

**For discussion
on 25 April 2006**

**LEGISLATIVE COUNCIL
PANEL ON PLANNING, LANDS AND WORKS**

Tamar Development Project

PURPOSE

This paper sets out the details of the proposal for the design and construction of a new Central Government Complex (CGC), Legislative Council Complex (LCC), Civic Place and associated facilities at Tamar.

PROPOSAL

2. The Government announced in October 2005 the relaunch of the Tamar development project. The project had obtained support from this Panel and the Public Works Subcommittee (PWSC) in April and May 2003, but was shelved later that year in view of the impact of the SARS outbreak. The relaunch is generally a continuation of the Tamar development project then. After the announcement, the Administration briefed this Panel on the relaunch on 22 November 2005. We explained to Members the justifications for the relaunch, the improvement in project scope with reference to the excision of the Exhibition Gallery to contain building height and development intensity, and the same approach to select a Design and Build (D&B) contractor for the project. We also undertook to provide Members with updated floor area requirements and other details of the project in April 2006. We have completed the updating exercise. The relevant information is set out below.

(A) Central Government Complex (CGC)

3. The offices of the Principal Officials and policy bureaux are currently mainly housed in the Central Government Offices (CGO) and Murray Building (MB). The buildings provide a total of 39 600 m² in terms of Net Operating Floor Area (NOFA) for bureau offices. CGO and MB have been in operation for over 45 and 35 years and are far from being able to meet the total office space requirements of the Government

Secretariat. As a result, no less than nine bureaux have part or all of their offices functioning away from CGO and MB and the total space requirement spread amongst out-stationed Government-owned buildings or leased premises amounts to 126 300 m² (NOFA).

4. Other than the serious shortage of office space in the CGO and MB, the physical constraints within the buildings have also made it extremely difficult for major alteration or refurbishment to be undertaken in an efficient and cost-effective manner to meet the present day information technology (IT), telecommunications and electronics requirements. The cable trunks, network rooms and server rooms are reaching their maximum capacity. There is inadequate physical space for expansion. Temporary relocation of offices and equipment to make way for the upgrading or renovation works would cause serious disruption to the normal and effective operation of the Government Secretariat. The ageing of the buildings also poses serious structural constraints for effective maintenance of existing facilities, not to mention the dire need for expansion.

5. We have proposed to construct a new CGC at Tamar, comprising a low block for accommodating the Chief Executive's Office, the Executive Council and its secretariat, and office block(s) for accommodating the offices of the Principal Officials and their bureaux and key staff who are directly involved in policy-making functions. The new CGC will also provide proper common and ancillary facilities including a multi-purpose hall, building management office, conference rooms and press rooms. To contain the traffic to and from the new CGC, there will only be 380 car parking spaces in the CGC, same as the number for the existing CGO and MB.

6. We envisage that the total NOFA of the new CGC would be around 62 340 m² representing about 10% reduction from the 2003 estimate of 69 330 m² NOFA to which the PWSC had rendered support. In deriving this latest space requirement estimate, we have exercised the most stringent control. Notwithstanding the reorganisation between some departments and bureaux, only those core offices of the bureaux that are performing policy-making functions will be accommodated in the new CGC at Tamar. The total number of staff to be involved would be around 3 270. Since the CGC is expected to meet the long-term requirements for the Government headquarters, it would be reasonable and proper to allow adequate room for future expansion. Accordingly, we will factor in an expansion factor of 10%. In overall terms, there remains a net reduction of some 10% in terms of NOFA required, from

69 330 m² to 62 340 m². A table summarising the existing and planned arrangements for accommodating the relevant offices and facilities is at **Annex A**.

7. We estimate that upon completion of the CGC and LCC, around 5 820 m² (NOFA) out-stationed commercial office space would be released eventually, generating rental savings of around \$31.8 million per annum. The new CGC will provide a long-term solution to the acute shortfall of office space for policy bureaux. It will improve the operational efficiency of the Government Secretariat by centralising core policy-making units under one roof. We will also incorporate in the new CGC centralised and expandable IT and telecommunications networks which have a built-in capacity for expansion and upgrading without the need to recourse to change of the whole system or network in future.

8. In addition, the proposed CGC and LCC (see paragraph 9 below) would allow some 12 750 m² (NOFA) in total to be vacated from other Government office buildings including Southorn Centre, Revenue Tower, Wanchai Tower, Citibank Tower, etc. This would in turn provide reprovisioning or de-leasing opportunities for many departments currently housed in split locations. The notional savings would be to the tune of \$36.1 million per annum. Once the scope for the first round of move to Tamar can be agreed, the Administration would work out details for this secondary round of office consolidation.

(B) Legislative Council Complex (LCC)

9. The existing LegCo Building was constructed in 1911. It formerly housed the Supreme Court and its exterior is now a declared monument. Since it is not large enough to accommodate all the Members, staff and facilities of LegCo, part of the LegCo Secretariat and offices of LegCo Members are currently scattered in nearby commercial premises (Citibank Tower and Prince's Building) and CGO West Wing. Existing premises allocated for LegCo's use is about 9 410 m² (NOFA). Given the status of declared monument of the LegCo Building, it would be difficult to carry out substantial upgrading and alteration works for accommodating new IT, telecommunications or electronics facilities. The situation is unsatisfactory. Similarly, a purpose-built LCC will provide a long-term solution to resolve the aforementioned problems.

10. The LegCo Commission advises that the proposed LCC will consist of a low block and at least one high (office) block of a total NOFA of 16 090 m². The low block will accommodate the LegCo Chamber,

conference rooms, press room(s), dining hall and other ancillary facilities. The high block(s) will house the LegCo Secretariat, Members' offices, library, printing room and other ancillary facilities. The LCC will be free standing on the project site, having its own identity being distinguishable from the rest of the developments, and easily observable from the harbour without any view blockage. The height of the high block(s) of the LCC would not be higher than 86 metres.

11. A table showing the existing and planned arrangements for the LegCo is at **Annex B**. To cater for future development, such as possible increases in number of Members and staff, we have planned for construction of a large LegCo Chamber that could accommodate up to 120 LegCo Members. As agreed with the LegCo Commission, the tenderers should give sufficient flexibility in the design and building structures to allow future expansion in both meeting facilities and offices. A maximum of 9 200 m² will be allowed for potential expansion of the LCC as a whole (2 300 m² would be required for an increase of every 15 LegCo seats). There will be 120 car parking spaces in the future LCC for Members, staff and visitors.

(C) Civic Place

12. The Tamar site is of 4.2 hectares in size (see location map at **Annex C**). About half (viz., 2.2 hectares) of the site is zoned for "Government, Institution or Community" (G/IC) use for the development of a new CGC and LCC. The remaining two hectares will be for "Open Space" use and will be developed into a Civic Place for public enjoyment.

13. We will develop the Civic Place to cater for multi-purpose needs. It will be easily accessible by the public. We will request the tenderers to propose special green features in the design such as fountains and landscaped garden to provide an open and pleasing atmosphere, together with a sense of spaciousness for the public to come together in this prime civic core of the city. We will also require the Civic Place to be linked to the pedestrian circulation and walkway systems in the district, with particular regard to the adjoining waterfront promenade.

14. Through an open deck of a width of 50 – 60 meters* above the sunken portion of Road P2, the Civic Place would be kept open and

* Approximately the width of a soccer field of international standard (i.e. 64m x 100m).

pedestrian flow encouraged to/from the adjoining waterfront promenade. The Civic Place and the open space in the adjoining waterfront promenade will provide about 10.8 hectares of public open space in total, forming an integrated open space network at the Central waterfront.

(D) Associated Facilities

15. The associated facilities of the project will mainly include two covered pedestrian footbridges connecting –

- (a) the south of the development at Tamar with Admiralty, close to the transport interchange, and
- (b) the east of the development at Tamar with the existing footbridge system linking CITIC Tower.

16. The tenderers will be required to propose the design and alignment of the footbridges. Their completion would not only facilitate users and staff of LCC and CGC, but also members of the public moving to and from the Central Business District. With the proposed pedestrian footbridges, we expect the walking distance from the Admiralty railway station to the Tamar site to be about two minutes and, through the open deck linkage, to the waterfront promenade, about 10 minutes.

(E) Other Design Requirements

17. Our planning target is to develop Tamar as the prime civic core of Hong Kong, comprising the proposed CGC, LCC and Civic Place. We would require the design of the new development to project Hong Kong's position as a cosmopolitan city and Asia's world city. The design scheme for the development should as a whole be responsive to the urban fabric of the Central District as well as the natural context of the waterfront setting and the backdrop of Victoria Peak. The distinct identities of the new CGC and new LCC should be duly reflected taking into account their respective constitutional roles.

18. In response to the community aspiration for as much open view as possible to the ridgeline and the harbour, we have tightened up the height restriction of the Tamar site. Under the relevant statutory Central District (Extension) Outline Zoning Plan (OZP) No. S/H24/6, the highest permissible height of the developments on the whole Tamar site should be 180 metres PD. From the outset of the relaunch, the Administration has taken the initiative to tighten up the height restrictions to 130 metres –

160 metres PD, to ensure at least 20% “building-free zone” below the ridgeline which we will seek to protect. The effect of the new height restrictions is attached at **Annex D**. We will consider requiring the tenderers to conduct Air Ventilation Assessment for their design schemes to ensure good air ventilation effects.

19. As set out in the Prequalification Document, we have encouraged the applicants to explore the option of “underground car park”. In response to the strong public sentiment of keeping the building heights to the minimum necessary, we will consider specifying in the tender document the following facilities that may be provided underground -

- (a) the bulk of car parking spaces;
- (b) plant rooms; and
- (c) certain communal facilities, such as shredding room, paper recycling depot, building management rooms and maintenance facilities

20. The indicative construction floor area of the above facilities, if provided underground, amounts to some 25 830 m², which means a maximum of around 20% of the construction floor area of CGC could be built underground. These facilities have initially been identified as appropriate to be provided underground because their location would not substantially affect their functional and operational needs. For the same area, underground construction cost is about two times of those above ground. Underground accommodation would require more space and servicing to allow the facilities to function underground, such as additional escape staircases, ventilation and smoke extract systems, plant rooms, etc., and hence is generally considered a less cost-effective option.

21. In their proposed designs, the tenderers will also be required to take into due account the Urban Design Guidelines under the Hong Kong Planning Standards and Guidelines, the Vision and Goals for Victoria Harbour promulgated by the Town Planning Board which aims to make the harbour “attractive, vibrant, accessible and symbolic”, as well as the Harbour Planning Principles formulated by the Harbour-front Enhancement Committee which emphasizes creating “a harbour for the people and a harbour of life”.

(F) Plot Ratio

22. In view of the prevailing community concerns in recent years over development at the waterfront, the Administration is committed to minimising the development intensity of the Tamar site. We have excised the Exhibition Gallery (of area 13 235 m² NOFA) originally proposed in 2003 from the present project scope. In addition, the Administration has strictly scrutinised the user requirements of the proposed CGC (details of which are set out in paragraph 6 above and **Annex A**), resulting in a reduction of 6 993 m² (NOFA), or 10% in floor space requirement from the 2003 exercise. With these measures, the development plot ratio of the G/IC portion of the Tamar site has reduced from about 6.2 in 2003 to currently around 5.7. This is significantly lower than those of the adjacent commercial developments with plot ratios ranging from around 13 to 18.

(G) Environmental and Traffic Concerns

23. The Subcommittee to Review the Planning for the Central Waterfront (including the Tamar Site) set up under this Panel has convened three meetings. Some Members and deputations attending the meetings have expressed queries and comments on the environmental and traffic implications of the Central Reclamation III (CR III) and Tamar development project. Although Tamar lies outside the CR III is not related to the project *per se*, we have analysed these environmental and traffic concerns, details of which are at **Annex E** and **Annex F** respectively.

24. As to the Tamar project, it is a modest office development with the associated open space/ amenity/ footbridges etc. within an urban environment. Such type of development has limited potential for environmental impacts, especially when we have built in effective and standard pollution control measures. Overall, the project would not cause significant long-term impacts to the environment at both the construction and operation stages. The major pollution sources during the **construction** phase of the project are construction noise and dust, waste and wastewater from the site. With the adoption of environmental control and mitigation measures such as the regular wetting of the works surface, use of quiet power mechanical equipment, segregation of different types of wastes, etc., no insurmountable environmental impacts during the construction phase are anticipated. With the incorporation of environmental controls in the design requirements such as considerate disposition of the buildings, proper location of the exhaust point of

ventilation system, good waste collection system, etc., the development is not expected to create any significant long-term impacts during the **operational** stage.

25. On the front of traffic impacts of the Tamar project, assuming that the CGC and LCC would be developed to the “maximum” plot ratio of 15 and 12.5 respectively, the Transport Department assessed that the traffic flow at the peak hours of the Tamar project when in operation would amount to only some 3.4% (morning peak) and 2.3% (afternoon peak) of the total traffic flow in the Central Business District. With the latest estimated development plot ratio of 5.7 only, the percentages would be further reduced to 1.0% (morning peak) and 0.7% (evening peak). On average, it will be lower than 1%. Hence, the traffic impacts of the Tamar project would be insignificant.

(H) Use of Precast Units

26. In response to the requests from some Members to prescribe the use of concrete units/ segments precast in Hong Kong for the Tamar project in order to provide more job opportunities for local workers, the Administration has been studying the proposal actively. Our legal advisers and relevant bureaux and departments are examining Hong Kong’s obligations under the non-discrimination principle of the World Trade Organisation Agreement on Government Procurement, the receptiveness of the construction trade to the proposal and the possible impacts on the bidding prices of the public works projects. The Government would wish to establish its feasibility and seek to come to a final view before seeking funding approval in respect of the Tamar project from the Finance Committee (FC) within the current legislative session.

FINANCIAL AND ECONOMIC IMPLICATIONS

27. The overall capital outlay for the Tamar project amounts to about \$4.8 billion in September 2005 prices (or \$5.13 billion in Money of the Day prices). This estimated project cost may be further refined upon the finalisation of the detailed design requirements and technical specification before the project is submitted to the PWSC for funding approval in May 2006.

28. The additional recurrent expenditure for the new Tamar development will be around \$48.5 million per annum. The additional recurrent cost may be offset by \$31.8 million in direct rental savings and possibly \$36.1 million as potential savings upon the secondary round of leasing (paragraphs 7 and 8 above refer).

29. The Tamar development project would create some 2 600 employment opportunities totalling 70 000 man-months for the construction industry, the unemployment rate of which has remained high at above 13% in the first quarter of 2006.

PREQUALIFICATION

30. We issued the Prequalification Document on 20 December 2005 to invite prequalification applications. The aim is to identify contractors with sufficient financial, managerial, technical and design capabilities for participation in the future tender exercise. Upon the close of application period on 14 March 2006, we received four submissions. A Special Selection Board has been set up to assess the applications for prequalification. The Board is chaired by the Chief Secretary for Administration with two LegCo Members, two senior Government officials and a professor in architecture as Members. We aim to complete the prequalification exercise by the second quarter of 2006.

FUTURE USE OF THE CGO/MB

31. The CGO and MB sites are currently zoned G/IC on the approved Central District OZP No. S/H4/12 to reflect their existing uses as government offices. The future use of these sites after relocation could not be decided now.

32. To properly determine the appropriate use and scale of development of the two sites, the Government will responsibly consider public needs and aspirations and prevailing social and economic circumstances subject to availability of the sites for alternative considerations, i.e. offices and staff in the existing CGO and MB will be accommodated at the Tamar CGC. In that case, we will consider a comprehensive assessment of future possible uses of the two sites, taking into account the land use needs, the traffic, environmental and infrastructural impacts, the historic value of the sites and their

surroundings, tree preservation, protection of the ridgeline, the Urban Design Guidelines, etc. Relevant stakeholders in the community will be fully engaged in the process. In the event the future use of the sites were to warrant an amendment to the existing G/IC zoning on the OZP, the statutory planning procedures including the public consultation/ objection process under the Town Planning Ordinance will have to be followed through.

OTHER OPTIONS

(A) In-situ Redevelopment of CGO and MB

33. As explained when we announced the decision of the Executive Council in April 2002 to proceed with the development of the Tamar site, only two sites in Central could possibly meet the floor space requirements of the Government Secretariat, namely, the Tamar site or in-situ redevelopment of the CGO and MB. Similarly, only two possible sites in Central could meet the floor space requirements of the new LegCo Complex, namely, the Tamar site or the City Hall site. Having regard to the time frame for the development of the project and the possible constraints of the City Hall site and the serious disruption to be caused to the operation of the Government Secretariat by the in-situ redevelopment option, the Tamar site is considered the only feasible site in Central for both the CGC and the LCC.

34. Compared with the option of an in-situ redevelopment of the CGO and MB, the proposed development project at Tamar would allow at least four years of earlier completion. This would provide a more reasonable solution to the problem faced by the Government Secretariat and the LegCo and at the same time allow jobs to be created at the earliest opportunity for the construction sector. A table and bar chart comparing both scenarios are at **Annex G**.

(B) Kai Tak Site

35. There is a proposal from some Members to explore the former Kai Tak Airport site for development of the Government headquarters.

36. We have carefully considered the suggestion but come to the view that it may not serve the best interest and purposes. The Government first announced the intention to reserve the Tamar site for development of the Government headquarters in January 1998 and

proceeded with the planning and public consultation process afterwards to rezone the Tamar site from “Commercial” to “G/IC” and “Open Space” in 2000. We completed the feasibility study of the Tamar site and started preliminary ground works in preparation for the construction works of the Tamar development project by early 2003, and assessment of requirements for the pedestrian footbridges in mid-2003. If not for the SARS outbreak, the Tamar project should have been close to completion by now.

37. On the other hand, the Government commenced a comprehensive review of the Kai Tak development (which then involved reclamation of 133 hectares) since July 2004. Two rounds of public engagement processes were conducted since the second one started in late-2005. Major development components in the Kai Tak Development include world-class cruise terminal, multi-purpose sport stadium, etc. A preliminary outline development plan for Kai Tak should be available for the next phase of public consultation in mid-2006, after which the Government is committed to entering into the statutory planning process to propose corresponding amendments to the relevant OZPs. Taking into account the time required for detailed engineering and environmental impact assessment studies, the entire statutory planning process is expected to be completed in early 2008.

38. Notwithstanding the above, the Government considers Tamar the best site for Hong Kong’s prime civic core comprising the Legislature, the Government headquarters and a public open space. The location is easily accessible to international and local visitors, as they call on the lawmakers and senior officials. From Hong Kong’s long-term development point of view, there is strategic advantage for the Legislature, the Government Secretariat and the Judiciary to be located in the same district and in close proximity to the financial centre in Central, which is the hub for Hong Kong’s economic activities. Given the significant amount of time already expended on the feasibility studies and the broad directions agreed on the long-term use of the Tamar and Kai Tak sites, we do not propose to alter the agreed plans at the expense of further delays to the two important development programmes on both sides of the harbour. It may also cause delay to the socio-economic benefits to be generated from their developments, in terms of timely creation of job opportunities, improvement to the operational efficiency of the Government, and the vibrancy to be injected into the Southeast Kowloon district. After all, the Government sees Southeast Kowloon to offer the opportunity and land for comprehensive economic and other activities important for Hong Kong’s sustainable development. The

district warrants careful consideration in its own right and should not be constrained by a particular project proposal such as the new CGC.

39. Overall, the Government recognises that the Kai Tak site presents a very precious waterfront site of appreciable size. The Government is committed to developing it into an economically vibrant and lively area that meets the community needs and aspirations.

PUBLIC CONSULTATION

40. We attended the meetings of the LegCo Panel on Planning, Lands and Works on 21 October, 22 November and 17 December 2005 to brief Members on the relaunch of the Tamar development project. We also attended three meetings of a Subcommittee set up under the Panel on 9 February, 7 March and 3 April 2006 respectively to answer Members' questions and listen to the views of deputations. Further, we consulted the Central and Western District Council on 23 March 2006. Some of the District Councillors appealed to the Government to expedite the development of the Tamar site, some expressed reservation and concern over its impacts on the environment and local traffic, whereas some others requested that the feasibility of preserving CGO be explored.

WAY FORWARD

41. We are finalising the user requirements and breakdowns of the project cost. We will consult the PWSC and FC on the upgrading of the Tamar project to Category A in May and June 2006 respectively. Subject to the funding approval of the FC, we will finalise the tender document and commence inviting tenders from the prequalified applicants for the D&B contract in the third quarter of 2006. A schedule of implementation of the project is at **Annex H**.

BACKGROUND

42. The Government Secretariat and the LegCo have been experiencing an acute shortage of office space. Both have to resort to commercial and other government premises, bearing high rental expenses and operating costs in terms of duplicated administrative support and efficiency. The CGO, MB and LegCo Building are ageing and lacking physical space for effective conversion into technologically modern

offices. The maintenance costs involved are also on the rise with the ageing of the buildings. The development of the proposed CGC and LCC at Tamar will provide a long-term solution to these ongoing problems.

43. The Tamar development project was initially launched pursuant to the Executive Council's decision in April 2002. The then project scope included the new CGC, LCC, Exhibition Gallery and Civic Place as major development components.

44. We consulted the Panel on Planning, Lands and Works and PWSC on 4 April and 7 May 2003 respectively and obtained their support for the project proposal. However, in view of the impacts of the SARS outbreak on public finances and the economy as a whole, the Government decided later in May 2003 to put on hold its submission to the FC. After a six-month review, the Government announced in November 2003 the decision to defer the project. Notwithstanding, the Government made it clear that developing the Tamar site into the prime civic core of Hong Kong would remain our long-term commitment.

45. Against the economic upturn and improvement to public finances in the past two years, the Chief Executive announced in his Policy Address on 12 October 2005 to relaunch the Tamar development project. We have since been in close consultation with the Panel on Planning, Lands and Works and its Subcommittee, as well as the LegCo Commission for the detailed user requirements of the new LCC.

**Administration Wing
Chief Secretary of Administration's Office
April 2006**

**Existing and Planned Arrangements for
Office Accommodation – Central Government Complex (CGC)**

Facilities	Existing Area for units moving to CGC	Area required in new CGC (as set out in 2003 PWSC paper)	Area required in new CGC (projection in 2006)
	(m ²)	(m ²)	(m ²)
1. Chief Executive's Office	1 160	1 566	1 580
2. Executive Council and its Secretariat	880	1 188	1 150
3. Chief Secretary for Administration's and Financial Secretary's Offices, including Administration Wing and other offices ^{Note 1}	6 880	7 433	6 770
4. Offices of Bureaux ^{Note 2}	42 890	47 952	38 660
5. Common and Ancillary Facilities	3 050 ^{Note 3}	7 892	8 510 ^{Note 4}
Sub-total	54 860	66 031	56 670
Allowance for expansion		3 302 (5%)	5 670 (10%)
TOTAL	54 860 ^{Note 5}	69 333	62 340 ^{Note 7}

Note 1 : Other offices include the Central Policy Unit, Sustainable Development Unit, Economic Analysis and Business Facilitation Unit, etc. Office of the Secretary for Justice not included.

Note 2 : Existing offices of 11 bureaux, whether located in the Central Government Offices / Murray Building, leased premises or other government owned premises.

Note 3 : The figure covers Common and Ancillary Facilities in the Central Government Offices only.

Note 4 : Common and Ancillary Facilities at the new CGC include multi-purpose hall, press rooms, conference rooms, building management offices, common server rooms, etc. Many of these facilities are inadequate or not provided in the current CGC and MB.

Note 5: Breakdown of space provision for relevant offices and bureaux -

		Existing Area for units moving to CGC (m²)
(a)	Central Government Offices/Murray Building	39 610
(b)	Commercial Leased Premises	5 520
(c)	Owned Premises	9 730
	TOTAL	54 860

Note 6 : The sub-total of existing area of Bureaux Offices (Item 4) and Common and Ancillary Facilities (Item 5) is 45 940m². Required area for the same in the new CGC is 47 170 m², representing a net increase of 1 230 m². This is reflecting mainly the net outcome of decrease in bureaux's accommodation requirement and enhancement of the communal ancillary facilities at the new CGC.

In our updating exercise, we have stringently trimmed down bureaux's requirements, including both staff offices and ancillary facilities. For staff offices, units/sections that are not mainly involved in policy-making functions have been screened out and would not be relocated to the new CGC. We have also substantially cut bureaux's ancillary area by lowering their provisions for storage, filing, meeting rooms, etc.

On the other hand, we have strengthened communal facilities at the new CGC, with enhanced facilities to be used by bureaux on a shared basis. Major enhancements include an increase in area for press rooms (+750m²), conferencing facilities (+820 m²) and common server room (+1 000m²). In addition, we have also achieved a saving of around 1 355 m² through merging the banquet hall originally proposed for the Low Block, and the multi-purpose hall in the Office Block.

Note 7 : The user requirements are under final vetting by relevant government departments. Figures in this Annex are subject to fine-tuning. The finalized figures would be set out in submission for the PWSC meeting in May 2006.

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**Existing and Planned Arrangements for
Office Accommodation – LegCo Complex (LCC)**

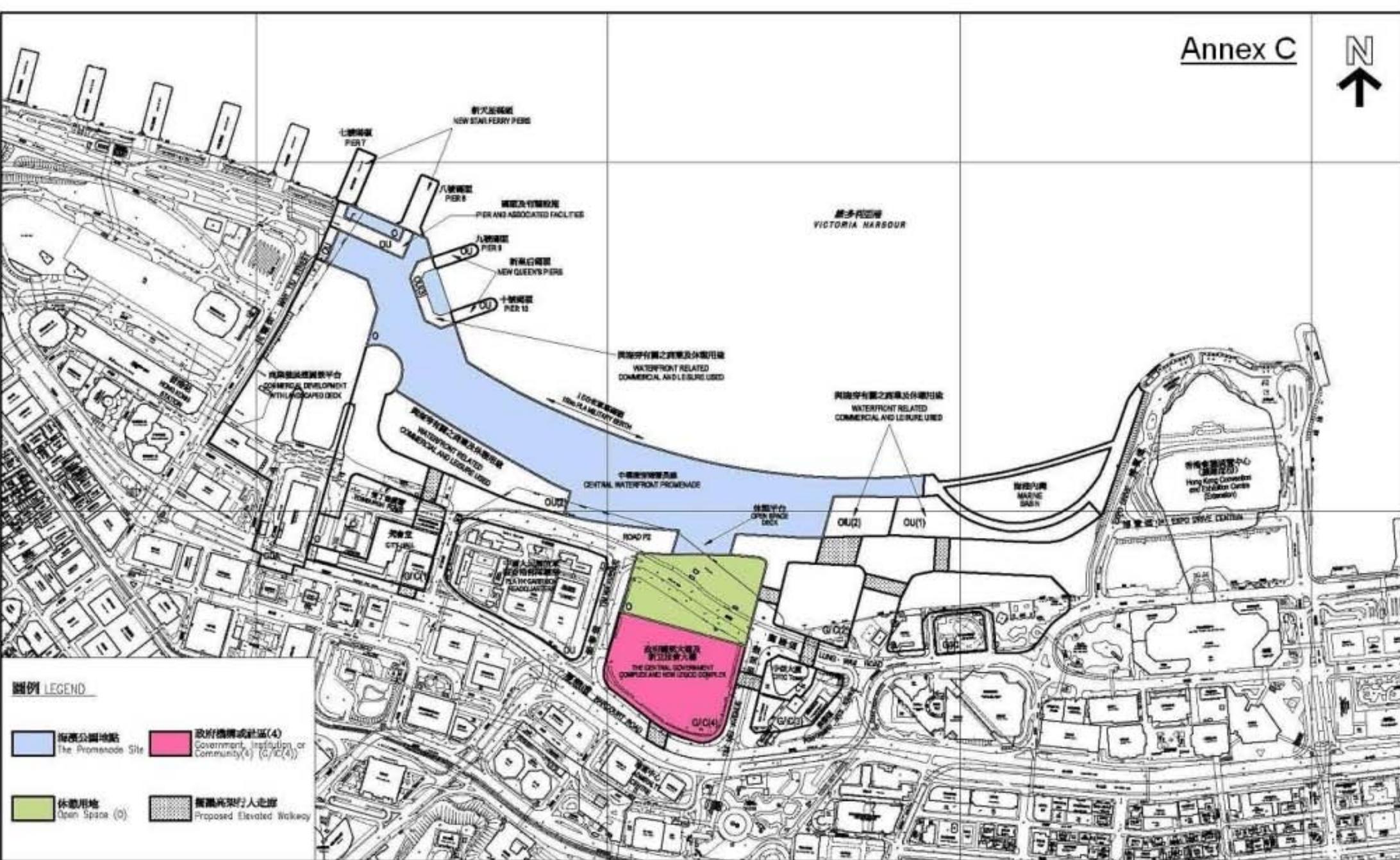
	Facilities	Existing area (m²)	Area required in the new LCC (as set out in 2003 PWSC paper) (m²)	Area required in new LCC (Projection in 2006) (m²)
1.	Members' offices and facilities	2 820	4 160	4 160
2.	Staff offices	3 050	3 550	3 640
3.	Meeting facilities (including the Chamber)	820	3 652 Note 1	3 650
4.	Ancillary facilities ^{Note 3}	2 720	4 640	4 640
	Total area	9 410	16 002	16 090
			(Potential expansion in future: 9 200m ²) ^{Note 2}	
5.	Car-parking spaces	30	120	120

Note 1: The Chamber will be able to accommodate 120 Legislative Councillors. Area for expansion has already been incorporated in the Chamber since it is technically not easily expandable in future.

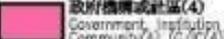
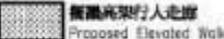
Note 2: In addition to the space requirements for the LCC set out above, the Legislative Council Commission has agreed that an area of 2 300m² would be required for an increase of every 15 Legislative Council seats in future. Tenderers will be required to allow room for the potential expansion of up to 60 seats, involving a further 9 200m². The implementation of any such expansion plan will be subject to the outcome of relevant future policy review and availability of funding.

Note 3: Ancillary facilities include the Ante-Chamber, press facilities, library, facilities for the redress system, dining facilities, computer server rooms, printing rooms and building management rooms, etc.

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圖例 LEGEND

 海濱公園地段 The Promenade Site	 政府機構或社區(4) Government Institution or Community(s) (G/C(4))
 休憩用地 Open Space (O)	 擬議高架行人走廊 Proposed Elevated Walkway

擬建添馬艦用地發展及海濱長廊
PROPOSED TAMAR DEVELOPMENT AND WATERFRONT PROMENADE

PLAN

本圖系根據 2005 年 9 月 20 日 11-SW-89&D, 11-SW-9A,B,C&D, 11-SW-10A&C, 11-SW-13B, 11-SW-14A&B 及 11-SW-15A
 EXTRACT PLAN PREPARED ON 20.9.2005 BASED ON
 SURVEY SHEET No. 11-SW-89&D, 11-SW-9A,B,C&D,
 11-SW-10A&C, 11-SW-13B, 11-SW-14A&B 及 11-SW-15A





PROTECTION OF RIDGELINE

**Environmental Concerns and Implications of the
Tamar Development Project and Central Reclamation III**

In view of the public's concerns over the environmental impacts of the Tamar development project, this Annex sets out how the Administration has addressed these concerns and provides clarification to some misunderstandings.

ENVIRONMENTAL ASSESSMENT ORDINANCE (Chapter 499)

2. Under Schedule 3 of the Environmental Impact Assessment Ordinance (EIA Ordinance), engineering feasibility studies of urban development or redevelopment projects covering more than 20 hectares or involving a total population of more than 100 000 are classified as “designated projects” and are required to conduct “Environmental Impact Assessment” (EIA).

3. Under Schedule 2 of the EIA Ordinance, there are certain categories of “designated projects” that require both an EIA and an Environmental Permit to construct and operate (e.g. major distributor roads, reclamation, and railway protection works).

4. According to the EIAO, the Central Reclamation III (CRIII) project was required to complete a Schedule 3 EIA. Since the development also involves some essential transport infrastructure including the new reclamation, the Central & Wan-chai Bypass and the Road P2 network, these Schedule 2 “designated project” were also assessed and included as part of the CRIII EIA. The major findings of the CRIII EIA are highlighted in paragraphs 16 to 28 below.

5. On the other hand, office development in an urban environment, like the construction of the Central Government Complex and the Legislative Council Complex of the Tamar development project, has limited potential for environmental impacts if standard pollution control measures are implemented. The Tamar project is not a “designated project” and no statutory EIA is required under the EIA Ordinance.

TAMAR DEVELOPMENT PROJECT

6. Although the Tamar project is not subject to an EIA, Architectural Services Department, the works department for the Tamar project, undertook a preliminary environmental review (PER) in 1998 to assess any possible environmental implications.

Preliminary Environmental Review

7. The PER confirmed that the Tamar development project would not cause long-term adverse environmental impacts arising from both the operation and construction stages. To control the short-term environmental impacts during the construction stage which are mainly construction waste, noise, dust and wastewater from the works site, the PER recommended adoption of environmental control and mitigation measures such as the regular wetting of works surface, use of quiet power mechanical equipment, segregation of different types of wastes, etc. The report confirmed that no insurmountable environmental impact would arise from the construction stage.

8. As regards the operational stage of the Tamar development, the PER recommended incorporation of environmental controls in the design requirements such as proper disposition of the buildings, proper location for the exhaust point of ventilation system, good waste collection system, etc. No long-term environmental impacts from the project are expected.

9. The PER also highlighted some areas requiring attention during the detailed planning and design stage to protect users of the future offices, such as proper ventilation design for underground car park, and provision of central air conditioning system with appropriately located fresh air intakes.

10. The Government will implement the said environmental control and mitigation measures for ensure least impacts of the project during both the construction and operation stages.

Air quality impacts of the Tamar project

11. Traffic is a major reason impacting on air quality. In its submission to the Expert Panel Forum on Sustainable Transport Planning and Central-Wan Chai Bypass of the Harbour-front Enhancement Committee in September 2005, the Transport Department (TD) assessed that the traffic flow at the peak hours of the Tamar project when in operation would be 1 924 passenger car units (PCU) (morning peak) and 1 286 PCU (afternoon peak). According to TD, these figures only amount to some 3.4% and 2.3%

of the total traffic flow in the Central Business District respectively. However, this assessment is based on the maximum development intensity of the CGC and LCC at 15 and 12.5 respectively. As stated in the Panel paper, the existing development plot ratio of the GCC and LCC would go down to about 5.7, hence the percentages would drop further down to 1.0% (morning peak) and 0.7% (afternoon peak) of the CBD's total traffic flow. On average, it will be less than 1%. The traffic impact of the Tamar project on the air quality is therefore insignificant.

“Canyon Effect” and the Tamar project

12. There were concerns raised at the recent Panel Subcommittee meeting on 3 April 2006 that the Tamar development project would create “Canyon Effect” causing serious air pollution in the vicinity of the Central District.

13. “Canyon Effect” is referring to the creation of an air stagnation zone by long and tall buildings without gaps in between along both sides of a street, which hinders dispersion of air pollutants released within the street. Apart from the building height and the width of the road, the length of the building is also relevant in considering if there is indeed a “canyon” in place. EPD has advised that there is no existence of such a “canyon” in the context of Tamar.

14. For the areas around the Tamar site, the major roads (e.g. Harcourt Road) are bisected by several other roads (e.g. Tim Mei Avenue and Tim Wa Avenue), and there is open space allowing air to flow through. Hence, the “Canyon Effect” would not be a concern for the Tamar development project.

15. The effects of canyon presented by some deputation at the Subcommittee meeting on 3 April were primarily based on a 2-dimensional model, which assumes that the two sides of the “wall” do not allow any air to flow through as there are no gaps or space between these buildings. The model is, therefore, not applicable to the area around the Tamar site as there is space left between the surrounding of the site and other buildings in the proximity. In reality, the air circulation around the Tamar development is 3-dimensional because of the land use pattern and the disposition of various buildings and open space. There are also air flows along the road and around various buildings to disperse pollutants. A 2-dimensional model is not appropriate for a real situation around the Tamar site. To the east of the Tamar, there is the Tin Mei Avenue; to the west, there is the Tin Wa Avenue. There is the Harcourt Garden to the Southeast of the site. The HK Red Cross

is a relatively low to medium rise building. There is also space between the Admiralty Centre and Far East Finance Centre with the Tamar Street in between. Hence, the 2-dimensional model is not reflecting the likely situation upon completion of the Tamar project.

16. Further, there would be space between the different buildings to be developed on the Tamar site, as there would be some separate blocks of building instead of a wall, including low block and office block(s) of CGC, and low block and high block(s) of the LCC, to be developed on the Tamar site.

Air Ventilation Assessment for the Tamar development project

17. We will consider requesting the tenderers to conduct Air Ventilation Assessment (AVA) for their design schemes, in order to ensure better air ventilation. The aim of AVA is to assess the impacts of the tender design proposals on pedestrian wind environment. The result would form part of the considerations in selecting the tender design.

18. Planning Department commissioned the “Feasibility Study for Establishment of AVA System in Hong Kong in 2003”. According to the findings of the study, for the initial stage of AVA, a performance-based assessment could be outlined. The AVA work methodology allows design options to be compared so that a better design in terms of city air ventilation could be objectively identified. The focus is to allow better layout design of developments and planning of the urban fabric. Wind Velocity Ratio (VRw) is used as the indicator. The key purpose of an indicator is to address what minimum wind environment information, and in what form, is needed to guide design and planning so as to achieve a better wind penetration into and hence, air ventilation of the city especially at the pedestrian level. A design having a higher velocity ratio would be considered better than one having a lower velocity ratio.

19. The Technical Requirement for AVA for the tender submissions of the Tamar Project is now under preparation. The Requirement shall be followed by the tenderers to carry out AVA to assess the impacts of the tender design on the pedestrian wind environment. This would help ensure better air ventilation of the project and the area as a whole.

ENVIRONMENTAL IMPACT ASSESSMENT OF CRIII

20. The EIA Report for the CRIII project was approved in 2001, and

has been uploaded to the EIAO website since 2001.

21. There have been criticisms that the EIA conducted for the CRIII is based on a model assuming the whole Central District a piece of flat land, and hence the outcome of the assessment, particularly on air quality, is not correct.

22. The Administration would like to clarify that the EIA conducted for CRIII has in fact taken into account the existing, committed and planned developments of the district. As the Air Quality Objectives are defined as ambient standards, all buildings (or fresh air intake) in the adjacent area of CRIII are considered as Air Sensitive Receivers. According to Section 2 of the CRIII EIA Report (the Report), a number of commercial and office buildings have been identified as Air Sensitive Receivers. Both the existing commercial and office buildings and future office and commercial buildings are listed as Air Sensitive Receivers in the report. According to Table 2.2 of the Report, the proposed Central Government Complex was specifically listed as one of the Future Air Sensitive Receivers (A70).

23. According to Section 2 of the Report, it is specifically stated that commercial and office buildings and a number of hotels dominate the urban area surrounding the CRIII site. It is also stated in the Report that these buildings are centrally ventilated and air-conditioned, and the additional CRIII road traffic does not generate air pollutant levels which will exceed those of the Air Quality Objectives.

24. It has been shown in Figure 14.19 and Figure 14.20 in the EIA Report that the proposed Central Government Complex would be of a maximum height of 180 meter PD and the elevation of the buildings was displayed in Figure 14.20. The building layout and heights have been taken into account in the EIA study.

25. The CRIII EIA has used a CALINE4 model in assessing air quality impacts of the project. This model is a well-established and proven air quality model acceptable in Hong Kong and internationally for predicting vehicular emission impact. The model is applicable for modeling the air quality of urban areas and has a feature to calculate the canyon and building effect. The model has also been applied overseas for modeling the air quality of densely built urban areas. This model is a 3-dimensional model that calculates the air quality impacts in a 3-dimensional manner. EPD has done measurements in street canyons to determine the plume spread. The value adopted in the air quality modelling is smaller than the measured values, thus giving conservative pollutant concentration.

26. The consultants conducting the CRIII modelling assessment had taken into account all these buildings identified in the Section 2 of the EIA Report, and had assumed that emissions from the traffic impinge directly onto the surrounding sensitive receptors. A narrow plume spread (small Sigma value) is used in the model. In and around buildings, turbulence is generated which disperses the pollutants. By using a plume spread with small Sigma value, the plume is more concentrated to impact on the receptor, producing conservative predictions. Such methods of calculations can cater for the effects of the buildings and the canyon effects, if any, on the predicted air quality modeling results.

Major assumptions of the air quality assessment

27. To recapitulate, the air quality assessment was conducted in accordance with the technical requirements under the “Technical Memorandum on EIA Process” and the established practices and models used in Hong Kong and internationally. The assessment has adopted a conservative approach, taking into account the best available information and data at the time of the assessment, including -

- (a) emissions from traffic impinging directly on nearby sensitive receivers without being first dispersed by obstacles;
- (b) existing and proposed developments scenario at the time of the assessment (the Central Government Complex at the Tamar site, CRIII, Wanchai Development Phase II and Central Wan Chai Bypass & Island Eastern Corridor Link);
- (c) cumulative air quality impact as posed by vehicle emissions from the existing and proposed road network planned within the assessment area and Year 1999 background air quality data collected by the EPD’s Central/Western Air Quality Monitoring Station;
- (d) peak hour traffic flows with traffic flow projection into Year 2027;
- (e) conservative vehicle emission estimates (further reduction of vehicle emissions from Year 2011 to Year 2027 as a result of the implementation of the more stringent vehicle emission control requirements have not been included); and
- (f) worst meteorological conditions as inputs to air quality model.

Roadside air monitoring stations

28. Some deputations attending the Subcommittee meeting suggested that the air pollutants NO₂ and respirable suspended particles (RSP) were underestimated in the CRIII model and lower than those recorded by the roadside air monitoring stations.

29. We would like to clarify that the prediction of the CRIII EIA is the air quality at Year 2027 which is the worst case scenario from the commencement of operation of the proposed roads under the CRIII to Year 2027. However, the records of the Central Roadside Air Quality Monitoring Station cited are historical data. The Hong Kong SAR Government and Guangdong Provincial Government have been working closely to implement a comprehensive Pearl River Delta Regional Air Quality Management Plan to reduce the total air pollutant emission in the region. Due to the tightening of vehicle emissions in Hong Kong, the air quality conditions at roadside have showed gradual improvement in recent years.

CRIII EIA and the Tamar development project

30. Whilst no EIA is required for the Tamar development project, the Tamar site is covered by the CRIII EIA to consider the impacts of the CRIII on the Tamar project. The Tamar development project is an air sensitive receiver considered in the CRIII EIA. Vehicular emission impacts of the existing and proposed roads in the vicinity of the Tamar site on its development among other sensitive receivers have been assessed. On the other hand, the air quality impacts of the Tamar project to its surrounding due to the additional vehicle flow have been taken into account as the additional traffic flow forms part of the traffic forecast. The additional traffic flow due to the Tamar development is not significant. Such type of office development (i.e. CGC and LCC) has limited potential for environmental impacts, provided standard pollution control measures are implemented.

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Tamar Development Project and Traffic Implications of Central Reclamation III

In view of the public's concern over the traffic implications of the Tamar development project and Central Reclamation III (CRIII), this Annex sets out the relevant assessments and provides clarifications.

TAMAR DEVELOPMENT PROJECT

2. Concern has been expressed by some in the community that the proposed Central Government Complex (CGC) and Legislative Council Complex (LCC) of the Tamar development project, when completed and in operation, will attract considerable traffic to the Central Business District (CBD). There have also been criticisms that the proposed developments at Tamar will bring more traffic to the area and thus negate the otherwise positive impact of the planned road networks in CRIII which are to provide relief the traffic in Central and its neighbouring districts.

3. The fact is that, according to Transport Department's data, the proposed CGC and LCC, if developed to their "maximum" permissible development plot ratios, would attract 1,924 passenger car units (pcu) and 1,286 pcu in the morning and afternoon peak periods respectively. Based on Transport Department's 2004 Annual Traffic Census and projecting to 2016, the traffic flow in the CBD during peak hours would be around 57,000 pcu. Hence, the traffic flow that the proposed CGC and LCC, if developed to their "maximum" permissible development plot ratios, would be 3.4% and 2.3% of the CBD's total traffic flow in the morning and afternoon peak periods respectively. On average, it would be about 3%.

4. As explained in paragraph 25 of the Panel paper, the development plot ratio of the Tamar project would be around 5.7. At this scale, the proposed CGC and LCC will attract around 581 pcu and 406 pcu in the morning and afternoon peak periods respectively. Hence, the traffic that they will attract will only be 1.0% and 0.7% of the CBD's total traffic flow in the morning and afternoon peak periods respectively. On average, it will be less than 1%.

5. The Transport Department has also made it clear that given the very insignificant traffic impact of the Tamar development project, the planned road networks, the Central-Wan Chai Bypass (CWB) and the P2 Road are not necessitated by the Tamar development project.

Vehicular Access to the Tamar Site

6. Since Road P2 within CR III will be completed around 2008, i.e., before the completion of the Tamar development project, vehicles accessing the Tamar site can make use of Harcourt Road or Road P2. Traffic from the west may use Harcourt Road, Tim Mei Avenue to reach the Tamar site, while traffic from the east may use Fenwick Pier Street, Road D11, Road P2 and Tim Wa Avenue to access the Tamar site.

7. Traffic leaving the Tamar site heading west may use Road P2 via Road D11. Traffic leaving the Tamar site heading east may take Harcourt Road or Fenwick Pier Street.

Public Transportation to be provided at the Tamar site

8. The Tamar site will be served by the public transport interchange at Admiralty where MTR, bus, tram and mini-bus services are readily available. A footbridge across Harcourt Road will be provided to facilitate pedestrians commuting between the public transport interchange and the Tamar site. Pick-up/drop-off bays will be provided within the CGC to facilitate visitors travelling by private cars. Pick-up/drop-off bays along Tim Wa Avenue and Tim Mei Avenue will be provided for taxis. Bus stops will be provided along Road P2 at suitable locations.

CENTRAL RECLAMATION III

Existing Traffic Situation of the Central Reclamation Area

9. The existing traffic situation in the Central Reclamation Area is not satisfactory. This is because the predominant traffic movement on the northern shore of Hong Kong Island is in the east-west direction along the Connaught Road Central/ Harcourt Road/ Gloucester Road trunk road corridor (the Corridor). This is attributable to the concentration of commercial and business areas in CBD, which generate considerable traffic throughout the day.

10. The Corridor is already operating beyond its design capacity currently. Congestion along the Corridor is not limited to the typical morning and evening peak hours. Regular traffic congestion can be observed between 8 a.m. and 8 p.m. during weekdays. This adverse traffic situation will not be improved until additional road infrastructures within the Central Reclamation Area, such as the Road P2 network and the CWB are in operation.

Planned Transport Infrastructures in Central Reclamation Area

11. As part of the CRIII project, a detailed Traffic Impact Assessment (TIA) has been carried out at various stages and with new transport infrastructures proposed to cope with the anticipated traffic demand. The new roads under construction within the CRIII site are shown in the enclosed Figure 1. The new road network comprises Road P2 which runs along the east-west direction as the backbone with various transverse distributor roads running north-south to allow for traffic circulation. Road P2 in CRIII will connect the existing Man Cheung Street on CRI (between the Airport Railway Station and Two International Finance Centre) to Fenwick Pier Street. This new road network will support the developments in CRII and CRIII and also provide relief to the existing congestion problem along Man Yiu Street, Harbour View Street and Connaught Place in CRI.

12. The results of the TIA completed previously indicate that all the new road links within the Central Reclamation Area would operate well within their design capacities. The critical section of Road P2, where it would still be operating satisfactorily and without capacity problem, would be the underpass section outside the Tamar site. Two traffic lanes would be provided for each direction there.

13. The finding of the TIA also reveals that the critical aspect to the operation of the new road network will be the junction performance, rather than the free-flow road sections. With turning pockets provided at critical junctions to enhance their efficiency, all junctions along Road P2 would operate with spared reserve capacity.

Planned Transport Infrastructures at Strategic Level

14. The CWB is the last, but yet to be built section of a strategic highway running along the northern part of the Hong Kong Island. It will connect the existing flyover near Rumsey Street at Central to the

existing Island Eastern Corridor at Causeway Bay. Government's Comprehensive Transport Study models since the late 1980s and a Transport Expert Panel made up of leading local and overseas transport planning experts in 2005 have confirmed the need for CWB. The Government is actively planning for the construction of the CWB.

15. If we have the CWB and Road P2 in place, even with the planned developments in Central Reclamation Area by 2016, the volume to capacity ratio¹ of the roads in Central and Wan Chai would in general, be below 1.0, i.e., the roads would be operating within capacity by 2016.

Interim Traffic Management Measures to Tackle the Increasing Traffic Volume

16. It is always the Government's intention to expedite the construction of the CWB to further relieve the traffic congestion problem along the northern part of Hong Kong Island. As the completion of the CWB will likely be beyond 2010, the Government will proceed with the construction of Road P2 and with short-term traffic management measures such as load/unloading restrictions, junction improvement, public transport route rationalization, etc., to tackle the traffic congestion in the CBD prior the opening of the CWB.

Public Transportation Facilities

17. To serve the Central Reclamation Area, different kinds of public transport interchange facilities adjacent to the ferry piers of the Central Reclamation Area, with a bus terminus, GMB stands and taxi stands as well as a dedicated loading/unloading and pick-up/drop-off bays for coaches, cars and taxis near the public landing steps will be provided. Service provisions have been based on the premise that all existing facilities should be relocated within the new public transport interchange, with sufficient flexibility to absorb new or relocated routes and services. The majority of GMB services currently operating near the Edinburgh Place will be relocated to the south of Road P2 near Man Yiu Street. The remainder will operate from the ferry pier facility to enhance modal interchange for ferry passengers.

¹ Volume/capacity (v/c) ratio is an indicator which reflects the performance of a road. A v/c ratio equals to or less than 1.0 means that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; that above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively with further increase in traffic.

Pedestrian Access

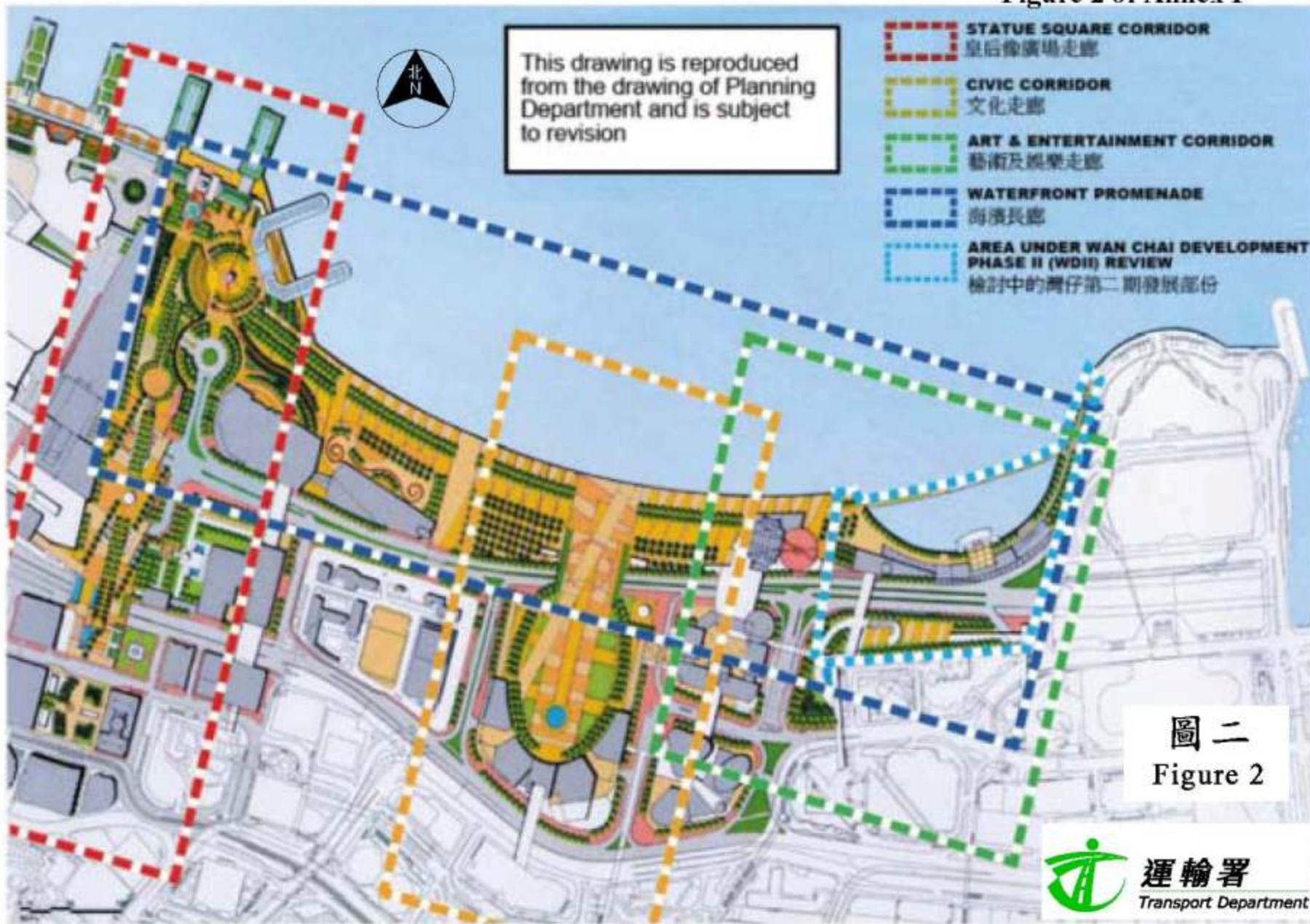
18. The hierarchy of pedestrian facilities with the Central Reclamation Area generally dictates that short distance walking trips are undertaken at street level while longer distance trips use the footbridge network that spans the east-west vehicle corridors providing uninterrupted north-south movement.

19. As shown in the enclosed Figure 2, grade-separated links such as the Status Square Corridor, Civic Corridor and Arts & Entertainment Corridor catering for pedestrian flows anticipated along the major corridors are proposed. It will be supplemented by high capacity at-grade facilities across Road P2 and other transverse distributor roads catering for shorter distance trips and connections to ground level activities.

20. The proposed shoreline promenade and the pedestrian facilities linking it with the proposed development sites and the existing pedestrian network serve to create not only a highly accessible, high quality waterfront area but also enhanced modal interchange links that are vital to a successfully integrated transport system.

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Figure 2 of Annex F



Comparison of Implementation Programme**Tamar development project VS In-situ redevelopment of Murray Building and Central Government Offices (CGO)**

Tamar		In-situ Redevelopment Murray Building + CGO	
<u>Event</u>	<u>Duration (Months)</u>	<u>Event</u>	<u>Duration (Months)</u>
• Construct new building(s) on Tamar site	39	• Demolish Murray Building	10
• Testing & Commissioning (T&C)	3	• Construct new building(s) on Murray Building site	32
		• T&C	3
		• Demolish CGO	10
		• Construct new building(s) on CGO site	32
		• T&C	3
Total	42	Total	90

Note:

- (1) The Murray Building + CGO Option is 48 months (**4 years**) longer than the Tamar Option counting from Day One of construction work on site.
- (2) The pre-contract lead time for the Murray + CGO Option will be longer than the Tamar Option, since preliminary feasibility study, topographical survey, preliminary environmental review, ground investigation etc. have already been carried out for the Tamar Option.
- (3) The 3 months allowed for T&C includes testing and commissioning of IT and building services systems and moving-in of tenants.
- (4) The 32 months each allowed for the construction of new building(s) on the Murray Building and CGO sites is a preliminary assessment assuming the scope of development will be the same as the Tamar Option. Time has not been allowed for any unforeseen underground utilities, geotechnical complications and adverse underground soil conditions etc. for the Murray + CGO Option.
- (5) Programme barcharts comparing the 2 Options are attached.

Annex H

Schedule of Implementation of the Tamar Development Project

<u>Event</u>	<u>Timing</u>
(a) Submission to Public Works Subcommittee for funding approval	24 May 2006
(b) Submission to Finance Committee for funding approval	23 June 2006
(c) Invitation of tender	3 rd quarter of 2006
(d) Completion of tender exercise and award of contract	Early 2007
(e) Completion of works	2010