

Checklist to Explore the Feasibility of Daytime Roadwork

Purpose

To minimize undue noise impact arising from roadwork at restricted hours (i.e. between 7p.m. and 7a.m. and any time on a general holiday including Sunday), this checklist is prepared for project proponents or contractors to ensure appropriate steps are considered in the planning stage. When the steps are conscientiously followed, it leads to answer the question whether a Construction Noise Permit (CNP), under the Noise Control Ordinance, would be issued by the Environmental Protection Department (EPD) for carrying out the intended roadwork.

Consideration to explore the feasibility of daytime roadwork

2. In planning or recommending the working hours of roadwork that cause the least environmental nuisance to noise sensitive receivers, the processes below should be considered. The key is to explore the feasibility of carrying out roadwork at day hours whenever practicable. Unless construction at the restricted hours is well justified and explained, the chance of obtaining a CNP from the EPD is not high.

- a) If the carrying out of roadwork at non-restricted hours is not feasible with justification on grounds of serious traffic interruption or disruption (e.g. works on daytime ban routes or objected by HKPF or TD to be carried out at non-restricted hours) or for some other special reason(s), day hours (between 9a.m. and 7p.m.) on general holidays should be the first option of substitution. Construction works at evening hours (between 7p.m. and 11p.m.) on general holidays may be allowed only when day hours are considered well justified as inappropriate/insufficient for construction.
- b) If option (a) above of using day hours on general holidays is inappropriate for construction, and again well justified with valid reason(s), evening hours (between 7p.m. and 11p.m.) outside general holidays should then be considered as the second option of substitution, or supplementary to option (a).
- c) Only under exceptional situation that both options (a) and (b) above are proved not possible, or inappropriate for construction, then the carrying out of roadwork at nighttime (i.e. between 11p.m. and 7a.m. of the next day) outside general holidays would become the last resort for substitution, or supplementary to options (a) and (b). Notwithstanding, no overnight roadwork would generally be permitted for any weekdays which are just before or after a general holiday.

3. In consideration of reason(s) or justification above, road traffic management measures should be explored and implemented wherever practicable. Some examples are:

- a) road traffic diversion to reduce the traffic volume on the road where the work is to be carried out; and
- b) provision of temporary urban clearway and suspension of roadside parking spaces to increase the capacity of the road concerned.

4. Upon identification of certain road sections which need to be carried out during restricted hours, such particular road sections have to be clearly marked in the CNP application. For instance, the applicant should mark only the road junction which require working in restricted hours but not the others where work can be done at non-restricted hours.

5. To help check whether the roadwork should be carried out at restricted hours, a flow diagram checklist is attached at **Annex I** for the concerned parties to follow when seeking proper advice from relevant authorities or recommending the working hours. Some examples on working hours for roadworks with different unavoidable constraints are attached at **Annex II**.

Adoption of Quiet Equipment and Technique

6. Under some very special situations, CNP applications are justified notwithstanding that the noise level generated from the work would exceed the statutory limit. EPD when issuing the CNP would nevertheless require the employment of the quietest practical construction methods including quiet construction equipment to effect the greatest protection to nearby noise sensitive receivers. The “Guidelines on the application of some commonly used quiet equipment and techniques for road pavement works”, attached at **Annex III**, will help clarify those situations where the use of quiet equipment would be mandatory for unavoidable road pavement works carried out during the restricted hours.

7. Following the same principle outlined in paragraph 6, if it is anticipated that the construction work associated with the CNP application would induce significant impact on nearby noise sensitive receivers, EPD may impose the following permit conditions on the CNP as appropriate.

- a) Require the use of quiet construction equipment, such as :-
 - i) super silenced generator; and
 - ii) small milling machine to replace hand held breaker for breaking up the asphalt surfaces at road kerbs and around manholes.

- b) Control on working hours, such as:
 - i) carrying out the noisy work (e.g. road breaking) in the day hours on general holidays and the less noisy work (e.g. water piping work) in the evening (and nighttime if absolutely necessary);
 - ii) prohibiting the use of noisy equipment or work process (e.g. hammering, breaking, milling, and cutting process, and handling of rubble) from 11p.m. to 7a.m. on any day, and additionally from 7a.m. to 9a.m. on general holidays; and
 - iii) limiting noisy work (e.g. road breaking or milling) to one night per week if night work is unavoidable (see Note 1).

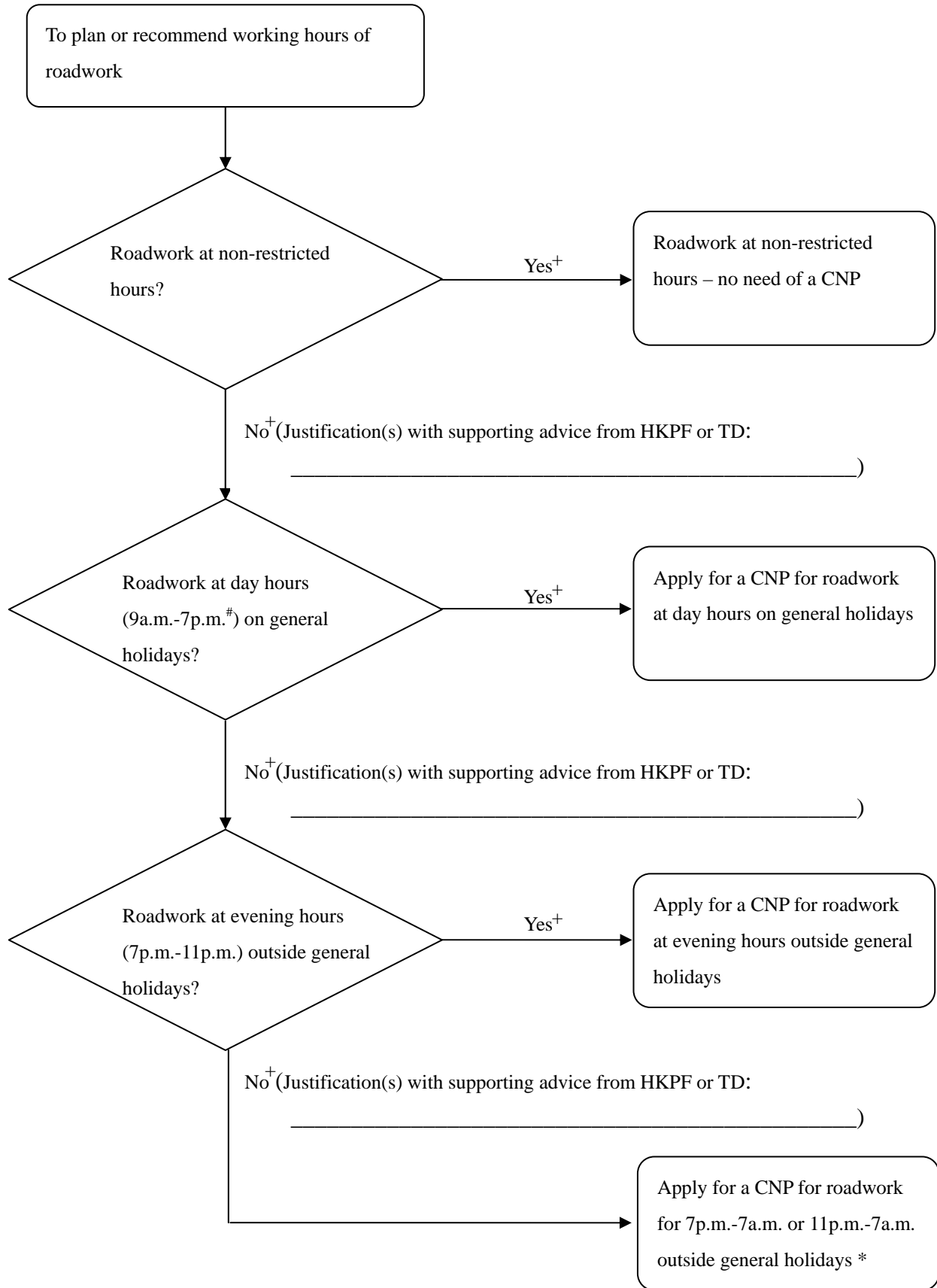
Enquiries

8. All CNP applications and enquiries can be made to Local Control Offices of the Environmental Protection Department. Addresses and telephone numbers of the six Local Control Offices are listed in **Annex IV**.

Note:

1. The control measure outlined in paragraph 7 (b) (iii) is intended to avoid affecting the same noise sensitive receivers in consecutive nights. For a long road section covered by a single CNP application, the EPD may divide the road section into shorter sections and apply the limitation to each of the shorter sections. Such long stretch of roadwork would be arranged to be carried out in different road sections in different nights of a week.

Checklist to Explore the Feasibility of Daytime Roadworks



+ Please delete if not applicable.

CNP will be issued to allow construction work up to 11p.m. on general holidays if justification is provided.

* Hammering, breaking, milling and cutting process, and handling of rubble shall not be carried out after 11p.m. unless prior consent is given by EPD.

Examples on working hours for roadworks with different unavoidable constraints

If the carrying out of roadwork at non-restricted hours is not feasible with justification provided, possible working hours, which should be derived from after following the flow diagram checklist attached in Annex I, are as follows:

- Working hours
- (a) - Day hours on general holidays (9a.m. to 7p.m. or upto 11p.m. if justification provided)
 - (b) - Evening hours outside general holidays (7p.m. to 11p.m.)
 - (c) - Night hours outside general holidays (11p.m. to 7a.m. on next day)

Working hours	Examples on working hours for roadworks with different unavoidable constraints	Remarks
(a)	Sunday / holiday roadwork	CNP will be issued to allow construction work up to 11p.m. on general holidays if justification is provided.
(a) + (b)	Pipe laying work in a roadway needs to be completed for several consecutive working days at evening hours after work on a general holiday	
(a) + (b) + (c)	For road re-surfacing works in a three-lane highway, work in slow lane is allowed on Sunday and general holidays. Since work in mid lane or fast lane may require closure of 1.5 lanes, lane closure and hence construction work is only allowed, for example, after 9p.m. outside general holidays.	
(b) or (b) + (c)	Road re-surfacing work in Strategic Road Network or roadway that the work could not be carried out on general holidays.	
(c)	For safe bus operation in a one-way single-lane road connected to a bus terminal, ONLY night works is allowed and hence CNP for night hours outside general holidays would be issued.	

**Guidelines on the application of some commonly used
quiet equipment and techniques for road pavement works**

Construction Work	Quiet equipment/techniques (see Note 1)
1. Concrete structure demolition above road surface e.g. removal of central barrier	* Hydraulic concrete crusher (see Note 2)
2. Trench opening on carriageways - Asphalt surface - Concrete surface	* Hand-held hydraulic/electric breaker with acoustic baffles/enclosures (see Note 3) * Saw and lift method with acoustic baffles as necessary (see Notes 2 and 4)
3. Road pavement for reconstruction - Asphalt re-surfacing - Pavement demolition	* Road miller with noise reduction treatments to engine/exhaust and acoustic baffles as necessary (see Note 2) * Saw and lift method or road ripper with acoustic baffles as necessary (see Notes 2 and 4)

Notes :

1. These quiet equipment/techniques will apply whenever the noise from essential or urgent works is assessed to exceed the relevant Acceptable Noise Level during restricted hours (7 p.m. to 7 a.m. on any day or any time on general holidays). Alternative construction methods are sometimes acceptable to suit particular technical constraints such as those described in Notes 2 and 4.
2. Hand-held hydraulic/electric breakers may be used for concrete removal within 300mm around manholes or channels, or at other positions where there is access difficulty or where the use of the quiet method is impracticable. Under such circumstances, acoustic baffles/enclosures or equivalent measures shall be adopted for noise mitigation (see Note 3).
3.
 - (i) An example of the materials suitable for acoustic baffles or enclosure is minimum 50mm thick sound absorbing lining and 10mm thick plywood (or 1mm thick steel) backing so that no part of the equipment is visible from any nearby noise sensitive receiver.
 - (ii) Except under exceptional circumstances, no breakers shall be operated from 11 p.m. to 7 a.m. on any day, and additionally from 7 a.m. to 9 a.m. on general holidays.
4. Saw and lift method may be considered not practicable in situations where it would damage existing underground utilities embedded beneath the road surface.

(Remarks: The above "Guidelines" are extracted from the ProPECC Notes No.PN1/96)

**Environmental Protection Department
Offices for Licence and Permit applications**

The Chinachem Tsuen Wan Plaza Office of this Department will terminate its licence and permit application services with effect from 24 July 2004. Applications services are now available at the following Customer Service Counters:

Offices	Office Addresses	Tel.	Control Districts
Head Office	28/F., Southorn Centre, 130 Hennessy Road, Wanchai, Hong Kong.	2573 7746	---
Revenue Tower Office	33/F., Revenue Tower, 5 Gloucester Road, Wanchai, Hong Kong.	2824 3773	---
Cheung Sha Wan Government Offices	8/F., Cheung Sha Wan Government Offices, 303 Cheung Sha Wan Road, Kowloon.	2402 5200	---
Regional Offices:			
Regional Office (East)	5/F., Nan Fung Commercial Centre, 19 Lam Lok Street, Kowloon Bay, Kowloon.	2755 5518	Kwun Tong, Wong Tai Sin, Sai Kung, Yau Tsim Mong & Kowloon City
Regional Office (South)	2/F., Chinachem Exchange Square, 1 Hoi Wan Street, Quarry Bay, Hong Kong.	2516 1718	Hong Kong Island & Islands
Regional Office (West)	8/F., Tsuen Wan Government Office, 38 Sai Lau Kok Road, Tsuen Wan, New Territories.	2417 6116	Tuen Mun, Tsuen Wan, Kwai Tsing & Sham Shui Po
Regional Office (North)	10/F., Shatin Government Offices, No.1 Sheung Wo Che Road, Shatin, New Territories.	2158 5757	Yuen Long, Shatin, Tai Po & North.