

For information on
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**LANTAU DEVELOPMENT ADVISORY COMMITTEE
SUSTAINABLE DEVELOPMENT SUBCOMMITTEE**

**Sustainable Design Concepts for Mountain Bike Trail
in South Lantau**

PURPOSE

This paper aims to brief Members on the sustainable design concepts for the improvement and expansion of mountain bike trail (MBT) networks in south Lantau.

BACKGROUND

2. The improvement and expansion of MBT networks in south Lantau are implemented in two phases (Location Plan at **Annex**). Phase 1 works mainly involve the improvement of existing MBT networks. The works commenced in end 2015 and are expected to complete in end 2016. Phase 2 works mainly consist of the expansion of the MBT networks in south Lantau as well as provision of a training ground with ancillary facilities. The Finance Committee of the Legislative Council approved the funding for the construction of Phase 2 works in July 2016. The construction is planned to start in end 2016 for completion by end 2017.

SUSTAINABLE DESIGN CONCEPTS

3. The sustainable design concepts of improvement and expansion of MBT networks in south Lantau are mainly based on the following three aspects:

Life Cycle of MBT

4. In line with sustainable development principle, one of the major design considerations of MBT is to extend the life cycle and reduce the need of maintenance. We considered that the life cycle of MBT can be

(Translated Version)

effectively extended by preventing soil erosion and damage arising from inclement weather. As such, the design of the proposed MBTs has incorporated design for preventing soil erosion. For instance, erosion can be reduced by designing MBT with crossfall as far as possible to drain away the surface runoff, and the control of overall gradient by adjusting its alignment to reduce the velocity of surface runoff. Crushed stones will also be placed at suitable locations to improve drainage performance. The aforementioned design details could not only prevent soil erosion, but also safeguard the MBT users. The design of MBT alignment and gradient for drainage need as well as the technical features of the trail will make the MBT alignment become tortuous by avoiding straight alignment design of the MBT and thus enhance the enjoyment of mountain biking.

Environmental Protection

5. As the MBTs in south Lantau are located within Country Park, we considered that environmental protection is of paramount importance for their future sustainable development. In order to match with the surrounding natural environment, the use of reinforced concrete road surface will be avoided and natural materials such as soil, sands and stones will be adopted as far as practicable for the design. We will also reuse the excavated materials on site as far as possible in order to effectively reduce construction waste. In addition, the alignment of the MBT will be designed to avoid tree felling as far as practicable in order to preserve the original scenery of the Country Park.

Sustainable Development of Mountain Biking Activity

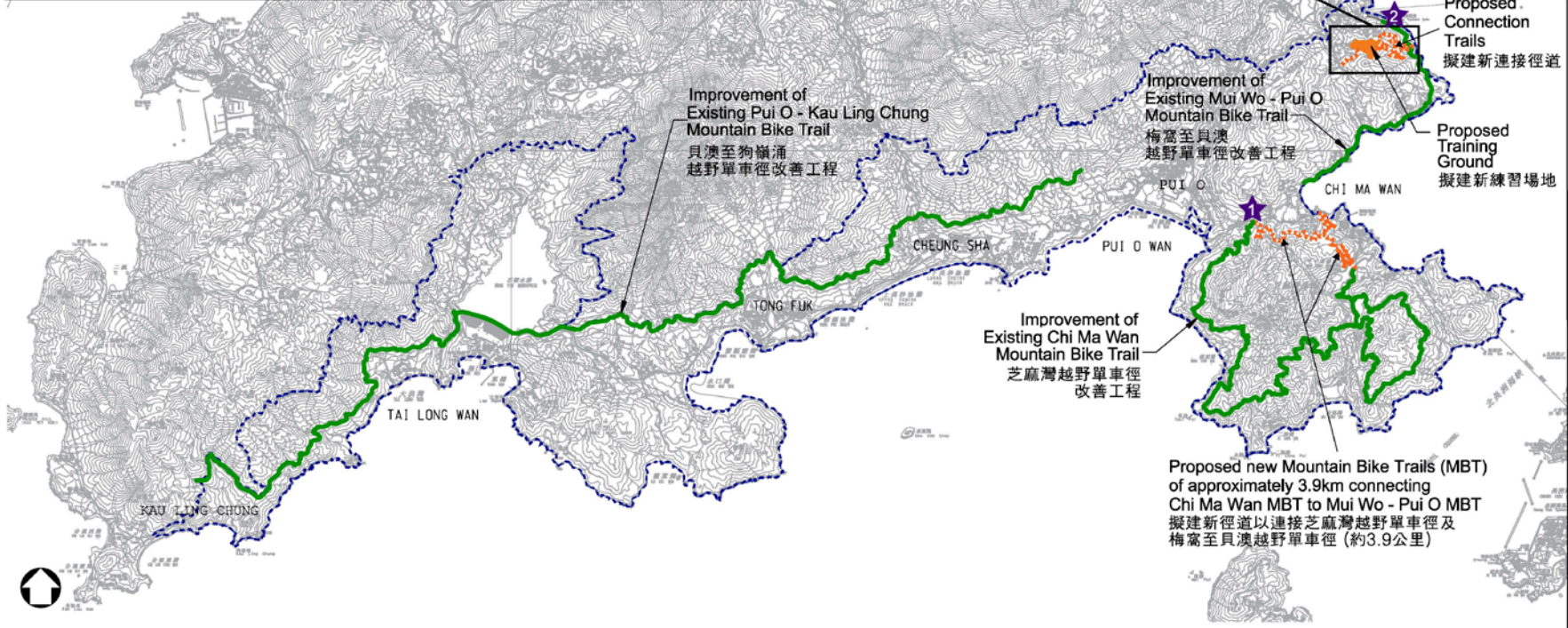
6. The proposed training ground near Lai Chi Yuen Tsuen and the ancillary facilities can be used for promoting mountain biking activities. Trails of different levels of riding difficulty will be provided at the proposed training ground, which enables people of different physical conditions and skill levels to try and experience mountain biking. Elementary training facilities will also be provided for beginners so that they can try and enjoy mountain biking. In addition, we will explore if the proposed MBT networks in south Lantau can meet the standard for holding international competitions, where local mountain bikers can gain experience on competitions and improve their standard of skills. The above proposals are beneficial to sustainable development of mountain biking activity of Hong Kong. The recreational and educational values as well as the attractiveness of the South Lantau Country Park can also be enhanced.

CONCLUSION

7. Members are invited to note and express their views on the above sustainable design concepts for the improvement and expansion of MBT networks in south Lantau.

**Civil Engineering and Development Department
July 2016**

- Legend 圖例**
- - - - Feasibility Study Area 可行性研究範圍
 - Existing Mountain Bike Trails for Improvement (Phase 1 Works)
現有越野單車徑改善工程 (第一期工程)
 - - - - Proposed New Mountain Bike Trails (Phase 2 Works)
擬建新越野單車徑 (第二期工程)
 - Proposed Training Ground (Phase 2 Works)
擬建新練習場地 (第二期工程)
 - ★ Gathering Place at the Entrance of Chi Man Wan Country Trail (Phase 1 Works)
擬建越野單車人士集合地點-芝麻灣郊遊徑入口處 (第一期工程)
 - ★ Gathering Place at Mui Wo Ferry Pier Road (Phase 2 Works)
擬建越野單車人士集合地點-梅窩碼頭道旁 (第二期工程)



Mountain Bike Trail Networks in South Lantau - Design and Construction
 Proposed Phase 1 and Phase 2 Works
 南大嶼山越野單車徑網絡 - 設計與建造
 擬建第一期及第二期工程

Drawing No. 圖則編號		
Drawn 繪圖	Checked 覆核	Approved 批准
Scale 比例	Date 日期	Date 日期
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