Purpose

This paper sets out the background to the improvement to Tung Chung Road (TCR) between Lung Tseng Tau and Cheung Sha (the Project), and summarizes the major views and concerns expressed by Members previously on the subject.

Tung Chung Road

2. TCR is the only vehicular access connecting North and South Lantau between Tung Chung in the north and Cheung Sha in the south. It is a 3.5-metres (m) wide single-lane carriageway with some 40 passing bays for two-way traffic with sharp bends, poor visibility and steep gradients of up to 20% at certain locations. In view of the limited capacity and the substandard condition of the road, a dual-permit system¹ was operated to restrict the number of vehicles using the road.

Improvement to Tung Chung Road

3. In November 1996, the Administration commissioned a feasibility study on the improvement of TCR to a two-lane road with an additional climbing lane at the uphill sections to meet the traffic demand and improve road safety. The study considered two possible improvement schemes. The first one was to widen the road along the existing alignment and the second was to improve the road to the current design

¹ The dual-permit system means the TCR Prohibited Zone Permit System and the Lantau Closed Road Permit System. Currently, all vehicles, except franchised buses, Lantau taxis and emergency vehicles, require both permits to travel on the section of TCR between Shek Mun Kap Road and South Lantau Road from 8:00 am to 6:00 pm everyday. Vehicles not exceeding 5.5 tonnes but possessing only Lantau Closed Road Permits can travel on that section of TCR outside the above period. Vehicles exceeding 5.5 tonnes are generally banned from using that section of the road.
standard. Since then, the Administration had worked on a number of improvement options, including tunnels, having regard to the environmental, cost, technical and land implications.

**Original funding proposal for the improvement to Tung Chung Road**

4. In June 2003, the Administration sought the approval of the Public Works Subcommittee for upgrading TCR to a single two-lane road of 7.3-m in width for two-way traffic, with footpath alongside. The proposed works involved widening and realignment of the section of TCR between Lung Tseng Tau and Pak Kung Au along its existing alignment, and construction of a new road for the section between Pak Kung Au and Cheung Sha to reduce the gradient to within 15%. The Administration also proposed to provide passing bays to ensure smooth traffic flow and a roundabout at Cheung Sha to connect TCR with South Lantau Road. A traffic control and surveillance system comprising four closed circuit televisions cameras and a set of variable message signs for monitoring and directing traffic flow on TCR would be provided. The estimated cost of the Project was $629.8 million in money-of-the-day (MOD) prices.

5. The then projected v/c ratios of TCR in 2006, 2011 and 2016, with or without the proposed improvement works, were as follows:

<table>
<thead>
<tr>
<th>V/C Ratio of TCR</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006 2011 2016</td>
</tr>
<tr>
<td>Without the proposed improvement works</td>
<td>1.4 1.4 1.4</td>
</tr>
<tr>
<td>With the proposed improvement works</td>
<td>0.69 0.84 0.99</td>
</tr>
</tbody>
</table>

6. On 18 July 2003, the Finance Committee (FC) approved the funding proposal for the Project.

**Increase of the approved project estimate in June 2004**

7. On 11 June 2004, the Administration sought FC approval for increasing the approved project estimate (APE) of the Project from $629.8 million to $688.5 million in MOD prices (i.e. an increase of $58.7 million). According to the Administration, the increase in APE was required to cover the additional costs associated with the following –

(a) higher-than-expected tender outturn price; and

(b) provision for additional road safety enhancement measures.
Tender outturn price

8. On tender outturn price, the Administration advised that tenders for the Project were invited on 3 October 2003. Of the 12 tenders received, the actual tender prices of all the tenders were higher than the original estimate. The higher-than-expected tender price might be attributable to the tenderers being more cautious about the difficult site conditions, the strict environmental measures to be adopted and the tight construction programme of the project, thus adopting more conservative tender prices despite the intense competition in the market. After assessing the tenders, the Administration found that an additional $50.7 million was needed to cover the price of the recommended tender taking into account the latest price trend.

Additional road safety enhancement measures

9. Regarding the need for providing additional road safety enhancement measures, the Administration explained that it had taken into account the recommendations in the Report on Enhancement of Highway Safety issued by the Independent Expert Panel on Tuen Mun Road Incident in December 2003 and considered it desirable to include the high containment safety barrier fences along the edges of steep slopes and physical central barriers on tight curvatures to enhance the safety of this vital road link in Lantau. The contractor was required to undertake additional road safety enhancement works at an estimated cost of $8.0 million. Since these additional measures were only identified after tender was invited for the project, the cost was not included in the original estimate.

10. As a result of the changes, there was a need for the Administration to seek supplementary provisions and the Project delivery date was deferred from September 2006 to March 2007.

11. The funding proposal for increasing the APE of the Project was approved by FC on 11 June 2004.

Proposed further increase of the APE in 2006

12. The Administration will brief members at the Panel meeting on 24 November 2006 on its proposal to further increase the APE of the Project.

Concerns expressed by Members and local groups

Discussions by the Panel on Transport

13. The Panel on Transport has along been concerned about the north-south access of Lantau in view of the increased traffic flow brought about by the opening of the North Lantau Highway in 1997 and the Hong Kong International Airport in Chek Lap
Kok in 1998. On 19 January 2001, the Panel held a meeting to discuss with the Administration on various options that had been considered to improve the north-south access of Lantau. Members noted that the widening of TCR was considered the most favourable option in view of its technical feasibility, cost-effectiveness and potential impact on the environment. While mindful of the serious safety risks caused by the substandard conditions of TCR, members urged the Administration to fast-track the implementation of the Project to address the dire transport needs of the Lantau residents.

14. Members also expressed concern about the usage and cost-effectiveness of the Project as the upgraded TCR would still be closed to general traffic. The Administration advised that there would be relaxations for the South Lantau residents in using TCR upon completion of the Project. It was intended that the holders of South Lantau Closed Road permits would be accorded 24-hour access to TCR. On the decision to retain the restriction of public access to TCR, the Administration had considered it necessary for both safety and traffic management concerns as well as the planning themes of conservation and sustainable recreation for South Lantau and the design capacity of the South Lantau Road.

15. At the Panel meeting on 25 January 2002, members reviewed the progress of the Project with the Administration. It also took the opportunity to review a traffic incident happened on 7 December 2001 when an oil tanker, traveling from Tung Chung to South Lantau, overturned on the section of TCR about one km south of Pak Kung Au. After the accident, the entire TCR was closed by the Police for safety reasons. In view of the strategic importance of TCR and the safety concerns expressed by the general public, members generally considered that there was a need to expedite completion of the road improvement works. They urged the Administration to review the works programme and examine the possibility of 24-hour work.

Discussions by the Finance Committee and its subcommittee

16. In considering the funding proposal for the Project at the Public Works Subcommittee (PWSC) meeting on 25 June 2003, members noted that some local groups were concerned about the environmental impacts during the construction and operational phases of the Project. The Administration had explained that it would control the environmental impacts to acceptable limits by implementing environmental mitigation measures and the Environmental Monitoring and Audit programme in accordance with the approved Environmental Impact Assessment report. The Project was essential and could not be replaced by localized or gradual improvement through only minor modification works and falling short of an additional lane.

17. Regarding the suggestions to provide a road link between the North and South Lantau in addition to the existing TCR, to develop a comprehensive road network and to abandon the permit systems restricting the road usage on Lantau Island, the Administration's view was that the currently proposed road scheme was the most optimal option having regard to the environmental, cost, technical and land
implications.

18. Apart from the handling of local objections, members also raised concerns on the followings matters:

   (a) the Administration should consider relaxing the restrictions on vehicular access to TCR after the completion of the Project;

   (b) the Administration should ensure that the design of the lighting facilities along TCR should be in harmony with the environment;

   (c) the Administration should make proper compensation for trees felled due to the Project works, and adopt a main theme in designing the landscaping of the road and selecting the species of trees to be planted; and

   (d) the Administration should consider providing a public transport interchange and car parking facilities at Cheung Sha to serve Tung Chung residents.

19. In discussing the proposal to increase the APE at the PWSC meeting on 5 May 2004, members expressed concern on the justifications for such an increase. Some members were concerned whether the environmental measures adopted were necessary or otherwise excessive, which had led to a higher project cost. The Administration's reply was that the environmental measures to be adopted were those recommended in the approved EIA report for the Project.

20. A list of papers is in the Annex.

Council Business Division 1
Legislative Council Secretariat
11 December 2006
### Improvement to Tung Chung Road (TCR)
**between Lung Tseng Tau and Cheung Sha**

<table>
<thead>
<tr>
<th>Date of meeting</th>
<th>Meeting</th>
<th>Minutes/Paper</th>
<th>LC Paper No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.11.00</td>
<td>Panel on Transport</td>
<td>Minutes of the meeting</td>
<td>CB(1)309/00-01&lt;br&gt;<a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp241100.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp241100.pdf</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration’s paper on the latest position of the project Lantau North-South Road Link between Tai Ho Wan and Mui Wo</td>
<td>CB(1)205/00-01(07)&lt;br&gt;<a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/a205e07.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/a205e07.pdf</a></td>
</tr>
<tr>
<td>19.1.01</td>
<td>Panel on Transport</td>
<td>Minutes of the meeting</td>
<td>CB(1)808/00-01&lt;br&gt;<a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp190101.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/minutes/tp190101.pdf</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration’s paper to seek Members’ views on the proposed way forward for improving the north-south access of Lantau</td>
<td>CB(1)464/00-01(03)&lt;br&gt;<a href="http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/a464e03.pdf">http://www.legco.gov.hk/yr00-01/english/panels/tp/papers/a464e03.pdf</a></td>
</tr>
<tr>
<td>25.1.02</td>
<td>Panel on Transport</td>
<td>Minutes of the meeting</td>
<td>CB(1)1955/01-02&lt;br&gt;<a href="http://www.legco.gov.hk/yr01-02/english/panels/tp/minutes/tp020125.pdf">http://www.legco.gov.hk/yr01-02/english/panels/tp/minutes/tp020125.pdf</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration’s paper to brief Members on the progress of the TCR improvement project and short-term improvement measures on TCR, and the report on the TCR incident of 7 December 2001</td>
<td>CB(1)872/01-02(03)&lt;br&gt;<a href="http://www.legco.gov.hk/yr01-02/english/panels/tp/papers/tp0125cb1-872-3e.pdf">http://www.legco.gov.hk/yr01-02/english/panels/tp/papers/tp0125cb1-872-3e.pdf</a></td>
</tr>
<tr>
<td>Date of meeting</td>
<td>Meeting</td>
<td>Minutes/Paper</td>
<td>LC Paper No.</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>23.5.03</td>
<td>Panel on Transport</td>
<td>Administration’s paper to inform Members of the proposal to upgrade 718TH – Improvement to TCR between Lung Tseng Tau and Cheung Sha to Category A</td>
<td>CB(1)1686/03-04(01) <a href="http://www.legco.gov.hk/yr02-03/english/panels/tp/papers/tp0523cb1-1686-1e.pdf">http://www.legco.gov.hk/yr02-03/english/panels/tp/papers/tp0523cb1-1686-1e.pdf</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration’s funding proposal for the improvement to TCR Road between Lung Tseng Tau and Cheung Sha</td>
<td>PWSC(2003-04)45 <a href="http://www.legco.gov.hk/yr02-03/english/fc/pwsc/papers/p03-45e.pdf">http://www.legco.gov.hk/yr02-03/english/fc/pwsc/papers/p03-45e.pdf</a></td>
</tr>
<tr>
<td>5.5.04</td>
<td>Public Works Subcommittee</td>
<td>Minutes of the meeting</td>
<td>PWSC77/03-04 <a href="http://www.legco.gov.hk/yr03-04/english/fc/pwsc/minutes/pw040505.pdf">http://www.legco.gov.hk/yr03-04/english/fc/pwsc/minutes/pw040505.pdf</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration’s funding proposal to increase the approved project estimate of 718TH</td>
<td>PWSC(2004-05)10 <a href="http://www.legco.gov.hk/yr03-04/english/fc/pwsc/papers/p04-10e.pdf">http://www.legco.gov.hk/yr03-04/english/fc/pwsc/papers/p04-10e.pdf</a></td>
</tr>
</tbody>
</table>

Council Business Division 1  
Legislative Council Secretariat  
11 December 2006