



Code of Practice for the  
Lighting, Signing and  
Guarding of Road Works

道路工程的照明、  
標誌及防護工作守則





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1.1 All road works cause inconvenience and are a potential hazard to the safety of road users, including those employed in carrying out the works. It is the duty of those responsible for road works to ensure that these effects are mitigated or reduced to a minimum, and to ensure that works are properly lit, signed and guarded. The need to provide clear and early warning of any obstruction and road works is most essential.

1.2 With the high traffic densities in Hong Kong and the continuing development of the road network, it is important that those responsible for road works give more thought and pay more attention to detail than they have found necessary in the past. The person responsible shall carefully and properly plan and implement the temporary traffic arrangement for road works with due regard to the safety of the road works personnel and the impact to the traffic, according to the requirements of this Code. On this, the person responsible shall strive to avoid putting the worksite in vulnerable situation and to carry out road works in daytime as far as practicable, with time window and working space sufficiently wide for setting up, maintaining and removal of lighting, signing and guarding and protection measures before, during and after works execution. These can contribute to minimizing the risk of the road works being hit by oncoming or passing vehicles.

1.3 It is essential for the safety of all concerned that uniform and consistent procedures should be adopted on all roads in the network. This Code is intended to provide a standard of good practice for the marking of obstructions and road works as well as for the temporary traffic control necessitated by them. The Code however does not cover every eventuality. Those responsible should use the principles set out in this Code and obtain approval, where necessary, from the appropriate authorities for situations not covered by the Code.

1.1 所有道路工程都會造成不便，亦可能會危及道路使用者，包括進行工程的人員。因此，負責道路工程的人員有責任確保把這些影響減輕或降至最低程度，以及確保工程有適當的照明、標誌及防護。為障礙物及道路工程提供清楚的預先警告是最為重要的。

1.2 由於本港車輛稠密，道路網絡不斷發展，負責道路工程的人員應較以往更仔細地考慮和留意各項細節。為確保道路工程人員的安全及減低工程所造成的交通影響，負責人須根據本守則的規定，仔細策劃及妥善執行臨時交通安排。為此，負責人須盡可能避免在欠穩妥的情況下施工，及盡可能安排工程於日間進行。同時，在策劃道路工程的開展、進行及完成時，負責人須為工程的照明、標誌和防護等措施的設置、維持和移除提供足夠的工作時間和空間，以減低施工地區被來車或經過車輛撞及的風險。

1.3 為各有關人士的安全起見，實有必要在本港所有道路採用相同和一致的程序。本守則的目的是針對障礙物和道路工程以及由此所需的臨時交通管制，提供一套妥善的工作準則。本工作守則並不包括所有可能出現的情況，因此對於未有包括在內的情況，負責道路工程的人員應遵照本守則所列的原則，並在有需要時，呈請有關當局批准。

## Definitions

1.4 **Code** means this Code of Practice for the Lighting, Signing and Guarding of Road Works.

**excavation** means any opening, hole or trench executed in any road.

**expressway** means any road and land that are designated as such under the Road Traffic Ordinance (Cap. 374).

**high speed road** means public roads satisfying the criteria set out in para. 7.16 of this Code.

**hours of darkness** means the time between a quarter of an hour after sunset and a quarter of an hour before sunrise.

**long term works** means works that occupy a location 24 hours a day for two weeks or more in general.

**obstruction** means any material, machinery, tools, rubbish, vehicle or other thing placed upon any road in such a manner as to obstruct or endanger the passage of any person or of any vehicle on the road.

**Ordinance** and **Regulations** mean respectively the Road Traffic Ordinance (Cap. 374) and the subsidiary Regulations.

**person responsible** in relation to any road works, obstruction or excavation means the person under whose supervision or direction the road works are carried out or the obstruction or excavation is caused or made.

## 定義

1.4 **守則**指本道路工程的照明、標誌及防護工作守則。

**挖掘處**指在任何道路上挖掘的開口、洞或壕溝。

**快速公路**指根據道路交通條例(第 374 章)指明為快速公路的任何道路及土地。

**高速道路**指符合本守則第 7.16 段所述的公共道路。

**黑夜時間**指日落後 15 分鐘起，至日出前 15 分鐘止的一段時間。

**長期工程**指全日 24 小時佔據一個地方，並一般維持達兩星期或以上的工程。

**障礙物**指放置在道路上的任何物料、機器、工具、垃圾、車輛或其他東西，而其放置的方式妨礙或危及任何人或任何車輛在該條道路上通行。

**條例及規例**分別指道路交通條例(第 374 章)及其附屬規例。

**負責人**指就任何道路工程、障礙物或挖掘處而言，監督或指示進行該道路工程或導致或造成該障礙物或挖掘處的人。

**road works** means any excavation, structural or maintenance work or any other work executed on or near the road together with the area for –

- (a) the storage of any material;
- (b) the storage and operation of any constructional plant; and
- (c) the construction of any temporary structure in connection with road works.

**speed limit** of a road means the maximum speed at which a vehicle may be driven on the road, as prescribed under the Ordinance and the Regulations. For road works located shortly after speed limit change of a road, lighting, signing and guarding requirements for the higher speed limit shall be followed whenever practicable. While speed limit is referred to in the Code, if necessary, the person responsible should take into account the actual traffic conditions of the road where the road works is to be carried out and determine whether its approach speed, which is the 85 percentile speed in free flow condition of light vehicles on the approach to the road works location, exceeds the speed limit of the road. Should the approach speed exceed the speed limit, the person responsible should use the approach speed for planning the temporary traffic arrangement for the road works instead. In case of doubt on the speed limit and approach speed, the Transport Department should be consulted.

**traffic sign** means a sign, object or device for conveying to persons using a road any warning, information, direction, requirement, restriction or prohibition.

**道路工程**指在道路上或在道路附近進行的任何挖掘、構造或維修工程或任何其他工程，連同供以下用途的範圍 —

- (a) 貯存物料；
- (b) 貯存建築業裝置及其運作；及
- (c) 建造任何與道路工程相關的臨時構築物。

**車速限制**指根據道路交通條例及規例指明車輛在道路上行駛的最高速度限制。當道路工程位於有車速限制改變的路段後不遠處時，其照明、標誌及防護安排須在可行情況下依照較高車速限制的要求。守則內根據車速限制釐定的規定，負責人可按需要，按照施工路段的實際交通情況，在來車速度高於車速限制時，考慮應否以來車速度來制定臨時交通安排。來車速度指在通往道路工程地點的進路上，輕型車輛在無阻的情況下的 85 百分位車速。如就車速限制及來車速度有疑問，應諮詢運輸署。

**交通標誌**指標誌、物體或設備，用以向道路使用者傳達任何警告、資料、指示、規定、限制或禁止的信息。

## General

2.1 The majority of obstructions which arise from planned works are generally identified well in advance of the actual commencement date. There is no excuse, therefore, for not planning for the provision of the correct lighting, signing and guarding as required by the Ordinance, the Regulations and the Code. Failure to comply with the legal requirements may render the person responsible liable to prosecution, and it is stressed that anyone responsible for road works should obtain their own copy of the Ordinance and the Regulations to familiarize themselves with the requirements.

2.2 The Code sets out a standard of good practice to enable the legal requirements to be met in a wide variety of circumstances. Its provisions should be adhered to as a general standard of good practice at all time. The principles of the practices set out in the Code are also applicable to roads with “Driving on the Right” traffic arrangement.

2.3 The legal requirements governing traffic issues of road works are stipulated in the Ordinance and the Regulations, a summary of which is given in the following paragraphs. For the precise meaning of the law and representation of prescribed signs, the Ordinance and the Regulations should be referred to. Changes in the legislation may render parts of the Code incorrect. In all instances, the prevailing legislation takes precedence.

## Road Traffic Ordinance (Cap. 374)

2.4 This is the principal Ordinance concerning road traffic matters, and from this stems the Road Traffic (Traffic Control) Regulations (Cap. 374G) which contain the particular regulations pertaining to the lighting, signing and guarding of road works. The Ordinance empowers the Director of Highways to prescribe and from time to time revise a code of practice for the lighting,

## 總則

2.1 通常在確實施工日期前，策劃工程的人員已可估計大部分會出現的障礙物。因此，如果有關人員未有計劃提供符合條例、規例及守則所規定的正確照明、標誌和防護設施，實屬難辭其咎。如未遵守法律的規定，其負責人有被起訴之虞。負責道路工程的人員均應自備一份條例及規例，並應熟習各項規定。

2.2 本守則訂下了優良的工作準則，使有關人員在不同環境下均能遵守各項法律的規定。守則內的條款是作為優良工作的一般標準，有關人員在任何時間均應依從。本守則所訂立的工作準則之原則亦可應用於「靠右駕駛」的道路。

2.3 道路工程中管制交通事宜的法律規定已載於條例及規例中，下文是有關撮要。關於法律及訂明標誌的確實意思，應參考條例及規例的原文。法例的改動或會令部分守則有誤，故在所有情況下，應優先遵照現行法例。

## 道路交通條例（第 374 章）

2.4 這是有關道路交通事項的主要條例，由這條例產生道路交通（交通管制）規例（第 374G 章），包括與道路工程照明、標誌及防護有關的特別規例。這條例授權路政署署長就有關道路工程的照明、標誌及防護制訂和不時修改一套工作守則。



signing and guarding of road works.

## Road Traffic (Traffic Control) Regulations (Cap. 374G)

2.5 The person responsible for road works is obliged to comply with Regulation 20 for the purpose of lighting, signing and guarding, to erect and maintain prescribed lanterns, traffic signs and road markings and to locate them in the manner set down in the Code. In addition, Schedule 5 requires barriers to be placed in accordance with the Code.

Note : Prescribed lanterns, traffic signs and road markings are defined as lanterns, signs and road markings of the size, colour and type prescribed in the Regulations. Any non-prescribed equipment will be illegal obstructions if placed on any part of a road, unless the permission of the Commissioner for Transport or the Director of Highways has been given.

2.6 Regulation 21 on portable light signals or traffic signs for obstructions and excavations requires the person responsible to provide prescribed portable light signals or manually operated temporary signs ("Stop/Go" signs) when the passage of vehicles in two directions is less than 5.5m in width due to an obstruction or excavation. The requirements on portable light signals are prescribed in Schedule 3. The portable light signals or manually operated temporary signs (i.e. "Stop/Go" signs) shall be provided and operated in such a manner as to enable vehicles to pass the obstruction or excavation in either direction without risk of accident and without unnecessary delay.

2.7 Regulation 22(1) on dangerous excavations requires the person responsible to provide sufficient fencing around the excavation as will be adequate and effective to prevent any pedestrian or vehicle from falling into the excavation or being otherwise endangered, taking into account the nature and position of the

## 道路交通（交通管制）規例（第 374G 章）

2.5 道路工程負責人須按第 20 條規例有關照明、標誌及防護的規定，豎立及保持豎立訂明的燈具、交通標誌及道路標記，並按照守則所定方式放設。另外，附表 5 要求防欄的設置，須符合守則的規定。

注意：訂明的危險警告燈、交通標誌及道路標記，應解釋為符合規例內訂明的尺寸、顏色和種類的危險警告燈、標誌及道路標記。除獲得運輸署署長或路政署署長批准外，在道路的任何一部分設置任何非訂明的裝備均被視作違例障礙物處理。

2.6 有關就障礙物及挖掘處而使用的手提交通燈或交通標誌的第 21 條規例明確規定，如由於障礙物或挖掘處而使一條供車輛雙向行駛的道路上可供車輛行駛的該部分道路寬度小於 5.5 米，道路工程負責人須提供訂明的手提交通燈或人手操作臨時標誌。手提交通燈的要求訂明於附表 3。手提交通燈或人手操作臨時標誌（即「停／去」標誌）的設置及操作須使來往車輛能於駛經障礙物或挖掘處時，不會帶來意外的風險及不必要的延誤。

2.7 有關危險挖掘處的第 22(1) 條規例明確規定，道路工程負責人須考慮挖掘處的性質或位置，在挖掘處周圍設置足夠的圍欄，以有效防止任何行人或車輛墮入該挖掘處或遭遇其他危險。

excavation.

### **Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A)**

2.8 The Regulations require the use of amber lamps on vehicles, other than by certain Government departments, to be authorized by the Commissioner for Transport, and prescribe the size, type and mounting details.

### **Road Traffic (Expressway) Regulations (Cap. 374Q)**

2.9 The Regulations require the persons carrying out expressway works, whilst on foot on any part of an expressway, to wear reflective jackets and the vehicles used in connection therewith to be coloured bright yellow and installed with flashing lanterns and warning signs. The definition of “expressway works” is given in the Ordinance. Basically, expressway works cover any type of works carried out on expressways and include inspection, investigation and survey.

### **道路交通（車輛構造及保養）規例（第 374A 章）**

2.8 這規例要求在車輛上使用的琥珀色燈必須獲得運輸署署長批准，某些政府部門的車輛除外。本規例亦規定燈的尺寸、種類和裝置詳情。

### **道路交通（快速公路）規例（第 374Q 章）**

2.9 這規例要求在快速公路上工作的人，如在快速公路任何部分上步行，須穿上反光外衣，其相關使用的車輛須髹上鮮黃色，亦應有閃光燈具及警告標誌。條例已對「快速公路工程」作出定義。基本上，快速公路工程是指任何在快速公路上進行的工程，並包括視察、勘查及測量等工作。

## Works Programme

3.1 It is essential that road works are carefully planned in advance, and that proper consultations take place prior to and during the works for the purposes of :

- providing clear and early warning of any obstruction or road works,
- guiding road users to pass any work site in a safe manner,
- providing adequate safety clearance, working space and protection for road works to minimize the risks posed to road users and road works personnel, and
- minimizing potential conflict between road users, and road works personnel and their operations.

To ensure that these are achieved, the person responsible should prepare a works programme for the road works for his/her managing of the works as well as for obtaining necessary permit or permission.

3.2 Opportunity of lane closures for regular maintenance should be taken to carry out other maintenance works required. Where permanent variable message signs, variable speed limit signs, lane control signals or traffic information systems are available, the person responsible should arrange with the Transport Department and/or tunnel operator(s) to use these signs and systems to provide additional warning to motorists. Reasons for not using these signs and systems must be properly recorded.

## Consultation

3.3 Where disruption to traffic, either vehicular or pedestrian, could occur as a result of the road works, regardless of whether an excavation permit is required,

## 工程計劃

3.1 道路工程須在進行前預先仔細策劃，並在工程進行前和進行期間作適當諮詢，以達致下列目的：

- 為障礙物及道路工程提供清楚的預先警告；
- 安全引導道路使用者經過工地；
- 為工程提供足夠的安全淨距、工作空間及防護，減低道路使用者及道路工程人員所面對的風險；及
- 減低道路使用者與道路工程人員及其運作的潛在衝突。

為確保達到此目的，負責人需要為道路工程制訂工程計劃，以便管理有關工程及取得所需的准許證或批准。

3.2 在行車綫封閉進行定期維修工程時，應盡可能利用這些行車綫封閉計劃，進行其他維修工程。如施工路段設有固定交通訊息顯示屏、可變車速限制標誌、行車綫管制燈號或交通資訊系統，負責人應與運輸署及／或隧道營辦商安排使用有關標誌及系統，為駕駛人士提供額外警告。不使用有關標誌及系統的原因必須仔細記錄。

## 諮詢

3.3 如道路工程可能影響車輛或行人交通，無論是否需要挖掘准許證，工程在進行前必須預早取得警務處、運輸署和路政署的相關同意，

relevant agreement from the Police, the Transport Department and the Highways Department must be obtained well in advance of the commencement of any works. Failure to do this may result in the works being stopped. In addition, consultation with the MTR Corporation Limited or the Hong Kong Tramways Limited must take place before any works are carried out adjacent to level crossings of the Light Rail or the tramway.

3.4 The person responsible shall plan the road works with due regard to the safety of the road works personnel according to the requirements of this Code. On this, the person responsible shall strive to avoid putting the worksite in vulnerable situation and to carry out road works in daytime as far as practicable, with time window and working space sufficiently wide for setting up, maintaining and removal of lighting, signing and guarding and protection measures before, during and after works execution, so as to minimize the risk of the road works from being hit by oncoming or passing vehicles.

The person responsible shall also demonstrate with suitable supporting information that the impact of the temporary traffic arrangement of the road works to the traffic in the vicinity will not cause unacceptable inconvenience to road users. The person responsible shall obtain the agreement of the Transport Department and the Police, according to their respective roles, authorities and responsibilities, on the proposed temporary traffic arrangement.

Otherwise, the person responsible shall carry out appropriate and reasonable traffic impact assessment and/or trial run for the temporary traffic arrangement for the road works in order to assess its effect on the traffic flow. The purpose of traffic impact assessment and/or trial run is/are to demonstrate to the satisfaction of the Transport Department and the Police, according to their respective roles, authorities and responsibilities, that the temporary traffic arrangement for the road works with the desired space and time with due regard to the safety of

否則有可能被勒令停工。另外，在輕鐵或電車的平交道口進行任何工程前，必須先諮詢香港鐵路有限公司或香港電車有限公司。

3.4 為確保道路工程人員的安全，負責人須根據本守則的規定，仔細策劃臨時交通安排。為此，負責人應盡可能避免在欠穩妥的情況下施工，及盡可能安排工程於日間進行。在策劃道路工程的開展、進行及完成時，負責人應為工程的照明、標誌和防護等措施的設置、維持和移除提供足夠的工作時間和空間，以減低施工地區被來車或經過車輛撞及的風險。

負責人亦須以適當的資料，證明該道路工程的臨時交通安排不會對當區的道路使用者造成不能接受的影響。負責人須就其建議臨時交通安排取得運輸署及警務處按其職權範圍下的同意。

否則，負責人須為道路工程的臨時交通安排進行恰當及合理的交通影響評估及／或試行，以評估其對交通流量的影響。交通影響評估及／或試行的目的是為證明道路工程的臨時交通安排是在考慮了工程人員安全的前提下，提供適當施工空間和時間的同時，又不會對道路使用者造成不可接受的不便，以便運輸署及警務處按其職權範圍下審視有關臨時交通安排。當涉及非運輸署管理的道路，負責人亦須就其建議臨時交通安排取得其他相關部門的同意，在有

the road works personnel, is appropriate for the works and will not cause unacceptable inconvenience to road users. For roads that are not under the management of the Transport Department, the person responsible shall also obtain the agreement of other concerned departments on the proposed temporary traffic arrangement and shall also consult these departments on the proposed traffic impact assessment and/or trial run, if necessary.

3.5 Should it be necessary to operate clearway restriction, relevant government departments should be consulted well in advance.

3.6 Should there be situations where site constraints restrain the temporary traffic arrangement from meeting the requirements stipulated in the Code, the agreement of the Transport Department and the Police, according to their respective roles, authorities and responsibilities, on the consideration and rationale for not meeting the requirements must be properly recorded. The person responsible shall also properly record the agreed practical alternative that can minimize the risk of road works personnel from being hit by traffic.

3.7 If the obstruction or excavation requires the width of a single carriageway to be reduced such that there is only sufficient room for one-lane two-way traffic, the person responsible must inform the Transport Department and the Police. If the means of control is by the use of portable light signals, the Director of Highways must also be informed.

### **Lighting, Signing and Guarding Equipment**

3.8 Planning for road works includes not only how the works are to be carried out but also how the works are to be lit, signed and guarded. It is essential that proper and adequate lanterns, traffic signs and guarding equipment are available for the various stages of the works. The types of common traffic management

需要時亦須就交通影響評估及／或試行諮詢該部門。

3.5 如要實施禁止上落客貨區的限制，應預早諮詢有關政府部門。

3.6 如臨時交通安排因工地環境所限而不能符合載於守則的要求，負責人須仔細記錄已取得運輸署及警務處按其職權範圍所同意的相關考慮及理據。負責人亦須仔細記錄獲認可用以減低道路工程人員所面對之風險的替代安排。

3.7 如障碍物或挖掘處令不分隔車路收窄，以至只有足夠空間提供單綫雙向行車，負責人必須通知運輸署及警務處。如使用手提交通燈管制交通，亦須通知路政署署長。

### **照明、標誌及防護設備**

3.8 道路工程計劃不但包括工程如何進行，還包括如何為工程設置照明、標誌及防護。在工程進行的各階段均須有適當和足夠的警告燈、交通標誌及防護設備。常用的交通管理設備在第4章說明。除非在本守則另行訂明，否則交通管理設備須符合土木工程拓展署編製的《土木

devices are described in Chapter 4. Unless otherwise stated in this Code, the traffic management devices shall comply with relevant requirements specified in the General Specification for Civil Engineering Works (GS) published by the Civil Engineering and Development Department.

3.9 The person responsible should prepare layout plans showing the lanterns, traffic signs and guarding equipment to be used to ensure that the necessary equipment is available when required, and also that the site staff clearly understand where, and what, equipment is to be used. For works which require the lighting, signing and guarding to be varied in any way during the works, a separate plan showing each different phase should also be prepared.

### Traffic Management for Road Works

3.10 The requirements in respect of the arrangement of traffic management devices for road works are described in Chapter 5. Particular aspects that should be attended to by the person responsible for works on footways, cycleways, verges and central reservations, on carriageways and on expressways are highlighted in Chapters 6, 7 and 8 respectively. These requirements are also applicable for roads with "Driving on the Right" traffic arrangement except that the lighting, signing and guarding layouts shall be mirrored to suit the driving direction.

3.11 Barrier-free access should be maintained during the course of road works so as to ensure the safety and thoroughfare of road users, including persons with disabilities, not be affected. For road works involving temporary removal or disruption of barrier-free facilities, e.g. tactile guide paths, tactile warning strips, dropped kerbs, ramps and etc., the person responsible should identify and highlight such details and propose any associated measures to be provided in the temporary traffic management plan for consultation with the relevant Government departments. The concerned organizations

工程一般規格》的相關要求。

3.9 負責人應製定警告燈、交通標誌及防護設備的分佈圖則，以確保能提供所需的設備，及使工地人員清楚明白在何處使用何種設備。如需在工程進行期間改變照明、標誌及防護設備的設置，則應同時準備每個不同階段的圖則。

### 道路工程的交通管理

3.10 有關交通管理設備安排的要求在第 5 章說明。而在行人路、單車路、路邊和中央分道帶上、在車路上以及在快速公路上進行道路工程時需注意的特別事項，則分別載於第 6、7 和 8 章。這些要求亦適用於「靠右駕駛」的道路，但照明、標誌及防護設備的分佈須配合行車方向左右反轉。

3.11 為確保道路使用者包括殘疾人士的安全及通行無阻，工程進行期間應維持無障礙通道。如道路工程需臨時移除或影響凹凸紋引導徑、凹凸紋警告條、下斜路緣及斜路等無障礙設施，負責人應辨認及指出有關細節，並提出臨時交通安排下的相應措施，向有關政府部門諮詢。在適當情況下，亦應諮詢代表殘疾人士的相關團體。

representing the persons with disabilities should also be consulted where appropriate.

3.12 If it is necessary to occupy part of a road to erect fencing for roadside works, the person responsible shall plan and implement its lighting, signing and guarding provisions according to the requirements in this Code with due consideration to the safety of the workers and road users. In particular, the fencing should be free-standing on the pavement surface wherever possible and the method of excavating pits in the carriageway to form foundations for the fence posts should only be adopted as a last resort. In such cases allowance must be made for the complete reconstruction of the road pavement over the whole lane width and for the whole length of the affected section upon removal of the fencing.

3.12 如需佔用部分道路，以豎設在路旁工程所需的圍欄，負責人應按本守則的規定策劃及實施工程的照明、標誌和防護等措施，以確保工程人員和道路使用者的安全。尤其是圍欄應盡可能獨立地擺放於路面上，至於在車路上挖洞以作為欄柱地基的做法，只應作為非不得已下才採用的方法。如出現這種情況，則須在拆除圍欄後全面重建路面，範圍包括整條行車綫的闊度及受影響的全段道路。

## General

4.1 The traffic signs shown in the Code are the appropriate ones for use at road works. Do not use others, except with the permission of the Commissioner for Transport or the Director of Highways.

4.2 All traffic signs and devices shall be maintained properly and cleaned regularly to ensure that they are clean, legible and in good working condition at all times. The surfaces of any traffic signs and reflective materials on any devices shall be smooth and free from creases. Any unsatisfactory signs or devices shall be replaced promptly.

4.3 Traffic signs and devices shall conform to the standards specified below.

## Warning, Regulatory and Informatory Signs

4.4 All prescribed signs used for road works must be of a standard design. The signs are available in different sizes and a guide to the appropriate sign size is given in Tables 5.1, 5.5 and 5.6 of Chapter 5. Full details of the standard signface layouts are available from the Transport Department.

The signs, including posts, backing plates and faces shall comply with the requirements for traffic signs specified in clause 1.15 and section 12 of the General Specification for Civil Engineering Works (GS) published by the Civil Engineering and Development Department, and this Code.

The name of the person responsible must appear in English and Chinese on the back of each sign. Relevant information of the works, including contract number, name of the promoter and/or contractor of the works, and telephone number for answering enquires and complaints on the works, shall also be appeared on the back of sign where appropriate, in particular for

## 總則

4.1 本守則所示的交通標誌，均為道路工程上使用的適當標誌。除運輸署署長或路政署署長許可外，切勿使用其他標誌。

4.2 所有交通標誌及設備，須妥善保養及定期清洗，以確保其在任何時間均清潔、易看及處於良好狀況。標誌面層及設備上的反光物料須平滑並沒有綳褶。欠佳的標誌或設備，須立即更換。

4.3 交通標誌及設備須符合下文所列的標準。

## 警告、限制及提示標誌

4.4 道路工程中使用的所有訂明標誌必須為標準設計。標誌的尺寸有不同大小，第 5 章的表 5.1、表 5.5 及表 5.6 就標誌的適當尺寸提供指引。有關標準標誌面的詳情，可向運輸署查詢。

整個標誌包括其支柱、底板及表面均須符合由土木工程拓展署編製的《土木工程一般規格》第 1.15 條目和第 12 節及本守則的要求。

負責人的名稱必須以中、英文標明在每個標誌的背面。在適當情況下，特別是放置於遠離工地位置的臨時方向指示標誌或訊息板，應在標誌的背面標明工程的相關資料，包括工程合約編號、工程負責機構及／或承建商的名稱、及用以回應查詢及投訴的電話號碼。



temporary directional signs or message boards placed far away from the concerned works site.

4.5 All signfaces must be constructed in retroreflective material conforming to “Class RA2” of BS EN 12899-1:2007. In particular, ASTM D4956-16 “Type IX” retroreflective material shall be used for the signs mounted at the rear end of a works vehicle or shadow vehicle.

4.6 Backing plates of signs must conform to one of the following :

- Aluminium plate shall comply with the requirements of BS EN 485-3:2003 or BS EN 485-4:1994, together with the requirements of BS EN 485-2:2004, and have a minimum thickness of 3 mm.
- Plastic backing plates shall have a minimum 3mm thickness. The backing plates, when subject to the impact test specified in clause 7 of BS 873-1:1983, shall not deform at any point by more than 2mm from the plane surface and any cracking or other damage shall be confined within a circle of 5mm radius around the point of impact of the steel ball.
- Temporary signs for emergency purposes and used for less than 24 hours may be mounted on flexible plastic boards or other similar materials. The materials should be strong enough to withstand normal wind load without excessive bending.

4.7 The support for a free-standing sign may be constructed of other material provided that the weight of the sign together with its support will be sufficiently heavy to ensure that the completed sign is stable under wind and moving traffic. The sign including its support, irrespective of its material type, should be free from sharp edges or burr, and all angles should be rounded. The signface shall be erected vertically and facing the oncoming traffic.

4.5 所有標誌面必須以符合英國歐盟標準 12899-1:2007 規定的「RA2 參照級別」反光材料製造。安裝在工程車或護航車尾部的標誌須使用美國材料及試驗學會標準 D4956-16 規定的「第九類型」反光材料。

4.6 標誌的底板必須以下列其中一種材料製造：

- 符合英國歐盟標準 485-3:2003 或 485-4:1994，並符合英國歐盟標準 485-2:2004 的規定，且最少厚 3 毫米的鋁板。
- 塑料底板最少厚 3 毫米。底板在英國標準 873-1:1983 第 7 條目規定的撞擊測試下，任何一點不得下陷多於 2 毫米，而任何裂痕或破損均只應出現在測試中鐵球撞擊點 5 毫米半徑的範圍內。
- 作為緊急用途及使用少於 24 小時的臨時標誌，可用柔性塑料板或類似的物料承托。有關物料應有足夠強度承受一般的風力，並且不會過度彎曲。

4.7 獨立式標誌的支撐架可以使用其他物料製造，但需有足夠重量，以確保整個標誌在風吹和車輛經過時仍然穩妥。標誌及其支撐架，不論以何種物料製造，應沒有任何銳利的邊緣或尖刺，所有邊角應打磨至圓滑。標誌面須垂直地豎設並面向迎面而來的車輛。

## Traffic Control Equipment

4.8 The normal minimum width of a single carriageway for two way traffic is 5.5 m. If this width cannot be provided, the carriageway must be reduced to a width not less than 3 m but not more than 3.7 m and traffic control equipment used to operate alternate one way working. Traffic control may be by approved portable light signals or "Stop/Go" signs.

4.9 Portable light signals are the preferred means of traffic control and must be used :

- where the length of control exceeds 30 m,
- where the length of control is less than 30 m and the view of oncoming traffic is obscured, or
- during the hours of darkness, irrespective of the length of control.

4.10 Portable light signals must be of a type approved by the Transport Department, and a copy of the certificate stating that the signals are of an approved type must be available at the site at all times when the light signals are in operation. Advice on the approval procedures can be obtained from the Transport Department.

4.11 Portable light signals are intended for applications when works are of short term duration. For long term works where the location of works remains stationary, consideration should be given to fixing the light signals on ground.

4.12 The operation of portable light signals must comply with Regulation 21 of the Road Traffic (Traffic Control) Regulations (Cap. 374G), the Guidance Notes for the Use of Portable Traffic Signals and other relevant instructions issued from time to time by the Transport Department.

## 交通管制設備

4.8 供雙向行車的不分隔車路通常最少闊 5.5 米。如果不能達到這個闊度，車路必須收窄至不少於 3 米但不多於 3.7 米闊，並必須使用交通管制設備，以進行交替性單向行車。管制交通時，可使用認可的手提交通燈或「停／去」標誌。

4.9 手提交通燈是用作管制交通的較佳工具，並必須在下列情況下使用：

- 受管制的路面長度超過 30 米，或
- 受管制的路面長度不足 30 米，但不能清楚看見迎面的車輛，或
- 在黑夜時間中，不論受管制的路面長度。

4.10 手提交通燈必須屬於經運輸署批准的類型，而使用時，必須在工地上展示批准證書的副本以證明這些交通燈屬經批准類型。有關的批核程序，可向運輸署查詢。

4.11 手提交通燈應在短期工程中使用。在進行長期工程，而又有固定施工地點時，應考慮把交通燈固定地豎設在地上。

4.12 使用手提交通燈必須遵照道路交通（交通管制）規例（第 374G 章）第 21 條、《使用手提交通燈指南》及運輸署不時發出的其他有關指示。

4.13 If “Stop/Go” signs are used, two signs shall be operated, one at each end of the control, unless the control length is less than 15 m. In this case only one sign is required, located centrally.

4.14 “Stop/Go” signs (para. 4.67) must be constructed in retroreflective materials and mounted between 1.5 m and 2.5 m above the carriageway surface. The use of flags or arm waving to control traffic is not permitted.

### Traffic Cones and Cylinders

4.15 The boundaries of all road works on carriageways must be clearly delineated by traffic cones (para. 4.92). The aim is to guide approaching vehicles gradually into a lane passing the works by means of an approach taper, and to ensure that a motorist can readily judge the limits of the carriageway throughout the length of the works. Oil drums, barrels or concrete blocks must not be used to delineate road works.

4.16 Cones must conform to the general requirements of BS EN 13422:2004 and shall be of the appropriate height indicated in Table 5.4 in Chapter 5. The white portion must be retroreflective and the red portion may be retroreflective or have a fluorescent finish.

4.17 Cones must have heavy duty rubber bases and the weight of the whole 750 mm and 1000 mm cones shall not be less than 3.85 kg and 6 kg respectively. The use of bags filled with sand as ballast is not acceptable.

4.18 Traffic cylinders (para. 4.93) conforming to BS EN 13422:2004 may be used instead of, or in combination with, cones for lane delineation where they can be fixed firmly in position such as by securing into the metal bases of depressible road studs. Cylinders shall be of the appropriate height as indicated in Table 5.4.

4.13 使用「停／去」標誌時，須分別在管制區兩端各操作一個標誌。如管制的路面長度不足15米，則只需在中央位置使用一個標誌。

4.14 「停／去」標誌（第4.67段）必須用反光材料製造，並須裝置在離車路面1.5米至2.5米高的位置。不得使用旗號或以揮手方式管制交通。

### 交通圓筒和圓柱

4.15 所有在車路上的道路工程範圍必須用交通圓筒（第4.92段）清楚界定，目的是利用楔形引入路段引導迎面而來的車輛駛進可順利經過工程區的行車綫，並確保駕駛人士可以迅速地判斷整段工程區的车路界限。電油筒、圓桶或混凝土壘不可用以標示道路工程。

4.16 交通圓筒必須符合英國歐盟標準13422:2004的一般規定，並符合第5章內表5.4所顯示的適當高度。圓筒的白色部分必須反光，而紅色部分可以是反光或螢光表面。

4.17 交通圓筒必須有結實的橡膠底，而整個高750毫米及1000毫米圓筒的重量分別不可小於3.85公斤及6公斤。不接受以沙袋作為壓載物。

4.18 如可穩固擺放交通圓柱，例如把圓柱安裝在可壓低路釘的金屬底座，則可使用符合英國歐盟標準13422:2004規定的交通圓柱（第4.93段）來代替交通圓筒，或與交通圓筒同時使用來標示行車綫。圓柱須符合表5.4所示的適當高度。

4.19 Traffic cones or cylinders when used on one site shall be of the same height. Cones and cylinders should be constructed in a manner that they will yield or collapse, and will not present a hazard, when struck by vehicles.

4.20 Cones should be placed close enough together to give an impression of continuity and an appearance of substance. The following maximum cone spacings shall be followed. Placing of cylinders shall comply with the same requirement.

Tapers and edges of temporary diversion routes –

2 m – normal approach tapers, or on both sides of temporary traffic lane diversions not along the edges of the existing traffic lanes.

1 m – 45° approach tapers where traffic control is used, or at end tapers.

1 m – edges of temporary pedestrian ways adjoining and encroaching onto a carriageway.

Along the edges of existing traffic lanes –

3 m – for roads with speed limit up to but not more than 50 km/h.

9 m – for roads with speed limit of 70 km/h to 80 km/h, or at tight bends and near slip roads on roads with speed limit over 80 km/h.

(When road hazard warning lanterns are required to be provided according to para. 4.35, they shall be mounted on additional cones and placed midway between those cones used for delineation. Effectively, road users will see cones at 4.5m maximum spacing with lanterns on every other cones.)

18 m – for roads with speed limit over 80 km/h, or expressways, except at tight bends or near slip roads.

(When road hazard warning lanterns are required to be provided according to para. 4.35,

4.19 在同一工地使用時，須採用單一高度的交通圓筒或圓柱。圓筒及圓柱的構造應在被車輛撞倒時可以變形或倒下，以及不會構成危險。

4.20 圓筒應密集擺放，以至有連續的觀感及實在的外表。圓筒之間最大的間距須如下文所述。擺放圓柱的方式須遵照相同的要求。

楔形路段及臨時改道路線邊緣—

2 米— 一般的楔形引入路段，或在並非沿著現有行車綫邊緣的臨時改道行車綫兩旁。

1 米— 在實施交通管制措施時成 45 度角的楔形引入路段，或在楔形引出路段。

1 米— 佔用車路並與車路毗鄰的臨時行人路邊緣。

沿著現有行車綫的邊緣—

3 米— 在車速限制每小時最高不超過 50 公里的路上。

9 米— 在車速限制每小時 70 公里至 80 公里的路上，或在車速限制超過每小時 80 公里的道路的急彎及近連接路之處。

(當道路危險警告燈需要根據第 4.35 段的規定放置時，警告燈須放置在用作標示邊界的圓筒中間，並須安裝在附加的圓筒上，令道路使用者可每隔 4.5 米看到一個圓筒，並每隔一個圓筒看到一盞警告燈。)

18 米— 在車速限制超過每小時 80 公里的道路或快速公路，但在急彎或近連接路的道路除外。

(當道路危險警告燈需要根據第 4.35 段的規定放置時，警告燈須放置在用

they shall be mounted on additional cones and placed midway between those cones used for delineation. Effectively, road users will see cones at 9m maximum spacing with lanterns on every other cones.)

## Temporary Tubular Barriers

4.21 Obstructions and excavations shall be adequately guarded at all times for the safety of all road users. Pedestrians should be guarded from the works and vehicles by means of continuous temporary tubular barriers which clearly separate pedestrians from the works and trafficked carriageway and warn pedestrians of their presence. Temporary tubular barriers should be provided on those sides of an obstruction that restrict pedestrian flows or are accessible to pedestrians, whether or not there is any special reason to expect blind or visually impaired people passing that location. Temporary tubular barriers may also be used for fencing excavations to warn road users to take special care of the presence of excavations so as to prevent pedestrians or vehicles from falling into the excavation or being otherwise endangered. They should be placed with sufficient clearance to excavations, materials or plant to prevent dangers to pedestrians.

4.22 Temporary tubular barriers shall have a height of at least 900 mm. They should be stable under adverse weather conditions and be substantial, and should not be easily toppled or moved by pedestrians or slipstreams of moving traffic. They should be made of metal or plastic and should be designed to effectively restrict pedestrian access and not to obstruct visibility. The barriers should have a handrail of at least 900 mm but not exceeding 1150 mm above ground level, which should be reasonably smooth and rigid for guiding and providing some measure of support to pedestrians, and be provided with a tapping rail at not more than 280 mm above ground level.

作標示邊界的圓筒中間，並須安裝在附加的圓筒上，令道路使用者可每隔 9 米看到一個圓筒，並可每隔一個圓筒看到一盞警告燈。)

## 臨時管狀防欄

4.21 障礙物及挖掘處不論何時均須有足夠的防護，以保障道路使用者的安全。行人與工地及車輛之間應有連續的臨時管狀防欄，以分隔行人與工地及行車路，以及警告行人。不論有否特別理由預計該處會有失明或視障人士經過，防欄應設置於阻礙行人流通或行人可到達障礙物的旁邊地方。防欄亦可用作圍封挖掘處，從而警告道路使用者倍加留意，以防止行人或車輛墮入挖掘處或遭遇其他危險。防欄應與挖掘處、物料或機械保持足夠距離，避免危害行人。

4.22 臨時管狀防欄須最少高 900 毫米，在惡劣的天氣下應仍然穩定、牢固和不應該輕易被行人或經過車輛所形成的氣流推倒或移動。防欄應以金屬或塑膠製造，其設計應有效地限制行人通過及不可阻礙視線。防欄應有最少離地 900 毫米但不超過 1150 毫米的扶手，扶手應合理地順滑及堅固以指引行人及給予行人某程度的支撐，防欄並應有離地不多於 280 毫米的下橫檔。

4.23 Temporary tubular barriers when erected should provide a clear and uniform overall appearance. Therefore, the same type of barriers shall be used on one site unless there is a need to use different types, e.g. metal barriers on footway and plastic barriers on carriageways. Adjacent panels shall be interlocked together without undue gaps affecting their guarding purpose. They should stand out conspicuously in contrast to the works behind them and are visible by day and night. They may be used to carry traffic signs or lanterns. Temporary tubular barriers shall be augmented by lanterns during hours of darkness. Temporary tubular barriers placed on carriageways adjacent to running traffic lanes shall be of the plastic type and be guarded by a line of traffic cones.

4.24 Temporary tubular barriers should not cause excessive damage to a vehicle that hits the barriers. Temporary tubular barriers with detachable horizontal members made of hard objects such as timber or steel poles must not be used as they constitute a serious hazard should a vehicle collide with them. Temporary tubular barriers shall not be used on the carriageways of expressways and roads with speed limit over 80 km/h.

#### **Water-filled Barriers without Stipulated Containment Level**

4.25 Water-filled barriers without stipulated containment level may be used as an alternative to temporary tubular barriers and traffic cones to separate the trafficked carriageway from the adjacent footway or work zone of road works, especially for long term works. The barriers are proprietary-made water fillable plastic containers of various sizes and shapes with device for interlocking adjoining container units. They are heavier in weight and offer better resistance to displacement by vehicular collision as compared to temporary tubular barriers and traffic cones.

4.23 臨時管狀防欄在豎設後應有一個清晰及一致的整體外表。除非有使用不同類型的需要，例如把金屬製防欄用於行人路和塑膠製防欄用於車路，否則在同一工地上只可使用單一類型防欄。相鄰的防欄須互相緊扣並不可有過大的空隙，以免影響其防護功能。它們應明顯易見，與後面的工地有所分別，並且日夜可見。它們可以用作安裝交通標誌或警告燈。臨時管狀防欄於黑夜時間須加裝警告燈。放在行車路上而毗鄰有車行駛的行車綫的臨時管狀防欄須為塑膠製造，並用交通圓筒作為防護。

4.24 如被車輛撞及，臨時管狀防欄不應對車輛造成過多損毀。不可使用有由硬物，例如木條或鐵條等，組成的可拆除橫向組件的臨時管狀防欄，因為如果車輛與它們相撞，後果可能很嚴重。臨時管狀防欄不得在快速公路及車速限制超過每小時 80 公里的車路上使用。

#### **沒特定防撞等級的注水防欄**

4.25 沒特定防撞等級的注水防欄，特別在長期工程當中，可用作代替臨時管狀防欄及交通圓筒，以分隔有車輛的車路及毗鄰行人路或道路工程的範圍。這些防欄是特別製造的注水容器，有多種尺寸和形狀，以及有將相鄰容器互相緊扣的裝置。該等防欄比較重，與臨時管狀防欄及交通圓筒相比，較難被車輛碰撞致移位。

4.26 Water-filled barriers shall be at least 800 mm in height. They should be stable under adverse weather conditions and be substantial, particularly for water-filled barriers which allow mounting of screening panels on top. For use as an alternative to temporary tubular barriers, the water-filled barriers shall be designed to meet the requirements set out in paras. 4.22 to 4.24, including the minimum height of 900 mm which may be provided by suitably designed extension of the barriers. If the top surface of the water-filled barriers is smooth and is capable of providing guiding and support to pedestrians, provision of a separate handrail is not required.

4.27 Water-filled barriers shall be filled with water at least up to the minimum water level according to the operating instructions of the manufacturer. Minimum and maximum water level marks shall be conspicuously imprinted on the barriers to facilitate checking of water level during setting up of barriers and site inspection. At locations which are difficult to inspect, water-level indicators in form of a floating tube or other appropriate means should be provided and the type of water-level indicators used shall be included as part of the temporary traffic arrangement.

4.28 The barriers shall be placed in alternate red and white colours such that they stand out conspicuously in contrast to the works behind them and are visible by day and night. Barriers of other contrasting colour combination may be used subject to agreement by relevant authorities. Also, road hazard warning lanterns shall be provided during the hours of darkness (paras. 4.32 to 4.41).

#### **Temporary Safety Barriers with Stipulated Containment Level**

4.29 Temporary safety barriers with appropriate containment level are capable of absorbing the energy of colliding vehicle. It may take the form of a permanent type safety barrier erected temporarily or a

4.26 注水防欄須最少高 800 毫米，在惡劣天氣下應仍然穩定及牢固，特別是容許裝設屏風於上方的注水防欄。在用作代替臨時管狀防欄時，注水防欄的設計須符合第 4.22 至 4.24 段的規定，包括最少高 900 毫米，經適當設計的防欄延伸可作此用途。如注水防欄頂端的表面光滑，並具有給予行人指引及支撐的能力，則不需另設扶手。

4.27 注水防欄須依從生產商的使用指引注水，水位須達到訂明的最低水位的要求。為便利設置防欄或在實地檢查時確認注水是否足夠，防欄表面須壓印明顯的最低及最高水位標記。若防欄的位置令水位難以檢查，防欄應提供浮標或其他適當設計以顯示其水位的位置。所用的水位指示標記類型，須包括在臨時交通安排的措施內。

4.28 防欄須為紅、白色並交替設置，使它們與其後面的工地有所分別，並且日夜可見。如獲相關部門同意，可使用其他對比強烈的顏色組合。在黑夜時間，須另外放置道路危險警告燈（第 4.32 至 4.41 段）。

#### **符合特定防撞等級的臨時安全護欄**

4.29 符合適當防撞等級的臨時安全護欄能抵受車輛撞擊的衝力，可用作其中一種方法以減低偏離車路的車輛撞入工地的風險，減低所造成的損毀或對道路工程人員、車輛司機、乘客及

purpose-made temporary safety barrier of concrete, steel or water-filled type. It can be used as one of the means to minimize the risk of off-track vehicles penetrating into the work zone and causing damage or injuries to road works personnel, motorists, passengers and other road users. If there is a need to provide protection to adjacent footway or hazards, such as bridge piers and slopes, in association with the road works, the use of such barriers should be considered (refer to para. 5.24).

4.30 The barrier assembly and individual components must be designed to meet BS EN 1317-2:2010 containment level T2 or above. The containment level of temporary safety barriers shall be marked on the barriers for identification. If the barriers can be deflected when struck by vehicles, adequate buffer separation must be allowed for the deflection. Temporary safety barriers, if in form of water-filled barriers, must be filled with water according to the manufacturer's recommendation. The barriers should stand out conspicuously and shall be provided with road hazard warning lanterns as in accordance with para. 4.28.

4.31 In planning for the temporary traffic arrangement, the person responsible shall submit proof to the relevant authorities that the temporary safety barriers to be used are in accordance with the above requirements.

### Road Hazard Warning Lanterns

4.32 During the hours of darkness or at times of poor visibility, all obstructions or road works must be properly delineated with prescribed road hazard warning lanterns to indicate to road users the limits of the works.

4.33 The colour of the light shown by a lantern shall be amber and the external surfaces of the body of the lantern shall be coloured yellow. Each lantern shall be fitted with a supplementary reflector of at least 50 cm<sup>2</sup> in area which must appear under headlamp illumination to

其他道路使用者造成傷害。永久性安全護欄可臨時置於工地當作臨時安全護欄。特別製造的臨時安全護欄可以是混凝土、鋼或注水類型。如有需要向與道路工程相關的毗鄰行人路或危險地方（例如橋墩及斜坡）提供保護，應考慮使用該等護欄（請參閱第 5.24 段）。

4.30 護欄組合和個別組件的設計須符合英國歐盟標準 1317-2:2010 防撞等級 T2 或以上的規定。臨時安全護欄的防撞等級須標示於護欄上，以資識別。如護欄會被車輛撞至移位，則須就移位程度預留足夠緩衝分隔。臨時安全護欄如為注水類型，須根據製造商的建議注水。護欄應明顯易見，並須根據第 4.28 段裝設道路危險警告燈。

4.31 在制訂臨時交通安排時，負責人須呈交文件予相關部門，證明臨時安全護欄符合上述規定。

### 道路危險警告燈

4.32 在黑夜時間中或當能見度低時，所有障礙物或道路工程必須用規定的道路危險警告燈標示，使道路使用者得知工程區的範圍。

4.33 燈光顏色須為琥珀色，而燈身的外層須為黃色。每盞警告燈須裝上一塊最小 50 平方厘米的輔助反光板，並在車頭燈照明下發出與警告燈所射出的同樣顏色燈光。



be of a similar colour to the light emitted by the lantern.

4.34 Lanterns may show an intermittent or revolving light. Flashing lanterns shall have a flashing rate of 90 – 150 times per minute. The following is a list of lantern types indicating where they shall be used :

- Low intensity battery operated lamps (para. 4.39) – to delineate temporary edges of carriageways or footways. The lanterns shall comply with the requirements of BS 3143-2:1990 or equivalent and should be the flashing type.
- High intensity battery operated beacons (para. 4.40) – to draw drivers' attention to hazards, e.g. at approach tapers or in conjunction with advance warning signs. The lanterns shall comply with the requirements of BS 3143-4:1985 or equivalent and should be the flashing type.
- Revolving lanterns – to draw drivers' attention in works on expressway by placing at entry/exit points of lane closure (Appendix C, para. C-1.4) and mounting on vehicles (Appendix E, para. E-1(d)(ii)). The lanterns shall comply with the requirements of BS 3143-4:1985 or equivalent.

4.35 Lanterns should be placed at regular intervals along the line of the obstruction or road works. Individual lanterns should normally be placed midway between successive traffic cones (and therefore follow the same 3 m, 9 m and 18 m spacing) when placed approximately parallel to the line of traffic. The following maximum lantern spacings shall be followed.

Tapers and edges of temporary diversion routes –

8 m – normal approach tapers.

4 m – on both sides of temporary traffic lane diversions not along the edges of the existing traffic lanes; edges of temporary pedestrian ways adjoining and encroaching onto a carriageway; or end tapers.

4.34 警告燈可以發出間歇或繞轉的燈光。閃動警告燈須每分鐘閃動 90 至 150 次。以下列出警告燈的類型，並說明須在何處使用：

- 低亮度電池警告燈（第 4.39 段）—標示臨時車路或行人路的邊緣。燈具須符合英國標準 3143-2:1990 或同等標準的規定，及應為閃動類型。
- 高亮度電池閃動標燈（第 4.40 段）—提醒駕駛人士有危險，例如在楔形引入路段或與預先警告標誌一起使用。燈具須符合英國標準 3143-4:1985 或同等標準的規定，及應為閃動類型。
- 繞轉警告燈—在快速公路進行工程時，放置在封閉行車綫的出入口處（附錄 C 第 C-1.4 段）和裝設在車上（附錄 E 第 E-1(d)(ii) 段），用作提醒駕駛人士。燈具須符合英國標準 3143-4:1985 或同等標準的規定。

4.35 警告燈應沿著障礙物或道路工程路線相隔固定距離放置。一般而言，當大約與行車綫平行放置時，每個警告燈應放置在前後兩個交通圓筒的正中間（因此亦依照 3 米、9 米及 18 米間距）。下文是須遵守的警告燈最大間距。

楔形路段及臨時改道路線邊緣—

8 米— 一般楔形引入路段。

4 米— 並非沿著現有行車綫邊緣的臨時改道行車綫兩旁；毗鄰並佔用車路的臨時行人路邊緣；或楔形引出路段。

1 m – 45° approach tapers where traffic control is used.

Along the edges of existing traffic lanes –

3 m – for roads with speed limit up to but not more than 50 km/h.

9 m – for roads with speed limit of 70 km/h to 80 km/h, or at tight bends and near slip roads on roads with speed limit over 80 km/h.

18 m – for roads with speed limit over 80 km/h, or expressways, except at tight bends or near slip roads.

4.36 Lanterns shall face oncoming vehicles and shall be mounted on stands or cones, with the centre of lens not exceeding 1.2 m above the road surface, except that on roads with speed limit of 70 km/h or above, mounting on cones is the only acceptable method. When placed in front of a sign, lanterns shall not obscure the face of the sign.

4.37 When provided on expressways or roads with speed limit over 80 km/h, lanterns shall be mounted on cones so that the centre of the lens is about 1.2 m above the road surface to make them clearly visible above the line of 1000 mm high traffic cones.

4.38 Kerosene burning lanterns are not permitted for the lighting of road works.

4.39 Low intensity battery operated lamps are used in combination with traffic cones or cylinders to delineate temporary edges of carriageways (see Fig. 5.0 as an example). On temporary edges of a footway delineated by temporary tubular barriers, a lantern shall be placed near each corner of the delineated area, and additional lanterns shall be placed along the edges exceeding 4 m in length so that the spacing between lanterns is not more than 4 m.

1 米— 在實施交通管制措施時成 45 度角的楔形引入路段。

沿著現有行車綫的邊緣—

3 米— 車速限制最高不超過每小時 50 公里的道路。

9 米— 在車速限制每小時 70 公里至 80 公里的路上，或在車速限制超過每小時 80 公里的道路的急彎及近連接路之處。

18 米— 在車速限制超過每小時 80 公里的道路或快速公路，但在急彎或近連接路的道路除外。

4.36 警告燈須面向來車和安裝在支架或圓筒上，而其鏡片的中心與路面距離不得超過 1.2 米，但在車速限制每小時 70 公里或以上的道路上，則只可將警告燈裝置在圓筒上。如警告燈放置在標誌的前面，則警告燈不可遮擋著標誌面。

4.37 在快速公路或在車速限制超過每小時 80 公里的道路上，警告燈須放置在圓筒上，使燈具鏡片的中心點距離路面約 1.2 米，令道路使用者在一列高 1 000 毫米的交通圓筒上方亦可清楚看見。

4.38 道路工程不可用燃點火水的警告燈照明。

4.39 低亮度電池警告燈可連同交通圓筒或圓柱使用，以標示臨時車路邊緣（如圖 5.0 所示）。在以臨時管狀防欄劃定的行人路臨時邊緣，須在劃定地方的每一角落附近放置一盞警告燈，亦須在超過 4 米長的邊緣處放置額外的警告燈，令燈與燈之間的距離不多於 4 米。

4.40 High intensity battery operated beacons are used to draw attention to the hazard existing at a particular site and to warn drivers to take special care (see Fig. 5.0 as an example). They shall not be used as a means of delineating the works.

4.41 High intensity battery operated beacons of the unidirectional type shall be used to supplement signs indicating the beginning of a temporary diversion on expressways or roads other than expressways with speed limit over 80 km/h.

### Flashing Arrow Sign (FAS)

4.42 A FAS (Appendix E, Fig. E-1) has a matrix of individual lights that can flash on and off in a control manner to show arrangements such as “arrow to the right” or “arrow to the left”. It must be used to warn motorists to take special care of the presence of stationary or slowly moving works vehicles and lane closure on expressways, high speed roads and roads with speed limit of 70 km/h or above. It can be mounted on a vehicle, a trailer or a frame. For indicating lane closure on these roads, FAS shall be placed on top of the barricade sign. The specification of FAS is given in Appendix E, which also prescribes the details of the vehicles for mounting the FAS. Extending the use of FAS on roads with speed limit of 50 km/h or below should duly consider the site-specific traffic condition and road layout. Any possible blockage of drivers’ sightline near signalized junction or pedestrian crossing should be avoided.

4.43 To provide advance warning, a FAS should be mounted at the highest possible level. The mounting height (measured from the road surface to the bottom of sign) shall not be less than 2.4 m on a vehicle or be less than 1.5 m on a trailer. To further improve visibility, the mounting height can be increased to 3.3 m, but in this case the vehicle may have a height in excess of the relevant limit specified in the Road Traffic (Construction

4.40 高亮度電池標燈用以提醒有關人士留意某地點有危險，並警告駕駛人士需特別小心（如圖 5.0 所示）。它們不可用以標示工程範圍。

4.41 須用單向類型的高亮度電池標燈以輔助，指明在快速公路或車速限制超過每小時 80 公里的道路上的臨時改道開端。

### 閃爍箭咀指示燈號

4.42 閃爍箭咀指示燈號（下稱指示燈號）（附錄 E 圖 E-1）由一組獨立的燈以矩陣形式排列，可按預定的安排閃爍以顯示標誌，例如「向右箭咀」或「向左箭咀」。快速公路、高速道路及車速限制每小時 70 公里或以上的道路上有停下或慢駛工程車輛及封閉行車綫時，必須使用此指示燈號警告駕駛人士倍加留意。指示燈號可安裝在車輛、拖車或支架上。為顯示這些道路上封閉行車綫，指示燈號須放置在路障標誌上面。指示燈號的規格載於附錄 E。附錄亦列明裝有指示燈號的車輛的詳情。若將指示燈號的使用擴展至車速限制每小時 50 公里或以下的道路，應仔細考慮工地特定的交通情況及路形。因可能阻礙駕駛人士的視線，應避免將指示燈號放置於交通燈控制的路口或行人過路處附近。

4.43 為提供預先警告，指示燈號應盡可能裝於最高處。在車輛上，安裝的位置（由路面至燈號底部）不得低於 2.4 米；在拖架上則不得低於 1.5 米。為進一步加強其能見度，安裝高度可增至 3.3 米，但在這種情況下，車輛的高度可能超逾道路交通（車輛構造及保養）規例（第 374A 章）所規定的高度限制，因而需由運輸署署長批准，以便把車視作特別用途車輛並豁免其高

and Maintenance of Vehicles) Regulations (Cap. 374A) and needs to be exempted by the Commissioner for Transport as a special purpose vehicle. For works on expressway, the mounting height on vehicles shall not be less than 3.3 m (See Appendix D, Fig. D-1).

4.44 For non-government vehicles the display of a FAS could contravene Regulation 92(1)(b) of the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A) which specifies the colour of lights that may be shown to the rear of a vehicle. It is therefore a necessity that any non-government vehicle using a FAS has been exempted by the Commissioner for Transport from the provision of Regulation 92(1)(b).

### Temporary Variable Message Signs (VMS)

4.45 Temporary VMS is a LED matrix sign for displaying variable messages. It stands out more than conventional sign plates and can better draw the motorists' attention to the road works ahead. Temporary VMS shall be used for road works on expressways with hard shoulders of width not less than 3m in addition to advance warning signs. Where considered appropriate, it should also be used on other roads to provide additional warning to motorists.

4.46 Temporary VMS shall be conforming to BS EN 12966-1:2014 and with optical performance Level 1 as defined in TR 2516B "Performance Specification for Discontinuous Variable Message Sign". The sign should be approximately 1100 mm wide and 1100 mm high and shall display appropriate graphic similar to "Lane Closed Ahead" sign (para. 4.58) and distance plate (para. 4.91), as shown in para. 4.99, to provide information of lane closure ahead. The sign shall be with automatic dimming control and capable of displaying bilingual text messages and graphical messages.

4.47 To provide additional warning, a temporary VMS mounted on a vehicle, a trailer or a frame shall be placed

度限制。若用於快速公路工程，其安裝高度不得低於 3.3 米（參看附錄 D 圖 D-1）。

4.44 如屬非政府車輛，展示這種指示燈號屬違反道路交通（車輛構造及保養）規例（第 374A 章）第 92（1）（b）條，該規條規定車輛向後方發出光綫的顏色。因此，如非政府車輛使用指示燈號，必須獲運輸署署長豁免其遵守第 92（1）（b）條的規定。

### 臨時交通訊息顯示屏

4.45 臨時交通訊息顯示屏具有以矩陣排列的發光二極管，用作顯示交通訊息。交通訊息顯示屏比傳統標誌牌更顯著，因而更有效令駕駛人士注意到前方有道路工程。在設有不少於 3 米寬路肩的快速公路進行道路工程時，除設置預先警告標誌外，須設置臨時交通訊息顯示屏。在有需要時，可考慮在其他道路使用臨時交通訊息顯示屏，為駕駛人士就道路工程提供額外警告。

4.46 臨時交通訊息顯示屏須符合英國歐盟標準 12966-1:2014 及 TR 2516B 間斷可變訊息顯示屏的性能規格內訂明的第一級光學性能。顯示屏應大約 1100 毫米闊及 1100 毫米高，並須如第 4.99 段所示，顯示「前面車綫封閉」標誌（第 4.58 段）及距離標誌牌（第 4.91）的合適圖像，以提供前方行車綫封閉的相關資訊。顯示屏須配備因應周圍照度自動調節光暗的功能，並能顯示雙語文字訊息及圖像訊息。

4.47 為提供額外警告，裝設在車輛、拖車或支架上的臨時交通訊息顯示屏須放置於快速公路的

at least 200m in advance of the first advance warning sign on the hard shoulder of an expressway. Necessary exemption from the Commissioner for Transport under Regulation 92(1)(b) of the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A) must be obtained for installation of temporary VMS on non-government vehicles or trailers.

## Road Markings

4.48 Road markings of an approved type may be used at road works where appropriate to delineate carriageway edges or to divide a carriageway into traffic lanes. Where, during the course of road works, the road remains in use and dangers are likely to occur through absence of road markings, temporary markings shall be laid down. Suitable self adhesive materials for such temporary markings should be used. Other materials, such as thermoplastic material, complying with the requirements for road markings specified in section 12 of the GS may also be used. The markings must be completely removed as soon as their purpose has been served.

4.49 It is most important that existing road markings and road studs must be removed where they give misleading information to motorists. Existing markings which will become redundant by reason of the works should be removed and not covered with overlay. Where the works require that existing markings are to be covered temporarily, they should be masked with proprietary black tape and not be painted black. When an existing road marking is removed by grinding or masked by black tape, the grinding operation or the mask should be applied over a rectangular area covering the marking but not just the area of the marking.

4.50 The edge of the carriageway may be indicated by a 100 mm wide continuous reflectorised white line approximately 200 mm from the actual edge of the carriageway. A 150 mm wide white reflectorised

路肩上，並設置在第一個預先警告標誌最少 200 米前。安裝在車輛或拖車上的臨時交通訊息顯示屏須獲運輸署署長豁免其遵守道路交通（車輛構造及保養）規例（第 374A 章）第 92（1）（b）條的規定。

## 道路標記

4.48 在適當情況下，可在道路工程使用認可的路面標記以標明車路邊緣或在車路上劃分行車綫。如在工程期間仍開放道路，而缺乏道路標記會產生危險時，則須設置臨時標記。這種臨時標記應使用合適的自動黏貼材料。亦可使用其他符合《土木工程一般規格》第 12 節有關道路標記要求的物料，如熱塑材料。當不需使用臨時標記時，須盡快完全清除。

4.49 如現有道路標記和路釘誤導駕駛人士，必須清除。如由於工程的影響令現有標記冗贅，則應清除該等標記而並非以覆蓋物遮蓋。如因工程需要而將現有標記暫時遮蓋，應以專門的黑膠條遮蓋，而不應髹上黑漆。如要磨去或用黑膠條遮蓋現有標記，則磨蝕工序或遮蓋的範圍應是一個足以覆蓋標記的長方形，而非單單覆蓋標記本身。

4.50 車路的邊緣可用一條 100 毫米闊的連續反光白綫顯示，該白綫要髹在距離實際車路邊緣大約 200 毫米的地方。一條 150 毫米闊，由 4 米長的標記和 2 米長的缺口相間組成的白色反光

warning line comprising 4 m marks and 2 m gaps may be used as a temporary line to separate opposing streams of traffic, except when roads having speed limits of 70 km/h or greater, line comprising 6 m marks and 3 m gaps should be used. Double white lines may only be used when authorised by the Commissioner for Transport.

4.51 To show where a motorist should stop when control by portable traffic signals is operated, a “When Red Light Shows Wait Here” sign (para. 4.65) or Road Marking RM 1011 (a 200 mm transverse white reflectorised “Stop” line) shall be provided (Fig. 5.5 and 5.6).

### High Visibility Clothing

4.52 For their own safety, it is important that persons working on or near carriageways are made visible to motorists and they shall always wear highly visible clothing, incorporating retroreflective stripes or patches. Under the Road Traffic (Expressway) Regulations (Cap. 374Q), any person carrying out expressway works must, when on foot on any part of an expressway, wear a reflective jacket of a type approved by the Director of Highways. If necessary, road works personnel should wear reflective trousers to enhance conspicuity.

### Truck Mounted Attenuator (TMA)

4.53 A TMA is designed to absorb the energy of a trailing vehicle colliding onto the vehicle fleet so as to reduce the severity of damage and injury. The equipment is mounted at the rear end of a shadow vehicle to protect road works personnel in the works areas in front or to escort works vehicles when performing mobile operation activities. This setup of shadow vehicle with TMA shall be used for lane closure and mobile operations on expressways, high speed roads and other roads with speed limit of 70 km/h or above according to the requirements set out in para. 5.22 and Appendix A.

警告綫，可作為臨時綫以分隔相反方向的車輛，但如道路的時速限制為每小時 70 公里或以上，則應採用有 6 米長標記和 3 米長缺口的警告綫。雙白綫只在運輸署署長授權下方可使用。

4.51 在使用手提交通燈管制交通時，須設「紅燈亮時在此等候」標誌（第 4.65 段）或道路標記 RM1011（一條 200 毫米闊白色反光「停車」橫綫），以指示駕駛人士應在何處停車（圖 5.5 及 5.6）。

### 高能見度衣服

4.52 所有在車路或其附近工作的人員，為本身的安全起見，須經常穿著能見度高，並有反光條紋或斑紋的衣服，讓駕駛人士容易看見。根據道路交通（快速公路）規例（第 374Q 章），任何快速公路工程人員在快速公路任何部分步行時，均須穿著屬路政署署長認可類型的反光外衣。如有需要，工程人員應穿著反光褲，使其更明顯易見。

### 車載式緩撞裝置

4.53 車載式緩撞裝置是因應遇到尾隨車輛撞擊時，為吸收撞擊能量以減輕損毀及傷害的程度而設。這裝置是安裝在護航車輛的尾部，為於前方工作的道路工程人員提供防護，或為進行流動作業的工程車提供護航。根據第 5.22 段及附錄 A 的規定，在快速公路、高速道路及車速限制達每小時 70 公里或以上的道路上進行固定作業及流動作業時，須使用緩撞裝置。

4.54 The TMA shall be of level 3 complying with all the mandatory and optional test requirements for speed of 100km/h as set out in the US National Cooperative Highway Research Programme Report 350 or other equivalent standard. The vehicle for mounting the TMA must meet the requirements recommended by the manufacturer of the TMA and have a minimum weight of 11,000kg. Weight ballast can be used to bring the vehicle up to the minimum weight requirement, and the ballast must be securely fastened to the vehicle such that it will not be separated from the vehicle upon impact. In planning for the temporary traffic arrangement, the person responsible shall submit proof to the relevant authorities that the TMA and the shadow vehicle to be used are in accordance with the above requirements. Necessary approval from the Commissioner for Transport under the relevant provisions of the Road Traffic (Construction and Maintenance of Vehicles) Regulations (Cap. 374A) must be obtained for installation of TMA on vehicles.

### General Road Works Signs

4.55 The traffic sign numbers mentioned below are those given in the Drawing Number series CT174/51-1 to CT174/51-5, obtainable from the Transport Department.

4.54 緩撞裝置須符合美國國家公路合作研究計劃的第 350 號報告書或同等標準中，針對每小時 100 公里車速而訂明的第三級測試規定，所有強制性及選擇性的規定均包括在內。安裝緩撞裝置的車輛必須符合裝置製造商的建議要求及最少重 11 公噸。安裝緩撞裝置的車輛可加裝鎮重物，以符合上述最低重量要求。鎮重物必須穩固於車輛上，即使車輛受撞擊，仍不會從車輛上飛脫。當策劃臨時交通計劃時，負責人須呈交文件予相關部門，證明緩撞裝置及安裝裝置的護航車符合上述規定。在車輛上安裝緩撞裝置須獲運輸署署長根據道路交通（車輛構造及保養）規例（第 374A 章）的相關規定批准。



### 一般道路工程標誌

4.55 下述交通標誌在圖則編號 CT174/51-1 至 CT174/51-5 號內表明，這些圖則可向運輸署索取。

#### 4.56 Road Works Ahead

This warning sign indicates that road works are being carried out on the road ahead.



491

#### 4.56 前面有道路工程

本警告標誌顯示在后面的道路正進行道路工程。

#### 4.57 Road Narrows on Right Ahead

The warning symbol may be reversed to give "Road Narrows on Left Ahead"

(related traffic sign number shown in green)



416, 417

#### 4.57 前面道路右邊收窄

可將警告符號轉至相反的方向，以顯示「前面道路左邊收窄」

(有關標誌的號碼以綠色顯示)

#### Road Narrows on Both Sides Ahead

These warning signs are used to give warning that the existing carriageway width is restricted. The type of restriction will determine the sign to be used. These signs may be used with the following supplementary plates where appropriate.



415

#### 前面道路兩邊收窄

這些警告標誌用以警告駕駛人現有車路的寬度會受到限制。如何使用標誌視乎限制形式。在適當情況下，這些標誌可連同以下的輔助字牌同用。



737



738



#### 4.58 Right Lane Closed Ahead

These warning signs indicate temporary lane closure ahead.

1 way 2 lane road/2 lane dual carriageway

The symbols may be reversed to give "Left Lane Closed Ahead"

(related traffic sign number shown in green)



499, 500

1 way 3 lane road/3 lane dual carriageway

The red bar(s) may be placed across any 1 or 2 lanes to indicate the closure of the lane(s).

(related traffic sign number shown in green)



495, 492-497

For lane closure on a 1 way road with 4 or more lanes or dual carriageway with 4 or more lanes at the closed direction, traffic sign similar to the above "Lane Closed Ahead" signs should be erected in consultation with Transport Department. The sign should be able to indicate the number and position of the traffic lanes to be closed and maintained.

#### 4.59 Diversion to Another Carriageway to Right Ahead

This warning sign is used to divert traffic from one carriageway of a dual carriageway road to the other carriageway.

The symbol may be reversed to give "Diversion to Another Carriageway to Left Ahead"

(related traffic sign number shown in green)



501, 502

#### 4.58 前面右邊行車綫封閉

這些警告標誌用以表示前面行車綫已臨時封閉。

單程雙綫路／雙綫雙程分隔車路

符號可轉至相反的方向，以顯示「前面左邊行車綫封閉」

(有關標誌的號碼以綠色顯示)

單程 3 綫路／3 綫雙程分隔車路

紅色橫條可放置在其中 1 條或 2 條綫上以顯示該行車綫封閉

(有關標誌的號碼以綠色顯示)

如需在單程 4 綫或以上的道路封閉行車道或在雙程分隔車路上受封閉影響的一邊有 4 條或以上的行車道，應與運輸署商討設立與上述「行車綫封閉」標誌相似的標誌。標誌應能清晰顯示需封閉及所餘行車道的數目及位置。

#### 4.59 前面改道至右邊車路

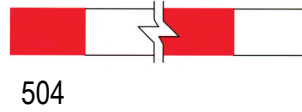
本警告標誌用於使交通從一條分隔車路的其中一條車路改道至另一條車路。

符號可轉至相反的方向，以顯示「前面改道至左邊車路」

(有關標誌的號碼以綠色顯示)

#### 4.60 Barricade

This warning barricade indicates the extent of obstructions or excavations and/or that a lane or carriageway is closed.



504

**Minimum length** 1 m

**Depth of Panel** 150–300 mm for ordinary roads  
600 mm for roads with speed limit over 80 km/h

**Mounting height** approximately 1 m

#### 4.60 路障

本警告路障顯示障礙物或挖掘處的範圍及／或表示有一條行車綫或車路已封閉。

**最少長度** 1 米

**路障板高度** 一般道路 150 至 300 毫米

車速限制超過每小時 80 公里的道路 600 毫米

**裝置高度** 約 1 米

#### 4.61 Temporary Sharp Deviation

This warning sign indicates a sharp deviation to avoid road works or other temporary obstructions in the carriageway.

Note : The black and white version of this sign (Traffic sign 414) must not be used at road works.



503

The sign may be reversed to indicated a sharp deviation to the left

Speed	Depth	Minimum Length
<50 km/h	200 mm	900 mm
50 – 80 km/h	400 mm	1 800 mm
> 80 km/h	800 mm	3 600 mm

**Mounting height** approximately 1 m

#### 4.61 臨時實施道路急轉

本警告標誌顯示道路急轉，以避開在該車路上的道路工程或其他臨時障礙物。注意：切勿在道路工程範圍使用本標誌的黑白款色（交通標誌 414）。

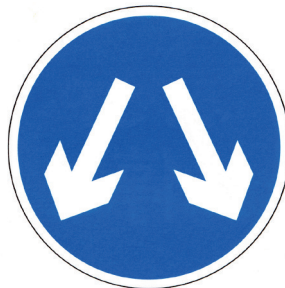
標誌可轉至相反方向，以顯示道路急向左轉。

速度	高度	最少長度
時速<50 公里	200 毫米	900 毫米
時速 50-80 公里	400 毫米	1800 毫米
時速>80 公里	800 毫米	3600 毫米

**裝置高度** 約為 1 米

#### 4.62 Pass Either Side

This informatory sign informs motorists that vehicles may pass either side of an obstruction in the carriageway to reach the same destination.



602

#### 4.62 可取道任何一邊

本提示標誌通知駕駛人，車輛可從車路上一個障礙物的兩邊其中任何一邊駛過，往同一目的地。

#### 4.63 Two Way Traffic

This warning sign informs road users of the start of a section of the road which is carrying two way traffic on the same carriageway when on the previous section traffic was carried on a road comprising one way traffic carriageway.



407

#### 4.63 雙程行車

本警告標誌通知道路使用者：從該處開始，該段道路容許在同一車路上雙程行車，而在先前的一段道路乃為單程行車的車路。

此標誌應在每隔 100 至 300 米的地方設置。

The sign should be repeated at 100 – 300 m intervals.

#### 4.64 Traffic Signals Ahead

This warning sign is used to warn of control of traffic ahead by traffic signals.



409

#### 4.64 前面交通燈號

本警告標誌用來發出警告，顯示前面有交通燈作管制。

A distance plate should be used with sign on rural single 2 lane roads or where there is poor visibility.

在郊區雙線不分隔道路或能見度差的地方，距離標誌牌應連同本標誌一起使用。

#### 4.65 Stopping Place Indicator

This regulatory sign indicates to vehicular traffic the place beyond which traffic shall not proceed when a temporary red light signal is displayed and no stop line is placed on the carriageway.



219

#### 4.65 停車處指示牌

本限制標誌向交通車輛顯示在臨時紅色交通燈亮着及在車路上並無停車綫時，交通車輛不得越過該處。

#### 4.66 Traffic Control Ahead

This warning sign indicates that there is manual control of traffic ahead by the use of Stop/Go signs.



509

#### 4.66 前面交通管制

本警告標誌顯示前面交通受人手控制“停”或“去”標誌管制。

**4.67 Manually Operated Temporary Sign**

These regulatory signs indicate to vehicular traffic that it shall not proceed (Stop sign) / may proceed (Go sign) into the length of road where one way working is necessary.

The signs should be 900 mm diameter



103

**4.67 人手操作臨時標誌**

本限制標誌向交通車輛顯示：交通車輛不得駛入（“停”標誌）／可駛入（“去”標誌）該段須作單程路使用的道路。

標誌的直徑應為 900 毫米



104

**4.68 Road Ahead Closed**

This warning sign warns the motorists that the road ahead is closed.

Diversion signs may be required.



508

**4.68 前面道路封閉**

本警告標誌警告駕駛人前面道路已封閉。

或需使用改道標誌。

**4.69 Road Closed**

This regulatory sign is placed on or near a road to indicate that the road has been closed.

Diversion signs may be required.



220

**4.69 道路封閉**

本限制標誌放置在道路上或道路附近，以顯示該道路已經封閉。

或需使用改道標誌。

**4.70 Ramp Ahead**

This warning sign warns of a sudden change of level in the road surface ahead.

It should be sited not less than 30 m before the ramp.  
It must be used with the “Ramp” sign.



506

**4.70 前面道路起伏**

本警告標誌警告前面路面平面的突然變化。

本標誌應設置在起伏的道路前面至少 30 米外，並須連同「道路起伏」標誌一起使用。

**4.71 Ramp**

This warning sign indicates to motorists a sudden change of level in the road surface.



505

**4.71 道路起伏**

本警告標誌向駕駛人顯示路面平面的突然變化。

#### 4.72 Uneven Road Surface

This warning sign indicates any uneven road surface ahead.



434

#### 4.72 路面不平

本警告標誌顯示前面路面不平。

#### 4.73 Loose Chippings Ahead

This warning sign is used in advance of a recently surface dressed road or other road where there is a possibility of loose chippings or stones on the road surface to indicate that there is a danger of flying stones from vehicles' wheels.



488

#### 4.73 前面有鬆脫碎片

在一條新鋪路面的道路前面，或在路面可能有鬆脫碎片或石頭的道路前面，可使用本警告標誌以顯示有石頭從車輪飛出的危險。

本標誌應沿著受影響路段經常重覆設置。

It should be repeated frequently along the affected length.

#### 4.74 Slippery Road

This warning sign is used to warn of a dangerous condition on the road surface ahead.



489

#### 4.74 前面路滑

本警告標誌用作警告前面路面危險。

#### 4.75 End of Road Works

This sign assembly is placed beyond the temporary obstruction. This is the last sign motorists should see. The sign may be omitted if its use may cause confusion with regard to adjacent road works.

Note: The End sign may also be used in conjunction with other signs to indicate the end of a particular hazard.



491

#### 4.75 道路工程終止

本標誌組合放置在臨時障礙物之後，是駕駛人應看見的最後一個標誌。如使用本標誌會令人混淆毗連的道路工程，則可省去不用。

注意：“終止”標誌亦可連同其他標誌使用，以表示某一類危險已告終止。



767

**4.76 Height Restricted Ahead**

This warning sign warns of a height restriction ahead.

It should be located at a suitable diversion point. Diversion signs may be required.

The numerals may be altered to cater for different height restrictions  
(related traffic sign number shown in green)



442, 433, 435-447

**4.76 前面高度限制**

本警告標誌就前面有高度限制發出警告。

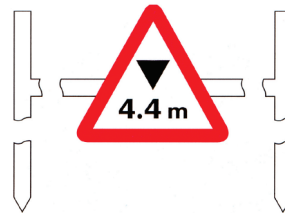
本標誌應設在適當的改道地點。或需使用改道標誌。

標誌上的數字可予更改，以適合不同的高度限制  
(有關標誌的號碼以綠色顯示)

**4.77 Height restriction**

This warning sign is erected at the location where the height is restricted to indicate over which width the headroom so indicated is available.

The numerals may be altered to cater for different height restrictions  
(related traffic sign number shown in green)



Available width of stated headroom at hazard  
上述危險淨高的寬度

455, 448-459

**4.77 高度限制**

本警告標誌豎立在有高度限制的位置，以顯示在所示的淨高所能容納的寬度。

標誌上的數字可予更改，以適合不同的高度限制  
(有關標誌的號碼以綠色顯示)

(related traffic sign number shown in green)

**Regulatory Signs****4.78 Keep Left**

This sign indicates that passage must be to the left of some obstruction.

The direction of the arrow may be reversed to give "Keep Right"  
(related traffic sign number shown in green)



109, 110

**限制標誌****4.78 靠左**

本標誌顯示須靠著某障礙物的左面駛過。

可將箭嘴轉至相反的方向，以顯示「靠右」  
(有關標誌的號碼以綠色顯示)

**4.79 Turn Left**

This sign indicates that vehicles must proceed in the direction shown by the arrow.

The direction of the arrow may be reversed to give "Turn Right"  
(related traffic sign number shown in green)



107, 108

**4.79 左轉**

本標誌顯示車輛須朝箭嘴所示方向行駛。

可將箭嘴轉至相反的方向，以顯示「右轉」  
(有關標誌的號碼以綠色顯示)

#### 4.80 Turn Left Ahead

This sign indicates that vehicles must turn in the direction shown by the arrow at the junction ahead.

The direction of the arrow may be reversed to give "Turn Right Ahead"

(related traffic sign number shown in green)



111, 112

#### 4.80 駛前左轉

本標誌顯示：車輛須在前面交匯處按箭嘴所示方向轉彎。

可將箭嘴轉至相反的方向，以顯示「駛前右轉」  
(有關標誌的號碼以綠色顯示)

#### 4.81 Ahead Only

This sign indicates that vehicles must proceed in the direction indicated by the arrow.



106

#### 4.81 只准駛前

本標誌顯示車輛須朝箭嘴所示方向行駛。

The above 4 signs must not be used to direct pedestrians.

以上 4 個標誌切勿作為指示行人用。

### Diversion Signs

#### 4.82 Diversion 200 m

This informative sign is used in advance of a temporary diversion to indicate to motorists of its commencement.

The numerals may be altered to give different distances  
(related traffic sign number shown in green)



689, 688, 690

### 改道標誌

#### 4.82 改道二百米

本提示標誌在臨時改道前使用，向駕駛人顯示改道的開始。

標誌上的數字可予更改，以切合不同的距離  
(有關標誌的號碼以綠色顯示)

#### 4.83 Diversion

This informative sign must be used if there is only one alternative route.

The direction of the arrow may be reversed  
(related traffic sign number shown in green)



685, 686

#### 4.83 改道

如果只有一條替代路線，必須使用本提示標誌。

可將箭嘴轉至相反的方向  
(有關標誌的號碼以綠色顯示)

**4.84 Diverted Traffic**

This informatory sign indicates the direction for all diverted traffic.

The arrow may be reversed in direction and placed on the left

(related traffic sign number shown in green)



682, 683

**4.84 改道車輛**

本提示標誌顯示所有改道車輛的方向。

可將箭嘴轉至相反的方向及放置在左面  
(有關標誌的號碼以綠色顯示)

**4.85 Diversion Ends**

This informatory sign is placed at the end of a temporary diversion.



681

**4.85 改道終止**

本提示標誌在臨時改道終止的地點放置。

Additional diversion signs indicating the direction to named places or roads may be required. Appropriate signs shall be subject to approval of the Commissioner for Transport or the Director's Representative.

或需另外使用改道標誌，以表示通往某地或某道路的方向。適當的標誌須經運輸署署長或路政署署長代表批准方可採用。

**Signs for Pedestrians****行人標誌****4.86 Crossing Not In Use**

This warning sign indicates to pedestrians that a pedestrian crossing is not in use.



510

**4.86 行人綫停用**

本警告標誌向行人顯示該行人綫已停用。

**4.87 Pedestrians**

This warning sign advises pedestrians of the direction of a temporary footway.

The arrow may be reversed or a double headed arrow may be used.

(related traffic sign number shown in green)



511, 512, 513

**4.87 行人**

本警告標誌將臨時行人徑的方向通知行人。

箭嘴可轉至相反的方向，或使用一個雙頭箭嘴標誌。

(有關標誌的號碼以綠色顯示)



## Signs for Cyclists

### 4.88 Cycling Restriction

This regulatory sign indicates that cycling is prohibited beyond the sign and cyclists must dismount and push their bicycles or tricycles if they wish to proceed beyond the sign.



227

### 4.89 End of Cycling Restriction

This sign indicates the end of cycling prohibition.



228

### 4.90 Cyclists Dismount

These warning signs advise cyclists to dismount, in particular at location with road works ahead.



480



483

## 騎單車者標誌

### 4.88 限制騎單車

本限制標誌顯示禁止騎單車超越本標誌。如騎單車者欲超越本標誌，則須下車並手推其單車或三輪車前行。

### 4.89 限制騎單車的終止

本標誌顯示限制騎單車的終止。

### 4.90 騎單車者下車

本警告標誌用作忠告騎單車者下車，特別是前面的路面正進行道路工程。

## Supplementary Plates

4.91 Traffic sign 491 may be used in conjunction with supplementary plates to indicate the nature of road works.



491

The following plates may be used :

Line Painting	TS 752
Surveying	TS 749
Gully Emptying	TS 756
Tree Cutting	TS 753
Sign Cleaning	TS 754
Surfacing	TS 757
Blasting	TS 746
Grass Cutting	TS 755

On dual carriageway roads the approach signs should be supplemented with distance plates indicating the distance to a hazard.

The numerals may be varied  
(related traffic sign number shown in green)

This plate is used with other traffic signs to indicate the length over which the prohibition or the hazard exists.

The numerals may be varied  
(related traffic sign number shown in green)

## 輔助字牌

4.91 交通標誌 491 可連同輔助字牌使用，以顯示有關道路工程的性質。



752

可使用以下字牌：

路面髹綫	TS 752
進行測量	TS 749
清理溝渠	TS 756
砍伐樹木	TS 753
清洗路牌	TS 754
鋪築路面	TS 757
爆石	TS 746
進行剪草	TS 755



772, 768-781

分隔車路上的接近危險地點標誌應加上距離字牌，以表示與某一危險之間相隔的距離。

字牌上的數字可變更  
(有關標誌的號碼以綠色顯示)



785, 784-792, 794

本字牌連同其他交通標誌使用，以顯示有關禁止或危險所在的長度。

字牌上的數字可變更  
(有關標誌的號碼以綠色顯示)

#### 4.92 Traffic Cone

Used to delineate the edge of a route for vehicular traffic to avoid a part of the carriageway.

The height of cone shall be in accordance with Table 5.4 of Chapter 5. The central white portion of cone must be retroreflective



217

#### 4.92 交通圓筒

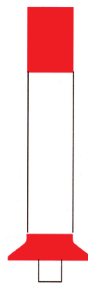
用於劃定一條路綫的邊緣，以便交通車輛避免使用車路的一部分。

圓筒的高度須符合第 5 章的表 5.4。圓筒中間的白色部分必須可以反光

#### 4.93 Traffic Cylinder

Used to indicate the temporary diversion of traffic flows in opposing directions, or to delineate the edge of a temporary diversion of a route for vehicular traffic.

The central white portion of cylinder must be retroreflective



218

#### 4.93 交通圓柱

用於顯示在一條車路上將來往方向行駛的車輛臨時隔開，或用以劃定交通車輛的路綫上臨時改道的邊緣。

圓柱中間的白色部分必須可以反光

#### 4.94 No Entry Except Trams



#### 4.94 電車以外車輛不准駛入

### Special Temporary Warning Signs

4.95 Special temporary warning signs in the following paragraphs are required when one or more of the criteria below are encountered:

- all works involving diversion of vehicular traffic away from the original carriageway to a temporary pavement through a work site;
- all works involving temporary complete closure of a

### 特別臨時警告標誌

4.95 在下列道路工程中，須設置下文所述的特別臨時警告標誌：

- 所有涉及將原有行車道上交通改道行經工地臨時路面的工程；或
- 所有涉及臨時完全封閉一段現有行車道的工程；或

section of carriageway; or

- road construction projects involving fencing off one or more traffic lanes of the carriageway longer than 100m and the project period is not less than one month.

- 需要封閉一條或多條長於 100 米行車線達一個月或以上的道路建築工程。

#### 4.96 Slow, Road Works

To be placed at the beginning of the work zone, and to be added intermittently at appropriate locations if the fenced off area is longer than 135m.



For roads of speed limit equal to or lower than 70km/h, H = 1.2 m, W = 1.25 m.

For roads of speed limit above 70km/h, H = 1.3 m, W = 1.6 m.

#### 4.96 慢駛，道路工程

本標誌應設立在工地開端。如行車線封閉長於 135 米，標誌應重覆加設在適當的地點。

在車速限制等於或小於每小時 70 公里的道路上，H = 1.2 米，W = 1.25 米。

在車速限制高於每小時 70 公里的道路上，H = 1.3 米，W = 1.6 米。

#### 4.97 Reduce Speed Now, Works Ahead

To be placed 100m approximately in advance of the "Slow, Road Works" sign.



For roads of speed limit equal to or lower than 70km/h, H = 1.3 m, W = 1.35 m.

For roads of speed limit above 70km/h, H = 1.6 m, W = 1.8 m.

#### 4.97 開始減速，前面工程

本標誌應設立在「慢駛，道路工程」標誌前約 100 米處。

在車速限制等於或小於每小時 70 公里的道路上，H = 1.3 米，W = 1.35 米。

在車速限制高於每小時 70 公里的道路上，H = 1.6 米，W = 1.8 米。

#### 4.98 Slow, Sharp Bend Ahead

To be placed 100m approximately in advance of the "Sharp Bend" sign in temporary traffic arrangement involving sharp bend(s).

The triangular warning sign on this sign is TS412, which should be replaced by TS410, TS411, TS413 to suit the actual circumstances.



For roads of speed limit equal to or lower than 70km/h, H = 1.7 m, W = 1.2 m.

For roads of speed limit above 70km/h, H = 2.1 m, W = 1.6 m.

#### 4.98 慢駛，前面急彎

臨時交通安排中如有急彎，本標誌應設立在「急彎」標誌前約 100 米處。

標誌上的三角形警告標誌為 TS412。有關標誌須因應不同的情況變更為警告標誌 TS410、TS411 或 TS413。

在車速限制等於或小於每小時 70 公里的道路上，H = 1.7 米，W = 1.2 米。

在車速限制高於每小時 70 公里的道路上，H = 2.1 米，W = 1.6 米。

For roads of speed limit not greater than 70km/h, the 'x' height of the letters and height of the triangular warning

如車速限制不高於每小時 70 公里，特別臨時警告標誌上文字的「x」高度及三角形警告標誌的

sign on the special temporary warning signs should be 75mm minimum and 750mm minimum respectively.

For roads of speed limit above 70km/h, the 'x' height of the letters and height of the triangular warning sign on the special temporary warning signs should be 100mm minimum and 900mm minimum respectively.

The horizontal clearance of the signs from the carriageway shall comply with the requirement of the Transport Planning and Design Manual.

Prior endorsement from the Traffic Management Liaison Group for the project shall be obtained if the required clearance or size of the temporary warning sign or the 'x' height could not be complied with due to site constraints. In the absence of a Traffic Management Liaison Group, prior approval from relevant authorities, i.e. the Police, Transport Department, Highways Department and other concerned parties shall be obtained.

高度應分別不少於 75 毫米及 750 毫米。

如車速限制高於每小時 70 公里，特別臨時警告標誌上文字的「x」高度及三角形警告標誌的高度應分別不少於 100 毫米及 900 毫米。

有關標誌須依照《運輸策劃及設計手冊》的規定與行車道保持水平淨距。

如因工地環境所限，標誌不能達到所需的水平淨距或大小，或標誌上的文字不能達到所需的「x」高度，則須先得到該工程計劃交通管理聯絡小組同意。若工程不設有交通管理聯絡小組，則須得到有關監管部門，如警務處、運輸署、路政署及其他相關部門同意。

#### 4.99 Temporary VMS

To be placed at least 200m in advance of the first advance warning sign on the hard shoulder of an expressway.

Message to be displayed on the sign should be varied to suit the temporary traffic arrangement.



#### 4.99 臨時交通訊息顯示屏

本標誌應放置於快速公路的路肩上，並設置在第一個預先警告標誌最少 200 米前。

因應臨時交通安排而制定顯示訊息

## Device Location and Mounting

5.1 Signs and other traffic management devices should be placed on the verge wherever possible. When placed adjacent to a trafficked carriageway, signs and portable light signals should be at sufficient clearance from the carriageway, without any part of the signs, portable light signals or supports encroaching onto the carriageway. Signs should be provided with stands so that the sign is held in a rigid position with at least 300 mm above the adjacent roadway. For regulatory signs of prohibitory in nature such as “No Entry” sign, the mounting height shall comply with the requirements given in section 2.2.3 of the Transport Planning and Design Manual Volume 3 published by the Transport Department. The sign stand should be sufficiently rigid to prevent movement of the sign in windy conditions.

5.2 On dual-carriageway roads where the central reservation is formed by concrete profile barriers, it may be necessary to mount advance warning signs on road lighting columns. Signs mounted on lighting columns must be smaller than 0.4 m<sup>2</sup>, be securely fixed without damage to the columns, and be positioned so as not to obstruct access to joint boxes. To achieve this, purpose-made sign mounts with neoprene rubber lining should be used. The person responsible will be liable to any resulting damage to the lighting columns.

5.3 Prior to a heavy rainstorm or typhoon, portable signs should be secured or adequately weighted at the bottom of the signs such that the signs will not be blown or washed away.

5.4 Where works impose a temporary height restriction less than 5 m (e.g. safety platform or bridge falsework), warning of the restriction must be given by means of a “Height Restriction” sign (para. 4.77) which shall be attached to the structure, and by advance warning signs (para. 4.76) at a suitable diversion point before the hazard. Height restrictions less than 4.7 m should be

## 設備的地點和裝置

5.1 標誌和其他交通管理設備應盡可能放置於路邊。標誌和手提交通燈應與毗鄰有車行駛的車路保持足夠距離。標誌、交通燈或支撐物的任何部分不應佔用有車輛的行車路。標誌應放置在支架上，以便可以保持在固定不變的位置，標誌底部與路面的距離最少為 300 毫米。至於包含禁止信息的限制性交通標誌（如「不准駛入」標誌）的設置高度，須符合運輸署出版的《運輸策劃及設計手冊》第 3 冊第 2.2.3 節的規定。標誌支架應安裝穩固，防止標誌在大風的情況下移動。

5.2 在中央分道帶由混凝土縱向護欄組成的分隔車路上，可能需要將預先警告標誌裝置於路燈柱上。裝置在燈柱上的標誌必須少於 0.4 平方米，並須穩固而不損柱身，安裝位置亦不能防礙開啟電箱。因此，應使用特製並有氯丁橡膠襯墊的標誌固定裝置。負責人須對燈柱的任何損毀負責。

5.3 在暴雨或颱風來臨前，應將活動標誌縛緊，或在標誌底部用足夠的重物壓著，以免標誌被風或水流移走。

5.4 如在進行工程時需要臨時將行車高度限制在 5 米以下（例如有安全平台或橋樑鷹架），必須在有關台架上展示「高度限制」標誌（第 4.77 段），以及在限制處前面的適當改道地點設置預先警告標誌（第 4.76 段）。有關人員應盡可能避免將高度限制在 4.7 米以下，但如有需要將高度限制在 4.7 米以下，必須諮詢警務處、運輸署和

avoided wherever possible. However, where it is necessary to impose a height restriction less than 4.7 m, the Police, the Transport Department and the Highways Department must be consulted.

### Siting Distance and Size of Signs

5.5 The size of advance warning signs to be used is shown in Table 5.1, according to the speed limit of roads. Larger signs are normally required for roads with higher speed limit, and this is reflected in the Table. Where alternative sign sizes are shown in brackets, the first sign should always be the larger size, whilst subsequent signs may be of the smaller size.

5.6 Table 5.2 shows the siting distances for the advance warning signs in relation to the works. The first sign, which should always be a “Road Works Ahead” sign (para. 4.56), shall be sited in advance of the start of the approach taper, and suitably located such that motorists are provided with the minimum visibility to the sign as shown in the Table. If placement of the first sign is required at a position where it does not meet the minimum visibility to the sign due to site constraints, an additional sign shall be placed in advance of the original position to give motorists sufficient warning when approaching the worksite. For roads of speed limit not exceeding 70 km/h, at least one additional advance warning sign, describing the hazard, shall be placed midway between the first sign and the hazard, whilst for higher speed roads, two additional signs are required, equally spaced, between the first sign and the works. Appropriate warning signs for the most common road works configurations are shown in Figs. 5.0 – 5.13.

5.7 Where the approach conditions are such that the warning signs could be missed, such as where the approach is on a left hand bend, the approach signs should be duplicated on the right hand side of the road. For dual-carriageway roads, duplicated signs both in the verge and the central reservation shall always be

路政署。

### 標誌的設置距離和尺寸

5.5 表 5.1 說明根據車速限制而採用不同的預先警告標誌尺寸。車速限制較高的道路通常需要較大的標誌，這一點已在上述表內反映。當有括號內數字顯示另一可供選擇的標誌尺寸時，第一個標誌須用較大的尺寸，而隨後的標誌可用較小的尺寸。

5.6 表 5.2 說明有關工程預先警告標誌設置的距離。第一個標誌必定是「前面有道路工程」標誌（第 4.56 段），並須設置於如表中所述在楔型引入路段開端的位置，使駕駛人士至少能在表內所示的距離之前看到。如因工地限制，使駕駛人士不能在表內所示的距離之前看到第一個警告標誌，需在該位置的前方設置額外警告標誌，向駛近工地的駕駛人士提供足夠的警告。對車速限制不超過每小時 70 公里的道路而言，在第一個標誌和危險處的中間，須最少增設一個說明危險情況的預先警告標誌，而在較高速的道路則需要增設兩個標誌，以相同的間距設在第一個標誌和工程之間。有關常見道路工程所需的警告標誌，已在圖 5.0 至 5.13 內說明。

5.7 如前路情況會令駕駛人士看不到警告標誌，例如前路是向左轉的彎角，則應在道路的右邊加設一套相同的標誌。在分隔車路上，路邊和中央分道帶均需設置標誌。

required.

5.8 On roads where the alignment is poor or there is insufficient width for two way traffic, advance warning to traffic in each direction should be given by a “Road Works Ahead” sign (para. 4.56).

5.9 Table 5.3 shows the siting distance for the “End of Road Works” sign, which shall be placed beyond the limit of the works. On dual-carriageway roads, the sign shall be duplicated both in the road verge and the central reservation.

### Approach and Exit Tapers

5.10 The design of approach tapers is an important feature of all road works, to ensure that motorists are guided to safely pass the works area. The use of traffic cones, together with road hazard warning lanterns, regulatory “Keep Right/Keep Left” signs (para. 4.78) and “Barricade” sign indicating lane closure (para. 4.60) provides a uniform and consistent indication to motorists of the obstruction or excavation on carriageway. At location where visibility could be a problem, the barricade sign should be used with a FAS (paras. 4.42 to 4.44). Approach tapers shall not be used for entering or exiting the works site.

5.11 The length of approach tapers, and the height and spacing of cones shall be in accordance with Table 5.4. Where it is impractical to provide the required length of approach tapers due to site constraints, the length of approach tapers can be reduced subject to agreement of relevant authorities. “Keep Right/Keep Left” regulatory signs (para. 4.78) shall be sited at the commencement and the end of the taper (Figs. 5.1 – 5.13).

5.12 High intensity battery operated beacons of the type showing an intermittent amber light (para. 4.34) shall be placed within the line of cones. They shall be mounted on stands or cones, except that on roads with speed limit

5.8 在線向欠佳或寬度不足以供雙程行車的路上進行工程時，應同時在兩個行車方向設置「前面有道路工程」標誌（第 4.56 段），以預先警告車輛。

5.9 表 5.3 顯示「道路工程終止」標誌的設置距離，須按照這個距離把這個標誌放在工程範圍界限之後。在分隔車路上，相同的標誌須分別設在道路邊緣和中央分道帶。

### 楔形引入和引出路段

5.10 對於所有道路工程，為確保能引導駕駛人士安全駛經工地，楔形引入路段的設計非常重要。應使用交通圓筒及道路危險警告燈、「靠右／靠左」限制標誌（第 4.78 段）和指示封閉行車綫的「路障」標誌（第 4.60 段），以便向駕駛人士發出統一和一致的指示，顯示車路上有障礙物或挖掘處。在視線可能有問題的地點，應同時使用路障標誌及閃爍箭咀指示燈號（第 4.42 至 4.44 段）。楔形引入路段不可用作工地的出入口。

5.11 有關楔形引入路段的長度和圓筒的高度及間距，須根據表 5.4 釐定。如因工地限制，楔形引入路段的長度未能符合上述要求，在獲得相關部門同意的情況下，可縮短楔形引入路段的長度。「靠右／靠左」限制標誌（第 4.78 段）須設置於楔形路段的開端及末端（圖 5.1 至 5.13）。

5.12 發出斷續琥珀色燈光的高亮度電池標燈（第 4.34 段）須設置於圓筒行列之內，並須設在支架或圓筒上。在車速限制每小時 70 公里或以上的道路，這些警告燈只能裝設在圓筒上。



of 70 km/h or above, mounting on cones is the only acceptable method.

5.13 Where traffic control, either by use of portable light signals or "Stop/Go" signs, is used (para. 4.67), a much shorter approach taper is required. It shall be formed by cones of the height indicated in Table 5.4, at 45° to the line of the road, placed at 1 m spacing. High intensity battery operated beacons shall be placed between each successive cone, at 1 m spacing.

5.14 For exit tapers at the end of the temporary carriageway restrictions, the taper shall be formed at 45° to the line of the road, in a similar manner to that described in para. 5.13.

5.15 Throughout the length of the restricted carriageway, cones of the minimum height indicated in Table 5.4 shall be used to delineate the edge of carriageway. They shall be placed at appropriate spacing in accordance with para. 4.20.

### **Supplementary Plate Sizes**

5.16 The size of supplementary plates used in association with the various advance warning signs shall be in accordance with Table 5.5.

### **Temporary Directional and Other Worded Signs**

5.17 The signs shall comply with the requirements in paras. 4.4 to 4.7 of this Code and section 3.6 – Temporary Directional Signs of the Transport Planning and Design Manual Volume 3 published by the Transport Department.

5.18 In particular, the signs should have black legends and borders on a yellow background, and meet the visibility requirement stated in the Transport Planning and Design Manual.

5.13 在利用手提交通燈或「停／去」標誌（第 4.67 段）管制交通時，只需極短的楔形引入路段。這個楔形路段須以表 5.4 所示高度的圓筒標示，並與道路線成 45 度角，每隔 1 米設置一個圓筒。高亮度電池標燈須以 1 米的間距放置在接連的圓筒之間。

5.14 至於在臨時收窄的車路末端的楔形引出路段，亦與第 5.13 段所述一樣，與道路線成 45 度角。

5.15 在收窄的車路，全段須使用表 5.4 所示最小高度的圓筒標示車路邊緣，並須依照第 4.20 段在適當的間距設置。

### **輔助標誌牌尺寸**

5.16 與各個預先警告標誌一起使用的輔助標誌牌，其尺寸須根據表 5.5 釐定。

### **臨時方向指示標誌及其他文字標誌**

5.17 標誌須符合本守則第 4.4 至 4.7 段及運輸署出版的《運輸策劃及設計手冊》第 3 冊第 3.6 節關於臨時方向指示標誌的規定。

5.18 標誌的底色應為黃色，配以黑色的文字、圖案及框線，並符合《運輸策劃及設計手冊》要求的能見度。

5.19 The size of temporary directional and other worded signs is determined by the number of words on the sign and the letter size. The “x” height, which is the height of the lower case “x”, shall be in accordance with Table 5.6.

5.19 臨時方向指示牌及其他文字標誌的尺寸，是根據標誌上的字數和字體大小決定。「x」高度是小寫字母「x」的高度，須根據表 5.6 釐定。

Table 5.1 Minimum Sign Size (mm)

表 5.1 標誌的最小尺寸 (毫米)

Type of Sign 標誌種類	Paragraph Number 段號	Speed Limit (km/h) 車速限制 (公里/小時)		
		Below 70 70 以下	70-80 70 至 80	Over 80 超過 80
Warning (Triangular) and Regulatory (Circular) 警告 (三角形) 及限制 (圓形)		750 (600)	900 (750)	1200
Road Closed 道路封閉	4.69	1250 x 525	1675 x 700	
Road Ahead Closed 前面道路封閉	4.68	1350 x 650	1850 x 875	
Ramp 道路起伏	4.71	1300 x 700		
Ramp Ahead 前面道路起伏	4.70	1400 x 525		
Traffic Control Ahead 前面交通管制	4.66	1550 x 650		
When Red Light Shows Wait Here 紅燈亮時在此等候	4.65	825 x 725		
Crossing Not In Use 行人綫停用	4.86	800 x 450		
Pedestrians 行人	4.87	800 x 500		
Diversion Ahead 前面改道	4.82	1025 x 920		
Diversion 改道	4.83	1025 x 695		
Diverted Traffic 交通改道	4.84	1095 x 675		
Diversion Ends 改道終止	4.85	1025 x 675		

Table 5.2 Siting of Advance Warning Signs

表 5.2 設置預先警告標誌的位置

Speed Limit (km/h) 車速限制 (公里/小時)	Distance of First Sign in Advance of Road Works (m) 道路工程與前面第一個標誌的距離 (米)	Minimum Number of Signs in Advance of Road Works 道路工程前面設置標誌的最少數目	Minimum Visibility Distance of Driver to First Sign (m) 駕駛人士應能在這距離之前看到第一個標誌 (米)
Below 70 70 以下	40-100	2	60
70 to 80 70 至 80	100-300	3	70
Over 80 超過 80	300-600	3	80
Expressways 快速公路	600	3	80

Table 5.3 Siting of "End of Road Works" Sign		表 5.3 設立「道路工程終止」標誌的位置	
Speed Limit (km/h) 車速限制 (公里/小時)		Distance beyond the Works (m) 工程範圍之後的距離 (米)	
Up to 50 50 或以下		10-30	
50 to 80 50 至 80		30-35	
Over 80 超過 80		45-90	

Table 5.4 Length of Approach Tapers (m)		表 5.4 楔形引入路段長度 (米)		
Width of Hazard (m) including lateral safety clearance zone 危險處闊度 (米) 包括橫向安全淨距區	Speed Limit (km/h) 車速限制 (公里/小時)			
	Below 70 70 以下	70 70	80 or above 80 或以上	
2.4	30	45	60	
2.7	34	51	69	
3.0	38	58	76	
3.4	42	63	84	
3.7	46	69	91	
4.3	52	78	108	
4.9	60	90	122	
5.5	68	102	138	
6.1	76	114	152	
6.7	84	126	168	
7.3	90	138	182	
Minimum Height of Traffic Cones/Cylinder (mm) 交通圓筒/圓柱的最小高度 (毫米)	750		1000	
Maximum Spacing of Traffic Cone/Cylinder (m) 交通圓筒/圓柱的最大間距 (米)	2		2	

Table 5.5 Sizes of Supplementary Plates

表 5.5 輔助標誌牌尺寸

Type of Sign 標誌種類/ (mm) 標誌尺寸 (毫米)	Paragraph Number 段號	Size of Warning (Triangular) Sign (mm) 警告 (三角形) 標誌尺寸 (毫米)			
		600	750	900	1200
Distance to a Hazard 與某一危險之間相隔的距離	4.91	500 x 350	625 x 425	750 x 500	1000 x 675
Length over which a Prohibition or a Hazard Exists 有關禁止或危險所在 的長度	4.91	500 x 500	625 x 625	750 x 750	1000 x 1000
Line Painting 路面鬆綫 Sign Cleaning 清洗路牌 Grass Cutting 進行剪草 Gully Emptying 清理溝渠 Tree Cutting 砍伐樹木	4.91	475 x 325	650 x 350	800 x 425	950 x 660
Blasting 爆石 Surfacing 鋪築路面 Surveying 進行測量	4.91	475 x 250	650 x 350	800 x 425	950 x 510
End 終止	4.75	275 x 250	375 x 350	450 x 425	550 x 500
Single File Traffic 單排行車	4.57	475 x 375	650 x 450	800 x 550	950 x 660
Reduce Speed Now 開始減速	4.57	725 x 450	900 x 550	1075 x 660	1425 x 875

Table 5.6 Appropriate 'x' Height For Temporary Directional Signs

表 5.6 臨時方向指示牌的適當「x」高度

'x' Height 「x」高度	Speed Limit(km/h) 車速限制 (公里/小時)		
	Below 70 70 以下	70-80 70 至 80	Over 80 超過 80
Temporary Directional Signs 臨時方向指示標誌			
Desirable minimum (mm) 最少應有 (毫米)	150	250	250
Absolute minimum (mm) 最少須有 (毫米)	100	150	200
Warning and Informatory Signs 警告及指示標誌			
Desirable minimum (mm) 最少應有 (毫米)	100	100	150
Absolute minimum (mm) 最少須有 (毫米)	75	100	100

## Example of Common Sign and Guarding Equipment Layouts

5.20 The track layouts in Figs. 5.0 to 5.11 are shown as a guide to the signing requirements for the most common road works configurations. For works on carriageway, the guarding arrangement shown in Fig. 5.12 or 5.13 shall be applied where appropriate. The track layouts cannot cover every eventuality, and adaptations in accordance with the guidelines set out in the Code will have to be made for other situations. Contra-flow and segregated contra-flow arrangements are considered to be outside the scope of this booklet and should not normally be considered except with the prior agreement of the Police, the Transport Department and the Highways Department.

Fig. 5.0 Basic signing layout.

Fig. 5.1a Layout of signs for minor works on minor roads between parked vehicles.

Fig. 5.1b Layout of signs for minor works on minor roads.

Fig. 5.2 Guarding arrangement for works on footways.

Fig. 5.3 Layout of signs for works on footways. One lane partly closed as diversion for obstructed footway.

Fig. 5.4 Layout of signs for works on single carriageway roads. Minimum unobstructed width 5.5 m.

Fig. 5.5 Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of portable light signals.

Fig. 5.6 Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of portable light signals. Alternative signal location.

## 一般標誌及防護設施分佈的舉例

5.20 對於最常遇到的道路工程，圖 5.0 至 5.11 所顯示的車道安排可作為設置所需標誌的指南。在車路上進行工程，須因應情況，設置圖 5.12 或 5.13 所示的防護安排。這些車道安排例子不能完全包括所有可能發生的情況，在其他情況下，需根據本守則所述指引作出修改。反方向和分隔式反方向行車的安排不在本手冊的範圍內，除非獲得警務處、運輸署和路政署的事先同意，否則通常不應考慮這些安排。

圖 5.0 基本標誌分佈。

圖 5.1a 在停泊於小路的車輛之間進行小型工程時的標誌分佈。

圖 5.1b 在小路進行小型工程時的標誌分佈。

圖 5.2 在行人路進行工程時的防護安排。

圖 5.3 在行人路進行工程，並將一條行車綫部份封閉作為受阻行人路改道時的標誌分佈。

圖 5.4 在不分隔車路進行工程時的標誌分佈，最少保持 5.5 米闊的車路暢通無阻。

圖 5.5 在不分隔雙綫車路進行道路工程，並封閉一條行車綫及利用手提交通燈管制交通時的標誌分佈。

圖 5.6 在不分隔雙綫車路進行道路工程，並封閉一條行車綫及利用手提交通燈管制交通時的標誌分佈，這是另一個可供選擇的交通燈位置。

- |           |  |        |  |
|-----------|--|--------|--|
| Fig. 5.7  | Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of "Stop/Go" signs. | 圖 5.7  | 在不分隔雙綫車路進行道路工程，並封閉一條行車綫及利用「停／去」標誌管制交通時的標誌分佈。 |
| Fig. 5.8  | Layout of signs for road works on single 2 lane carriageway roads. Road closed with diversion.                                   | 圖 5.8  | 在不分隔雙綫車路進行道路工程，並封閉道路及作出改道時的標誌分佈。             |
| Fig. 5.9  | Layout of signs for road works at road junction.   | 圖 5.9  | 在路口進行工程時的標誌分佈。                               |
| Fig. 5.10 | Layout of signs for road works on dual 2 lane carriageway roads. Slow lane closed.   | 圖 5.10 | 在雙綫分隔車路進行道路工程，並封閉慢綫時的標誌分佈。                   |
| Fig. 5.11 | Layout of signs for road works on dual 3 lane carriageway roads. Centre and fast lanes closed.                                   | 圖 5.11 | 在 3 綫分隔車路進行道路工程，並封閉中綫和快綫時的標誌分佈。              |
| Fig. 5.12 | Layout of temporary tubular barriers – For obstruction or excavation on carriageway accessible to pedestrians.                   | 圖 5.12 | 臨時管狀防欄的分佈 – 位於車路上而行人可到達的障礙物或挖掘處。             |
| Fig. 5.13 | Guarding arrangement for works on expressways, high speed roads and other roads with speed limit of 70km/h or above.             | 圖 5.13 | 在快速公路、高速道路及其它時速限制 70 公里或以上的道路上進行工程的防護安排。     |

### Guarding Arrangement for Road Works

5.21 Obstructions or excavations shall be guarded on all sides. Unless there are continuous barriers or railings which prevent pedestrians from approaching the obstructions or excavations, the obstructions or excavations shall be guarded by temporary tubular barriers as shown in Figs. 5.2 and 5.12.

5.22 For works on expressways, high speed roads and roads with speed limit of 70 km/h or above, guarding arrangement using TMA mounted on shadow vehicle (paras. 4.53 to 4.54) shall be placed in front of a longitudinal safety clearance zone (para. 7.5) before the works area as shown in Fig. 5.13, unless temporary safety barriers are provided at the approach taper (para. 5.24).

### 道路工程的防護安排

5.21 障礙物或挖掘處的四周須加以防護。除非有連續防欄或欄杆以防止行人接近障礙物或挖掘處，否則須如圖 5.2 及 5.12 所示，設置臨時管狀防欄作防護。

5.22 在快速公路、高速道路及時速限制達 70 公里或以上的道路進行工程時，防護安排須如圖 5.13 所示，即在施工地區前的縱向安全淨距區(第 7.5 段)的前方，設置配備車載式緩撞裝置的護航車(第 4.53 段至 4.54 段)。若在楔型引入路段設置臨時安全護欄，則可替代配備車載式緩撞裝置(第 5.24 段)。

5.23 Notwithstanding the requirements stipulated in paras. 4.20 and 4.35, for excavation works on carriageways with excavation depth not exceeding 150mm, such as cold milling and resurfacing works, the maximum spacing of traffic cones and lanterns placed alongside the works area and the longitudinal safety clearance zone shall be 3 m and 6 m respectively. With such arrangement, provision of temporary tubular barriers as described in para. 5.21 is not required.

5.24 For works on carriageways with :

- excavation depth greater than 150 mm,
- works involving temporary removal of existing roadside barriers,
- the need to provide protection to temporary or permanent bridge supports, or
- any other situations that the person responsible considers there is risk of off-track vehicles penetrating into the work zone taking into account the site conditions including available lane/working width, road curvature, speed limit of the roads, access arrangement for works/emergency vehicles, frontage access, duration of works, and extent of works area, etc.,

the person responsible shall use temporary safety barriers (paras. 4.29 to 4.31) whenever possible to provide sufficient fencing for the approach taper and around the work site to minimize the risk of causing damage or injuries to road works personnel, motorists, passengers and other road users in case the road works are being hit by vehicle. If temporary safety barriers are provided at the approach taper, it can be used as an alternative to the TMA mounted on shadow vehicle for guarding as specified in para. 5.22.

5.23 在車路上進行挖掘，而挖掘深度不超過 150 毫米時，如刨鋪路面，不論第 4.20 及 4.35 段有關交通圓筒及警告燈的間距要求為何，沿施工地區及縱向安全淨距區設置的交通圓筒及警告燈的最大間距分別為 3 米及 6 米。在此安排下，則無需如第 5.21 段所述設置臨時管狀防欄。

5.24 就車路上進行的工程而言，如：

- 挖掘深度超過 150 毫米，或
- 工程涉及臨時移除現有路邊護欄，或
- 有需要為臨時或永久橋墩提供保護時，或
- 負責人因應工地狀況，包括現有行車綫／工作範圍的闊度、道路曲度、道路的車速限制、工程車／緊急服務車輛的出入、沿街通道、工程持續時間及工程範圍等，認為存在偏離車路的車輛撞入工地的風險時，

負責人須在楔型引入路段及工地的周圍盡可能使用臨時安全護欄（第 4.29 至 4.31 段）以提供足夠的圍欄，盡量減低當工地遭車輛意外撞擊時對道路工程人員、車輛司機、乘客及其他道路使用者造成的損毀或傷害。在楔型引入路段設置的臨時安全護欄，可替代配備車載式緩撞裝置的護航車作防護（第 5.22 段）。

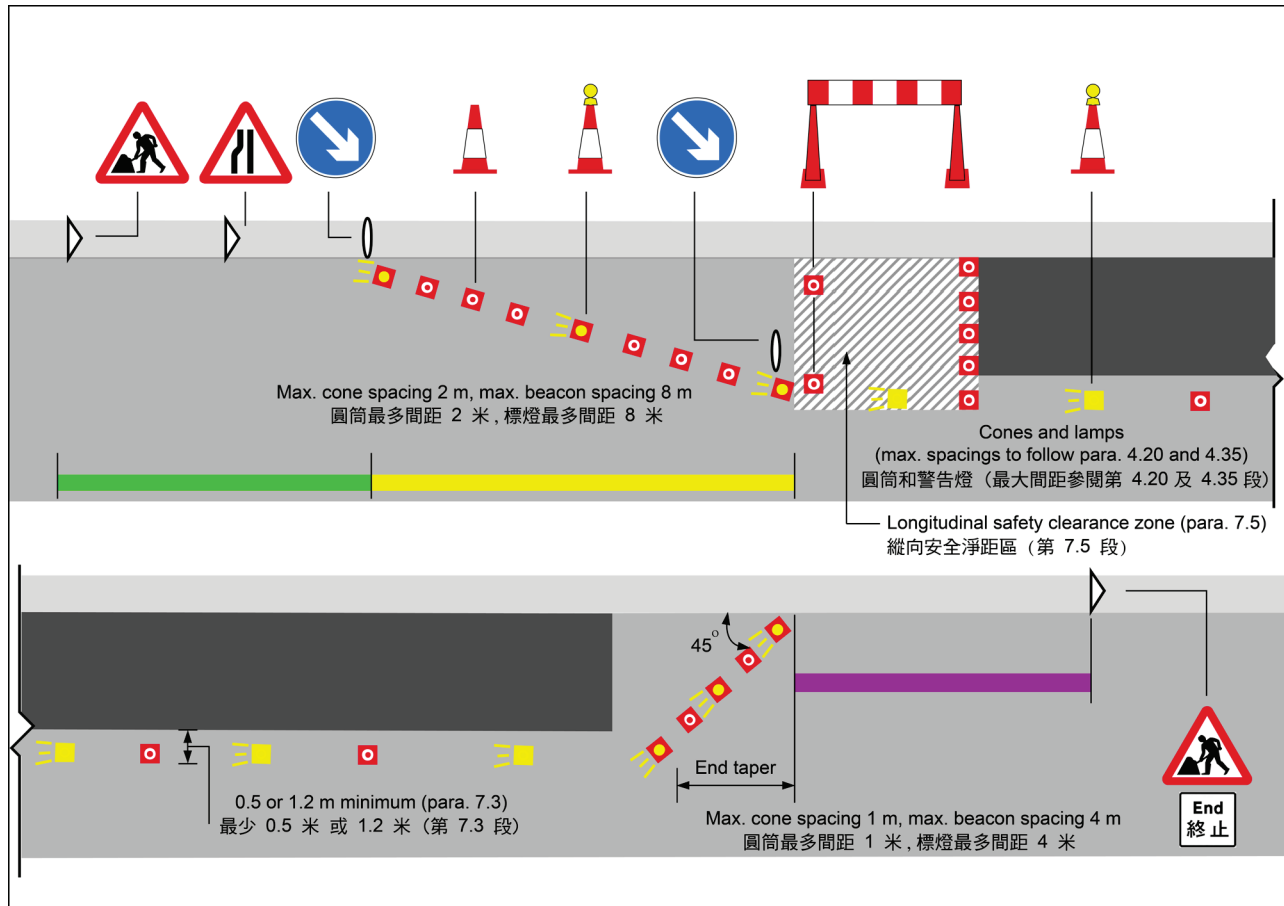
If temporary safety barriers are not used, the person responsible shall properly record the detailed consideration and reasons for not using the temporary safety barriers in the submission for temporary traffic arrangement to Traffic Management Liaison Group or to the relevant authorities.

如不使用臨時安全護欄，負責人須將有關理據仔細記載於提交給交通管理聯絡小組或有關監管部門的臨時交通安排計劃。



Fig. 5.0 Basic signing layout

圖 5.0 基本標誌分佈

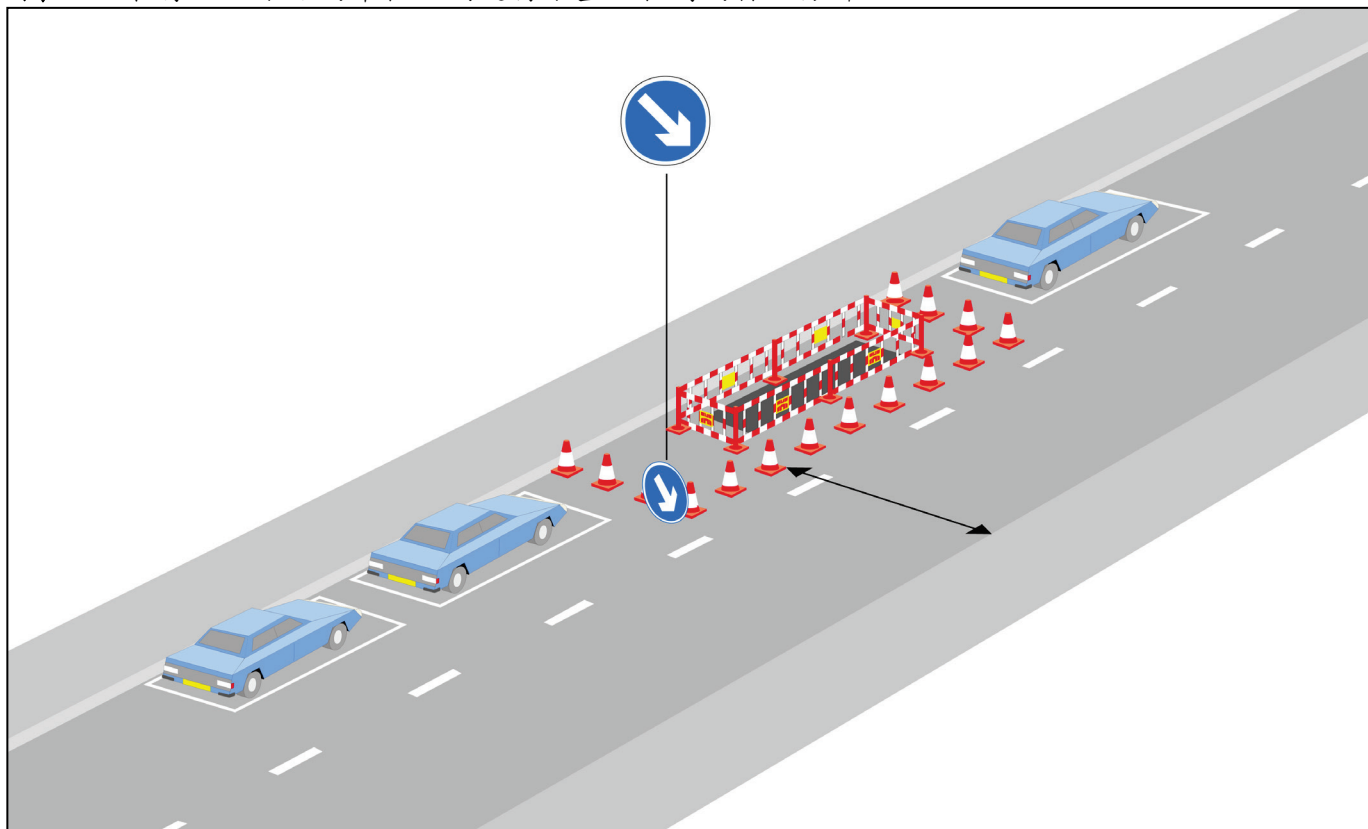


### Key 索引

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- Low intensity battery operated lamps  
低亮度電池警告燈
- High intensity battery operated beacons  
高亮度電池標燈

**Fig. 5.1a** Layout of signs for minor works on minor roads between parked vehicles

**圖 5.1a** 在停泊於小路的車輛之間進行小型工程時的標誌分佈



**Note:**

1. If delineated area does not project beyond line of parked vehicles, 'Keep Right' sign (para. 4.78) at approach corner may be omitted.

2. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

1. 如果標示的地區不超過停泊車輛界線，無須在來車綫的一角設置「靠右」標誌(第 4.78 段)。

2. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**



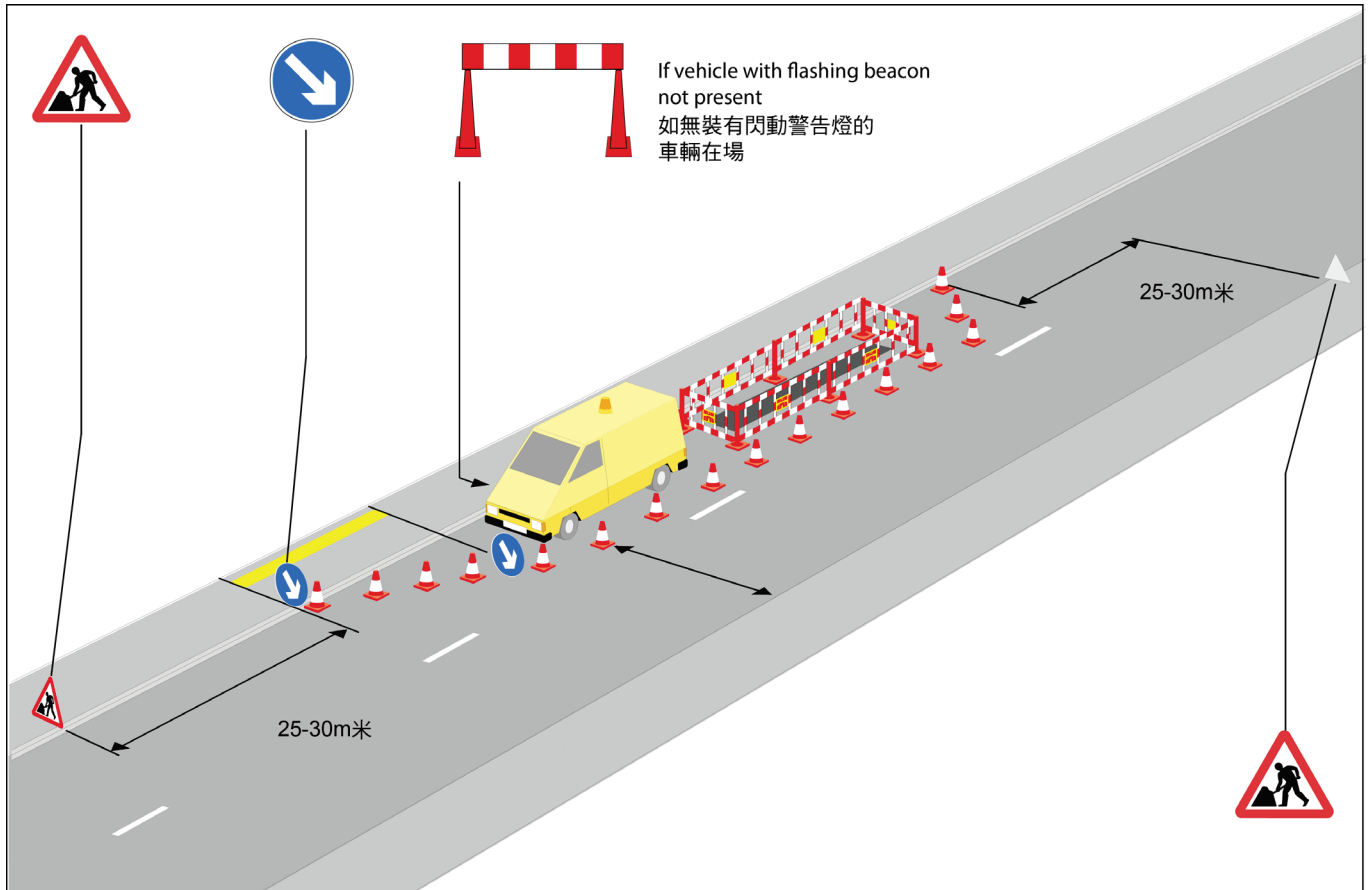
Works area/ Obstruction  
施工地區/ 障礙物



5.5m minimum unobstructed width  
最少保持 5.5 米闊的車路暢通無阻

**Fig. 5.1b** Layout of signs for minor works on minor roads

**圖 5.1b** 在小路進行小型工程時的標誌分佈



**Note:**

1. If vehicle conforming with para 7.11 is in attendance, the "Barricade" and "Road Works Ahead" signs may be omitted.
2. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

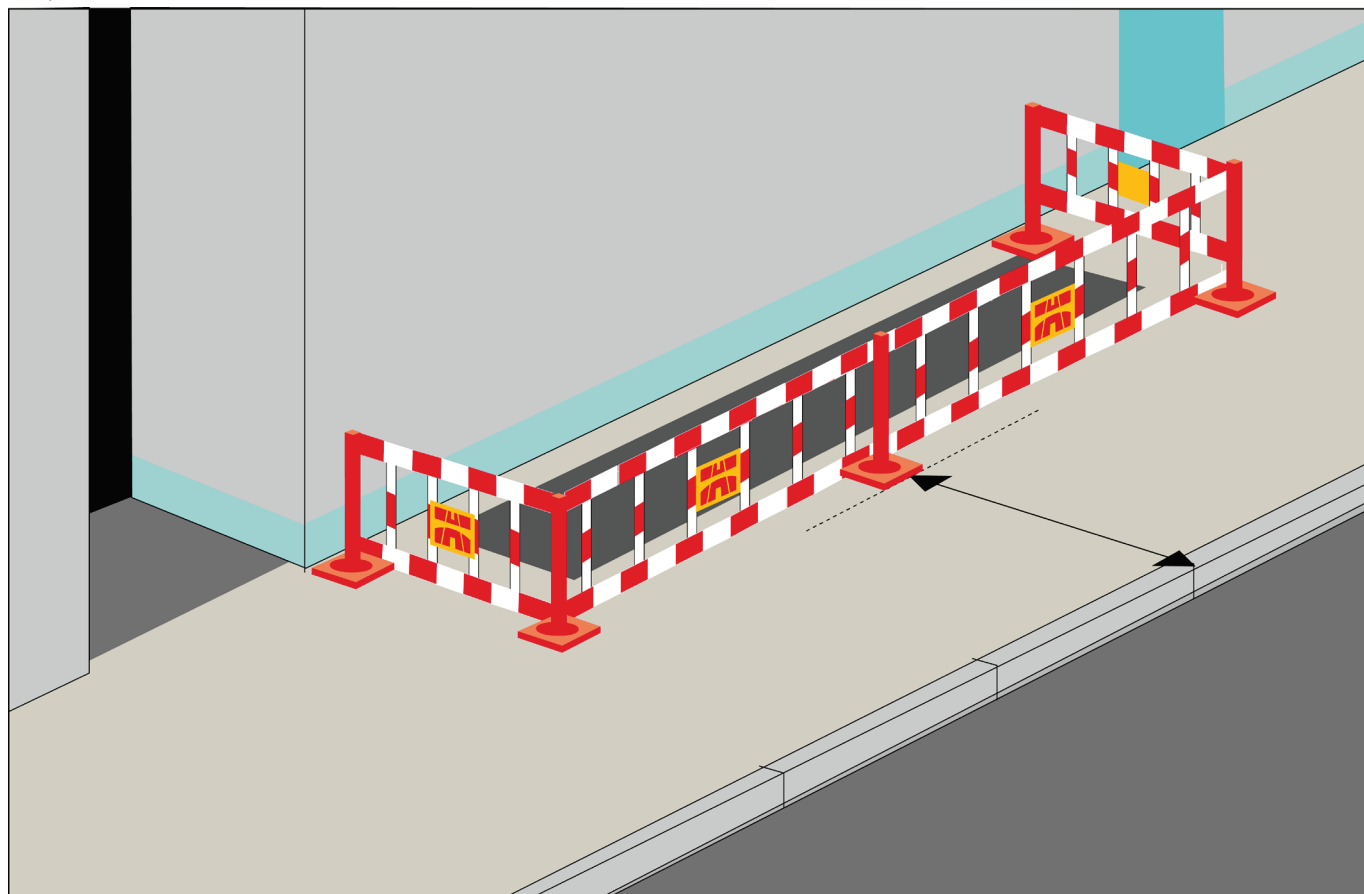
1. 如果有符合第 7.11 段規定的車輛在場時，無須「路障」和「前面有道路工程」標誌。
2. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- 5.5m minimum unobstructed width  
最少保持 5.5 米闊的車路暢通無阻

Fig. 5.2 Guarding arrangement for works on footways

圖 5.2 在行人路進行工程時的防護安排



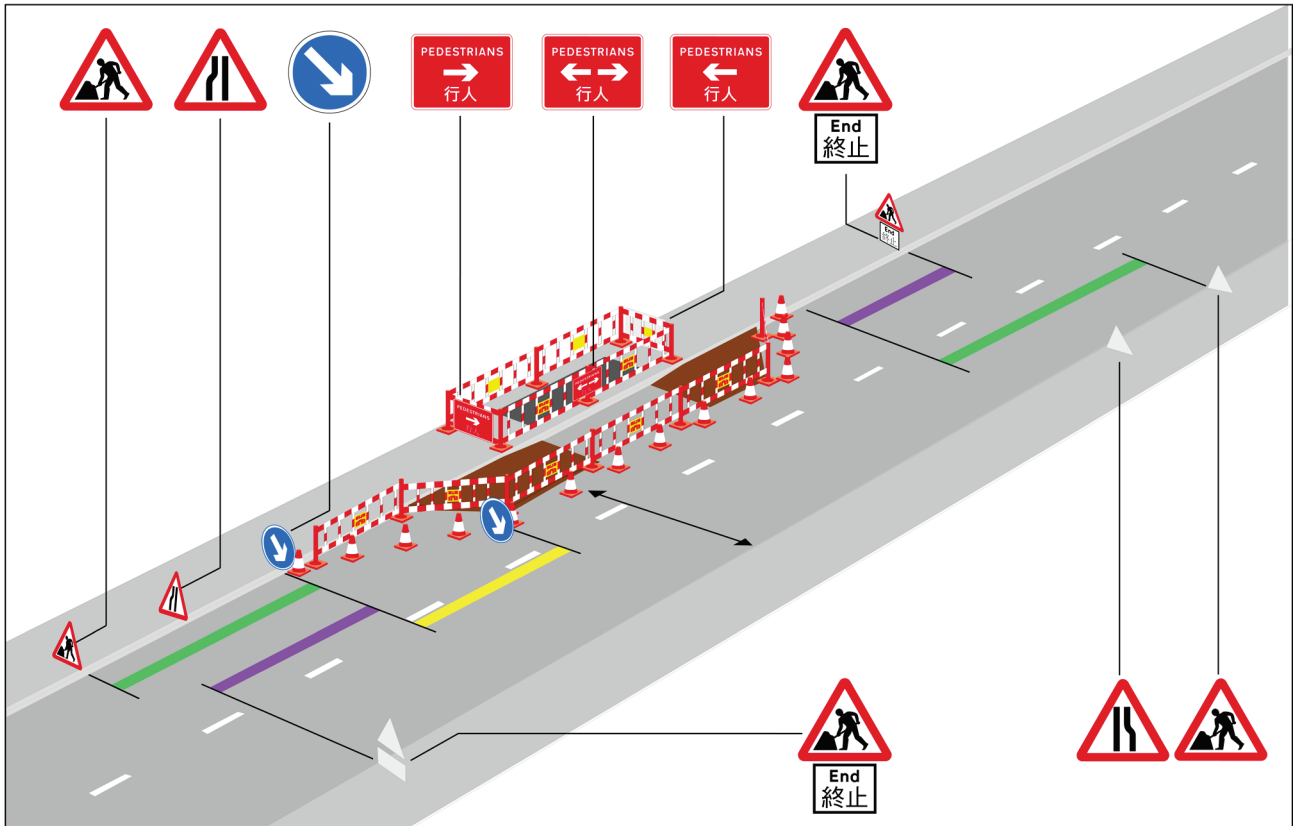
Key 索引

Works area/ Obstruction  
施工地區/ 障礙物

1.5 m minimum unobstructed width (para 6.1)  
最少保持 1.5 米闊的通道暢通無阻 (第 6.1 段)

**Fig. 5.3** Layout of signs for works on footways. One lane partly closed as diversion for obstructed footway

**圖 5.3** 在行人路進行工程，並將一條行車綫部分封閉作為受阻行人路改道時的標誌分佈



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**







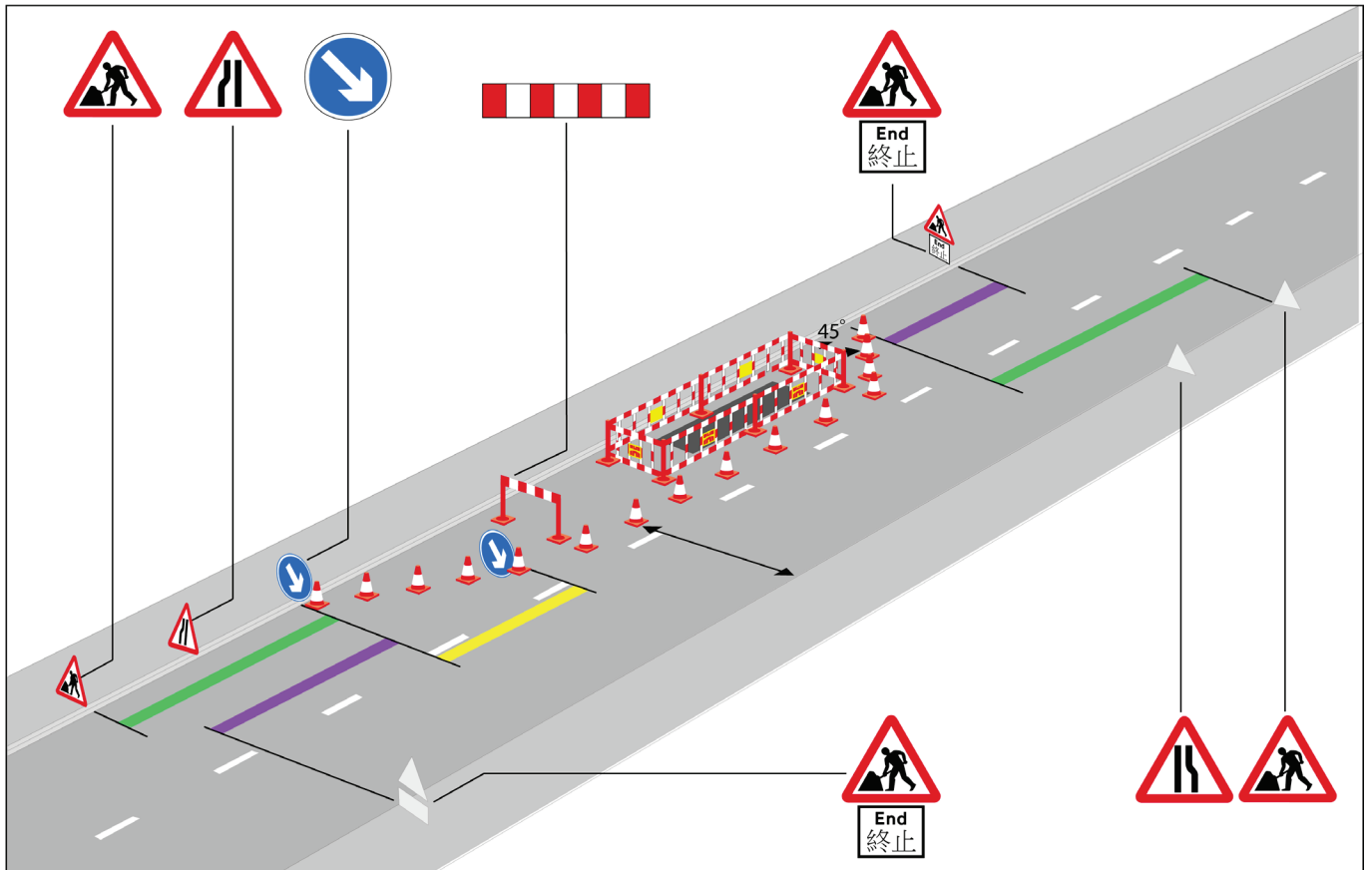
-  See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
-  See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
-  See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
-  Works area/ Obstruction  
施工地區/ 障礙物
-  Temporary ramp  
臨時斜路
-  5.5 m minimum unobstructed width  
最少保持 5.5 米闊的車路暢通無阻

Fig. 5.4 Layout of signs for works on single carriageway roads. Minimum unobstructed width 5.5 m

圖 5.4 在不分隔車路進行工程時的標誌分佈，最少保持 5.5 米闊的車路暢通無阻



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

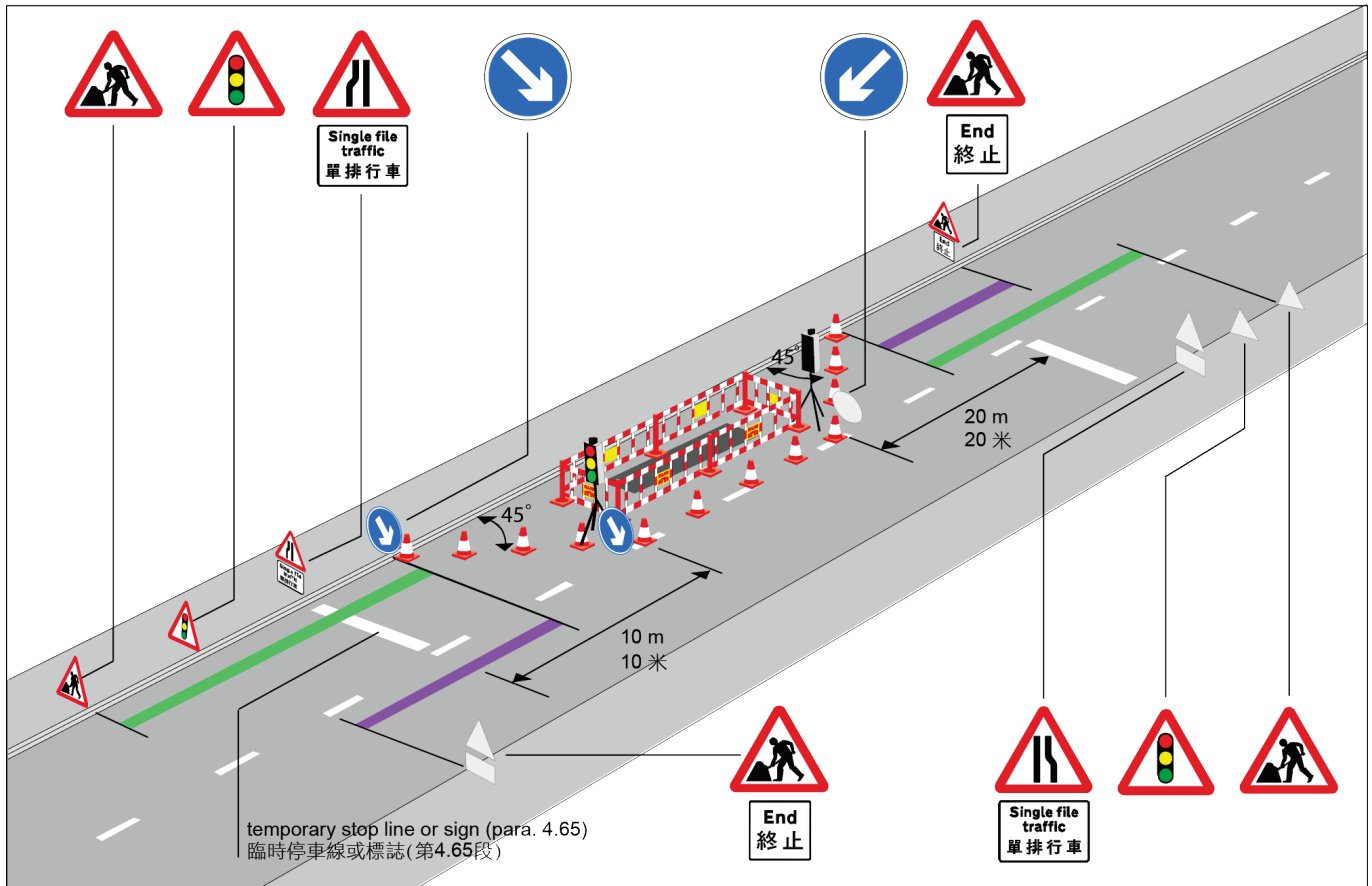
1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- ↔ 5.5 m minimum unobstructed width  
最少保持 5.5 米闊的車路暢通無阻

**Fig. 5.5** Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of portable light signals

**圖 5.5** 在不分隔雙線車路進行道路工程，並封閉一條行車綫及利用手提交通燈管制交通時的標誌分佈



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

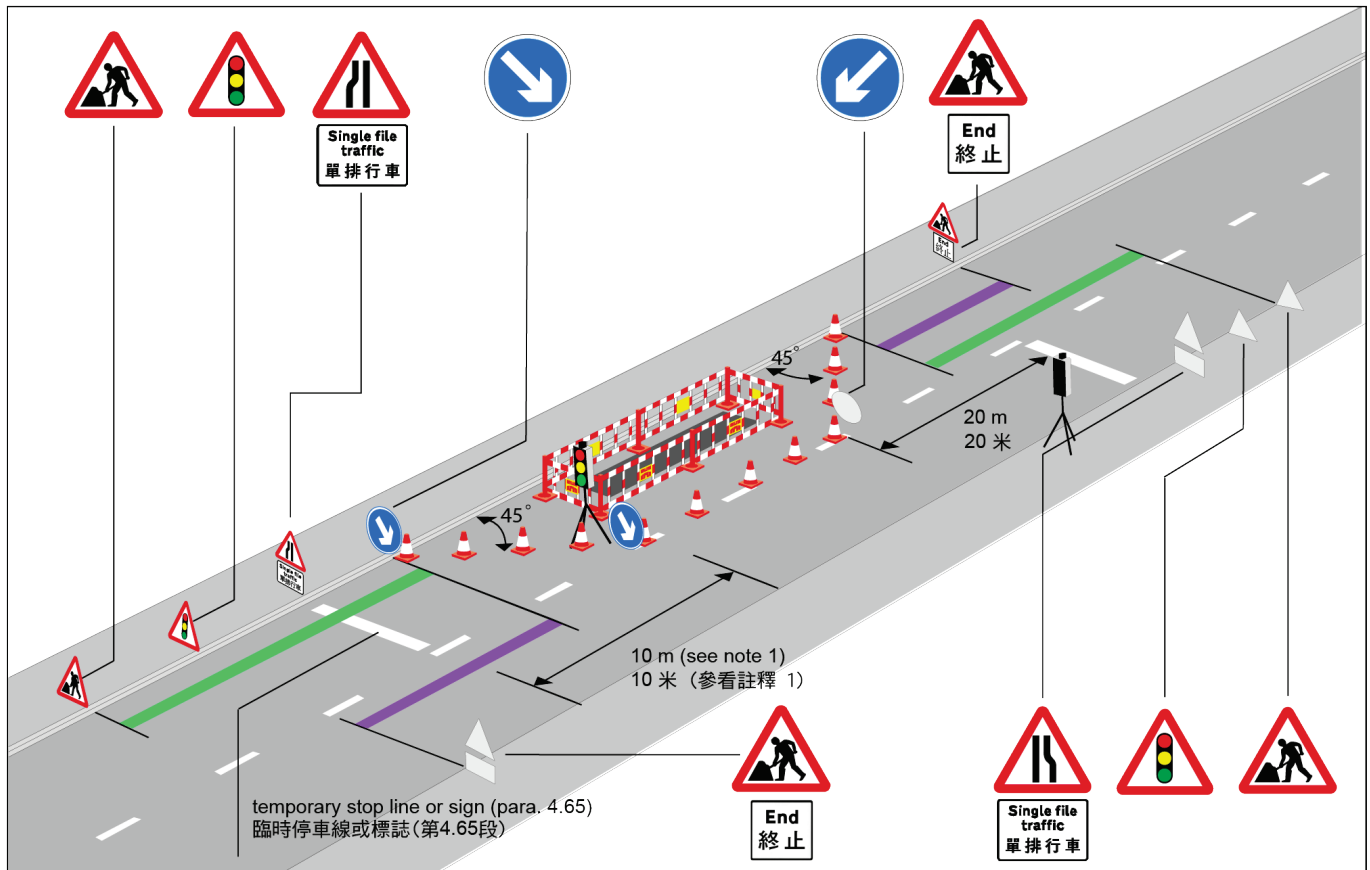
1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Works area/ Obstruction  
施工地區/ 障礙物

**Fig. 5.6** Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of portable light signals. Alternative signal location

圖 5.6 在不分隔雙線車路進行道路工程，並封閉一條行車綫及利用手提交通燈管制交通時的標誌分佈，這是另一個可供選擇的交通燈位置



**Note:**

1. A distance of 10-15 m may be adopted if vehicle-actuated type of portable light signal is used.

2. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

1. 如手提交通燈是車輛驅動類型，則可採納 10-15 米的距離。

2. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

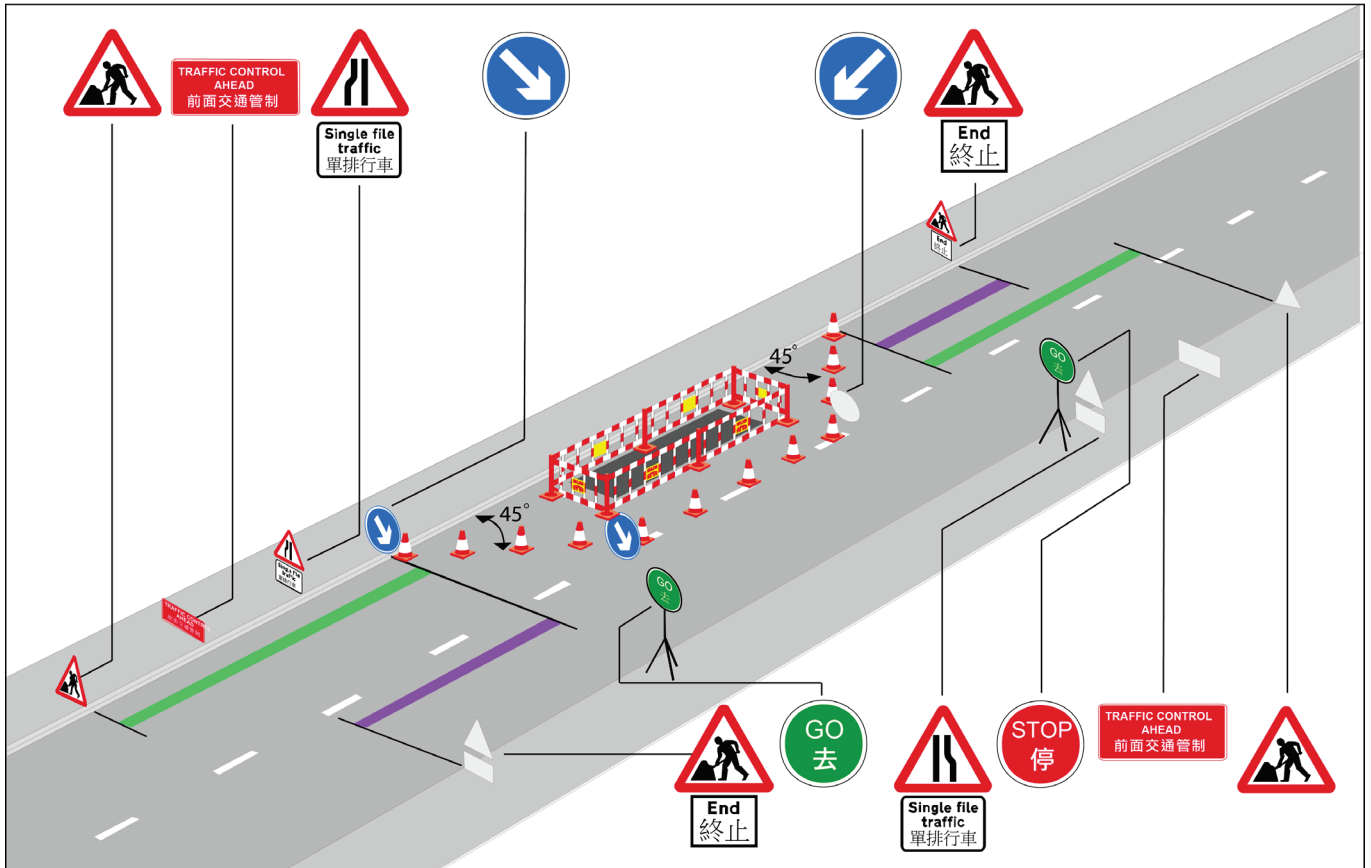
**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Works area/ Obstruction  
施工地區/ 障礙物



**Fig. 5.7** Layout of signs for road works on single 2 lane carriageway roads. One lane closed. Traffic control by means of "Stop/Go" signs

**圖 5.7** 在不分隔雙線車路進行道路工程，並封閉一條行車綫及利用「停/去」標誌管制交通時的標誌分佈



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

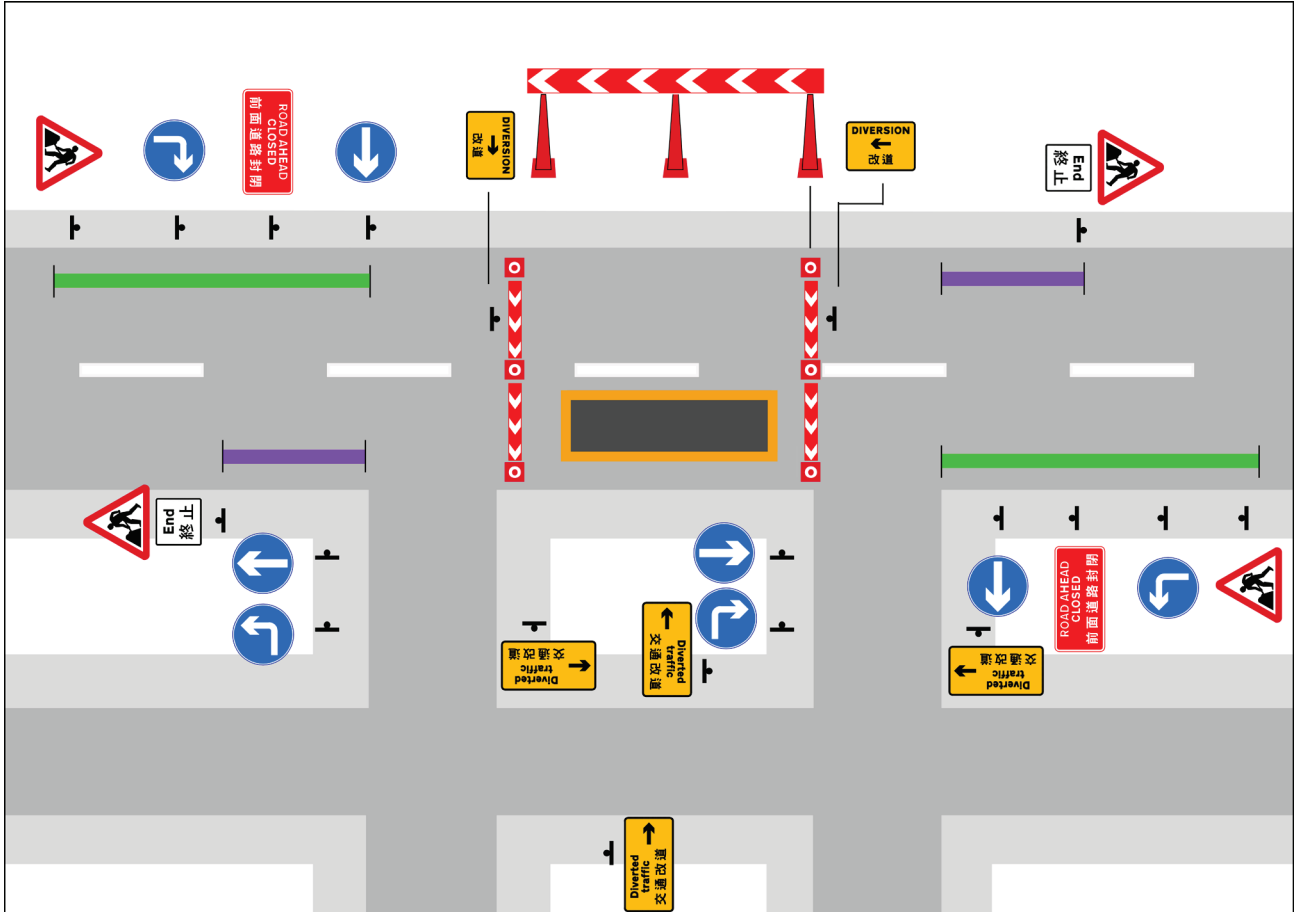
1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Works area/ Obstruction  
施工地區/ 障礙物

Fig. 5.8 Layout of signs for road works on single 2 lane carriageway roads. Road closed with diversion

圖 5.8 在不分隔雙線車路進行道路工程，並封閉道路及作出改道時的標誌分佈



**Note:**

1. Additional temporary diversion signs indicating the direction to named places or roads may be required.
2. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

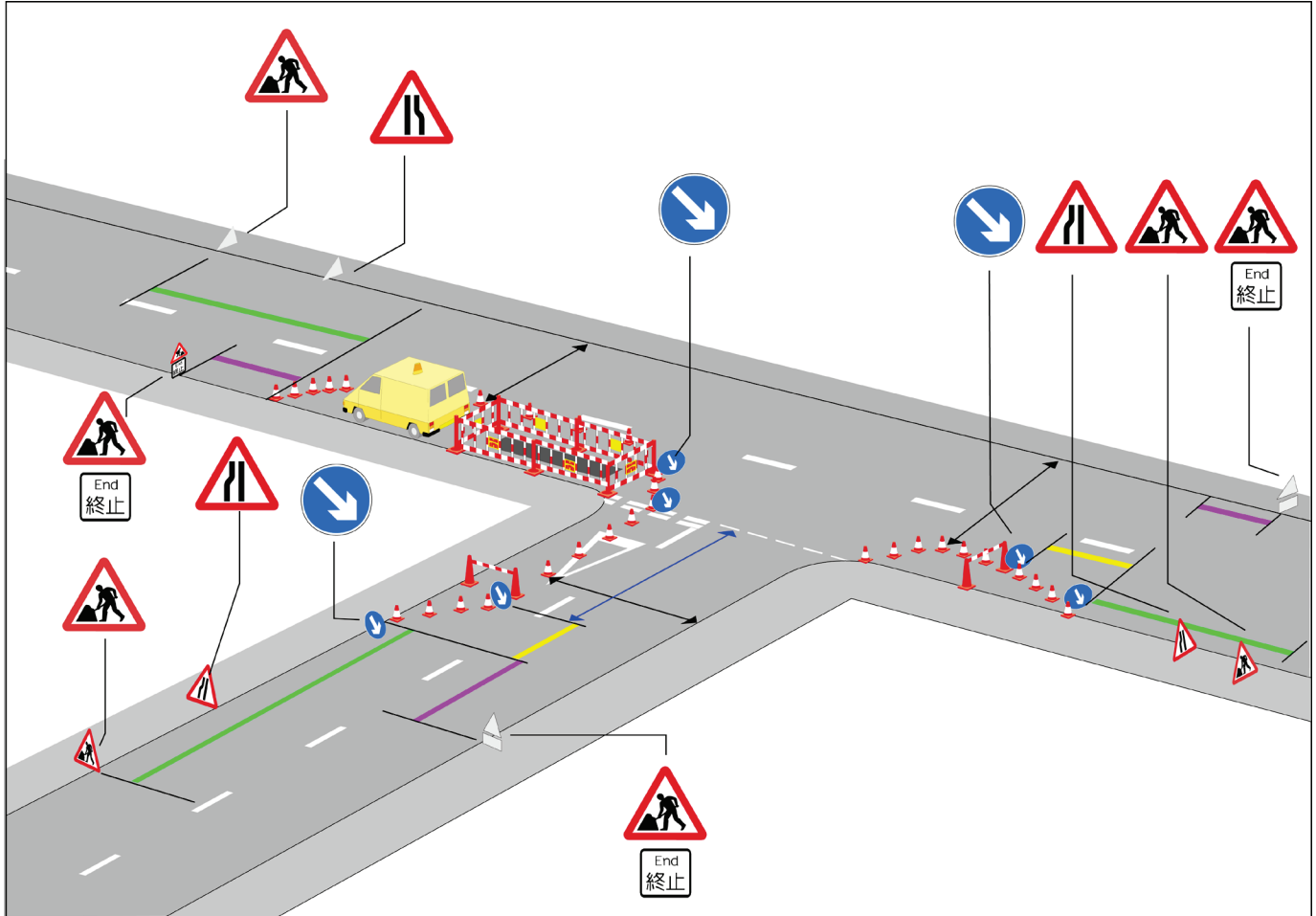
1. 可能需要額外臨時改道標誌，以顯示通往某地區或某道路的方向。
2. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Works area/ Obstruction  
施工地區/ 障礙物
- Temporary tubular barrier  
臨時管狀防欄

**Fig. 5.9** Layout of signs for road works at road junction

**圖 5.9** 在路口進行工程時的標誌分佈



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types to be used and the fencing layout for fencing excavations.

**註：**

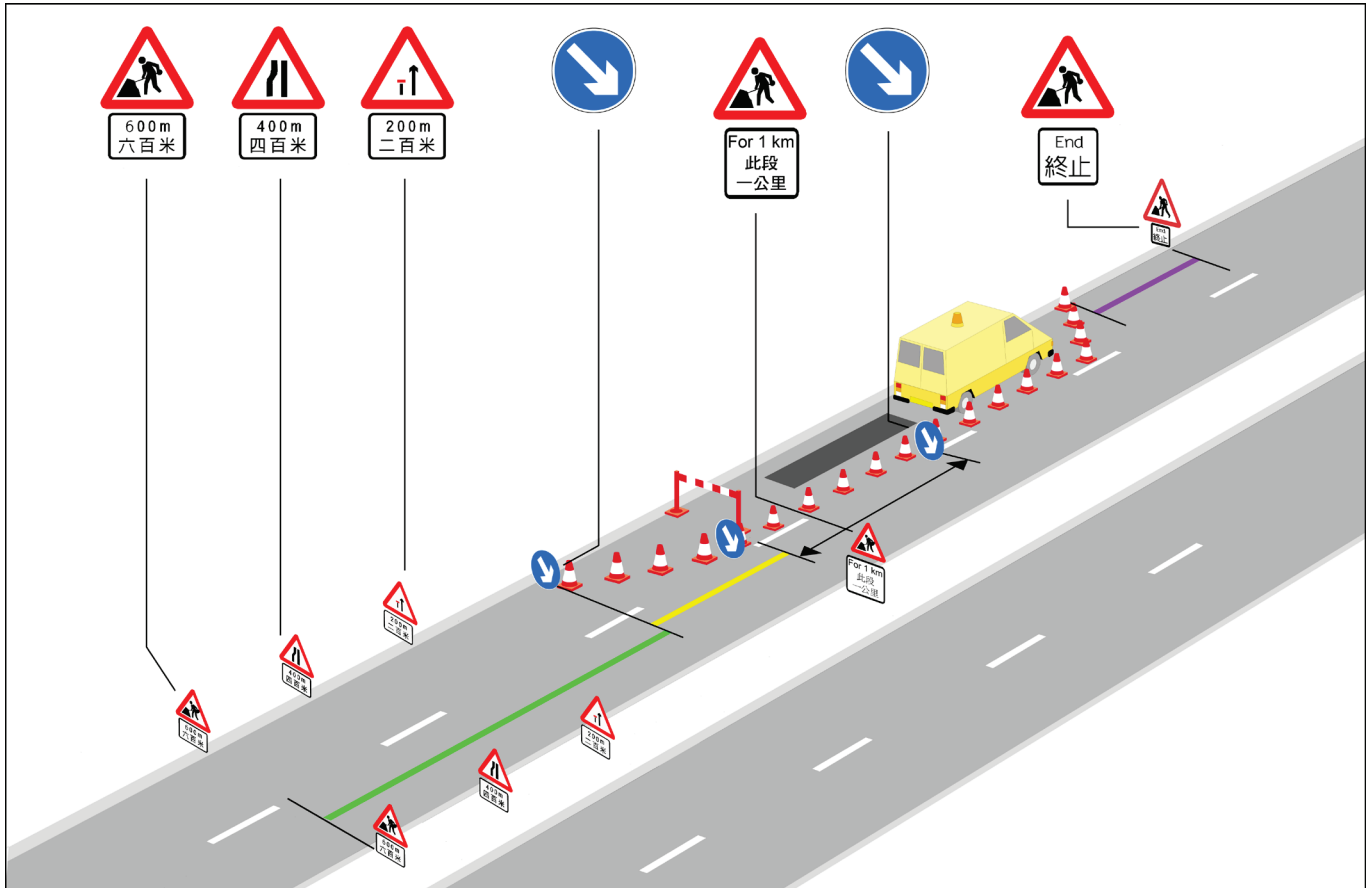
1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- $\longleftrightarrow$  5.5 m minimum unobstructed width  
最少保持 5.5 米闊的車路暢通無阻
- $\longleftrightarrow$  15 m  
15 米

Fig. 5.10 Layout of signs for road works on dual 2 lane carriageway roads. Slow lane closed

圖 5.10 在雙綫分隔車路進行道路工程，並封閉慢綫時的標誌分佈



**Note:**

1. Supplementary plate distances vary according to siting distance given in Table 5.2.
2. If the length of the traffic lane closed is more than 135 m, 'Keep Right' signs should be repeated at 135 m interval along the edge of the temporary carriageway.
3. Guarding arrangement shall be applied according to the requirements in the Code.

**註：**

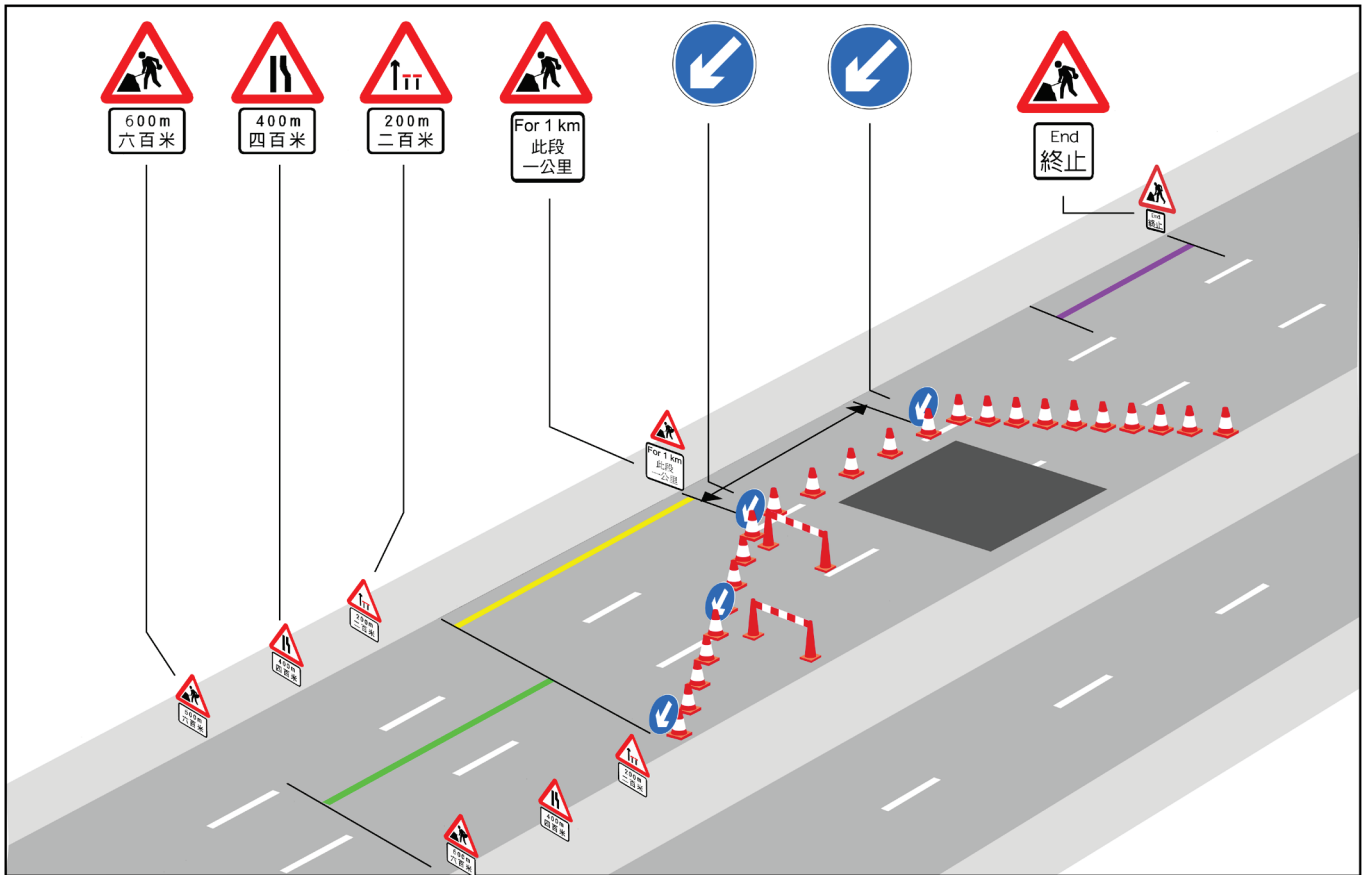
1. 標誌牌的距離隨著表 5.2 所示的設置距離而改變。
2. 如果被封閉的行車綫超過 135 米長，應沿著臨時車路的邊緣每隔 135 米設置「靠右」標誌一個。
3. 須按本守則的規定設置防護安排。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- ↔ Every 135 m  
每隔 135 米

**Fig. 5.11** Layout of signs for road works on dual 3 lane carriageway roads. Centre and fast lanes closed

**圖 5.11** 在 3 線分隔車路進行道路工程，並封閉中線及快綫時的標誌分佈



**Note:**

1. Supplementary plate distances vary according to siting distance given in Table 5.2.
2. If work is to be carried out in the centre lane both the centre and fast lanes should be closed.
3. If the length of the traffic lane closed is more than 135 m, 'Keep Left' signs should be repeated at 135 m interval along the edge of the temporary carriageway.
4. Guarding arrangement shall be applied according to the requirements in the Code.

**註：**

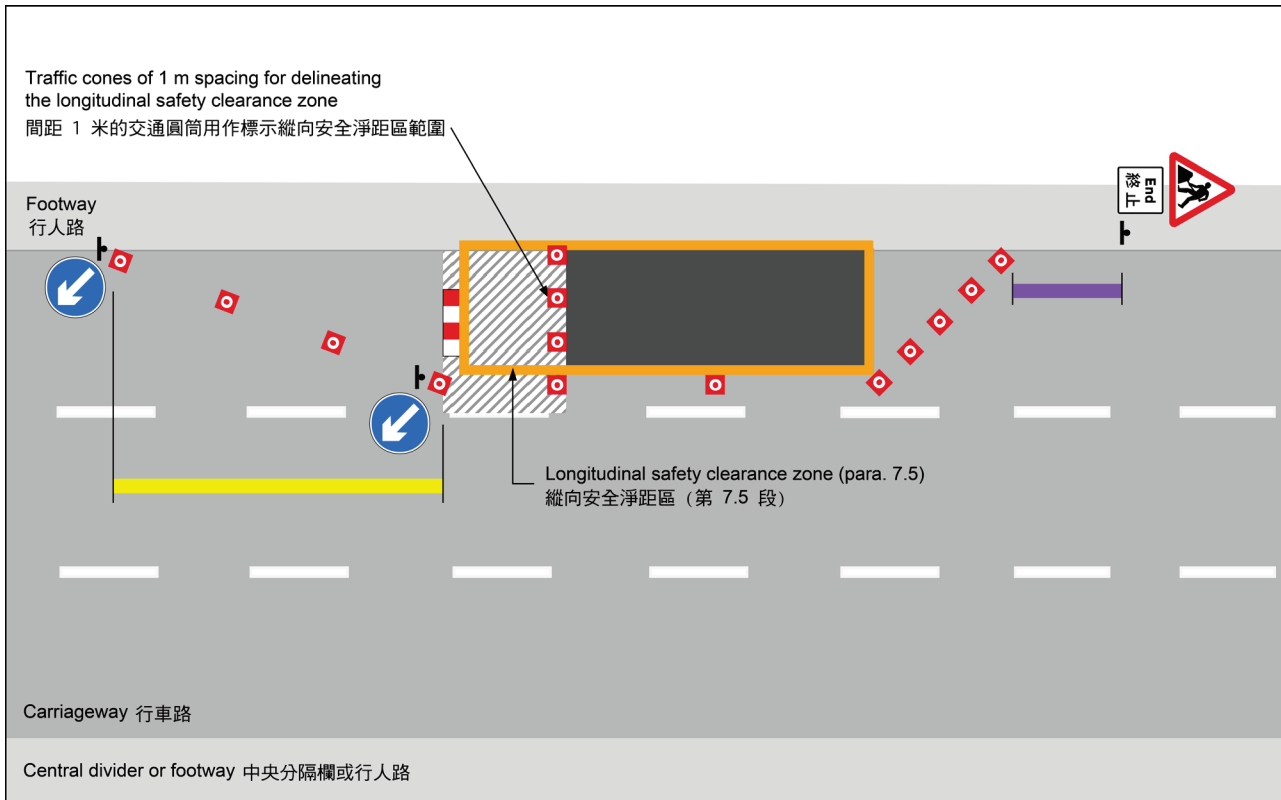
1. 標誌牌的距離隨著表 5.2 所示的設置距離而改變。
2. 如在中綫進行工程，應將中綫和快綫同時封閉。
3. 如果被封閉的行車綫超過 135 米長，應沿著臨時車路的邊緣每隔 135 米設置「靠左」標誌一個。
4. 須按本守則的規定設置防護安排。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- ↔ Every 135 m  
每隔 135 米

**Fig. 5.12** Layout of temporary tubular barriers – For obstruction or excavation on carriageway accessible to pedestrians

**圖 5.12** 臨時管狀防欄的分佈 – 位於車路上而行人可到達的障礙物或挖掘處



**Note:**

1. The temporary tubular barriers shown are for preventing pedestrians from approaching works area/obstruction and for reference only. Person responsible shall determine appropriate barrier types and fencing layout for fencing excavations. The guarding arrangement shall be applied according to the requirements in the Code.






2. Advance warning signs shall be provided as in accordance with paras. 5.5 to 5.9.

**註：**

1. 所示的臨時管狀防欄是用以防止行人接近施工地區或障礙物，並只供參考。負責人須決定適當的防欄種類及防欄分佈圍封挖掘處。須按本守則的規定設置防護安排。

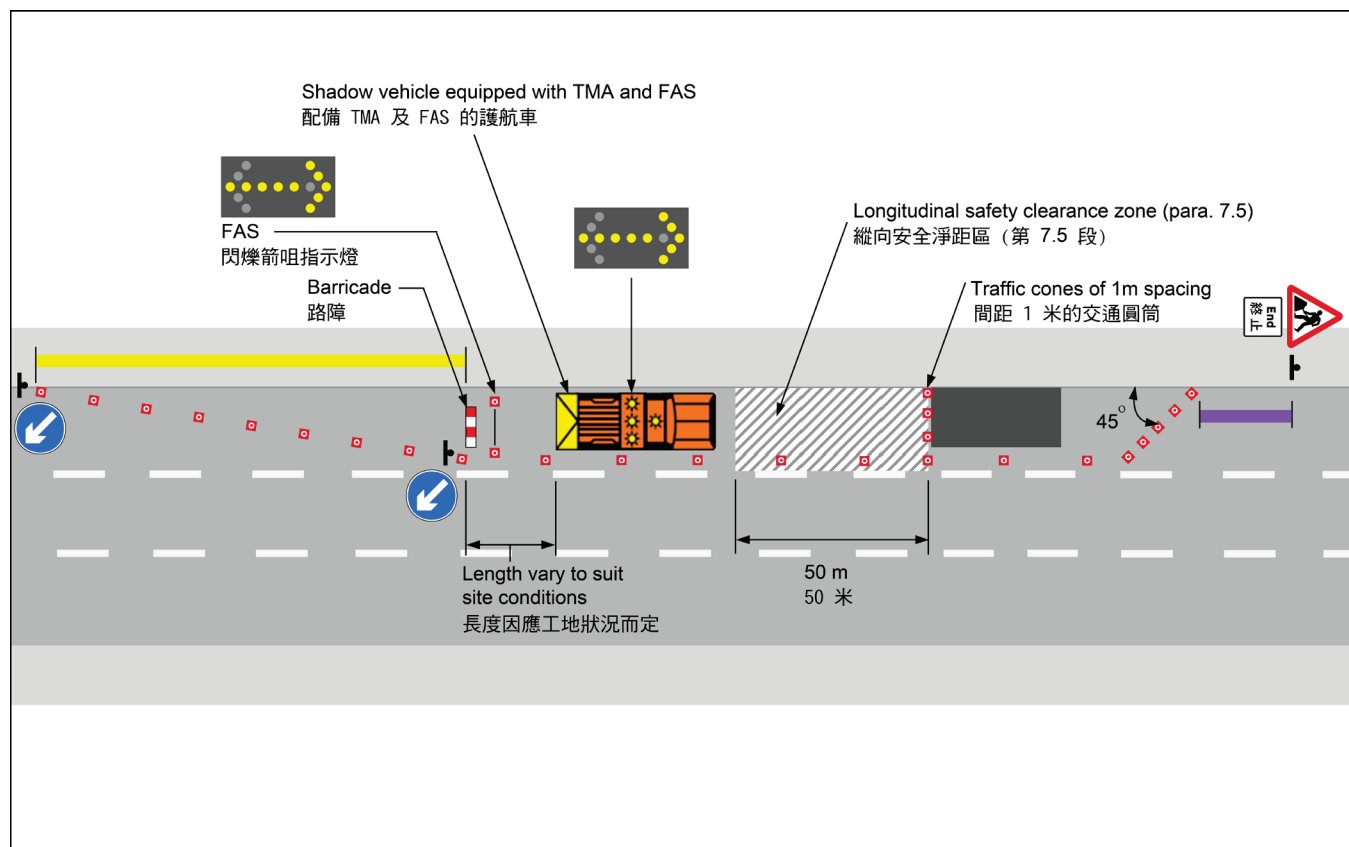
2. 預先警告標誌須遵照第 5.5 至 5.9 段的規定設置。

**Key 索引**

-  See Table 5.3 for distance of “End of Road Works” Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
-  See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
-  Works area/ Obstruction  
施工地區/ 障礙物
-  Temporary tubular barrier  
臨時管狀防欄
-  Traffic cones  
交通圓筒

**Fig. 5.13** Guarding arrangement for works on Expressways, High Speed Roads and other roads with speed limit of 70 km/h or above

**圖 5.13** 在快速公路，高速道路及時速限制 70 公里或以上的道路上進行工程的防護安排



**Note:**

1. Advance warning signs shall be provided as in accordance with paras. 5.5 to 5.9.





2. When the shadow vehicle equipped with TMA and FAS is positioned right at the end of the approach taper, the FAS placed at the location of barricade is not required.

**註：**

1. 預先警告標誌須遵照第 5.5 至 5.9 段的規定設置。

2. 如配備緩撞裝置及閃爍箭咀指示燈的護航車置於楔型引入路段的末端，則不需於路障位置放置閃爍箭咀指示燈。

**Key 索引**

-  See Table 5.3 for distance of “End of Road Works” Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
-  See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
-  Works area/ Obstruction  
施工地區/ 障礙物
-  Traffic cones  
交通圓筒

6.1 When works are carried out on the footway, the maximum width possible should be provided for pedestrian movements. Normally, a minimum clear footway width of 1.5 m should be maintained for pedestrians. Where it is not practicable to provide this minimum width and no adequate alternative route can be provided, the Police, the Transport Department and the Highways Department should be consulted, as it may be necessary to make use of the adjacent carriageway (Fig. 5.3). If the affected footway is of a short length, the footway width may be reduced to less than 1.5 m with the prior permission of the authorities. For emergency works constrained by site conditions, a reduced footway width could be provided without the prior permission of the authorities. However, the authorities should be consulted as soon as possible on the temporary arrangement. The minimum 1.5 m clear footway width should be provided and maintained once site conditions allow.

6.2 Works on footways, cycleways and verges, including the storage of spoil, plant and materials, shall be adequately guarded by continuous barriers. Reference should be made to paras. 4.21 to 4.24 for the requirements of temporary tubular barriers. Where disruption to existing tactile guide paths could occur as a result of the works, the person responsible should temporarily reprovide the affected sections of tactile guide paths, or consider devising appropriate alternative methods for guiding visually impaired persons passing the obstruction or excavation. Any unduly long detour should be avoided as far as practicable. The Police, the Transport Department and the Highways Department should be consulted on the proposed measures for minimising the impacts of road works on barrier-free facilities. The concerned organizations representing the persons with disabilities should also be consulted where appropriate. Stored plant and materials should be kept as far back as possible from the edge of the carriageway and in such a position that sightlines, particularly at junctions, are not obstructed.

6.1 在行人路進行工程時，應盡可能留下最闊的通道，供行人通過。一般來說，應為行人保留淨闊最少為 1.5 米的行人路。如果未能提供此最少淨闊度，又不能另行提供一條適當的通道時，應諮詢警務處、運輸署和路政署，因為在這個情況下可能需要利用毗連的車路(圖 5.3)。如受影響的為一段短行人路，其闊度可減至少於 1.5 米，但事先須獲有關方面批准。對於受工地限制的緊急工程，可在未有事先取得有關當局批准的情況下，提供較窄的行人路。但對此臨時安排，應盡快諮詢有關當局。一旦工地狀況許可，應立刻提供及維持不少於 1.5 米淨闊的行人路。

6.2 在行人路、單車路和路邊的工程，包括存放泥土、機械和材料，必須用連續的護欄防護。臨時管狀防欄的要求應參照第 4.21 至 4.24 段。如工程影響現有凹凸紋引導徑，負責人應臨時重置受影響的凹凸紋引導徑，或考慮採取適當的替代方法指引視障人士經過障礙物或挖掘處。應盡量避免過長的繞道。就減低對無障礙設施之影響的方案，應諮詢警務處、運輸署及路政署。在適當情況下，亦應諮詢代表殘疾人士的相關團體。機械和材料的存放地點應盡可能遠離車路邊緣及不阻礙視線，特別是在路口地方。



6.3 When works are carried out on the cycleway, a desirable minimum clear width of 1.8 m should be maintained for cyclists to dismount and wheel their bicycles or tricycles passing the works area in two-way directions. Where it is not practicable to provide this minimum width and no appropriate alternative route can be provided, the Police, the Transport Department and the Highways Department should be consulted. The advance “Cyclists Dismount” warning signs (para. 4.90) shall be erected to advise cyclists to dismount in advance of the works area. To avoid hazardous situations to cyclists (such as the works area situated at cycleway of long steep gradient, clear width less than 1.8 m, inadequate sightline or etc.) or where considered appropriate, subject to agreement of the Police, the Transport Department and the Highways Department, mandatory dismounting of all cyclists should be imposed, and the limits of area with mandatory dismounting requirement shall be indicated by “Cycling Restriction” and “End of Cycling Restriction” signs as shown in paras. 4.88 and 4.89. The siting distances and sizes of traffic signs should follow those shown in Tables 5.1 to 5.3 for speed limit up to 50 km/h.

6.4 Warning signs on the carriageway are not required for works on footways, cycleways, verges, or the central reservation of a dual carriageway if when erected, the lighting, signing and guarding equipment is further than:

- 0.5 m from the edge of the carriageway for roads with speed limit up to 80 km/h.
- 1.2 m from the edge of the carriageway for roads with speed limit over 80 km/h or expressways.

6.3 在單車路上進行工程時，應保留淨闊最少為 1.8 米的單車路，讓騎單車人士下車，並推其單車或三輪車以雙向方式經過工地。如果未能提供此最少淨闊度，又不能另行提供一條適當的通道時，應諮詢警務處、運輸署和路政署。須放置「騎單車者下車」標誌（第 4.90 段），以忠告騎單車人士在工地前下車。為避免騎單車人士的危險情況（如工地位處斜坡、單車路淨闊少於 1.8 米、視線距離不足等）或在有需要時，在警務署、運輸署及路政署的同意下，可實施強制所有騎單車者下車的要求。強制下車的範圍，須用「限制騎單車」和「限制騎單車的終止」的標誌顯示（第 4.88 及 4.89 段）。設置預先警告標誌的位置及交通標示的尺寸，應遵照表 5.1 至 5.3 的要求，而時速限制應設定為 50 公里或以下。

6.4 在行人路、單車路、路邊和雙程分隔車路的中央分道帶進行工程時，如果設立照明、標誌及防護設施後，設施：

- 於車速限制不超過每小時 80 公里的道路上，與車路邊緣的距離將多於 0.5 米，
- 於車速限制超過每小時 80 公里的道路或快速公路上，與車路邊緣的距離將多於 1.2 米，

則無需在車路上設立警告標誌。

## Introduction

7.1 This Chapter covers the practices for carrying out road works on carriageways, including those of minor nature. Although this Chapter also mentions relevant practices on expressways, reference should be made to Chapter 8 for the detailed procedures and requirements.

7.2 The person responsible shall carefully and properly plan and implement the temporary traffic arrangement for road works with due regard to the safety of the road works personnel and the impact to the traffic, according to the requirements of this Code. On this, the person responsible shall strive to avoid putting the worksite in vulnerable situation and to carry out road works in daytime as far as practicable, with time window and working space sufficiently wide for setting up, maintaining and removal of lighting, signing and guarding and protection measures before, during and after works execution. These can contribute to minimizing the risk of road works being hit by oncoming or passing vehicle. The person responsible shall obtain the prior agreement of the Transport Department and the Police to the temporary traffic arrangement for the road works according to para. 3.4.

## Lateral Safety Clearance

7.3 For expressways and roads with speed limit of 80 km/h or above, the lateral safety clearance between the works area and any part of the trafficked carriageway shall not be less than 1.2 m. Where it is impractical to provide such safety clearance, the lateral safety clearance shall be as wide as practicable with an absolute minimum of 0.5 m. Also, measures to temporarily reduce the speed of traffic passing the site to 70 km/h shall be put in place. For roads other than expressways and with speed limit of 70 km/h or below, the lateral safety clearance shall not be less than 0.5m. The above are the minimum lateral clearance requirements. Where it is reasonably practicable to

## 引言

7.1 本章是關於在車路上進行工程時的規定，包括小型工程。雖然本章也提及有關在快速公路上進行工程的準則，但詳細的程序和規定應參照第 8 章。

7.2 為確保道路工程人員的安全及減低工程所造成的交通影響，負責人須根據本守則的規定，仔細策劃及妥善執行臨時交通安排。為此，負責人應盡可能避免在欠穩妥的情況下施工，及盡可能安排工程於日間進行。同時，負責人在策劃道路工程的開展、進行和完成時，應為工程的照明、標誌和防護等措施的設置、維持和移除提供足夠的工作時間和空間，以減低施工地區被來車或經過車輛撞及的風險。就道路工程的臨時交通安排，負責人須按第 3.4 段的規定，事前獲得運輸署和警務處的同意。

## 橫向安全淨距

7.3 在快速公路及車速限制達每小時 80 公里或以上的道路，工地與有車輛行駛的車路任何部分之間應有不少於 1.2 米的橫向安全淨距。如未能提供上述安全淨距，須提供盡量寬闊而不少於 0.5 米寬的安全淨距，並將車速限制臨時減低至每小時 70 公里。在非快速公路和車速限制達每小時 70 公里或以下的道路，橫向安全淨距不得少於 0.5 米。上述為橫向安全淨距的最低要求，在合理可行的情況下，應封閉毗鄰工地的行車綫，以提供額外的安全淨距。

provide additional clearance by closing the traffic lane adjacent to the road works, this should be done.

7.4 To provide the required minimum lateral safety clearance, it may be necessary to occupy part or whole of the adjacent traffic lane if it is agreeable to relevant authorities. For situation where the required closure of part or whole of the adjacent lane to provide the lateral clearance is restrained by site conditions, the available options could include:

- Closing the road for the road works and diverting its traffic to other route, if practicable;
- By setting up guide island, imposing speed limit reduction temporarily or other means, reducing the speed of the oncoming and passing traffic to a safe limit such that the traffic will not pose any hazard to the road works personnel.

The alternative must be fully justified and properly recorded with the consideration to address workers' safety, and agreed by the Transport Department, the Police and the Highways Department.

### Longitudinal Safety Clearance

7.5 Longitudinal safety clearance zone is an unoccupied space between the end of the approach taper and the works area which provides a margin of safety for both the traffic and road works personnel and should not be used as a working space. The interface of longitudinal safety clearance zone and works area shall be delineated by traffic cones at 1 m spacing unless continuous barrier is provided along the interface. The purpose of marking the interface is to prevent road works personnel inadvertently entering this safety clearance zone. For expressways, high speed roads and other roads with speed limit of 70 km/h or above, a longitudinal safety clearance zone of 50 m in length together with the guarding arrangement specified in para. 5.22 shall be

7.4 為提供所需的最少橫向安全淨距，可能需要佔用部分或整條毗鄰的行車綫，但有關安排須獲得相關部門的事前同意。如道路工程因實際環境沒有條件封閉毗鄰所需的部份或全部行車綫，可考慮的方案包括：

- 如屬可行，應封閉受工程影響的路段，並將交通改道至其他道路；
- 設置交通導流島、臨時減低車速限制或以其它方法，設法減低接近及經過施工路段的行車速度至安全水平，從而令車輛不會對工程人員構成危險。

替代方案須獲得運輸署、警務處及路政署的同意，並須仔細記錄採用替代方案的有關理據。

### 縱向安全淨距

7.5 縱向安全淨距區是楔形引入路段末端和施工地區之間的空間，該空間不應佔據作施工之用，以提供安全距離予交通和道路工程人員。除非縱向安全淨距區和施工地區的交界設有連續防欄，否則須設置間距 1 米的交通圓筒作標示，防止道路工程人員不小心進入該安全淨距區。在快速公路、高速道路及車速限制達每小時 70 公里或以上的道路，須提供 50 米長的縱向安全淨距區及第 5.22 段所述的防護安排。在車速限制每小時 70 公里以下的道路，須提供 10 米長的縱向安全淨距區。如道路工程因實際環境沒有條件實施上述的縱向安全淨距及防護安排，有關道路工程進行前須獲得負責該工程的相關政府部門首長級職系人員或非政府

provided. For roads with speed limit below 70 km/h, a longitudinal safety clearance zone of 10 m in length shall be provided. Should there be situations where site constraints restrain the implementation of the longitudinal safety clearance zone and the guarding arrangement above, the agreement of the directorate officer in the government department or equivalent in other organization responsible for the road works, for not adopting the specified guarding arrangement must be sought.

### Works Area

7.6 Setting up the works area should commence with the placing of traffic signs, cones and barriers in accordance with Chapter 5. The operation should be performed facing oncoming traffic, beginning with the “Road Works Ahead” sign (para.4.56), and progressing in sequence moving towards the obstruction or site of works. Removal of the set-up is the reverse of this procedure.

7.7 All signs made temporarily redundant by the road works shall be covered, and any road markings made temporarily redundant shall be masked. Temporary road works signs must not obscure any permanent sign. When the signing layout has been established, it is advisable to drive through the site to check the signing from the driver’s point of view.

7.8 Once a works area is established, tools and materials must not be left outside the area. Site traffic and equipment must be parked within the works area, and movement of plant and materials to or from the site should, if possible, be restricted to “off peak” traffic periods. Site must be kept tidy, and the adjacent carriageways and footways kept free of loose stones, materials and debris. Temporary footways must be maintained in a satisfactory condition such that the movement of pedestrians is not impeded in any way.

機構相等職級人員的同意。

### 工地

7.6 進行工程前應先根據第 5 章把施工範圍用交通標誌、圓筒和防欄圍起。放置這些設施時，應面向駛來的車輛，首先放置「前面有道路工程」標誌（第 4.56 段），然後按照次序移動並朝障礙物或擬進行工程的地點逐步放置。移走設施時，則按照這個程序的相反次序進行。

7.7 因進行道路工程而暫時多餘的標誌，須加以遮蓋，而任何暫時無用的路面標記亦須加以遮蓋。臨時道路工程標誌不應遮蔽任何永久標誌。放置所有標誌後，建議駕車經過工地，從而以駕駛者的角度檢查標誌。

7.8 工地圍起後，不得將工具、材料置於工地以外的地方。工地車輛及設備均必須擺放於工地內，並盡可能在「非繁忙」交通時間運送機械和材料進出工地。工地必須保持整齊，並須盡量清除毗鄰車路和行人路上一切零散石塊、材料及廢物等。臨時行人路必須保持暢通，以免妨礙行人通過。

7.9 Particular care is required for any works adjacent to, or occupying any part of the level crossings of the Light Rail or the tramway.

### Minor Works

7.10 Minor works (which are those planned to be started and completed on the same day outside the hours of darkness and not during times of poor visibility) on minor roads may dispense with the need for “Barricade” sign (para. 4.60), provided a conspicuously coloured works vehicle is permanently in attendance, with an amber flashing roof beacon and rear markings, parked at the start of the works area.

7.11 For minor works on minor roads, the advance warning signs may be dispensed with provided a vehicle fitted with an amber flashing roof beacon is permanently in attendance throughout the works or the works are confined between parked vehicles (Fig. 5.1a & Fig. 5.1b).

7.12 A road may be considered as a minor road if it satisfies the following :

- a single carriageway access or local distributor road in the urban area;
- subject to a speed limit of 50 km/h; and
- characterised by infrequent bus services and low pedestrian flows.

7.13 It is essential that the Police, the Transport Department and the Highways Department are in agreement that a road may be categorised as a “minor road”.

### Works on Tramway Track

7.14 The practices applicable to the works on carriageway should be followed in carrying out works on tramway track, except that the requirement to fence off

7.9 在輕鐵或電車的平交道上的任何部分或其附近進行任何工程時，必須特別小心。

### 小型工程

7.10 在小路進行小型工程(即計劃在同一日的非黑夜時間開始和完成，並且不是在能見度低的情況下進行的工程)，可無需放置「路障」標誌(第4.60段)；然而，現場須經常有一輛髹上明顯顏色，並裝有琥珀色閃光車頂標燈及車尾標記的工程車輛停泊在工地起點處駐守。

7.11 在小路進行小型工程時，如工程進行期間有一輛裝上琥珀色閃光車頂標燈的車輛一直留駐現場，或工程只限於在停泊車輛之間進行(圖5.1a及5.1b)，則可免用預先警告標誌。

7.12 須符合以下條件才可視作小路：

- 市區內的不分隔車路通道或地方幹路；
- 車速限制為每小時50公里；以及
- 只有疏落巴士服務和低行人流量的道路。

7.13 須得警務處、運輸署和路政署一致同意，方能把道路界定為「小路」。

### 在電車軌道上的工程

7.14 在電車軌道上進行工程時，應遵守適用於車路工程的做法，但如在邊界設置防欄隔開工地或以交通圓筒組成楔形路段，會阻礙電車通

the works area by barriers or form tapers by traffic cones would not apply at the sides where the passage of trams would be obstructed. At these locations, the person responsible should display conspicuously signs not less than 1 m above the road surface to give to any person adequate warning of the danger. Temporary road humps should also be provided across the tramway track where additional warning to motorists is necessary.

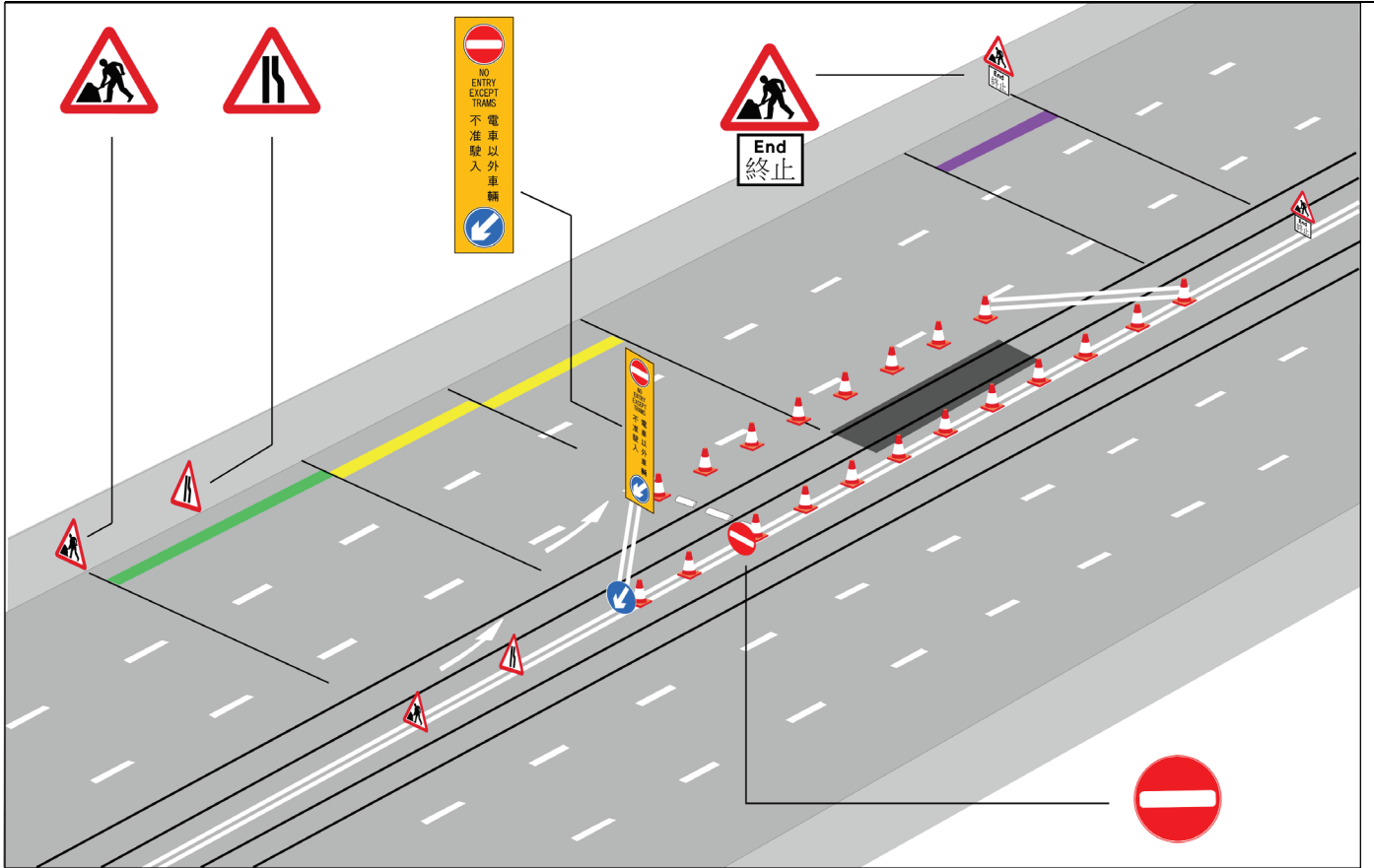
7.15 The sizes of traffic signs should follow those shown in Table 5.1 as far as possible. At locations between or adjoining tramway tracks where the width available for placing signs is limited, signs of smaller sizes may be used and some of the signs may be placed on the footway as shown on Fig. 7.1, subject to no objection by the Police, the Transport Department and the Highways Department. The layout is shown as a guide to the signing requirements for the common works configuration and adaptations in accordance with the guidelines will have to be made to meet other configurations.

過，則這些防欄及圓筒並不適用於這邊界。在這些地點，負責人應在距離路面不少於1米的地方清楚展示標誌，以便向所有人士提供足夠的危險警告。如需向駕車人士提供額外警告，應設置橫跨電車軌道的臨時路拱。

7.15 應盡量遵照表 5.1 所示的交通標誌尺寸。在電車軌道之間或毗鄰的地方，如可供設置標誌的闊度有限，在警務處、運輸署及路政署沒有反對的情況下，可使用尺寸較小的標誌，以及在行人路放置部分標誌，如圖 7.1 所示。這圖旨在為常見工程安排的標誌規定提供指引，為符合其他工程安排，應根據這些指引作出修改。

**Fig. 7.1** Layout of signs for road works on tramway track

**圖 7.1** 在電車軌道進行道路工程的標誌分佈



- Note:** 1. The minimum sizes of the traffic signs sited in between two tramway tracks shall be 300mm.  
 2. Temporary road markings RM 1116 and RM 1001 forming the tapers shall comply with the requirements prescribed in para. 4.48.  
 3. Temporary tubular barriers shall be provided as in accordance with para. 4.21 to 4.24.

- 註:** 1. 設於兩條電車軌道之間的交通標誌的最小尺寸須為 300 毫米。  
 2. 臨時路面標記 RM 1116 和組成楔形路段的 RM 1001 須遵照第 4.48 段的規定。  
 3. 臨時管狀防欄須遵照第 4.21 至 4.24 段的規定設置。

**Key 索引**

- See Table 5.2 for distance of first sign  
請參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
請參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
請參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物
- Tramway track  
電車軌道
- Road hump  
路拱

### Works on High Speed Roads and Roads of Speed Limit of 70 km/h or Above

7.16 High speed roads are designed to carry large volume of free flowing traffic. They are the trunk roads connecting to expressways and have the following typical characteristics:

- speed limit of 70 km/h or above;
- no adjacent pedestrian facilities; and
- directly connecting to expressways with no traffic lights.

7.17 For high speed roads and roads of speed limit of 70 km/h or above, because of the high speed and large volume of traffic flow, careful planning for road works must be made according to the requirements stipulated in para. 3.4, taking into account the road conditions and constraints such as allowable working hours, before the commencement of any work.

7.18 Basically, the procedures and requirements of lighting, signing and guarding for road works on these roads should follow those prescribed in the previous Chapters. To enhance traffic safety and where considered appropriate, consideration should be given to adopting the practices for expressways.

7.19 The Highways Department operates cyclic lane closure programmes for some high speed roads to allow necessary highway maintenance works to be carried out. To minimise traffic disruption and to separate lane closures, other maintenance works should as far as possible be phased in such a way to take full opportunity of lane closures carried out under these cyclic programmes. Information of the cyclic lane closure programmes is circulated by the Highways Department in advance to relevant parties.

### 在高速道路及車速限制達每小時 70 公里或以上的道路上的工程

7.16 高速道路是為容納高流量及直通無阻的交通而設計。該等道路是連接快速公路的幹路，並有以下典型特性：

- 車速限制為每小時 70 公里或以上；
- 附近無行人路設施；以及
- 直接連接快速公路和沒有交通燈。

7.17 就高速道路及車速限制達每小時 70 公里或以上的道路而言，因其車速較快和交通流量高，故此在該處進行道路工程前，必須按第 3.4 段的規定小心計劃，並考慮道路的情況和容許的施工時間等限制。

7.18 基本上，為這些道路工程設置照明、標誌和防護設備的程序和要求應遵照前章所述。為加強交通安全或在有需要時，應考慮採用快速公路的措施。

7.19 路政署對某些高速道路實行週期性行車綫封閉計劃，以便進行必要的道路維修工程。為盡量減少干擾交通及把行車綫分開封閉，應盡可能同時進行其他維修工程，以充分利用這些週期性行車綫封閉計劃。路政署會事先向有關方面傳閱週期性行車綫封閉計劃的資料。



## Mobile Operations

7.20 Mobile operations are those activities taking place on roads (but not contained within a fixed site) where operation vehicles are progressing with the flow of traffic at a speed not exceeding 25km/h or the speed specified by the manufacturer of the TMA, whichever is the less. In these operations, the works vehicles may move along the road intermittently or continuously, but planned stops shall not be more than 15 minutes each. Mobile operations mainly include the following activities:

- (a) setting up lane closure,
- (b) removing lane closure,
- (c) road lighting maintenance,
- (d) picking up litter,
- (e) landscaping work, e.g. pruning, weeding and watering,
- (f) gully emptying,
- (g) road sweeping and cleansing, and
- (h) patching pot-holes.

7.21 The stopping of works vehicles and the presence of slow moving works vehicles on expressways, high speed roads and roads with speed limit of 70 km/h or above without lane closure should be carried out in a well planned and very careful manner because they will constitute a potential danger to other road users. Such vehicles must be very carefully marked, lit and signed to give as much warning as possible to approaching traffic. Besides being painted in bright yellow (para. 8.3), relevant works vehicles must be fitted with signs at the back, amber flashing rooftop beacons and also flashing arrow signs (FAS) (Appendix E, Fig. E-1). If the FAS

## 流動作業

7.20 流動作業是指在道路（但在固定工地內）進行的活動，而作業車輛會以每小時不超過 25 公里或車載式緩撞裝置製造商指定的車速在道路上行駛，以兩者較低者為準。在流動作業中，作業車輛會以慢速斷續或連續地在道路上行駛，但每次有計劃的停頓不可超過 15 分鐘。流動作業主要包括下列活動：

- (a) 封閉行車綫；
- (b) 解除封閉行車綫；
- (c) 維修路燈；
- (d) 清理垃圾；
- (e) 進行環境美化工程，如修剪、除草及灑水；
- (f) 清理溝渠；
- (g) 清掃及清洗道路；及
- (h) 修補路面凹坑。

7.21 在快速公路、高速道路及車速限制每小時 70 公里或以上的道路，如沒有封閉行車綫，應周詳計劃和非常小心地在道路上使用慢駛工程車輛或停泊工程車輛，因為這些車輛始終對其他道路使用者構成潛在危險。工作人員務須謹慎為這些車輛加上標記、照明和標誌，盡可能向靠近的車輛發出最多警告。除髹上鮮黃色（第 8.3 段）之外，這些車輛必須在尾部裝置標誌，以及裝上琥珀色閃光車頂標燈和指示燈號（附錄 E 圖 E-1）。如指示燈號無法裝設在工程車上（如掃街車），指示燈號可裝設在由工程車拖行的拖架上，作為替代方法。工程

cannot be mounted on the rear of the works vehicle (such as a road sweeper), the sign may be mounted on a trailer on tow by the works vehicle as an alternative. The flashing beacons and FAS must be kept operating at all times when the works vehicles are stopping or moving slowly.

7.22 Slow moving works vehicles carrying out mobile operation works on expressways, high speed roads and other roads with speed limit of 70 km/h or above must be escorted by vehicle(s) each mounted with a FAS and truck mounted attenuator in such a way as to provide the earliest possible warning to other motorists. The mobile operation procedures set out in Appendix A shall be followed.

7.23 For mobile operations on roads with speed limit below 70 km/h, advance signing shall be provided, by means of a "Road Works Ahead" sign (para. 4.56) together with an appropriate supplementary plate (para.4.91). If it is necessary to stop traffic, traffic control equipment must be used, together with appropriate coning and warning signs as shown in Figs. 5.5 to 5.7. The use of red flags or arm waving is not permitted. On roads where the alignment is poor or there is insufficient width for two way traffic, advance warning to traffic in each direction should be given by a "Road Works Ahead" sign (para. 4.56). The distance between the signs should be sufficient to enable several operations to be carried out.

車輛停止或慢駛時，閃動標燈和指示燈號必須保持亮著。

7.22 在快速公路、高速道路及車速限制達每小時 70 公里或以上的道路上進行流動作業時，慢駛工程車輛須由裝有指示燈號和車載式緩撞裝置的車輛護航，以盡早向其他駕駛人士發出警告。須按照附錄 A 規定的程序進行流動作業。

7.23 在車速限制每小時 70 公里以下的道路進行流動作業，須使用「前面有道路工程」標誌（第 4.56 段）及適當的輔助標誌牌（第 4.91 段），以提供預先警告。如需要截停車輛，必須使用交通管制設備，連同適當的圓筒和警告標誌，如圖 5.5 至 5.7 所示。不可使用紅旗或揚手截停車輛。在線向欠佳或寬度不足以供雙程行車的路上進行工程時，應同時在兩個行車方向設置「前面有道路工程」標誌（第 4.56 段），以預先警告車輛。標誌之間的距離應足以進行數項工作。



## Introduction

8.1 Except otherwise stipulated in this Chapter or the Appendices, the general requirements described in Chapters 1 to 7 also apply to expressway works. This Chapter gives a summary of the requirements specifically applicable to expressway works. It also provides guidelines on mobile operations and road closures for expressway works.

## Summary of Requirements

8.2 The following is a summary of requirements applicable to expressway works. For details, the relevant paragraphs in Chapters 1 to 7 should be referred to.

- size of warning sign to be 1200 mm (Table 5.1)
- first advance warning sign to be placed 600 m ahead (Table 5.2)
- 1000 mm high cones to be used (para. 4.16, Table 5.4)
- cone spacing to be 9 m parallel to traffic lane (18 m for short duration day time works not at tight bends nor near slip roads) (para. 4.20)
- approach and end taper cone spacing to be 2 m and 1 m respectively (para. 4.20)
- temporary tubular barriers not to be used (para. 4.24)
- high intensity battery operated beacons to be used along tapers and in conjunction with advance warning signs (para. 4.34)
- road hazard warning lanterns to be mounted on cones 1.2 m above road surface (para. 4.37)

## 引言

8.1 除非於本章或附錄中另有規定，否則第 1 至 7 章所述的一般規定亦適用於快速公路工程。本章撮述特別適用於快速公路工程的規定，同時就快速公路工程的流動作業及封閉道路等事宜提供指引。

## 規定撮要

8.2 下文撮述適用於快速公路工程的規定。如需詳細資料，請參看第 1 至 7 章的有關段落。

- 警告標誌的尺寸須有 1 200 毫米（表 5.1）
- 第一個預先警告標誌須設於 600 米前（表 5.2）
- 須使用 1 000 毫米高的圓筒（第 4.16 段，表 5.4）
- 與行車綫平行放置的圓筒間距為 9 米（並非在急彎亦不在連接路附近進行的日間短暫工程，則間距為 18 米）（第 4.20 段）
- 在楔形引入及引出路段的圓筒間距分別為 2 米及 1 米（第 4.20 段）
- 不可使用臨時管狀防欄（第 4.24 段）
- 沿著楔形路段使用高亮度電池標燈，標燈應與預先警告標誌一起使用（第 4.34 段）
- 道路危險警告燈安裝在圓筒上，並於路面以上 1.2 米（第 4.37 段）

- Flashing arrow signs (FAS) to be used with barricade signs to indicate beginning of temporary diversion (para. 4.42)
- slow moving works vehicles to be mounted with FAS (para. 4.42)
- high visibility clothing to be worn by workers (para. 4.52)
- 1.2 m lateral safety clearance to be maintained (paras. 7.3 and 7.4)
- 50m longitudinal safety clearance zone to be maintained (para. 7.5)
- shadow vehicle with TMA in front of the 50m long longitudinal safety clearance zone to be placed before the works area as guarding provision (para. 5.22 and 7.5)
- any permanent variable message signs, lane control signals, variable speed limit signs and/or traffic information systems in the vicinity of lane closure shall be displayed with suitable message to provide additional warning to motorists. The Transport Department and/or tunnel operator(s) shall be liaised in advance and during the works for this purpose.
- 閃爍箭咀指示燈號（下稱指示燈號）與路障標誌同時使用，以指示道路開始臨時改道（第 4.42 段）
- 慢駛的工程車輛須裝上指示燈號（第 4.42 段）
- 工程人員須穿上高能見度衣服（第 4.52 段）
- 提供 1.2 米的橫向安全淨距（第 7.3 及 7.4 段）
- 提供 50 米的縱向安全淨距（第 7.5 段）
- 在施工地區前的縱向安全淨距區的前方，設置配備車載式緩撞裝置的護航車作防護（第 5.22 段至 7.5 段）
- 於施工路段附近的固定交通訊息顯示屏、可變車速限制標誌、行車線管制燈號或交通資訊系統須顯示適當的訊息，為駕駛人士提供額外警告。為作出相應安排，須於工程進行前及進行期間，與運輸署及／隧道營辦商聯絡。



## Conspicuity

8.3 In addition to the requirement that persons carrying out expressway works must wear reflective jackets (para. 4.52), the Road Traffic (Expressway) Regulations (Cap. 374Q) also require that vehicles used must be painted bright yellow in colour in a shade approved by the Commissioner for Transport. As a guide the following shades are regarded as acceptable :

- No. 008 E51 in British Standard 5252F:1976; or
- No. BSC 355 in British Standard 381C:1996; or
- No. BSC 356 in British Standard 381C:1996.

8.4 The paintwork of the vehicle must be kept in good repair and the vehicle kept clean at all times, so that the vehicle remains conspicuous to other traffic. The name of the company in respect of which the permit for expressway works has been issued must be marked in black in at least one prominent position on each side of the vehicle.

## Mobile Operations

8.5 Mobile operations are those activities taking place on roads (but not contained within a fixed site) where operation vehicles are progressing with the flow of traffic at slow speed. In these operations, the vehicles may move along the road intermittently or continuously. The procedures set out in paras. 7.21 and 7.22 shall be followed in mobile operations on expressways.

## Lane, Shoulder and Central Reservation Closures

8.6 Due to the free flow condition and the generally higher speed on expressways, the following requirements must be carefully observed:

- Traffic must always be presented with a full lane to travel in. This means that when closing a lane, a

## 明顯易見

8.3 根據道路交通（快速公路）規例（第 374Q 章），在快速公路進行工作的人員，必須穿上反光外衣（第 4.52 段），而有關車輛必須髹上運輸署署長認可的鮮黃色。以下是認可的色調：

- 英國標準 5252F:1976 內第 008 E51 號；或
- 英國標準 381C:1996 內第 BSC 355 號；或
- 英國標準 381C:1996 內第 BSC 356 號

8.4 車輛表面的油漆必須保養良好，而車輛則須經常保持清潔，以便其他駕駛人士容易看見。必須在車輛每面最少一個當眼位置用黑色標示獲發快速公路工程許可證的公司名稱。

## 流動作業

8.5 流動作業是指在道路（但在不在固定工地內）進行的作業，而作業車輛會以慢速斷續或連續地在道路上行駛。在快速公路上須按照第 7.21 和 7.22 段規定的程序進行流動作業。

## 封閉行車綫、路肩及中央分道帶

8.6 由於快速公路上交通直通無阻，車速一般較高，所以須謹守下述規定：

- 須維持全條行車綫予車輛行駛。意思是當封閉行車綫時，須封閉整條行車綫，切勿

full lane width must always be closed, never part of a lane.

- A lateral safety clearance as specified in paras. 7.3 and 7.4 shall be maintained between any activity and the trafficked carriageway. Since partial lane closure on expressways is not permitted, the lateral safety clearance required will necessitate closure of an additional traffic lane if the total width of works area and lateral safety clearance is wider than one traffic lane.
- A longitudinal safety clearance zone together with the guarding arrangement as specified in para 7.5 shall be maintained between the end of the approach taper and the works area.

8.7 Layouts shall be designed so that traffic merges to the left if more than one lanes on the left side of a carriageway are to be closed. This may necessitate the forming of a guide island before the actual work zone to merge traffic to the left before shifting traffic back to the right side of the work zone. Traffic could be merged direct to the right at the lane closure if only the leftmost lane is being closed. Left merging must be followed if it is necessary to close, using a single approach taper, more than one lanes leaving only the right most lane for traffic.

8.8 The sign layouts in Appendix B are shown as a guide to the signing requirements for the most common expressway works configurations. The sign layouts cannot cover every eventuality, and adaptations in accordance with the guidelines set out in the Code will have to be made for other situations.

### Setting Up and Removal of Lane Closure

8.9 The Police must always be informed before a lane closure is implemented.

封閉行車綫的一部分。

- 任何工作與有車輛行駛的車路之間，須有按第 7.3 及 7.4 段規定的橫向安全淨距。由於在快速公路不可封閉行車綫的一部分，如施工地區及橫向安全淨距的總闊度多於一條行車綫，需封閉額外行車綫以提供所需的橫向安全淨距。
- 在楔形引入路段末端和施工地區之間的空間，須按第 7.5 段規定設置縱向安全淨距區及防護安排。

8.7 如需在車路左邊封閉多於一條行車綫，須把分佈設計成可讓交通向左匯流。這或需在實際工地之前組成一個交通導流島，以便先把交通向左匯流，然後才導向至工地右邊。如只封閉最左邊行車綫，可在需封閉行車綫的右方直接把車輛匯流。如需用單獨一個楔形引入路段封閉多過一條行車綫並只餘下最右行車綫通車，則須採用向左匯流的方法。

8.8 對於最常見的快速公路工程，附錄 B 的標誌分佈可作為設置所需標誌的指南。這些標誌分佈不包括所有可能發生的情況，在其他情況下，須根據本守則所述指引作出修改。

### 封閉及撤銷封閉行車綫

8.9 每次封閉行車綫前，須先通知警務處。

8.10 Depending on the traffic density and the road conditions, it may be necessary to have the assistance of the Police when setting up or subsequently removing a lane closure on an expressway. This applies particularly to the placement of advanced warning signs in the central reservation and to the establishment of the approach taper.

8.11 The person responsible should load the devices for the closure onto the sign transporter and double check against the signing layout plan before bringing the devices to the site.

8.12 When it is necessary to set up a guide island to force left merging, the whole guide island shall be in place before setting up cones and other signs to delineate the main work zone.

8.13 When it is necessary to set up lane closures during the hours of darkness, extreme caution must be exercised during the whole operation. The procedure for setting up the lane closure will be the same as that for day time closures, except that the appropriate road hazard warning lanterns must be set out at the same time as the signs and cones, so that approaching traffic is always presented with lanterns and signing.

8.14 If there is indication that the closure cannot be set up without undue risk to either personnel or other road users, say because of exceptional heavy traffic flow, the closure should be delayed until the traffic condition is more favourable. Similarly, if prior to or during the course of the setting up an incident such as an accident occurs adjacent to the lane being closed, it may be necessary to abandon the setting up work to avoid undue obstruction to traffic.

8.10 視乎交通密度及道路情況，在封閉或隨後撤銷封閉快速公路行車綫時，或需警務處協助。這特別適用於在中央分道帶裝設預先警告標誌，及設置楔形引入路段。

8.11 負責人應順著將會放置的次序把封路設備放上標誌運送車，並在運送設備前往工地之前，根據標誌分佈圖再檢查一次。

8.12 如需設置交通導流島以引導交通向左匯流，則須先妥當設置交通導流島，然後才設置用以標示主要工地範圍的圓筒及其他標誌。

8.13 如需在黑夜時間設置封閉行車綫設施，整個過程須極小心進行。設置封閉行車綫設施的程序與在日間進行的程序相同，不同的是在設置標誌及圓筒時須同時設置適當的道路危險警告燈，以便在任何時間都能向駛來的車輛顯示警告燈及標誌。

8.14 如有跡象顯示封閉行車綫會令工作人員或其他道路使用者有很大危險，例如交通流量特大，則應延遲封閉，以待交通情況有所改善。同樣，如在設置封閉設施之前或在設置過程中有事故發生，例如在正要封閉的行車綫旁邊發生交通意外，則或需終止設置工作，以免對交通造成不必要的阻礙。

### Entry and Exit Arrangement

8.15 All vehicles shall enter or leave the lane closure only at the designated entry or exit points. The entry and exit arrangements and procedures are set out in Appendix C.

### Maintenance Works

8.16 The Highways Department operates cyclic lane closure programmes for every expressway to allow any necessary highway maintenance works to be carried out. To minimise traffic disruption and separate lane closures, other maintenance works should as far as possible be phased in such a way to take full opportunity of lane closures carried out under these cyclic programmes. Information of the cyclic lane closure programmes is circulated by the Highways Department in advance to relevant parties.

8.17 When planning road pavement repairs or resurfacing works, the lateral safety zone (paras. 7.3 and 7.4) shall be taken into account. It shall be necessary to close the middle lane to create a safety zone if the whole width of the slow lane is to be occupied for the resurfacing work. An alternative is to carry out the works when the whole carriageway can be closed.

### 出入安排

8.15 所有車輛只可在指定的出入地點進出封路範圍。出入安排和程序載於附錄 C。

### 維修工程

8.16 路政署對每條快速公路實行週期性行車綫封閉計劃，以便進行必要的道路維修工程。為盡量減少干擾交通及把行車綫分開封閉，其他維修工程應盡可能同時進行，以充分利用這些週期性行車綫封閉計劃。路政署會事先向有關方面傳閱週期性行車綫封閉計劃的資料。

8.17 策劃路面修葺或重鋪工程時，須考慮第 7.3 及 7.4 段有關設置橫向安全淨距區的規定。如要封閉整條慢綫以進行路面重鋪工程，則須要封閉中綫以闢出安全區。另一個做法是在合適的時間封閉整條車路以進行工程。



# 9

## Points to Remember 緊記事項

- If you obstruct the road traffic, you must erect signs.
- If you restrict the road width to less than 5.5 m, you must operate traffic control.
- Check that your lighting, signing and guarding proposals comply with the Code.
- Consult the appropriate authorities before starting your work.
- Erect necessary lighting, signing and guarding equipment before commencing work and check the layout.
- Ensure that all lighting, signing and guarding equipment are regularly maintained.
- Keep the site tidy.
- When you have completed the job, remove the lighting, signing and guarding equipment immediately.
- Persons and vehicles must be conspicuous and readily visible to other road users.
- Traffic must always be provided with a full lane on expressways.
- Escort must be provided in carrying out mobile operations on expressways, high speed roads and other roads with speed limit of 70 km/h or above.
- 如阻塞道路交通，必須豎立標誌。
- 如限制路面闊度以致其不足 5.5 米，則必須實施交通管制。
- 所有照明、標誌及防護計劃均須符合本守則的規定。
- 工程開始前，應諮詢有關部門。
- 進行工程前，應設置所需的照明、標誌及防護設施，並核對其位置。
- 確保定期保養所有照明、標誌及防護設施。
- 保持工地整齊。
- 工程完成後，立即移走照明、標誌及防護設施。
- 工程人員和車輛必須明顯易見，讓其他道路使用者容易看見。
- 必須在快速公路提供全條行車綫。
- 在快速公路、高速道路及其它時速 70 公里或以上的道路上進行流動作業時，必須提供護航。

## A-1 Mobile Operation

A-1.1 In mobile operations, works vehicle(s) (WV(s)) may move along the road intermittently or continuously, but planned stops shall not be more than 15 minutes each. Operation vehicles are progressing with the flow of traffic at a speed not exceeding 25km/h or the speed specified by the manufacturer of the truck mounted attenuator (TMA), whichever is the less. Mobile operations mainly include the following activities:

- (a) setting up lane closure,
- (b) removing lane closure,
- (c) road lighting maintenance,
- (d) picking up litter,
- (e) landscaping work, e.g. pruning, weeding and watering,
- (f) gully emptying,
- (g) road sweeping and cleansing, and
- (h) patching pot-holes.

A-1.2 Mobile operation procedures shall be adopted on expressways, high speed roads and all other roads with speed limit of 70km/h or above. The general requirements for carrying out mobile operations are set out in section A-2. The working procedures for setting up lane closure, removing lane closure and other types of mobile operations (road lighting maintenance, picking up litter, landscaping work, gully emptying, road sweeping and cleansing, and patching pot-holes) on expressways are set out in sections A-3, A-4 and A-5 respectively. The principles of these procedures are applicable to mobile operation on high speed roads and roads with speed limit of 70 km/h or above. Section A-6 sets out the safety

## A-1 流動作業

A-1.1 在流動作業中，工程車會斷續或連續地在道路上行駛，但每次有計劃的停頓不可超過 15 分鐘。車輛是以每小時不超過 25 公里或車載式緩撞裝置製造商指定的車速行駛，以兩者較低者為準。流動作業主要包括下列活動：

- (a) 封閉行車綫；
- (b) 解除封閉行車綫；
- (c) 維修路燈；
- (d) 清理垃圾；
- (e) 進行環境美化工程，如修剪、除草及灑水；
- (f) 清理溝渠；
- (g) 清掃及清洗道路；及
- (h) 修補路面凹坑。

A-1.2 在快速公路、高速道路及其他車速限制為每小時 70 公里或以上的道路工作時，須採用流動作業程序。下文第A-2 節說明進行流動作業時的一般規定。下文第A-3、A-4 及A-5 節分別載述在快速公路進行封閉行車綫、解除封閉行車綫及其他種類的流動作業（維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路，以及修補路面凹坑）的工作程序。這些工作程序的原則亦適用於在高速道路和車速限制為每小時 70 公里或以上進行的流動作業。下文第A-6 節列明進行流動作業時的安全預防措施，而第A-7 節則列明在進行

precautions in carrying out mobile operations. Procedures for lane changing during mobile operations are set out in section A-7.

流動作業時轉換行車綫的程序。

## A-2 General Requirements

## A-2 一般規定

A-2.1 Depending on the traffic conditions, call the Police for assistance when necessary especially during the hours of darkness before the mobile operation.

A-2.1 視乎交通情況，在進行流動作業前和有需要時尋求警務處協助，特別在黑夜時間。

A-2.2 Under the following circumstances, mobile operation procedures shall not be carried out, except in emergencies:

A-2.2 如遇上下列情況，不應進行流動作業，但緊急事故除外：

(a) Work requiring WV(s) to stop for more than 15 minutes.

(a) 需要工程車停頓超過15分鐘的工程。

(b) Inclement weather and poor visibility.

(b) 惡劣天氣和能見度低。

(c) Traffic flow is significantly affected.

(c) 會嚴重影響交通流量。

A-2.3 During the mobile operation,

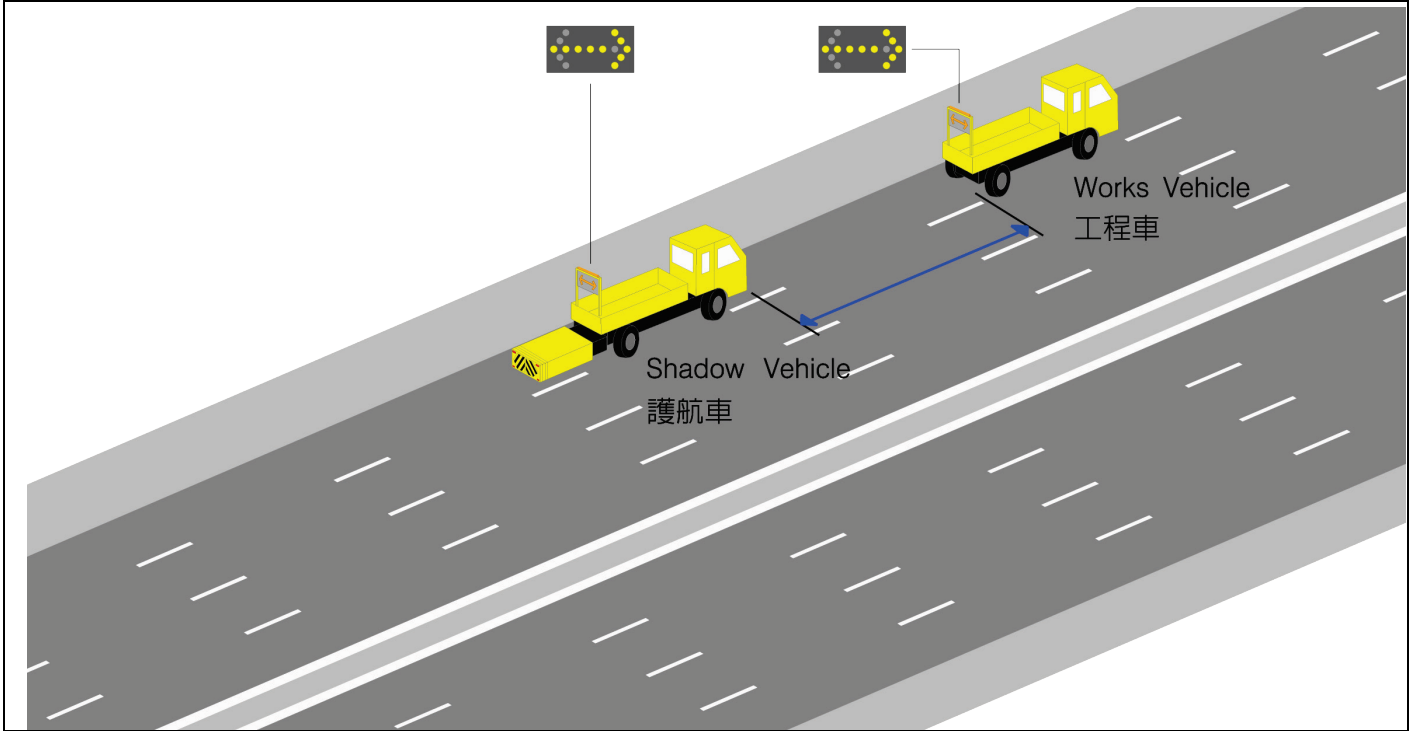
A-2.3 在進行流動作業時，

(a) the WV(s) must be escorted by a shadow vehicle (SV) equipped with a Level 3 TMA. All SVs mentioned in this Appendix refer to SVs equipped with a Level 3 TMA according to the requirements stipulated in paras. 4.53 and 4.54 of this Code. The TMA shall be unfolded during mobile operations. All the WV(s) and SVs shall be equipped with a flashing arrow sign (FAS). A typical arrangement is shown in Fig. A-1. The FAS installed on the SV should be positioned near the vehicle end as close as possible, but without affecting the folding and unfolding operations of the TMA.

(a) 工程車必須由配備緩撞裝置（第三級）的護航車同行。本附錄所述的所有的護航車是指已按本守則第 4.53 及 4.54 段的規定配備緩撞裝置（第三級）的護航車。在進行流動作業時，緩撞裝置須打開。所有工程車及護航車須配備閃爍箭咀指示燈號（下作指示燈號）。典型的安排載於圖A-1。指示燈號在不影響緩撞裝置的摺合和打開的操作下，應盡量安裝在護航車靠近車尾的位置。

Fig. A-1 Mobile Lane Closure

圖A-1 流動性行車綫封閉



**Note:**


1. When necessary, additional SV equipped with TMA shall be provided between the SV and the first WV to prevent any vehicle bypassing the SV from wedging-in the relevant road section inadvertently. For details, please refer to para. A-2.3(c).

**註：**

1. 如有需要，須在第一輛工程車與護航車之間加入額外配備緩撞裝置的護航車，以免車輛越過護航車後意外楔入有關路段。詳情請參閱第 A-2.3(c)段。

**Key 索引**

← → See Table A-1 for the buffer distances  
參看表 A-1 所示的緩衝距離

 Flashing arrow sign (FAS)  
閃爍箭咀指示燈號

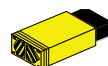
 TMA (Level 3)  
緩撞裝置 (第三級)

Table A-1 Table for Buffer Distance<sup>4</sup> for shadow vehicles<sup>1</sup> 表 A-1 護航車<sup>1</sup> 的緩衝距離表<sup>4</sup>

Speed Limit (km/h) 速度限制 (公里/小時)	Recommended Distance (m) <sup>2</sup> 推薦距離 (米) <sup>2</sup>	
	Stopping Works Vehicle during Mobile Operation 流動作業中停下的工程車輛	Slowly Moving Works Vehicle during Mobile Operation <sup>3</sup> 流動作業中慢駛工程車輛 <sup>3</sup>
Greater than 大於 80	50	55
70 – 80	50	45
Less than 小於 70	25	30

Note:

註：

- 1 Shadow vehicle for mounting of TMA shall have a minimum weight of 11,000kg.  
護航車的最少重量為 11 公噸。
- 2 Recommended distance (m) is the distance between the front of the shadow vehicle and the beginning of works area which is the first worker/operation/vehicle to be protected.  
推薦距離 (米) 為介乎護航車前端及施工範圍的起點，意指前面受保護的工人/作業/車輛。
- 3 Distances are appropriate for mobile operation speeds up to 25 km/h.  
這些距離適用於速度為每小時 25 公里或以下的流動作業。
- 4 The shadow vehicle shall keep a distance of at most 100m from the works vehicle(s).  
護航車須與工程車保持不多於 100 米的距離。

- (b) the TMA shall be folded up or unfolded at a suitable place. A suitable place refers to an area where the folding or unfolding of TMA shall not cause any disturbance to any oncoming or nearby vehicles. Hard shoulders or laybys of widths not less than 3m and with sufficient visibility distances to oncoming vehicles are considered as a suitable place where the TMA can be folded up or unfolded;
- (c) the distance between the WV(s) and the SV shall follow the buffer distances shown in Table A-1. For moving works, such as road lighting maintenance, picking up litter, landscaping works, gully emptying, road sweeping and cleansing, and patching pot-holes, at a bend or location with inadequate sightline distance, when the geometry of the road section of inadequate sightline distance is in such a manner that driver of a vehicle immediately bypassing the SV could not see the WV ahead, additional SV equipped with TMA shall be provided between the SV and the first WV to prevent any vehicle bypassing the SV from wedging-in the relevant road section inadvertently. The last SV of the convoy shall stay before the start of the bend or before the crest of a slope. The SV shall also keep a distance of at most 100m from the WV(s);
- (d) all the WV(s) and SV(s) shall be equipped with communication facilities in order to maintain effective communication. All communication shall be conducted in a manner in full compliance of the Road Traffic (Traffic Control) Regulations reg. 42(1)(g); and
- (b) 緩撞裝置須在適當的地方摺合或打開。適當的地方是指在該處摺合或打開緩撞裝置均不會對任何駛來或附近車輛造成影響。寬度不少於 3 米及對駛來的車輛提供充足能見距離的路肩或避車處，可視為適合緩撞裝置摺合或打開的地方；
- (c) 工程車與護航車之間的距離須遵照表 A-1 所規定的緩衝距離。在彎位或沒有足夠視線距離的地方進行流動工程，如維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路及修補路面凹坑時，如路形的視線距離不足，導致車輛在越過護航車後無法看見前方的工程車，須在第一輛工程車與護航車之間加入額外配備緩撞裝置的護航車，以免車輛越過護航車後意外楔入有關路段。車隊尾的護航車須停在彎位開始前的地方或在坡頂前的地方。護航車亦須與工程車保持不多於 100 米的距離；
- (d) 所有工程車和護航車須配備通訊設施，以維持有效通訊。進行任何通訊時，須全面遵照道路交通(交通管制)規例第 42(1)(g)條的規定；及

- (e) all the WV(s) and SV(s) must switch on the vehicle's hazard warning lights, the strobe lights and the FAS to alert the oncoming vehicles to use other traffic lanes. In addition, drivers of the WV(s) and SV(s) should pay attention to the road traffic at the back.

A-2.4 With the agreement of relevant authorities, the use of SV equipped with a TMA may be exempted on roads where topographic conditions of the road rendered the use of a TMA not possible.

### A-3 Working Procedures for Setting up Lane Closure

A-3.1 The following working procedures shall be observed in setting up of lane closure:

- (a) Informing the Transport Department and/or tunnel operator(s) to suitably display road works or lane closure related message if there is any permanent variable message signs, lane control signals, variable speed limit signs and/or traffic information systems in the vicinity of lane closure,
- (b) Erecting temporary VMS (where appropriate) and advance warning signs,
- (c) Setting up the approach taper, and
- (d) Completing the lane closure set-up.

#### A-3.1.1 Erecting Temporary VMS and Advance Warning Signs

- (a) For lane closure on expressways with hard shoulders of width not less than 3m, temporary VMS shall be erected as the first step for lane closure to provide advance

- (e) 所有工程車和護航車必須開啟車輛的危險警告燈，並開啟閃燈和指示燈號，以提醒駛來的車輛使用其他行車綫。此外，工程車和護航車的司機應留意背後的路面交通。

A-2.4 如得到有關部門的同意，在道路的地形狀況無法使用緩撞裝置的情況下，可豁免使用配備緩撞裝置的護航車。

### A-3 封閉行車綫的工作程序

A-3.1 封閉行車綫時，須遵守下列工作程序：

- (a) 如施工路段附近設有固定交通訊息顯示屏、行車綫管制燈號、可變車速限制標誌或交通資訊系統，應通知運輸署及／或隧道營辦商，安排於有關標誌及系統顯示道路工程或車綫封閉的相關訊息，
- (b) 豎設臨時交通訊息顯示屏（如適用）及預先警告標誌，
- (c) 設置楔形引入路段，及
- (d) 完成封閉行車綫設置。

#### A-3.1.1 豎設臨時交通訊息顯示屏及預先警告標誌

- (a) 在設有不少於 3 米寬路肩的快速公路封閉行車綫，第一步須豎設臨時交通訊息顯示屏作預先警告。如要封閉

warning. For closure on a fast lane (or, on fast lane plus second fast lane), advance warning signs and high intensity battery operated beacons shall be erected alongside the slow lane first and then along the fast lane. For closure on a slow lane (or, on slow lane plus second slow lane), advance warning signs and high intensity battery operated beacons shall be erected alongside the fast lane first and then along the slow lane. High intensity battery operated beacons are required during the hours of darkness. Advance warning signs shall be displayed in advance of the closure area in accordance with para. 5.6.

- (b) If temporary VMS is required, after erecting the temporary VMS on hard shoulder, the WV(s) and the SV must move slowly and the WV(s) shall stop at the location of the first warning sign to erect the first warning sign.
- (c) Afterwards, the WV(s) shall move slowly to the next locations of the warning signs to erect other warning signs respectively. After all advance warning signs are erected, the WV(s) and the SV shall leave the road under one of the following two modes:
  - (i) The SV shall have the TMA folded up at a suitable place (refer to para. A-2.3 (b) for the definition of suitable place). If so, the strobe lights, the FAS and the vehicle's hazard warning lights of the WV(s) and the SV shall be switched off when the traffic conditions allow. Then the WV(s) and the SV shall leave the road at a normal speed and the speed of the SV shall not exceed the speed specified by the manufacturer of

快綫（或封閉快綫及第二快綫），須先沿慢綫豎設預先警告標誌和高亮度電池標燈，然後再沿快綫豎設該等設備。如要封閉慢綫（或封閉慢綫和第二慢綫），則須先沿快綫豎設預先警告標誌和高亮度電池標燈，再沿慢綫豎設該等設備。在黑夜時間，必須裝設高亮度電池標燈。預先警告標誌須根據第 5.6 段於封路範圍之前的地方設置。

- (b) 如需豎設臨時交通訊息顯示屏，在豎設交通訊息顯示屏後，工程車和護航車必須慢駛，工程車須停在第一個警告標誌的地方，以豎設第一個警告標誌。
- (c) 其後，工程車須慢駛至其他警告標誌的地方，再豎設其他警告標誌。豎設所有預先警告標誌後，工程車和護航車須以下列其中一種方式駛離道路：
  - (i) 護航車的緩撞裝置須在適當的地方摺合（有關適當地方的定義，請參閱第A-2.3（b）段）。如緩撞裝置已摺合，在交通情況許可下，工程車和護航車的閃燈、指示燈號和車輛的危險警告燈須關上。其後，工程車和護航車須以正常車速駛離道路但不應超過緩撞裝置製造商指定的車速，或



the TMA, or

(ii) if there is no suitable place for the TMA of the SV to be folded up, then only the WV(s) shall leave the road in the way as specified in para. (i) above. For the SV, its strobe lights, the FAS and the vehicle's hazard warning lights shall remain switched on, and shall leave the road at a speed not exceeding the speed specified by the manufacturer of the TMA.

(d) The WV(s) and the SV shall then go to the other side of the carriageway for displaying the other set of advance warning signs as required in para. (a) above by repeating the procedures in para. (b) to (c) above.

#### A-3.1.2 Setting up the approach taper

(a) After erecting advance warning signs, the WV(s) and the SV shall go to the approach taper location to prepare for setting up on the same lane. Before letting workers get off for setting up of approach taper, the SV shall stop at a suitable location away from the approach taper so as to give a sightline distance of 200m to the approaching vehicles. The relevant standards on setting up the approach taper are given in the following tables or sections of the previous Chapters :-

\* Signs: Tables 5.2 and 5.3

\* Length of approach taper: Table 5.4

(ii) 假如沒有適當的地方可供摺合護航車的緩撞裝置，只可由工程車以上文(i)段指定的方式駛離道路，而護航車的閃燈、指示燈號和車輛的危險警告燈必須繼續亮着，並以不超過緩撞裝置製造商指定的車速駛離道路。

(d) 工程車和護航車其後須前往車路的一面，重複進行上文第(b)至(c)段所述的程序，展示上文第(a)段規定的另一組預先警告標誌。

#### A-3.1.2 設置楔形引入路段

(a) 豎設預先警告標誌後，工程車和護航車須前往將設置楔形引入路段的地方，在該處設置楔形引入路段。在容許工人前往設置楔形引入路段前，護航車須停在離開楔形引入路段的適當地點，以便為駛近的車輛提供 200 米的視線距離。設置楔形引入路段的有關標準載於前章下列的附表或段落：—

\* 標誌： 表 5.2 及 5.3

\* 楔形引入路段的長度： 表 5.4

\* Traffic cones: Para. 4.20

\* 交通圓筒：第 4.20 段

\* Lantern spacing: Para. 4.35

\* 警告燈間距：第 4.35 段

(refer to Appendix B for the general arrangement).

(有關一般安排，應參閱附錄 B)。

(b) A FAS and a barricade sign must be placed at the end of the approach taper. This is to alert the oncoming vehicles to use other traffic lanes.

(b) 楔形引入路段末端必須放置指示燈號及路障標誌，以提醒駛來的車輛使用其他行車綫。

#### A-3.1.3 Completing the lane closure set-up

#### A-3.1.3 完成封閉行車綫設置

(a) After setting up the approach taper, the WV(s) shall move forward slowly for placing traffic cones, and low intensity battery operated lamps until the end of road closure in accordance with para. 4.20, 4.35 and Table 5.3. When the WV(s) is moving forward to set up the lane closure, the SV shall still stay outside the approach taper of the lane closure. After setting up the whole lane closure, the WV(s) and the SV shall then leave the road under one of the modes as detailed in para. A-3.1.1 (c).

(a) 設置楔形引入路段後，工程車須向前慢駛，以放置交通圓筒和低亮度電池警告燈，直至根據第 4.20、4.35 段及表 5.3 結束封路為止。當工程車前行以設置封閉行車綫設施時，護航車仍須停留在被封閉的行車綫的楔形引入路段之外。在封閉整條行車綫後，工程車和護航車須以第 A-3.1.1 (c) 段詳列的其中一種方式駛離道路。

### A-4 Working Procedures for Removing Lane Closure Set-Up

### A-4 移除封閉行車綫設施的工作程序

A-4.1 In removing the lane closure set-up, the procedures shall be carried out in the reverse order to those of setting up lane closure:

A-4.1 在移除封閉行車綫設施時，須依照與設置封閉行車綫設施相反的程序進行：

(a) Removing the lane closure set-up

(a) 移除封閉行車綫設施

(b) Collecting all advance warning signs

(b) 收回所有預先警告標誌

(c) Informing the Transport Department and/or

(c) 如施工路段附近設有固定交通訊息

tunnel operator(s) to suitably cancel the display of road works or lane closure related message if there is any permanent variable message signs, lane closure signals, variable speed limit signs and/or traffic information systems in the vicinity of lane closure.

顯示屏、行車線管制燈號、可變車速限制標誌或交通資訊系統，應通知運輸署及／或隧道營辦商，安排消除於有關標誌及系統顯示道路工程或車綫封閉的相關訊息。

#### A-4.1.1 Removing the lane closure set-up

#### A-4.1.1 移除封閉行車綫設施

- (a) The WV(s) shall move slowly to and stay at the end of the end taper of the lane closure. If the lane changing movements involved in these actions are likely to cause disturbance to the traffic flow, the entry arrangements and procedures as specified in Appendix C shall be followed.
- (b) The SV, with its TMA unfolded and with the strobe lights, FAS and vehicle's hazard warning lights switched on, shall move to the front of the approach taper and stay there.
- (c) Right after the SV has come to the approach taper, the WV(s) shall move backward very slowly for collecting the signs, cones and lanterns from the end taper.

- (a) 工程車須慢駛，並停留在被封閉行車綫的楔形引出路段末端。假如這些活動所涉及的換綫行動會對交通造成影響，便須遵照附錄C指定的入口安排和程序。
- (b) 緩撞裝置已打開和閃燈、指示燈號和車輛的危險警告燈均亮着的護航車，須駛至楔形引入路段前，並在該處停留。
- (c) 護航車到達楔形引入路段後，工程車須向後慢駛，由楔形引出路段開始收回標誌、圓筒和警告燈。

#### A-4.1.2 Collecting all advance warning signs

#### A-4.1.2 收回所有預先警告標誌

- (a) After removing the approach taper, the WV(s) shall have the strobe lights, the FAS and the vehicle's hazard warning lights switched off when the traffic conditions allow, and then leave the road at a normal speed and prepare for going back to the first advance warning sign with the escort of the SV.

- (a) 拆除楔形引入路段後，工程車須在交通情況許可下，關掉閃燈、指示燈號和車輛的危險警告燈，然後以正常車速駛離道路，並準備返回第一個預先警告標誌的地方。在返回時，須與護航車同行。

- (b) At the same time, either:
- (i) the SV shall have the TMA folded up at a suitable place (refer to para. A-2.3 (b) for the definition of suitable place). If so, the strobe lights, the FAS and the vehicle's hazard warning lights of the SV shall be switched off when the traffic conditions allow. Then the SV shall leave the road at a normal speed not exceeding the speed specified by the manufacturer of the TMA and prepare to escort the WV(s) to go back to the first advance warning sign, or
  - (ii) if there is no suitable place for the TMA of the SV to be folded up, the strobe lights, the FAS and the vehicle's hazard warning lights of the SV shall remain switched on. Then the SV shall leave the road at a speed not exceeding the speed specified by the manufacturer of the TMA, and prepare to escort the WV(s) to go back to the first advance warning sign.
- (c) Before the WV(s) and the SV come to the first warning sign, the strobe lights, the FAS and the vehicle's hazard warning lights of the WV(s) and the SV shall be switched on and the TMA unfolded at a suitable place beforehand.
- (d) After arriving at the first advance warning sign, workers from the WV(s) shall start collecting the advance warning signs and high intensity battery operated beacons.
- (e) After collecting all the signs and beacons on one side of the road, the WV(s) and the SV
- (b) 同時，亦須進行下列其中一項工作程序：
- (i) 護航車的緩撞裝置須在適當的地方摺合（有關適當地方的定義，請參閱第A-2.3 (b)段）。如緩撞裝置已摺合，在交通情況許可下，護航車的閃燈、指示燈號和車輛的危險警告燈須關上。其後，護航車須以正常車速但不超過緩撞裝置製造商指定的車速駛離道路，並準備隨同工程車返回第一個預先警告標誌的地方；或
  - (ii) 假如沒有適當的地方可供摺合護航車的緩撞裝置，護航車的閃燈、指示燈號和車輛的危險警告燈必須繼續亮着，並以不超過緩撞裝置製造商指定的車速駛離道路，以及準備隨同工程車返回第一個預先警告標誌的地方。
- (c) 在工程車和護航車到達第一個警告標誌前，工程車和護航車的閃燈、指示燈號和車輛的危險警告燈必須亮着，而緩撞裝置亦須事先在適當的地方打開。
- (d) 到達第一個預先警告標誌後，工程車的工人須收回預先警告標誌和高亮度電池標燈。
- (e) 收回一邊道路的所有標誌和標燈後，工程車和護航車須以第A-3.1.1 (c)

shall leave the road under one of the two modes as detailed in para. A-3.1.1 (c) and go back to the first advance warning sign on the other side of the carriageway for collecting the remaining set of advance warning signs and high intensity battery operated beacons.

- (f) If necessary, after collecting the remaining set of advance warning signs and high intensity battery operated beacons, the WV(s) and the SV shall leave the road under one of the two modes as detailed in para. A-3.1.1 (c) and go back for collecting the temporary VMS on the hard shoulder of the road.

#### **A-5 Working Procedures for Other Types of Mobile Operations (Para. A-1.1 (c) to (h))**

A-5.1 The following working procedures shall be followed when carrying out mobile operations including road lighting maintenance, picking up litter, landscaping work, gully emptying, road sweeping and cleansing, and patching pot-holes (except for road bends and special road sections with inadequate sightline):

- (a) The WV(s) and the SV shall move slowly along the slow lane or fast lane with their strobe lights, FAS and vehicle's hazard warning lights switched on and the TMA unfolded at a suitable place beforehand, and with a speed not more than 25km/h or the speed specified by the manufacturer of the TMA, whichever is the less.
- (b) The buffer distances between the WV(s) and the SV shall be maintained in accordance with Table A-1.

段詳列的兩種方式的其中一種方式駛離道路，並返回車路另一面的第一個預先警告標誌的地方，以收回餘下的預先警告標誌和高亮度電池標燈。

- (f) 如有需要，在收回餘下的預先警告標誌和高亮度電池標燈後，工程車和護航車須以第A-3.1.1 (c)段詳列的兩種方式的其中一種方式駛離道路，並返回放置臨時交通訊息顯示屏的地方，收回臨時交通訊息顯示屏。

#### **A-5 其他種類的流動作業的工作程序（第 A-1.1 (c) 至 (h) 段）**

A-5.1 在進行流動作業，包括維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路及修補路面凹坑時（道路彎位和沒有足夠視線的特殊路段除外），須遵守下列工作程序：

- (a) 工程車和護航車須沿慢綫或快綫慢駛，並開啟車輛的閃燈、指示燈號和車輛的危險警告燈，以及事先在適當的地方打開緩撞裝置。慢駛時的速度不可超過每小時 25 公里或緩撞裝置製造商指定的速度，兩者以較低者為準。
- (b) 工程車和護航車之間的緩衝距離，須遵照表A-1 的規定。

(c) When the work location is identified, the WV(s) and the SV shall communicate well with each other by telecommunication so as to ensure they stop on a safe spot before letting workers come down to the road or commence work on the WV(s).

(d) Workers shall work within 3m on the side or in front of or on the WV(s), and shall stay within the traffic lane on which the WV(s) and the SV stopped.

(c) 如已確定工作地點，工程車和護航車須以電訊設備保持聯絡，確保在安全地點停泊，讓工人前往道路或在工程車展開工作。

(d) 工人須在工程車上、旁邊或前面的 3 米以內範圍工作，並須逗留在工程車和護航車停下的行車綫內。

A-5.2 The following procedures shall be followed when carrying out mobile operations including road lighting maintenance, gully emptying, picking up litter, landscaping works, road sweeping and cleansing, and patching pot-holes on a road bend or road section with inadequate sightline (e.g. after a crest):

(a) Same as para. A-5.1(a)

(b) Same as para. A-5.1(b)

(c) When the work location is on a road bend or on a road section with inadequate sightline (e.g. after a crest), the provisions under para. A-2.3(c) shall be followed.

(d) Same as para. A-5.1 (d)

(e) After the work is completed, the SV shall move forward once the WV(s) has left the road bend or the road section with inadequate sightline. After the SV catches up the WV(s), it shall then maintain proper buffer distances according to Table A-1 and proceed to the next work location.

A-5.2 在進行流動作業，包括在道路彎位或沒有足夠視線的路段（例如在坡頂之後）維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路及修補路面凹坑時，須遵守下列工作程序：

(a) 與第A-5.1(a)段相同。

(b) 與第A-5.1(b)段相同。

(c) 如工作地點位處道路彎位，或在沒有足夠視線的路段（例如在坡頂之後），須遵照第A-2.3(c)段的規定。

(d) 與第A-5.1(d)段相同。

(e) 完成工作後，護航車須在工程車駛離道路彎位或沒有足夠視線的路段時向前行駛。當護航車追及工程車後，須遵守表A-1 的規定，保持適當緩衝距離，並前行至下個工作地點。

A-5.3 The following procedures shall be followed when carrying out mobile operations including road lighting maintenance, picking up litter, landscaping works, gully emptying, road sweeping and cleansing, and patching pot-holes on an expressway, the work locations of which are on the hard shoulder (except for road bends and special road sections with inadequate sightline).

#### A-5.3.1 Hard Shoulder Width not less than 3.3m

- (a) The procedures as described in para. A-5.1(a) to (d) above shall be followed, except that the WV(s) and the SV shall move slowly along the hard shoulder and workers shall stay within the hard shoulder on which the WV(s) and the SV stopped.

#### A-5.3.2 Hard Shoulder Width less than 3.3m

- (a) The WV(s) shall move slowly along the hard shoulder occupying part of the slow lane if necessary and the SV shall move slowly along the slow lane, with their strobe lights, FAS and vehicle's hazard warning lights switched on and the TMA unfolded at a suitable place beforehand, and with a speed not more than 25km/h or the speed specified by the manufacturer of the TMA, whichever is the less.
- (b) Same as para. A-5.1(b).
- (c) Same as para. A-5.1(c).
- (d) Workers shall work within 3m on the side or in front of or on the WV(s), and shall stay within the hard shoulder on which the WV(s) stopped.

A-5.3 在進行流動作業，而工作地點是在路肩，包括維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路及修補路面凹坑時（道路彎位和沒有足夠視線的特殊路段除外），須遵守下列工作程序。

#### A-5.3.1 路肩寬度不少於 3.3 米

- (a) 工作程序須與第A-5.1 (a)至(d)段相同，但工程車和護航車須沿路肩慢駛及工人須逗留在工程車和護航車停下的路肩內。

#### A-5.3.2 路肩寬度少於 3.3 米

- (a) 工程車須沿路肩慢駛，如有需要，可佔用部分慢綫，護航車須沿慢綫慢駛。工程車和護航車須開啟車輛的閃燈、指示燈號和車輛的危險警告燈，以及事先在適當的地方打開緩撞裝置。慢駛時的速度不可超過每小時 25 公里或緩撞裝置製造商指定的速度，兩者以較低者為準。
- (b) 與第A-5.1 (b)段相同。
- (c) 與第A-5.1 (c)段相同。
- (d) 工人須在工程車上、工程車的旁邊或其前面 3 米內的範圍工作，並須逗留在工程車停下的路肩內。

A-5.4 The following procedures shall be followed when carrying out mobile operations including road lighting maintenance, picking up litter, landscaping works, gully emptying, road sweeping and cleansing, and patching pot-holes, the work locations of which are on the hard shoulder and on a road bend or special road section with inadequate sightline.

A-5.4 在進行流動作業，而工作地點是在道路彎位或沒有足夠視線的路肩，包括維修路燈、清理垃圾、進行環境美化工程、清理溝渠、清掃及清洗道路及修補路面凹坑時，須遵守下列工作程序。

A-5.4.1 Hard Shoulder Width not less than 3.3m

A-5.4.1 路肩寬度不少於 3.3 米

- (a) The procedures as described in para. A-5.2 above shall be followed, except that the WV(s) and the SV shall move slowly along the hard shoulder, the FAS shall be switched off and workers shall stay within the hard shoulder on which the WV(s) and the SV stopped.

- (a) 工作程序須與第A-5.2 段相同，但工程車和護航車須沿路肩慢駛，並關閉指示燈號，以及工人須逗留在工程車和護航車停下的路肩內。

A-5.4.2 Hard Shoulder Width less than 3.3m

A-5.4.2 路肩寬度少於 3.3 米

- (a) Same as para. A-5.3.2(a).  
(b) Same as para. A-5.1(b).  
(c) Same as para. A-5.2(c).  
(d) Same as para. A-5.3.2(d).  
(e) Same as para. A-5.2(e).

- (a) 與第A-5.3.2 (a)段相同。  
(b) 與第A-5.1 (b)段相同。  
(c) 與第A-5.2 (c)段相同。  
(d) 與第A-5.3.2 (d)段相同。  
(e) 與第A-5.2 (e)段相同。

**A-6 Safety Precautions in Carrying out Mobile Operations**

**A-6 進行流動作業的安全預防措施**

A-6.1 The following safety precautions shall be observed in carrying out mobile operations:-

A-6.1 進行流動作業時，須遵守下列安全預防措施：—

- (a) The driver of the SV with TMA must have

- (a) 駕駛有緩撞裝置護航車的司機必須



received proper training on driving the vehicle provided by recognized institutions of motoring. Upon satisfactory completion of the training, a completion certificate valid for not more than 3 years will be issued to the driver. Only drivers with valid certificates are allowed to operate vehicles mounted with TMAs.

已在認可的駕駛院校接受適當的訓練。成功完成有關訓練後，該名司機會獲發有效期不超過三年的完成訓練證書。當局只容許持有有效證書的司機操作裝設緩撞裝置的車輛。

- (b) Check the WV(s), the SV, the strobe lights, the TMA, the FAS, the high intensity battery operated beacons, the low intensity battery operated lamps and the telecommunication equipment to ensure that they can function properly.
- (c) Maintain the buffer distances according to Table A-1 and stop at pre-determined locations.
- (d) Workers in the WV(s) must pay attention to the traffic conditions and ensure that the SV has stopped at a suitable location and it is safe before they get off the WV(s).
- (e) Workers should always face the direction of the oncoming traffic and pay attention to the traffic conditions when erecting warning signs, road hazard warning lanterns and traffic cones.
- (f) Workers must wear proper personal protection equipment such as safety helmets and reflective jackets.

- (b) 檢查工程車、護航車、閃燈、緩撞裝置、指示燈號、高亮度電池標燈、低亮度電池警告燈和電訊設備，確保設備有效運作。
- (c) 遵照表A-1 的規定，保持緩衝距離，並停下在預先設定的地點。
- (d) 工程車的工人必須注意交通情況，在安全情況下，並確保護航車已在適當地點停下，才從工程車落車。
- (e) 工人在豎設警告標誌、道路危險警告燈和交通圓筒時，應面向駛來車輛的方向，並注意交通情況。
- (f) 工人必須佩戴適當的個人保護裝備，例如安全頭盔和反光外衣。

## A-7 Lane Changing during Mobile Operation

## A-7 在進行流動作業時轉換行車綫

A-7.1 The following procedures shall be followed when the WV(s) and the SV change lane during mobile operation: -

A-7.1 在進行流動作業期間，工程車和護航車如需轉換行車綫，須遵守下列程序：—

- (a) Lane changing shall be initiated by the SV. Before initiating the lane changing action, the driver of the SV shall ensure there is sufficient clearance with oncoming vehicles in the lane that he attempts to change into. The lane changing actions of the WV(s) and the SV shall take place simultaneously or as soon as the traffic condition allows.
- (b) Right before lane changing, the WV(s) and the SV shall flash the appropriate vehicle's direction indicators to indicate to the approaching traffic their intention of lane changing and shall show the appropriate signals in the FAS to alert the oncoming vehicles to use other traffic lanes. The vehicle's direction indicators and the FAS signal shall be coordinated in the following manner:
- (i) When the WV(s) and the SV intend to change from a fast lane to the middle lane, or from the middle lane to the slow lane, during each lane changing action, the vehicle's direction indicators shall indicate a "go left" signal to alert oncoming vehicles its intention to go leftward, whilst the FAS shall show a "hazard" signal to alert oncoming vehicles to use other traffic lane(s).
- (ii) When the WV(s) and the SV intend to change from the hard shoulder to a slow lane, from a slow lane to the middle lane, or from the middle lane to the fast lane, the coordination shall be in the manner same as para. (i) above, except that the vehicle's direction indicators shall indicate a "go right"
- (a) 須由護航車首先轉綫。在開始轉綫前，護航車的司機須確保在將轉入的行車綫上，與駛來的車輛有足夠相距空間。工程車和護航車須同時轉綫，或在交通情況許可下才可轉綫。
- (b) 在轉綫前，工程車和護航車須閃動適當的車輛轉向指示燈，向駛近的車輛表示有意轉綫，並須啟動指示燈號中的適當燈號，提醒駛來的車輛使用其他行車綫。工程人員須協調車輛的轉向指示燈和指示燈號如下：
- (i) 當工程車和護航車打算由快綫轉入中綫，或由中綫轉入慢綫，在每轉入一條行車綫時，車輛的轉向指示燈須顯示「向左」訊號，提醒駛來的車輛其有意轉左，而指示燈號亦須顯示「危險」的訊號，提醒駛來的車輛使用其他行車綫。
- (ii) 當工程車和護航車打算由路肩轉入慢綫，或由慢綫轉入中綫，或由中綫轉入快綫，協調方式須與上文(i)段所述的情況相同，但車輛的轉向指示燈則須顯示「向右」訊號。

signal.

- (c) When the traffic conditions allow, the fleet shall drive at the mobile operation speed to complete the lane changing action.
- (d) The fleet shall not change more than one lane at one time.

- (c) 如交通情況許可，車隊須以流動作業車速行駛，以完成轉綫行動。
- (d) 車隊每次不可轉換超過一條行車綫。

**B-1 The following closure arrangements shall be adopted under the corresponding circumstances:-**

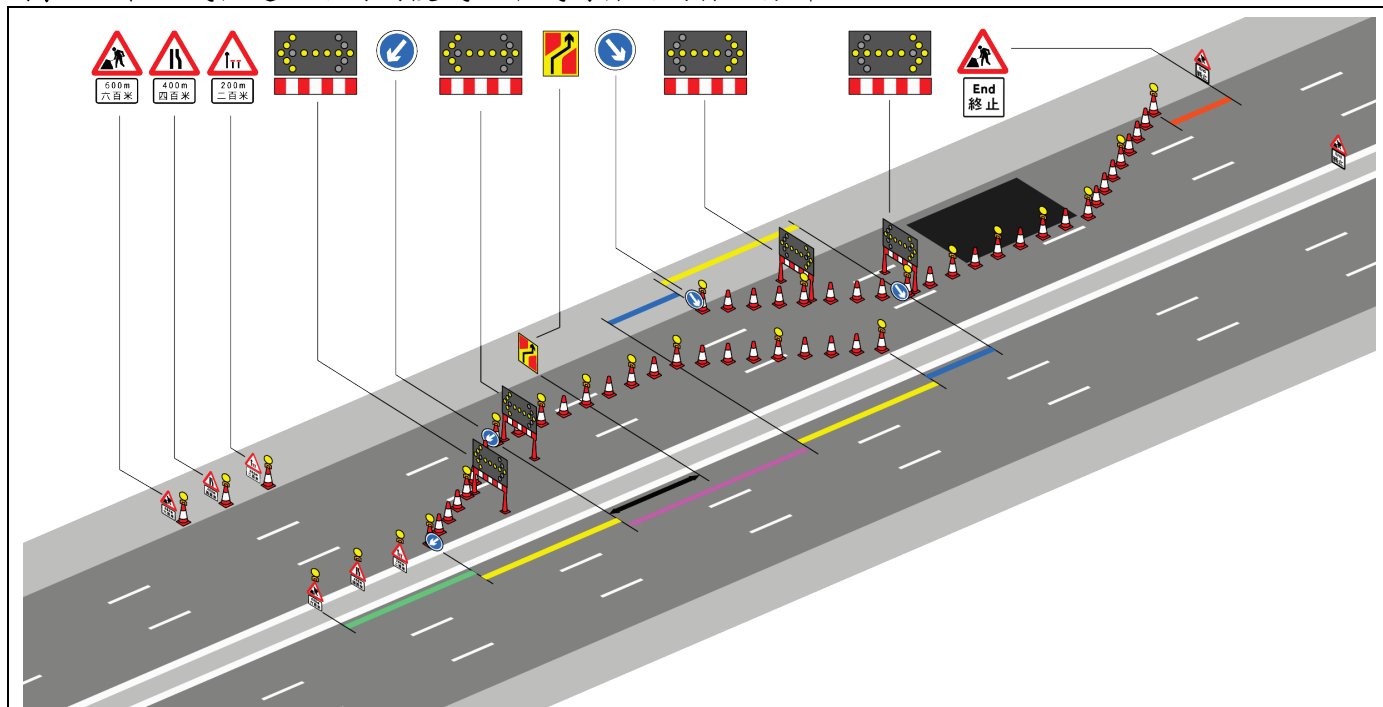
- (a) Fig. B-1 - Layout of signs for a slow and a middle lane closure for works on a 3-lane expressway
- (b) Fig. B-2 - Layout of signs for a slow lane closure for works on a 4-lane expressway
- (c) Fig. B-3 - layout of signs for a fast lane closure for works on a 4-lane expressway
- (d) Fig. B-4 - Layout of signs for a fast lane and a second fast lane closure for works on a 4-lane expressway
- (e) Fig. B-5 - Layout of signs for a second slow lane and a second fast lane closure for works on a 4-lane expressway
- (f) Fig. B-6 - Layout of signs for a second slow lane closure for works on a 4-lane expressway
- (g) Fig. B-7 - Layout of signs for a slow lane and a second slow lane closure for works on a 4-lane expressway
- (h) Fig. B-8 - Layout of signs for a hard shoulder closure

**B-1 工程人員須因應所屬情況，採取下列有關封閉的安排：—**

- (a) 圖B-1 – 在 3 綫快速公路封閉慢綫及中綫時採用的標誌分佈
- (b) 圖B-2 – 在 4 綫快速公路封閉慢綫時採用的標誌分佈
- (c) 圖B-3 – 在 4 綫快速公路封閉快綫時採用的標誌分佈
- (d) 圖B-4 – 在 4 綫快速公路封閉快綫及第 2 快綫時採用的標誌分佈
- (e) 圖B-5 – 在 4 綫快速公路封閉第 2 慢綫及第 2 快綫時採用的標誌分佈
- (f) 圖B-6 – 在 4 綫快速公路封閉第 2 慢綫時採用的標誌分佈
- (g) 圖B-7 – 在 4 綫快速公路封閉慢綫及第 2 慢綫時採用的標誌分佈
- (h) 圖B-8 – 封閉路肩時採用的標誌分佈

**Fig. B-1** Layout of signs for a slow and a middle lane closure for works on a 3-lane expressway

**圖 B-1** 在 3 綫快速公路封閉慢綫及中綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.

2. Advance warning signs shall be supplemented by high intensity battery operated beacons.

3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

1. 須使用一米高的圓筒，間距參看第 4.20 段。

2. 預先警告標誌應與高亮度電池標燈同用。

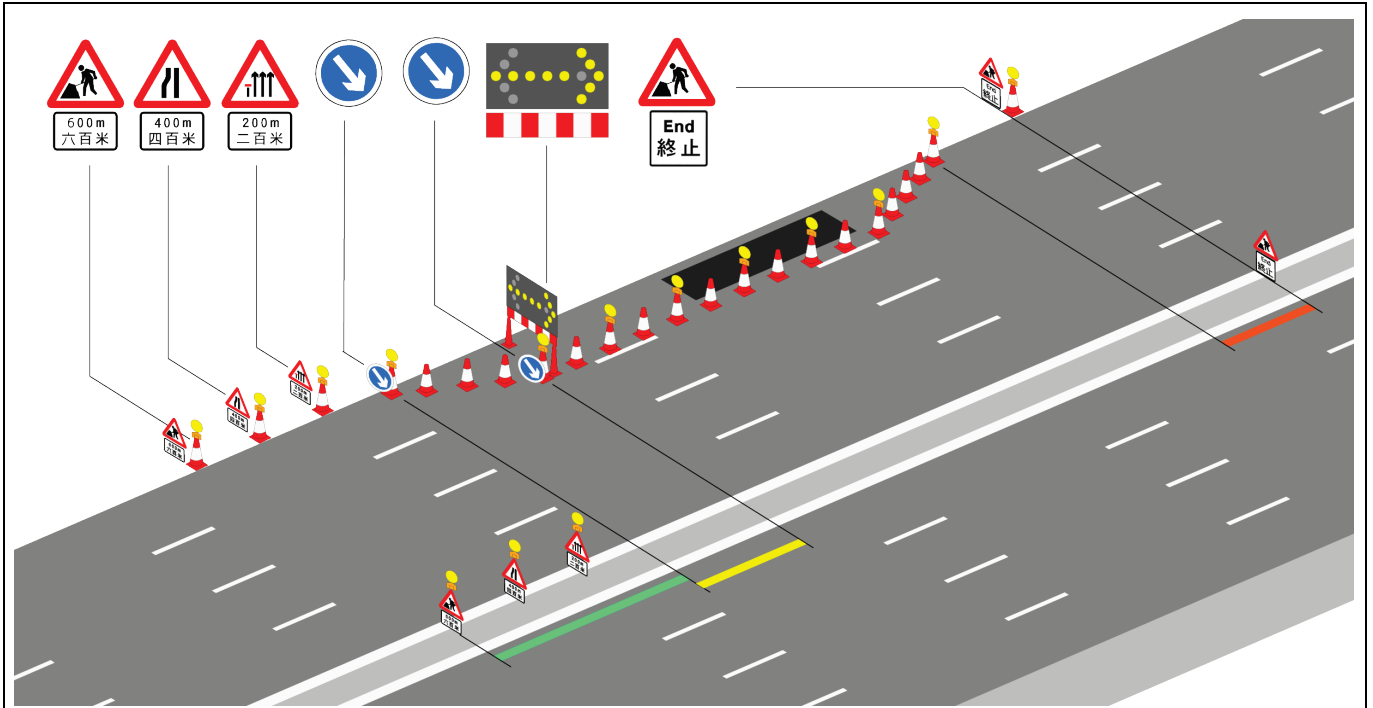
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
- Half of the taper length shown in Table 5.4  
表 5.4 所示楔形路段的一半長度
- ↔ 90m  
90 米
- ↔ 180m  
180 米
- Works area/ Obstruction  
施工地區/ 障礙物

Fig. B-2 Layout of signs for a slow lane closure for works on a 4-lane expressway

圖 B-2 在 4 綫快速公路封閉慢綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

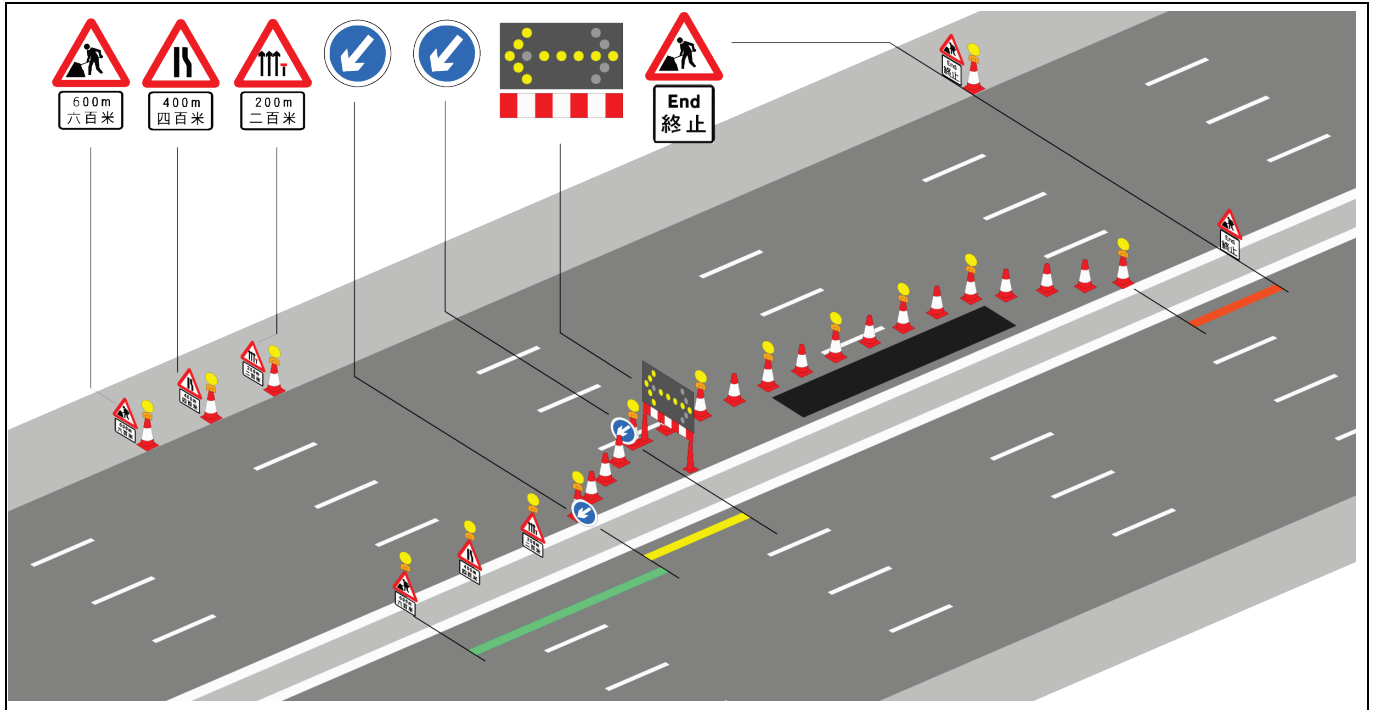
1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物

**Fig. B-3** Layout of signs for a fast lane closure for works on a 4-lane expressway

**圖 B-3** 在 4 綫快速公路封閉快綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

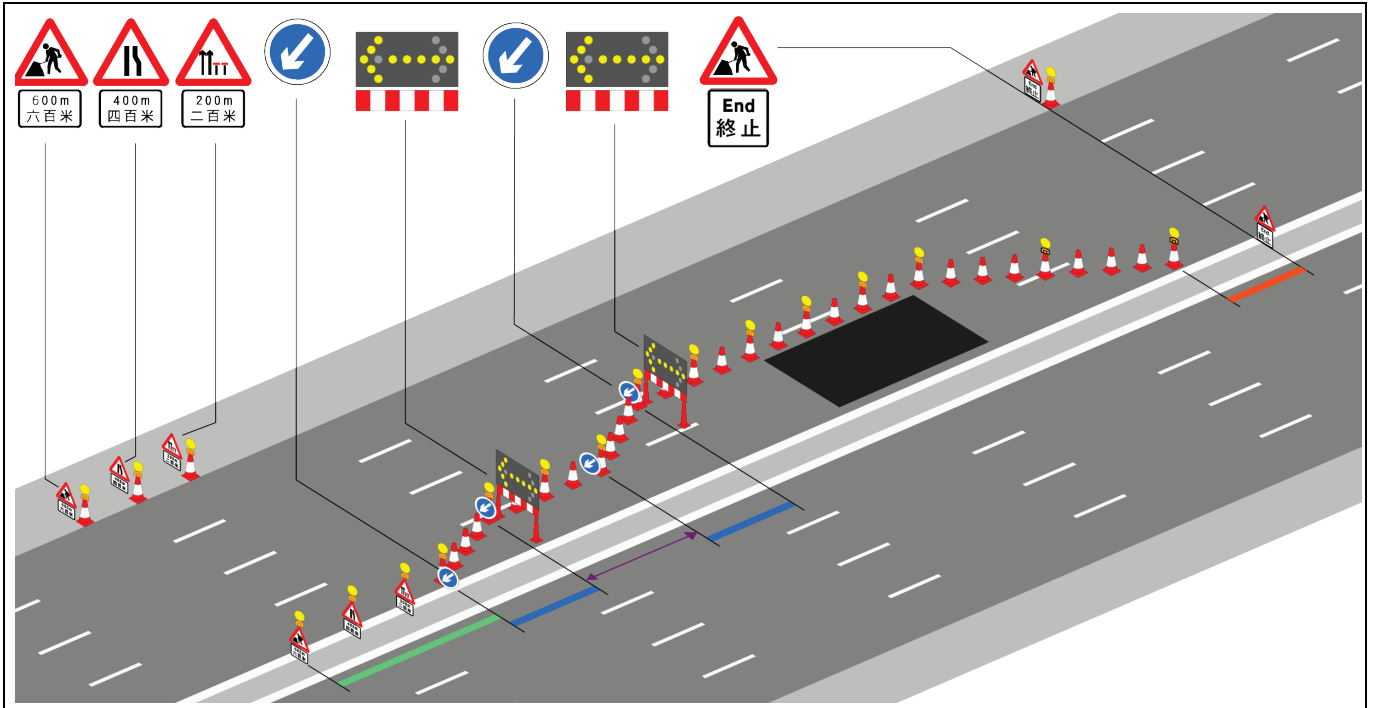
1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
- Works area/ Obstruction  
施工地區/ 障礙物

Fig. B-4 Layout of signs for a fast lane and a second fast lane closure for works on a 4-lane expressway

圖 B-4 在 4 綫快速公路封閉快綫及第 2 快綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

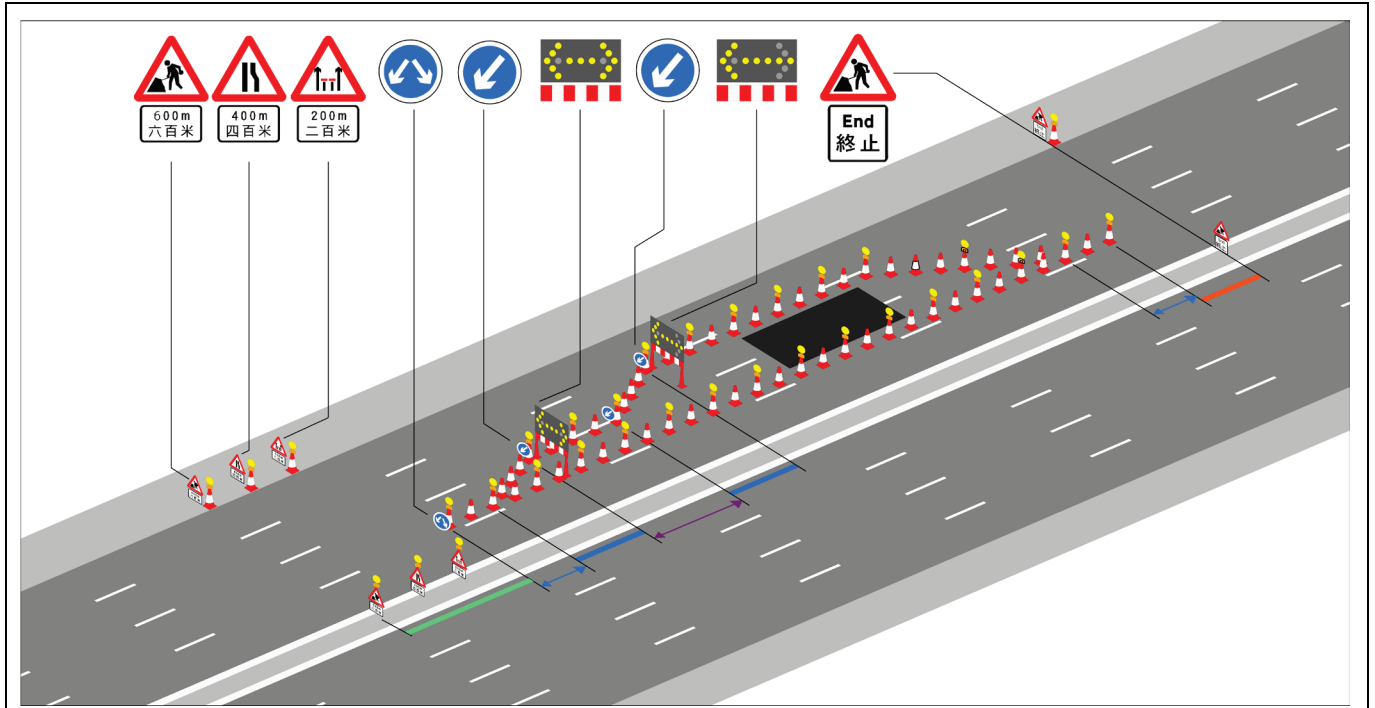
**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Half of the taper length shown in Table 5.4  
表 5.4 所示楔形路段的一半長度
- ↔ 100m  
100 米
- Works area/ Obstruction  
施工地區/ 障礙物



**Fig. B-5** Layout of signs for a second slow lane and a second fast lane closure for works on a 4-lane expressway

**圖 B-5** 在 4 綫快速公路封閉第 2 慢綫及第 2 快綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

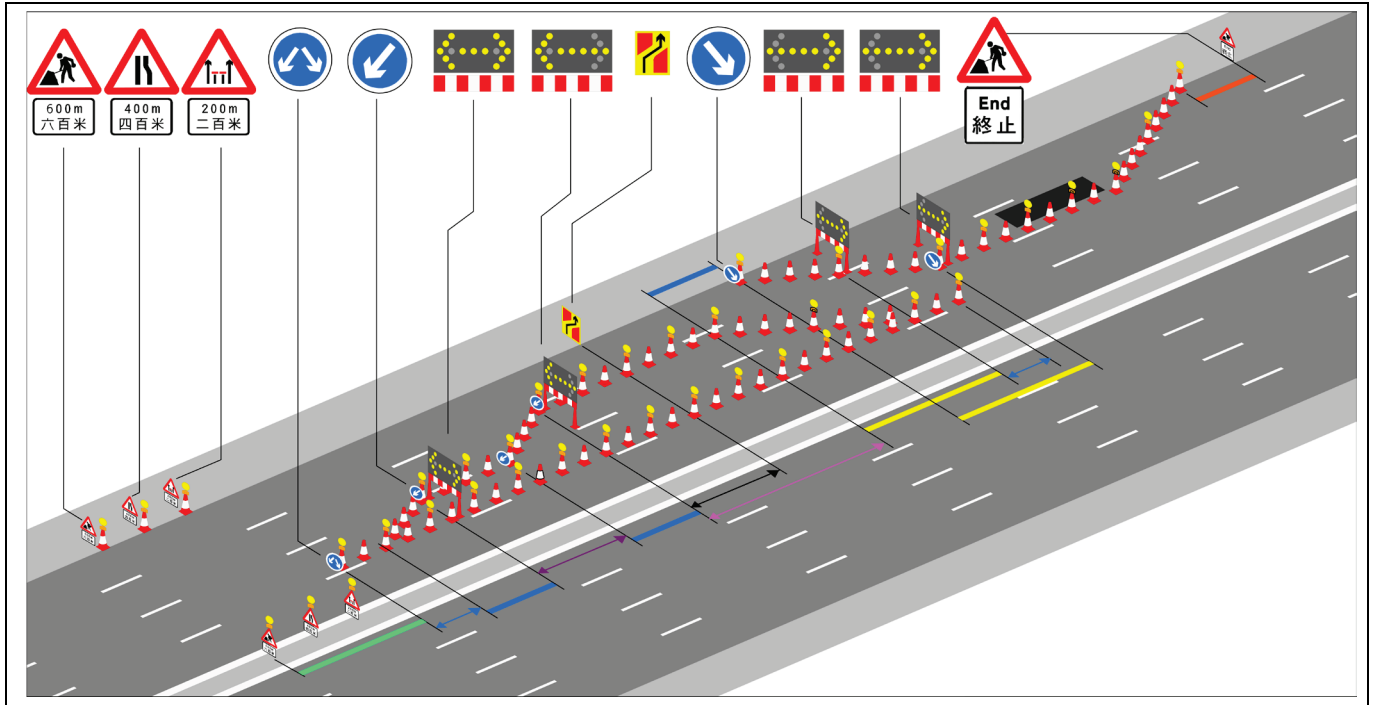
1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- Half of the taper length shown in Table 5.4  
表 5.4 所示楔形路段的一半長度
- ↔ 50m  
50 米
- ↔ 180m  
180 米
- Works area/ Obstruction  
施工地區/ 障礙物

Fig. B-6 Layout of signs for a second slow lane closure for works on a 4-lane expressway

圖 B-6 在 4 綫快速公路封閉第 2 慢綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

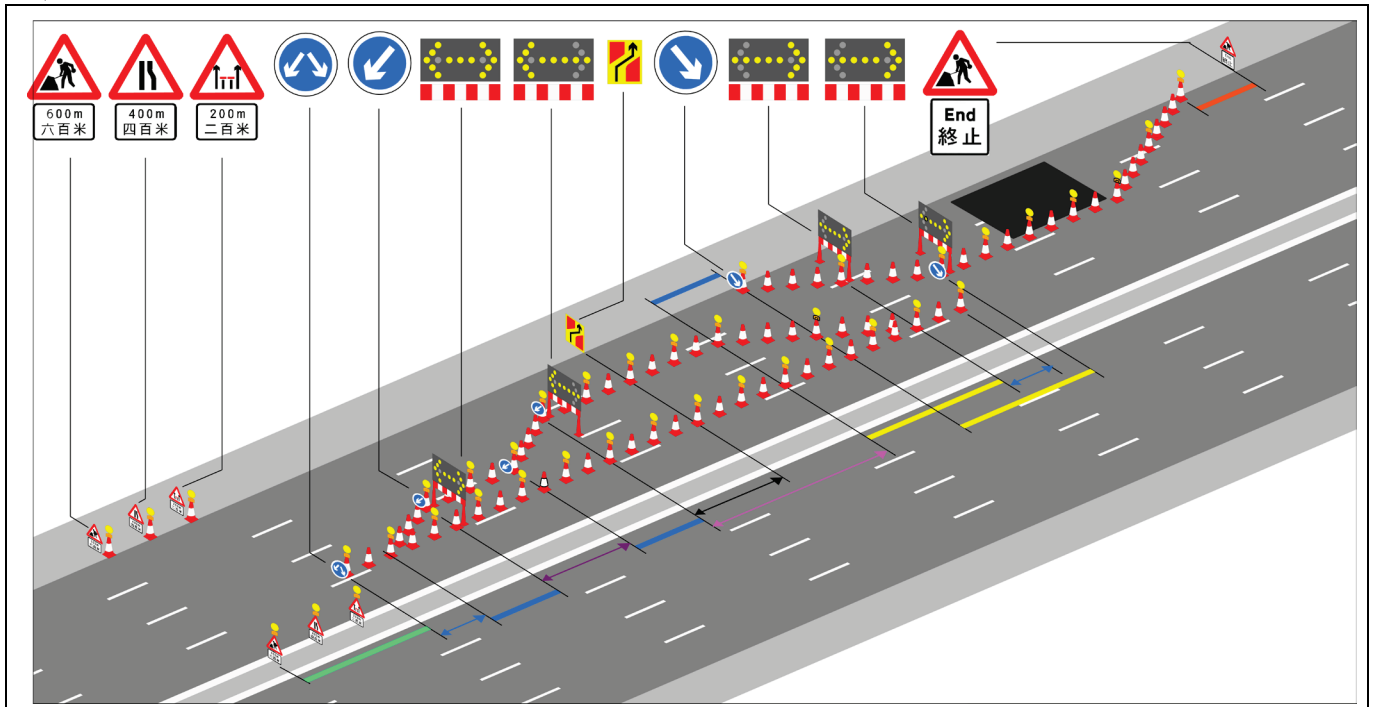
1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of “End of Road Works” Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
- Half of the taper length shown in Table 5.4  
表 5.4 所示楔形路段的一半長度
- ↔ 50m  
50 米
- ↔ 90m  
90 米
- ↔ 100m  
100 米
- ↔ 180m  
180 米
- Works area/ Obstruction  
施工地區/ 障礙物

**Fig. B-7** Layout of signs for a slow lane and a second slow lane closure for works on a 4-lane expressway

**圖 B-7** 在 4 綫快速公路封閉慢綫及第 2 慢綫時採用的標誌分佈



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Some traffic management devices, including temporary VMS, traffic cones for delineating the extent of longitudinal safety clearance, barriers for fencing excavation and/or truck mounted attenuator, are not shown in the above figure.

**註：**

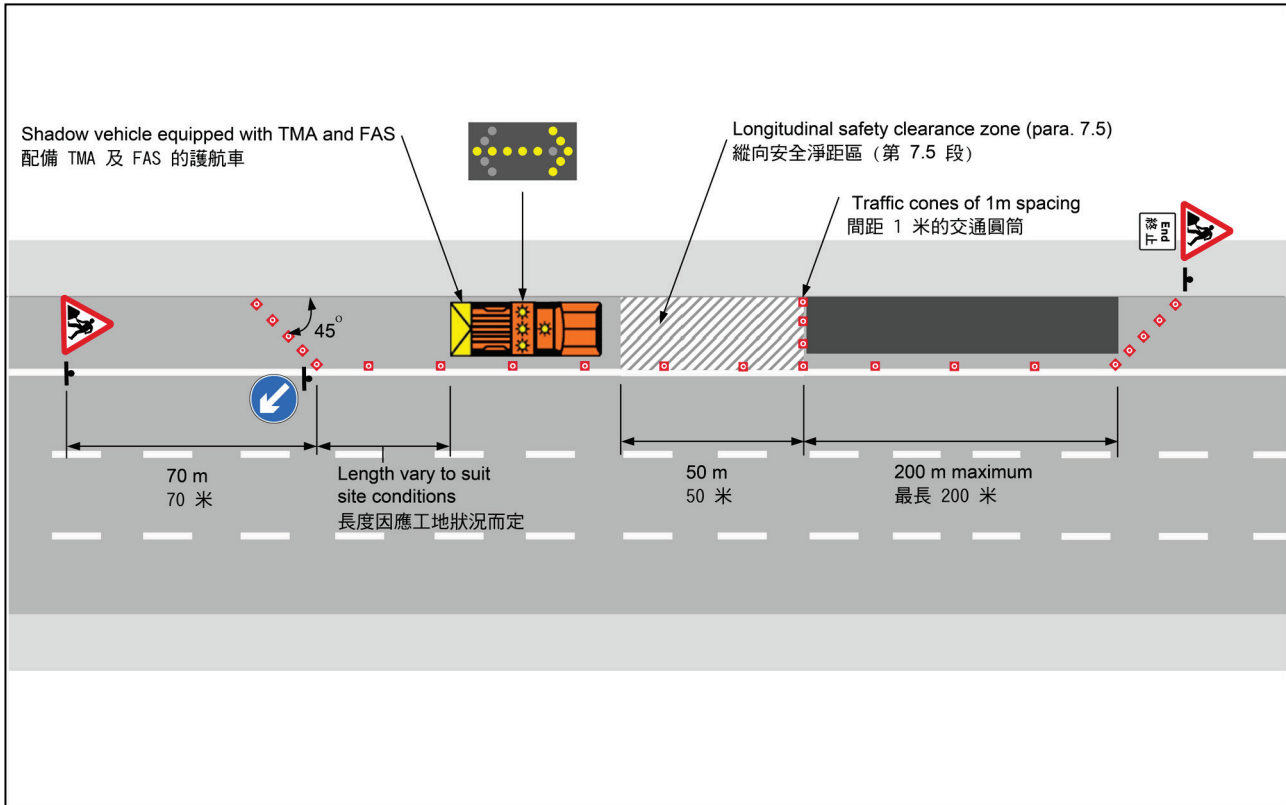
1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 上圖沒有顯示部分交通管理設備，包括臨時交通訊息顯示屏、用作標示縱向安全淨距範圍的交通圓筒、圍封挖掘處的防欄及/或車載式緩撞裝置。

**Key 索引**

- See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
- See Table 5.3 for distance of "End of Road Works" Sign after road works  
參看表 5.3 所示道路工程之後的「道路工程終止」標誌的距離
- See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
- Half of the taper length shown in Table 5.4  
表 5.4 所示楔形路段的一半長度
- ↔ 50m  
50 米
- ↔ 90m  
90 米
- ↔ 100m  
100 米
- ↔ 180m  
180 米
- Works area/ Obstruction  
施工地區/ 障礙物

Fig. B-8 Layout of signs for a hard shoulder closure

圖 B-8 封閉路肩時採用的標誌分佈



**Note:**

1. The maximum cone and lantern spacing at the approach taper shall be 1m and 4m respectively.
2. For hard shoulder not wide enough for placing shadow vehicle equipped with TMA, temporary safety barrier or other appropriate guarding provision shall be considered.

**註：**

1. 在楔型引入路段，圓筒及警告燈的最大間距分別為 1 米及 4 米。
2. 如路肩寬度不足，不能放置配備車載式緩撞裝置的護航車，須考慮使用臨時安全護欄或其他合適的防護安排。

**Key 索引**

- Works area/ Obstruction  
施工地區/ 障礙物
- Traffic cones  
交通圓筒

**C-1 Entry and Exit Arrangements and Procedures**

C-1.1 All vehicles entering or leaving the lane closure, regardless of their functions and purposes, shall follow the entry and exit arrangements and procedures described below.

C-1.2 All vehicles shall enter the lane closure only at the designated entry points as specified in para. C-1.4 below. However, a vehicle(s) shall not enter a lane closure through the end taper except removing lane closure as described in section A-4 of Appendix A.

C-1.3 As a first principle, all vehicles shall leave a lane closure through the end taper. Before a vehicle(s) leaves, the traffic cones at the end taper shall be removed temporarily. When the traffic conditions allow, the vehicle(s) shall exit the lane closure area and accelerate in the same lane to the normal speed before any lane changing actions. Upon completion of the exit action, the traffic cones temporarily removed shall be placed back as soon as possible. If the method specified above is impractical, the alternative exit arrangement in para. C-1.4 shall be followed.

C-1.4 The detailed procedures of the entry and alternative exit arrangements are described in the sub-paragraphs below. The alternative exit arrangement is applicable only if the method described in para. C-1.3 above is impractical. A graphical illustration is given in Fig. C-1.

- (a) All vehicles shall enter or leave the lane closure only at the designated entry or exit points.

**C-1 出入安排和程序**

C-1.1 所有車輛進出被封閉的行車綫時，無論其職能和目的為何，均須遵守下文所述的出入安排和程序。

C-1.2 所有車輛只可從下文第C-1.4 段指定的入口處進入被封閉的行車綫。然而，車輛不得從楔形引出路段進入被封閉的行車綫，附錄A第A-4 節所述解除封閉行車綫除外。

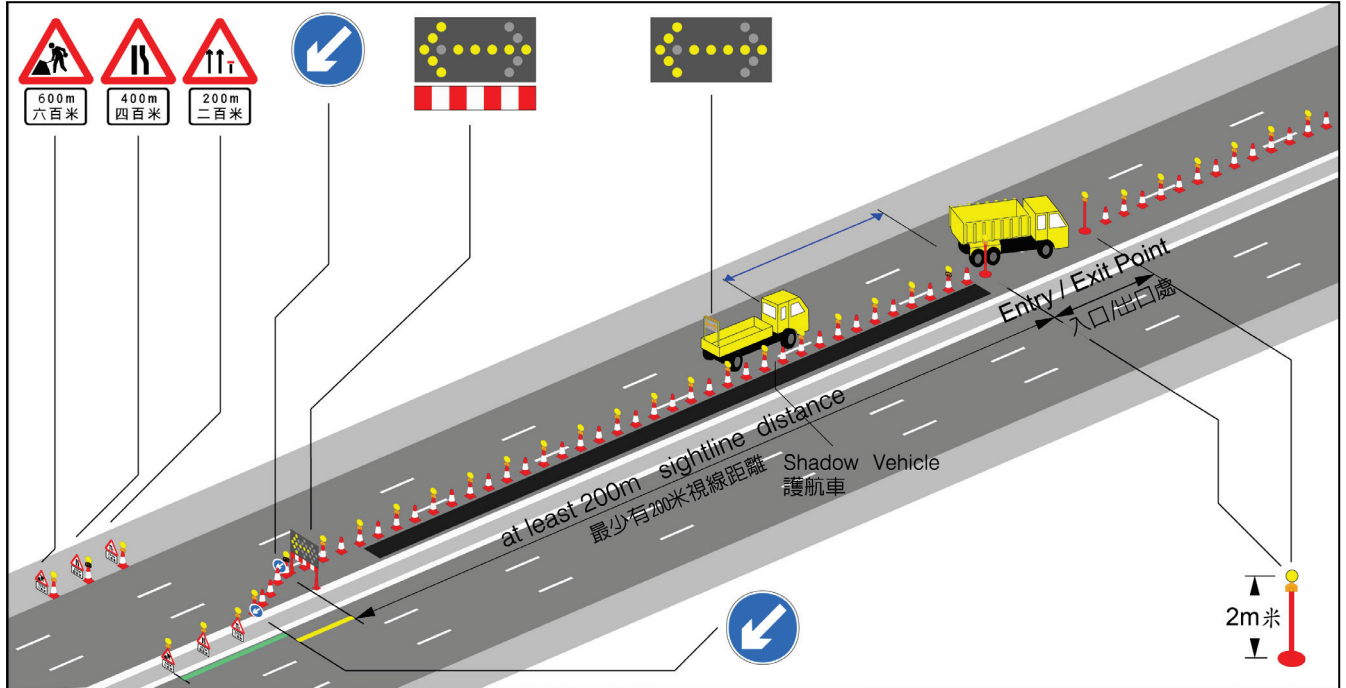
C-1.3 首要原則是，所有車輛須從楔形引出路段駛離被封閉的行車綫。在車輛駛離前，須暫時移開楔形引出路段的交通圓筒。在交通情況許可時，車輛須駛離被封閉行車綫範圍，並在轉綫前在同一條行車綫加速至正常速度。車輛駛離後，須盡快把暫時移開的交通圓筒放回原處。假如無法實行上述方法，須遵照第C-1.4 段的替代離開安排。

C-1.4 進入和替代離開安排的詳細程序載於下文分段。只有在上文第C-1.3 段所述的方法無法實行時，替代離開安排才適用。有關的圖像解說載於圖C-1。

- (a) 所有車輛只可在指定的入口或出口處進出被封閉的行車綫。

Fig. C-1 Entry / Exit Arrangement of Vehicles

圖 C-1 車輛出入安排



**Note:**

1. One metre high cones shall be used. See para. 4.20 for spacing.
2. Advance warning signs shall be supplemented by high intensity battery operated beacons.
3. Vehicles equipped with FAS and strobe lights may enter the lane closures without further escorts by shadow vehicles.
4. The exit point as shown is the alternative arrangement when exiting through the end taper is impractical.

**註：**

1. 須使用一米高的圓筒，間距參看第 4.20 段。
2. 預先警告標誌須與高亮度電池標燈同用。
3. 裝有指示燈號及閃燈的車輛可在無護航車護送下進入已封閉的行车綫。
4. 圖中所示的出口處，是車輛無法在楔形引出路段駛離時的替代安排。

**Key 索引**

-  See Table 5.2 for distance of first sign  
參看表 5.2 所示的第一個標誌的距離
-  See Table 5.4 for taper length  
參看表 5.4 所示的楔形路段長度
-  Works area/ Obstruction  
施工地區/ 障礙物
-  See Table C-1 in Appendix C for the buffer distances  
參看附錄 C 內表 C-1 所示的緩衝距離
-  Flashing arrow sign (FAS)  
閃爍箭咀指示燈號
-  Two-metre high amber revolving lantern  
兩米高的琥珀色繞轉警告燈

Table C-1 Table for Buffer Distance<sup>3</sup> for shadow vehicles 表 C-1 緩衝距離表<sup>3</sup>

For Shadow Vehicles Weighing 10,000 kg or More 適用於重量為 10 公噸或以上的護航車		
Speed Limit (km/h) 速度限制 (公里/小時)	Recommended Distance (m) <sup>1</sup> 推薦距離 (米) <sup>1</sup>	
	Stopping Works Vehicle 停下的工程車輛	Slowly Moving Works Vehicle <sup>2</sup> 慢駛工程車輛 <sup>2</sup>
Greater than 大於 80	50	55
70 – 80	50	45
Less than 小於 70	25	30
For Shadow Vehicles Weighing Less than 10,000 kg 適用於重量為 10 公噸以下的護航車		
Speed Limit (km/h) 速度限制 (公里/小時)	Recommended Distance (m) <sup>1</sup> 推薦距離 (米) <sup>1</sup>	
	Stopping Works Vehicle 停下的工程車輛	Slowly Moving Works Vehicle <sup>2</sup> 慢駛工程車輛 <sup>2</sup>
Greater than 大於 80	55	70
70 – 80	40	55
Less than 小於 70	30	30

Note:

註：

- 1 Recommended distance (m) is the distance between the front of the shadow vehicle and the works vehicle.  
推薦距離 (米) 為介乎護航車前端及工程車之間的距離。
- 2 Distances are appropriate for moving works vehicle with speeds up to 25 km/h.  
這些距離適用於速度為每小時 25 公里或以下的慢駛工程車輛。
- 3 The shadow vehicle shall keep a distance of at most 100m from the works vehicle(s).  
護航車須與工程車保持不多於 100 米的距離。

- (b) Entry or exit points shall be located at straight sections of the roads and a sightline distance of at least 200m from the end of the approach taper is provided.
- (b) 入口或出口處須設於道路直線路段，與楔形引入路段末端之間須有 200 米的視線距離。
- (c) The entry and exit points shall be delineated by a pair of two-metre high amber revolving lanterns.
- (c) 出入口處須以一對兩米高的琥珀色繞轉警告燈所標示。
- (d) For entering the lane closure, the vehicle(s) shall be escorted by a SV. All escorting SVs for this purpose refer to SVs not equipped with TMAs. However, vehicles equipped with FAS and strobe lights clearly visible to oncoming vehicles may enter the lane closures without further escorts by SVs. The SV shall have its strobe lights, FAS and vehicle's hazard warning lights switched on. Before the entry action, the traffic cones placed across the entry point shall be removed temporarily. When approaching the entry point, the SV shall gradually slow down and let the vehicle(s) enter the lane closure. Immediately after the vehicle(s) has entered the lane closure, the SV shall accelerate to the normal speed before any further lane changing actions.
- (d) 車輛如進入被封閉的行車綫，須由護航車同行，而作此用途的護航車則不須裝設緩撞裝置。然而，已配備清晰可見的指示燈號和閃燈的車輛在進入被封閉的行車綫時，則可無須再有護航車。護航車須亮着其閃燈、指示燈號和車輛的危險警告燈。在進入前，放置在入口處的交通圓筒須暫時移開。在駛近入口處時，護航車須逐漸慢駛，讓車輛可駛入被封閉的行車綫。車輛進入被封閉的行車綫後，護航車須立即加速至正常速度，才可轉換行車綫。
- (e) For exiting the lane closure at alternative exit point, the vehicle(s) must be escorted by a SV traveling on the unclosed traffic lane on the side of the exit point. The SV shall have its strobe lights, FAS and vehicle's hazard warning lights switched on. Before the exit action, the traffic cones placed across the exit point shall be removed temporarily. When approaching the exit point, the SV shall gradually slow down and let the vehicle(s) exit the lane closure. Immediately after exited the lane closure, the vehicle(s), together with the SV,
- (e) 車輛在替代出口處離開被封閉的行車綫時，必須與護航車同行，而護航車須在出口處旁邊的不封閉行車綫上行駛。護航車須亮着其閃燈、指示燈號和車輛的危險警告燈。在駛離前，放置在出口處的交通圓筒須暫時移開。在駛近出口處時，護航車須逐漸慢駛，讓車輛可駛離被封閉的行車綫。車輛離開被封閉的行車綫後，須與護航車在情況許可下立即加速至正常速度，才可轉換行車綫。



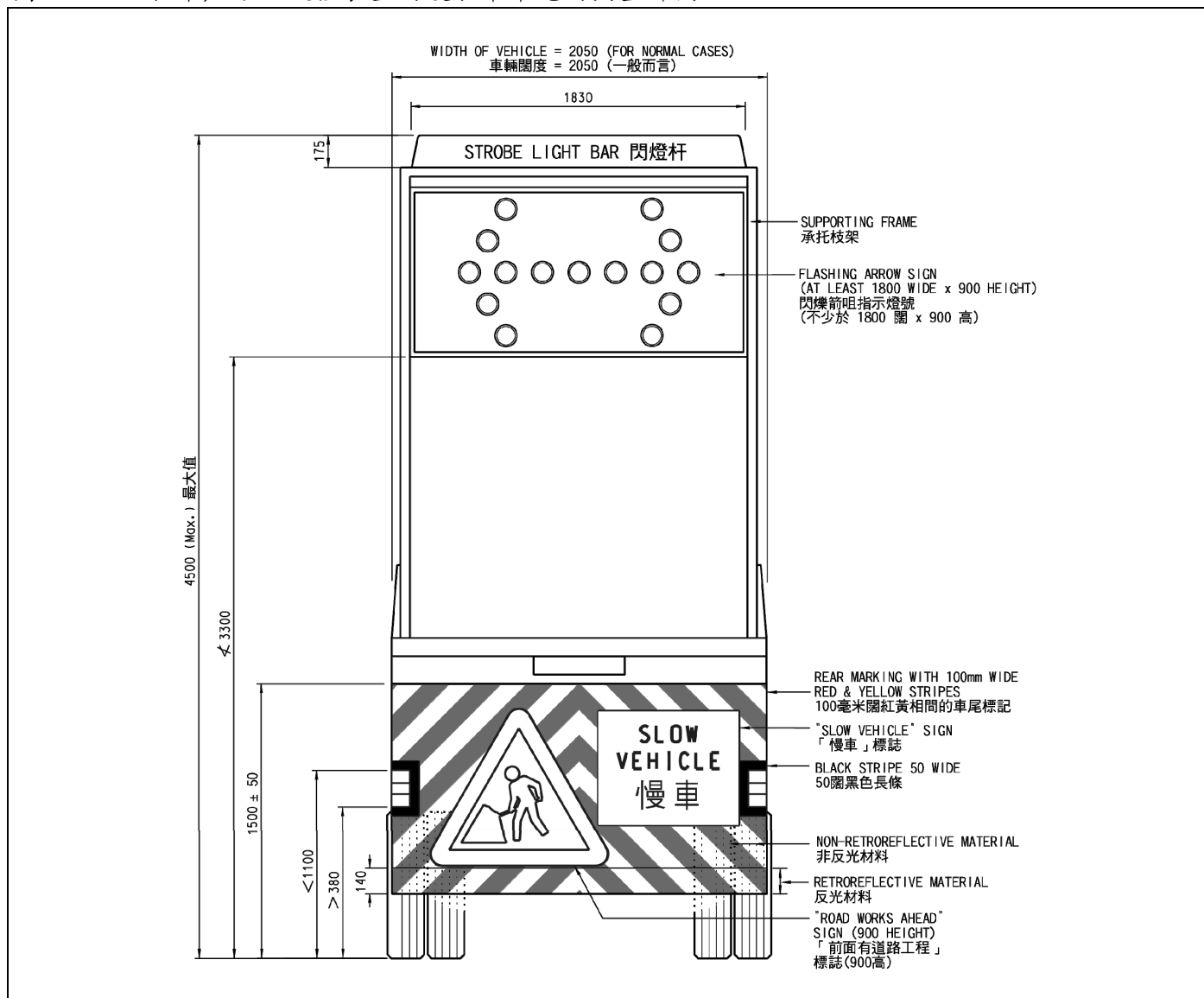
shall accelerate to the normal speed where conditions allowed before any lane changing actions.

- (f) Immediately after the entry/exit actions, the traffic cones temporarily removed from the entry/exit points shall be placed back to their original positions as soon as possible.

- (f) 當車輛駛入／駛離後，須即時把從出／入口處暫時移開的交通圓筒盡快放回原處。

Fig. D-1 Typical Rear Details of Works Vehicle/Shadow Vehicle without Truck Mounted Attenuator (TMA)

圖 D-1 工程車/不設緩撞裝置的護航車車尾的典型詳圖



## Notes:

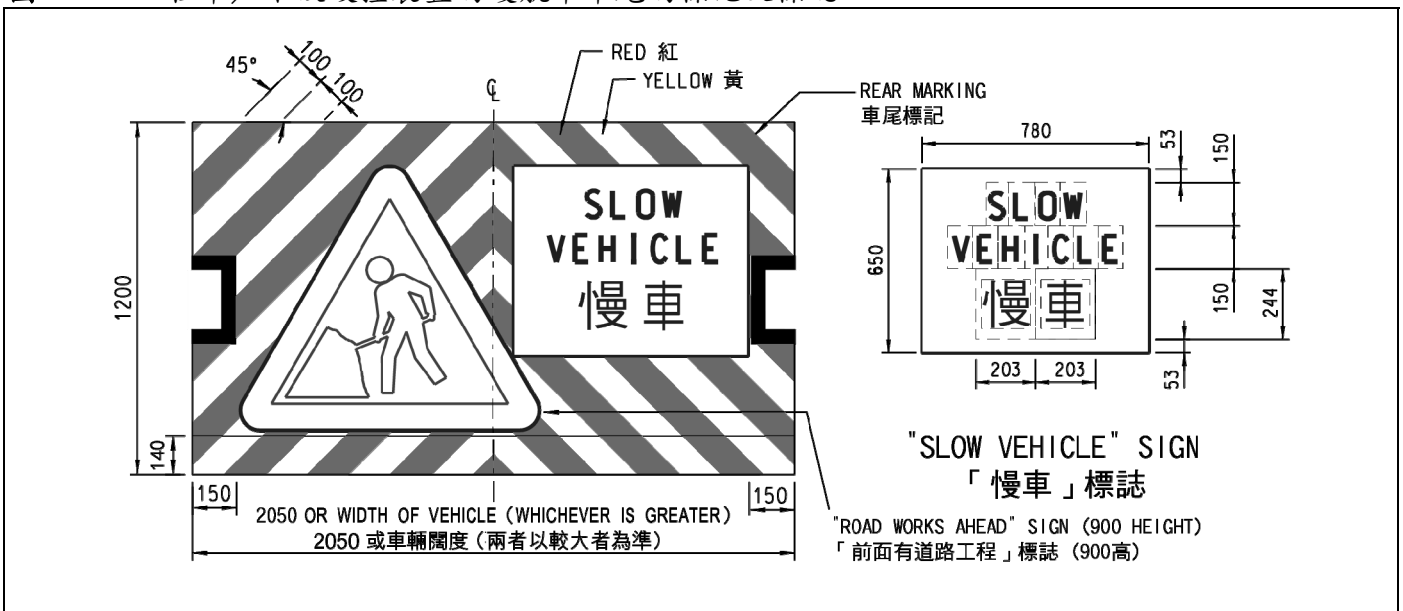
- All dimensions are in millimeters.
- Details of rear marking, "Road Works Ahead" sign and "Slow Vehicle" sign are given on Fig. D-2. The details may be changed for accommodation of vehicle's rear lights to suit the licensing requirements of the Transport Department and exact details shall be proposed for acceptance.
- Fig. D-1 is not applicable for works vehicles equipped with automatic mechanical system(s).
- Refer to Fig. D-4 for the typical rear details of works vehicles equipped with automatic mechanical system(s).

## 註：

- 所有尺寸為毫米。
- 車尾標記、「前面有道路工程」標誌及「慢車」標誌的詳圖載於圖 D-2。為裝設車尾燈以符合運輸署的發牌要求，可能會修改有關詳圖，和須要提出確實詳圖，以供驗收。
- 圖 D-1 不適用於配備自動機械系統的工程車。
- 配備自動機械系統的工程車車尾的典型詳圖，參看圖 D-4。

**Fig. D-2 Rear Marking and Signs for Works Vehicle/Shadow Vehicle without TMA**

**圖 D-2 工程車／不設緩撞裝置的護航車車尾的標記及標誌**



**Notes:**

1. All dimensions are in millimetres.
2. Sign plates and rear marking shall be aluminium plate of at least 3mm thick.
3. All sign face material, backing plate material, edge sealant, clear coat lacquers and silk screen inks used should be well bonded with each other without peeling off.
4. The sign faces of "Road Works Ahead" sign, "Slow Vehicle" sign and the bottom 140 mm of the rear marking shall be of ASTM D4956-16 "Type IX" retroreflective material. Any part of the back of the signs shall be grey colour if exposed to sight.
5. For "Slow Vehicle" sign, the detail shall be as follows:
  - (i) Alphabet style: (a) Letters - Transport Heavy (Transport Department Standard Drawing No. RS/S/20 refers)  
(b) Chinese Characters - Avector Chinese True Type Fonts (Hong Kong)
  - (ii) Colour : (a) Background - White;  
(b) Characters & Letters - Red
  - (iii) The dotted lines forming the rectangular tiles do not form part of the actual sign.
6. Fig. D-2, apart from dimensions and technical details of "Road Works Ahead" sign and "Slow Vehicle" sign, is not applicable for works vehicles equipped with automatic mechanical system(s).
7. Refer to Fig. D-4 for rear marking and signs for works vehicles equipped with automatic mechanical system(s).

**註：**

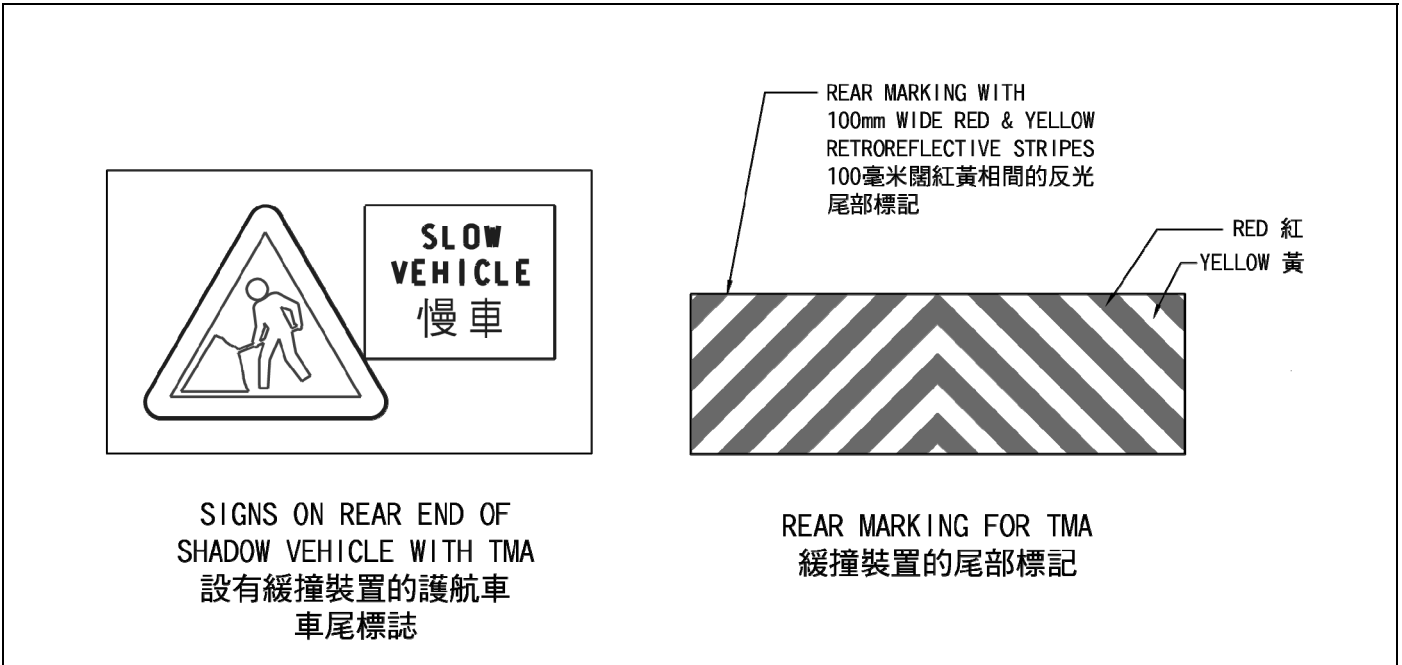
1. 所有尺寸為毫米
2. 標誌牌及車尾標記須為鋁製，最少厚 3 毫米。
3. 所有標誌面材料、底板材料、邊緣密封劑、漆塗層及絲網印劑，均應互相粘合良好，不會剝落。
4. 「前面有道路工程」標誌、「慢車」標誌及車尾標記底部 140 毫米的標誌面須為美國材料及試驗學會標準 D4956-16 規定的「第九類型」反光材料。標誌背面的任何可看見部分須為灰色。
5. 就「慢車」標誌而言，詳情如下：
  - (i) 字體： (a) 英文字母—粗體(參照運輸署第 RS/S/20 號標準圖則)  
(b) 中文字體—全真字庫(港人版)—粗黑
  - (ii) 顏色： (a) 背景—白色；  
(b) 中文字體及英文字母—紅色
  - (iii) 長方形的圍邊虛線並不屬實際標誌的部分。
6. 除了「前面有道路工程」標誌及「慢車」標誌的尺寸及技術細節，圖 D-2 不適用於配備自動機械系統的工程車。
7. 配備自動機械系統的工程車車尾的標記及標誌，參看圖 D-4。

Works on Expressway, High Speed Roads and Roads with Speed Limit of 70 km/h or Above – Typical Rear Details of Works Vehicle/Shadow Vehicle

在快速公路、高速道路及車速限制達每小時70公里或以上的道路進行的工程 - 工程車/護航車車尾的典型詳圖

Fig. D-3 Signs for Shadow Vehicle with TMA and Rear Marking for TMA

圖 D-3 設有緩撞裝置的護航車車尾標誌及緩撞裝置尾部標記



Notes:

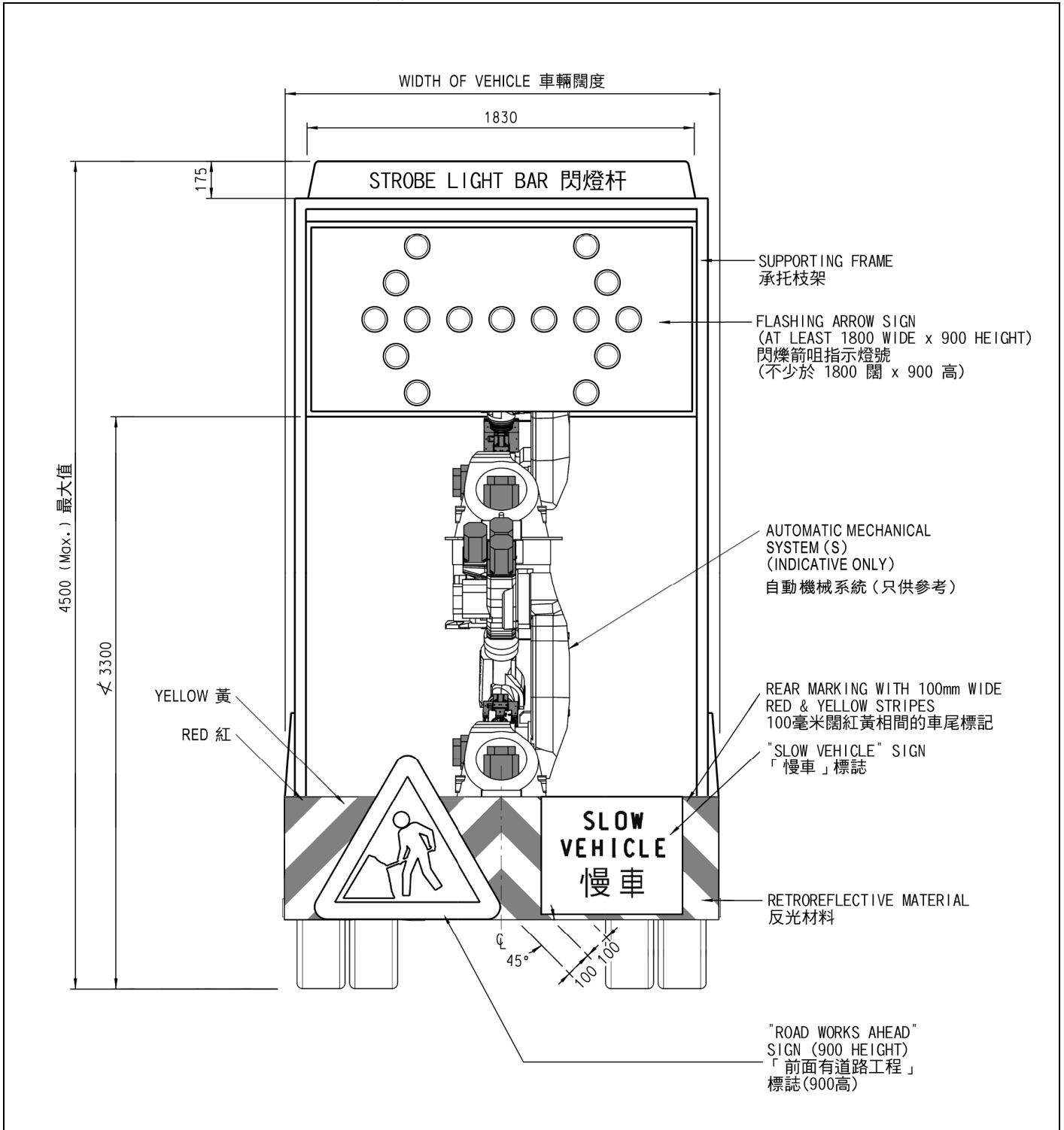
1. The actual size of the rear marking shall be designed to suit the end panel size of different type of TMA.
2. The entire rear marking shall be of ASTM D4956-16 "Type IX" retroreflective materials.
3. Refer to Fig. D-2 for the dimensions of "Road Works Ahead" sign and "Slow Vehicle" sign.
4. LED strips may be added, as appropriate, to enhance the conspicuity of TMA.

註：

1. 尾部標記的實際尺寸須切合不同型號緩撞裝置的尾部尺寸來設計。
2. 整個尾部標記須為美國材料及試驗學會標準 D4956-16 規定的「第九類型」反光材料。
3. 「前面有道路工程」標誌及「慢車」標誌的尺寸，參看圖 D-2。
4. 如合適，可加裝發光二極管燈條以加強緩撞裝置的顯著度。

**Fig. D-4** Typical Rear Details, Rear Marking and Signs for Works Vehicles equipped with Automatic Mechanical System(s)

**圖 D-4** 配備自動機械系統的工程車車尾的標記、標誌及典型詳圖



Notes for Fig D-4:

1. All dimensions are in millimeters.
2. Rear marking shall be aluminum plate of at least 3mm thick.
3. All sign face material, backing plate material, edge sealant, clear coat lacquers and silk screen inks used should be well bonded with each other without peeling off.
4. The “Road Works Ahead” sign and “Slow Vehicle” sign shall be properly mounted at the rear of the vehicle.
5. Refer to Fig. D-2 for dimensions and technical details of “Road Works Ahead” sign and “Slow Vehicle” sign.
6. The entire sign face of rear marking shall be of ASTM D4956-16 “Type IX” retroreflective material, with 100mm wide red and yellow stripes.
7. The total retroreflective area of the entire sign face of rear marking, excluding those covered by the “Road Works Ahead” sign, “Slow Vehicle” sign, vehicle’s rear lights, number plate and other associated installations, shall not be less than 2050mm x 140mm.
8. Number plate, vehicle’s rear lights and other associated installations are not shown for clarity.
9. Details of rear marking, “Road Works Ahead” sign and “Slow Vehicle” sign may be changed for accommodation of vehicle’s rear lights to suit the licensing requirements of the Transport Department and exact details shall be proposed for acceptance.

圖 D-4 的註：

1. 所有尺寸為毫米。
2. 車尾標記須為鋁製，最少厚3毫米。
3. 所有標誌面材料、底板材料、邊緣密封劑、漆塗層及絲網印劑，均應互相粘合良好，不會剝落。
4. 「前面有道路工程」標誌及「慢車」標誌必須適當地安裝於車尾的位置。
5. 「前面有道路工程」標誌及「慢車」標誌的尺寸及技術細節，參看圖 D-2。
6. 整個100毫米闊紅黃相間的車尾標記，須為美國材料及試驗學會標準 D4956-16 規定的「第九類型」反光材料。
7. 整個車尾標記的反光材料的總面積，在扣除被「前面有道路工程」標誌、「慢車」標誌、車尾燈、車牌及其他相關裝置覆蓋的部份後，不能少於2050毫米 x 140毫米。
8. 為清晰起見，未有顯示車牌、車尾燈及其他相關裝置。
9. 為裝設車尾燈以符合運輸署的發牌要求，可能會修改車尾標記、「前面有道路工程」標誌及「慢車」標誌詳圖，和須要提出確實詳圖，以供驗收。

E-1 The following paragraphs provide supplementary specifications for FAS in addition to those given in Chapter 4 :

- (a) The FAS shall be a board with a rear facing flashing arrow sign incorporating at least 15 sealed and hooded round beams. The beams shall be of 125mm diameter and shall have variable intensity as shown in Table E-1. The beams shall either be amber coloured spot lights, LED or optic fibre lights, and shall be visible at night and in day conditions. For works on expressway, the sign shall be of size not less than 1800 mm wide and 900 mm high. The lights on the sign face shall be capable of being controlled electronically, manually or automatically, dimmable, for the lighting patterns as described in para. (i) to (vi) below. Graphical illustrations of FAS and the lighting patterns are given in Fig. E-1.
- (i) Pass on the Left – an arrow light pattern pointing to the left flashing at a frequency of about 40 cycles per minute. This lighting pattern indicates that passage must be to the left of the stopping or slowly moving works vehicle/shadow vehicle.
- (ii) Pass on the Right – as para. (i) but the arrow is pointing to the right. This lighting pattern indicates that passage must be to the right of the stopping or slowly moving works vehicle/shadow vehicle.
- (iii) Pass on the Right or Left – the 13 beams forming a double arrow shall be flashing at about 40 cycles per minute. This lighting pattern indicates that

E-1 除第 4 章所指的規格外，下文載列閃爍箭咀指示燈號的補充規格：

- (a) 閃爍箭咀指示燈號（下稱指示燈號）是一塊背向面裝有多種指示燈號的板，該指示燈號須最少有 15 個已密封及罩着的圓形光束。光束的直徑須為 125 毫米，並能發出如表 E-1 所示的不同光度。光束須為琥珀色射燈、發光二極管或光纖燈，同時須在日夜均能看見。在快速公路進行的工程，指示燈號的尺寸不得少於 1 800 毫米闊和 900 毫米高。裝設在指示燈號上的燈須能以電子、人手或自動操作，並可按照下文第 (i) 至 (vi) 段的燈號模式轉變和變暗。指示燈號和有關燈號模式的圖像解說載於圖 E-1。
- (i) 繞向左面—指向左方的箭咀燈號模式，頻率為每分鐘閃爍約 40 次。本燈號模式顯示須靠著停下或慢駛工程車輛／護航車的左面駛過。
- (ii) 繞向右面—如 (i) 段所述，但箭咀指向右方。本燈號模式顯示須靠著停下或慢駛工程車輛／護航車的右面駛過。
- (iii) 繞向右面或左面—由 13 個光束組成的雙箭咀，每分鐘閃動約 40 次。本燈號模式顯示可靠著停下或慢駛工程車輛／護航車的右

passage may be to the right or to the left of the stopping or slowly moving works vehicle/shadow vehicle.

- (iv) Hazard Warning – the 4 beams flashing at a frequency of between 90 and 150 times per minute. The four corner lights shall be flashed with diagonal pairs flashing alternately to alert oncoming vehicles to use other traffic lane(s) when the works vehicle/shadow vehicle intends to change or is changing lane, or is under other hazardous situations.
  - (v) A test sequence shall be provided to test if all beams are functional.
  - (vi) A test sequence shall be provided to energize all beams to the desired power level for steady state testing of the beam's intensity.
- (b) The luminance performance shall be regularly monitored to ensure the compliance with the requirements and the FAS shall be calibrated every three years. Certificates and calibration results to demonstrate the compliance with the luminance requirements shall be produced when required.
- (c) The sign shall be connected to a suitable low voltage d.c. power supply fixed in the vehicle. The driver of the vehicle must be able to operate and control the FAS whilst driving.

邊或左面駛過。

- (iv) 危險警告—4 個光束每分鐘閃動 90 至 150 次。當工程車／護航車打算、正在轉換行車綫或處於其他危險情況時，對角的一對光束須交替閃動，提醒駛來的車輛使用其他行車綫。
  - (v) 須設有測試次序，以測試所有光束是否運作正常。
  - (vi) 須設有測試次序，以便為所有光束充電至預算的電力水平，並保持光束穩定地亮著，以測試光束亮度。
- (b) 須定期監察燈光亮度的表現，以確定其符合要求。此外，指示燈號須每 3 年調校一次。在接獲要求時，須提供證書和調校結果，以證明符合燈光要求。
- (c) 燈號須接駁至裝設在車輛的適當低壓直流電電源。車輛司機必須能夠在駕駛時操作和控制指示燈號。



Table E-1 Luminous Intensity (Luminance limits on reference axis)  
表 E-1 燈光亮度(參考軸上的亮度限制)

Ambient Illuminance (lux) 周圍照度(勒克司)	Luminance (cd/m <sup>2</sup> ) (Amber Colour) 亮度(cd/m <sup>2</sup> ) (琥珀色)	
	Minimum 最小	Maximum 最大
> 40,000	12,400	10 times the values of the minimum on the left 左面最小值的 10 倍
> 4,000 & ≤ 40,000	6,200	
> 400 & ≤ 4,000	1,100	
> 40 & ≤ 400	300	
≤ 40	200	5 times the values of the minimum on the left 左面最小值的 5 倍

Notes:

- (i) The intensity in any directions within 5° to the right and left of the reference axis and within 5° below the reference axis must be at least 50% of the measured intensity on the reference axis. The minimum element on-time of the lighting signal shall be 50 percent for each flashing mode.
- (ii) When the sign is set for 40,000 lux and 400 lux (in tunnel) tests, the sign shall achieve the relevant luminance value without the external illumination (solar simulator OFF).
- (iii) The minimum luminance ratio shall be in accordance with Table E-2 below for all illuminance between 400 and 40,000 lux at the reference angles in (i) above.

註：

- (i) 參考軸左右5度範圍內及參考軸以下5度範圍內任何方向的光度，最小須為參考軸的量度光度的50%。在閃動時，燈號亮起的時間不應小於百分之五十。
- (ii) 當燈號用作40,000勒克司及400勒克司（就隧道而言）的測試時，燈號須在沒有外來照明（關上太陽模擬器）的情況下達到有關亮值。
- (iii) 上文第(i)項所述的參考角度內所有介乎400至40,000勒克司的照度的最低亮度比率，均須符合下文表E-2的規定。

Table E-2 Minimum Luminance Ratio 表 E-2 最低亮度比率

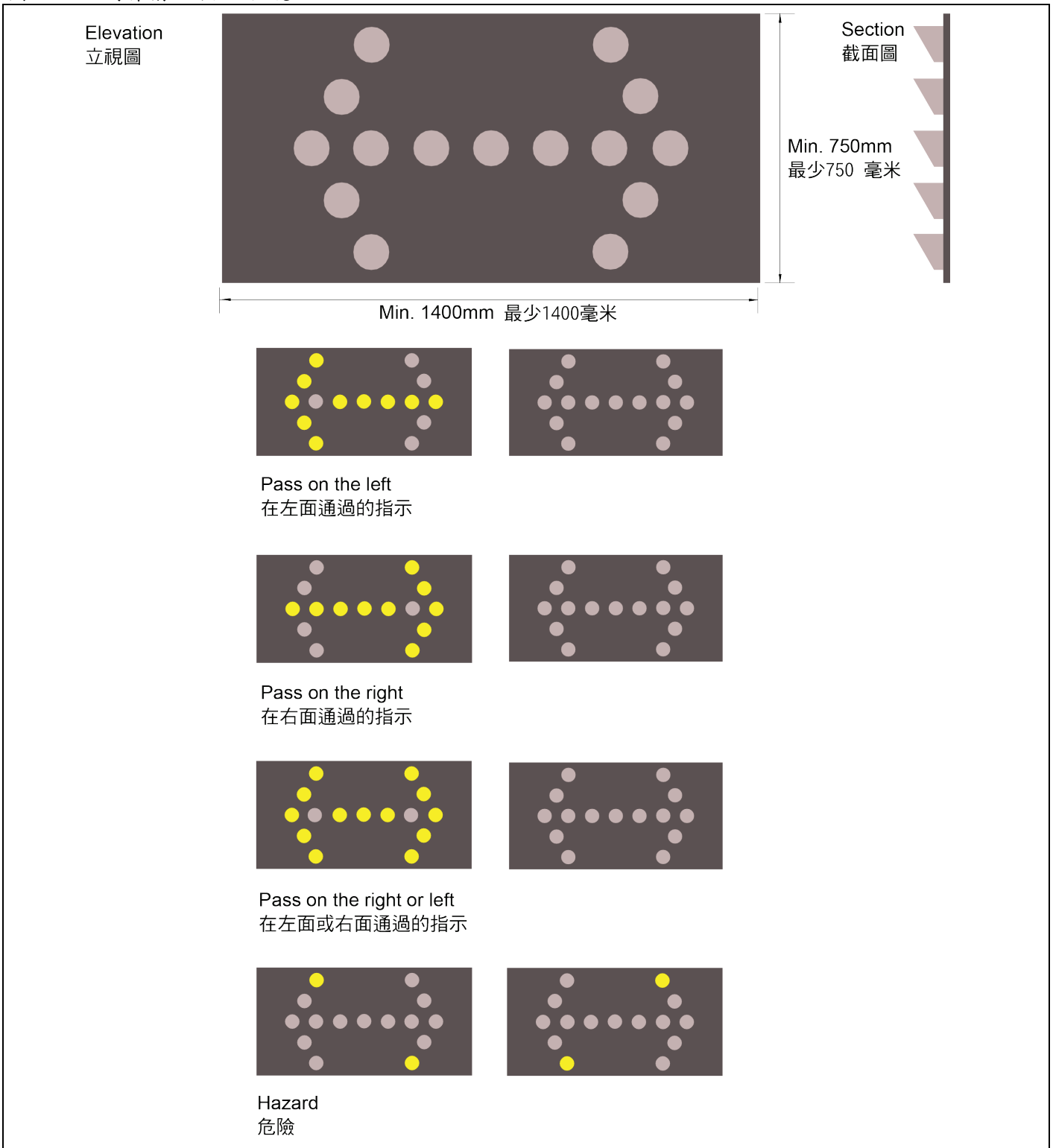
Minimum Luminance Ratio (Amber Colour) 最低亮度比率(琥珀色)	
On reference axis 在參考軸上	Off reference axis 離開參考軸
10	5

Note : 1. For illuminances below 400 lux (e.g. tunnels or night-time), there is no luminance ratio requirement.

註： 1. 就 400 勒克司以下的照度（例如隧道或夜間）而言，並無亮度比率規定。

Fig. E-1 Flashing arrow sign

圖 E-1 閃爍箭咀指示燈號



Note: 1. The height and width for works on expressway, high speed roads and other roads with speed limit of 70km/h or above should refer to Appendix D.

註: 1. 用於在快速公路、高速道路及其他車速限制每小時 70 公里或以上的道路進行之工程的高度及闊度，參看附錄 D。

- (d) For works on expressways, high speed roads and roads with speed limit of 70 km/h or above, the rear details of WV installed with FAS are shown on Fig. D-1 to D-2 in Appendix D. The details of lighting and signing are summarized as follows:
- (i) The FAS shall be mounted with its base not less than 3300 mm above road level on a steel frame.
  - (ii) The WV(s) shall also be equipped with a high mount strobe light bar. The light bar shall be of amber colour with 2 high intensity strobe light bulbs, 2 revolving lanterns, 2 diamond mirrors and 2 V-shaped mirrors or other equivalent design approved by the Director of Highways. The strobe light bar shall be of minimum 18,000 candela output able to be automatically dimmed to 1,800 candela when the ambient illuminance is equal to or less than 40 lux with 60-80 flashes per minute. The revolving lantern shall flash 90-150 times per minute.
  - (iii) Other than the FAS and the strobe light bar, the WV(s) shall also be equipped with a rear marking with a height of 1200 mm and with a width being the smaller of 2050 mm or the width of the vehicle. The WV(s) shall also have the two signs as shown on Fig. D-1 to D-2 in Appendix D.
  - (iv) If the FAS cannot be mounted on the WV (such as a road sweeper), the FAS may be mounted on a trailer on tow by the WV as an alternative.
- (d) 就快速公路、高速道路及其他車速限制每小時 70 公里或以上所進行的工程而言，裝設有指示燈號的工程車的背面詳圖載於附錄D圖D-1 至D-2。有關燈號及標誌的詳情現摘錄如下：—
- (i) 指示燈號須裝設於鋼架上，而燈號的底部須距離路面不少於 3 300 毫米。
  - (ii) 工程車亦須配備高置閃燈杆。燈杆須為琥珀色，並設有兩個高亮度閃燈泡、兩個繞轉警告燈、兩面鑽石鏡和兩面V形鏡，或其他路政署署長批准的同等設計。閃燈杆的輸出率最低須為 18 000 燭光，並能於周圍照度等同或低於 40 勒克司時自動調暗至 1800 燭光，閃動次數為每分鐘 60 至 80 次。繞轉警告燈須每分鐘閃動 90 至 150 次。
  - (iii) 除配備指示燈號和閃燈杆外，工程車亦須配備車尾標記。車尾標記的高度為 1 200 毫米，闊度則為 2 050 毫米或車輛的闊度，以較少者為準。工程車亦須裝設如附錄D中圖D-1 至D-2 所示的兩個標誌。
  - (iv) 如指示燈號無法裝設在工程車上（如掃街車），指示燈號可裝設在由工程車拖行的拖架上，作為替代方法。

(e) For the SV, a FAS, a strobe light bar and a rear marking, a “Road Works Ahead” sign and a “Slow Vehicle” sign shall also be installed in accordance with para. (d)(i), (d)(ii) and (d)(iii) above respectively. For the SV with TMA, the “Road Works Ahead” sign and “Slow Vehicle” sign shall be fitted on the rear of the SV such that they can be clearly viewed when the TMA is unfolded, and without affecting the folding and unfolding operations of the TMA. The rear marking of TMA shall be entirely fitted with ASTM D4956-16 “Type IX” retroreflective material as shown in Fig. D-3.

(e) 至於護航車，亦須遵照上文第(d)(i)、(d)(ii)和(d)(iii)段所述，分別安裝指示燈號、閃燈杆、車尾標記、「前面有道路工程」標誌和「慢車」標誌。設有緩撞裝置的護航車，在不影響緩撞裝置的摺合和打開的操作下，「前面有道路工程」標誌及「慢車」標誌應盡量安裝在護航車靠近車尾的位置，並能在緩撞裝置摺合時清晰可見。如圖D-3所示，緩撞裝置的整個尾部標記須為美國材料及試驗學會標準D4956-16規定的「第九類型」反光材料。