

**For discussion
on 26 May 2009**

Legislative Council Panel on Development

PWP Item 677CL – Wan Chai development phase II, engineering works

PURPOSE

This paper seeks Members' support for the proposal to upgrade **677CL** entitled "Wan Chai development phase II, engineering works" to Category A at an estimated cost of \$4,642.7 million in money-of-the-day (MOD) prices for implementation of the Wan Chai development phase II (WDII).

PROJECT SCOPE AND NATURE

2. The scope of works of the **677CL** project comprises –
 - (a) reclamation of the seabed in Wan Chai North and North Point to form a total of about 12.7 hectares (ha) of land including construction of about 1.57 kilometres (km) of seawall;
 - (b) construction of precast box structures spanning over the existing Mass Transit Railway (MTR) Tsuen Wan Line (TWL);
 - (c) construction of ground level roads of about 0.7 km in total length, modification of existing roads for connection with the slip roads of the proposed Central-Wan Chai Bypass and Island Eastern Corridor Link (Trunk Road), and some other road junction improvement works;
 - (d) extension of a dual 2-lane primary distributor, Road P2, and realignment of the existing

Convention Avenue and Hung Hing Road, of about 1.0 km in total length;

- (e) relocation of a public transport interchange (PTI) at Expo Drive East to combine with an existing PTI at Wan Chai North;
- (f) construction of a footbridge of about 180 metres (m) in length along Wan Shing Street;
- (g) construction of three pedestrian landscaped decks to the west of Hong Kong Convention and Exhibition Centre (HKCEC), the north of the Wan Chai North PTI and the north of Victoria Park;
- (h) construction of stormwater box culverts of about 1.17 km in total length in Wan Chai North and North Point and the associated hinterland drainage improvement works;
- (i) re-provisioning of existing waterfront facilities including cross harbour water mains, submarine sewage outfall pipelines, ferry piers, cooling water pumping systems and a salt water pumping station;
- (j) construction of associated footpaths, roadside amenities, stormwater drainage works, sewerage works and landscaping works; and
- (k) implementation of environmental mitigation measures and an environmental monitoring and audit (EM&A) programme for the works mentioned above.

— Details of the proposed works are shown at Enclosure 1.

3. We plan to commence the proposed works in December 2009 for completion in June 2017.

JUSTIFICATION

4. The key purpose of the WDII is to provide land for the construction of the proposed Trunk Road along the northern shore of Hong Kong Island. The reclaimed land formed incidental to the construction of the Trunk Road will be put to public use with a view to developing a world-class waterfront promenade at Wan Chai North adjoining the promenade at the new Central waterfront.

5. The proposed Trunk Road, which will serve to connect the existing Rumsey Street Flyover in Central with the existing Island Eastern Corridor (IEC) at North Point, aims to relieve traffic congestion along the Connaught Road Central/Harcourt Road/Gloucester Road corridor (the Corridor) which is operating beyond its capacity at the moment. Having examined all the feasible options for construction of the Trunk Road and considering the constraints imposed by the MTR TWL tunnel, the need to provide slip roads to the ground level in Wan Chai and the need to connect to the existing IEC, reclamation is needed and the minimum extent of permanent reclamation required is 12.7 ha.

6. The WDII also provides the necessary ground level roads, which include an extension of Road P2 being constructed under the CRIII project and realignment of the existing Convention Avenue and Hung Hing Road. Upon completion, the ground level road network will serve to redistribute traffic through the Central Reclamation and Wan Chai North areas, thus relieving the existing traffic congestion in the existing road network. Connectivity will also be provided between the ground level roads and the proposed Trunk Road, which is a tunnel, thereby enhancing the overall effectiveness of the latter.

7. Under this project, we also propose to relocate the existing bus terminus at Expo Drive East, which will be affected by the modification to Expo Drive and Expo Drive East, to combine it with the Wan Chai North PTI. Land thus made available will be used for the proposed expansion of Golden Bauhinia Square, which is an important tourist attraction.

8. To enhance pedestrian linkage between the hinterland and the new waterfront, we will provide nine new pedestrian links including five at-grade crossings (three in Wan Chai North and two in North Point), a footbridge and three pedestrian landscaped decks. Laybys will also be provided at suitable locations along Road P2 and the realigned Convention Avenue and Hung Hing Road for dropping off and picking up of visitors for access to the waterfront promenade.

9. In order not to impose additional loading onto the existing immersed tube of the MTR TWL, reclamation works along the MTR TWL will be in the form of precast box structures, of about 50 m in length, spanning over the immersed tube.

10. To cope with the proposed reclamation, we have to extend the existing stormwater box culverts and outfalls in Wan Chai North and North Point to the new seawall and also undertake some hinterland drainage improvement works.

11. The proposed reclamation works will affect some existing waterfront facilities, including cross harbour water mains, submarine sewage outfall pipelines, an existing salt water pumping station and several groups of cooling water pumping stations serving government and private buildings in the vicinity. Moreover, the existing Wan Chai ferry piers will need to be demolished and relocated. Whilst the facilities affected would basically be reprovisioned on a “like-for-like” basis, some of them will be upgraded to meet the latest demand. During the construction period, the services of all the existing facilities will be maintained until completion of the new facilities.

12. We will implement the EM&A programme as recommended in the Environmental Impact Assessment (EIA) reports under the EIA Ordinance. We will establish an Independent Environmental Team for the implementation of the EM&A programme. We will also employ an Independent Environmental Checker to review and conduct audit on all aspects of the programme.

13. We have engaged consultants to carry out detailed design of the proposed works. The detailed design has been substantially completed. Due to insufficient in-house resources, we propose to engage consultants to undertake contract administration and site supervision of the proposed works.

FINANCIAL IMPLICATIONS

14. We estimate the capital cost of the project to be \$4,642.7 million in MOD prices, made up as follows –

	\$ million
(a) Reclamation, including seawalls	1,073.0
(b) Precast box structures spanning over the	169.1

	\$ million
MTR TWL	
(c) Ground level roads other than Road P2 extension and realignment of the existing Convention Avenue and Hung Hing Road	102.0
(d) Road P2 extension and realignment of the existing Convention Avenue and Hung Hing Road	80.2
(e) Relocation of the existing PTI at Expo Drive East to combine with the existing PTI at Wan Chai North	28.6
(f) Footbridge in Wan Shing Street	38.6
(g) Pedestrian landscaped decks	390.3
(h) Box culverts and hinterland drainage improvement works	157.9
(i) Reprovisioning of cross harbour water mains, sewage outfall pipelines, ferry piers, cooling water pumping systems ¹ and salt water pumping station	1,032.2
(j) Associated footpaths, roadside amenities, stormwater drainage works, sewerage works and landscaping works	226.6
(k) Environmental mitigation measures and EM&A programme	68.9
(l) Consultants' fees	13.3
(i) contract administration	10.6

¹ The costs for reprovisioning the affected cooling water pumping systems will be recovered from respective building owners who have agreed in principle with the Civil Engineering and Development Department the basis for their contribution. All receipts will revert to general revenue.

	\$ million	
(ii) management of resident site staff	2.7	
(m) Remuneration of resident site staff	311.8	
(n) Electrical and Mechanical Services Trading Fund charges	7.0	
(o) Contingencies	<u>369.9</u>	
	Sub-total	4,069.4 (in September 2008 prices)
(p) Provision for price adjustment	573.3	
	Total	<u>4,642.7</u> (in MOD prices)

PUBLIC CONSULTATION

15. The public has been extensively engaged on the project, with details summarised at Enclosure 2. A public engagement exercise entitled “Harbour-front Enhancement Review – Wan Chai, Causeway Bay and Adjoining Areas” (HER) under the steer of the Harbour-front Enhancement Committee Sub-committee on WDII Review (HEC Sub-committee) was conducted from May 2004 to June 2007 for the public input to the planning and engineering review of the WDII project (WDII Review). The then Panel on Planning, Lands and Works (PLW Panel) of the Legislative Council (LegCo), the four District Councils (DCs) of Hong Kong Island, relevant advisory bodies and professional institutions have been consulted at different stages on specific findings of the WDII Review. The recommendations of the WDII Review, including the development of the waterfront promenade at Wan Chai North, were generally supported.

16. We consulted the four DCs of Hong Kong Island and the then PLW Panel of LegCo in May to June 2007 on the proposed WDII works in conjunction with the Trunk Road and proposed amendments to the relevant Outline Zoning Plans (OZPs). Members of the Wan Chai, Eastern and Southern DCs generally supported the proposed works. Whilst some members of the Central and Western DC urged for completion of the Trunk Road as soon as possible, some other members maintained their objection to the proposed reclamation works notwithstanding explanation made by the Administration that the proposed reclamation is unavoidable and a report

entitled “Report on Cogent and Convincing Materials to Demonstrate Compliance with the Overriding Public Need Test” (the CCM Report) has been produced for demonstrating compliance with the Protection of the Harbour Ordinance (Cap. 531) (PHO). The then PLW Panel of LegCo reached a general consensus that the extent of reclamation should be as small as possible and the Administration should ensure that the proposed reclamation could meet the overriding public need test.

17. Between April and July 2008, all the four DCs of the Hong Kong Island passed a motion urging the Government to expedite the construction of the Central-Wan Chai Bypass (CWB) to resolve the traffic congestion problems in Central and Wan Chai.

18. We gazetted the proposed reclamation works and the proposed road works under the Foreshore and Sea-bed (Reclamations) Ordinance (Cap.127) (FS(R)O) and Roads (Works, Use and Compensation) Ordinance (Cap. 370) (R(WU&C)O) on 27 July and 3 August 2007 respectively for replacement of the original reclamation scheme and road scheme². We received five objections to the proposed reclamation scheme and two objections to the proposed road scheme. One of the objections to the proposed road scheme was subsequently withdrawn unconditionally. Details of the objections and the Administration’s responses are summarised at Enclosure 3.

19. Having considered the unresolved objections, the Chief Executive in Council overruled the unresolved objections to the proposed reclamation and road works and authorized the reclamation and road schemes without modification on 19 May 2009. The notice of authorization will be gazetted on 22 May 2009.

20. We again consulted the four DCs of Hong Kong Island and the Panel on Development of LegCo in November 2008 on the latest development of the Trunk Road and WDII projects, as well as providing supplementary information on the two options for constructing the Trunk Road, namely the tunnel and flyover options, with particular reference to the temporary reclamation requirements. The Planning, Works and Housing Committee of the Eastern DC and the Traffic and Transport Committee of the Central and Western DC supported the tunnel option

² The original reclamation scheme and road scheme were gazetted under the (FS(R)O) and the (R(WU&C)O) on 19 April and 26 April 2002 respectively. In the light of the legal proceedings with the Society for Protection of the Harbour Limited, the gazetted schemes lapsed on 18 and 19 September 2003 respectively.

unanimously. The Wan Chai DC supported the tunnel option with a great majority. The Southern DC did not comment on the tunnel option. Members of the Panel on Development supported the construction of the Trunk Road to be carried out as soon as possible. There was no support for the flyover option.

21. We shall continue engaging the public on the reprovisioning of the affected infrastructure facilities in particular on the exterior design of the reprovisioned Wan Chai ferry pier. Views collected on the exterior design of the reprovisioned ferry pier will be reflected to the Town Planning Board (TPB) for approval of the exterior design.

ENVIRONMENTAL IMPLICATIONS

22. The WDII project is a designated project under Schedule 3 of the EIA Ordinance (Cap. 499) (EIAO). The proposed reclamation works, major roads, dredging for the reprovisioned cross harbour water mains, and reprovisioned sewage outfall pipelines, which form part of the WDII project, are also Schedule 2 designated projects under the EIAO. An EIA Report covering these designated projects has been prepared for the WDII project under the EIAO and the Director of Environmental Protection approved the EIA report with conditions on 11 December 2008 after consulting the Advisory Council on the Environment. The EIA report concluded that the environmental impacts of the WDII would be acceptable with the implementation of the recommended mitigation measures. We shall implement the mitigation measures, and EM&A programme as recommended in the EIA report. The recommended mitigation measures include deployment of silt curtains at the dredging and filling areas, installation of silt screens at selected seawater intakes for reclamation works and use of quiet powered mechanical equipment and movable/temporary noise barriers for road works, translocation of the affected corals, although of low ecological value, to nearby suitable habitats such as Junk Bay. The water quality mitigation measures stated above would also be adopted during various marine works including dredging, filling and construction of a sewage outfall and cross harbour water mains. We shall put in place a real-time on-site system for monitoring the noise level around the works sites at North Point and Tin Hau during the construction phase of the WDII. To facilitate communication, enquiries and complaints handling, we shall set up a Community Liaison Group comprising representatives of concerned and affected parties, including owners' corporations, management offices, local committees and schools in the North Point and Tin Hau areas. We estimate the cost of implementing the environmental mitigation measures and the EM&A programme to be about \$68.9 million which has been

included in the project estimate.

23. We have considered all the proposed works and construction sequences in the planning and design stages to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated materials) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities³. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

24. We will also require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert construction waste and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.

25. We estimate that the project will generate about 129 000 tonnes of construction waste. Of these, we will reuse about 12 000 tonnes (10%) and will deliver about 110 000 tonnes (85%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of about 7 000 tonnes (5%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$3.8 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne⁴ at landfills).

26. We will use public fill for the reclamation and we estimate that

³ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public reception facilities requires a licence issued by the Director of Civil Engineering and Development.

⁴ This estimate has taken into account the cost of developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

the project will import about 2 741 000 tonnes of public fill from the Tseung Kwan O and/or Tuen Mun Fill Bank. We estimate that reclamation works will generate about 712 000 m³ of uncontaminated mud and about 493 000 m³ of contaminated mud. The dredged marine mud will be disposed of at designated sites to be allocated by the Marine Fill Committee (MFC) or other disposal sites to be agreed by the MFC and the Environmental Protection Department.

HERITAGE IMPLICATIONS

27. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historical sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

28. The proposed works do not require any land resumption. However, the marine rights of four private lots will be extinguished. Any person who considers that he has an interest, right or easement in or over such foreshore and sea-bed that will be injuriously affected by the proposed works may deliver a written statutory claim under section 12 of the FS(R)O, and if the claim cannot be settled by agreement, they may apply to the Lands Tribunal for determination of the amount of compensation to be paid. Under the established policy, ex-gratia allowance will be offered to eligible fishermen as a result of the loss of their habitual fishing ground.

29. Furthermore, easement and right of temporary occupation have to be created, under the R(WU&C)O, at Inland Lot No. 8593 (Portion) for the construction of the proposed pedestrian landscaped deck to the west of HKCEC. Along the embankment of the CBTS, seven temporary structures will have to be cleared and ex-gratia allowance may be payable to the occupiers.

30. No land resumption cost is involved. The estimated amount of ex-gratia allowances for eligible fishermen and for clearing the temporary structures along the CBTS seafront are \$1.235 million and \$0.56 million respectively. Funds will be made available under **Head 701 – Land Acquisition**. We have already reviewed the design of the project to minimize the land acquisition and clearance cost.

BACKGROUND

31. Finance Committee approved in March 1999 the upgrading to Category A of part of **439CL** as **652CL** - “Wan Chai development phase II – comprehensive feasibility study and site investigation” at an estimated cost of \$60 million in MOD prices for engaging consultants to conduct a comprehensive feasibility study of the WDII which was completed in 2001.

32. As **439CL** would not cover the construction works of the WDII project, a new item **677CL** - “Wan Chai development phase II, engineering works” was created in September 2000 for both the detailed design and construction for the WDII project.

33. We upgraded **677CL** to Category B in September 2000. In January 2002, we upgraded part of **677CL** as **696CL** - “Wan Chai development phase II, engineering works: consultants’ fees and site investigation” at an estimated cost of \$111.1 million in MOD prices for engaging consultants to carry out detailed design.

34. We gazetted the previous reclamation scheme under the FS(R)O and road scheme under the R(WU&C)O in April 2002. The relevant draft Wan Chai North OZP was also gazetted at the same time. The Society for Protection of the Harbour Limited (SPH) lodged a judicial review (JR) on the decisions of the TPB on the OZP. The JR was eventually heard by the Court of Final Appeal (the CFA) which handed down its judgment (the CFA Judgment) on 9 January 2004. At the request of the TPB and in the light of the CFA Judgment, we engaged consultants to conduct the WDII Review which was commenced in March 2004 and was completed in July 2007.

35. We have strictly observed the PHO in the planning of the proposed reclamation works. We have completed the CCM Report which provides in a step by step manner the “cogent and convincing materials” for fully demonstrating that the proposed reclamation of the WDII can comply with the PHO. The report together with its annexes provides a comprehensive package of materials which sets out in a cogent and convincing manner the rebuttal of the presumption against reclamation in the harbour by establishing an overriding public need for reclamation, in compliance with the CFA Judgment.

36. In line with the Court of First Instance’s judgment on the application of PHO to temporary reclamation, the CCM Report has been supplemented by the Comparison Report, with additional materials, to

address specifically the reclamation requirements of the feasible Trunk Road options, including the temporary reclamation requirements, and then the comparison of the tunnel and flyover options with some further elaboration on their relative performance in all relevant aspects, for the purposes of assessing both options by reference to the Overriding Public Need Test. The Comparison Report has re-affirmed that the tunnel option best serves to protect and preserve the Harbour.

37. Of the 486 trees within the project boundary, none will be felled and 267 trees will be preserved. The proposed works will involve transplanting 219 trees elsewhere or replanting them within the project site. None are important trees⁵. We will incorporate planting proposals as part of the project, including about 150 new trees and 20 000 m² of grassed area.

38. We estimate that the proposed works will create about 2 260 jobs comprising 430 professional/technical staff and 1 830 labourers, providing a total employment of 60 080 man-months.

WAY FORWARD

39. Members are invited to support our proposal to upgrade **677CL** to Category A for consideration by the Public Works Subcommittee of the Finance Committee in June 2009 and for funding approval by the Finance Committee in July 2009.

⁵ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument and trees in memory of important persons or events;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree size, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

**Development Bureau
Transport and Housing Bureau
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