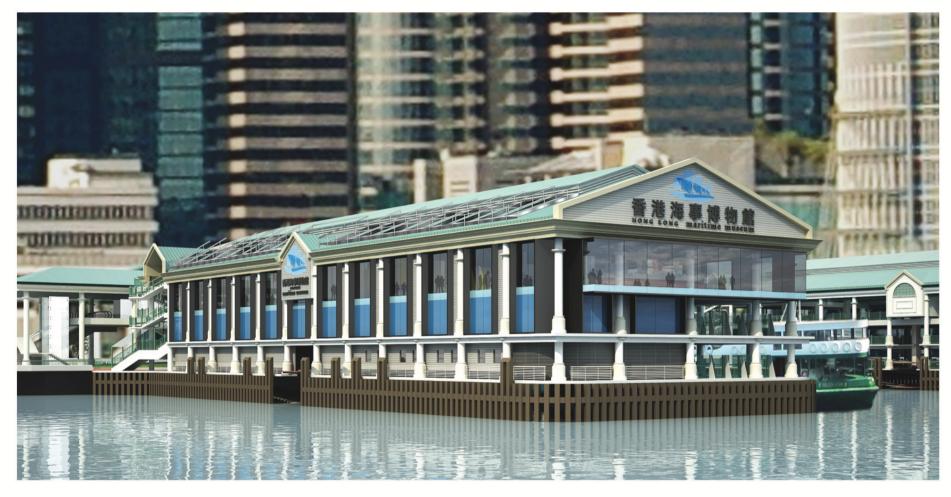
Victoria Harbour View from the north end of Pier 7 = 158° (83.7% of original Pier 8 190° viewing arc)

從八號碼頭戶外觀景平台看到的維多利亞海港範圍 (25°+84°)=109°(是八號碼頭原可提供190°觀景角度的57.4%)

從九號碼頭盡處看到的維多利亞海港範圍

從七號碼頭北面盡處看到的維多利亞海港範圍 = 158° (是八號碼頭原可提供190°觀景角度的83.7%)

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安裝了太陽能電板後從維港望向香港海事博物館東北面的構思圖 View of Hong Kong Maritime Museum from the Northeast when solar panels are installed (artistic impression)

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安裝了太陽能電板後從維港望向香港海事博物館西北面的構思圖 View of Hong Kong Maritime Museum from the Northwest when solar panels are installed (artistic impression)

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