HIGHWAYS DEPARTMENT

GUIDELINES ON TRAFFIC IMPACT ASSESSMENT & DAY-TIME BAN REQUIREMENTS FOR ROAD WORKS ON TRAFFIC SENSITIVE ROUTES

Research & Development Division

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1. Introduction

1.1 In mid 1994 the Road Opening Working Party (ROWP) chaired by Secretary for Works decided to require utility undertakers to carry out Traffic Impact Assessment (TIA) for any proposed utility works on traffic sensitive routes. This requirement was implemented in stages and from April 1995 the TIA requirement applies to 126 roads / road sections. In December 1994 the ROWP decided to ban day time utility works on 45 traffic sensitive road sections. This Guidance Note contains a consolidated guidelines on these two requirements.

1.2 The requirements stipulated by ROWP are for utility works. Subsequently Highways Department (HyD) decided to follow the TIA requirement for in-house works and to comply with the day-time ban requirement as far as practicable. It is recognised that it will not be in the interest of the public to restrict certain highway works to night time such as construction of elevated road or road construction.

2. TIA Requirement

2.1 Objective

The main objectives of TIA are

a) to assess the anticipated traffic implications of carrying out road works;

b) to devise appropriate temporary traffic management measures to ameliorate the traffic impact of the road works.

2.2 List of roads affected

The list of roads where TIA requirements shall apply is given in Appendix 1 and includes Red Routes and Pink Routes and some other traffic sensitive routes.

2.3 Types of works affected
The TIA requirement shall apply to the following types of works which will affect vehicle movements including works on footways involving diversion of pedestrians onto the adjoining carriageway -

a) any works requiring an excavation permit from the HyD including but not limited to utility works implemented by utility undertakers and road opening works by other public bodies or private developers; and

b) HyD capital works projects, road improvement works and maintenance works.

2.4 Exemption

Exemptions will not generally be allowed. Exceptional application for exemption should be submitted to the concerned Traffic Engineering (TE) Division of Transport Department (TD) on a case by case basis. The limited circumstances where exemptions have been granted are as follows:

a) Emergency works (for utility works, the list of emergency works agreed between utility undertakers and HyD shall apply).

b) Works involving night work only are generally exempted except a few critical routes such as Cross Harbour Tunnel Approach Roads. The concerned TE Division of TD must be notified and consulted in advance. Night work is defined as work within the following period - 2200-0600 hours for Strategic Road Networks (SRN)\(^1\) 2000-0600 hours for other roads.

c) Works which is expected to cause minimal impact to traffic flow as confirmed on a case by case basis by the concerned TE Division of TD. Despite the exemption on TIA requirement, the day-time ban requirement may still apply to such works. Examples are routine road lighting maintenance works such as lamp replacement, lantern cleaning, pole painting and mechanical pole testing and lighting works where excavations are carried out in the pedestrian ways and outside the peak periods which are 7am - 10am and 4pm - 8pm in general.

2.5 Procedures

a) A TIA Report outlining the findings and recommendations of the TIA shall be prepared. Guidelines on preparing TIA Reports (including estimation of road capacity) are given in Appendix 2.

b) One copy of TIA Report shall be submitted to the concerned TE Division of TD with copy sent to the Commissioner of Police, and if the proposed works is within the Area Traffic Control areas to the Area Traffic Control Division of TD.

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\(^1\) SRN consists of both rural and urban trunk roads which generally have route numbers assigned to them.
c) The concerned TE Division of TD will normally reply within three weeks after the submission.

d) Applications for excavation permits will not be processed until the related TIA Report has been approved by TD.

e) For capital works projects, assessment of traffic impact shall be carried out during the planning stage in consultation with TD and the Commissioner of Police. Depending on the complexity of any traffic management measures required, it may be necessary to set up a Traffic Management Group at the construction stage to consider and fine tune those measures.

3. Day-time Ban Requirement

3.1 Objective

The objective is to restrict works to outside day-time hours to avoid disruption to peak hour vehicular traffic. Day-time hours mean 0700 to 1900 hours.

3.2 List of roads affected

The list of roads where day-time ban shall apply is given in Appendix 1. The day-time ban road sections overlap partly with the TIA routes. Those TIA routes with part sections falling within the day-time ban list are marked as "part length day-time ban" in Appendix 1.

3.3 Types of works affected

The day-time ban requirement shall apply to the following types of works which will affect vehicle movements including works on footways involving diversion of pedestrians onto the adjoining carriageway -

a) any works requiring an excavation permit from the HyD including but not limited to utility works implemented by utility undertakers and road opening works by other public bodies or private developers; and

b) HyD capital works projects, road improvement works and maintenance works.

3.4 Exemption

Exemption will not generally be allowed but the followings have been exempted:

- Emergency works (for utility works the list of emergency works agreed between utility undertakers and HyD shall apply), provided that the
work is carried out round the clock, unless technically not possible, until completion of emergency repairs.

· Works on Sundays and public holidays but excluding works on -
  - Strategic Road Networks;
  - Chatham Road South;
  - Clearwater Bay Road;
  - Nathan Road;
  - Repulse Bay Road;
  - Sai Sha Road and
  - Salisbury Road.

· Works on footways without encroachment (including diversion of pedestrian) onto the adjoining carriageway. In such case, stopping any construction vehicle by the kerb side for loading/unloading during day-time is not permitted.

Exceptional application for exemption should be submitted to the Regional Offices of HyD who will seek the agreement of TD and Commissioner of Police before granting approval. In general the following will be exempted:

a) Works or certain parts of works which cannot be completed during a night shift or during public holidays and it is not practical to deck over the excavation at day-time, such as
  - full depth reconstruction of roads; and
  - curing of concrete carriageway

subject to appropriate traffic management measures acceptable to TD and the Commissioner of Police.

b) Works with virtually no adverse effect to the traffic even carried out at day-time, for instance, tram track renewal works along tram reserve.

c) Airport Core Projects, Airport Railway Projects, HyD capital works projects, and HyD maintenance and improvement works where
  - full TIA has been carried out to derive traffic management proposal acceptable to TD and Commissioner of Police;
  - it is not in the interest of the public to restrict such works outside day-time hours.

Examples are traffic improvement works required by TD and routine maintenance work for expressways under cyclic lane closure programme acceptable to TD and the Commissioner of Police.
d) Other works confirmed by HyD on a case by case basis on technical grounds.

3.5 Procedures

a) For proposed works on day-time ban roads, Excavation Permit applicants shall indicate in their applications whether they intend to carry out the work at night (or on Sundays, public holidays) and provide details showing how they propose to deck over any excavation on the carriageway during day-time.

b) For in-house HyD works, officers concerned shall take into account this requirement in planning and in liaison with other departments.

4. Construction Noise Permit

4.1 It is expected that the TIA and day-time ban requirements will result in more road works to be carried out at night or on Sundays and public holidays. Despite these requirements, contractors will still have to obtain Construction Noise Permit (CNP) from Environmental Protection Department (EPD) for working within the restricted hours under the Noise Control Ordinance.

4.2 Contractors must be reminded to adopt low noise construction methods during restricted hours. Conditions on allowable working periods, the powered mechanical equipment to be used and noise control measures etc will be imposed by EPD, depending on the estimated noise impact to the nearest noise sensitive receivers. Enforcement action will be taken against contractors who do not follow the conditions of the CNP. The Practice Note prepared by EPD at Appendix 3 is a useful guide for promoters and contractors of road excavation works in their application for CNPs.

5. Temporary Decking over Trenches on Carriageways

5.1 The TIA and day-time ban requirements may require trenches on carriageways to be decked over during day-time to maintain traffic flow. To avoid reduction in road capacity, the temporary decking shall be constructed to avoid the need for vehicles to slow down when passing over the decking. Unless there are practical difficulties the top of the temporary decking shall be flush with the adjoining road surface. A typical construction of the decking is shown in Appendix 4.

5.2 Any protruding decking on TIA or day-time ban roads shall be marked on the surface by alternate black and yellow diagonal strips of 300mm width and an "Uneven Road" sign (sign 434) provided to warn motorists of its presence. The yellow markings shall have skid resistance and reflectivity characteristics equivalent to common thermoplastic road markings.
5.3 The temporary decking shall always be secured in position and covering the whole area of the trench on carriageway without causing any danger to road users.

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