Part A
General Guidelines

1. Site Design

Site planning is an important consideration in locating any tourist product. Site planning is essentially location and activity specific but a set of general guidelines applicable for entire country are important in achieving envisaged tourism development.

Site planning has given adequate importance in tourism guidelines of other countries as well.

"As difficult as it may be to determine, every site has a limit for development and human activity. A detailed site analysis should determine this limit based on the sensitivity of the site's resources, the ability of the land to regenerate and the mitigating factors incorporated into the site's design"

- *Tourism Development Guidelines Philippine*

"Places, items, building or structures of historical, cultural or natural and environmental significance in an island leased for tourism purpose shall be properly maintained and conserved in accordance with the instructions from relevant government authorities"

- *Tourism Development Guidelines* Maldives

Box 1: Site planning for a tourist hotel

The site planning process determine the exact locations of infrastructure, taking into account the site's ecological sensitivity and positioning the infrastructure from a visitor management perspective (e.g., location of trails in relation to a campground or attraction). A financial feasibility study can help determine whether there is or will be sufficient demand for a business-focused infrastructure (e.g., an eco lodge) and an environmental feasibility study will assess its environmental viability. The visitor site planning process is best carried out by a team made up of a landscape architect, a biologist or ecologist, and an environmental engineer, who should all have some training in environmental impact evaluation and tourism infrastructure; and also a local resident who is familiar with the site and/or environmental conditions in the area. The first step in preparing a visitor site plan is to survey and analyze the proposed location for the recommended infrastructure. It may be necessary to look at a fairly large area and then reduce the effective site's area depending upon results of the analysis. At this point, the following questions should be asked and answered in at least a provisional manner:

1. *Is the site appropriate for developing tourism activities according to the General Management Plan?*
2. *Can development impacts on the site be minimized?*
3. *What inputs (energy, materials, labor, products) are necessary and available?*
4. *Can waste outputs (solid waste, sewage effluent, exhaust emissions) be dealt with at acceptable environmental costs?*
5. *What are the potential indicators that should be considered in a future impact monitoring plan for this site?*

The next step involves the actual sitting of the proposed buildings and infrastructure.

Source: Zoning site Planning and design, module 8

1.1. Setback

There are number of setbacks regulations proposed by various authorities of the country which related to sitting of buildings. Mainly those are twofold as reservations and buffer zones. Reservations do not allow performing any development activity within that while buffer zones allow certain activities to perform. Buffer zones act as transitional spaces between the proposed development and adjacent environment.

Setbacks frequently operate as physical separators of conflicting land uses. Currently, there is no general guideline made by SLTDA on any of the setbacks but it has recommended adhering to the limits stipulated by the relevant authorities maintaining consistency among respective laws and plans.

Existing Regulations / Guidelines	Act / Authority
▪ Adequate setbacks to be maintained as per the regulations of the Coast Conservation Department, Urban Development Authority, Railway Department, Wild Life Department, Archaeological Department, Irrigation Department, Mahawali Authority etc	*SLTDA Guidelines, web site*
▪ The Coast Conservation Department in their Coastal Zone Management Plan has identified the setback limits. In tourism zones those setbacks are to be maintained. Within the setback no permanent construction of any kind will be permitted. However, soft developments, which are removable easily without permanent foundation, will be permitted	*SLTDA Guidelines, web site*

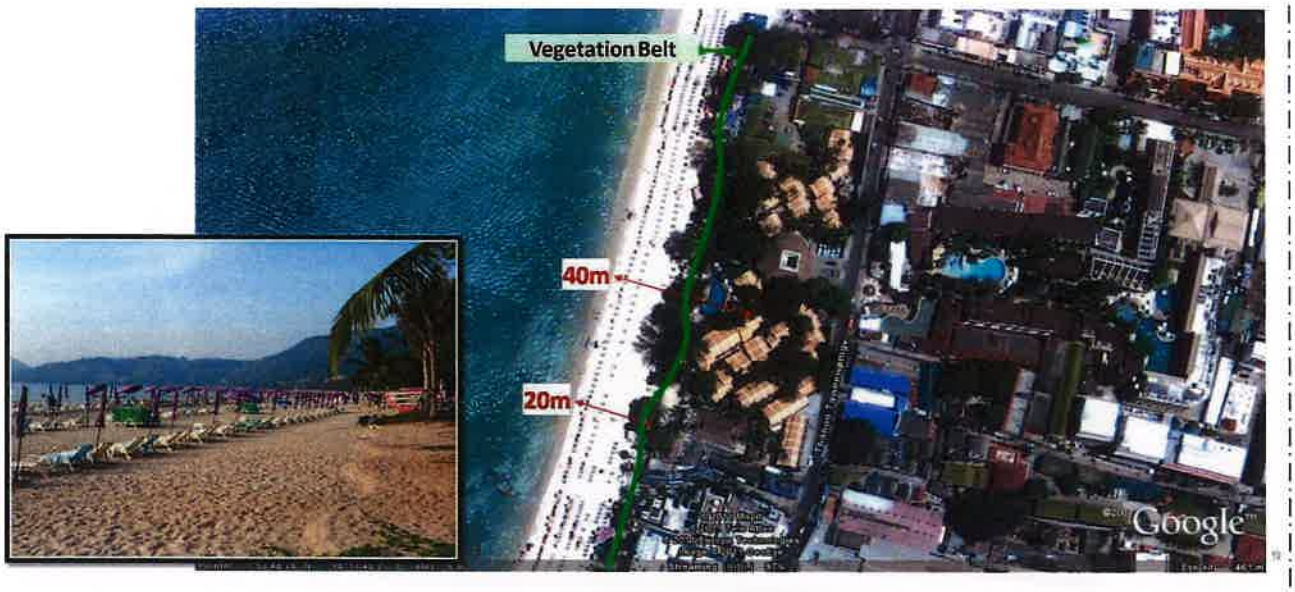
Setback regulations made by the institutions change time to time. Coastal Zone Management Plan revised by every fifth year and the existing setback limits those have made in 2006 as interim development guidelines are still under a process of revision. The interim guidelines made by CCD are given below.

Existing Regulations / Guidelines
▪ Costal Buffer Zone (100m) ("A 100 m buffer zone from the permanent vegetation line of the beach front should be delineated for any new construction in the west and south coast from Kala Oya river mouth (Gange Wadiya) to Kinindi Oya river mouth and 200 m buffer zone from the permanent vegetation line of the beach front should be delineated for any new construction in the East and the North coast from Kirindi Oya river mouth to Kala Oya (Gange Wadiya)"
▪ A structure free set-back (buffer zone) should be maintained from the seaward side of the fore dunes up to the landward toe of the back dunes, where the total width of the fore dunes (primary dunes) and the back dunes (secondary dunes) is more than 100 meters at Kalpitiya, Talavila, Udappuwa, Hambantota Koholankala, Kirinda in the west and the south coast and 200 meters at Panama, Potuvil, Thirukkovil, Manalkadu, Kashurina beach and the Mannar peninsular in the east and the north coast
▪ Setback (Buffer Zone) exceptions are determined by the Coast Conservation Advisory Council for the nationally important projects, fisheries related buildings & infrastructure development activities and tourism related development projects within the declared tourism zones.
▪ A 100 meters structure free setback (buffer zone) from the mean high water line should be delineated for the development activities that are carried out in the islands located in the West and the South coast from Kala oya river mouth (Ganga Wadiya) to Kirindi oya river mouth. ▪ (ii) A 200 m structure free set back (buffer zone) from the Mean High Water line should be delineated for the development activities that are carried out within the coastal zone in the islands located from Kirindi Oya river mouth to Kala Oya covering East and North coast
▪ With the concurrence of the Coast Conservation Advisory Council, approval will be granted with a minimum of 25 meter structure free setback (buffer zone) from the edge of the cliff when development activities carried out in the areas above five meter contour line from the Mean Sea Level in the high ground areas mentioned in Coast Conservation Act characterized with rock outcrops or hard soil such as laterite in the west and the south coast from Kala Oya to Kirindi Oya river mouth and the Trincomalee Bay in the east coast
▪ Structure free reservation area should be maintained either banks of the rivers, streams and lagoons that are permanently or temporary connected to the sea within the coastal zone, 100 m for the West & South coast and 200m for the North & East coast respectively.

Source: Developers Guide and Procedure for Coastal Development - Coast Conservation Department

Setback regulations for coastal areas vary from country to country. "Indonesia requires a 100m shoreline setback for all buildings from the mean high water line, and Tanzania requires 60m [of the same]. In the Philippines, setbacks from rivers, streams, lakes, and mean high tide level of seashores are 3m in urban areas, 20m in agricultural areas, and 40m in forest areas" (*Zoning, site-planning & Design, 2009).* In Maldives, any infrastructure or facility in an island or land leased for the development of tourism allows to build 5m inwards from the permanent vegetation line. In Mexico this limit vary from 10-15m while in Fiji the limit varies from 30-60m from the high tide line.

In comparatively, Indonesia has the highest set back limit out of all discussed countries but current Sri Lankan interim limits a far ahead as 100m from the permanent vegetation line in the West coast and 200m of the same in the East coast. To a certain extent, setbacks are worth to adhere as it provides mutual benefits. For instance a coastal setback prescribed for a hotel may benefit to beach by reducing beach erosion, enhance sand dune formation and protect coastal vegetation while the same may benefit to hotel buildings by ensuring the structural stability of the building. Yet, over too controlling is a constraint for economic development of coastal belt and in the current revision the existing level of tourist development and tourism development potential need to be thoroughly considered.



Phuket – Thailand; 20 m set back from mean high water line

Poovar – India; 20 m set back from mean high water line

Beruwela – Sri Lanka

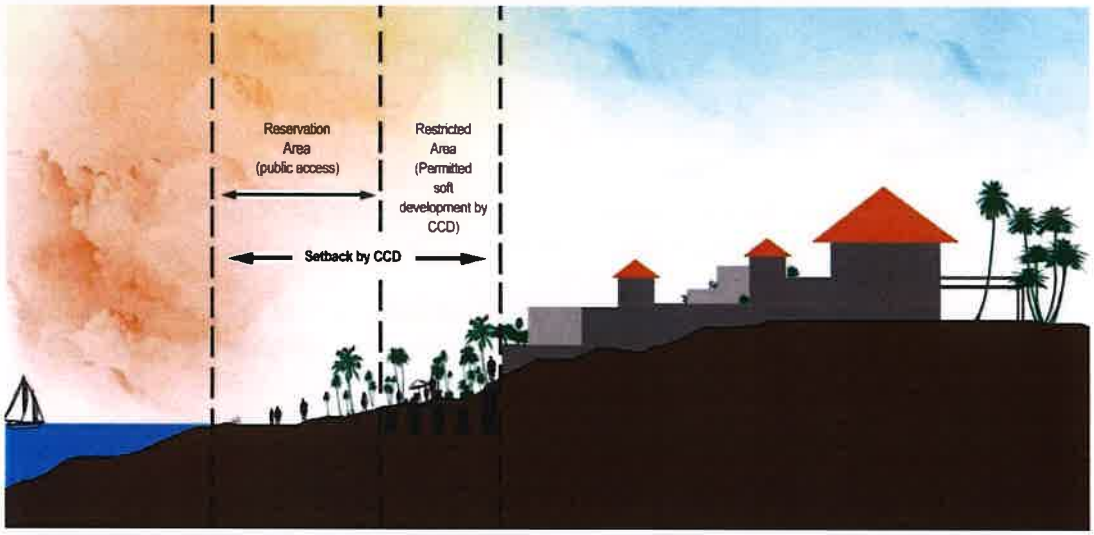
Hikkaduwa – Sri Lanka

1.1. Proposed Guidelines: Site Design - Setback Guidelines

1.1. 1. Coastal Zone

a. A structure frees (no permanent construction) setback shall be maintained as per the guidelines of CCD.

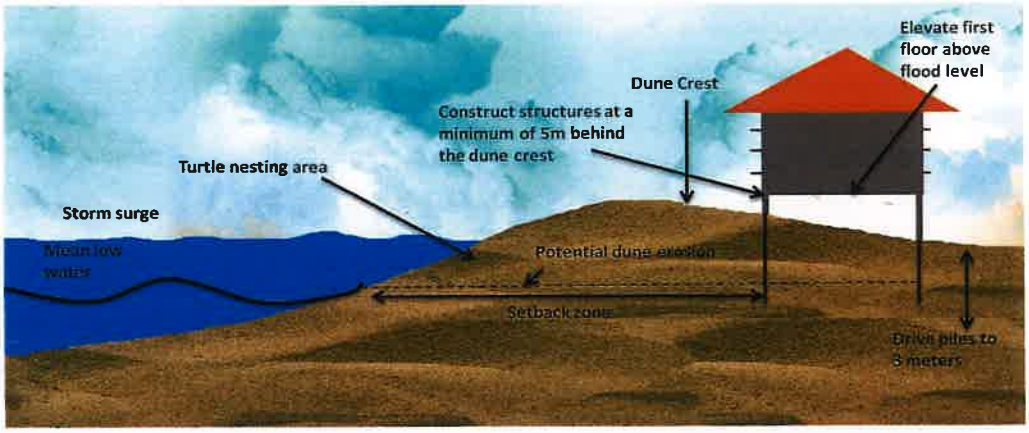
b. There can be soft developments, (Easily removable structures without permanent foundations) within the setback limits specified by CCD or as per the permissions obtained from CCD.



1. 1 2. Coastal Zone - Sand Dune

a. Minimize constructing rigid structures such as cement or concrete seawalls on the beach or in front of the dune. These walls tend to increase the forces of erosion directly in front of the structure during storms. This happens because wave energy is not dissipated, causing the sand to be eroded at the base of the structure, reducing the width of the beach.

b. Design and construct developments to adapt to the natural characteristics and functions of dunes. The sand and vegetation act as a buffer, reducing the potential for the waves from over-washing onto the back dune during storms. For this same reason, dunes shall not be levelled during construction.



1.1. 3. Islands

a. A structure free (no permanent construction) setback from mean high-tide line shall be maintained as per the guidelines of CCD

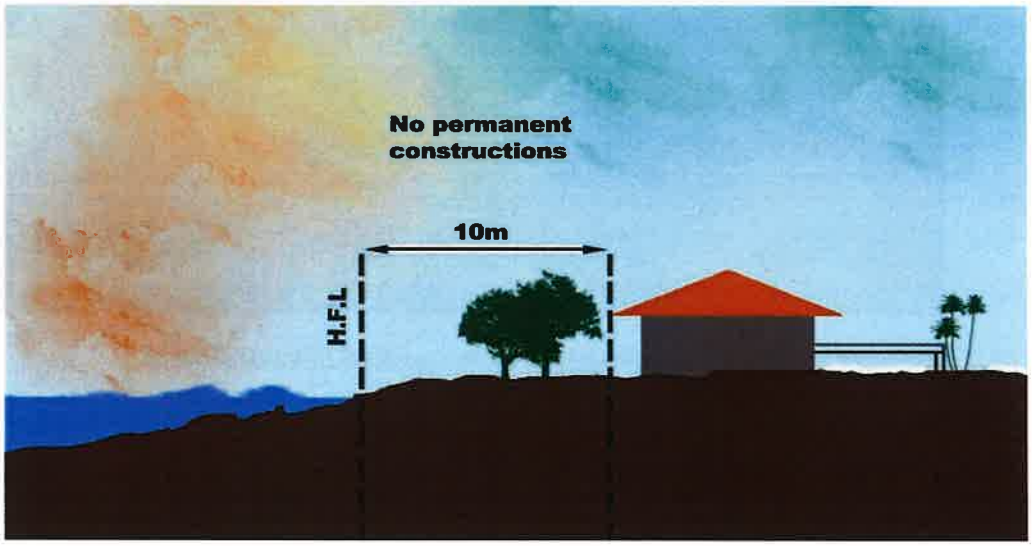
b. Water bungalow, jetties and other water activities will be permitted with the concern of SLTDA, Fisheries Dept., CCD, NARA after considering soil stability, erosion level etc.

1.1. 4. Near Water bodies (River, Stream, Lagoon, Lake), Forests & Wildlife reserves and Wetland areas

a. Adequate setback to be maintained as per the regulations of the Wildlife Department, Irrigation Department, Mahaweli Authority, Urban Development Authority, SLLRDC etc.

b. If not specified, a structure free (no permanent construction) setback of 10m shall be maintained from High Flood Level (HFL). The setback will act as a buffer zone and can use for activities and installations without permanent constructions.

   H.F.L: maximum limit of flood height at 10 year return period.



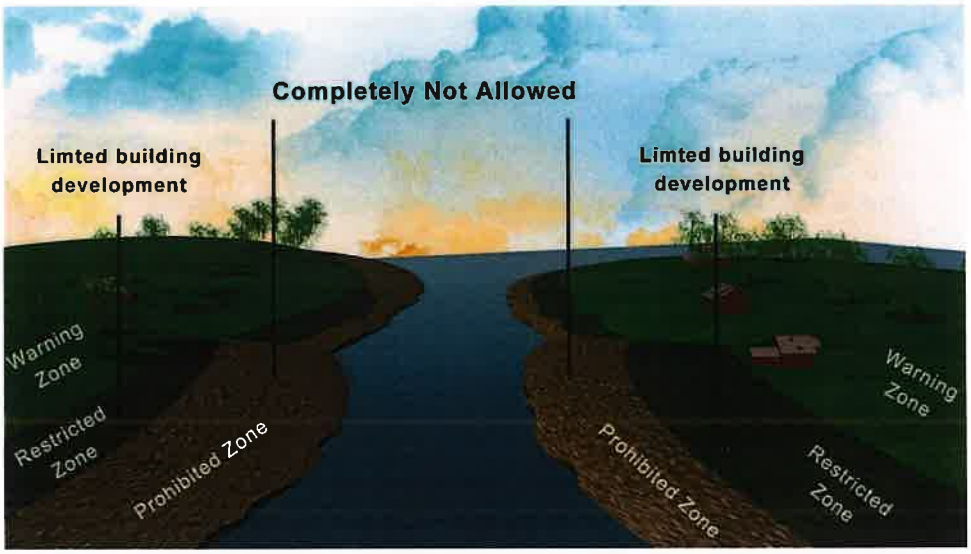
1.1. 5. Flood prone area

a. Any kind of permanent construction shall not be allowed in Prohibited Zone (i.e. Annual flood prone area) which is demarcated under Flood Protection Ordinance. This area may allow for garden furniture, landscaping and other activities.

b. Limited constructions can allow in restricted zone.

I. Restricted area subjects to minor floods therefore; all buildings shall structurally resistant to floods.

II. Maximum allowable room density per ha is 25 (existing guidelines for sensitive areas.



1.1. 6.Near (r ≥ 200 m) Archeological and Designated Historical Site:

a. Adequate setback to be maintained as per the regulations of the Archaeological Department and Urban Development Authority or relevant Local Authority.

1.1. 7. Declared tourism promotion zones:

a. Site and activity specific guidelines proposed by SLTDA shall be followed.

1.2. Conflicting and Complementary Uses

Locating tourism activities should give special attention on surrounding land uses. There can be complementary uses as well as conflicting uses depend upon the interests between the different users. Conflicts or complementarities at many times depend on the design and functions of proposed tourism activity. The example below explains how the type of uses can be complementary of conflicting to each other.

	Benefits to hotel	**Cost to hotel**
Benefits to adjacent user	A coastal tourist hotel with a direct view of beach and the hotelier's plant mangrove garden along the beach.	A coastal tourist hotel where hotelier construct a park with open access to neighbourhood but neighbours pollute the park.
Cost to adjacent user	A coastal tourist hotel with a direct view to beach but discharge waste water to sea.	A coastal tourist hotel with open bar facility adjacent to the play ground of a school.

The detailed guidelines on managing conflicting uses are specific to products and sites. Currently, site specific guidelines are available in some of the declared tourism zones of SLTDA. For instance, the existing site specific guidelines given in Kalpitiya declared tourism zone is given below.

Box 2: Harmonizing surrounding uses

"If the site provides for different types of visitor use, for example eco-lodge and campground, make sure these uses are sufficiently separated geographically so that they do not conflict. Safety, visual quality, noise and odor are all factors that need to be considered when sitting support services and facilities. These areas need to be separated from public use and circulation areas. Under some circumstances, utilities, energy systems and waste recycling areas can be a positive, educational part of the ecotourism experience. Sitting should be compatible with traditional agricultural, fishing and hunting activities. Some forms of development that supplant traditional land uses may not be responsive to the local economy"

Source: Zoning site Planning and design

"Buffer zones are also use to separate activities that have negative effects on sensitive areas and mitigate them. Buffer zones should be fully landscaped using plants indigenous to the region and in addition a 10m setback buffer from the perimeter of the site to the development is recommended. The use of earth mounds topped by dense planting is encourage to shield the site from negative features like roads etc. in sensitive coastal areas with lakes and mangrove vegetation, additional setbacks may be necessary to protect and conserve this important features. "

-General guidelines for investors, Kalpitiya (p-25)

1.2. Proposed Guidelines - Site Design - Conflicting and complementary uses

1.2.1 There shall be a site plan illustrating the location of proposed activities and their functional, visual linkages to the land uses of adjacent sites.

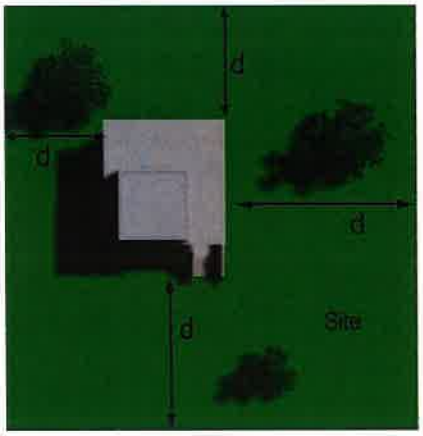
a. Conflicting and complementary uses located at the perimeter of site need to identify in the site plan with respect to both the existing and proposed uses.

b. Conflicting uses (e.g.: schools, temples, playgrounds) have to avoid the maximum possible extent if not a suitable separators like boundary walls, hedges and vegetation zones could be adopted. Distance of such separators shall decide according to the nature of conflict as visual discrepancies, noise emission and privacy.

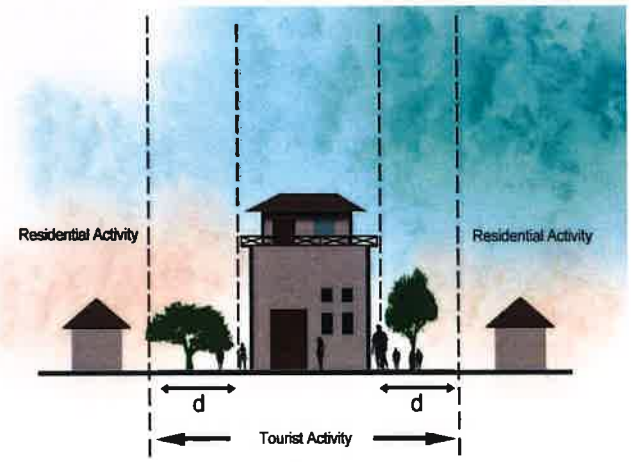
c. Proposed tourism development activities shall need to open up to or blend with complementary uses (e.g.: road, street, tourism activities, beach front) as maximum as possible.

d. Proposed tourist activities shall neither disturbed nor prevent access to surrounding public activities (e.g.: Designated Beach areas, Public Parks).

1.2.2. Distance of 5.5 m may keep from the edge of the building to perimeter of the plot. Wherever, the building height exceeds 22m, this distance to be maintained as 1/4th of the height of the building.



d ≥ 5.5m
or
d ≥ Height of the Bulding / 4



1.2.3. Road width (d) may reduce up to 10ft if stipulated in site specific guidelines.

1.3. Landscaping

Existing landscaping guidelines of SLTDA have considered the visual quality of the out-door environment, privacy of the outdoor activities, wind circulation, penetration of sea breeze and enhancing natural lighting. Landscaping has identified as a noise controlling devise within the subspaces of site as well as outside the premises too. Landscape can play a dominant role in aesthetic appealing well as identity of the place.

Box 3: Landscaping as a value added service

"Throughout hotels in Europe and Asia, and especially in countries like Holland and Japan, indoor landscaping is as common as tulips and chopsticks, because the cultural and social relevance is embedded in their way of life...Some hotel brands in the United States have made plant life and interior landscaping a top priority since their inception and even incorporated the practice into their brand standards...The practice adds irreplaceable value for the guests and makes the working environment much more pleasant for the hotel staff...'The greenery has a calming effect on the guests and team members alike, From a guest standpoint, many arrive and start taking photos of the lobby atrium.'... Research concludes without a doubt that plants add value to employees' working environments, and productiveness, and therefore improves guests' experiences in hotels. Hotels can also keep guests in the lobby, gift shop, and atrium longer when the interior landscaping has a nature element"

- *'Lodging; the official magazine of the American hotel and lodging association', April 2004*

SLTDA has identified the importance of landscaping and the existing guidelines stated are mentioned below.

Existing Regulations / Guidelines

- For new tourist development, cabling services should run underground to enhance the visual appearance. Existing tourist areas and attractions should give "undergrounding" existing supply lines.

- The existing and proposed landscaping of a site requires comprehensive analysis. A full landscape design should be a component of the development proposal submission. It should be a fully integrated proposal giving consideration to factors such as privacy, noise pollution, visual enhancement and wind screening. The proposal should include depiction of boundary fences, paths, roadways, street furniture and area lighting. It should also incorporate existing trees into the plan. However, if trees of importance have to be uprooted, it is to be carefully root balled and replanted elsewhere on the site. Scenic vantage points should be sensitively considered and other such features included where appropriate. On site plant nurseries is encouraged.

- Landscape buffer zones should be provided around the building as a protective barrier against noise. This will also help to maintain privacy of the facility and enhance the quality of the property.

Accordingly, making minimum damages to existing landscape has been advised throughout the construction and operation process. Alterations to existing landscape in sensitive areas and protected sites are controlled by the relevant laws. In addition to that, altering any significant landscape features have controlled even in urban areas by UDA regulations as well.

Existing Regulations / Guidelines	Act / Authority
▪ The UDA may, in the interest of amenity prohibit the felling, lopping or wilful destruction of any tree, group of trees or vegetation or altering any significant landscape feature of an area.	*UDA_ Act_No_392/9 of_1986*

SLTDA has considered on enhancement of the bio-diversity in some of the declared tourism zones. For instance, in Kalpitiya declared tourism zone use of indigenous vegetation has encouraged while the use of exotic plants for landscaping has been discouraged. This has given importance in tourism development of many other countries as well. In Western Australia, only locally indigenous vegetation is propagated for landscaping. In Maldives "use of any plant of any species, imported for use in a tourist resort or such a place, shall be used or planted after obtaining written permission and in accordance with the instructions from the Ministry of Tourism. In case any disease or fungus is found in any plants in the resort, it shall be reported to the relevant government authority, and measures to remedy the problem must be carried out in accordance with advice and instructions from such authorities".

1.3. Proposed Guidelines - Site Design - Landscaping

1.3. 1. The existing and proposed landscaping of a site requires a comprehensive analysis. . A full landscape design approved by landscape architecture shall be a component of the development proposal submission. It shall be a fully integrated proposal giving consideration to factors such as privacy, noise pollution, visual enhancement wind screening, conservation of natural environment and energy efficiency

Requirements

The proposal shall include depiction of boundary fences, paths, roadways, street furniture and area lighting.

Adjacent land uses/ functions outside the perimeter, existing trees and seasonal wind directions should mark in the landscape proposal.

Guidelines

a) Scenic vantage points shall be sensitively considered and other such features included where appropriate.

b) If any significant (i.e. endemic, red-listed /rare/endangered, historical and cultural) flora species present, then those must be uprooted, it is to be carefully root balled and replanted elsewhere on the site.

c) Use of indigenous vegetation has encouraged while the use of exotic plants for landscaping has been discouraged.

d) On site plant nurseries shall be encouraged.

e) Ecological niches of fauna species including breeding or feeding areas need to be protected with minimum disturbances.

f) Use of compost fertilizer is encouraged and the chemicals (weedcides, pesticides) may control unless if necessary.

g) Minimal change is made to landform (cut and fill) and topography to accommodate buildings and infrastructure

h) Architectural style, landscape design and construction materials may reflect local elements

i) Isolated structures, such as car parks, toilet blocks, towers and storage areas blend into the natural setting with appropriate selection of materials and with endogenous vegetation

2. Site Density

Sitting of facilities should carefully weigh the carrying capacity of the site at the design of site density and infrastructure provision. Allowable site density may vary depend on the existing development and sensitivity of the location.

There are three standards currently use by SLTDA to control the site density as plot coverage, room-land ratio and building height. Existing guidelines are mentioned below.

Existing Regulations / Guidelines	
Rooms to land ratio	o Number of rooms should not exceed 25 per Hectare in sensitive/rural area, 62 per Hectare in townships, and 125 per Hectare in cities o Higher densities (125 double guest rooms per hectare) should only be considered on sites where the carrying capacity and the EIA and SIA studies recommend that such increase can be sustained. Subsequent extensions should be permitted up to, but not exceeding the density originally designated
Plot coverage	o The footprint of the building should not exceed 25% of the total land area o Maximum site coverage (i.e. the area of the "footprint" of a building as a percentage of the area of the whole site) of 30% should be applied for development purposes. Potential development sites should be graded by low, medium or high density. Consideration should be given to factors such as local site conditions, the general location, and site landscape, bearing capacity and sociological and environmental aspects o This coverage will include all hard paving as well.
Building Height	o Maximum storey's in rural area should be restricted to two o Ridges of the roof should be below an average Coconut tree(avg. height 12m) o The Ground floor should be up to 75metres with a ridge height of 5metres o Buildings with heights of 100metres could be developed as Ground floor plus one floor with a ridge height of 10metres o Buildings with heights of 200metres could be developed as Ground floor plus two floors with a ridge height of 15metres o All buildings should be in harmony with the features of the land and locality, and should be structurally sound and cyclone free

2.1. Rooms to Land Ratio

Rooms to land ratio refers to the maximum number of rooms permitted on a lot. In the current rooms to land ratio guideline, the terms of 'sensitive areas, rural areas, townships and cities' need to interpret properly as such any location can be identified without any ambiguity. Though the number of rooms allows from 25 per hectare to 125 per hectare as a general guideline, this may varies at declared sites. For instance, in Kalpititya declared tourist zone, the development has restricted to 3-6 rooms per acre (i.e. 7- 15 rooms per hectare).

Caribbean islands and Costa Rica beaches has the same density which allows in sensitive/rural areas of Sri Lanka as 20-30 rooms per hectare. The number of rooms allowed in rural areas (which are not highly sensitive) is comparatively less. Countries like Hong Kong (Angkor; 50 rooms per ha), India (Agra, Kerala; 50 rooms per ha) allows the similar number of rooms which allow in Sri Lankan townships (62 rooms per ha). Bali islands and Honolulu allows slightly more rooms as 60-100 rooms per ha at different townships. 125 rooms per ha in cities is not higher number in comparison to the city hotels in Mexico (240 rooms per ha Diamante, 300 rooms per ha in Cancun) and USA (375 rooms per ha in San Diego).

The salient feature observed through the review of other countries is that the prescribed rooms to land ratio is high at high density zones while it is low at low density zones highly depending on the space to grow and land value. The proposed density guidelines has incorporate those considerations allowing high densities at high density zones while controlling dense developments at law density zones. This aims to maintain a consistency with the surrounding development pattern. However, this striking a balance between caring capacity and economic growth is formula not applicable to sensitive areas (sensitive areas declared under forest act, Special areas declared under National Environmental Act, protected reserves under Antiquities ordinance) which need special attentions.

$$\text{No. of Rooms per Ha} = \frac{\text{Surrounding Area Population Density per Ha / Avg. Persons per Room}}{\text{Plot Coverage}}$$

2.1. Proposed Guidelines - Site Density – Room to Land Ratio

Area	No. of Maximum Rooms per Ha*
2.1.1. Declared tourism promotion zones	***Site specific guidelines need to follow***
2.1.2. Sensitive Areas**	***25***
2.1.3. Non UDA declared areas	***40***
2.1.4. UDA declared areas – Low Density Areas (<50 PPHa)	***50***
2.1.5. UDA declared areas – Moderate Density Areas (50-100 PPHa)	***80***
2.1.6. UDA declared areas – High Density Areas (100-200 PPHa)	***125-175***
2.1.7. UDA declared areas – Very High Density Areas (>200 PPHa)	***200-250***

** Minimum room size has assumed based on the room sizes(mentioned in bellow) stated in Gazzete number 1070/10, dated 1999.03.11 under the Tourist Development Act, No:14 0f 1968*

Star Grade	*Room Size*
1 star to 2 star hotels	*(a)single air conditioned approximately 120 sq.ft* *(b))single non air conditioned approximately 140 sq.ft* *(c)Double air conditioned approximately 160 sq.ft*
3 star to 5 star hotels	*(a)single air conditioned approximately 140 sq.ft* *(b))single non air conditioned approximately 160 sq.ft* *(c)Double air conditioned approximately 190 sq.ft*

*** Restricted Flood Zones under flood protection ordinance, Designated landslide prone areas by NBRO; Designated forest and wildlife areas; forest areas designated under Forest Act; Special areas declared under NE Act, Antiquities Ord., Fauna & Flora Ordinance or any such land as determined by the SLTDA*

2.2. Plot Coverage

As mentioned in the investor's guide of the tourist board, the footprint of the building should not exceed 30% of the total land area. UDA act allow non-residential developments in urban areas up to 65% of total land area.

Existing Regulations / Guidelines	Act / Authority
I. The maximum lot coverage permissible is 65% and minimum open space at any level is 35% II. The maximum lot coverage permissible for high rise > G+12 is 50%	UDA_ Act_No_392/9 of_1986

However, tourism activities demand for more open areas compare to other non-residential land uses in order to cater outdoor activities and to have attractive landscape features.

In Maldives, in order to preserve and maintain the natural environment at least 80% of the island spared un-built (the area inwards from the vegetation line take as the area of the island). The same amount as 20% built-up area from total land area practice in the countries like Hong Kong, India while this has reduced further in some of the places like Costa Rica and Caribbean islands.

$$\text{Plot Coverage} = \frac{\text{Ground Floor Printh Area X 100}}{\text{Land Area}}$$

2.2. Proposed Guidelines - Site Density – Room to Land Ratio & Plot Coverage

Area	No. of Maximum Rooms per Ha*	Plot Coverage	Justification
Declared tourism promotion zones	*Site and activity specific guidelines proposed by SLTDA should be followed.*		
*Sensitive Areas***	*25*	*20%*	*Guidelines for plot coverage in Sensitive Areas are not available at present. Proposed provisions are valid only for the eco-sensitive tourism developments approved by EIA/IEE*
Non-UDA declared areas	*40*	*30%*	*30% may include only the building foot print.* *Additional 20% of plot coverage can be used for road access, swimming pools, sport facilities, terraces, waste treatment facility and other soft development activities. Out of the additional 20% area, non-permeable surfaces shall not exceed 10% of plot coverage.*
UDA declared areas – Low Density Areas (<50 PPHa)	*50*	*30%*	
UDA declared areas – Moderate Density Areas (50-100 PPHa)	*80*	*50%*	
UDA declared areas – High Density Areas (100-200 PPHa)	*125-175*	*80%*	*50% may include only the building foot print.* *Additional 30% of plot coverage can be used for road access, swimming pools, sport facilities, terraces, waste treatment facility and other soft development activities. Out of the additional 30% area, non-permeable surfaces shall not exceed 15% of plot coverage*
UDA declared areas – Very High Density Areas (>200 PPHa)	*200-250*	*80%*	

** Minimum room size has assumed based on the room sizes(mentioned in bellow) stated in Gazzete number 1070/10, dated 1999.03.11 under the Tourist Development Act, No:14 0f 1968*

Star Grade	Room Size
1 star to 2 star hotels	*(a)single air conditioned approximately 120 sq.ft* *(b))single non air conditioned approximately 140 sq.ft* *(c)Double air conditioned approximately 160 sq.ft*
3 star to 5 star hotels	*(a)single air conditioned approximately 140 sq.ft* *(b))single non air conditioned approximately 160 sq.ft* *(c)Double air conditioned approximately 190 sq.ft*

*** Restricted Flood Zones under flood protection ordinance, Designated landslide prone areas by NBRO; Designated forest and wildlife areas; forest areas designated under Forest Act; Special areas declared under NE Act, Antiquities Ord., Fauna & Flora Ordinance*

2.3. Building Height

Existing building height regulations in Sri Lanka are stipulated by UDA in urban declared areas, Civil Aviation authority near airports, and coastal conservation department in Coastal buffer zones. In addition to that, SLTDA provide special guidelines for tourism development.

Existing Regulations / Guidelines
I. Maximum storey's in rural areas should be restricted to two.
II. Ridges of the roof should be below an average Coconut tree(avg. height 12m)
III. The Ground floor should be up to 75metres with a ridge height of 5metres
IV. Buildings with heights of 100metres could be developed as Ground floor plus one floor with a ridge height of 10metres
V. Buildings with heights of 200metres could be developed as Ground floor plus two floors with a ridge height of 15metres
VI. All buildings should be in harmony with the features of the land and locality, and should be structurally sound and cyclone free

Building height limits Area specific guidelines need to develop for the building height of declared tourism zones considering structural stability, visual quality (scenic value), safety from natural disasters and air circulation. In Kalpititya declared tourism zone, the building heights were already demarcated in order to enhance the built features of coastal belt.

> "All structures facing the coast should be limited to one floor within 1st 100 m. the buildings in the next 100m could be developed to G+1 floor only within a ridge height 12m. The area beyond would be designated the maximum development zone, permitting a development height of G+2 floors only within the maximum ridge height of 16m. Care should be taken in the design of the individual resort to ensure that the building types do not form walls of the buildings thereby blocking the natural air flow through the site. The use of flat roof is discouraged as they are usually unsympathetic with the architectural styles prevalent in monsoon Asia. Low buildings that are maintain below the tree cover more protected from the wind."

Additionally, site specific guidelines are required for archeologically important, coastal and disaster prone areas. In coastal tourist hotel guidelines of Sri Lanka it has mentioned as "if the development is within view of an important site or building, the tourist facility should not be taller than that site. The design of the exterior of the building should also be harmonious with the architectural style of the site". The following table represents the relationship between proposed plot coverage and rooms to land ratio with building height.

Relationship between minimum height required with proposed Plot coverage and Rooms to land ratio				
Area	**No. Rooms per Ha**	**Plot Coverage**	**Minimum Height required to construct 13sqm rooms***	**Minimum Height required to constrict 40 sqm rooms***
Sensitive Areas	25	20%	1	1
Urban Areas – Low Density Areas (<50 PPHa)	40	30%	1	1
Special tourist zone areas	50	30%	1	2
Urban Areas – Moderate Density Areas (50-100 PPHa)	80	50%	1	2
Urban Areas – High Density Area (100-200 PPHa)	125-175	80%	1	2
Urban Areas – Very High Density Areas (>200 PPHa)	200-250	80%	1	2

** If allocate 50 % of total built- up area for rooms*

Accordingly, except in very high density areas (>200ppHa) maximum number of rooms can construct even as a single floor following the minimum room sizes. Yet, if the hotel consists of deluxe rooms then the number of required floors may increase up to four floors. Sometimes, buildings may preferable to go for higher number of floors than the minimum requirement in order to harness the aesthetic appealing of the building and to acquire more space for construction. Height of the proposed developments should control considering the built form, topography and landscape character of the surrounding area. Further, it should give adequate importance to the demand and tourist development potential of the site. On that ground, tourist hotel can allow to built as high rises unless if not visual amenity of the foreshore and ocean from nearby residential areas, roads and public spaces is detrimentally affected. For instance countries like Singapore permit buildings to be constructed up to a maximum height of 280 meters while the same in Hong Kong is of 1:12 FAR (up to 34 stories).


Glendower Hotel Nuwar Eliya
360° View


Kandalama SL


Airport Garden Hotel SL


Grandview Nuwara Eliya


The Tea Factory N-Eliya


EarlsRegencyHotelKandy


Heritance Factory N-Eliya


Thailand

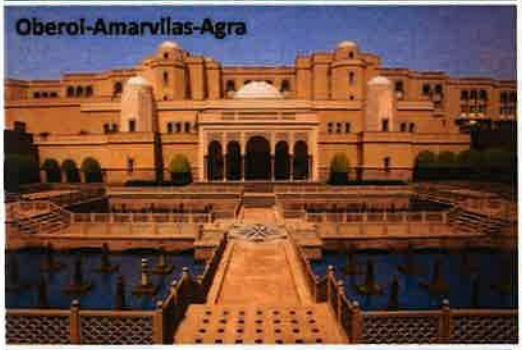

Singapore


Mt. Lavinia


Maldives


Maldives


Malay


Oberoi-Amarvilas-Agra


Taj Mahal Palace
Hotel in Mumbai


Intercontinental-hotel, Mumbai


Delhi


Millennium Hilton Bangkok


Montien Riverside
Hotel
Baiyoke Sky H
Bangkok

Many of the small island countries do not allow for coastal constructions over permanent vegetation line. For instance while Sri Lanka does not allow more than the height of coconut tree; countries like Indonesia(Bali), Maldives do not allow a height more than the height of palm tree. However, many countries nowadays move to more demand oriented customized, control over the skyline of coast. For instance, Cockburn Coast district structure plan in Australia Provides for potential height ranges of from 5 to 16 storeys, dependent on the precinct.

Further, many countries are shifting to FAR regulations than controlling the height in meters. FAR allows more flexible built form avoiding the homogenous skyline on coast. Therefore, in proposed guidelines, FAR has introduced instead of the height in meters.

Buildings in coastal areas may have a gradual increase in height as it merges with the coastal landscape.

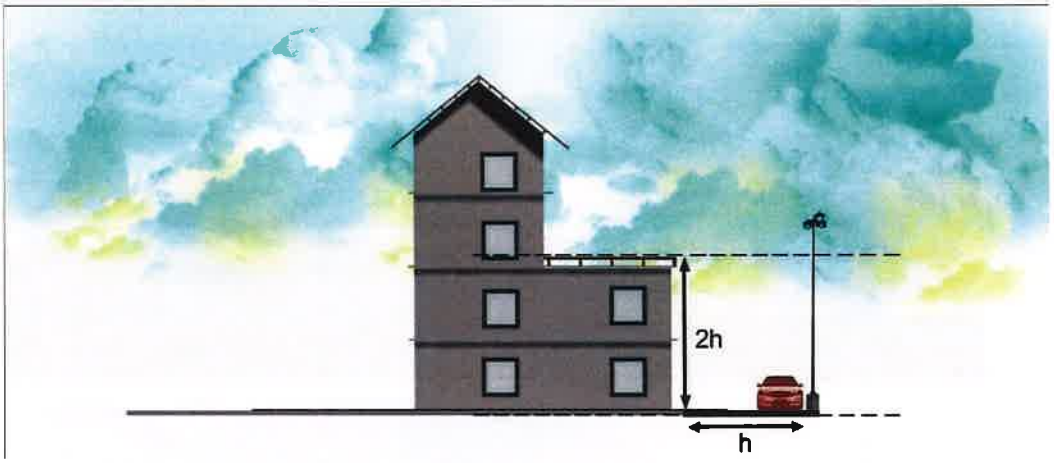
In Costa Rica, (Executive Decree of government of President Oscar Arias, April 2008) 50-200m from the high tide mark, buildings not higher than 16m; 200-800 m not higher than 24m and 0.8-4km not more than 36m are allowed for construction of hotels.

In Phuket Thailand, according the revised guidelines of 2003, within 30-50m from high tide line allows to construct a hotel maximum of 5m with 60% plot coverage; within 50-150 of 12m with 90% plot coverage; within 150-200 m of 16m with 90% plot coverage. After 200m the development allows up to 45-60m depend on the density with 70% plot coverage.

In Republic of Mauritius the overall architectural massing of the hotel shall incorporate single, double and triple floor buildings. For a hotel with coastal frontage, the maximum building height within the belt of 81.21 m from high tide line shall be 13m and the maximum footprint area shall be G+1 +33% (G) i.e. up to 33% of the total building ground floor area will be allowed on the third level. The remainder of the site will be allowed G+2 with maximum height of 13-15m.

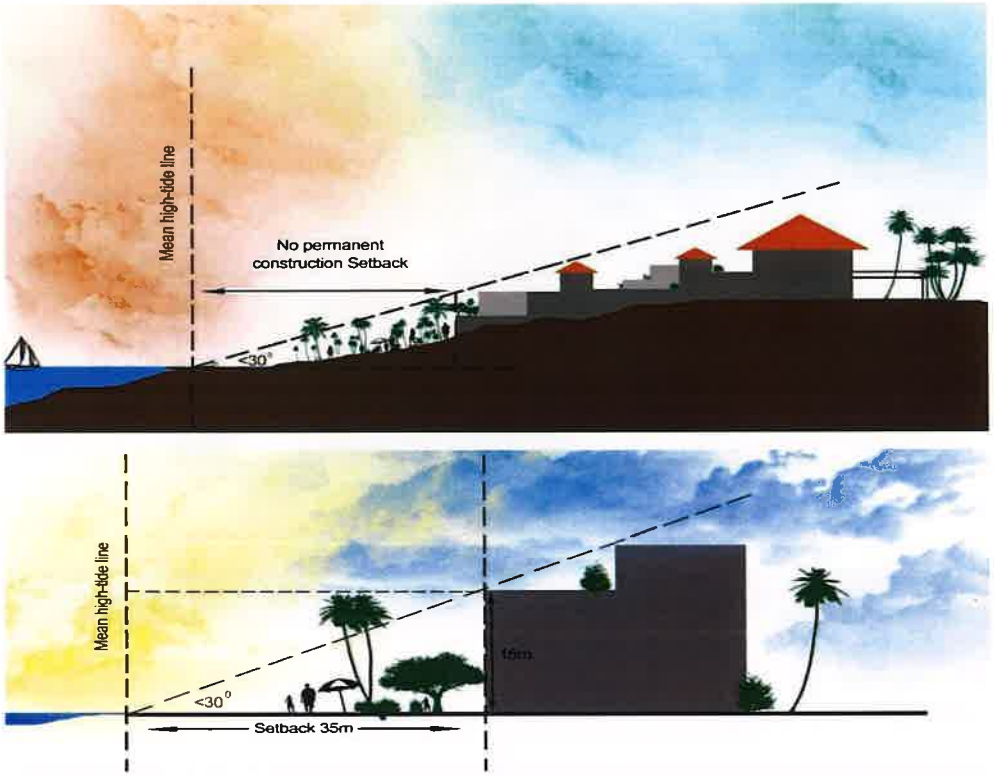
2.3. Proposed Guidelines - Site Density – Building Height

2.3.1. The maximum height of the building shall not exceed twice the horizontal distance between any storey of the building and the farer edge of the abutting street



Area	Special guidelines
2.3.2. Special guidelines for declared tourism promotion zones	Site and activity specific guidelines proposed by SLTDA shall be followed.
2.3.3. Special guidelines for UDA declared areas	UDA, FAR and Building height regulations shall be followed.
2.3.4. Special guidelines for the surrounding areas of airport	Airport & Aviation Authority guidelines shall be followed.
2.3.5. Special guidelines for 200 m buffer zone from Archaeological or Religious sites	Site specific guidelines shall be followed with the concerns of SLTDA, Archaeology department and Local Authority.
2.3.6. Special guidelines for designated natural disaster prone areas	NBRO and DMC guidelines shall be followed.

2.3.7. Special guidelines for Coastal Areas (300m area from Mean High Tide Line)	FAR and Building Height regulations of UDA shall be followed. FAR may use as the height regulation with an angle (30^0) specified from High water line.



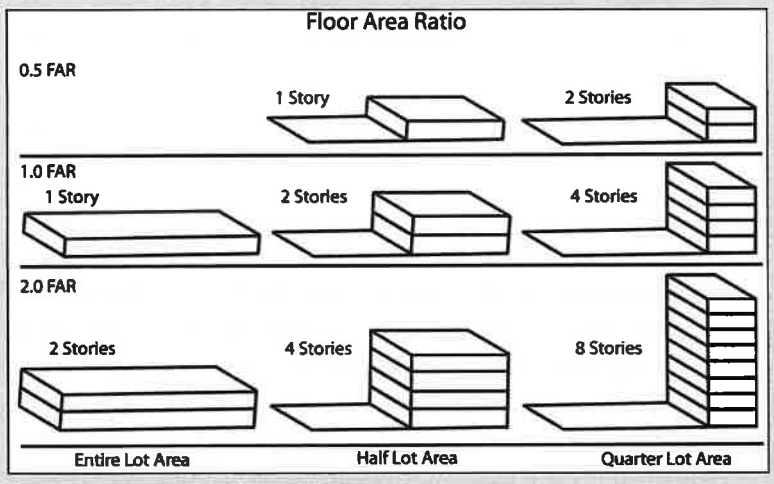
Area	Special guidelines
2.3.8 Non UDA declared areas	a. When Building height exceed 4 stories or 16m, in such circumstances provided the proponent demonstrates that the impact would not be significant and as adhere to respective local authority by-laws. I. Proponents shall prepare a physical or computer generated three-dimensional model for indicating how the proposed development will impact on visual landscape character. II. Proponents shall prepare a Visual Resource Management Plan, which should address the existing landform, vegetation, prominent features and view sheds (to and from the proposed site) b. Permissible Floor Area Ratio (FAR) shall be determined, taking into account the characteristics of the buildings intended to be developed, the location and the capacity of infrastructure, provided that the permissible FAR on any site shall not exceed 1:2.75

Box 4: Floor Area Ratio (FAR)

"Floor Area Ratio is a way of expressing the relationship between the size of the lot to the floor area of the buildings on the lot. The higher the FAR, generally speaking, the more intensity of use on the lot. FAR is the ratio of total net floor area of a building to the total lot area"

$$\text{FAR} = \frac{\text{Total net floor area of a building}}{\text{Total lot area}}$$

"The idea behind FAR is a sound one. It's a way of compromising between simply limiting height or lot coverage and allowing the formation of an envelope on a lot. A developer can push around the potential use in a number of different ways and the local government can limit the density on the lot"



3. Design of the Buildings

Existing building design guidelines stipulated by SLTDA are given below.

Existing Regulations / Guidelines	*Act / Authority*
a) The building should be in consonance with the features of the land and locality.	*SLTDA Guidelines*
b) All proposed buildings for tourist facilities should incorporate local architectural features and where possible, traditional patterns, designs and motifs should be used in interior decoration. This does not exclude the use of modern design and décor that does not clash with traditional styles with preference given to the use of local material.	***SLTDA Guidelines***
c) All buildings should be designed with a view to conserving natural resources such as water and energy.	*SLTDA Guidelines*
d) Encouragement should be given to designing the public areas of tourist facilities with effective natural ventilation, supplemented by the use of fans, both to enhance the interior design and reduce electricity demands and operating costs. Special attention should be given to the design of bedrooms, in particular the placement of windows and screens should be designed to facilitate free flow of air. This should be supplemented by fans and by the inclusion of an appropriately located wall or spilt air conditioning unit. This would offer the guest the choice for either a naturally ventilated or an air-conditioned bedroom.	*SLTDA Guidelines*
e) No boundary walls are allowed, instead the use of hedges and live fences could be adopted.	*SLTDA Guidelines*

In addition to that, there are specific design guidelines stipulated under UDA Act as mentioned below.

Existing Regulations / Guidelines	*Act / Authority*
a) The building shall not interfere with the supply of amenities to the neighbourhood or damage the harmony of the area.	*UDA_ Act_No_392/9 of_1986*
b) All building shall be separated from Low tension line (by 2.5m vertical & 1.5 horizontal) and High tension line (by 4.5m vertical & 2.5 horizontal)	*UDA_ Act_No_392/9 of_1986*
m) The building which are located at a distance of 100m from the intersection of "A" or "B" category should be provided with 2m wide arcade, at the ground floor	*UDA_ Act_No_392/9 of_1986*
n) The UDA may direct any mechanical or other equipment located on the top of the buildings to be visually screened in such manner as it is necessary to provide protection	*UDA_ Act_No_392/9 of_1986*
1.1. The UDA may in the interest of harmonizing the development activities with the surrounding development, direct the owner to make such modifications as it deems necessary in the height, architecture, architectural features or façade of any building	*UDA_ Act_No_392/9 of_1986*

3. Proposed Guidelines - Design of the Building

3.1. All buildings shall incorporate the code of practice for energy efficient buildings in Sri Lanka, established under the close of 36 (g) of Sri Lankan Sustainable Energy Authority Act or any other appropriate internationally recognized green building code (e.g. : LEED green building codes)

3.2. In order to ensure safety from natural/manmade disasters;

a. Minimize the use of hazardous materials and insure the risks of all such materials.
b. Locate all buildings & infrastructure in least vulnerable areas to natural hazards and wherever, such vulnerabilities record, adhere to the disaster safety building codes.
c. Incorporate flood sensitive design principles and features into overall design of buildings, hard surfaces, landscaped areas and storm water drainage.
d. Minimize solid enclosure and thermal mass; maximize roof ventilation; use elongated or segmented floor plans to minimize internal heat and maximize ventilation.
e. Hotel developments in disaster prone areas may follow the disaster resilient construction guidelines[1] developed by the respective authorities.

3.3. The minimum height of rooms shall be for toilets, bath rooms and corridors, not less than 2.1 m.

3.4. For all other rooms in any building, not less than 2.7 m, provided that beams, trusses and similar supporting structures extending beyond the level of the roof shall not be such as to reduce this height below 2.4 m at any point.

3.5. Every room in a building shall be provided with natural light and ventilation by means of windows, doors or any other approved openings. Every such room of a building to be lighted and ventilated shall have windows and opening through which natural light and ventilation can be obtained, so located that they face and open upon,

a. A public street or a street on which the owner or the building has a right of way.
b. A courtyard or open space located in the building site.

[1] *'Guidance for construction in disaster prone areas' prepared by Asian Disaster Preparenes Centre, 1999 in collaboration with National Building Research Organization, Urban Development Authority and National Housing Development Authority*

4. Water Supply

Water supply is important for any tourist activity in order to ensure the provision of safe drinking water and sanitation as basic needs. Existing water supply guidelines for tourist hotels are given below.

Existing Regulations / Guidelines	Act / Authority
I. All drinking water should be boiled, filtered and cooled	TD_Act_No_14_of_1968; schedule C
II. The water supply to all tourist establishments should be adequate in terms of quality and quantity, and sources of supply should be sustainable. For hotels the minimum requirement is 450 liters per guest per day. The use of glass bottled water is encouraged	SLTDA Guidelines
III. Drinking water quality must at least comply with WHO guidelines	WHO guidelines on drinking water quality

SLDTA has mainly considered about the Quality and Quantity of water supply. Water storage and sources of supply have been addressed in the guidelines set by UDA on water supply.

Existing Regulations / Guidelines	Act / Authority
IV. Every building shall be provided with a protected water supply system connected to an existing pipe borne water supply	***UDA_ Act_No_392/9 of_1986***
V. Where it is not possible to provide connection to the public water supply system, a system connected to a private source shall be provided	UDA_ Act_No_392/9 of_1986
VI. Every building shall be provided with water storage tanks and pumps of such capacity as may be specified	UDA_ Act_No_392/9 of_1986
VII. No well used for the supply of drinking water shall be located less than 15.0 meters from a cesspit or a soakage pit of a septic tank	UDA_ Act_No_392/9 of_1986
VIII. A well located minimum of 10 m away from a cesspit or a soakage pit of a septic tank shall be considered on a recommendation obtained from a qualified Geologist or the Medical Officer of Health of the relevant area in the absence pipe borne water	UDA_ Act_No_392/9 of_1986
IX. In areas where there are no pipe borne water supply systems installed, the minimum lot extent should be 200 sq.m.	UDA_ Act_No_392/9 of_1986

According to World Health organization, the water requirement of a person in tropics is 150 lpcd (litres per capita per day). Central Environmental Authority of Sri Lanka has determined this limit to be 135 lpcd. In addition to this usual requirement, water requirement for tourism activities accounts for the use of water for landscaping, leisure and recreation and kitchen or laundry uses as well. Considering this special requirements, World Tourist Organizations recommend to allocate 500 lpcd for hotels in tropics. Therefore, the existing water supply standard of 450 lpcd can be practiced as it is. But, in addition, fire protection water storage needs to be maintained as stipulated by local authority by-laws. Proposed guideline for water supply is therefore given below.

4. Proposed Guideline – Infrastructure – Water Supply

4.1. Water Supply

a. Every tourism development shall be provided with adequate supply of water either from pipe borne water by National Water Supply & Drainage Board (NWS&DB) or elsewhere, if there is lack of pipe borne water SLTDA shall request the project proponent to harness the ground water or surface water in nearby area with approvals from respective authorities (Irrigation Department, Mahaweli Authority, Water Resource Board & NWS&DB etc.).

b. If tourism development is to tap the surface water from a water body, permission from the respective authorities in charge of such a water body must be obtained prior to any construction. Special features such as intake structure, transmission main or pump house etc shall be approved by the respective authorities.

c. Where it is not possible for pipe borne connection from the public water system, ground water could be harnessed; provided that either Water Resource Board or National Water Supply and Drainage Board shall approve the amount of water to be abstracted and the time duration during which extraction could be made for a given day.

4.2. Water Quality

a. Every tourism development shall be provided with a water supply complying with World Health Organization (WHO) guidelines or Sri Lanka Standards SLS 614(SLS-614) for drinking water in terms of water quality
b. Cool and hot water should be provide as per the requirement of client

4.3. Water Quantity

a. For hotels, rest houses and guest houses the 450 liters per room per day is recommended.

   Note: this value shall be accounted for the rest of the uses including other domestic demand such as water for kitchen, garden, staff, laundry, leisure.etc.

b. Water must be stored for fire code purposes as per the amount specified by the nearest local fire authority for the region of proposed development or from the Fire Department of the Colombo Municipal Council.

4.4. System Design

a. Every building shall be provided with water storage tanks and pumps of such capacity as may be specified (at least for a day)

b. The pipe lines for water supply shall be separated from the sewer line. Wherever possible, water supply lines shall be placed above the sewer lines so as to minimize the risk of being contaminated.

5. Sewage and Wastewater Treatment

Sewage system needs special consideration as currently Sri Lanka does not have a fully fledged central treatment facility everywhere. Except in Colombo municipal council area and a few other areas, all other settlements rely upon privately owned underground septic tanks or wastewater treatment systems. SLTDA has introduced small common Sewage treatment Plants (STP's) for selected declared tourism zones. There are guidelines for Sewage and wastewater treatment stipulated by SLTDA.

Existing Regulations / Guidelines	Act / Authority
I. Facility should be linked to effective neighbourhood sewerage systems or have their own package treatment facilities designed and installed to produce effluents to CEA approved disposal standards.	SLTDA Guidelines
II. Low water consumption utensils are encouraged	SLTDA Guidelines
III. Recycled water should be utilized for washing and gardening, and any excess water should be discharged in an acceptable manner to CEA and local authority guidelines	SLTDA Guidelines

According to SLS standards, if number of users exceeds 300 then, there should be a standalone STP instead of septic tank. Such hotels usually have more than 99 rooms and therefore, EIA must be carried out in which this issue is dealt with in detail.

As a best practice many of the large hotels will be advised to have STP's that have facility to recycle water and reuse for landscaping and toilet flushing purposes. Sludge waste in the STP can be converted to compost and make use for gardening purpose. The same practice could be made mandatory in some of the declared tourism zones as Kalpitiya.

5. Proposed Guideline – Infrastructure – Sewage and Wastewater Treatment

5.1.

a. Sewage disposal facility shall be designed taking into account

1) Nearby sewage treatment system or nearby sewerage system

2) In-house wastewater treatment facility

This system should cater for both black water and gray water or allwaste (Black water+ gray water) as the case may be.

b. There shall be a wastewater treatment plant exclusively for tourism development or the wastewater generated per day shall be connected to the nearby wastewater treatment plant or sewerage system. The amount of wastewater generated per day shall be taken as 85%-95% of water demand.

5.2. Design Consideration - Location

a. In-house facility shall be designed and installed so that the effluent coming from the facility shall comply with the regulations on effluent standards stipulated by CEA.

b. Septic tank and its associated effluence disposal system shall be designed and disposed in small discharges. In the case of soakage, following criteria shall be satisfied.

c. Soakage Pits should be located in an open area and satisfy the following requirements;

a. At least 18 m away from the nearest well or other drinking water sources;

b. At least 5 m away from the nearest building.

c. A minimum distance from other soakage pits, either existing or proposed, within or outside the property shall be maintained as specified in table 2 below

Average daily flow (m^3/d)	*Minimum distance between soakage pits (m)*
<2	*10*
2-10	*20*
10-30	*36*

d. Reuse, recycle options shall be encouraged in order to minimize the water footprint of the tourism development.

5.3. Design Consideration - Quality

a. Treated waste Water discharge from STP shall follow the CEA standards on emission of wastewater depending on receiving environment.

b. Screened solids and sludge should be transported to an appropriate landfill or composting site. It is always encouraged to compost sludge on-site and use for landscaping.

c. The sludge or solid arising out of the operation of shall be considered to be hazardous waste and disposal shall be carried out accordance to the standards stipulated by CEA on handing hazardous materials.

6. Surface Water / Drainage

Existing Regulations / Guidelines	Act / Authority
o Drainage should be adequate to remove water without causing dampness and damage. Collection and re-use should be incorporated into the design and operation	*SLTDA Guidelines*
o Effective use of rainwater are encouraged	*SLTDA Guidelines*
o Surface water should be purified, recycled and reused (for flushing)	***SLTDA Guidelines***
o Every building shall be provided with adequate drainage facilities to drain off rain water from the roof to a storage tank constructed within the premises to be used for appropriate purposes. If construction of such tank is not possible , it shall be drained off to a street drain or other approved outlet without causing dampness or damage to the walls or foundation of the building or those of adjacent buildings	*UDA_ Act_No_392/9 of_1986*
o Surface water discharges should in line with CEA standards	*NEA act, 1976*

6. Proposed Guideline – Infrastructure – Surface water / Drainage

6.1. Drainage management plan shall be approved taking into account at least for the 25 years return period.

6,2. Rain water harvesting potential shall be explore and were possible, facility for retention & it subsequent and treatment shall be encouraged.(follows all the guidelines mention in the rain water forum)

6.3. The drainage master plan that developed shall be approved by the completed authority and the constructions shall be damp according to the re-development plan.

7. Solid Waste Management

There are no general waste management guidelines proposed by SLTDA at present but it has been addressed in site specific guidelines of many of the declared tourism zones. The subject of solid waste management functions is vested with local authorities. It is the general practice of the tourism development to come out as to how they plan generation of MSW (Municipal Solid Waste), sorting, storage, transport and final disposal of different components specially biodegradable and non-biodegradable components respectively.

Existing Regulations / Guidelines	Act / Authority
○ Bins to collect waste shall be kept in various areas in an easily accessible manner in all resorts, picnic islands, marinas or such places leased for tourism purposes. Such bins shall be in a clean and sanitary state, with the lid closed. ○ Food and beverages, putrefying items, plastics, paper, glass, iron and items such as cans and toxic or hazardous waste shall be kept in separate bins for each type, and shall be labelled as such. ○ Incinerators, compactors and bottle crushers shall be kept and used in all tourist resorts operating as practical as possible. If such equipment does not exist in any resort, such resorts shall obtain and start using that equipment within 6 months from the date of coming into force of this regulation. This may not be mandatory in Sri Lanka. ○ Waste shall be disposed to the designated area if there is such an area in the region, in the absence of a designated area waste shall be disposed in a manner that is least harmful to the environment. ○ In the absence of a designated area for waste disposal in the region, only food waste and biodegradable waste may be dumped into the ocean. Any biodegradable waste dumped as such shall be dumped to the sea outside atoll, taking into account the wind and ocean currents so that it would not land on the shores of islands. This may not be allowed in Sri Lanka. ○ It is prohibited to burn waste generated from the operation of the resort in the open areas of the resort. Incinerator shall be used to dispose such waste. Items that would cause emission of noxious gases into the atmosphere when burned (such as plastics) shall not be burned and shall be collected and delivered to a designated waste management area. ○ It is prohibited to pump any sewer or waste into the lagoons or into any protected area of the ocean from any tourist vessel.	*Maldives*
○ No refuse or filth shall be deposited in any part of the hotel except in refuse bins.	*Singapore*
▪ All waste generated at site shall be separated at source, recycled and orgnic waste shall be converted to compost fertilizer. Tourists would be encouraged to come up with own management based on the availability of approved methods of disposal in the area for hazardous items like batteries and other items that require special disposal methods unavailable in the island.	*General guidelines for investors, Kalpitiya*

7. Proposed Guideline – Infrastructure – Solid Waste Management

7.1. 3R principal (re-cycle, re-use, reduce) shall be encouraged wherever possible.

7.2. Provisions shall be made in order to separate different categories of waste such as food and putrefying items, paper, glass, ferrous, and non ferrous items and hazardous waste in separate bins.

7.3. Such waste collected in bins or containers shall be taken to temporary transfer points or final disposal facility within or outside in tourism development.

7.4. No waste perpetually municipal solid waste shall be disposed into the environment so as to cause pollution health hazards or any adverse impacts to the flora and fauna.

7.5. Proper disposal methods to be incorporated shall be approved by the respective local authority and the concurrence of such methods shall be obtained from CEA.

8. Road & Accessibility

Existing Regulations / Guidelines	Act / Authority
▪ Within development sites, circulation roads for two-way traffic should be a minimum of 6 meters wide and should be designed for the safety and enjoyment of guests taking a major role, including a full pedestrian walkway system and adequate consideration for lighting and planting. Planting "boulevards" and walkways should be at least 1.2 meters wide. At the principal entrances to development sites particular attention should be paid to sight lines and the ease with which site traffic can enter or leave the general traffic flow. Turning circles should have a minimum radius of 6 meters, but a greater radius is desirable for easier traffic flow	*SLTDA Guidelines*
▪ Private walkways could be constructed between the edge of a coastal resort and the bio shield	*SLTDA Guidelines*
▪ Bicycle tracks and pedestrian tracks must be provided on either side of the highway	*SLTDA Guidelines*
▪ Internal roads parallel to the main highway must be placed to provide access	*SLTDA Guidelines*
▪ Internal roads should be stabilized and graveled/ primed.	*General guidelines for investors, Kalpitiya (p-27)*
▪ The access road for should be minimum of 9m in width except (road width 6m) maximum area of lot 500sqm and maximum number of lots 4 or maximum area of lot 2500sqm and maximum number of lots 1	*UDA_ Act_No_392/9 of_1986*
▪ All vehicles use for recreational purposes should be battery operated non-polluting types	*General guidelines for investors, Kalpitiya (p-27)*

8. Proposed Guideline – Infrastructure – Road & Accessibility

8.1. No site or lot abutting a street less than 9m in width shall be used for tourism use or construction of any building (less than < G+4) for such use except following table

Maximum Extent of Land Served (sq. m.)	Maximum FAR on each site	Minimum Width of Street (m)	Maximum Length of Street (m)
500 Where the street serves more than 1 lot or site but not more than four lots	1.5	6.0	50
2500 Where the street serves only one lot or site	1.5	6.0	150

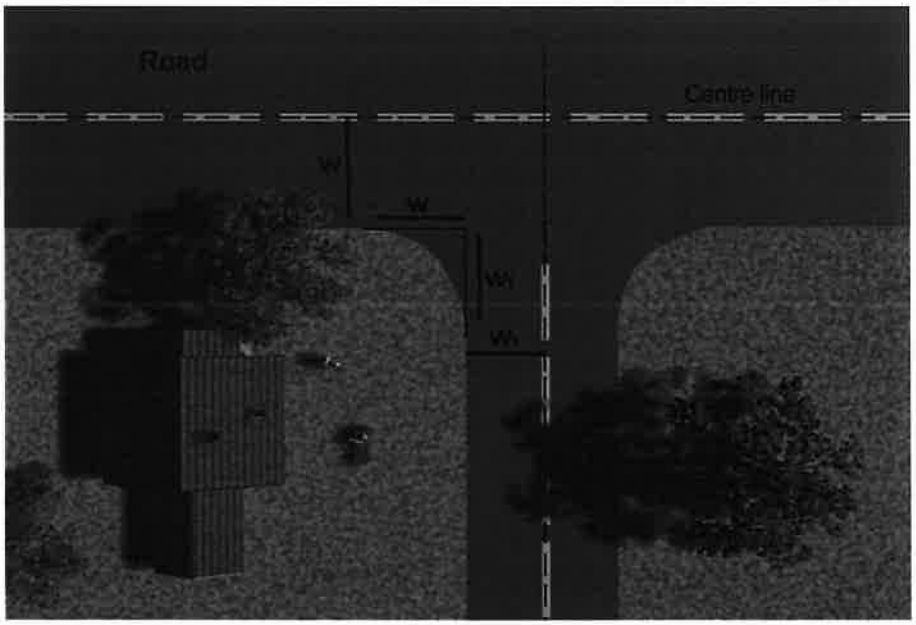
- No site or lot abutting a street less than nine meters (9m) in width shall be used for tourism use or construction of any building for such use except as following regulation

Max. Land Area : 500 sq.m (per lot)
Min. Width of Road:6m
Max. FAR : 1:1.5
Max. No. of Lots : 4

Max. Land Area : 2500 sq.m (per lot)
Min. Width of Road: 6m
Max. Length of Road: 150m
Max. FAR : 1:1.5
Max. No. of Lots : 4

8.2. No plan of the tourism development site shall be approved for the construction of a high rise building (G+4 or more) unless the site abuts on a street which is not less than 12 m in width

8.3. The Authority may require the corner of any building including boundary walls or fences to be erected at the corner of two streets be rounded off or splayed to such extent and height as may be necessary in the interest of the safety of the users of the streets.



8.4. Within development sites

a. Circulation roads for two-way traffic shall be a minimum of 6m wide and shall be designed for the safety and enjoyment of guests taking a major role, including a full pedestrian walkway system and adequate consideration for lighting and planting.

b. At the principal entrances to development sites particular attention shall be paid to sight lines and the ease with which site traffic can enter or leave the general traffic flow.

c. Turning circles may have a minimum radius of 6m, but a greater radius is desirable for easier traffic flow

9. Parking

Existing Regulations / Guidelines	Act / Authority
▪ There should be an adequate car park	*TD_Act_No_14_of_1968*
▪ Vehicle parking should be fully integrated into the landscaping plan to minimize the visual impact of large paved surfaces. Encouragement should be given to breaking down parking areas into a number of smaller units by inclusion of changes of level and vegetation for shade and visual amelioration. Car parking spaces should be 2.4 meters x 4.8 meters with a minimum area of 30 square meters per space for open car parking. Adequate coach parking spaces should be provided.	*SLTDA Guidelines*
▪ Surfaces should be consistent with the overall design of the whole facility, such as concrete or washed gravel with tuff employed in areas of low traffic. Tarmacadam paving is generally not suitable. Traffic flow within sites should be planned in detail with parking limited to designated areas	*SLTDA Guidelines*
▪ 1 standard parking for 50sq.m. of floor area or 1 standard parking for 2 rooms and 1 standard parking for 1 suites whichever is more and 1 motor cycle bays for 50sq.m.	*UDA_ Act_No_392/9 of_1986*
▪ A minimum two standard parking areas and two motor cycle bay shall be kept.	*UDA_ Act_No_392/9 of_1986*
▪ Dimension, Width Aisles, Width of Entry & Exit and Ramps of Car Parking shall be in line with UDA guidelines	*UDA_ Act_No_392/9 of_1986*

Parking become as a one of the main requirements with the tourism development. Existing parking related guide lines in Sri Lanka basically focused on two way traffic and interior car park designs. But there of the Environment in UK given a core for the development of parking standards can be an argument occurs that with the different tourists' products the space requirement of the parking can be vary. Especially Five star hotels, four star hotels, three star hotels, Guest Houses, restaurants, Restaurants & Cafes, Drinking Establishments, and Hot Food Takeaways have different space requirements for parking stalls.

Basingstoke and Deane-in South Central England classify the type of the development and identify the different products comes under that development to determine the parking requirements. Also they introduced parking guidelines based on the rural, Outer Urban, Inner Urban, and Core Urban category. Parking Standards - Non-residential- An Agency within the department based on the Operational Parking Space

and the Non-Operational Parking Space. There are mainly four factors affecting when determining parking requirements in an area.

- Parking accumulation
- Duration of parking
- Total number of parkers
- Composition of vehicles by vehicular types

By using the above four factors can develop a methodology to find out the product specific parking space requirement. In circumstances such as presence of common parking areas or any other reasonable grounds a special permission should be granted after assessing following criteria's parking accumulation, duration of parking, total number of parkers and composition of vehicles by vehicular types. Details will be provided in the product specific and site specific guide lines

Parking accumulation

Vehicles which are come to a location to fulfill their requirements vary with the different time of the day and different days within the week. The total number of vehicles parked in an area at a specified moment known as parking accumulation and parking accumulation curve helps to identify parking demand in different time of the day.

Duration of parking

The vehicles which are come towards a location parked their vehicles for different time periods, it depend according to the trip purpose. Some may be parked his vehicle in for long time period some may short. Also the duration of parking changed form based on the type of the activity that undertaken in different products.

Total number of parkers

In a given area total number of parkers will be changed in time to time within a day. Total number of parkers in peak hours is higher than other hours of the day. Parking demand in a area depends on the total number of parkers.

Composition of vehicles by vehicular types

The type of parked vehicles is another factors that very much important with parking. There are different types of vehicles used and parked for different purposes the space required as parking stalls is depends according to the composition of the vehicles

9. Proposed Guideline – Infrastructure – Parking

Classification	*Parking standard*
9.1. Hotels, Motels and Guest houses	*1 space per 3 bedrooms*
9.2. 100+ bedroom hotels	*1 space per 3 bedrooms (plus 1 coach parking space per 50 guest bedrooms) Facilities shall be provided within the site for the loading, unloading and manoeuvring of delivery vehicles*
9.3. Restaurants, cafes and Bars	*2 space per 10 seats standard for hotels applies where there is guest bedroom accommodation*
9.4. Takeaways	*To be assessed in relation to location, hours of operation, highway safety and availability of alternative parking, delivery and collection facilities*
9.5. Hotels, Motels and Guest houses in Sensitive areas	*Developments that are in sensitive locations may require a Transport Statement/Transport Assessment*
9.6. City hotels	*1 space per 3 bedrooms(if above 50 guest bedrooms- plus 1 coach parking space per 50 guest bedrooms & Facilities shall be provided within the site for the loading, unloading and maneuvering of delivery vehicles)*
9.7. Beach resort hotels	*1 space per 3 bedrooms*
9.8. Estate hotels	*1 space per 5 bedrooms*

9.9. Vehicle parking shall be fully integrated into the landscaping plan to minimize the visual impact of large paved surfaces. Encouragement may given to break-down parking areas into a number of smaller units by inclusion of changes of level and vegetation for shade and visual amelioration

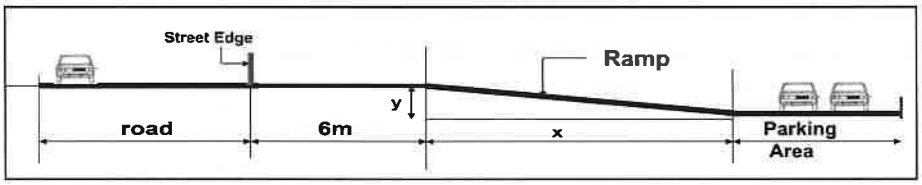
9.10. The minimum width of aisles shall be in line with following specifications

Parking Angle	One Way Traffic		Two Way Traffic (m)
	Bays on one Side (m)	Bays on Two Sides (m)	
Parallel	3.6	3.6	6.0
30 deg.	3.6	4.2	6.3
45 deg.	4.2	4.8	6.3
60 deg.	4.8	4.8	6.6
90 deg.	6.0	6.3	7.2

9.11. The width of access to car parking area shall not be less than 3m clear of footways and other obstructions if entry and exit are separately provided and 5.5m if entry and exit are provided together.

9.12. The maximum gradient of ramps shall not be steeper than 1 in 8.

9.13. Every such ramp shall start only beyond a distance of 6.0 m from the street edge



Maximum gradient of ramps (X: Y) = 1: 8

9.14. In circumstances such as presence of common parking areas or any other reasonable grounds a special permission shall be granted after assessing following criterions

- *Parking accumulation*
- *Duration of parking,*
- *Total number of parkers*
- *Composition of vehicles by vehicular types.*

10. Electricity and Power Supply System

Existing Regulations / Guidelines	Act / Authority
▪ Electrical safety devices such as trip switches for main circuit and electrical kitchen equipment, separate main switches and lighting conductors should be provided	*TD_Act_No_14_of_1968; schedule C*
▪ All power cables should be laid underground	*SLTDA Guidelines*
▪ All tourist establishments should have adequate and reliable power supply or generation capacity. Environmentally friendly alternative sources, particularly solar energy, should be encouraged	*SLTDA Guidelines*
▪ Alternative power sources are encouraged	*UDA_ Act_No_392/9 of_1986*
▪ All electrical and plumbing work in any building or premises shall be carried out by a relevant qualified person as the case may be, and these works shall conform to standards and specifications as the UDA may require with a view to ensure maximum safety and sanitary conditions within any such building or premises	*UDA_ Act_No_392/9 of_1986*
▪ All integrated resort should examine and move towards sustainable energy resources in keeping with the green image. The use of alternative, environmental friendly energy sources for power generation is encouraged and would be eligible for special consideration for selection of the proposal.	*General guidelines for investors, Kalpitiya (p-26)*

10. Proposed Guideline – Infrastructure – Electricity and Power Supply System

10.1. All tourism development activities and areas may examine and move towards sustainable energy resources in keeping with the green image. The use of alternative, environmental friendly energy sources for power generation is encouraged and would be eligible for special consideration for selection of the proposal. (Code of practice for energy efficient buildings in Sri Lanka-2008)

10.2. All electrical and plumbing work in any building or premises shall be carried out by a relevant qualified person as the case may be, and these works shall conform to standards and specifications as the SLTDAA may require with a view to ensure maximum safety and sanitary conditions within any such building or premises

10.3. Electricity required for tourism activity can be obtained from power supply authorities by using one of the following methods.

a. *Existing 3 phase line*
b. *For a large areas – from the existing high voltage lines (133kv & 11 kw) through a transformer installed within the premises of the project site. In any event, transformers shall be located so as to keep 7.5m (25ft.) gap between the transformer and the nearest building.*

10.4. No construction is allowed under any transmission line passing through a proposed project site. A horizontal distance of 2m (6'- 0") from either side of the transmission line shall be reserved as a service reservation for the transmission line.

10.5. All on-site access roads, footpaths, streets, etc., shall be illuminated with street lighting.

10.6. Wherever possible, provide underground cables for electricity supply to avoid damage due to falling of overhead cable lines on properties and the public during high wind.

11. Telecommunication

Existing Regulations / Guidelines	Act / Authority
1. For hotels a minimum of 1 line per 10 to 20 rooms, depending on the nature of demand and the level of service, would be appropriate	*SLTDA Guidelines*
2. All cables should be placed underground	*General guidelines for investors, Kalpitiya (p-27)*

11. Proposed Guideline – Infrastructure – Telecommunication

11.1. Every tourism development may need to have telecommunication (either mobile or fixed) facility

11,2, No telecommunication transmission tower is allowed within tourism project sites. It is further recommended that the distance from a transmission tower to a nearby building shall be twice the height of the tower.

11.3. Communication antenna may place considering the visual quality of the vicinity.

12. Fire Fighting, First Aid and Safety

Existing Regulations / Guidelines	Act / Authority
▪ Adequate fire precautions, fire escape and firefighting equipment should be available and a Fire certificate should be obtained annually from the local fire authority or the fire department of the Colombo Municipal Council and 50% of the staff should be trained in first aid and fire fighting	*TD_Act_No_14_of_1968*
▪ Adequate precautions should be taken in sea side hotels and hotels with swimming pools for the bathers	*UDA_ Act_No_392/9 of_1986*
▪ Adequate fist-aid kit should be available for use of guests	*UDA_ Act_No_392/9 of_1986*
▪ Every hotel should be covered by a Hoteliers Insurance Policy with public liability	*UDA_ Act_No_392/9 of_1986*
▪ Every building shall conform to fire safety requirements applicable to the area or type of building or as may be specified by the UDA with a view to providing a greater measure of safety to the inhabitants of such buildings	*UDA_ Act_No_392/9 of_1986*
▪ All intermediate rise, middle rise, high rise and sky scrapers of more than 400 sq.m. in extent, the installations therein shall conform to any additional fire safety requirements as may be recommended by the Chief Officer of Fire Brigade. The authority may require fire clearance with a view to ensure the maximum safety of the inhabitants.	*UDA_ Act_No_392/9 of_1986*
▪ All building which have two or more floors and 300 sq.m. in extent and which are located in areas where pipe-borne water supply is available, should provide for a sump to store water to be used in an event of fire. The dimensions of the sump will be determined by the planning authority in relation to the size and use of the building	*UDA_ Act_No_392/9 of_1986*
▪ Fire-fighting equipment shall be installed and maintained in all hotels to the satisfaction of the Director of the Singapore Fire Service.	*Singapore (S_1_22)*

12. Proposed Guideline – Infrastructure – Fire Fighting, First Aid and Safety

12.1. Adequate fire precautions, fire escape and fire fighting equipments should be available and a Fire certificate should be obtained annually from the local fire authority or the fire department of the Colombo Municipal Council

12.2. 50% of the staff should be trained in first aid and fire fighting

12.3. All intermediate rise, middle rise, high rise and sky scrapers shall conform to any additional fire safety requirements as may be recommended by the Chief Officer of Fire Brigade. The authority may require fire clearance with a view to ensure the maximum safety of the inhabitants.

12.4 Adequate first-aid kits should be available for the use of guests

12.5. Adequate precautions should be taken in sea side hotels and hotels with swimming pools for the bathers

12.6. Every hotel should be covered by a Hoteliers Insurance Policy with public liability

13. Proposed Guideline – Facilities for physically disabled people

13.1. All provisions to be kept as per the

a. Disable person's accessibility regulations no: 01 of 2006

14. Environmental Guidelines for EPL/EIA/SEA

14.1. Environmental Protection License (EPL)

a. Residential hotels, guest houses, rest houses with 05 or more and less than 20 rooms may need to obtained "EPL type C" certificate from respective Local Government Authorities, namely Municipal Councils, Urban Councils and Pradeshiya Sabhas.

b. Food manufacturing and processing industries including bakery products and confectioneries where 5 or more workers and less than 25 workers are employed. Hostels and similar dwelling places where occupancy level of 25 or more boarders and less than 200 borders may need to obtained "EPL type B" certificate from relevant Provincial Offices or District Offices of the CEA.

c. Hotels, guest houses, rest houses having 20 or more rooms. Hostels and similar dwelling places where occupancy level is exceeding 200 or more and Zoological gardens. may need to obtained "EPL type B" certificate from relevant Provincial Offices or District Offices of the CEA

14.2. Environmental Impact Assessment (EIA) / Initial Environmental Examination (IEE)

a. Construction of Hotels or holiday resorts or projects which provide recreational facilities exceeding 99 rooms or 40 Hectares, as the case may be.

b. Reclamation of Land, wetland area exceeding 4 hectares.

c. Clearing of land areas exceeding 50 hectares

d. any development activity of any description what so ever proposed to be established within 1 mile from the boundary of any National Reserve

e. Within 100m from the boundaries of any area declared under the National Heritage Wilderness Act, No 3 of 1988. Within 100m from the boundaries of any area declared under the Forest Ordinance .

f. Any erodible area declared under the Soil Conservation Act

g. Any flood area declared under the Flood Protection Ordinance (Chapter 499) and any Flood Protection Area declared under the Sri Lanka Land Reclamation and Development Corporation Act No. 15 of 1968

h. Within a public stream of 60m from the bank of a public stream and having a width of more than 25m at any point of its course

i. Any reservation beyond the full supply level of reservoir

j. Within 100m from the boundaries of or within any area declared as Sanctuary under the Fauna and Flora Protection Ordinance N0 2 of 1937.

k. Within 100m from the high flood level contour of or within, a public lake as defined in the Land Development Ordinance (Chapter 454) including those declared under section 71 of the said ordinance

14.3. Strategic Environmental Assessment (SEA)

a. National Tourism Policies or Development Plan

b. Provincial / Regional / District / Local Authority Tourism Policies or Development Plan

c. Integrated tourism development at declared tourism promotion zones

d. Special Tourism Development Programmes

e. Tourism Development Strategic Plans

15. Other guidelines

15.1. Other guidelines - Permission for Selling Alcoholic Beverages

15.2. All hotel may need to follow guidelines and regulation given by Department of Excise, Sri Lanka

15.3. Sale of liquor prohibited on all full moon (Poya) days, holidays marked for religious occasions, temperance days and any other days declared by the authorities for prohibition for special reasons.

15.4. Other guidelines – Noise Level

a. The noise levels emanation from the operation of tourism development shall comply with regulations of noise levels stipulated by CEA.(the national environmental act, Gazette no. 47 of 1980-no 924/12)

b. Vibration levels that are likely during the construction and operation of tourism development shall comply with the interim standards stipulated by CEA.

c. Ambient air quality within the proposed tourism development area shall comply with regulations stipulated by CEA. (the national environmental act, no.47 of 1980- Gazette no 924/12)

d. The emission level of air quality from different point sources shall comply with the interim guidelines stipulated by CEA on emission levels of air quality.

e. Any noise emanating from the operation of loud speakers, machinery, electrically or electronically amplify equipment or any other high fight system, television, video, etc. shall comply with the interim order given by Supreme Court.