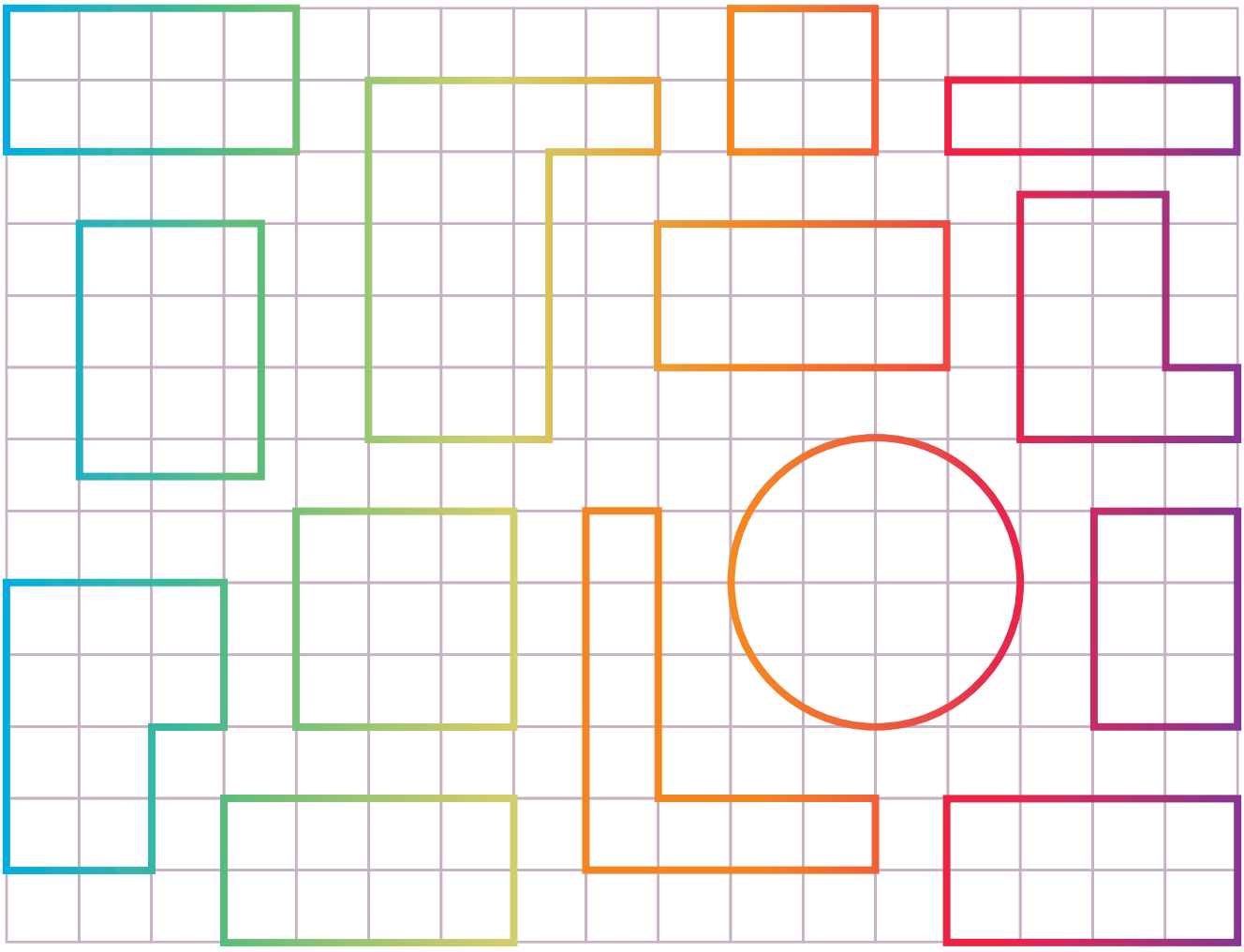
# HONG KONG PLANNING STANDARDS AND GUIDELINES

# Summary



PLANNING DEPARTMENT
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION

# Contents



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(July 2022 Edition)

This summary version of the Hong Kong Planning Standards and Guidelines (HKPSG) is intended to be an easy reference. Please refer to the full version of relevant chapter for the details of standards and guidelines. The HKPSG is a government manual of criteria for determining the scale, location and site requirements of various land uses and facilities. Various bureaux and departments (B/Ds) will formulate, review and amend the planning standards and guidelines falling under their purview from time to time taking into account the latest policy considerations and initiatives. PlanD will assist B/Ds to incorporate updated or new standards and guidelines into the HKPSG for promulgation to the public. In case of doubts on its application, please contact relevant B/Ds direct.

# Chapter 1 : Introduction

1. The Hong Kong Planning Standards and Guidelines (HKPSG) is a Government manual of criteria for determining the scale, location and site requirements of various land uses and facilities. As planning standards and guidelines could affect the allocation of scarce land and financial resources, they should be applied with a degree of flexibility. Trade-offs may be necessary so that the community at large could benefit most from the development.

2. HKPSG is applicable in four aspects :

   - Forward Planning - it provides an equitable basis for allocating scarce land resources and locational guidelines for various types of land uses and facilities.
   - Development Control - it provides guidance on the scale, intensity and site requirements of developments as well as the supporting facilities required.
   - Plan Implementation - it provides a yardstick to measure the sufficiency of land for various uses and adequacy of facilities to serve a planning area.
   - Raising Quality of Life - it provides guidelines on environmental planning and conservation of our natural landscape, habitats, cultural heritage and townscape.

3. There are no pre-set planning standards or guidelines for territorial or unique uses and facilities, such as airports, museums, universities etc. since they are subject to individual investigations and other internationally recognized criteria.

4. The subsequent chapters would provide a summary of various planning standards and guidelines as specified below :

   - Chapter 2 : Residential Densities
   - Chapter 3 : Community Facilities
   - Chapter 4 : Recreation, Open Space and Greening
   - Chapter 5 : Industry
   - Chapter 6 : Retail Facilities
   - Chapter 7 : Utility Services
   - Chapter 8 : Internal Transport Facilities
   - Chapter 9 : Environment
   - Chapter 10 : Conservation
   - Chapter 11 : Urban Design Guidelines
   - Chapter 12 : Miscellaneous Planning Standards and Guidelines

# Chapter 2: Residential Densities

1. Residential density is a quantitative measure of the intensity with which land is occupied by either development or population. The relative distribution of population has major implications for the provision of public facilities, such as transport, utilities and social infrastructure.

2. The maximum domestic plot ratios applicable to all residential developments in different areas are summarized in the following tables:

**Table 1: Main Urban Areas**

| Density Zone | Type of Area | Location | Maximum Domestic Plot Ratio | Notes |
|---|---|---|---|---|
| R1 | Existing Development Area | Hong Kong Island | 8/9/10 (depends on Site Class A, B and C respectively) | (i) (ii) |
| | | Kowloon & New Kowloon | 7.5 (according to statutory town plans and site class is not relevant) | (iii) (iv) |
| | | Tsuen Wan New Town (covers Tsuen Wan, Kwai Chung & Tsing Yi Island) | 8 | (ii) (v) |
| | New Development Area and Comprehensive Development Area | | 6.5 | (vi) (vii) |
| R2 | | | 6 | (viii) (ix) |
| R3 | | | 3.6 | (viii) (ix) |

Notes :

General:

- The Table only gives an indication of the maximum plot ratio which may be allowed for a particular area. However, where there are significant constraints on development capacity (such as transport or infrastructure limitations, environmental, topographical or geotechnical conditions, or heritage and nature conservation), other planning principles and urban design considerations (including local character and setting, building height profile and massing of the neighbourhood, air ventilation and visual impacts on the surroundings, protection of important physical features such as ridgelines), or special design considerations, a lower plot ratio may be specified when considered appropriate and possible.

- In some areas, maximum plot ratios may not be achievable due to Airport Height Restrictions.

(i) Maximum domestic plot ratio of 8, 9 and 10 depends on Site Class A, B and C respectively.

(ii) If there is non-domestic floorspace, maximum domestic plot ratio will be reduced according to the provisions of the B(P)R composite building formula.

(iii) The maximum domestic plot ratio is in accordance with those stipulated on statutory town plans and site class is not relevant.

(iv) If there is non-domestic floorspace with a plot ratio in excess of 1.5, maximum domestic plot ratio will be reduced by the amount of this excess.

(v) For this first generation New Towns (i.e. Tuen Mun, Sha Tin, Fanling/Sheung Shui, Tai Po, Yuen Long and Tsuen Wan), lease modifications for higher plot ratios than those applicable prior to September 1981 should be permitted only if the proposed development forms the whole or a substantial part of a comprehensive redevelopment plan prepared or approved by the planning authority.

(vi) Higher maximum domestic plot ratios may be permitted in Comprehensive Development Areas having regard to local circumstances, such as infrastructure capacities. However, for New Development Area and CDA for Tsuen Wan, Kwai Chung & Tsing Yi Island, the maximum plot ratio is normally 5.

(vii) Any non-domestic plot ratio component may be in addition to the domestic plot ratio, up to the maximum permitted by the B(P)R composite building formula or those of the statutory town plans .

(viii) In existing development areas this maximum domestic plot ratio can only be imposed in the case of lease modifications or Section 16 applications, unless it is incorporated in the statutory town plans .

(ix) In Special Control Areas, maximum domestic plot ratio may be further limited.

## Table 2 : Residential Density in New Towns (excluding Tsuen Wan)

| Residential density zone | Maximum domestic plot ratio |
|---|---|
| R1 | 8 (i) (ii) (iii) |
| R2 | 5 |
| R3 | 3.6 |
| R4 (iv) | 0.8 |

Notes :

General: The Table only gives an indication of the maximum plot ratio which may be allowed for a particular area. However, where there are significant constraints on development capacity (such as transport or infrastructure limitations, environmental, topographical or geotechnical conditions, or heritage and nature conservation), other planning principles and urban design considerations (including local character and setting, building height profile and massing of the neighbourhood, air ventilation and visual impacts on the surroundings, protection of important physical features such as ridgelines), or special design considerations, a lower plot ratio may be specified when considered appropriate and possible.

(i) Domestic plot ratio 8 should only be permitted where there are no infrastructure constraints, e.g. close to high capacity transport systems. Elsewhere, the plot ratio should be determined according to local circumstances. A maximum permitted plot ratio for R1 in most New Towns is 6, where infrastructural capacity and planning considerations permit.

(ii) In the first generation New Towns (i.e. Tuen Mun, Sha Tin, Fanling/Sheung Shui, Tai Po, Yuen Long and Tsuen Wan), lease modifications for higher plot ratios than those applicable prior to September 1981 should be permitted only if the proposed development forms the whole or a substantial part of a comprehensive redevelopment plan prepared or approved by the planning authority.

(iii) If there is non-domestic floorspace, maximum domestic plot ratio will be reduced according to the provisions of the B(P)R composite building formula.

(iv) Sites in New Towns should only be designated R4 if there are special justifications such as severe geotechnical or infrastructural constraints.

## Table 3: Rural Areas

| Density Zone | Maximum Domestic Plot Ratio (i) | Maximum Development Site Ratio (ii) | Typical Total No. of Storeys | Locational Criteria |
|---|---|---|---|---|
| RR1 | 3.6 | - | 12 | Commercial Centres of Rural Townships. |
| RR2 | 2.1 | - | 6 | Areas within Rural Townships lying outside the commercial centre, and in other significant rural development areas served by medium capacity public transport, such as light rail systems. |
| RR3 | - | 0.75 | 3 over car port | Peripheral parts of Rural Townships or other rural developments areas, or in locations away from existing settlements but with adequate infrastructure and no major landscape or environmental constraints. |
| RR4 | - | 0.4 | 3 including car port | Similar locations to RR3 but where development intensity is restricted by infrastructure or landscape constraints. |
| RR5 | - | 0.2 | 2 over car port | Replacements for temporary structures in areas requiring upgrading. |
| Villages | 3.0 (iii) | - | 3 | Within the defined envelope of recognized villages. |

Notes :

General: The Table only gives an indication of the maximum plot ratio which may be allowed for a particular area. However, where there are significant constraints on development capacity (such as transport or infrastructure limitations, environmental, topographical or geotechnical conditions or heritage and nature conservation), other planning principles and urban design considerations (including local character and setting, building height profile and massing of the neighbourhood, air ventilation and visual impacts on the surroundings, protection of important physical features such as ridgelines), or special design considerations, a lower plot ratio may be specified when considered appropriate and possible.

(i) Domestic plot ratio is applied to the Net Site Area (i.e. excluding roads and zoned open space).

(ii) Development site ratio is applied to the whole site including those parts to be devoted to roads and open space, but excluding slopes.

(iii) New Territories Exempted House, built on a site area of 65.03$m^2$.

# Chapter 3 : Community Facilities

1. A wide range of community facilities is necessary to maintain an appropriate standard of living. Their provision is based on the growth or concentration of population in the area served.
2. The standards and guidelines for various community facilities are summarized in the following tables. Other community facilities not specified below are to be determined by consultation with relevant departments/organisations.

**Table 1 : Sensitive Community Facilities**

| Facility | Locational Factors | Public Consultation |
|---|---|---|
| **<u>Group A</u>**<br>Facilities of territorial importance serving the wider public but not specific client users and who would not require frequent services of the facilities: these facilities include correctional facilities, public mortuaries, funeral depots and parlours. | • Land use compatibility<br>• Nature of services and target users<br>• Public reactions to the facility<br>• Normally require stand-alone sites<br>• Preferably not be directly next to residential development and non-sensitive community facilities<br>• Buffer areas with physical barriers should be provided if necessary<br>• The accessibility and the transport needs of staff, users and visitors should be considered | • Consult Home Affairs Department and the respective District Office to formulate a public consultation strategy at early stage<br>• The scope of consultation should be wide enough to allow relevant parties to be informed and to make comments<br>• The concept of community integration for Group B facilities should be stressed during consultation<br>• All comments raised during consultation should be properly responded to<br>• Proper records of the public consultation should be kept for necessary follow-up actions |
| **<u>Group B</u>**<br>Facilities of more local or district significance serving specific client users who would require frequent services of the facilities: these facilities include special medical and health clinics, education facilities and social welfare services. | • Land use compatibility<br>• Nature of services and target users<br>• Public reactions to the facility<br>• Community integration and joint user development should be considered as far as possible<br>• Provide clear signage to ensure undisturbed access to staff, users and visitors where appropriate | |

**Table 2 : Educational Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Kindergartens | 500 half-day and 500 whole-day places for every 1 000 children in the age group of 3 - under 6. Ω | @ | local |
| Primary Schools | 1 whole day classroom per 25.5 persons aged 6-11.<br><br>For a 30-classroom school, site reservation at a minimum of 6 200$m^2$ per school with a minimum acceptable width of 65m is required;<br><br>for a 24-classroom school, a minimum of 4 700 $m^2$ per school with a minimum acceptable width of 55m; and<br><br>for a 18-classroom school, a minimum of 3 950$m^2$ per school with a minimum acceptable width of 55m.<br><br>A 10% additional site reservation may be required for new development areas. | <br><br>A 30-classroom school, operating a total of 30 whole-day classes, requires a site of 6 200$m^2$ for 765 persons aged 6-11. △<br><br>A 24-classroom school, operating a total of 24 whole-day classes, requires a site of 4 700$m^2$ for 612 persons aged 6-11. △<br><br>A 18-classroom school, operating a total of 18 whole-day classes, requires a site of 3 950$m^2$ for 459 persons aged 6-11. △ | local |
| Secondary Schools | 1 whole day classroom for 40 persons aged 12-17 with site reservation at a minimum of 6 950$m^2$ per school with a minimum acceptable width of 65m is required. | A 30-classroom school, operating 30 whole-day classes, requires a site of 6 950$m^2$ for 1 200 persons aged 12-17. △ | district |
| Technical Institutes | No set standard * | - | territorial |
| Industrial Training Centre | No set standard * | - | territorial |
| Special Schools | No set standard * | - | territorial |
| Post-secondary College | No set standard. To be advised by SED on case-by-case basis. | Site reservation between 2 000$m^2$ to 7 000$m^2$ in consultation with SED | territorial |
| Universities | No set standard * | - | territorial |

**Table 3 : Medical and Health Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Hospitals | 5.5 beds/1 000 persons with a distribution of beds between various types of hospitals determined on a regional basis. # | (a) Regional and district hospitals - average of 80$m^2$ per bed.<br>(b) Convalescent/ infirmary hospitals - average of 60$m^2$ per bed. | regional |
| Polyclinics/Specialist Clinic | One specialist clinic/ polyclinic whenever a regional or district hospital is built. | Site reservation: about 4 700$m^2$ (62m x 76m) | regional |
| Clinics/Health Centres | One clinic/health centre for every 100 000 persons. # | Site reservation : about 2 200$m^2$ (37m x 60m) | district |
| Rural Clinics | Future needs to be determined on a district basis. * | - | district |

**Table 4 : Police Stations**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| District Police Stations | 1/200 000 - 500 000 persons. # | About 4 650$m^2$ (61m x 76m) fronting onto at least 2 main roads plus similar size for married staff quarters. | regional |
| Divisional Police Stations | 1/100 000 - 200 000 persons. # | About 3 000$m^2$ (50m x 60m) fronting onto at least 2 main roads. | district |
| Sub-Divisional Police Stations/Police Posts | To be determined in the light of local factors and other considerations. * | Site allocation dependent on building design. | local |
| Marine Police Stations | To be determined in the light of local factors and other considerations. * | Site allocation dependent on building design. | regional |

**Table 5 : Magistracies**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| 8 courtrooms | 1 for 660 000 persons. | Site allocation about 4 200$m^2$ (61m x 69m). | regional |

**Table 6 : Correctional Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Correctional Facilities | Reservation to be determined on a regional basis. * | - | regional |

**Table 7 : Fire Services Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Standard Divisional Fire Stations | Provision depends on graded response time determined by fire risk category system.<br>Generally 1 standard divisional station is provided for 1 fire division. Provision of standard sub-divisional station and non-standard station depends on local needs. | 2 960$m^2$ with a minimum frontage of 47m. The frontage of the site will have to be widened if the run-in to the drill yard is not from the back. | district |
| Standard Sub-divisional Fire Stations | | 1 800$m^2$ with a minimum frontage of 37m. The frontage of the site will have to be widened if the run-in to the drill yard is not from the back. | local |
| Non-standard Fire Stations | | No set standard for site requirement. | local |
| Joint Divisional Fire Stations & Ambulance Depots<br>(Fire stations may be accommodated on joint sites with ambulance depots, whenever practicable.) | | 3 830$m^2$ with a minimum frontage of 80m and a drill yard of 1 635$m^2$ behind the divisional fire station building block. | district |
| Joint Sub-divisional Fire Stations and Ambulance Depots | | 2 670$m^2$ with a minimum frontage of 70m and a drill yard of 1 225$m^2$ behind the sub-divisional fire station building block. | district |

**Table 8: Ambulance Services Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Ambulance Depots | Provision depends on the requirement of accommodation for ambulances to give an emergency coverage of 10 minutes and 20 minutes in urban/new towns and rural areas respectively. The number of ambulances required depends on the projected population distribution and the projected incidence rate of an area. | 1 160$m^2$ with a minimum frontage of 36m. The frontage of the site will have to be widened if the run-in to the drill yard is not from the back | district |
| Ambulance Stations | | No set standard. | district |
| Joint Divisional Fire Stations & Ambulance Depots | | See 'Fire Services Facilities' above | district |
| Joint Sub-divisional Fire Stations and Ambulance Depots | | See 'Fire Services Facilities' above | district |

**Table 9 : Cultural Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Arts Venues | No set standard. To be determined on the basis of need, as assessed and advised by the Secretary for Home Affairs. | - | Territory-wide and community level |
| Libraries | One district library should be provided for each district. There should also be a district library for every 200 000 persons.# | @ | district |

**Table 10 : Community Halls & Social Welfare Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Community Halls | To be determined on the basis of need, having regard to community aspirations and other relevant considerations. | 1 260$m^2$ (32m x 39.5m) floor area and, preferably, with a minimum clearance height of 7.65m for joint-users buildings; or 2 100$m^2$ (60m x 35m) site area for stand-alone sites in exceptional circumstances. | local |
| Child Care Centres | 100 aided places per 25 000 persons.~ | NOFA$^+$ : 530$m^2$<br>NUFA: 689$m^2$<br>for 100 places<br><br>NOFA$^+$ : 776$m^2$<br>NUFA : 1 009$m^2$<br>for 150 places<br><br>NOFA$^+$ : 1 035$m^2$<br>NUFA : 1 346$m^2$<br>for 200 places<br><br>$^+$ excluding toilets, partitions, baby care room and circulation area | local |
| Integrated Children and Youth Services Centres | 1/12 000 persons in 6-24 age group. The provision standard for this facility should be applied flexibly having regard to local factors. | NOFA : 631$m^2$ | local |
| District Elderly Community Centres | One in each new development area with a population of around 170 000 or above. | NOFA : 424$m^2$<br>NUFA : 572$m^2$ | district |
| Neighbourhood Elderly Centres | One in a cluster of new and redeveloped housing areas with a population of 15 000 to 20 000 persons, including both public and private housing. | NOFA : 303$m^2$<br>NUFA : 394$m^2$ | district |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Community Care Services Facilities (including – | 17.2 subsidised places per 1 000 elderly persons aged 65 or above~ ^ | | district |
| (i) Day Care Centres for the Elderly; | | NOFA : 267m$^2$<br>NUFA : 401m$^2$<br>for 40 places<br><br>NOFA : 358 m$^2$<br>NUFA : 537m$^2$<br>for 60 places<br><br>NOFA : 506 m$^2$<br>NUFA : 759m$^2$<br>for 80 places | |
| (ii) Day Care Unit for the Elderly in Residential Care Homes for the Elderly; | | NOFA : 70 m$^2$<br>NUFA : 105m$^2$<br>for 20 places<br><br>NOFA : 90 m$^2$<br>NUFA : 134m$^2$<br>for 30 places | |
| (iii) Day Care Unit for the Elderly in District Elderly Community Centres; and | | NOFA : 80 m$^2$<br>NUFA : 120m$^2$<br>for 20 places | |
| (iv) Integrated Home Care Services (Frail Cases)/ Enhanced Home and Community Care Services) | | NOFA : 90 m$^2$<br>NUFA : 120m$^2$<br>for 70 places | |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Residential Care Homes for the Elderly | 21.3 subsidised beds per 1 000 elderly persons aged 65 or above.~ | NOFA : 1 354$m^2$<br>NUFA : 2 166$m^2$<br>for 100 places<br><br>NOFA : 1 913$m^2$<br>NUFA : 3 061$m^2$<br>for 150 places<br><br>NOFA : 2 475$m^2$<br>NUFA : 3 960$m^2$<br>for 200 places<br><br>NOFA : 3 032$m^2$<br>NUFA : 4 851$m^2$<br>for 250 places | **five-cluster basis |
| Integrated Family Service Centres | 1/100 000 to 150 000 persons. | NOFA : 535$m^2$ | service boundary defined by the Director of Social Welfare |
| Pre-School Rehabilitation Services (including –<br><br>(i) Early Education and Training Centre; and<br><br>(ii) Special Child Care Centre) | 23 subvented service places per 1 000 children aged 0-6.~ | NOFA : 166$m^2$<br>NUFA : 216$m^2$<br>for 60 places<br><br>NOFA : 212$m^2$<br>NUFA : 276$m^2$<br>for 90 places<br><br>NOFA : 173$m^2$<br>NUFA : 225$m^2$<br>for 30 places<br><br>NOFA : 409$m^2$<br>NUFA : 532$m^2$<br>for 60 places | district |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Day Rehabilitation Services [including – | | | district |
| (i) Day Activity Centre; | To be determined taking into account the population, geographical factor, existing service provision and service demand. | NOFA : 319$m^2$<br>NUFA : 415$m^2$<br>for 50 places<br><br>NOFA : 377$m^2$<br>NUFA : 490$m^2$<br>for 60 places | |
| (ii) Vocational Rehabilitation Services (including – | 23 service places per 10 000 persons aged 15 or above.~ | | |
| (a) Sheltered Workshop; and | | NOFA : 587$m^2$<br>NUFA : 763$m^2$<br>for 100 places<br><br>NOFA : 696$m^2$<br>NUFA : 905$m^2$<br>for 120 places<br><br>NOFA : 805$m^2$<br>NUFA : 1 047$m^2$<br>for 140 places<br><br>NOFA : 910$m^2$<br>NUFA : 1 183$m^2$<br>for 160 places | |
| (b) Integrated Vocational Rehabilitation Services Centre)] | | NOFA : 447$m^2$<br>NUFA : 581$m^2$<br>for 80 places<br><br>NOFA : 653$m^2$<br>NUFA : 849$m^2$<br>for 120 places<br><br>NOFA : 854$m^2$<br>NUFA : 1 110$m^2$<br>for 160 places | |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Residential Care Services (including – | 36 service places per 10 000 persons aged 15 or above.~ | | ** five-cluster basis |
| (i) Hostel for Moderately Mentally Handicapped Persons; | | NOFA : 617$m^2$<br>NUFA : 864$m^2$<br>for 50 places | |
| (ii) Hostel for Severely Mentally Handicapped Persons; | | NOFA : 691$m^2$<br>NUFA : 967$m^2$<br>for 50 places | |
| (iii) Hostel for Severely Mentally Handicapped Persons (including provision for Day Activity Centre); | | NOFA : 1 010$m^2$<br>NUFA : 1 382$m^2$<br>for 50 places | |
| (iv) Hostel for Severely Physically Handicapped Persons; | | NOFA : 695$m^2$<br>NUFA : 1 043$m^2$<br>for 50 places | |
| (v) Supported Hostel for Mentally Handicapped Persons; | | NOFA : 243$m^2$<br>NUFA : 316$m^2$<br>for 20 places | |
| (vi) Supported Hostel for Physically Handicapped Persons; | | NOFA : 265$m^2$<br>NUFA : 345$m^2$<br>for 20 places | |
| (vii) Supported Hostel for Mentally/ Physically Handicapped Persons; | | NOFA : 355$m^2$<br>NUFA : 462$m^2$<br>for 30 places | |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| (viii) Supported Hostel for Visually and Mentally Handicapped Persons;<br><br>(ix) Supported Hostel for Persons in Mental Recovery;<br><br>(x) Care and Attention Home for Severely Disabled Persons;<br><br>(xi) Care and Attention Home for the Aged Blind; and<br><br>(xii) Long Stay Care Home) | | NOFA : 443$m^2$<br>NUFA : 576$m^2$<br>for 40 places<br><br>NOFA : 243$m^2$<br>NUFA : 316$m^2$<br>for 20 places<br><br>NOFA : 780$m^2$<br>NUFA : 1 170$m^2$<br>for 50 places<br><br>NOFA : 728$m^2$<br>NUFA : 1 092$m^2$<br>for 50 places<br><br>NOFA : 2 866$m^2$<br>NUFA : 4 299 $m^2$<br>for 200 places | |
| District Support Centre for Persons with Disabilities | One centre per 280 000 persons.~ | NOFA : 447$m^2$<br>NUFA : 626$m^2$<br>for 1 standard scale centre | district |
| Community Rehabilitation Day Centre | One centre per 420 000 persons.~ | NOFA : 301$m^2$<br>NUFA : 421$m^2$<br>for 1 standard scale centre | district |
| Integrated Community Centre for Mental Wellness | One standard scale centre per 310 000 persons.~ | NOFA : 510$m^2$<br>NUFA : 663$m^2$<br>for 1 standard scale centre | district |

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Study Rooms | (a) Usually one in each public major/district library. | About 200m$^2$ floor area required | local |
| | (b) Provision in Community Centre is governed by the approved schedule of accommodation. | About 130m$^2$ floor area required. | local |
| | (c) Provision in public housing estates is based on a need basis (usually managed by non-governmental organisations) | @ | local |

**Table 11 : Post Offices**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Post Offices | (a) In urban areas, post offices should be provided so that large concentrations of population have access to facilities within 1.2km from where they live or work. | @ | local |
| | (b) In rural areas, a distance of 3.2km should be assumed. | | |
| | (c) The provision is to be advised by the Postmaster General. | | |

**Table 12 : Public Mortuaries & Funeral Facilities**

| Facility | Standard | Land or Floor Area Requirement | Area Served |
|---|---|---|---|
| Public Mortuaries | One for each of the 5 regions, namely Hong Kong Island, Kowloon West, Kowloon East, New Territories West and New Territories East. | - | regional |
| Funeral Depots | 1/350 000 persons. | Site reservation about 0.25 ha. | regional |

Notes :

Ω This is a long-term goal and the actual provision would be subject to the consideration of the Secretary for Education in the planning and development process as appropriate.

Assuming 30 children for a half-day class and 20 children for a whole-day class, the number of classrooms required for every 1 000 children aged 3 to under 6 can be calculated as follows:

(500 half-day places ÷ 60 half-day places per classroom) + (500 whole-day places ÷ 20 whole-day places per classroom) = 34 classrooms

@ No specific site allocation is required. The facility is normally provided in a composite building.

* There is no set population/land area standard for this facility.

** The five clusters comprise of Hong Kong, Kowloon East, Kowloon West, New Territories East and New Territories West clusters.

# Where the population of an individual Study Area does not coincide with the service's catchment areas, then a logical operational solution should be devised, whilst attempting to maintain the per-capita standard.

△ The stipulated land requirements are for general reference only and would be subject to the consideration of the Secretary for Education and the Director of Architectural Services on individual case basis.

~ This is a long-term goal and the actual provision would be subject to the consideration of the SWD in the planning and development process as appropriate.

^ The planning standard of community care services (CCS) facilities (including both centre-based and home-based) is population-based. There is no rigid distribution between centre-based CCS and home-based CCS stated in the Elderly Services Programme Plan. Nonetheless, in general, 60% of CCS demand will be provided by home-based CCS and the remaining 40% will be provided by centre-based CCS.

NOFA The "Net Operational Floor Area" (NOFA) specified, unless otherwise stated, comprises a summation, round up, of all internal dimensions of rooms/spaces contained within the approved Schedule of Accommodation. This area excludes all structure and partitions, circulation areas, staircases, staircase halls, lift landings, the space occupied by toilet facilities, mechanical and electrical services such as lift and air-conditioning systems.

NUFA "Net Usable Floor Area" (NUFA) applicable to Private and Public Housing Developments, comprises the Net Operational Floor Area plus ancillary accommodation including circulation space, toilets, internal partitions, structure etc. for the sole use of the facility. This excludes common areas, lift and staircase enclosures, structural elements and service ducts forming part of, serving or supporting the remainder of the building.

# Chapter 4 : Recreation, Open Space and Greening

## I. Recreation and Open Space

1. Recreation ranges from home entertainment such as playing mah-jong and watching television, through passive activities such as strolling and playing tai-chi to active games and competitive sports. The planning standards and guidelines set out in this chapter is to provide an equitable basis for the planning, distribution and design of open space and recreation facilities.

2. Open Space is required to meet both the active and passive recreational needs of the populations, either within the residential neighbourhood ("Local Open Space") or centrally located to serve a wider area ("District Open Space"). "Regional Open Space" at prominent locations in the urban areas, serves the catchment area larger than that served by "District Open Space" and "Local Open Space" and it may also serve as major tourist attractions. Green Space such as Amenity Areas, Country Parks, Green Belts and Coastal Protection Areas are excluded from the Open Space standards set out below.

**Table 1 : Open Space**

| Open Space Category | Standard | Remarks |
|---|---|---|
| Regional Open Space<br>(at least 5 ha in size and a maximum building site coverage of 20%) | no set standard | – 50% counts as District Open Space in the Metro Area |
| District Open Space<br>(at least 1 ha in size and a maximum building site coverage of 10%) | 10 ha per 100 000 persons (i.e. 1$m^2$ per person) | – Subject to slope correction factor*<br>– Active to passive ratio of 3:2 is applied<br>– Not applicable to industrial, industrial-office, business and commercial areas, rural villages and small residential developments in the rural areas |
| Local Open Space<br>(at least 500$m^2$ in urban areas and a maximum building site coverage of 5%) | 10 ha per 100 000 persons (i.e. 1$m^2$ per person) | – Subject to slope correction factor *<br>– No active to passive ratio<br>– Primarily for passive use<br>– In industrial, industrial-office, business and commercial areas, the standard is 5 ha per 100 000 workers (i.e. 0.5$m^2$ per worker) |

Note: * Slope correction factor is used to examine whether the sloping part of a site is suitable for active or passive recreation use. Consequently if the land does not suitable for the purpose, the area of open space provision will have to be adjusted accordingly.

3. The standards of major recreation facilities and recreation buildings are summarized in the following tables:

**Table 2 : Recreation Facilities**

| Facility | Standard | Remarks |
|---|---|---|
| **Indoor** | | |
| Badminton court [2] | 1 per 8 000 ) | – Provided in sports centres, leisure centres or purpose-built facilities in composite developments |
| Squash court | on a district need basis ) | |
| Table Tennis table [2] | 2 per 15 000 or 1 per 7 500 ) | |
| Fitness/Dance hall | 1 per sports centre | |
| Gymnastics | 1 per district | – To be accommodated in the multi-purpose arenas in sports centres |
| Swimming | | |
| swimming pool complex | 1 per 287 000 or 1 $m^2$ water per 85 | |
| leisure pool | 1 per district | |
| **Outdoor** | | |
| Tennis court [1] | 2 per 30 000 | – Minimum 2 courts |
| Basketball court [1&2] | 1 per 10 000 | |
| Volleyball court [1] | 1 per 20 000 | |
| Football pitch | 1 per 100 000 | – Football pitches within sports grounds do not count towards standard due to their inaccessibility to the general public |
| Mini-Soccer pitch | | |
| 5-a-side [3] | 1 per 30 000 ) | – Provision for both facilities |
| 7-a-side [3] | 1 per 30 000 ) | |
| Rugby/Baseball/Cricket pitch | 1 per district | – To be accommodated in multi-purpose grass pitches |
| Athletics | 1 per 200 000-250 000 | – To be accommodated in sports ground/sports complex |
| Roller Skating rink | 300 $m^2$ per 30 000 | |
| Jogging Track | 500m-1 000m per 30 000 | – May be provided in district open space or as part of pedestrian circulation system |
| Children's Playground [2&4] | 400 $m^2$ per 5 000 | |

Notes:

1. Facilities which may also be provided indoors. However, indoor provision within Sports Centres on a share facility basis is normally considered as a bonus and does not count towards the HKPSG. In the absence of outdoor space, indoor provision within dedicated, purpose-designed, facilities may be countable.
2. Facilities which are normally provided in public housing development as outdoor provision. Informal facilities such as kickabout areas or basketball shooting areas, and courts of minor sub-standard size, may be acceptable and countable towards the standard of provision for recreation facilities in public housing development which have obvious site constraints.
3. Optional facilities to be provided in public housing development where site conditions permit.
4. Facility to be integrated with open space/play areas for all age groups and persons with disabilities to foster a sense of community in public housing developments.

## Table 3 : Recreation Buildings

| Facility | Standard | Site Area# | Remarks |
|---|---|---|---|
| Sports Centre | 1 per 50 000-65 000 | 0.6 ha<br>(i.e. 100m x 60m) | With*:<br>8 x badminton, or<br>2 x basketball, or<br>2 x volleyball<br>2 x tennis<br>plus<br>3 x Squash Courts<br>1 x Activity/Dance<br>1 x Fitness Training |
| Leisure Centre | 1 per 50 000 | 0.6 ha | May be provided as an alternative to sports centre* |
| Sports Ground/ Sports Complex | 1 per 200 000-250 000 | 3.0 ha | 400m track (all weather), grass infield for athletics (field events), seating capacity for about 10 000 spectators in standard designed sports ground |
| Swimming Pool Complex<br>- standard | 1 standard complex per 287 000 or<br>1 $m^2$ water per 85 | 2.0 ha for a standard complex | Usually with pools of 50m and/or 25m long* |
| Swimming Pool<br>- leisure | 1 per district<br>(Min. per 900 $m^2$ pool size) | 0.6 ha-2.0 ha subject to advice from LCSD | In addition to swimming pool complex* |

| Facility | Standard | Site Area[#] | Remarks |
|---|---|---|---|
| Indoor Stadium<br>- multi-purpose | Territorial facility based on need | To be determined at detailed design stage subject to advice from LCSD/Arch SD | Two existing, i.e. Hong Kong Coliseum and Queen Elizabeth Stadium. |
| Indoor Stadium<br>- sports | Territorial facility based on need | To be determined at detailed design stage subject to advice from HAB/LCSD, in consultation with the National Sports Associations | There may be a need for one such facility, but project feasibility and implementation aspects subject to further study. |
| Outdoor Stadium | Territorial facility based on need | 4.5 ha - 6.0 ha | |
| Water Sports Centre | No set standard | To be determined at detailed design stage subject to advice from LCSD/Arch SD | To be located at suitable inshore recreation areas and subject to EIA |

Notes: * Provision level of activities to be determined on an individual district-by-district basis.

[#] Site area for reference only and should be applied with a degree of flexibility according to actual site situation.

## II. Greening

4. It is the Government's greening policy to enhance the quality of our living environment through active planting, proper maintenance and preservation of trees and vegetation. The target is to bring noticeable improvements in urban greenery, to enhance the existing green areas and to maximize greening opportunity during the planning and development stages of works projects.

5. A holistic and balanced approach should be adopted to strengthen the commitment to greening. Every practical opportunity should be explored for provision of greenery. Notwithstanding, at least equal, if not higher, priority should be given for greening when compared with other technical requirements.

6. The greening guidelines for various land uses are summarized in the following table. Users may need to refer to the more detailed technical guidelines available in other sources as appropriate.

**Table 4 : Greening Guidelines**

| **Greening Guidelines** |
|---|
| **1. Site Development**<br>(a) Preparing landscape master plan to provide guidance on tree planting and soft landscape works<br>(b) Preserving existing vegetation as far as possible<br>(c) Periphery planting with landscape strip<br>- for tree planting, a 3 m wide planting strip and a min. of 1.2 m soil depth<br>- for other plantings, a min. of 1 m wide planting strip<br>(d) Landscape buffers to mitigate environmental nuisance<br>(e) Planting on vacant sites awaiting for development |
| **2. Residential/Industrial/Commercial Developments**<br>(a) Achieving the standards for open space with emphasis on soft landscaping<br>(b) Encouraging the provision of podium and communal sky gardens<br>(c) Achieving an overall target of 30% green coverage for public housing development<br>(d) Imposing the requirements of site coverage of greenery on all new land leases for private developments and in planning briefs where practicable<br>(e) Integrating greening, landscaping and building design within an urban design framework to reinforce the identity of a prime commercial development<br>(f) Taking into account the compliance with the Sustainable Building Design Guidelines, including site coverage of greenery in granting GFA concessions in new private building development<br>(g) Maximising greening opportunities of the sites for Government building projects |
| **3. Visually Sensitive Uses**<br>(a) Quarries<br>- full landscape reinstatement including mass tree planting and erosion control after quarry excavation<br>- re-grading quarry faces to slopes with max. gradient of 1:1.5 to retain soft fill for planting<br>- planning for restoration works well before the end of the quarry activities<br>(b) Utility Services Facilities<br>- periphery tree planting and amenity buffer strips for screening visual blights<br>- minimizing the damages of erection of pylons to existing vegetation and landscape re-instatement be undertaken<br>(c) Port Backup and Open Storage Uses<br>- providing 1 m - 2 m wide planting strip at site periphery to screen off visual impacts of stacks<br>- tree pits are to be provided at 4 m-5 m interval |
| **4. District and Local Open Spaces** |

(a) Achieving the standard of 1 $m^2$ / person for district and local open spaces respectively

(b) Preparing landscape plans for parks, gardens, promenades and sitting out areas to maximize the greening opportunities

(c) For active open space, at least 20% of the land for soft landscaping, half of which for planting trees

(d) For passive open space, 70% of the land for soft landscaping, 60% of which for planting trees

(e) Using native plant species in urban fringe parks

**5. Roads and Highways (including local access roads)**

(a) Creating avenues of trees and plants/green corridors along central dividers and pavements of road corridors/breezeways/air paths and in pedestrian areas

(b) On new roads, locating underground utility services and manholes away from planter beds and tree pits

(c) Avoiding the growing of trees / shrubs that obscures the visibility of road signs, traffic lights, CCTV, red light cameras, bus stops and intersections, etc. and sight-lines of pedestrians and drivers, and light of lamp posts

**6. Slopes**

(a) Slopes should be covered by vegetation. The existing vegetation should be safeguarded and intensified through further tree and shrub planting

(b) Existing trees on slopes should be retained

(c) Introducing planters at toe, on the crest, on berms and in adjacent paved areas

(d) Soil pockets in coreholes should be provided on hard surfaces for creepers and other climbers, grass and shrubs

**7. Drainage and Water Works**

(a) Planting more trees alongside existing drainage channels/systems

(b) Drainage channels /system should be planned with greenery and adopt environmental and sustainable design as far as possible

(c) Adopting an integrated approach in designing drainage and water works to avoid interference to planting and service maintenances

(d) Exploring opportunities for tree planting whilst observing the following restrictions:

- no trees / shrubs with penetrating roots be planted within 3 m from the centre line of any existing or proposed watermains and 3 m from the edge of drainage pipes;
- clearance distance can be reduced to 1.5 m if the size of watermains affected are below 600 mm;
- rigid root barriers may be required if the clear distance between the proposed tree and the pipe is less than 3 m and the barrier must extend below the inverted level of the pipe;
- no planting within the space of 1.5 m around the cover of any hydrant valves or the covers of WSD's valves, nor within a distance of 1 m from any hydrant outlet

**8. Skyrise Greening**

**(a)** Skyrise greening encompasses all greening on buildings or other structures beyond the ground level, including roof greening, vertical greening, sky gardens and terrace planting

**(b)** Skyrise greening provides environmental benefits as well as enhancing aesthetic quality of the urban environment

# Chapter 5: Industry

## 1. Industrial Land Use Types

There are two principal categories of industrial land use types on the basis of their operational and building characteristics:

### A. General Industrial Use (GIU)

Under this land use category, there are mainly two different kinds of uses:

I. ***Industrial Use*** mainly include the uses within multi-storey factory buildings, e.g. general warehouse developments and light industries, which are generally labour intensive and lower value-added industrial activities.

II. ***Industrial/Office Buildings*** are designed and constructed for both office and industrial uses. They provide premises for manufacturing related offices and trading firms that require large storage space and have frequent loading and unloading activities.

### B. Special Industrial Use (SIU)

Under this category of industrial use, there are 4 types of industrial development:

I. ***Industrial Estate*** aims to provide premises of low-rise, purpose-designed and owner-occupied for high-tech industries with highly mechanized manufacturing activities which cannot be operated in multi-storey buildings.

II. ***Science Park*** will be low to medium rise development specially designed for knowledge- and technology-based firms such as research, new technology and product development companies. High quality supporting commercial and recreational facilities as well as ancillary service type apartments will also be provided.

III ***Rural Based Industrial Use*** comprises mainly residual low-overhead industrial activities which require open land for goods storage, parking and loading/unloading. The workshops are usually developed on comparatively small individual sites in rural locations.

IV ***Other Industrial Uses*** with Special Requirements include mainly the special industries which are general capital intensive and land extensive and may also have special infrastructural and/or locational requirements such as deep water marine access, waterfront location, bulk storage or warehousing facilities on site.

## 2. Business Land Use Types

The following types of buildings are permitted as of right in the “OU(Business)” zone as new development or redevelopment/conversion of the whole building:

A. Business buildings providing accommodation for a mix of non-polluting industrial (excluding industrial undertakings involving the use/storage of Dangerous Goods), office and other commercial uses;

B. Office buildings with or without retail and other commercial uses;

C. Industrial buildings providing accommodation for non-polluting industrial uses (excluding industrial undertakings involving the use/storage of Dangerous Goods) and office uses (excluding those involving direct provision of customer services and goods); and

D. I/O buildings providing accommodation for non-polluting industrial uses (excluding industrial undertakings involving the use/storage of Dangerous Goods), offices (excluding those involving direct provision of customer services and goods) on upper floors, and general offices with or without commercial uses in the purpose-designed non-industrial portion on the lower floors which will be separated from the industrial uses on the upper floors by a buffer floor.

# Chapter 6 : Retail Facilities

1. Retailing can be defined as the selling of goods in small quantities direct to consumers. It includes the direct purchase of goods from retail warehouses and factory outlets as well as tele-shopping and e-shopping. It also includes the provision of services direct to consumers such as personal services and dining services.

2. Based on the shopping preferences of consumers identified from survey results, a three-tier retail hierarchy is identified as follows:

   (a) Territorial Shopping Centres – these serve the territory as a whole and provide the greatest variety of high order comparison goods and retail services. Three such shopping centres are identified and they are located in Mong Kok, Causeway Bay and Tsim Sha Tsui.

   (b) District Shopping Centres – these are medium sized shopping centres which serve the population within various districts.

   (c) Neighbourhood Shopping Centres – these are shopping areas within walking distance from residential neighbourhoods providing convenience goods and retail services to the local population.

3. For forward planning purposes, it is sometimes necessary to assess the demand for retail facilities and two broad approaches are usually adopted including the econometric modeling approach and the expenditure-based modeling approach. As these demand assessments require specialist input, they are normally conducted as part of a special study in the planning process.

4. Flexibility should be exercised in the application of the broad approach as Government upholds the view that retail development should be market-driven and that planning intervention should be kept to the minimum.

# Chapter 7 : Utility Services

Utility services are essential components of the basic infrastructure. The planning of their provisions should be well coordinated and integrated into the overall planning of new development areas such that a coherent and aesthetic design can be achieved.

**Their planning standards are summarized below :-**

| **Types of Utility** | **Standards** | | | |
|---|---|---|---|---|
| | **Site Area Required** | **Minimum Width of access** | **Minimum safe working clearance** | **Maximum gradient of access** |
| **Electricity Supply** | | | | |
| Extra High Voltage Substations (Switching Stations) | 6 500$m^2$ (100m x 65m) | 7.3m | 200m away from the nearest fence of any telephone exchange, radio-communications and broadcasting installations | 1 in 12 |
| Bulk Infeed Substations (Switching Stations) | | | | |
| (a) in CLP Power network | 2 870$m^2$ (70m x 41m) | 7.3m | | 1 in 10 |
| (b) in HEC network : | | | | |
| (i) 275kV /132kV Station | 1504$m^2$ (32m x 47m) | 7.3m | | 1 in 10 |
| (ii) 275kV/132kV Station (with 2 x 300MVA 275/132kV transformers) | 2 550$m^2$ (30m x 85m) | 7.3m | | 1 in 10 |
| Primary Substations (Zone Substations) | | | | |
| (a) in CLP Power network | 1 705$m^2$ (55m x 31m) | 7.3m | | 1 in 10 |
| (b) in HEC network | 1 600$m^2$ (40m x 40m) | 7.3m | | 1 in 10 |
| Consumer Substations (Distribution Substations) | | | | |
| (a) Outdoor Type | 30.25$m^2$ (5.5m x 5.5m) | 3m | - | - |
| (b) Indoor Type | 51$m^2$ (8.5m x 6m) | 3m | - | - |
| Overhead Transmission Lines (Voltage Level) | | | | |
| (a) 400kV | - | 6m; may be required to reach the | Horizontal : 5.5m<br>Vertical : 7.6m | - |

| Types of Utility | Standards | | | |
|---|---|---|---|---|
| | **Site Area Required** | **Minimum Width of access** | **Minimum safe working clearance** | **Maximum gradient of access** |
| (b) 132kV | - | principal face of any adjacent building development for fire fighting purpose | Horizontal : 3.7m<br>Vertical : 6.7m | - |
| (c) 33kV | - | | Horizontal : 2.8m<br>Vertical : 6.1m | - |
| (d) 11kV | - | | Horizontal : 2.8m<br>Vertical : 6.1m | - |
| Underground Cables | no set standard<br>minimum separation between power cables and telephone cables is 0.3m wherever practicable. | | | |
| **Gas supply** | no set standard | | | |
| **Telephone Services** | | | | |
| Telephone Exchange | | | | |
| (a) local exchanges in rural areas with <10 000 lines | 500m$^2$ | - | at least 200m from any power generating station, bulk infeed substation or primary station | - |
| (b) local exchanges in urban area with 20 000 - 60 000 lines | 1 000m$^2$-1 500m$^2$ | - | | - |
| (c) local exchange in urban areas with up to 120 000 lines or combined local/ tandem exchanges or telephone exchange complexes | 1 500m$^2$-2 000m$^2$ | - | | - |
| Telephone cables | a minimum separating distance of 2.5m from the nearest Light Rail Transit System and 300m from Kowloon Canton Railway System. | | | |

| Types of Utility | Standards |
|---|---|
| **Radio Telecommunications and Broadcasting Services** | no set standard |
| **Water Supply** | |
| (a) service reservoirs | • as near as possible to the area served<br>• at level where water can be fed by gravity to the supply zone |
| (b) pumping stations | • reasonable proximity to the source of supply<br>• adequate vehicular access<br>• away from noise sensitive uses<br>• a minimum clear distance of 100m from the sea water intake of salt water pumping stations |
| (c) water treatment works | • comply with the procedures laid down by the Coordinating Committee on Land Use Planning and Control related to Potentially Hazardous Installations |
| (d) water mains | • normally placed underground and routed along carriage ways<br>• adequate separation from power cables and other services |
| **Drainage Services** | |
| (a) foul sewerage system | • under carriageways, footpaths, or cycle tracks.<br>• gravity sewerage system is preferred |
| (b) stormwater drainage system | • collected and conveyed in enclosed drains or open channels |
| (c) pumping stations and sewage treatment works | • with design to minimise noise, odour and visual problems<br>• away from residential or other sensitive areas |
| (d) polder drainage and stormwater pumping schemes | • at lowest areas of the schemes<br>• covered or properly fenced off |
| (e) drainage reserves | • structures not permitted |
| **Dedicated Utility Reserves** | • outside road reserves<br>• adequate separation between different kinds of utility provisions |
| **District Cooling System** | • the minimum site area required for a standard DCS plant room is 5,400$m^2$ with a typical dimension of 180m x 30m to serve a cooling demand capacity of about 40,000TR (refrigeration ton). |

# Chapter 8 : Internal Transport Facilities

1. This chapter provides the design standards and guidelines for planning land requirements for internal transport facilities including footpath and parking.
2. The recommended minimum carriageway widths in accordance with the Transport Planning and Design Manual are shown below:

| Road Type | Carriageway Dual | Single Carriageway | Central Reserve |
|---|---|---|---|
| Expressway and Trunk Road | - | 7.3m(2-lane)<br>11.0m(3-lane)<br>14.6m (4-lane) | 2.3m (3.2m) # |
| Primary Distributor Road+ | - | 6.75m (2-lane)<br>10.0m (3-lane)<br>13.5m (4-lane) | 2.3m |
| District Distributor Road+ | 7.3m (2-lane)<br>10.3m (2-lane) *<br>13.5m (4-lane) | 6.75m (2-lane)<br>10.0m (3-lane) | 1.8m |
| Local Distributor Road+ | 7.3m (2-lane)<br>10.3m (2-lane) *<br>13.5m (4-lane) | 6.75m (2-lane) | 1.8m |
| Rural Road A | 7.3m (2-lane)<br>10.3m (2-lane) * | 7.3m (2-lane)<br>- | 1.8m |
| Rural Road B | 6.75m (2-lane)<br>10.3m (2-lane) * | 7.3m (2-lane)<br>- | 1.8m |
| Feeder Road | 6.0m (2-lane) | - | - |
| Single Track Access Road | 3.5m (1-lane) widened to 6m at passing bays<br>6.0m (2-lane) | - | - |

Notes:

+ Where there are tram tracks, a 5.5m wide tram reserve must be allowed for a double track system.

* When the peak hour traffic volume (two-way) exceeds 1 600 vehicles but is less than 2 400 vehicles, a wider 2-lane single carriageway should be used. The use of a 3-lane single carriageway is not recommended for safety reasons.

# Recommended minimum Central Reserve width for Rural Roads.

3. The minimum width standards for through zone, street furniture and greening zone as well as building frontage zone of a footpath/walkway on public roads for various land uses is shown in the table below. The width should be flexibly applied to suit individual circumstance or design.

| Land Use Type | Through Zone Width / Peak Pedestrian Volume (Pedestrians per minute) | Street Furniture and Greening Zone Width | Building Frontage Zone Width |
|---|---|---|---|
| Commercial<br>Commercial / Residential<br>Residential Zone 1 and those other areas near pedestrian generators such as cinemas, rail stations, some GIC facilities (e.g. schools), etc. | 4.5m<br>Very high (Over 100) | 1.5m (2)-(4) | 0.5m for dead areas and increase to 1m for shopping frontages |
| Residential Zone 1 | 3.5m<br>High (80 - 100) | | |
| Residential Zone 2 | 2.75m<br>Medium (60 - 80) | | |
| Residential Zone 3 | 2.0m<br>Low (Below 60) | | |
| Rural | 2.0m<br>Very Low | | |
| Business | 4.5m<br>Medium (80) | | |
| General Industrial Use (1) | 4.5m<br>Medium | 4m (3)-(4) | |
| Special Industrial Use (1) | 3.5m<br>Low to Medium | 2m (2)-(4) | |
| Rural Based Industrial Use | 2.5m<br>Low | 1.5m (2)-(4) | |

Notes: (1) For classification of industrial use, please refer to Chapter 5 of the HKPSG.

(2) The SF&GZ width should be increased to 3m for planting of large trees or understorey planting along boulevards or main roads.

(3) If bus shelter exceeding 1m width is provided along the footpath corridor, additional width of up to 2m should be suitably allowed in the SF&GZ.

(4) When street furniture exceeding normal object width of 1m (such as gateway and artwork) is required, the SF&GZ would need to be widened to cater for its provision.

4. Parking Standards for various types of development are summarised in the following tables : (In all cases, the level of provision in a development is to be decided by the Authority. The Standards serve to provide a guideline on which the Authority will base the decision.)

**Table 1 : Residential Development**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Subsidised Housing [#] | Private car :<br>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2)<br>Where:<br>GPS = 1 car space per 4 - 7 flats<br>R1= 0.52<br>R2 = 0.85 (within a 500m - radius of rail station); **or**<br>=1 (outside a 500m - radius of rail station)<br>Light Goods Vehicle and Light Bus:<br>1 "shared-use" LGV and Light Bus space per 260 flats<br>Medium/Heavy Goods Vehicle, Coach/Bus :<br>To utilise loading/unloading bays at estate commercial centres and around residential blocks for overnight parking in estates | Provision of minimum 2 "shared-use" coaches/buses and M/HGV loading/unloading bays around each residential block for service vehicles and overnight parking |
| Private Housing | Private car :<br>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2) x Development Intensity Adjustment Ratio (R3)<br>Where:<br>GPS = 1 car space per 4 - 7 flats<br>R1= 0.5 (flat size (GFA) $\leq 40m^2$); **or**<br>= 1.2 ($40 <$ flat size $\leq 70m^2$); **or**<br>= 2.4 ($70 <$ flat size $\leq 100m^2$); **or**<br>= 4.1 ($100 <$ flat size $\leq 130m^2$); **or**<br>= 5.5 ($130 <$ flat size $\leq 160m^2$); **or**<br>= 7.0 (flat size $> 160m^2$)<br>R2 = 0.75 (within a 500m - radius of rail station); **or**<br>= 1.00 (outside a 500m - radius of rail station)<br>R3 = 1.30 (0.00 < Domestic Plot Ratio $\leq$ 1.00); **or**<br>= 1.10 (1.00 < Domestic Plot Ratio $\leq$ 2.00); **or**<br>= 1.00 (2.00 < Domestic Plot Ratio $\leq$ 5.00); **or**<br>= 0.90 (5.00 < Domestic Plot Ratio $\leq$ 8.00); **or**<br>= 0.75 (Domestic Plot Ratio > 8.00) | Minimum of 1 loading/unloading bay for goods vehicles within the site for every 800 flats or part thereof, subject to a minimum of 1 bay for each housing block or as determined by the Authority<br><br>Space should also be provided around each block for service vehicles |

| | | |
|---|---|---|
| Village Housing | Up to 1 car parking space for each standard New Territories Exempted House ($65m^2$), with 10 - 15% of provision for overnight goods vehicles | |

# The parking standards for subsidised housing in Section 1 of Table 11 are applicable to both public rental housing and subsidised sale flats developments. For public rental housing developments with large site area and subsidised sale flats developments, GPS towards the upper end (i.e. 1 car space per 4 flats) should be considered, while the lower end (i.e. 1 car space per 7 flats) of the GPS should be considered for small sites or sites with severe constraints. A mid-range standard should be adopted for sites with housing type yet to be determined. The L/UL standard including the overnight parking requirement should be applied with due consideration of the site constraint and local situation.

**Table 2 : Education Facilities**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Primary Schools | 1 car parking space for every 4 to 6 classrooms | 1 lay-by for taxis and private cars for every 2 to 3 classrooms and a minimum of 3 lay-bys within the school boundary for school buses |
| Secondary Schools and Technical Institutes | 1 car parking space for every 3 to 4 classrooms | 1 lay-by for taxis and private cars for every 3 to 5 classrooms in secondary schools and technical institutes and a maximum of 3 lay-bys for school buses |
| Special Schools | 1 car parking space for every 4 to 8 classrooms | 1 lay-by for taxis and private cars for every 2-3 classrooms and a minimum of 3 lay-bys for school buses (within the site) |
| Kindergartens | 0 - 1 car parking space per 4 to 6 classrooms | 1 lay-by for taxis and private cars for every 5 - 8 classrooms and a minimum of 2 lay-bys for school buses<br>(Note: The requirement may be substituted by 5 lay-bys of size 3m x 7m for mini-bus/ nanny van which can provide a total number of seats equivalent to that provided by 2 large school buses) |
| Tertiary Institutions | No set standard. To be determined by the Authority. | |

**Table 3 : Medical Facilities**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Clinics and Polyclinics | 1 to 1.5 car parking spaces for each consulting room. 3 additional parking spaces (9m x 3m) for ambulances for polyclinics<br><br>1 to 2 car parking spaces should be reserved for disabled person | 1 to 2 lay-bys (9m x 3m) for ambulances and 0 to 1 taxi/private car lay-by per consulting room to be provided under cover<br><br>1 to 2 lay-bys for M/HGVs |
| Hospitals | 1 car parking space for every 3 to 12 beds. 2 - 5 spaces should be allocated for disabled visitor parking. 8 additional parking spaces (9m x 3m) for ambulances for hospitals with Accident and Emergency (A+E) departments. For hospitals without A+E departments, 3 additional parking spaces (9m x 3m) for ambulances | 1 lay-by for taxis and private cars to be provided under cover for every :<br>(i) 80 beds, or part thereof, in hospitals with A+E departments;<br>(ii) 160 beds, or part thereof, in hospitals without A+E departments<br><br>1 lay-by (8m x 3m) for PLBs for every:<br>(i) 200 beds, or part thereof, in hospitals with A+E departments;<br>(ii) 400 beds, or part thereof, in hospitals, without A+E departments<br><br>Ambulance lay-bys:<br>(i) 2 for hospitals with A+E departments<br>(ii) 1 to 2 for hospitals without A+E departments<br>(iii) all lay-bys to be under cover<br>1 to 3 lay-bys for M/HGVs |

**Table 4 : Retail Facilities**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Retail | 1 car space per 150 - 300$m^2$ GFA | 1 loading/unloading bay for good vehicles for every 800 to 1 200$m^2$ or part thereof, of gross floor area |
| Retail Markets | Generally nil | 1 M/HGV bay per 20 - 30 large stalls<br><br>1 M/HGV bay per 40 - 60 small stalls (Subject to a minimum provision of 2 M/HGV bays)<br><br>1 loading/unloading bay as those for a M/HGV, for each refuse collection point |

**Table 5 : Commercial Facilities**

<table>
<tr><th>Type of Development</th><th>Parking Requirements</th><th>Loading/Unloading Requirements</th></tr>
<tr><td>Office</td><td>For the first 15 000m$^2$ GFA : 1 car space per 150 - 200m$^2$ GFA<br><br>Above 15 000m$^2$ GFA : 1 car space per 200 - 300m$^2$ GFA</td><td>1 loading/unloading bay for goods vehicles for every 2 000 to 3 000m$^2$, or part thereof, of gross floor area<br><br>For sites of at least 5 000m$^2$ net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m$^2$, or part thereof, of gross floor area</td></tr>
<tr><td>Hotels<br>(a) Main Urban Areas & New Towns</td><td>1 car space per 100 rooms<br><br>0.5 - 1 car space per 200m$^2$ GFA of conference and banquet facilities in hotels</td><td>0.5 - 1 goods vehicle bay for every 100 rooms<br><br>Lay-by for taxi and private cars :<br><br><table><tr><th>Hotel Type</th><th>Minimum No.</th></tr><tr><td>≤299 rooms</td><td>2</td></tr><tr><td>300 - 599 rooms</td><td>3</td></tr><tr><td>≥600 rooms</td><td>4</td></tr></table><br>Lay-by for single-deck tour buses:<br><br><table><tr><th>Hotel Type</th><th>Minimum No.</th></tr><tr><td>≤299 rooms</td><td>1</td></tr><tr><td>300 - 899 rooms</td><td>2-3</td></tr><tr><td>≥900 rooms</td><td>3</td></tr></table><br>Additional provision for convention centres and banquet facilities to be determined by the Authority</td></tr>
</table>

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| (b) Other areas | Not less than 1 single-deck tour bus parking space for every 200 guest rooms or part thereof<br><br>Not less than 1 car parking space for every 10 guest rooms<br><br>2 - 5 car spaces per 200$m^2$ GFA of conference and banquet facilities in hotels | Not less than 1 bay for goods vehicles for every 100 guest rooms or part thereof.<br><br>Additional provision for convention centres and banquet facilities to be determined by the Authority |
| Commercial / Entertainment Facilities (e.g. cinemas, theatres) | Range of 0 to 1 car parking space for every 20 seats or part thereof | Except for cinemas, 1 loading/unloading bay for goods vehicles where practicable<br><br>Not less that 1 picking up/setting down lay-by for taxis and private cars for every 400 seats or part thereof |

**Table 6 : Industrial Development**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Industrial Use | 1 car space per 1 000 - 1 200$m^2$ GFA | 1 goods vehicle bay per 700 - 900$m^2$ GFA, 50% of which should be for parking of goods vehicles<br><br>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m |
| Industry/Office (I/O) Uses | 1 car space per 600 - 750$m^2$ GFA | 1 goods vehicle bay per 1 000 - 1 200$m^2$ of 50% of the I/O GFA; and 1 per 2 000 - 3 000$m^2$ of the remaining 50% of the I/O GFA<br><br>50% of all the above required goods vehicle bays shall be for parking of goods vehicles<br><br>1 goods vehicle bay per 800 - 1 200$m^2$ for commercial GFA soley for loading/unloading<br><br>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m |

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Business Use | Industrial Buildings:<br><br>1 car space per 600 - 750m$^2$ GFA | 1 goods vehicle bay per 1 000 - 1 200m² of 50% of the GFA; and 1 per 2 000 - 3 000m$^2$ of the remaining 50% of the GFA<br><br>50% of all the above required goods vehicle bays shall be for parking of goods vehicles<br><br>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m |
| | Industrial/Office (I/O) Buildings:<br><br>1 car space per 600 - 750m$^2$ GFA | 1 goods vehicle bay per 1 000-1 200m² of 50% of the I/O GFA; and 1 per 2 000 - 3 000m$^2$ of the remaining 50% of the I/O GFA<br><br>50% of all the above required goods vehicle bays shall be for parking of goods vehicles<br><br>1 goods vehicle bay per 800 - 1 200m$^2$ for commercial GFA solely for loading/unloading<br><br>1 container vehicle loading/ unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m |

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| | Office Buildings:<br><br>1 car space per 150 - 200m$^2$ GFA for the first 15 000m$^2$ GFA; 1 car space per 200 - 300m$^2$ GFA for the remaining GFA<br><br>Business Buildings:<br><br>1 car space per 200 - 300m$^2$ GFA | 1 goods vehicle bay per 2 000 - 3 000m$^2$, or part thereof, GFA<br><br>For sites of at least 5 000m$^2$ net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m$^2$, or part thereof, GFA<br><br>1 goods vehicle bay per 800 - 1 200m$^2$ GFA, 50% of which should be for parking of goods vehicles<br><br>A minimum of 1 picking up/ setting down lay-by for taxis and private cars shall be provided for sites of at least 5 000m$^2$ net site area<br><br>1 container vehicle loading/unloading bay with turning circle of 11.6m outer radius should be provided for a site with dimensions not less than 45m x 40m |
| Industrial Estate | 1 parking space per 900m$^2$ GFA or 1 parking space per 450m$^2$ site area, whichever is the greater. Of the spaces provided, 50% shall be for parking of private cars and light vans and 50% shall be for parking and loading/unloading of lorries. | One half of spaces set aside for lorries should be able to be used for loading/unloading. One container vehicle bay on sites with dimensions of not less than 45m x 40m |
| Science Park | 1 parking space per 75m$^2$ GFA (75% for cars; 25% for vans)<br><br>1 lorry parking space per 5 000m$^2$ GFA | One half of spaces set aside for lorries should be able to be used for loading/unloading |

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Rural Based Industrial Use | 1 parking space per establishment or 1 parking space for every 900m$^2$ GFA of the establishment, whichever is the greater, for lorry/visitor parking | One half of spaces set aside for lorries should be able to be used for loading/unloading |
| Other Industrial Uses with Special Requirements | As per functional needs | |

**Table 7 : Other Facilities**

| Type of Development | Parking Requirements | Loading/Unloading Requirements |
|---|---|---|
| Churches | Up to 1 car parking space for every 16 seats or equivalent | 1-2 bays (9m x 3m) for small coaches |
| Electric Substations | | |
| (a) 66kV and above sub-station | One space for private car | One M/HGV space |
| (b) 33kV substation | One space for private car | One LGV space |
| Art Venues | No set standard. To be determined by the Authority. | |

5. The dimensions of parking spaces and loading/unloading bays are set down below :

| Types of Parking Space and Loading/Unloading Bay | Length (m) | Width (m) | Minimum Headroom (m) |
|---|---|---|---|
| Private Cars, Van-type Light Goods Vehicles and Taxis | 5 | 2.5 | 2.4 |
| Light Goods Vehicles (LGV) | 7 | 3.5 | 3.6 |
| Medium/Heavy Goods Vehicles (M/HGV) | 11 | 3.5 | 4.7 |
| Container Vehicles | 16 | 3.5 | 4.7 |
| Coaches/Buses | 12 | 3.5 | 3.8 |
| Light buses | 8 | 3.0 | 3.3 |
| "Shared-use" for LGV and Light buses | 8 | 3.5 | 3.6 |
| "Shared-use" for Coaches/buses and M/HGV | 12 | 3.5 | 4.7 |

# Chapter 9 : Environment

1. Environmental factors and criteria have to be incorporated into the land use planning process in order to prevent adverse environmental problems. This chapter is to provide guidance for environmental planning of both public and private developments. The guidelines may be applied at three broad planning levels : strategic/territorial, sub-regional and district/local planning.

2. The general environmental guidelines for major land uses are summarized below :

| Land use | Guidelines and Siting Requirements to Minimize Environmental Problems |
|---|---|
| **Industry** | • Avoid airsheds with limited air dispersive capacity or areas subject to serious air pollution<br>• Provide adequate buffer areas or intervening uses as buffer against sensitive land uses<br>• Avoid noise sensitive uses<br>• Provide noise mitigation measures such as purpose-built noise barriers and innovative site layouts to minimise noise impacts whenever possible, if buffer or screening cannot be provided<br>• Avoid line-of-sight to major noisy activities from adjacent noise sensitive uses<br>• Locate in areas adequately served by public foul sewerage<br>• Provide adequate suitable land and access for installation of effluent pre-treatment facilities for effluent-producing industries and for the collection, storage and transportation of waste<br>• Centralise industries of the same category, wherever possible, to economise the provision of wastewater collection and treatment facilities<br>• Locate offensive trades in purpose-built industrial buildings within designated industrial areas and provide adequate buffer to minimise potential odour nuisance |
| **Residential** | • Provide adequate buffer and/or intervening uses from industrial uses and adopt design guidelines to reduce noise exposure if adequate buffer cannot be provided<br>• Allow no noise sensitive uses in areas within aircraft NEF 25<br>• Avoid proximity to, and with direct line-of-sight to, fixed noise sources, railways, helicopter facilities and routes and road with heavy traffic such that the maximum noise criteria are exceeded |

| Land use | Guidelines and Siting Requirements to Minimize Environmental Problems |
|---|---|
| **Residential (con't)** | • Avoid areas within 150m of uncovered MTR lines, 85m of KCR lines and 25m of LRT lines.<br>• Locate in areas adequately served by existing or new public sewerage and sewage treatment facilities.<br>• Avoid stagnant waters, enclosed waterbodies and existing water pollution black spots<br>• Provide suitable space and access for waste separation and collection facilities |
| **Transport Facilities** | • Encourage the development and use of railways, especially in metropolitan and topographically-confined areas<br>• Avoid routing major trunk roads and nodes with heavy traffic through existing air pollution black spots<br>• Promote balanced land uses to minimise the need to travel, hence the traffic volume<br>• Maintain a ventilation corridor for the dispersion of otherwise locally-trapped air pollutants<br>• Avoid noise sensitive uses<br>• Ensure that noise levels do not exceed acceptable limits and adequate separation from sensitive uses is provided |
| **Government / Institution / Community (GIC) Uses** | • Avoid locating sensitive GIC uses such as schools and hospitals in proximity to existing pollution black spots or sites that are subject to plume impingement<br>• Provide adequate buffering for potentially polluting GIC uses such as markets and refuse collection points etc., against sensitive uses and ensure that the site layout does not restrict local air circulation<br>• Provide suitable land and vehicular access for refuse transfer stations, public filling barging points, refuse collection points, collection, treatment and transportation of liquid and solid wastes, if required<br>• Avoid direct line-of-sight to noise sources from noise sensitive uses and provide adequate buffer and screen (e.g. noise-tolerant GIC uses such as multi-storey car parks and markets)<br>• Allow no noise sensitive developments within aircraft NEF 25. |

| Land use | Guidelines and Siting Requirements to Minimize Environmental Problems |
|---|---|
| **Slaughterhouses** | • Provide adequate buffer from sensitive uses and commercial areas<br>• Provide suitable space and access for the collection, storage, transportation and/or pre-treatment of waste and wastewater arising from the operations |
| **Commercial** | • Avoid areas where the traffic generated will cause adverse air pollution and noise impacts on nearby sensitive uses<br>• Avoid locating offices within aircraft NEF 30 unless buildings are insulated<br>• Make full use of insulated office blocks as noise screening structure<br>• Provide suitable space and access for waste separation, collection and transportation facilities |
| **Open space** | • Provide adequate buffer from road network and industrial area<br>• Make use of earth berms wherever practicable in passive recreation areas as noise screening structures to minimise noise impact from roads and rail lines |

3. The recommended buffer distances for various polluting uses :

| Polluting Uses | Sensitive Uses | Buffer Distance |
|---|---|---|
| Multi-storey industrial building | (a) residential areas, schools<br>(b) commercial and GIC uses | 100m<br>30m |
| Industrial areas | hospitals | 500m |
| Industrial chimneys | (a) sensitive uses<br>(b) high-rise buildings<br>(c) active open spaces | within 500m, consult EPD<br>200m<br>10-100m |
| Slaughterhouses | sensitive uses and commercial areas | 300m or 200m (with or without a rendering plant) |
| Village incinerator | sensitive uses | 100m |
| Odour sources | sensitive uses | 200m |
| Offensive trades | sensitive uses | 200m |
| Dusty uses | sensitive uses | 100m |
| Trunk roads | (a) active and passive recreational uses<br>(b) passive recreational uses<br>(c) amenity areas<br>(d) residential uses | >20m<br>3-20m<br>< 3m<br>300m<br>50m (with screening) |
| Primary distributors | (a) active and passive recreational uses<br>(b) passive recreational uses<br>(c) residential uses | >20m<br>3-20m<br>180m<br>40m (with screening) |
| District distributors | (a) active and passive recreational uses<br>(b) passive recreational uses<br>(c) residential uses | >10m<br><10m<br>120m<br>30m (with screening) |
| Local distributors | (a) active and passive recreational uses<br>(b) passive recreational uses<br>(c) residential uses | >5m<br><5m<br>120m<br>30m (with screening) |
| Construction and Earth Moving Activities | (a) active and passive recreational uses<br>(b) passive recreational uses | >50m<br><50m |
| MTR lines | noise sensitive uses | 150m |
| KCR lines | noise sensitive uses | 85m |
| LRT lines | noise sensitive uses | 25m |

# Chapter 10 : Conservation

1. Conservation is considered in this chapter in terms of land use which can be shown by zonings on statutory and non-statutory town plans. Two key aspects of conservation are covered in this chapter, namely nature conservation and biodiversity and conservation of cultural heritage.

## Principles of Conservation

2. The following four principles should be adopted for the practical pursuit of conservation in land use planning:

   (i) retain significant landscape, ecological and geological attributes and heritage features as conservation zones;

   (ii) restrict uses within conservation zones to those which sustain particular landscapes, ecological and geological attributes and heritage features;

   (iii) ensure compatibility of adjoining uses to minimise adverse impacts on conservation zones and optimise their conservation value; and

   (iv) create, where possible, new conservation zones in compensation for areas of conservation value, which are lost to development.

## Nature Conservation and Biodiversity

3. Our nature conservation policy is to regulate, protect and manage natural resources that are important for the conservation of biological diversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generations of the community. Biodiversity conservation can be achieved through protecting areas or individual sites of ecological or landscape significance from incompatible land uses, which is important in ensuring the continued survival and thriving of species therein. Conservation of biodiversity at the genetic level is indirectly assured as a result.

### *Statutory Town Plans*

4. A list of conservation zones designated for protection of natural landscapes and habitats on statutory town plans i.e. Outline Zoning Plans and Development Permission Area Plans, and their planning intentions are summarized **in Table A** below. Under these conservation zonings, there is a general presumption against development and the uses which are permitted, may be subject to the imposition of appropriate conditions by the Town Planning Board.

| **Table A : Conservation Zones in Statutory Town Plans** | |
|---|---|
| Zonings | Planning Intention |
| "Country Park" | To reflect a country park or special area as designated under the Country Parks Ordinance, where all uses and developments require consent from the Country and Marine Parks Authority. |
| "Coastal Protection Area" | To conserve, protect and retain the natural coastlines and the sensitive coastal natural environment, including attractive geological features, physical landform or area of high landscape, scenic or ecological value, with a minimum of built development; and to cover areas which serve as natural protection areas sheltering nearby developments against the effects of coastal erosion, with a general presumption against development. |
| "Site of Special Scientific Interest" | To conserve and protect the features of special scientific interest such as rare or particular species of fauna and flora and their habitats, corals, woodlands, marshes or areas of geological, ecological or botanical/biological interest which are designated as SSSI and to deter human activities or developments within the SSSI, with a general presumption against development. |
| "Conservation Area" | To protect and retain the existing natural landscape, ecological or topographical features of the area for conservation, educational and research purposes and to separate sensitive natural environment such as SSSI or Country Park from the adverse effects of development. There is a general presumption against development in this zone. |
| "Green Belt" | To primarily conserve the existing natural environment amid the built-up areas/at the urban fringe, to safeguard it from encroachment by urban type development, to define the limits of urban and sub-urban development areas by natural features, to contain urban sprawl as well as to provide passive recreational outlets, with a general presumption against development. |

| **Table A : Conservation Zones in Statutory Town Plans** | |
|---|---|
| To regulate developments within the wetland area around Mai Po Marshes and Inner Deep Bay near the Ramsar Site, the following land use zones are introduced in the OZPs within these areas: | |
| Zonings | Planning Intention |
| "Conservation Area" | To discourage new development unless it is required to support the conservation of the ecological integrity of the wetland ecosystem or the development is an essential infrastructure project with overriding public interest. |
| "Other Specified Uses (Comprehensive Development and Wetland Enhancement Area)" | For conservation and enhancement of ecological value and functions of the existing fishponds or wetland through consideration of application for development or redevelopment under the "private-public partnership approach". The "no-net-loss in wetland" principle is adopted for any change of use in this zone. |
| " Other Specified Uses (Comprehensive Development to include Wetland Restoration Area)" | To provide incentive for the restoration of degraded wetlands adjoining existing fish ponds through comprehensive residential and/or recreational development to include wetland restoration area, and to phase out existing sporadic open storage and port back-up uses on degraded wetlands. |
| " Other Specified Uses (Comprehensive Development and Wetland Protection Area)" | To allow consideration of comprehensive low-density residential development or redevelopment provided that all the existing continuous and contiguous fish ponds within the zone are protected and conserved. The "no-net-loss in wetland" principle is adopted for any change in use within the zone. |

***Non-Statutory Town Plans***

5. Non-statutory town plans and supporting planning documents should also be used to express the planning intention to protect conservation areas. Broad conservation sites should be identified and an overall framework of conservation should be reflected in planning and development studies as appropriate. At the district level, Outline Development Plans and Layout Plans are prepared at scales which enable existing and potential conservation sites to be shown and annotated with relevant symbol.

**Heritage Conservation**

6. Heritage conservation is the protection of declared monuments, historic buildings, sites of archaeological interest and other heritage items, but in a wider sense implies respect for local activities customs and traditions. The concept of heritage conservation is to conserve not only individual items but also respecting their wider urban or rural setting as a way to preserve our cultural heritage. The policy statement on heritage conservation is

to protect, conserve and revitalise as appropriate historical and heritage sites and buildings through relevant and sustainable approaches for the benefit and enjoyment of present and future generations.

***Statutory Town Plans***

7. The existing Town Planning Ordinance does not have provisions for the protection of declared monuments, historic buildings, sites of archaeological interest and other heritage items. It is also generally not possible to indicate on the statutory town plans, anything other than the wider 'use' in which these heritage items are located e.g. an ancestral hall within a "Village Type Development" zone or an archaeological relic within a "Conservation Area" zone. However, the information related to declared and proposed monuments, graded historic buildings, and sites of archeological interest are reflected on the relevant statutory town plans by making reference to the website of the Antiquities Advisory Board (www.aab.gov.hk), Antiquities and Monuments Office (AMO) or the Government website on heritage conservation in the Explanatory Statements and that prior consultation with the AMO is necessary for any developments or rezoning proposals affecting these sites or buildings and their immediate environment.

***Non-Statutory Town Plans***

8. Non-statutory town plans and supporting planning documents should be used to express the planning intention to protect declared monuments, historic buildings, sites of archaeological interest, and other heritage items. Declared monuments, historic buildings and sites of archaeological interest should be identified and an overall framework of conservation should be reflected in planning and development studies as appropriate. Layout Plans are prepared at scales which enable all declared monuments, recorded sites of archeological interest, graded historic buildings and other heritage items be shown and annotated with relevant symbol.

**Enforcement**

9. Conservation measures should be enforced under the most appropriate ordinance and authority as summarized in Table B below:

**Table B : Legislation and Administrative Controls for Conservation**

| Legislation | Authority (Administered by) |
|---|---|
| Country Parks Ordinance (Cap 208) | Country & Marine Parks Authority<br>(Agriculture, Fisheries and Conservation Department) |
| Marine Parks Ordinance (Cap 476) | Country & Marine Parks Authority<br>(Agriculture, Fisheries and Conservation Department) |
| Wild Animals Protection Ordinance (Cap 170) | Director of Agriculture, Fisheries and Conservation<br>(Agriculture, Fisheries and Conservation Department) |
| Waterworks Ordinance (Cap 102) | Water Authority<br>(Water Supplies Department) |

| Table B : Legislation and Administrative Controls for Conservation | |
|---|---|
| **Legislation** | **Authority (Administered by)** |
| Antiquities and Monuments Ordinance (Cap 53) | Secretary for Development<br>(Antiquities and Monuments Office) |
| Town Planning Ordinance (Cap 131) | Town Planning Board<br>(Planning Department) |
| Forests and Countryside Ordinance (Cap 96) | Director of Agriculture, Fisheries and Conservation<br>(Agriculture, Fisheries and Conservation Department) |
| Environmental Impact Assessment Ordinance (Cap 499) | Director of Environmental Protection<br>(Environmental Protection Department) |
| **Administrative Regulation** | |
| Site of Special Scientific Interest | Director of Agriculture, Fisheries and Conservation<br>(Agriculture, Fisheries and Conservation Department) |
| Outline Development Plans/ Layout Plans | Director of Planning<br>(Planning Department) |

# Chapter 11 : Urban Design Guidelines

1. To promote Hong Kong's image as a world-class city and to enhance the quality of our built-environment, this chapter provides guidelines on the major urban design issues and air ventilation to shape a better physical environment in aesthetic and functional terms and at macro and micro levels.

2. It may be necessary to refer to other relevant chapters in the HKPSG where appropriate in applying the urban design guidelines and striking a balance among various objectives to meet the needs of the community.

## Urban Design

3. Urban Design is an art of designing places for people and is one of the important elements in urban planning, especially for a compact and dynamic city like Hong Kong. It concerns about the total visual effect of building masses, connections with people and places, creation of spaces for movements, urban amenities and public realm, and the process for improving the overall townscape.

4. The guidelines for specific major urban design issues and land uses are summarised in the following table.

| **Urban Design Guidelines** | |
|---|---|
| **(a) Specific Major Urban Design Issues** | |
| Massing and Intensity in Urban Fringe Areas and Rural Areas | • Strengthen visual and physical linkages between urban and rural areas<br>• Avoid out-of-context "sore thumb" development |
| Development Height Profile | • Lowering of building height where appropriate to maintain views to ridgelines / peaks or water body<br>• Diversity in height in different localities<br>• Gradation in heights from the high density core to the low density fringe<br>• Respect low-rise neighbouring development by lowering building height<br>• Use low-rise G/IC buildings as visual and spatial relief<br>• Avoid monotonous development<br>• Allow high-rise nodes at selected strategic locations |

| Urban Design Guidelines | |
|---|---|
| **(a) Specific Major Urban Design Issues** | |
| Waterfront Sites | • Allow variety of uses, e.g. leisure, cultural, tourism-related and recreational uses, for public enjoyment<br>• Create interesting and active water edge with innovative building design<br>• Vary building height profile with taller buildings inland and lower buildings on the waterfront<br>• Avoid infrastructure projects which create visual and physical barrier<br>• Avoid wall and land-locked effect by maintaining visual permeability to harbour<br>• Provide view corridors and pedestrian / open space linkages to the waterfront |
| Public Realm | • Introduce identifiable features and setback at appropriate corner sites<br>• Adopt high quality architectural design building façade and podium edge at ground and first floor levels<br>• Encourage provision of open space at ground, podium and roof levels<br>• Integrate pedestrian linkages with open space networks<br>• Provide focal landmark features<br>• Reserve more ground level spaces and setbacks for tree planting and street activities<br>• Provide more green areas and amenity strips along circulation routes |
| Streetscape | • Provide shade for pedestrian<br>• Reduce podium coverage to allow more open spaces at grade<br>• Cater for the needs of disabled and elderly<br>• Provide adequate pavement width to accommodate pedestrian flows, street furniture, roadside trees and other utilities installations<br>• Encourage individualistic architectural design treatment to enhance interest at street level<br>• Add vitality by provision of active street frontage and various street activities<br>• Provide high quality pavement and street furniture<br>• Segregation of vehicles and pedestrians through pedestrian priority facilities, vehicular / pedestrian underpasses, flyovers, footbridges and traffic calming measures<br>• Provide direct linkages between activity nodes |

| Urban Design Guidelines | |
|---|---|
| **(a) Specific Major Urban Design Issues** | |
| Heritage | • Identify suitable new and compatible uses for heritage buildings<br>• Minimise negative impact of a new development on neighbouring heritage features to ensure compatibility in scale, proportions, colour materials or architectural design with descending heights towards heritage features<br>• Retain and enhance unique cultural and local characters<br>• Create a sense of history in new neighbouring development through architectural form and building materials<br>• Preserve or create suitable settings for heritage features |
| View Corridors | • Protect views to landmarks, ridgelines / peaks, water body, countryside and other natural features |
| Stilted Structures | • Screen unsightly raised structures or cutting with landscaping |
| **(b) Specific Major Land Uses** | |
| Commercial | • Reinforce waterfront buildings as the city's "Front Elevation"<br>• Identify suitable criteria for mega towers' locations and restrict mega towers for few landmark locations<br>• Use the commercial centre to create identity for residential area and district character<br>• Create breezeways and pedestrianised zones<br>• Strengthen legibility of street environment<br>• Consider visual impact of rooftop structures and advertising signs<br>• Provide efficient pedestrian networks at underground, ground and podium levels |
| Residential and Village | • Encourage comprehensive residential development<br>• Vary building height, massing and form for visual interest<br>• Adopt appropriate plot ratio, stepped height profile or building setbacks<br>• Orientate building blocks / houses to minimise nuisance and other adverse impacts from bad neighbouring uses<br>• Establish at-grade and podium level pedestrian linkages<br>• Reduce vehicle speeds within residential development by provision of speed bump or other traffic calming measures<br>• Maximise accessibility and usability of open space<br>• Provide more greening within residential development<br>• Allow adequate buffer with the surroundings<br>• Adopt innovative building design or architectural imagery to establish a recognizable identity<br>• Define entrance and focal point<br>• Avoid infill development with incompatible architectural style in indigenous village core |

| Urban Design Guidelines | |
|---|---|
| **(b) Specific Major Land Uses** | |
| Industrial | • Respect land uses in neighbouring zones by provision of buffers<br>• Minimise negative visual impact of provision of landscape buffer and breezeway<br>• Screen parking facilities with planting<br>• Incorporate open space with pedestrian network |

## Air Ventilation

5. For enhanced and long-term improvement of the wind environment in our city, it is important to optimise urban design for more wind penetration, especially to the public realm. The following table summarises the qualitative guidelines on air ventilation in land use planning, urban design, and planning and design of large-scale developments in the early stages before any actual undertaking of air ventilation assessment.

| Qualitative Guidelines on Air Ventilation | |
|---|---|
| **(a) District Level** | |
| Site Disposition | • Divide sites into parcels to avoid long and linear site geometry |
| Breezeways/ Air Paths | • Provide breezeways along major prevailing wind directions and air paths intersecting the breezeways<br>• Create breezeways in forms of major open ways through the high-density/high-rise urban form<br>• Link the amenity areas, building setbacks and non-building areas to form air paths |
| Street Orientation, Pattern and Widening | • Align an array of main streets/wide main avenues in parallel, or up to 30 degrees to the prevailing wind direction<br>• The length of street grid perpendicular to the prevailing wind direction should be as short as possible<br>• Introduce street widening schemes and align the longer frontage of development plots along the prevailing wind direction<br>• Introduce setbacks and non-building areas especially for large sites facing narrow urban canyon |
| Waterfront Sites | • Building blocks along the waterfront should be of appropriate scale, height and disposition to avoid blockage of sea/land breezes and prevailing winds |

| Qualitative Guidelines on Air Ventilation | |
|---|---|
| **(a) District Level** | |
| Height Profile | • Adopt varying heights across the district with heights decreasing towards the prevailing wind direction<br>• Decentralise low-rise buildings and open spaces within high-density neighbourhoods to create breathing spaces<br>• Avoid congestion of tall buildings which will block the wind |
| Greening and Disposition of Open Space and Pedestrian Area | • Maximise planting in open space and on hillside<br>• Planting of tall trees with wide and dense canopy in pedestrian area |
| **(b) Site Level** | |
| Podium Structure | • Avoid compact integrated developments and podium structures with full or large ground coverage on extensive sites<br>• Adopt a terraced podium design to direct downward airflow to the pedestrian level |
| Building Disposition | • Provide adequately wide gaps between building blocks at a face perpendicular to the prevailing wind<br>• Align the axis of the building blocks in parallel, or up to 30 degrees to the prevailing wind direction |
| Building Permeability | • Create gaps between building blocks, between the podium and the building blocks atop and at various building levels |
| Building Height and Form | • Adopt stepping height concept and built forms that can help optimise the wind capturing potential of development itself |
| Landscaping | • Maximise the amount and variety of effective green open spaces for individual developments<br>• Planting of tall trees with wide and dense canopy in entrance plazas and setback areas |
| Projecting Obstructions | • Avoid projecting obstructions over breezeways/air paths<br>• Avoid massive elevated road structures aligned by tall buildings in urban canyons<br>• Projecting signboards should be vertical |
| Cool Materials | • Use cool materials in the pavements, streets and building facades<br>• Provide cool sinks like trees and water body where appropriate |

6. To aid planning and design for better air ventilation through the city fabric, an advisory framework for the methodology to undertake air ventilation assessment is outlined in a Technical Guide for Air Ventilation Assessment for Developments in Hong Kong, which is downloadable from Planning Department's homepage http://www.pland.gov.hk.

# Chapter 12 : Miscellaneous Planning Standards and Guidelines

1. The purpose of this chapter is to provide planning standards and guidelines for those land uses or facilities which do not fall within the purview of other chapters.
2. The standards for these miscellaneous uses/facilities are :

| Uses | Standard |
|---|---|
| Rock Cavern Development | • the Cavern Master Plan (CMP), accompanied by an Explanatory Statement and a set of Information Notes for Strategic Cavern Areas (SCVAs), is a planning tool providing a broad strategic planning framework to guide and facilitate territory-wide cavern development in Hong Kong<br>• 48 SCVAs that are suitable for cavern development have been delineated under the CMP<br>• an updated list of land uses with potential to be developed in rock caverns has been included<br>• the key planning and design considerations for delineating cavern area are described<br>• the issues concerning implementation were highlighted |
| Petrol Filling Stations (PFS) | I. general site dimensions of new stations<br>• minimum size :<br>PFS without LPG facilities - 375m$^2$<br>LPG filling station - 375m$^2$<br>PFS with LPG facilities - 750m$^2$<br>EV charging station converted from existing PFS - 375m$^2$<br>• minimum frontage : 25m<br>• minimum depth : 15m (including footway)<br>• minimum width of access : 6m<br><br>II. site dimensions of stations with container vehicles patronage<br>• minimum frontage : 40m<br>• minimum depth : 15m (including a 3m footway)<br>• minimum width of access : 8.5m<br><br>III. siting on Expressways<br>• at least 2 km from any intersection<br>• preferably form part of a service area<br><br>IV. siting on Trunk Roads, Primary Distributor Roads and Rural Roads A<br>• minimum sight distance of 100m<br>• minimum interval of 5km |

| Uses | Standard |
|---|---|
| | V. siting on other roads lower in the hierarchy<br>• minimum sight distance of 50m<br>• minimum interval of 100m if located on different sides of the road<br>• minimum interval of 300m if located on the same side of the road<br><br>VI. waiting spaces (except EV charging station)<br>• 1 vehicle space adjacent to each metered filling point<br>• minimum 4 waiting spaces between the entrance and the filling points<br>• additional 4 spaces for each service bay if general lubrication and servicing facilities are available<br>• 1 additional space between each air-pumping point<br><br>VII. environmental, electrical, traffic and fire safety considerations<br>For all PFS (except EV charging station):<br>• preferably be located in relatively open areas<br>• covering of facilities for carwashing, petrol filling and maintenance activities, as well as car servicing and lubrication bays<br>For all PFS:<br>• avoidance of noise and air disturbances<br>• maintaining one ingress and one egress with one-way operation<br>• provision of adequate intercepting facilities<br>• provision of proper drainage facilities<br>• proper storage and disposal of chemical wastes<br>• compliance with fire safety requirements<br>• provision of fire hydrant within 100m<br>• compliance with electricity safety requirements<br><br>VIII. general separation distances of LPG filling station/facilities<br>• high-rise residential/education/hospital : 55m<br>• commercial/recreational/industrial : 15m<br>• low density residential/incidental dwelling : 15m<br><br>IX. PFS within buildings (not applicable to EV charging station)<br>PFS (without LPG filling facilities) may be accommodated on ground floors of carpark, industrial or commercial buildings subject to : |

| Uses | Standard |
|---|---|
| | • station completely separated from other parts of building by enclosures with fire resistance rating of 4 hours<br>• site open for ventilation on one of the longest sides or two adjoining sides<br>• adequate headroom and ventilation<br>• floor area above to be used for occupancy with low fire/life risk<br>• openings and windows on three levels directly above should be bricked up<br>• Quantitative Risk Assessment and necessary planning approval<br><br>X. special requirements relevant to EV charging station<br>• EV charging facilities should not be co-located with the vehicular fuel filling facilities in the same PFS<br>• minimum 2 waiting spaces<br>• EV charging facilities separating from any licensed store by at least 6 metres<br>• EPD will take lead to liaise with the controlling authorities about environmental, electrical, traffic and fire safety requirements, as well as planning, construction, installation, operation and maintenance of PFS solely used for EV charging station |
| Potentially Hazardous Installations (PHI) | • no set standard<br>• a consultation zone will be delineated for each PHI according to the topography, types of PHIs and their storage capacities<br>• Hazard Assessment, Planning Study and Action Plan would be undertaken as the basis for land use planning and development control within each consultation zone. |
| Vehicle Repairing Workshops | • <u>in rural areas</u><br>  • low rise building of 1 to 2 storeys<br>  • maximum plot ratio of 0.5<br>  • proper water supply and sewage disposal system<br>  • adequate paving and drainage facilities<br>  • suitable fencing as visual screen<br>• in purpose-designed buildings or on the lower floors of industrial buildings<br>  • minimum size of $90m^2$ (10m x 9m)<br>  • include a dangerous goods store<br>  • access ramp of gradient 1 in 5 for cars<br>  inner radius 3.5m |

| Uses | Standard |
|---|---|
| | outer radius 6.1m<br>• access ramp of gradient 1 in 10 for goods vehicles<br>inner radius 7.2m<br>outer radius 13m<br>• minimum 1 car lift (minimum 6.15m x 3.2m)<br>• minimum 2 fire stairs (minimum 5.25m x 2.1m)<br>• 5.2m floor to floor heights for cars and 7.2m for lorries<br>• access point at least 15m from street corner<br>• 0.75 parking space per workspace [(1)] or minimum 2 parking spaces per workshop<br>cars : 5.0m x 2.4m with minimum 2.4m headroom<br>goods vehicle : 11.0m x 3.5m with minimum 4.1m headroom |
| Port Back-up and Open Storage Uses | <u>minimum site requirements</u><br>• 5 100$m^2$ for container storage and repair<br>• 4 900$m^2$ for container yard<br>• 3 000$m^2$ for container lorry park<br>• 2 000$m^2$ for container freight station<br>• 1 000$m^2$ for other open storage uses |
| Use of Land beneath Flyovers and Footbridges | • No set standards<br>• Flyover/footbridges sites should only be considered as alternative solution space for uses upon exhausting all other suitable sites, provided that such uses are acceptable in terms of land use, structural, fire safety, traffic, environmental, visual and all other relevant considerations<br>• Uses beneath flyovers/footbridges are classified as acceptable, conditionally acceptable and unacceptable uses<br>• Relevant works departments should include the requirements for identification of possible land uses beneath flyovers/footbridges in the Investigation Stage of new major flyover/footbridge projects after inclusion into Category B of the Public Works Programme<br>• Application of the guidelines may be adjusted subject to the exact nature of use, locality of the site, design of the flyovers/footbridges and other relevant considerations |

Note:

[(1)] workspace refers to an area large enough to accommodate a vehicle and the person working on it.