

Hong Kong Planning Standards and Guidelines

- Summary -

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The manual is intended to be an easy reference. Contents are under constant review and are subject to amendments without further notice. In case of doubts on its application or for up-to-date information, please contact the Planning Information and Technical Administration Unit on 17/F, North Point Government Offices, 333 Java Road, North Point, Hong Kong or call 22315000.

Section 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 sections would provide a summary of various planning standards and guidelines as specified below :
 - Section 2 : Residential Densities
 - Section 3 : Community Facilities
 - Section 4 : Recreation, Open Space and Greening
 - Section 5 : Industry
 - Section 6 : Retail Facilities
 - Section 7 : Utility Services
 - Section 8 : Internal Transport Facilities
 - Section 9 : Environment
 - Section 10 : Conservation
 - Section 11 : Urban Design Guidelines
 - Section 12 : Miscellaneous Planning Standards and Guidelines

Section 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: Metroplan Area

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 OZPs and site class is not relevant)	(iii) (iv)
		Tsuen Wan, Kwai Chung & Tsing Yi	8	(ii) (v)
	New Development Area and Comprehensive Development Area	6.5	(vi) (vii)	
R2			5	(viii) (ix)
R3			3	(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, or environmental, topographical or geotechnical conditions), 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 OZPs 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 Town (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, 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 OZPs.
- viii. In existing development areas this maximum domestic plot ratio can only be imposed in the case of lease modifications or Section 16 applications as required under the Town Planning Ordinance, unless it is incorporated in the OZPs.
- ix. In Special Control Areas, maximum domestic plot ratio may be further limited.

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

Residential density zone	Maximum domestic plot ratio
R1	8.0 (i) (ii) (iii)
R2	5.0
R3	3.0
R4 (iv)	0.4

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, or environmental, topographical or geotechnical conditions), or special design considerations, a lower plot ratio may be specified when considered appropriate and possible.

- i. Domestic PR8 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.
- 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	Location 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.
Village	3.0 (iii)	-	3	Within the defined envelope of recognised traditional villages.

Notes :

General :

The Table only gives an indication of the maximum plot ratio which may be allowed for particular area. However, where there are significant constraints on development capacity (such as transport or infrastructure limitations, or environmental, topographical or geotechnical conditions), 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 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 65.03m².

Section 3 : Community Facilities

1. A wide range of community facilities is necessary to maintain an appropriate standard of living. Their provision are 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
<p style="text-align: center;"><u>Group A</u></p> <p>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.</p>	<ul style="list-style-type: none"> • Land use compatibility • Nature of services and target users • Public reactions to the facility • Normally require stand-alone sites • Preferably not be directly next to residential development and non-sensitive community facilities • Buffer areas with physical barriers should be provided if necessary • The accessibility and the transport needs of staff, users and visitors should be considered 	<ul style="list-style-type: none"> • Consult Home Affairs Department and the respective District Office to formulate a public consultation strategy at early stage • The scope of consultation should be wide enough to allow relevant parties to be informed and to make comments • The concept of community integration for Group B facilities should be stressed during consultation • All comments raised during consultation should be properly responded to
<p style="text-align: center;"><u>Group B</u></p> <p>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 such as hostels and day centres for discharged mental patients and severely mentally handicapped persons.</p>	<ul style="list-style-type: none"> • Land use compatibility • Nature of services and target users • Public reactions to the facility • Community integration and joint user development should be considered as far as possible • Provide clear signage to ensure undisturbed access to staff, users and visitors where appropriate 	<ul style="list-style-type: none"> • Proper records of the public consultation should be kept for necessary follow-up actions

Table 2 : Educational Facilities

Facility	Standard	Land or Floor Area Requirement	Area Served
Nursery Classes and Kindergartens	730 half-day and 250 full-day places for every 1 000 children in the age group of 3 - under 6.	@	local
Primary Schools	<p>1 whole day classroom per 25.5 persons aged 6-11.</p> <p>For a 30-classroom school, site reservation at a minimum of 6 200m² per school with a minimum acceptable width of 65m is required; for a 24-classroom school, a minimum of 4 700 m² per school with a minimum acceptable width of 55m; and for a 18-classroom school, a minimum of 3 950m² per school with a minimum acceptable width of 55m.</p> <p>A 10% additional site reservation may be required for new development areas.</p>	<p>A 30-classroom school, operating a total of 30 whole-day classes, requires a site of 6 200 m² for 765 persons aged 6-11. [△]</p> <p>A 24-classroom school, operating a total of 24 whole-day classes, requires a site of 4 700 m² for 612 persons aged 6-11. [△]</p> <p>A 18-classroom school, operating a total of 18 whole-day classes, requires a site of 3 950m² for 459 persons aged 6-11. [△]</p>	local
Secondary Schools	1 whole day classroom for 40 persons aged 12-17 with site reservation at a minimum of 6 950m 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 950m 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 000m ² to 7 000m ² in consultation with SED	territorial

Facility	Standard	Land or Floor Area Requirement	Area Served
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 80m ² per bed. (b) Convalescent/ infirmary hospitals - average of 60m ² per bed.	regional
Polyclinics/Specialist Clinic	One specialist clinic/ polyclinic whenever a regional or district hospital is built.	Site reservation: about 4 700m ² (62m x 76m)	regional
Clinics/Health Centres	One clinic/health centre for every 100 000 persons. #	Site reservation : about 2 200m 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 650m 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 000m 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 200m 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. 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 960m 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 800m 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 (Fire stations may be accommodated on joint sites with ambulance depots, whenever practicable.)		3 830m ² with a minimum frontage of 80m and a drill yard of 1 635m ² behind the divisional fire station building block.	district

Table 7 (cont'd)

Facility	Standard	Land or Floor Area Requirement	Area Served
Joint Sub-divisional Fire Stations and Ambulance Depots		2 670m ² with a minimum frontage of 70m and a drill yard of 1 225m 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 160m 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 260m ² (32m x 39.5m) floor area and, preferably, with a minimum clearance height of 7.65m for joint-users buildings; or 2 100m ² (60m x 35m) site area for stand-alone sites in exceptional circumstances.	local
Child Care Centres	To be based on the estimated demand, socio-economic factors, district characteristics and the provision of other child care support services for the area.	NOFA : 443m ² NUFA : 532m ² for 102 places	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 : 631m ²	local
District Elderly Community Centres	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand.	NOFA : 424m ² NUFA : 572m ²	district
Neighbourhood Elderly Centres	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand.	NOFA : 303m ² NUFA : 394m ²	district

Table 10 (cont'd)

Facility	Standard	Land or Floor Area Requirement	Area Served
Day Care Centres for the Elderly	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand.	NOFA : 267m ² NUFA : 401m ² for 40 places	district
Day Care Unit for the Elderly in District Elderly Community Centres	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand.	NOFA : 80m ² NUFA : 120m ² for 20 places	district
Day Care Unit for the Elderly in Residential Care Homes for the Elderly	To be determined taking into account the elderly population, demographic characteristics, geographical factor, existing service provision and service demand.	NOFA : 70m ² NUFA : 105m ² for 20 places	territory wide
Residential Care Homes for the Elderly	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 1 096m ² NUFA : 1 754m ² for 100 places	territory wide
Integrated Family Service Centres	1/100 000 to 150 000 persons.	NOFA : 535m ²	service boundary defined by the Director of Social Welfare
Early Education and Training Centre	To be determined taking into account the population, geographical factor, existing service provision and service demand.	NOFA : 166m ² NUFA : 216m ² for 60 places NOFA : 212m ² NUFA : 276m ² for 90 places	district

Table 10 (cont'd)

Facility	Standard	Land or Floor Area Requirement	Area Served
Special Child Care Centre	To be determined taking into account the population, geographical factor, existing service provision and service demand.	NOFA : 345m ² NUFA : 449m ² for 60 places	district
Day Activity Centre	To be determined taking into account the population, geographical factor, existing service provision and service demand.	NOFA : 319m ² NUFA : 415m ² for 50 places	district
Sheltered Workshop	To be determined taking into account the population, geographical factor, existing service provision and service demand.	NOFA : 587m ² NUFA : 763m ² for 100 places NOFA : 696m ² NUFA : 905m ² for 120 places NOFA : 805m ² NUFA : 1 047m ² for 140 places NOFA : 910m ² NUFA : 1 183m ² for 160 places	district
Hostel for Severely Mentally Handicapped Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 661m ² NUFA : 925m ² for 50 places	territory wide
Hostel for Moderately Mentally Handicapped Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 534m ² NUFA : 748m ² for 50 places	territory wide
Hostel for Severely Physically Handicapped Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 695m ² NUFA : 1 043m ² for 50 places	territory wide

Table 10 (cont'd)

Facility	Standard	Land or Floor Area Requirement	Area Served
Care and Attention Home for Severely Disabled Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 788m ² NUFA : 1 182m ² for 50 places	territory wide
Supported Hostel for Mentally Handicapped Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 243m ² NUFA : 316m ² for 20 places	territory wide
Supported Hostel for Ex-Mentally Ill Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 243m ² NUFA : 316m ² for 20 places	territory wide
Supported Hostel for Physically Handicapped Persons	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 265m ² NUFA : 345m ² for 20 places	territory wide
Halfway House	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 483m ² NUFA : 676m ² for 40 places	territory wide
Long Stay Care Home	To be determined taking into account the service demand and the availability of suitable premises.	NOFA : 2 866m ² NUFA : N/A m ² for 200 places	district
District Support Centre for Persons with Disabilities	To be determined taking into account the population, geographical factor, existing service provision and service demand.	About 500m ² floor area required	district

Facility	Standard	Land or Floor Area Requirement	Area Served
Integrated Community Centre for Mental Wellness	To be determined taking into account the population, geographical factor, existing service provision and service demand.	About 500m ² floor area required	district
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	<p>(a) In urban areas, post offices should be provided so that large concentrations of population have access to facilities within 0.8km from where they live or work.</p> <p>(b) In rural areas, a distance of 3.2km should be assumed.</p> <p>(c) In general, post offices should serve a population of not less than 30 000 persons. #</p>	@	local

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 :

- @ No specific site allocation is required. The facility is normally provided in a composite building.
- △ 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.
- * There is no set population/land area standard for this facility.
- # 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.

NOFA "Net Operational Floor Area" comprises a summation of all internal dimensions of rooms/spaces contained within the approved Schedule of Accommodation, excludes all structures and partitions, circulation areas, staircases, staircase halls, lift landings, area occupied by toilet facilities, mechanical and electrical services.

NUFA "Net Usable Floor Area" is applicable to private development and public housing estates. It comprises the NOFA plus ancillary accommodation, including circulation spaces, toilets, internal partitions, structures etc, for the sole use of the facility. It excludes common areas, lifts and staircase enclosures, structural elements and service ducts forming part of, serving or supporting the remainder of the building.

Section 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 section 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 (at least 5 ha in size and a maximum building site coverage of 20%)	no set standard	<ul style="list-style-type: none"> – 50% counts as District Open Space in the Metro Area
District Open Space (at least 1 ha in size and a maximum building site coverage of 10%)	10 ha per 100 000 persons (i.e. 1m ² per person)	<ul style="list-style-type: none"> – Subject to slope correction factor* – Active to passive ratio of 3:2 is applied – Not applicable to industrial, industrial-office, business and commercial areas, rural villages and small residential developments in the rural areas
Local Open Space (at least 500m ² in urban areas and a maximum building site coverage of 5%)	10 ha per 100 000 persons (i.e. 1m ² per person)	<ul style="list-style-type: none"> – Subject to slope correction factor * – No active to passive ratio – Primarily for passive use – In industrial, industrial-office, business and commercial areas, the standard is 5 ha per 100 000 workers (i.e. 0.5m² 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
<u>Indoor</u>		
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	
Gymnastic	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	
<u>Outdoor</u>		
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	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 estates 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 estates which have obvious site constraints.
3. Optional facilities to be provided in public housing estates where site conditions permit.

Table 3 : Recreation Buildings

Facility	Standard	Site Area [#]	Remarks
Sports Centre	1 per 50 000-65 000	0.6 ha (i.e. 100m x 60m)	With*: 8 x badminton, or 2 x basketball, or 2 x volleyball 2 x tennis plus 3 x Squash Courts 1 x Activity/Dance 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 - standard	1 standard complex per 287 000 or 1 m ² water per 85	2.0 ha for a standard complex	Usually with pools of 50m and/or 25m long*
Swimming Pool - leisure	1 per district (Min. per 900 m ² pool size)	0.6 ha-2.0 ha subject to advice from LCSD	In addition to swimming pool complex*

Table 3 (cont'd)

Facility	Standard	Site Area[#]	Remarks
Indoor Stadium - 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 - 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, and proper maintenance and preservation of trees and vegetation. The target is to bring noticeable improvements in urban greenery, improve the quality of existing greened areas and 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
<p>1. Site Development</p> <ul style="list-style-type: none">(a) Preparing landscape master plan to provide guidance on planting works(b) Preserving existing vegetation as far as possible(c) Periphery planting with landscape strip<ul style="list-style-type: none">- for tree planting, a 3 m wide planting strip and a min. of 1.2 m soil depth- for other plantings, a min. of 1 m wide planting strip(d) Landscape buffers to mitigate environmental nuisance(e) Planting on vacant sites awaiting for development
<p>2. Residential/Industrial/Commercial Developments</p> <ul style="list-style-type: none">(a) Achieving the standards for open space with emphasis on soft landscaping(b) Encouraging the provision of podium and communal sky gardens
<p>3. Visually Sensitive Uses</p> <ul style="list-style-type: none">(a) Quarries<ul style="list-style-type: none">- full landscape reinstatement including mass tree planting and erosion control after quarry excavation- re-grading quarry faces to slopes with max. gradient of 1:1.5 to retain soft fill for planting- planning for restoration works well before the end of the quarry activities(b) Utility Services Facilities<ul style="list-style-type: none">- periphery tree planting and amenity buffer strips for screening visual blights- minimizing the damages of erection of pylons to existing vegetation and landscape re-instatement be undertaken(c) Port Backup and Open Storage Uses<ul style="list-style-type: none">- providing 1 m - 2 m wide planting strip at site periphery to screen off visual impacts of stacks- tree pits are to be provided at 4 m-5 m interval
<p>4. District and Local Open Spaces</p> <ul style="list-style-type: none">(a) Achieving the standard of 1 m² / 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 large trees(d) For passive open space, 85% of the land for soft landscaping, 60% of which for planting large trees(e) Using native plant species in urban fringe parks

5. Roads and Highways (including local access roads)

- (a) Tree planting along central dividers and paving
- (b) Preferably 3 m wide amenity planting strips along pavements
- (c) Raised planters, either fixed or movable may be used if there are technical difficulties
- (d) On new roads, locating underground utility services and manholes away from planter beds and tree pits
- (e) 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
- (b) Existing trees on slopes should be retained or transplanted to other locations as appropriate
- (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 nullahs
- (b) Drainage channels should be planned with greenery in new development 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

Section 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.

Section 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.

Section 7 : Utility Services

Utility services are components of the basic infrastructure. The planning of their provision should be integrated into the overall planning of new development areas such that the efforts between various government departments and utility companies can be co-ordinated.

Their planning standards are summarized below :-

Types of Utility	Standard			
	Site Area Required	Minimum Width of access	Minimum safety clearance	Maximum gradient of access
Electricity Supply				
Extra High Voltage Substations	6 500m ² (100m x 65m)	6.5m	200m away from telephone exchange, broadcasting or radio communication installation	1 in 12
Bulk Infeed Substations				
(a) in CLP Power network	2 870m ² (70m x 41m)	4.5m		1 in 10
(b) in HEC network :				
(i) 275kV Station	1504m ² (32m x 47m)	4.5m		1 in 10
(ii) 132kV Station	2 550m ² (30m x 85m)	4.5m	1 in 10	
Primary Substation (Zone Substations)				
(a) in CLP Power network	1 705m ² (55m x 31m)	4.5m		1 in 10
(b) in HEC network	1 600m ² (40m x 40m)	4.5m		1 in 10
Consumer's Substation(Distribution Substation)				
(a) Indoor Type	30.25m ² (5.5m x 5.5m)	3m	-	-
(b) Outdoor Type	51m ² (8.5m x 6m)	3m	-	-
Overhead Transmission Lines				
(a) 400kV		6m; may be required to reach the principal face of any adjacent building development for fire fighting purpose	Horizontal : 5.5m Vertical : 7.6m	
(b) 132kV			Horizontal : 3.7m Vertical : 6.7m	
(c) 66kV			Horizontal : 3.2m Vertical : 6.1m	

Types of Utility	Standard			
	Site Area Required	Minimum Width of access	Minimum safety clearance	Maximum gradient of access
(d) 33kV			Horizontal : 2.9m Vertical : 6.1m	
(e) 11kV			Horizontal : 2.9m Vertical : 6.1m	
Underground Cables	no set standard 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	-		-
(b) local exchanges in urban area with 20 000-60 000 lines	1 000m ² -1 500m ²	-	at least 200 m away from any power generating station, bulk infeed substation or primary station	-
(c) local exchange in urban areas with >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	Standard
Radio and Broadcast Communications	no set standard
Water Supply	
(a) service reservoirs	<ul style="list-style-type: none"> • as near as possible to the area served • at level where water can be fed by gravity to the supply zone
(b) pumping stations	<ul style="list-style-type: none"> • reasonable proximity to the source of supply • adequate vehicular access • away from noise sensitive uses • a minimum clear distance of 100m from the sea water intake of salt water pumping stations
(c) treatment works	<ul style="list-style-type: none"> • follow the procedures laid down by the Coordinating Committee on Land Use Planning and Control related to Potentially Hazardous Installations
(d) water mains	<ul style="list-style-type: none"> • normally placed underground and routed along carriage ways • adequate separation from power cables and other services
Drainage Services	
(a) foul sewerage system	<ul style="list-style-type: none"> • under carriageways, footpaths, cycle tracks and amenity strips • gravity sewerage system is preferred
(b) storm water drainage system	<ul style="list-style-type: none"> • collected and conveyed in enclosed drains or open channels
(c) pumping stations and sewage treatment work	<ul style="list-style-type: none"> • with design to minimise noise, odour and visual problems • away from residential and other sensitive area
(d) polder drainage and floodwater dumping schemes	<ul style="list-style-type: none"> • at lowest areas of the scheme • covered or properly fenced off
(e) drainage reserves	<ul style="list-style-type: none"> • structures not permitted

Section 8 : Internal Transport Facilities

1. This Section 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	-	7.3 m (2-lane) 11.0 m (3-lane) 14.6 m (4-lane)	2.3m (3.2m) #
Primary Distributor Road ⁺	-	6.75 m (2-lane) 10.0 m (3-lane) 13.5 m (4-lane)	2.3m
District Distributor Road ⁺	7.3 m (2-lane) 10.3 m (2-lane) * 13.5 m (4-lane)	6.75 m (2-lane) 10.0 m (3-lane)	1.8m
Local Distributor Road ⁺	7.3 m (2-lane) 10.3 m (2-lane) * 13.5 m (4-lane)	6.75 m (2-lane)	1.8m
Rural Road A	7.3 m (2-lane) 10.3 m (2-lane) *	7.3 m (2-lane) -	1.8m
Rural Road B	6.75 m (2-lane) 10.3 m (2-lane) *	7.3 m (2-lane) -	1.8m
Feeder Road	6.0 m (2-lane)	-	-
Single Track Access Road	3.5 m (1-lane) widened to 6m at passing bays 6.0 m (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 Commercial / Residential Residential Zone 1 and those other areas near pedestrian generators such as cinemas, rail stations, some GIC facilities (e.g. schools), etc.	4.5 m Very high (Over 100)	1.5 m ⁽²⁾⁻⁽⁴⁾	0.5 m for dead areas and increase to 1m for shopping frontages
Residential Zone 1	3.5 m High (80-100)		
Residential Zone 2	2.75 m Medium (60-80)		
Residential Zone 3	2.0 m Low (Below 60)		
Rural	2.0 m Very Low		
Business	4.5 m Medium (80)		
General Industrial Use ⁽¹⁾	4.5 m Medium	4 m ⁽³⁾⁻⁽⁴⁾	
Special Industrial Use ⁽¹⁾	3.5 m Low to Medium	2 m ⁽²⁾⁻⁽⁴⁾	
Rural Based Industrial Use	2.5 m Low	1.5 m ⁽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 summarized 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 : Housing Development

Type of Development	Parking Requirements	Loading/Unloading Requirements
Subsidised Housing	<p><u>Private car</u> :</p> <p>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2)</p> <p>Where:</p> <p>GPS = 1 car space per 6-9 flats R1= 0.23 R2 = 0.85 (within a 500 m- radius of rail station); or =1 (outside a 500 m - radius of rail station)</p> <p><u>Light Goods Vehicle</u> :</p> <p>1 LGV space per 200-600 flats</p> <p><u>Medium Goods Vehicle</u> :</p> <p>No fixed standard.</p> <p>To utilize estate commercial center loading/unloading bays for overnight parking in estates.</p>	<p>Provision of minimum 1 loading/unloading bay around each residential block for service vehicles.</p>
Private Housing	<p><u>Private car</u> :</p> <p>Parking Requirement = Global Parking Standard (GPS) x Demand Adjustment Ratio (R1) x Accessibility Adjustment Ratio (R2)</p> <p>Where:</p> <p>GPS = 1 car space per 6-9 flats R1 = 0.6 (flat size (GFA) <40m²); or = 1 (flat size is 40-69.9m²); or = 2.5 (flat size is 70-99.9m²); or = 5 (flat size is 100-159.9m²); or = 9 (flat size >159.9m²) R2 = 0.85 (within a 500 m - radius of rail station); or = 1 (outside a 500 m - radius of rail station)</p>	<p>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.</p> <p>Space should also be provided around each block for service vehicles.</p>
Village Housing	<p>Up to 1 car parking space for each standard New Territories Exempted House (65m²), with 10-15% of provision for overnight goods vehicles.</p>	

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. (Note: The requirement may be substituted by 5 lay-bys of size 3 m x 7 m 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	<p>1 to 1.5 car parking spaces for each consulting room. 3 additional parking spaces (9m x 3m) for ambulances for polyclinics.</p> <p>1 to 2 car parking spaces should be reserved for disabled person.</p>	<p>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.</p> <p>1 to 2 lay-bys for MGVs/HGVs.</p>
Hospitals	<p>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.</p>	<p>1 lay-by for taxis and private cars to be provided under cover for every :</p> <ul style="list-style-type: none"> (i) 80 beds, or part thereof, in hospitals with A+E departments; (ii) 160 beds, or part thereof, in hospitals without A+E departments. <p>1 lay-by (8m x 3m) for PLBs for every:</p> <ul style="list-style-type: none"> (i) 200 beds, or part thereof, in hospitals with A+E departments; (ii) 400 beds, or part thereof, in hospitals, without A+E departments <p>Ambulance lay-bys:</p> <ul style="list-style-type: none"> (i) 2 for hospitals with A+E departments. (ii) 1 to 2 for hospitals without A+E departments. (iii)all lay-bys to be under cover. <p>1 to 3 lay-bys for MGVs/HGVs</p>

Table 4 : Retail Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements
<p>Retail</p> <p>(In purpose- designed centers)</p> <p>(a) Zone 1 areas</p> <p>(b) Zones 2 and 3 areas</p>	<p>1 car space per 200-300 m² GFA</p> <p>For the first 2 000m²: 1 car space per 40-50 m² GFA.</p> <p>Above 2 000 m²: 1 car space per 150-200 m² GFA.</p>	<p>1 loading/unloading bay for good vehicles for every 800 to 1 200m² or part thereof, of gross floor area.</p>
<p>Retail Markets</p>	<p>Generally nil</p>	<p>1 MGV/HGV bay per 20-30 large stalls.</p> <p>1 MGV/HGV bay per 40-60 small stalls. (Subject to a minimum provision of 2 MGV / HGV bays)</p> <p>1 loading/unloading bay as those for a MGV / HGV, for each refuse collection point.</p>

Table 5 : Commercial Facilities

Type of Development	Parking Requirements	Loading/Unloading Requirements																
Office	<p>For the first 15 000m² GFA :1 car space per 150-200m² GFA</p> <p>Above 15 000m² GFA :1 car space per 200-300m² GFA</p>	<p>1 loading/unloading bay for goods vehicles for every 2 000 to 3 000m², or part thereof, of gross floor area.</p> <p>For sites of at least 5 000m² net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m², or part thereof, of gross floor area.</p>																
<p>Hotels</p> <p>(a) Main Urban Areas & New Towns</p>	<p>1 car space per 100 rooms</p> <p>0.5-1 car space per 200m² GFA of conference and banquet facilities in hotels.</p>	<p>0.5-1 goods vehicle bay for every 100 rooms</p> <p>Lay-by for taxi and private cars :</p> <table border="1" data-bbox="1007 1050 1406 1323"> <thead> <tr> <th>Hotel Type</th> <th>Minimum No.</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Lay-by for single-deck tour buses:</p> <table border="1" data-bbox="1007 1469 1406 1742"> <thead> <tr> <th>Hotel Type</th> <th>Minimum No.</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Additional provision for convention centres and banquet facilities to be determined by the Authority.</p>	Hotel Type	Minimum No.	≤299 rooms	2	300-599 rooms	3	≥600 rooms	4	Hotel Type	Minimum No.	≤299 rooms	1	300-899 rooms	2-3	≥900 rooms	3
Hotel Type	Minimum No.																	
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≥600 rooms	4																	
Hotel Type	Minimum No.																	
≤299 rooms	1																	
300-899 rooms	2-3																	
≥900 rooms	3																	

Table 5 (cont'd)

Type of Development	Parking Requirements	Loading/Unloading Requirements
(b) Other areas	<p>Not less than 1 single-deck tour bus parking space for every 200 guest rooms or part thereof.</p> <p>Not less than 1 car parking space for every 10 guest rooms.</p> <p>2-5 car spaces per 200m² GFA of conference and banquet facilities in hotels.</p>	<p>Not less than 1 bay for goods vehicles for every 100 guest rooms or part thereof.</p> <p>Additional provision for convention centres and banquet facilities to be determined by the Authority.</p>
Commercial/ Entertainment Facilities (e.g. cinemas, theatres.)	Range of 0 to 1 car parking space for every 20 seats or part thereof.	<p>Except for cinemas, 1 loading/unloading bay for goods vehicles where practicable.</p> <p>Not less than 1 picking up/setting down lay-by for taxis and private cars for every 400 seats or part thereof.</p>

Table 6 : Industrial Development

Type of Development	Parking Requirements	Loading/Unloading Requirements
Industrial Use	1 car space per 1 000-1 200m ² GFA.	<p>1 goods vehicle bay per 700-900 m² GFA, 50% of which should be for parking of goods vehicles.</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6 m outer radius should be provided for a site with dimensions not less than 45 m x 40 m.</p>
Industry/Office (I/O) Uses	1 car space per 600-750 m ² GFA.	<p>1 goods vehicle bay per 1 000-1 200m² of 50% of the I/O GFA; and 1 per 2 000-3 000m² of the remaining 50% of the I/O GFA.</p> <p>50% of all the above required goods vehicle bays shall be for parking of goods vehicles.</p> <p>1 goods vehicle bay per 800-1 200m² for commercial GFA solely for loading/unloading.</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6 m outer radius should be provided for a site with dimensions not less than 45 m x 40 m.</p>

Table 6 (cont'd)

Type of Development	Parking Requirements	Loading/Unloading Requirements
	<p><u>Office Buildings:</u></p> <p>1 car space per 150-200m² GFA for the first 15 000m² GFA; 1 car space per 200-300m² GFA for the remaining GFA.</p> <p><u>Business Buildings:</u></p> <p>1 car space per 200-300m² GFA</p>	<p>1 goods vehicle bay per 2 000-3 000m², or part thereof, GFA.</p> <p>For sites of at least 5000m² net site area, 1 picking up/setting down lay-by for taxis and private cars for every 20 000m², or part thereof, GFA.</p> <p>1 goods vehicle bay per 800-1 200m² GFA, 50% of which should be for parking of goods vehicles.</p> <p>A minimum of 1 picking up / setting down lay-by for taxis and private cars shall be provided for sites of at least 5 000m² net site area.</p> <p>1 container vehicle loading/unloading bay with turning circle of 11.6 m outer radius should be provided for a site with dimensions not less than 45 m x 40 m.</p>
Industrial Estate	<p>1 parking space per 900m² GFA or 1 parking space per 450m² 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.</p>	<p>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.</p>
Science Park	<p>1 parking space per 75m² GFA (75% for cars; 25% for vans)</p> <p>1 lorry parking space per 5 000m² GFA</p>	<p>One half of spaces set aside for lorries should be able to be used for loading/ unloading.</p>

Table 6 (cont'd)

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 HGV/MGV 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 are set down below :

Types of Vehicle	Length (m)	Width (m)	Minimum Headroom (m)
Private Cars and Taxis	5	2.5	2.4
Light Goods Vehicles	7	3.5	3.6
Medium/Heavy Goods Vehicles	11	3.5	4.7
Container Vehicles	16	3.5	4.7
Coaches and Buses	12	3.5	3.8
Light buses	8	3.0	3.3

Section 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 section 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	<ul style="list-style-type: none"> • Avoid airsheds with limited air dispersive capacity or areas subject to serious air pollution • Provide adequate buffer areas or intervening uses as buffer against sensitive land uses • Avoid noise sensitive uses • 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 • Avoid line-of-sight to major noisy activities from adjacent noise sensitive uses • Locate in areas adequately served by public foul sewerage • 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 • Centralise industries of the same category, wherever possible, to economise the provision of wastewater collection and treatment facilities • Locate offensive trades in purpose-built industrial buildings within designated industrial areas and provide adequate buffer to minimise potential odour nuisance
Residential	<ul style="list-style-type: none"> • Provide adequate buffer and/or intervening uses from industrial uses and adopt design guidelines to reduce noise exposure if adequate buffer cannot be provided • Allow no noise sensitive uses in areas within aircraft NEF 25 • 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)	<ul style="list-style-type: none"> • Avoid areas within 150m of uncovered MTR lines, 85m of KCR lines and 25m of LRT lines. • Locate in areas adequately served by existing or new public sewerage and sewage treatment facilities. • Avoid stagnant waters, enclosed waterbodies and existing water pollution black spots • Provide suitable space and access for waste separation and collection facilities
Transport Facilities	<ul style="list-style-type: none"> • Encourage the development and use of railways, especially in metropolitan and topographically-confined areas • Avoid routing major trunk roads and nodes with heavy traffic through existing air pollution black spots • Promote balanced land uses to minimise the need to travel, hence the traffic volume • Maintain a ventilation corridor for the dispersion of otherwise locally-trapped air pollutants • Avoid noise sensitive uses • Ensure that noise levels do not exceed acceptable limits and adequate separation from sensitive uses is provided
Government / Institution / Community (GIC) Uses	<ul style="list-style-type: none"> • 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 • 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 • 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 • 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) • Allow no noise sensitive developments within aircraft NEF 25.

Land use	Guidelines and Siting Requirements to Minimize Environmental Problems
Slaughterhouses	<ul style="list-style-type: none"> • Provide adequate buffer from sensitive uses and commercial areas • Provide suitable space and access for the collection, storage, transportation and/or pre-treatment of waste and wastewater arising from the operations
Commercial	<ul style="list-style-type: none"> • Avoid areas where the traffic generated will cause adverse air pollution and noise impacts on nearby sensitive uses • Avoid locating offices within aircraft NEF 30 unless buildings are insulated • Make full use of insulated office blocks as noise screening structure • Provide suitable space and access for waste separation, collection and transportation facilities
Open space	<ul style="list-style-type: none"> • Provide adequate buffer from road network and industrial area • 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 (b) commercial and GIC uses	100m 30m
Industrial areas	hospitals	500m
Industrial chimneys	(a) sensitive uses (b) high-rise buildings (c) active open spaces	within 500m, consult EPD 200m 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 (b) passive recreational uses (c) amenity areas (d) residential uses	> 20m 3-20m < 3m 300m 50m (with screening)
Primary distributors	(a) active and passive recreational uses (b) passive recreational uses (c) residential uses	> 20m 3-20m 180m 40m (with screening)
District distributors	(a) active and passive recreational uses (b) passive recreational uses (c) residential uses	> 10m <10m 120m 30m (with screening)
Local distributors	(a) active and passive recreational uses (b) passive recreational uses (c) residential uses	> 5m <5m 120m 30m (with screening)

Polluting Uses	Sensitive Uses	Buffer Distance
Construction and Earth Moving Activities	(a) active and passive recreational uses	>50m
	(b) passive recreational uses	<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 heritage conservation.

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 with conservation zones to those which sustain particular landscapes, ecological and geological attributes and heritage features;
 - (iii) control adjoining use 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

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.

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.

Table A : Conservation Zones in Statutory Town Plans	
Zonings	Planning Intention
“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.
“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.
“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.
“Conservation Area” (for wetland only)	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.

Table A : Conservation Zones in Statutory Town Plans	
Zonings	Planning Intention
“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.

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. At the sub-regional level, broad conservation sites should be identified and an overall framework of conservation should be reflected in planning and development studies. 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 symbols.

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 their wider urban and 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 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 declared and proposed monuments, graded historic buildings and sites of archeological interest can be reflected on the relevant statutory town plans by stating them in the Explanatory Statements and that prior consultation with the

Antiquities and Monuments Office is necessary for any developments or rezoning proposals affecting these sites or buildings and their immediate environments.

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. At the sub-regional level, declared monuments, historic buildings and sites of archaeological interest should be identified and an overall framework of conservation should be reflected in the sub-regional plans. 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 symbols.

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 (Agriculture, Fisheries and Conservation Department)
Marine Parks Ordinance (Cap 476)	Country & Marine Parks Authority (Agriculture, Fisheries and Conservation Department)
Wild Animals Protection Ordinance (Cap 170)	Director of Agriculture, Fisheries and Conservation (Agriculture, Fisheries and Conservation Department)
Waterworks Ordinance (Cap 102)	Director of Water Supplies (Water Supplies Department)
Antiquities and Monuments Ordinance (Cap 53)	Secretary for Development (Antiquities and Monuments Office of Leisure and Cultural Services Department)
Town Planning Ordinance (Cap 131)	Town Planning Board (Planning Department)
Forests and Countryside Ordinance (Cap 96)	Director of Agriculture, Fisheries and Conservation (Agriculture, Fisheries and Conservation Department)
Environmental Impact Assessment Ordinance (Cap 499)	Director of Environmental Protection (Environmental Protection Department)

Table B : Legislation and Administrative Controls for Conservation	
Administrative Regulation	
Site of Special Scientific Interest	Director of Agriculture, Fisheries and Conservation
Outline Development Plans/ Layout Plans	Director of Planning (Planning Department)

Section 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 section 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 sections 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	<ul style="list-style-type: none"> • Strengthen visual and physical linkages between urban and rural areas • Avoid out-of-context “sore thumb” development
Development Height Profile	<ul style="list-style-type: none"> • Lowering of building height where appropriate to maintain views to ridgelines / peaks or water body • Diversity in height in different localities • Gradation in heights from the high density core to the low density fringe • Respect low-rise neighbouring development by lowering building height • Use low-rise G/IC buildings as visual and spatial relief • Avoid monotonous development • Allow high-rise nodes at selected strategic locations

Urban Design Guidelines	
(a) Specific Major Urban Design Issues	
Waterfront Sites	<ul style="list-style-type: none"> • Allow variety of uses, e.g. leisure, cultural, tourism-related and recreational uses, for public enjoyment • Create interesting and active water edge with innovative building design • Vary building height profile with taller buildings inland and lower buildings on the waterfront • Avoid infrastructure projects which create visual and physical barrier • Avoid wall and land-locked effect by maintaining visual permeability to harbour • Provide view corridors and pedestrian / open space linkages to the waterfront
Public Realm	<ul style="list-style-type: none"> • Introduce identifiable features and setback at appropriate corner sites • Adopt high quality architectural design building façade and podium edge at ground and first floor levels • Encourage provision of open space at ground, podium and roof levels • Integrate pedestrian linkages with open space networks • Provide focal landmark features • Reserve more ground level spaces and setbacks for tree planting and street activities • Provide more green areas and amenity strips along circulation routes
Streetscape	<ul style="list-style-type: none"> • Provide shade for pedestrian • Reduce podium coverage to allow more open spaces at grade • Cater for the needs of disabled and elderly • Provide adequate pavement width to accommodate pedestrian flows, street furniture, roadside trees and other utilities installations • Encourage individualistic architectural design treatment to enhance interest at street level • Add vitality by provision of active street frontage and various street activities • Provide high quality pavement and street furniture • Segregation of vehicles and pedestrians through pedestrian priority facilities, vehicular / pedestrian underpasses, flyovers, footbridges and traffic calming measures • Provide direct linkages between activity nodes

Urban Design Guidelines

(a) Specific Major Urban Design Issues

Heritage	<ul style="list-style-type: none"> • Identify suitable new and compatible uses for heritage buildings • 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 • Retain and enhance unique cultural and local characters • Create a sense of history in new neighbouring development through architectural form and building materials • Preserve or create suitable settings for heritage features
View Corridors	<ul style="list-style-type: none"> • Protect views to landmarks, ridgelines / peaks, water body, countryside and other natural features
Stilted Structures	<ul style="list-style-type: none"> • Screen unsightly raised structures or cutting with landscaping

(b) Specific Major Land Uses

Commercial	<ul style="list-style-type: none"> • Reinforce waterfront buildings as the city's "Front Elevation" • Identify suitable criteria for mega towers' locations and restrict mega towers for few landmark locations • Use the commercial centre to create identity for residential area and district character • Create breezeways and pedestrianised zones • Strengthen legibility of street environment • Consider visual impact of rooftop structures and advertising signs • Provide efficient pedestrian networks at underground, ground and podium levels
Residential and Village	<ul style="list-style-type: none"> • Encourage comprehensive residential development • Vary building height, massing and form for visual interest • Adopt appropriate plot ratio, stepped height profile or building setbacks • Orientate building blocks / houses to minimise nuisance and other adverse impacts from bad neighbouring uses • Establish at-grade and podium level pedestrian linkages • Reduce vehicle speeds within residential development by provision of speed bump or other traffic calming measures • Maximise accessibility and usability of open space • Provide more greening within residential development • Allow adequate buffer with the surroundings • Adopt innovative building design or architectural imagery to establish a recognizable identity • Define entrance and focal point • Avoid infill development with incompatible architectural style in indigenous village core

Urban Design Guidelines	
(b) Specific Major Land Uses	
Industrial	<ul style="list-style-type: none"> • Respect land uses in neighbouring zones by provision of buffers • Minimise negative visual impact of provision of landscape buffer and breezeway • Screen parking facilities with planting • 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	<ul style="list-style-type: none"> • Divide sites into parcels to avoid long and linear site geometry
Breezeways/ Air Paths	<ul style="list-style-type: none"> • Provide breezeways along major prevailing wind directions and air paths intersecting the breezeways • Create breezeways in forms of major open ways through the high-density/high-rise urban form • Link the amenity areas, building setbacks and non-building areas to form air paths
Street Orientation, Pattern and Widening	<ul style="list-style-type: none"> • Align an array of main streets/wide main avenues in parallel, or up to 30 degrees to the prevailing wind direction • The length of street grid perpendicular to the prevailing wind direction should be as short as possible • Introduce street widening schemes and align the longer frontage of development plots along the prevailing wind direction • Introduce setbacks and non-building areas especially for large sites facing narrow urban canyon
Waterfront Sites	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Adopt varying heights across the district with heights decreasing towards the prevailing wind direction • Decentralise low-rise buildings and open spaces within high-density neighbourhoods to create breathing spaces • Avoid congestion of tall buildings which will block the wind
Greening and Disposition of Open Space and Pedestrian Area	<ul style="list-style-type: none"> • Maximise planting in open space and on hillside • Planting of tall trees with wide and dense canopy in pedestrian area
(b) Site Level	
Podium Structure	<ul style="list-style-type: none"> • Avoid compact integrated developments and podium structures with full or large ground coverage on extensive sites • Adopt a terraced podium design to direct downward airflow to the pedestrian level
Building Disposition	<ul style="list-style-type: none"> • Provide adequately wide gaps between building blocks at a face perpendicular to the prevailing wind • Align the axis of the building blocks in parallel, or up to 30 degrees to the prevailing wind direction
Building Permeability	<ul style="list-style-type: none"> • Create gaps between building blocks, between the podium and the building blocks atop and at various building levels
Building Height and Form	<ul style="list-style-type: none"> • Adopt stepping height concept and built forms that can help optimise the wind capturing potential of development itself
Landscaping	<ul style="list-style-type: none"> • Maximise the amount and variety of effective green open spaces for individual developments • Planting of tall trees with wide and dense canopy in entrance plazas and setback areas
Projecting Obstructions	<ul style="list-style-type: none"> • Avoid projecting obstructions over breezeways/air paths • Avoid massive elevated road structures aligned by tall buildings in urban canyons • Projecting signboards should be vertical
Cool Materials	<ul style="list-style-type: none"> • Use cool materials in the pavements, streets and building facades • 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>.

Section 12 : Miscellaneous Planning Standards and Guidelines

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

Uses	Standard
Rock Cavern Development	<ul style="list-style-type: none"> • no set standard • pre-feasibility studies and planning assessments are required prior to project planning
Petrol Filling Stations (PFS)	<ol style="list-style-type: none"> I. general site dimensions of new stations <ul style="list-style-type: none"> • minimum size : PFS without LPG facilities - 375m² LPG filling station - 375m² PFS with LPG facilities - 750m² • minimum frontage : 25m • minimum depth : 15m (including footway) • minimum width of access : 6m II. site dimensions of stations with container vehicles patronage <ul style="list-style-type: none"> • minimum frontage : 40m • minimum depth : 15m (including a 3m footway) • minimum width of access : 8.5m III. siting on Expressways <ul style="list-style-type: none"> • at least 2 km from any intersection • preferably form part of a service area IV. siting on Trunk Roads, Primary Distributor Roads and Rural Roads A <ul style="list-style-type: none"> • minimum sight distance of 100m • minimum interval of 5 km V. siting on other roads lower in the hierarchy <ul style="list-style-type: none"> • minimum sight distance of 50m • minimum interval of 100m if located on different sides of the road • minimum interval of 300m if located on the same side of the road

Uses	Standard
	<p>VI. waiting spaces</p> <ul style="list-style-type: none"> • 1 vehicle space adjacent to each metered filling point • minimum 4 waiting spaces between the entrance and the filling points • additional 4 spaces for each service bay if general lubrication and servicing facilities are available • 1 additional space between each air-pumping point <p>VII. environmental and fire safety considerations</p> <ul style="list-style-type: none"> • preferably be located in relatively open areas • avoidance of noise and air disturbances • covering of facilities for carwashing, petrol filling and maintenance activities, as well as car servicing and lubrication bays • provision of adequate petrol-intercepting facilities • provision of proper drainage facilities • proper storage and disposal of chemical wastes • compliance with fire safety requirements • provision of fire hydrant within 100m <p>VIII. general separation distances of LPG filling station/facilities</p> <ul style="list-style-type: none"> • high-rise residential/education/hospital : 55m • commercial/recreational/industrial : 15m • low density residential/incidental dwelling : 15m <p>IX. PFS within buildings</p> <p>PFS (without LPG filling facilities) may be accommodated on ground floors of carpark, industrial or commercial buildings subject to :</p> <ul style="list-style-type: none"> • station completely separated from other parts of building by enclosures with fire resistance period of 4 hours • site open for ventilation on one of the longest sides or two adjoining sides • adequate headroom and ventilation • floor area above to be used for occupancy with low fire/life risk • openings and windows on three levels directly above should be bricked up • Quantitative Risk Assessment and necessary planning approval
Potentially Hazardous Installations (PHI)	<ul style="list-style-type: none"> • no set standard • a consultation zone will be delineated for each PHI according to the topography, types of PHIs and their storage capacities • Hazard Assessment, Planning Study and Action Plan would be undertaken as the basis for land use planning and development control within each consultation zone.

Uses	Standard
Vehicle Repairing Workshops	<ul style="list-style-type: none"> • <u>in rural areas</u> <ul style="list-style-type: none"> • low rise building of 1 to 2 storeys • maximum plot ratio of 0.5 • proper water supply and sewage disposal system • adequate paving and drainage facilities • suitable fencing as visual screen • in purpose-designed buildings or on the lower floors of industrial buildings <ul style="list-style-type: none"> • minimum size of 90m² (10m x 9m) • include a dangerous goods store • access ramp of gradient 1 in 5 for cars <ul style="list-style-type: none"> inner radius 3.5m outer radius 6.1m • access ramp of gradient 1 in 10 for goods vehicles <ul style="list-style-type: none"> inner radius 7.2m outer radius 13m • minimum 1 car lift (minimum 6.15m x 3.2m) • minimum 2 fire stairs (minimum 5.25m x 2.1m) • 5.2m floor to floor heights for cars and 7.2m for lorries • access point at least 15m from street corner • 0.75 parking space per workspace⁽¹⁾ or minimum 2 parking spaces per workshop <ul style="list-style-type: none"> cars : 5.0m x 2.4m with minimum 2.4m headroom goods vehicle : 11.0m x 3.5m with minimum 4.1m headroom
Port Back-up and Open Storage Uses	<p><u>minimum site requirements</u></p> <ul style="list-style-type: none"> • 5 100m² for container storage and repair • 4 900m² for container yard • 3 000m² for container lorry park • 2 000m² for container freight station • 1 000m² for other open storage uses

Uses	Standard
Use of Land beneath Flyovers and Footbridges	<ul style="list-style-type: none"> • No set standards • 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 • Uses beneath flyovers/footbridges are classified as acceptable, conditionally acceptable and unacceptable uses • 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 • 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.