RULE VIII - LIGHT AND VENTILATION

SECTION 801. General Requirements of Light and Ventilation

1. Subject to the provisions of the **Civil Code** of the Philippines on **Easements of Light and View**, and to the specific provisions of the **Code**, **every building** shall be designed, constructed, and equipped **to provide adequate light and ventilation**. *(Refer to **Guidelines** on Easements, View Corridors/Sight Lines and Basements at the end of this Rule)*

2. **All buildings** shall face a street or public alley or a private street which has been duly approved. *(Refer to **Guidelines** on Streets/RROW and Sidewalks at the end of this Rule)*

3. **No building** shall be altered nor arranged so as to reduce the size of any room or the relative area of windows to less than that provided for buildings under this Rule, or to create an additional room, unless such additional room conforms to the requirements of this Rule.

4. **No building** shall be enlarged so that the dimensions of the required court or yard would be less than what is prescribed for such building lot.

SECTION 802. Measurement of Site Occupancy

1. The measurement of **site occupancy** or **lot occupancy** shall be taken at the ground level and shall be **exclusive** of courts, yards, and light wells.

2. Courts, yards, and light wells shall be measured **clear of all projections** from the walls enclosing such wells or yards with the exception of roof leaders, wall copings, sills, or steel fire escapes not exceeding 1.20 meters in width.

SECTION 803. Percentage of Site Occupancy

1. The measurement of the percentage (%) of **site occupancy** (or lot occupancy) shall be taken at the ground level and shall be exclusive of courts, yards and light wells. Courts, yards, and light wells shall be measured **clear** of all projections from the walls enclosing such wells or yards with the exception of roof leaders, wall copings, sills, or steel fire escapes not exceeding 1.20 meters in width.

2. In case of proposed additional construction on a lot on which another building/structure already stands, the Percentage of Site Occupancy (**PSO**) arising out of such existing buildings/structures must be included in the computation of the **PSO** for the Total Lot Area (**TLA**). In case of discrepancy between the specified **Maximum Allowable PSO** and the other light and ventilation provisions under this Rule, the resulting **lesser building/structure footprint** or gross floor area at the ground floor (or at grade level) **must prevail**.

3. **Maximum site occupancy** shall be governed by use, type of construction, and height of the building and the use, area, nature and location of the site; and subject to the provisions of the local zoning requirements and in accordance with the following types of open spaces:

    a. Public open spaces - streets, alleys, easements of sea/lakeshores, rivers, creeks, *esteros*, railroad tracks, parks/plazas, playgrounds, and the like.

    b. Total Open Spaces within Lot (**TOSL**) - courts, yards, gardens, light wells, uncovered driveways, access roads and parking spaces consisting of two (2) types:

        i. Paved or tiled (**hardscaped** areas); sub-classification of open space shall fall under Maximum Allowable Impervious Surface Areas (**ISA**) within the Total Lot Area (**TLA**); and

ii. Unpaved areas within the lot that are with exposed soil and planted (**softscaped**), i.e., the Unpaved Surface Areas (**USA**); this sub-classification is the **true open space**.

4. The following Table illustrates the manner in determining the **Maximum Allowable Percentage of Site Occupancy (PSO), Maximum Allowable Impervious Surface Area (ISA), Maximum Allowable Construction Area (MACA), Minimum Unpaved Surface Area (USA),** and the **Total Open Space within Lot (TOSL)** with reference to Type of Land Use Zoning per Lot.

Table VIII.1. **Reference Table of Maximum Allowable PSO, Maximum Allowable ISA, the MACA, the Minimum USA and the TOSL by Type of Land Use Zoning per Lot**

Building/ Structure Use or Occupancy (or Land Use)[a]	% of Total Lot Area (**TLA**)				
	Duly-Approved Zoning [b]	Maximum Allowable **PSO** [c,d]	Maximum Allowable **ISA**[c] (Paved Open Spaces)	Minimum **USA** (Unpaved Open Spaces)	**TOSL** [d] (**ISA + USA**)
Residential	Basic Residential 2 (**R-2**)/ Medium Density Housing [single family dwelling unit with a Building Height Limit (**BHL**) of 10.00 meters]	55 [e]	30	15	45
		60 [f]	30%	10	40
	Maximum **R-2** / Medium Density Housing (multiple family dwelling units within one building/ structure with a **BHL** of 15.00 meters)	60 [e]	30	10	40
		70 [f]	20	10	30
	Basic Residential 3 (**R-3**)/ High Density Housing (single family dwelling unit with a **BHL** of 10.00 meters)	65 [e]	20	15	35
		70 [f]	20	10	30
	Maximum **R-3**/ High Density Housing (multiple family dwelling units within one building/ structure with a **BHL** of 36.00 meters)	70 [e]	20	10	30
		80 [f]	10	10	20
	Residential 4 (**R-4**)/ Individual Townhouse Units	70 [e]	20	10	30
		80 [f]	10	10	20
	Residential 5 (**R-5**)/ Condominiums	70 [e]	20	10	30
		80 [f]	10	10	20
Commercial	Commercial 1 (**Com-1**)	70 [e]	20	10	30
		80 [f]	10	10	20

Building/ Structure Use or Occupancy (or Land Use)[a]	% of Total Lot Area (**TLA**)				
	Duly-Approved Zoning [b]	Maximum Allowable **PSO** [c,d]	Maximum Allowable **ISA**[c] (Paved Open Spaces)	Minimum **USA** (Unpaved Open Spaces)	**TOSL** [d] (**ISA + USA**)
	Commercial 2 (**Com-2**)	75 [e]	20	5	25
		85 [f]	10	5	15
	Commercial 3 (**Com-3**)	80 [e]	15	5	20
		90 [f]	5	5	10
Industrial	Industrial 1 (**Ind-1**)	70 [e]	20	10	30
		80 [f]	10	10	20
	Industrial 2 (**Ind-2**)	70 [e]	15	15	30
		80 [f]	5	15	20
	Industrial 3 (**Ind-3**)	70 [e]	15	15	30
		80 [f]	5	15	20
Institutional	-	50 [e]	20	30	50
		60 [f]	20	20	40
Cultural	-	60 [e]	20	20	40
		70 [f]	20	10	30
Utility/Trans-portation/ Services	-	50 [e]	40	10	50
		60 [f]	30	10	40
Sidewalks/ Arcades at RROW	-	-	22.22 (of total width of RROW as Paved portion of sidewalk)	11.11 (of total width of RROW as Unpaved portion of sidewalk)	33.33 (of total width of RROW)
Parks and Open Recreational Spaces	-	20	30	50	80
Planned Unit Development (PUD)	PUD at a reclamation area close to an operating airport	70	15	15	30
	PUD at a reclamation area	70	15	15	30
	PUD at a coastal area	70	15	15	30
	PUD at an inland area close to an operating airport	70	10	20	30
	PUD at an inland area	70	10	20	30
Cemetery	-	85	10	5	15

Notes:

a) per duly-approved City/ Municipal Comprehensive Land Use Plan (CLUP)
b) per duly-approved City/Municipal Zoning Ordinance (ZO) and its IRR
c) PSO + ISA = MACA (Maximum Allowable Construction Area)
d) PSO + TOSL = TLA (Total Lot Area).
e) without firewall
f) with firewall

4. Minimum Requirements for Total Open Spaces within Lot (TOSL)

a. Total Open Spaces within Lot (**TOSL**) are portions of the Total Lot Area (**TLA**) not occupied by the **Maximum Allowable PSO**. The **TOSL** may consist of either the **Maximum Allowable ISA** (**hardscaped** areas) or the **USA** (exposed and planted/**softscaped** soil) or may also be the combination of both types of open spaces. (***Figure VIII.1.***)

b. Group A buildings or Residential 1 (**R-1**) uses/occupancies shall follow the minimum yard standards in ***Table VIII.2.*** to comply with the **TOSL** requirement.

c. Abutments for Basic Uses/Occupancies forming part of new developments shall be basically similar to the restrictions prescribed for firewalls under ***Rule VII***, to wit:

i. Absolutely no abutments are allowed at any property line for any **R-1** lot type/location.

ii. Abutments shall be allowed on only one (1) side for any **R-2** lot type/location. There shall be no firewalls/abutments on the front and rear property lines for any **R-2** lot type/ location.

iii. Abutments shall be allowed on two (2) sides only or on one (1) side and the rear property line/ boundary for any **R-3** lot type/location. There shall be no abutments on the front property line for any **R-3** lot type/location.

iv. Abutments shall be allowed on two (2) sides only for any **R-4** lot type/location. There shall be no firewalls/abutments on the front and rear property line for any **R-4** lot type/location.

v. Abutments shall be allowed on two (2) sides only or on one (1) side and the rear property line/boundary for any **R-5** lot type/location. There shall be no abutments on the front property line for any **R-5** lot type/location.

vi. Abutments shall be allowed on two (2) sides only or on one (1) side and the rear property line/boundary for any **C-3** lot type/location. There shall be no abutments on the front property line for any **C-3** lot type/location.

d. Lot Type/Location

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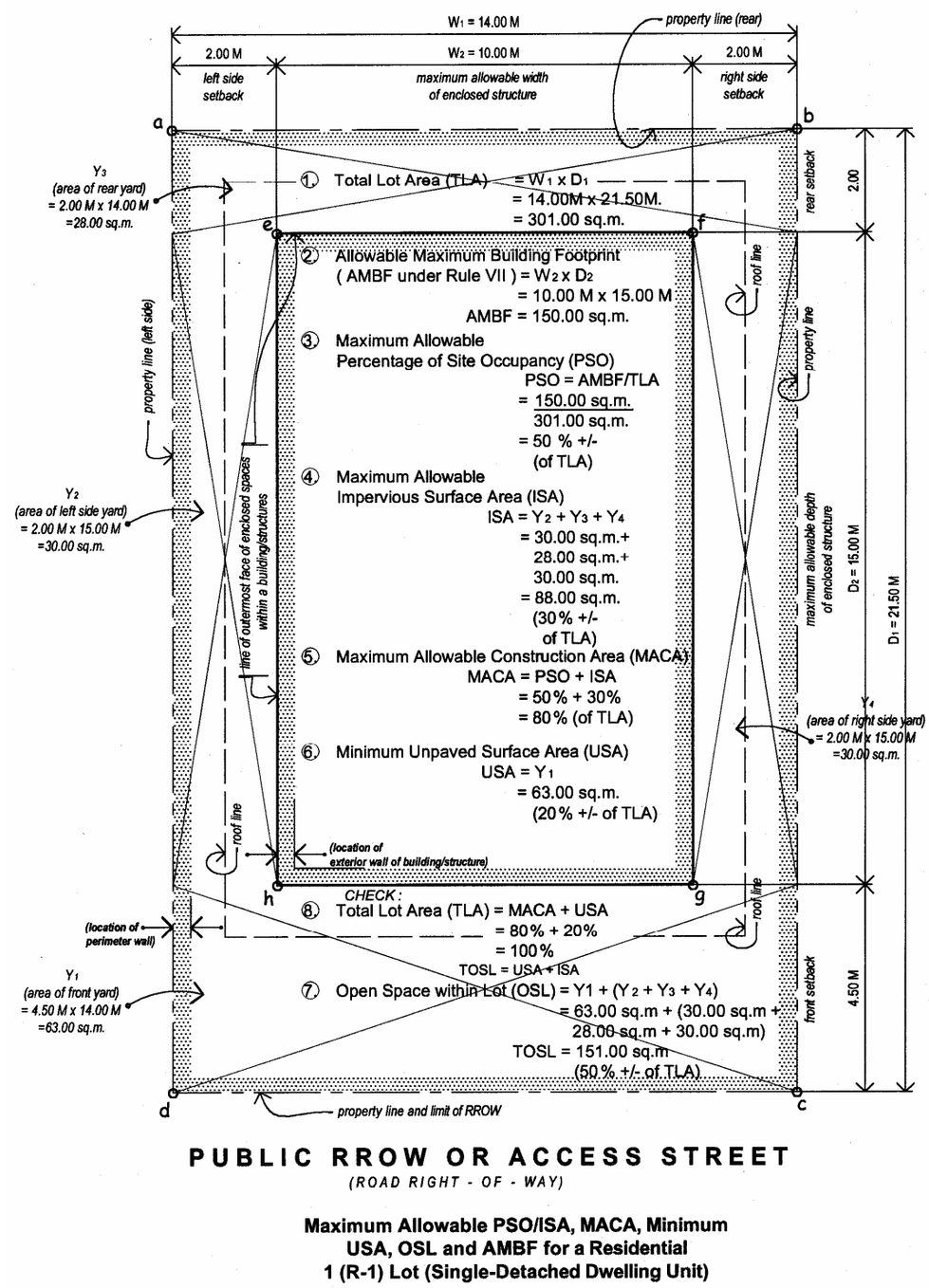
Only seven (7) types of lots and their respective locations are described under this Rule. (***Figures VIII.2.*** through ***VIII.8.***)

e. Variance

When the lots as described in ***Figures VIII.2.*** through ***VIII.8.*** are too narrow or too shallow such that the public open space, e.g., RROW, alley or the like on which they abut can adequately supply light and ventilation to every room therein subject to the requirements on window opening, the requirements on the minimum Total Open Space within Lot (**TOSL**) above may be waived (***Figures VIII.9.*** through ***VIII.11.***), provided however, that for lots abutting on only one (1) public open space, the depth of the open space to be provided shall not be more than 8.00 meters; and for those lots abutting two (2) or more public open spaces, the depth of the open space to be provided shall not be more than 12.00 meters.



Maximum Allowable PSO/ISA, MACA, Minimum USA, OSL and AMBF for a Residential 1 (R-1) Lot (Single-Detached Dwelling Unit)

Figure VIII.1.

Annotation. Spaces for carports have to be introduced ***within*** *the building footprint. If no roof is introduced over the proposed carport (that may be partly situated at the front yard or any of the 2 side yards), the space may then serve as open car parking. To maintain the* ***single-detached*** *quality of the building, only a low fence or low wall (****not a all wall or a firewall****) should be allowed along the entire property perimeter.* ***Firewalls are absolutely prohibited for R-1 lots****.*

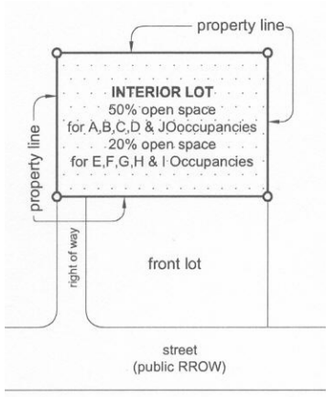


Figure VIII.2.

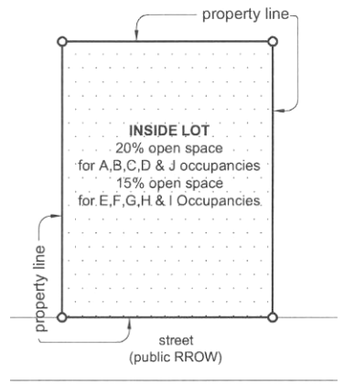


Figure VIII.3.

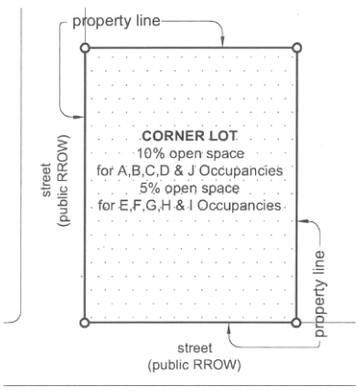


Figure VIII.4.

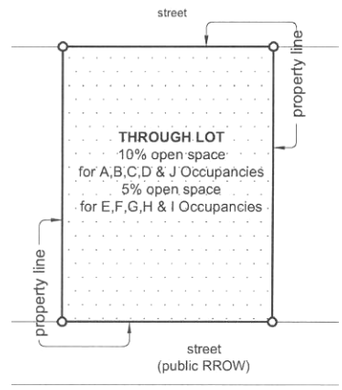


Figure VIII.5.

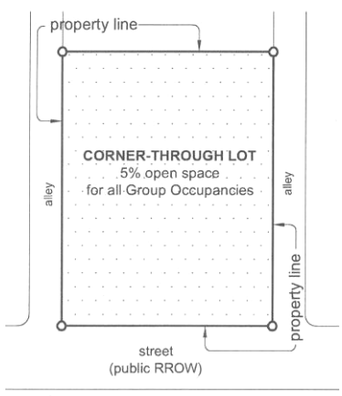


Figure VIII.6.

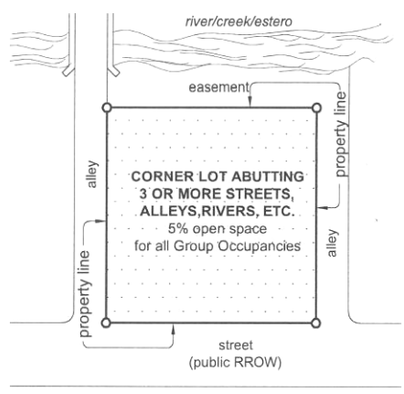


Figure VIII.7.

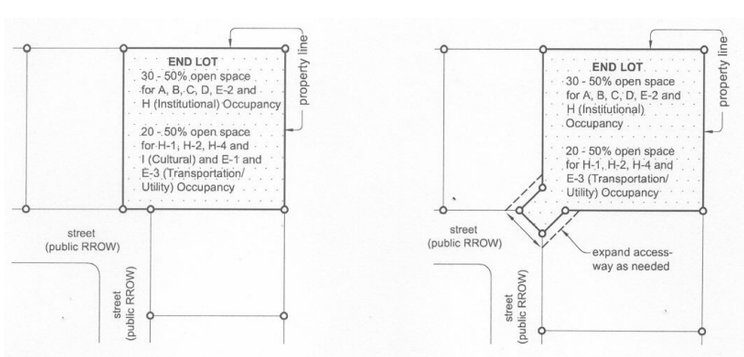


Figure VIII.8.
LOT TYPES

Annotation: The last 2 lot types are recommended for low density residential (R-1) developments.

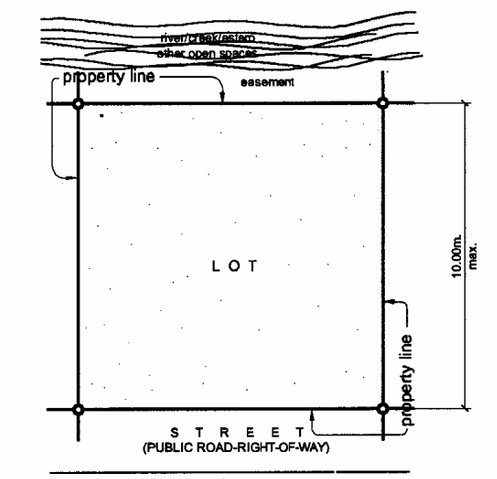


Figure VIII.9.

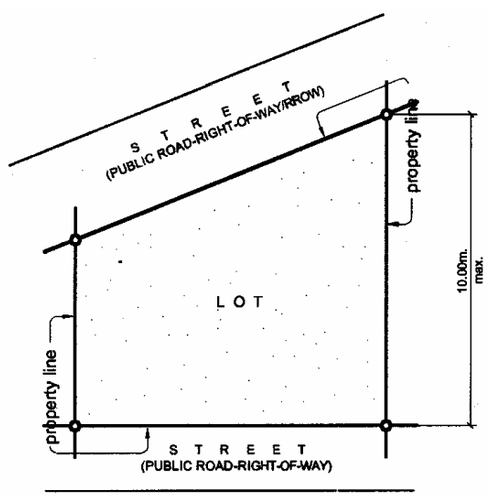


Figure VIII.10.

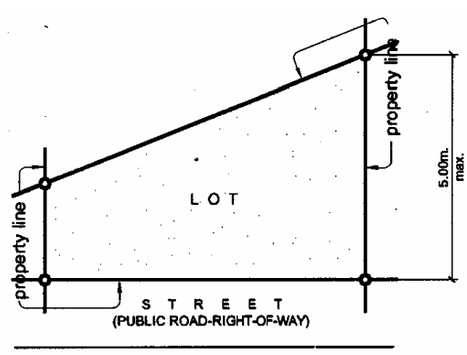


Figure VIII.11.

LOT TYPES

Annotation: The last 2 lot configurations may be better suited for non-residential developments.

SECTION 804. Sizes and Dimensions of Courts

1. **Minimum** sizes of courts and yards and their least dimensions shall be governed by the use, type of construction, and height of the building as provided hereunder, provided that the minimum horizontal dimension of said courts and yards shall be not less than 2.00 meters. All inner courts shall be connected to a street or yard, either by a passageway with a minimum width of 1.20 meters or by a door through a room or rooms.
2. The required open space shall be located totally or distributed anywhere within the lot in such a manner as to provide maximum light and ventilation into the building. (***Figures VIII.12.*** through ***VIII.15.***)
3. YARD - the required open space left between the **outermost face of the building**/structure and the property lines, e.g., front, rear, right and left side yards. **The width of the yard is the setback**. Yards prescribed for Commercial, Industrial, Institutional and Recreational Buildings are shown in ***Table VIII.3.*** hereafter.

Table VIII.2. **Minimum Setbacks for Residential Buildings/Structures**

YARD	Type of **Residential** Use/ Occupancy						
	R – 1 (meters)	**R - 2**		**R-3**		**R - 4** (individual lot/unit) (meters)	**R - 5****** (meters)
		Basic (meters)	Maximum (meters)	Basic (meters)	Maximum (meters)		
Front	4.50	3.00	8.00 *	3.00	8.00 *	4.50	6.00
Side	2.00	2.00 **	2.00 **	***	2.00 (optional)	2.00 (optional)	3.00
Rear	2.00	2.00	2.00	***	2.00	2.00	3.00

Notes:

*a) The setback requirements in **Table VIII.2.** above are for newly-developed subdivisions.*

*b) * Total setback only at grade (or natural ground) level, i.e., 3.00 meters + 5.00 meters = 8.00 meters (to accommodate part of the minimum parking requirement outside the designated area for the front yard). The second and upper floors and mezzanine level shall thereafter comply with the minimum 3.00 meters setback unless otherwise provided under the Code.*

*c) ** Setback required for only one (1) side. Setbacks on two sides shall be optional.*

*d) *** Abutments on two sides and rear property lines may be allowed with conditions as enumerated under Section 804, Subsection 10 of this Rule.*

*e) **** Mixed-Use Buildings/Structures in R-5 lots shall be considered a commercial use or occupancy if a substantial percentage, i.e., 55% of the Gross Floor Area (**GFA**) is commercial.*

f) In cases where yards/setbacks are impossible to attain or where frontage and depth of lots are similar to that of Open Market or Medium Cost Housing Projects, abutments on the sides and rear property lines may be allowed and 1.50 meters front yard is left open as transition area.

Table VIII.3. Setbacks for Commercial*, Industrial, Institutional and Recreational Buildings

Road Right-of-Way (**RROW**) Width (meters)	Front (meters)	Side (meters)	Rear (meters)
30.00 & above	8.00	5.00	5.00
25.00 to 29.00	6.00	3.00	3.00
20.00 to 24.00	5.00	3.00	3.00
10.00 to 19.00	5.00	2.00	2.00
Below 10.00	5.00	2.00	2.00

Note:

* *Mixed-Use Buildings/Structures in **R-5** lots may be considered a commercial development if a substantial percentage of the **GFA** is commercial.*

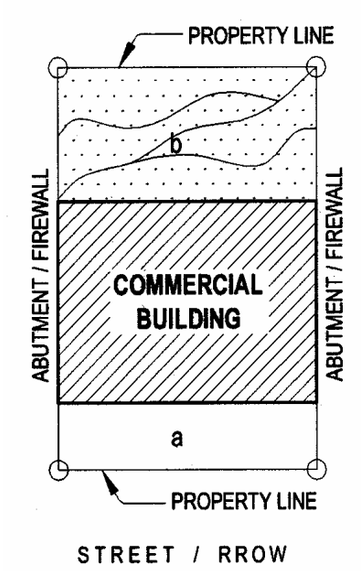


Figure VIII.12.

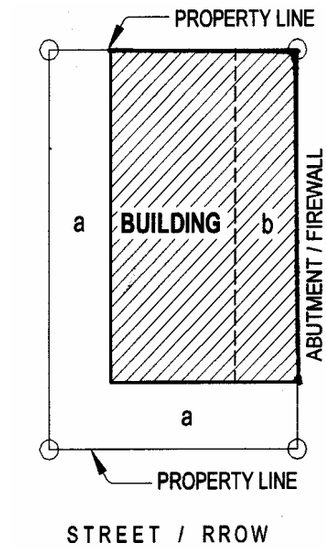


Figure VIII.13.

a - OPEN SPACE
b - ALTERNATE LOCATIONS

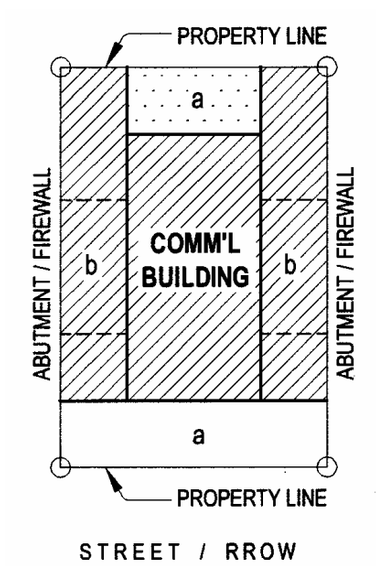


Figure VIII.14.

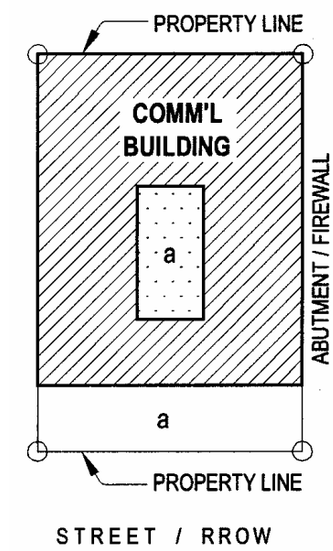


Figure VIII.15.

REQUIRED OPEN SPACE LOCATIONS

Annotation: For all firewalls (particularly those above 3.0 m in height), great care should be taken ***when*** *such firewalls face the south or southwest i.e. facing the southwest monsoon ("****habagat****") winds which are wet and destructive i.e. the firewalls may also be generally subjected to rain for up to six to eight (6-8) months annually. In such a situation,* ***firewall gutters*** *are strongly suggested to prevent the firewall water from flooding the adjoining properties. A better option is to set back the firewall by up to 0.60 m to create a drainage channel as well as a firewall maintenance space i.e. for painting and general repair work. When the latter solution is adopted, an* ***endwall*** *is created instead.*

4. The **setback** requirements in ***Table VIII.3.*** above are for newly-developed thoroughfares. For highly built-up urban areas with duly established lines and grades reflecting therein proposed road widening and elevation, the requirements in ***Table VIII.3.*** above may **not** be imposed and the face of the building may abut on the side and/or rear property lines provided that all the requirements on open space, window opening, artificial ventilation, if any, and firewalls (**Rule VII**) are first fully complied with.

5. Every court shall have a width of not less than 2.00 meters for one (1) or two (2) storey buildings. However, if the court is treated as a yard or vice versa, this may be reduced to not less than 1.50 meters in cluster living units such as quadruplexes, rowhouses and the like, with adjacent courts with an area of not less than 3.00 sq. meters. Provided further, that the separation walls or fences, if any, shall not be higher than 2.00 meters. Irregularly–shaped lots such as triangular lots and the like, whose courts may be also triangular in shape may be exempted from having a minimum width of not less than what is required in ***Table VIII.3.*** and as shown in ***Figures VIII.16., VIII.17., VIII.18. and VIII.19***.

6. For buildings of more than two (2) storeys in height, the minimum width of the rear or side court shall be increased at the rate of 300 millimeters for each additional storey up to the fourteenth (14th) storey (***Figure VIII.20.*** showing incremental setbacks). For buildings exceeding fourteen (14) storeys in height, the required width of the court shall be computed on the basis of fourteen (14) storeys.

7. Uncovered Driveways, Access Roads and Parking Spaces may be considered part of the open space provided that they are open and unobstructed from the ground upward as in courts and yards.

8. A carport shall not be considered part of the Total Open Space within Lot (**TOSL**) particularly if it is entirely roofed or roofed with overhangs. In such a case, it must be counted as an integral component of the Allowable Maximum Building Footprint (**AMBF**).

9. A front yard may be partly paved/hardscaped (converted into a courtyard) to serve as a carport but only for a basic **R-2 or basic R-3 or R-4** (individual lot) use or occupancy, i.e., all for single-family dwelling units only. All other uses/occupancies shall not be allowed to use the front yard for a carport nor for parking.

10. For **Basic R-3**, abutments on two sides and rear property lines may be allowed provided the following requirements are first complied with:

    a. Open space as prescribed in Reference Table for **Maximum PSO, TOSL**, and ***Table VIII.2.*** of this Rule are satisfied.

    b. Window opening as prescribed in **Section 808 of this Rule** are satisfied.

    c. Firewall with a minimum of two-hour fire-resistive rating constructed with a minimum height clearance of 400 millimeters above the roof. (***Figure VIII.21***)

11. In case of conflict in the provisions on lighting and ventilation under this Rule or under the **Code**, **the more stringent restrictions must prevail**.

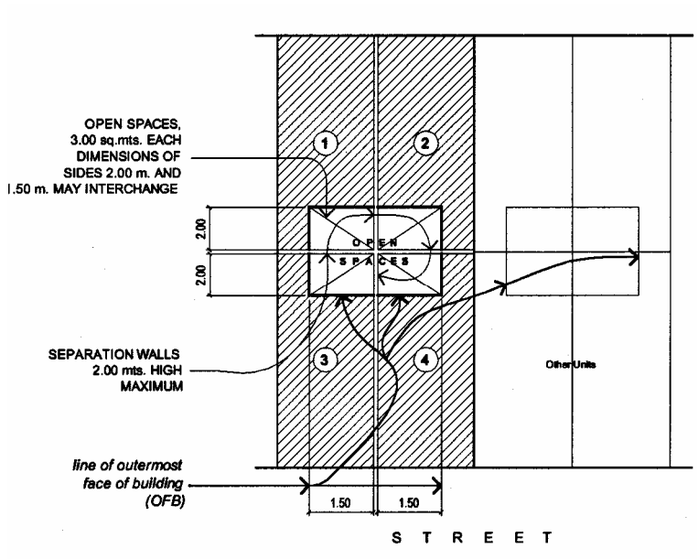
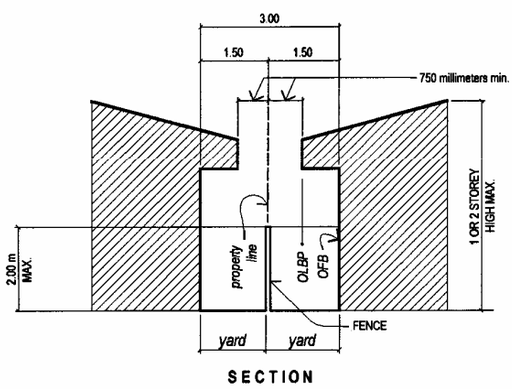


Figure VIII.16.



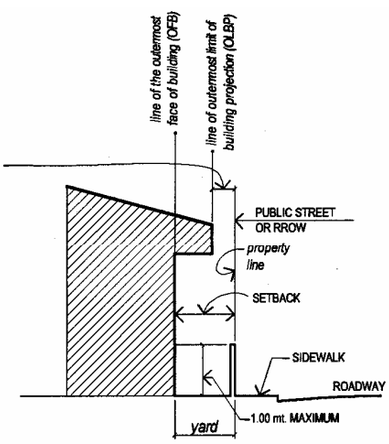


Figure VIII.17. ***Figure VIII.18.***

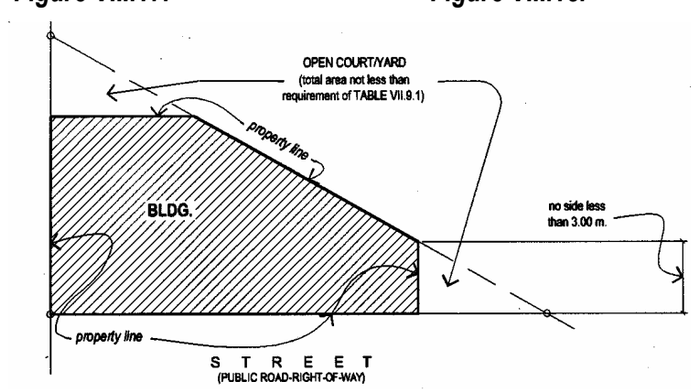


Figure VIII.19.
OPEN COURT / YARD

*Annotation: The separation walls are actually **firewalls** (particularly if these are above 3.0 m in height or above the roof lines of the buildings). A better option is to set back the firewall by up to 0.60 m to create a drainage channel as well as a firewall maintenance space i.e. for painting and general repair work. When the said solution is adopted, **endwalls** are created instead.*

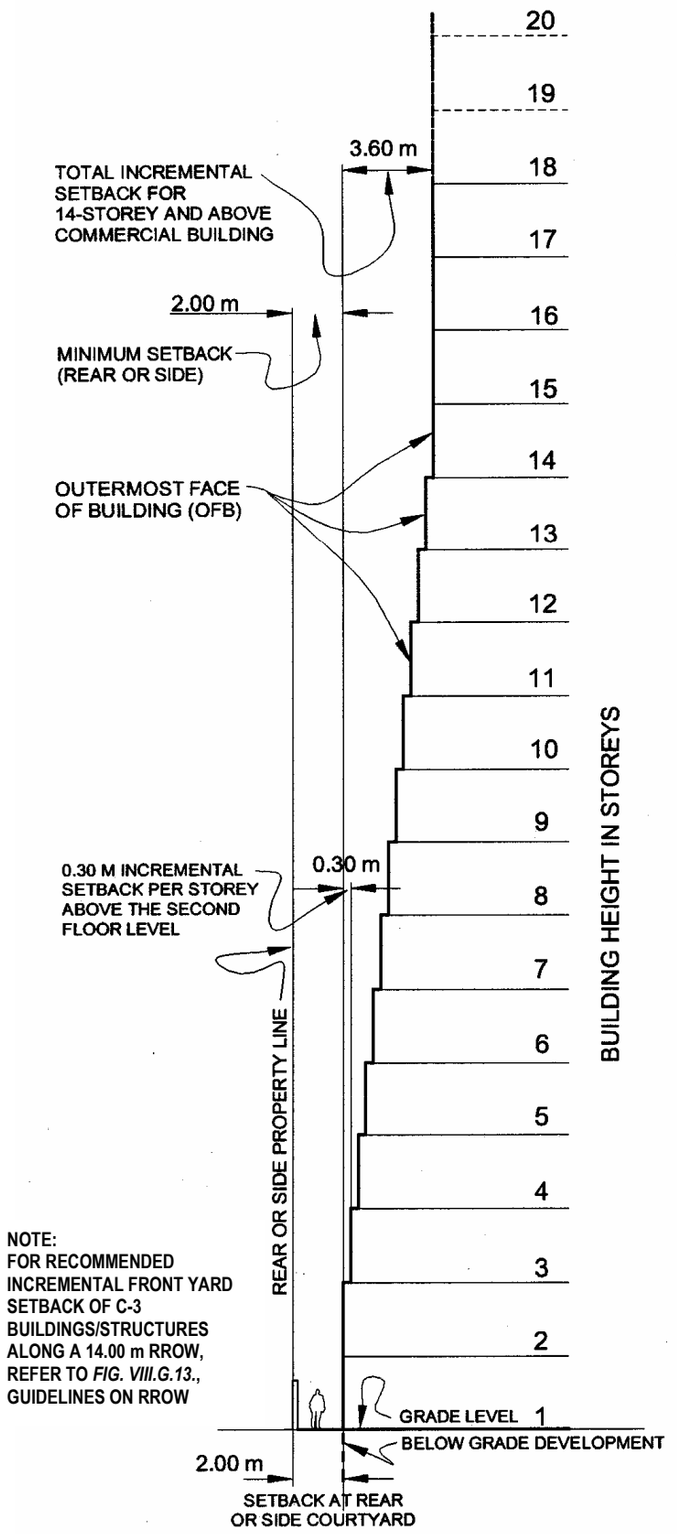
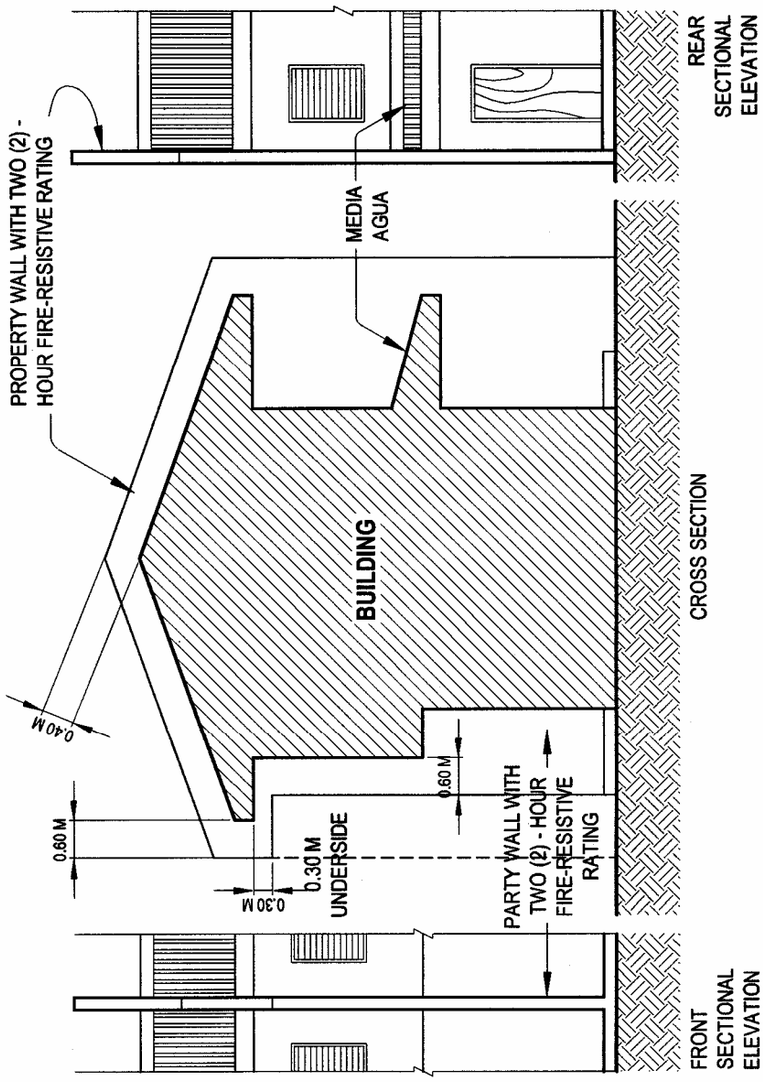


Figure VIII.20.

*Annotation: The **incremental setbacks** are not intended for adoption as architectural design standards. These are only tools to **limit** floor area generation using climatic conditions as bases. The actual design solution may actually have a different configuration that must however match the limit prescribed by the incremental setbacks.*



ABUTMENTS (FIREWALLS) ON THE SIDE & REAR PROPERTY LINES
Figure VIII.21.

*Annotation: The 0.40 m height of the **firewall** above the roof lines of the buildings is an absolute minimum. Only the flashing may be allowed to cross over to the other side of the firewall for anchorage purposes.*

SECTION 805. Ceiling Heights

1. **Habitable rooms provided with artificial ventilation shall have ceiling heights not less than 2.40 meters measured from the floor to the ceiling**; provided that **for buildings of more than one (1) storey, the minimum ceiling height of the first storey shall be 2.70 meters and that for the second story 2.40 meters and the succeeding stories shall have an unobstructed typical head-room clearance of not less than 2.10 meters above the finished floor. Above-stated rooms with natural ventilation shall have ceiling heights of not less than 2.70 meters.**

2. **Mezzanine floors shall have a clear ceiling height not less than 1.80 meters above and below it.**

SECTION 806. Sizes and Dimensions of Rooms

1. Minimum sizes of rooms and their least horizontal dimensions shall be as follows:

   a. Rooms for Human Habitations - 6.00 sq. meters with a least dimension of 2.00 meters;

   b. Kitchen - 3.00 sq. meters with a least dimension of 1.50 meters; and

   c. Bath and toilet - 1.20 sq. meters with a least dimension of 900 millimeters.

SECTION 807. Air Space Requirements in Determining the Size of Rooms

1. Minimum air space shall be provided as follows:

   a. School Rooms - 3.00 cu. meters with 1.00 sq. meter of floor area per person;

   b. Workshop, Factories, and Offices - 12.00 cu. meters of air space per person; and

   c. Habitable Rooms - 14.00 cu. meters of air space per person.

SECTION 808. Window Openings

1. **Rooms intended for any use, not provided with artificial ventilation system, shall be provided with a window or windows with a total free area of openings equal to at least 10% of the floor area of the room**, provided that such opening shall be **not less than 1.00 sq. meter**. However, **toilet and bath rooms, laundry rooms** and similar rooms **shall be provided with** window or **windows with an area not less than 1/20 of the floor area of such rooms, provided that such opening shall not be less than 240 sq. millimeters**. Such window or windows shall open directly to a court, yard, public street or alley, or open watercourse.

2. Required windows may open into a roofed porch where the porch:

   a. Abuts a court, yard, public street or alley, or open watercourse and other public open spaces;

   b. Has a ceiling height of not less than 2.70 meters;

   c. Has one of the longer sides at least 65% open and unobstructed.

3. Eaves, canopies, awnings (or *media agua*) over required windows shall not be less than 750 millimeters from the side and rear property lines.

4. **There shall absolutely be no openings on/at/within/through all types of abutments (such as firewalls) erected along property lines except for permitted vent wells. This Rule strictly applies to all new and existing developments**.

5. In locating window openings it should be borne in mind that in cases of extreme emergencies windows must serve as emergency egress to vacate the premises or access for rescue operations. Such windows shall meet the following requirements:

   a. They can be opened from the inside without the use of any tools;

   b. The minimum clear opening shall have a width not less than 820 millimeters and a height of 1 meter;

   c. The bottom of the opening should not be more than 820 millimeters from the floor;

   d. Where storm shutters, screens or iron grilles are used, these shall be provided with quick opening mechanism so that they can be readily opened from the inside for emergency egress and shall be so designed that when opened they will not drop to the ground;

   e. All areas immediately outside a fire exit window/grille must be free of obstacles and must lead to a direct access down into the ground or street level.

SECTION 809. Vent Shafts

1. Ventilation or vent shafts shall have a horizontal cross-sectional area of not less than 1.00 sq. meter for every meter of height of shaft but in no case shall the area be less than 1.00 sq. meter. No vent shaft shall have its least dimension less than 600 millimeters.

2. Unless open to the outer air at the top for its full area, vent shafts shall be covered by a skylight having a net free area or fixed louver openings equal to the maximum required shaft area.

3. Air ducts shall open to a street or court by a horizontal duct or intake. Such duct or intake shall have a minimum unobstructed cross-sectional area of not less than 0.30 sq. meter with a minimum dimension of 300 millimeters. The openings to the duct or intake shall be not less than 300 millimeters above the street surface or level of court.

SECTION 810. Ventilation Skylights

1. Ventilation skylights shall have a glass area not less than that required for the windows that are replaced. They shall be equipped with movable sashes or louvers with an aggregate net free area not less than the parts in the replaced window that can be opened, or else provide artificial ventilation of equivalent effectiveness.

SECTION 811. Artificial Ventilation

1. Rooms or spaces housing industrial or heating equipment shall be provided with artificial means of ventilation to prevent excessive accumulation of hot and/or polluted air.

2. Whenever artificial ventilation is required, the equipment shall be designed to meet the following minimum requirements in air changes as shown in ***Table VIII.4.*** hereafter.

Table VIII.4. **Minimum Requirements for Air Changes**

	Cubic Meter Per Minute Per Person		Air Changes Per Hour				
			Ceiling Height (meters)				
	Min.	Max.	2.40	3.00	3.70	4.90	6.10
Apartment	0.29	0.43	3	2	1-½	1	¾
Banking Space	0.22	0.29	3	2	1-½	1	¾
Barber Shop	0.22	0.29	3	2	1-½	1	¾
Beauty Parlor	0.22	0.29	3	2	1-½	1	¾
Broker's Board Room	0.57	0.85	8	6	4-½	3	2-½
Cafeteria	0.43	0.57	6	4-½	3-½	2-½	1-¾
Cocktail Bar	0.57	0.85	8	6	4-½	3	2-¼
Churches	0.14	0.22	3	2	1-½	1	¾
Department Stores	0.22	0.43	3	2	1-½	1	¾
Director's Room	0.85	0.14	8	6	4-½	3	2-¼
Drugstore (no counter)	0.22	0.29	3	2	1-½	1	¾
Drugstore (w/counter)	0.29	0.43	5	3-¾	3	2	1-½
Funeral Parlor	0.14	0.22	3	2	1-½	1	¾
Gambling Rooms	0.57	0.85	6	6	4-½	3	2-¼
Hospital Room	0.29	0.43	3	2	1-½	1	¾
Hotel Room	0.29	0.43	3	2	1-½	1	¾
Laboratories	0.43	0.57	6	4-½	3-½	2-½	1-¾
Office	0.29	0.43	4	3	2-¼	1-½	1
Restaurant Kitchen	0.34	0.43	5	3-¾	3	2	1-½
Shop, Retail	0.22	0.29	3	2	1-½	1	¾
Theaters	0.14	0.22	-	-	-	-	-

3. For other rooms or spaces not specifically covered under this Section, see applicable provisions of the pertinent referral code/s.

EXCEPTION:

1. Variances, exception or deviations from the provision of light and ventilation **may be allowed** only when the following term and conditions are fully complied with:

   a. In case of variances

      When the property is unique and different from other properties and because of its uniqueness such the owner cannot comply with the open space requirements, variances shall be applied to relax the application of the following provisions:
      i. setback;
      ii. ventilation and window opening requirements;
      iii. percentage of site occupancy;
      iv. floor area ratio; and
      v. building height limit (**BHL**).
      At least two (2) conditions must be satisfied for exception to be granted.

   b. In case of exceptions
      i. The exception must not adversely affect public health, safety and welfare and must be in keeping with the general pattern of development in the community.
      ii. The exception must not alter the essential character of the district where the exception sought is located, and will be in harmony with the general purpose of this **IRR**.

A. EASEMENTS

1. As it is situated outside of private property limits, the **easement is public land**, i.e., **public domain**, **that should be equally enjoyed by all members of the community**. The easement is **not to be used for any form of building**/structure that may go against its **public recreational character** and as such, the following uses and others similar thereto are absolutely prohibited:

   a. **Residential** and like uses whether temporary or permanent;
   b. Long-term or **overnight vehicle parking**, i.e., unless duly designated as day and/or night pay-parking zones;
   c. As a depository of stalled, wrecked or **abandoned vehicles**, mechanical devices and the like;
   d. The conduct of specific commercial, institutional and/or industrial activities **not** compatible with its stated character;
   e. Unauthorized recreational or entertainment usage and the like which will only benefit certain entities and which will ultimately result in **inconvenience/ nuisance/safety problems** to the general public; nor
   f. Any other form of **private use, gain, enjoyment or profit** at the expense of the motoring or walking public.

2. **Allowed or Encouraged** Structures/Developments **Within Easements**

   a. If wider than 9.00 meters, the easement may include a roadway/carriageway component on which vehicles can pass or on which the same may temporarily park, e.g., an **esplanade** and the like. (***Fig. VIII.G.1.***)
   b. Pedestrian access-ways and the like and to be located at/ above/below the easement may also be developed for public use, e.g., a **promenade** and the like. (***Fig. VIII.G.2.***)

Table VIII.G.1. **Easement* Along Water Bodies/Way by Location**

Location of Water Body/Way	Easement
Urban Areas	3.00 meters per side of waterway *(**Fig.VIII.G.3.**)*
Agricultural Areas	20.00 meters per side of waterway
Forest Areas	40.00 meters per side of waterway

* *Source: **Water Code** of the Philippines*

   c. The allowed structures/developments include:

      i. **Hardscaped** (**paved**) pedestrian access-ways such as walks, footpaths or arcades (covered or roofed sidewalks without any habitable structures above or below it); temporary or movable **hardscape elements** such as gazebos, sheds, fountains and like structures with large footprints must **not** encroach on the easement;

      ii. **Softscaped** (**paved**) developments such as park strips, linear parks and the like as well as small tree farms are encouraged for recreational, livelihood and soil stabilization/protection purposes;

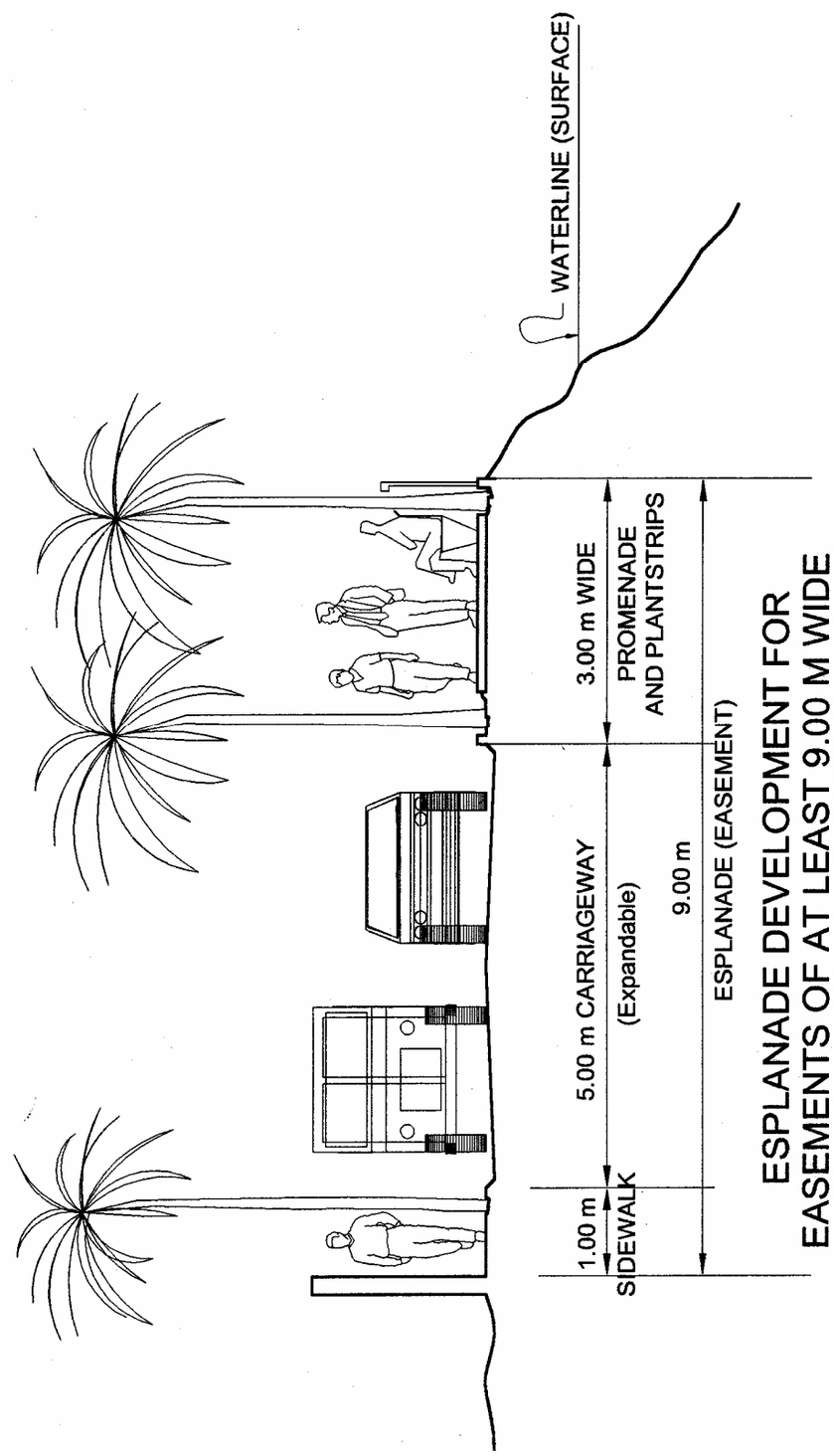
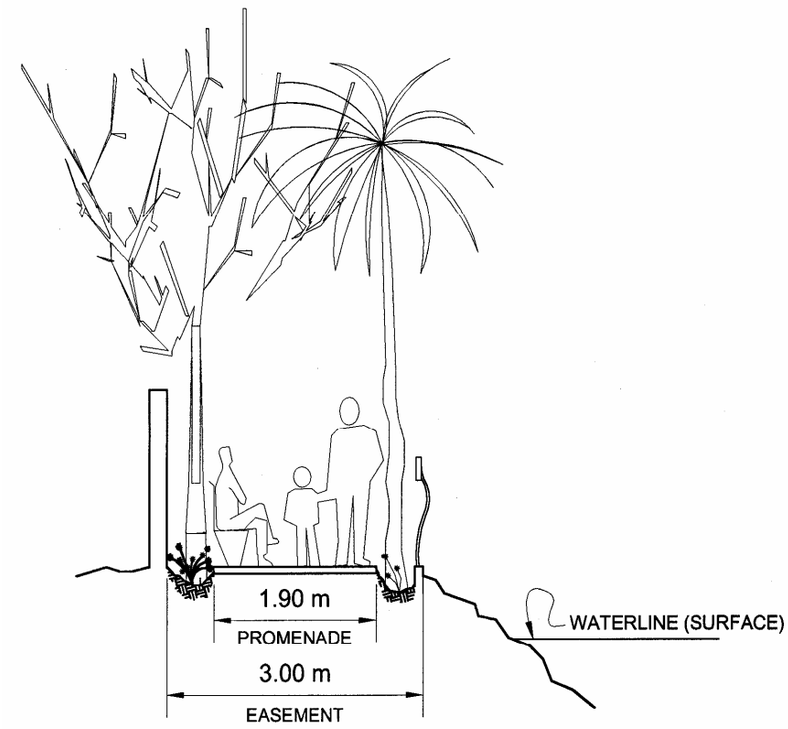


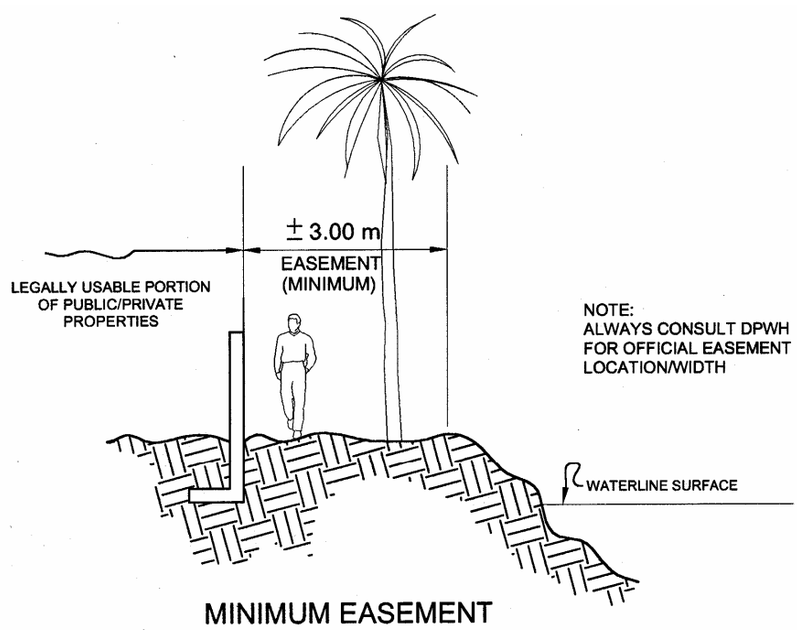
Figure VIII.G.1.

*Annotation: The level of the waterline surface must be established by the DPWH Regional or District Office, **not** by the Office of the Municipal/ City Engineer nor by the Office of the Building Official (OBO). Note also that the trees along the promenade are staggered i.e. the trees do **not** face each other but are suggested to be positioned in a zigzag pattern. In case the width for the esplanade is insufficient, the left sidewalk could also be dispensed with.*



PROMENADE DEVELOPMENT
WITHIN A MINIMUM EASEMENT
FOR URBAN AREAS

Figure VIII.G.2.



MINIMUM EASEMENT
AT URBAN AREAS

Figure VIII.G.3.

*Annotation: The level of the waterline surface must be established by the DPWH Regional or District Office, **not** by the Office of the Municipal/ City Engineer nor by the Office of the Building Official (OBO). Note also that the trees along the promenade are staggered i.e. the trees do **not** face each other but are suggested to be positioned in a zigzag pattern.*

iii. Concrete steps leading down to the water or wooden boardwalks are allowed, provided that all necessary safety precautions are taken, e.g., non-slip finishing for surfaces, handrails and railings;

iv. Other forms of soil stabilization/protection including anti-erosion/scouring measures/structures within the easement are allowed, e.g., rip-rapping, embankment protection, etc., provided that no enclosed/semi-enclosed habitable structures are built on, above or below such structures; and

v. Permanent utility/service lines (power, water, telecommunications, gas, etc.) are allowed within the easement provided that these are either below grade (underground) or above grade (overhead).

3. **Disallowed and Prohibited** Structures/Developments **Within Easements**

a. **No portion** of the easement whether at grade (on the ground), below grade or above grade may be leased or developed by the government or by private entities for purposes inconsistent with its character and intended function. In particular, any form of semi-permanent/permanent or semi-enclosed/enclosed residential, commercial, industrial, institutional or government structure/use and like, structures/uses at any portion of the public easement is prohibited;
b. **All** semi-enclosed or enclosed, semi-permanent or permanent habitable building **projections** (particularly **arcade** structures) or any other building projection or structural element (eaves, roof, cantilevered beams, foundations and the like) located above or below the easement are absolutely prohibited; and
c. **All forms of enclosures** such as fences, perimeter walls and the like, intended to limit the use of the easement for private enjoyment/benefit or to restrict full access to the public easement are absolutely prohibited unless the same are erected for reason of public safety.

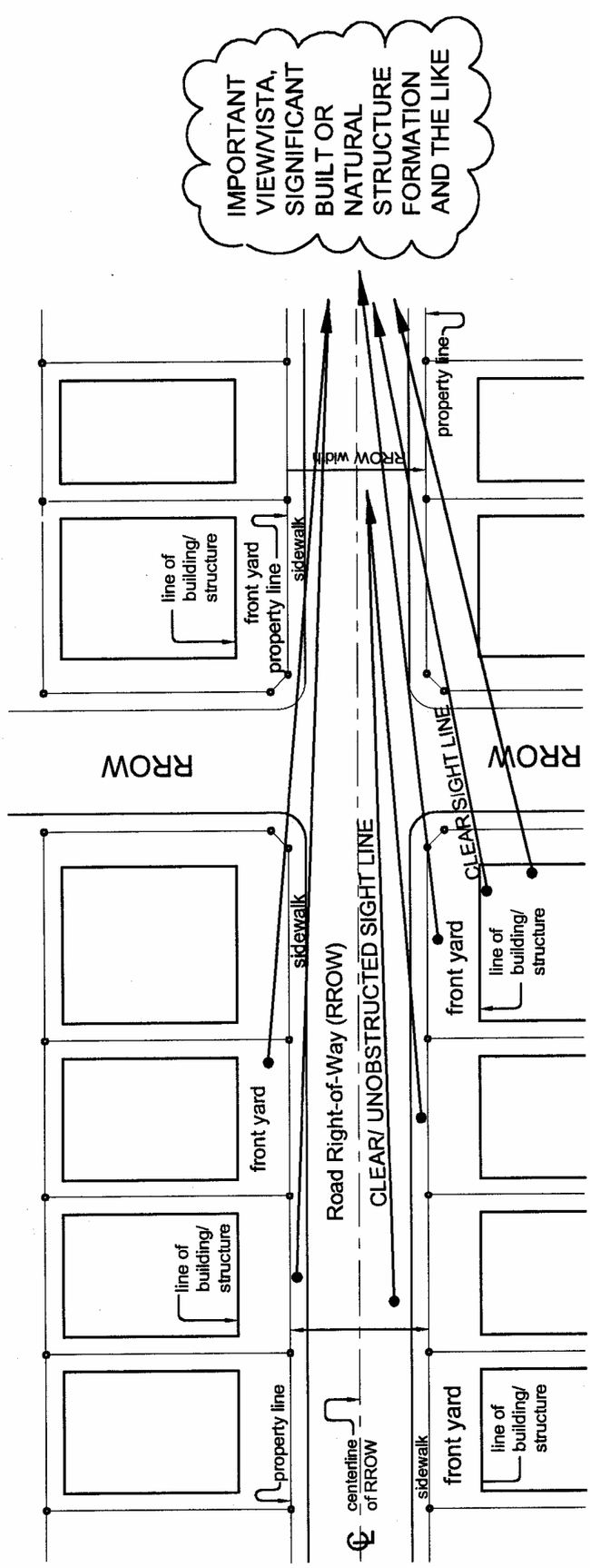
B. VIEW CORRIDORS AND/OR SIGHT LINES

1. Preservation of View Corridors and/or Sight Lines

a. The carriageway/roadway portion of the RROW shall be free of structures, particularly commercial signs that will impede the view corridor and sight lines within the RROW. (See ***Fig. VIII.G.4***)
b. To dignify very important public or historical/culture buildings/structures, all forms of commercial signs intruding into RROW leading to or away from such buildings/structures shall not be allowed. Specifically disallowed from such RROW are commercial signs supported from any building projection (such as arcades).
c. View corridors or sight lines from buildings/structures on a higher or lower lot shall not be entirely blocked by the intervening property to allow some sight lines to exist.
d. In case of allowed structures within the RROW for transportation, e.g., elevated ramps, flyovers, tracks, stations, terminals and the like, the appropriate designs shall be adopted to maximize light, ventilation and view.

C. STREETS/ROAD RIGHT-OF-WAY (RROW)

1. *General*. No building shall be constructed unless it adjoins or has direct access to public space, yard or street/road on at least one (1) of its sides. All buildings shall face a public street, alley or a road, which has been duly approved by the proper authorities for residential, institutional, commercial and industrial groups.



UNOBSTRUCTED VIEW CORRIDORS / SIGHT LINES

Figure VIII.G.4.

*Annotation: Billboard structures that block the view are particularly **prohibited** under this guideline.*

a. **Allowed or Encouraged** Structures/Developments **Within the RROW**

i. The RROW at all its physical levels may only be used for the following types of structures/uses or others similar to them, to wit:

(a) Transportation structures and like uses whether temporary or permanent, e.g., mass transit alignments (particularly light and heavy rail) at grade, mass transit stations and terminal facilities above grade (RROW air rights utilization) or below grade and the like; these also include waiting sheds, traffic outposts and the like;

(b) Limited commercial structures/uses above grade (RROW air rights utilization) or below grade provided that these are ancillary or supplementary/complementary to the transportation structures/uses allowed in the previous paragraph, and the like; commercial signages on the exterior of the commercial structure are disallowed and prohibited;

(c) Improvements on the RROW and on all its components/elements found at all its physical levels, e.g., sidewalks, arcades, roadway/carriageway, medians, planting strips, street furniture, elevated or underground crossings or access-ways, non-commercial traffic and directional signages and the like; and

(d) Public utility/service structures/uses (power, water, drainage, sewerage, telecommunications, gas, etc.) at all physical levels of the RROW provided that these do not restrict nor impede the movement of people and vehicles and provided further that the rights to utilize the RROW are properly secured and permitted.

b. **Disallowed and Prohibited** Structures/Developments **at RROW**

i. If situated outside of private property limits, the RROW is public land, i.e., public domain, which should be equally enjoyed by all members of the community. The RROW is not to be used for the following types of buildings/structures/ occupancies or others similar to them:

(a) Any form of semi-permanent/permanent or semi-enclosed/enclosed commercial structure/use and like structures/uses;

(b) Any form of temporary, semi-permanent/permanent or semi-enclosed/ enclosed residential structure/use and like structures/uses;

(c) Government structures/use unless the same are located below or above grade; in such cases, the proposed structure must be properly planned/designed and constructed;

(d) Long-term or overnight vehicle parking, i.e., unless duly designated as day and/or night pay-parking zones;

(e) As a depository of stalled, wrecked or abandoned vehicles, mechanical devices and the like;

(f) The conduct of other commercial/business/industrial activities incompatible with the character of the RROW;

(g) Unauthorized recreational or entertainment usage and the like which will only benefit certain entities and which will ultimately result in inconvenience/ nuisance/safety problems to the general public; nor

(h) Any other form of private use, gain, enjoyment or profit at the expense of the motoring or walking public.

Table VIII.G.2. **Suggested Median and Lane Widths Within Alleys/Roadways/Carriageways by Minimum RROW Width and by Suggested Vehicle Speeds**

Range of Total Alley or RROW Width (meters)	Suggested Minimum Required Width of Alley or Roadway/ Carriageway (meters)	Range of Suggested Minimum to Maximum Vehicle Speeds Along Alley or Roadway (kilometers/hour)	Suggested Minimum to Maximum Median Widths (meters)	Suggested Minimum to Maximum Lane Widths (meters)
3.00 to 6.00	2.00 (for 3.00 meters Alley ROW)	1.00 to 15.00	None	2.00 one way car passage
	4.00 (for 6.00 meters RROW)		None	2.10 each way
6.10 to 20.00	4.81 (for 6.01 meters RROW)	16.00 to 30.00	None	2.40 Each way
	13.40 (for 20.00 meters RROW)		1.20 to 2.00	2.80 to 3.00
20.10 to 40.00	13.50 (for 20.10 meters RROW)	31.00 to 60.00	1.20 to 4.50	1. 20 to 4. 80
	26.80 (for 40.00 meters RROW)		3. 00 to 3. 30	3.3 to 3.50
40.10 to 60.00 and above	26.90 (for 40.10 meters RROW)	61.00 and above	1.50 to 5.00	1.50 to 5.50
	40.00 (for 60.00 meters RROW)		3.50 to 3.80	3.80 to 4.00

c. Minimum Access Requirements

i. RROW/access streets or alleys shall have the following widths:

(a) Interior or rear lots shall have a RROW/access street with a minimum width depending upon the number of buildings or units which it serves provided, however, that said RROW/access street shall not be less than 3.00 meters in width and provided further that such RROW shall be provided with a minimum 4.00 meters wide chaflan at its intersect with the main RROW and provided, finally, that such **RROW shall not be used for any form of parking**.

(b) Multiple living units on same lot on which apartments, rowhouses or *accessorias* or a group of single-detached buildings are built be provided with a RROW/access street directly connecting said buildings or units to a public street/road or alley following the schedule as shown in ***Table VIII.G.3***.

(c) For commercial or industrial areas, sufficient lane widths, shoulders and maneuvering spaces for long-bodied/articulated vehicles should be considered within the RROW.

(d) Privately-owned RROW/access streets shall be duly registered and annotated in the lot title as such for as long as the apartments, rowhouses, etc., using said RROW/access streets, still exist.

(e) Alignment of RROW/access streets shall be integrated into the existing street/ road network, particularly with the provision of chaflans of the appropriate width.

(f) No obstruction should exist within the RROW/access streets servicing multiple housing of more than 75 units.

(g) All kinds of subdivisions and residential condominiums may generally refer to this Guideline concerning access streets/roadways. (***Figs. VIII.G.5.*** through ***VIII.G.10.***)

Table VIII.G.3. **Minimum Road Right-of-Way (RROW) Provisions for Developments with Multiple Dwelling Units**

Number of Dwelling Units	Minimum Width of Carriageway/ Roadway (meters)	Minimum Width of Sidewalk on each side (meters)	Minimum Total Width of the RROW (meters)
Up to six (6) units	3.00	0.60	4.20
Seven (7) up to fifteen (15) units	4.00	1.00	6.00
Sixteen (16) up to Twenty-five (25) units	5.00	1.00	7.00
Twenty-six (26) up to Thirty-five (35) units	6.00	1.00	8.00
More than thirty-five (35) units	6.70	1.00	8.70

d. The RROW consists of three (3) different physical levels as follows:

i. RROW ABOVE GRADE - refers to the portion of the RROW reckoned from the finished surface of the roadway/carriageway and/or the sidewalk/arcade all the way up to the air. If this level of the RROW is utilized for whatever purpose, the **Air Rights or the right to develop, benefit and profit from the use of the RROW above grade is given up by the government/general public and should therefore be <u>compensated</u>**, i.e., leased and paid for by the proponent/end-user/beneficiary of the proposed building/structure (***Figs. VIII.G.11.*** and ***VIII.G.12.***). **The minimum clear height for the utilization of air rights above RROW shall be 4.27 meters from the finished crown elevation of the roadway/carriageway**.

ii. RROW AT GRADE - refers to the portion of the RROW reckoned from the natural grade line up to the finished surface of the roadway/carriageway and/ or the sidewalk/arcade. This portion of the RROW is generally utilized for the movement of the general public (motorists and pedestrians). If this level of the RROW is utilized for whatever purpose, the right to develop, benefit and profit from the use of the RROW at grade is given up by the government/general public and should therefore be compensated, i.e., leased and paid for by the development proponent/end-user/ beneficiary. (***Figs. VIII.G.11.*** and ***VIII.G.12.***)

iii. RROW BELOW GRADE - refers to the portion of the RROW reckoned from the finished surface of the roadway and/or the sidewalk all the way down into the ground. If this level of the RROW is utilized for whatever purpose, the right to develop, benefit and profit from the use of the RROW below grade is given up by the government/general public and should therefore be compensated, i.e., leased and paid for by the development proponent/end-user/beneficiary. (***Figs. VIII.G.11.*** and ***VIII.G.12.***)

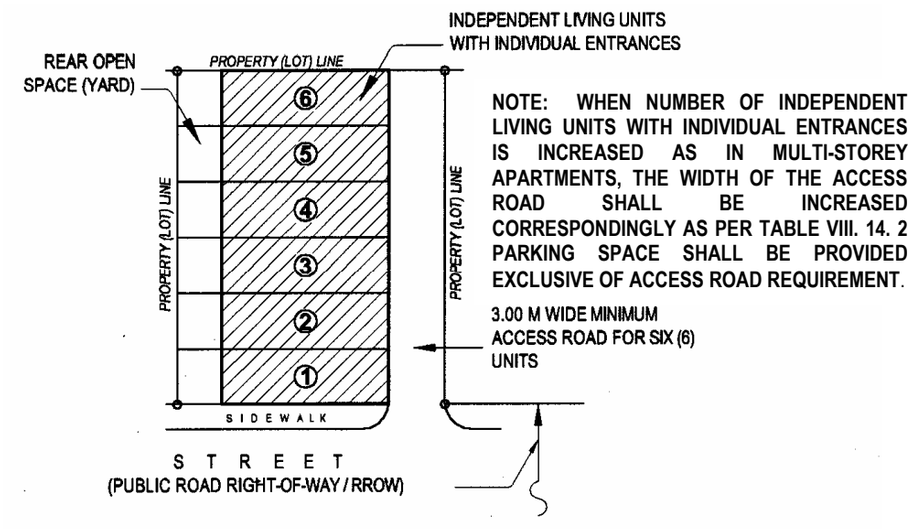


Figure VIII.G.5.

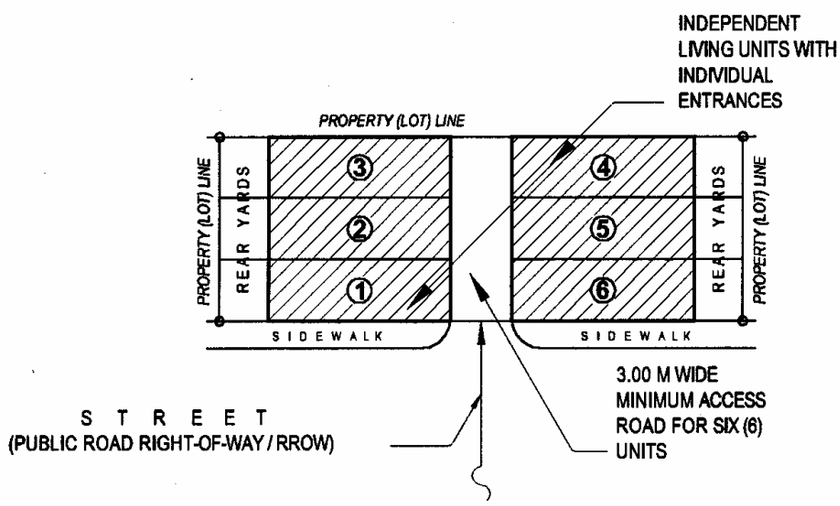
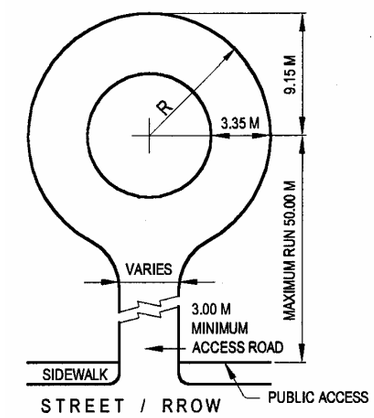


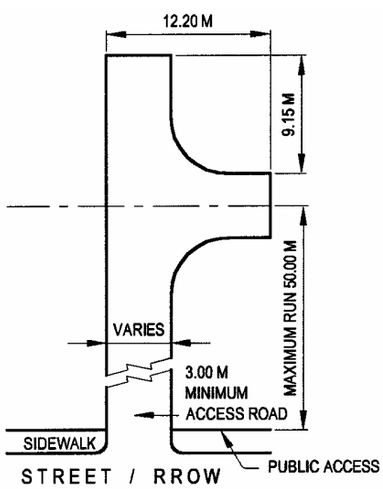
Figure VIII.G.6.

*Annotation: The **minimum** 3.0 m wide access road necessarily includes all provisions for drainage and for utility lines. It must be maintained free of all forms of obstructions at all times, particularly parked or abandoned vehicles that may impede rescue/emergency response. Trees or plants should **not** be sited within any part of the **minimum** 3.0m wide access road i.e. suggested for planting within the property limits instead.*



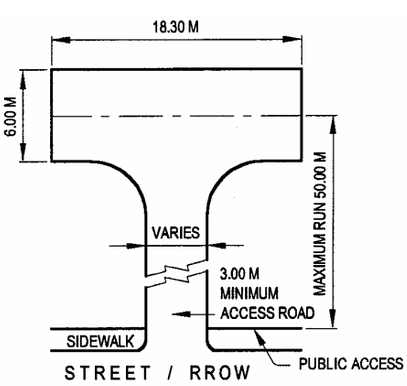
CUL-DE-SAC

Figure VIII.G.7.



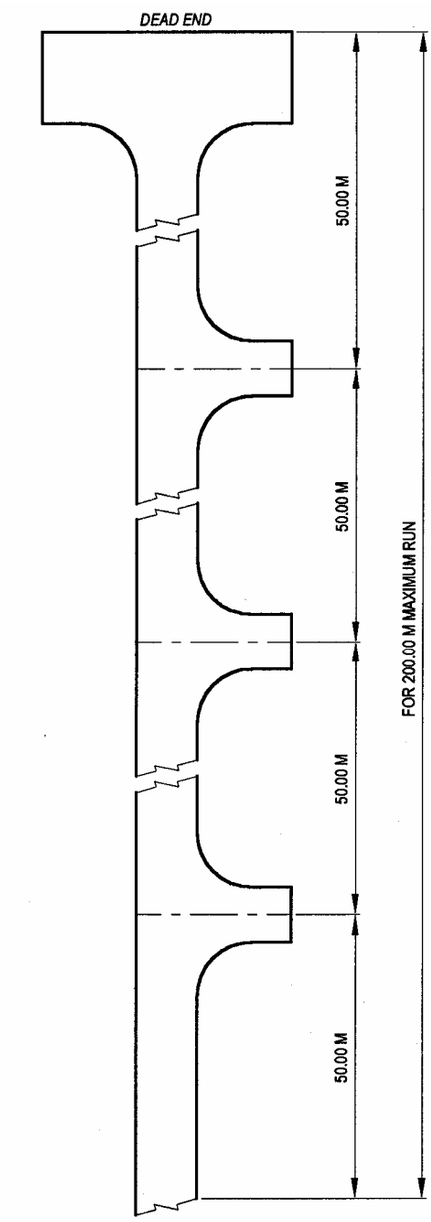
TURN COURT

Figure VIII.G.8.



TURN COURT

Figure VIII.G.9.

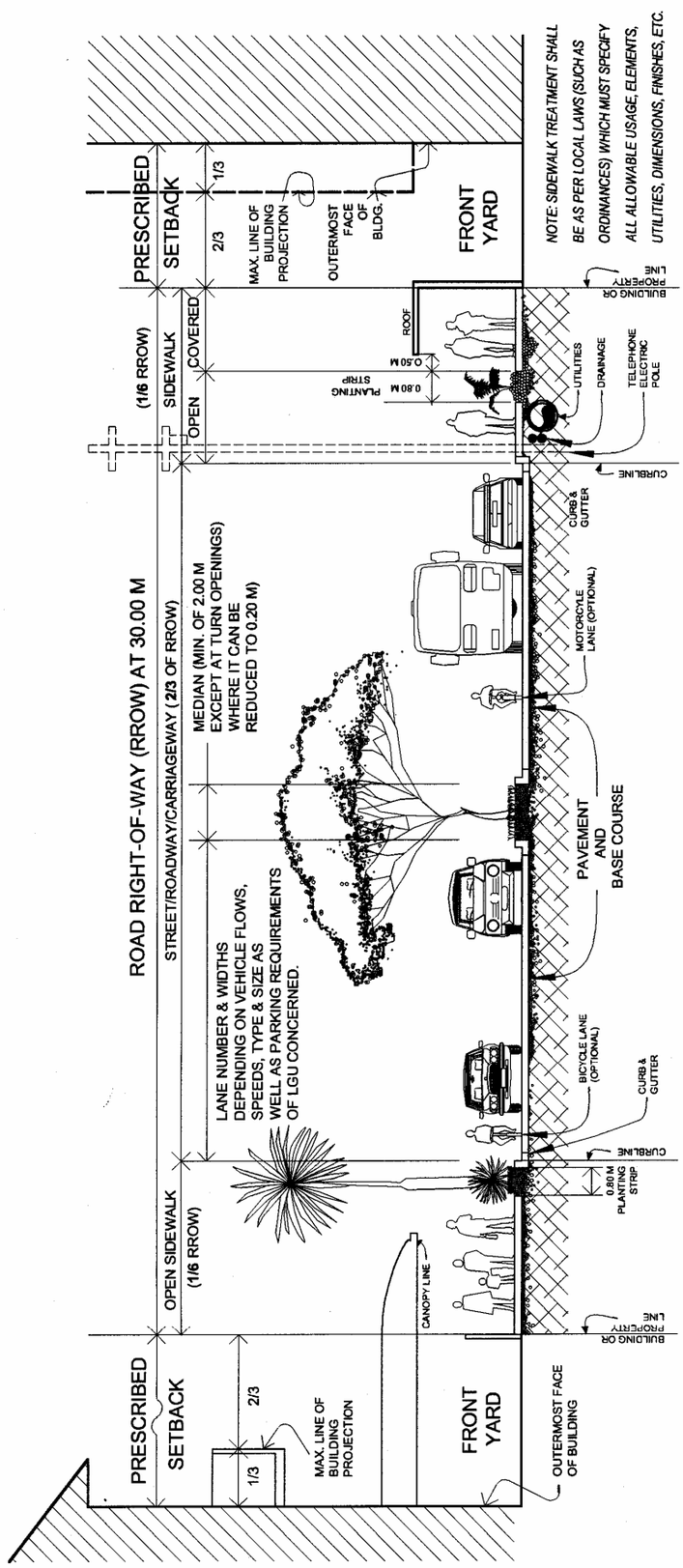


NOTE: WHERE LENGTH OF RUN IS 200.00 M, A CUL-DE-SAC OR TURN COURT SHALL BE PROVIDED FOR EACH MAXIMUM RUN.

Figure VIII.G.10.

ALL PRIVATE ROADS OR ACCESS TO INTERIOR LOTS SHALL BE ACCESSIBLE TO STREET OR PUBLIC SPACE OR YARD AND SUCH SHALL CONFORM TO SUCH PROVISIONS AS TO YARDS AND *TABLE VIII.G.3.*

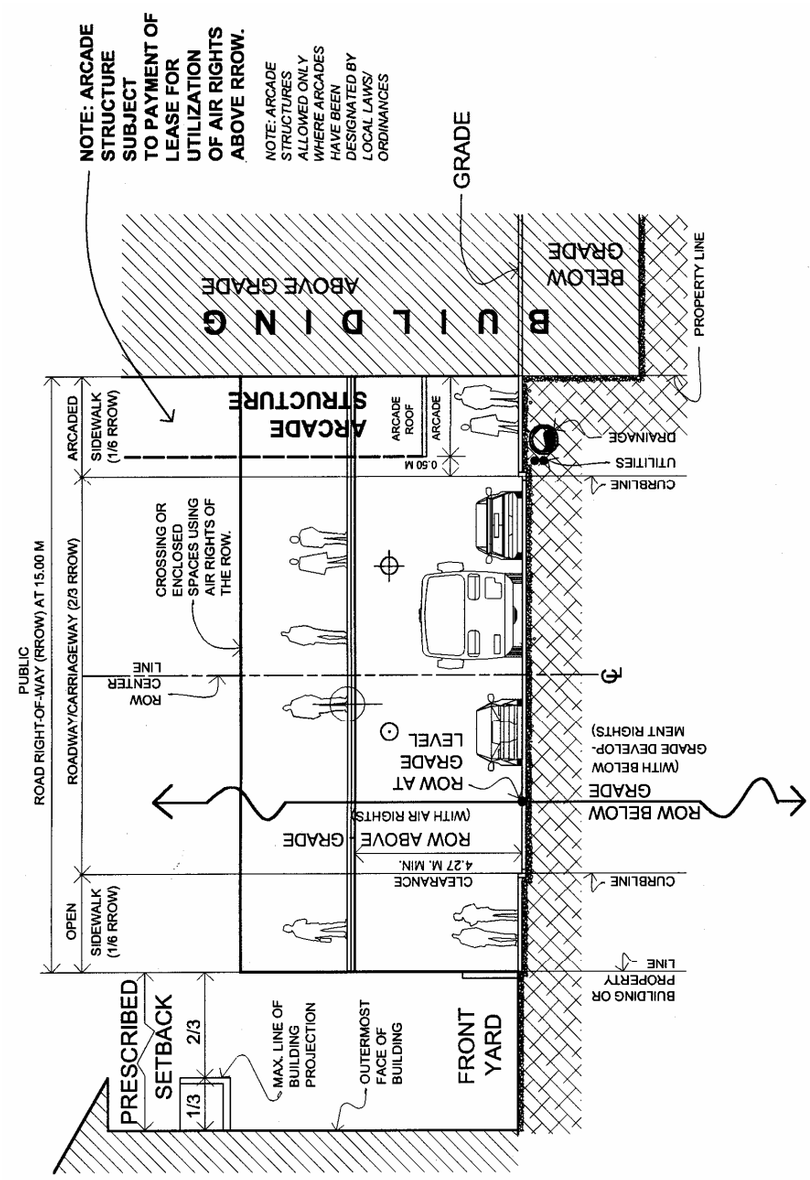
*Annotation: The **minimum** 3.0 m wide access road necessarily includes all provisions for drainage and for utility lines. It must be maintained free of all forms of obstructions at all times, particularly parked or abandoned vehicles that may impede rescue/emergency response. Trees or plants should **not** be sited within any part of the **minimum** 3.0m wide access road i.e. suggested for planting within the property limits instead.*



POSSIBLE ROAD RIGHT-OF-WAY (RROW) SECTION (30.00 M)

Figure VIII.G.11.

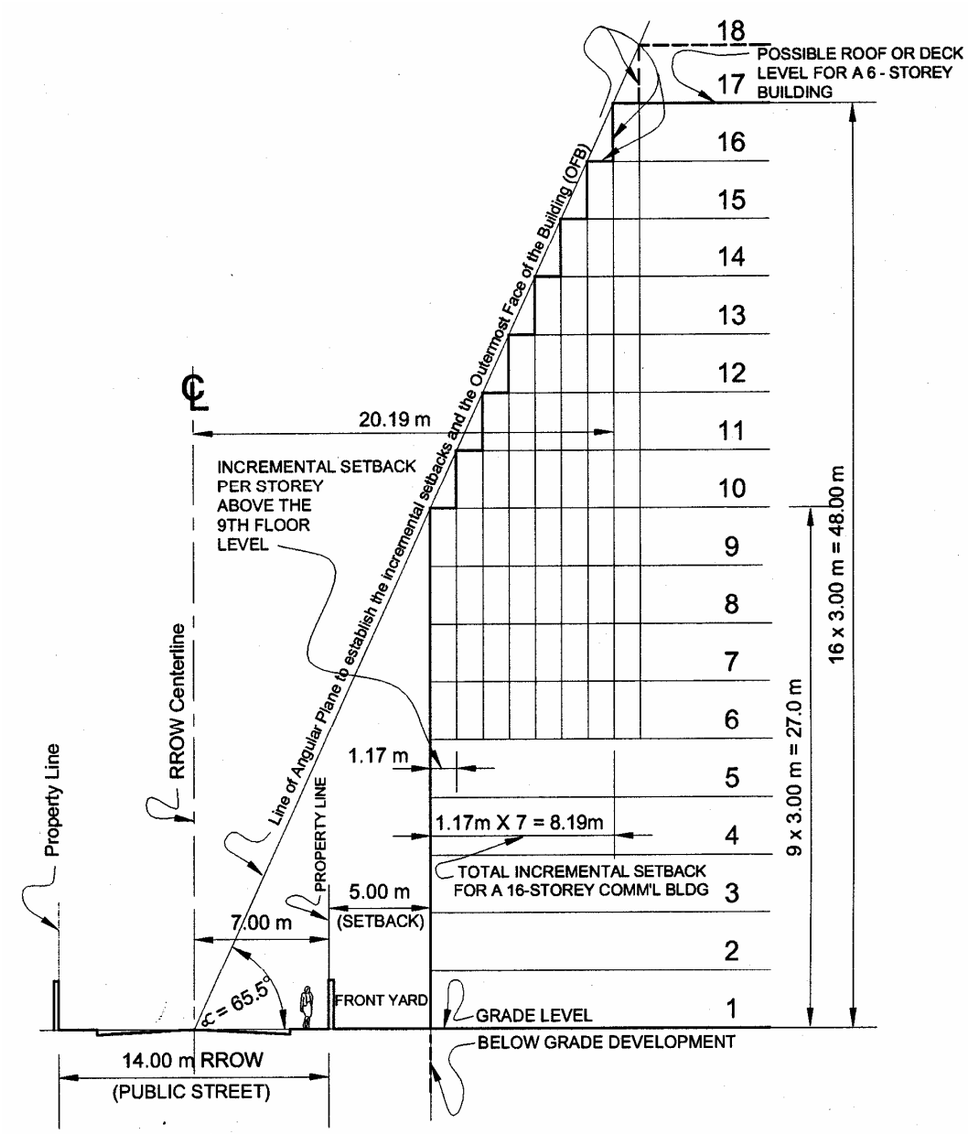
Annotation: Carriageway widths must also be measured in terms of standard-width lanes based on legal/allowed vehicle speeds on the thoroughfare.



LEVELS OF THE ROAD RIGHT-OF-WAY (RROW)
(AT A RROW OF 15.00 M ONLY)

Figure VIII.G.12.

Annotation: Assuming the necessary permits and/or required leasing arrangements for the use of air rights and below-grade rights are perfected, all three levels of RROW development could be introduced/ integrated.



ANGLE FROM RROW CENTERLINE THAT DETERMINE THE INCREMENTAL SETBACK AND OFB OF C-3 BUILDINGS/STRUCTURES ALONG A 14.00 M RROW

NOTE: SEE *FIGURE VIII.20.* RULE VIII FOR RELATED REAR AND SIDE INCREMENTAL SETBACK AND OFB OF C-3 BUILDINGS/ STRUCTURES.

Figure VIII.G.13.

*Annotation: The **incremental setbacks** are not intended for adoption as architectural design standards. These are only tools to **limit** floor area generation using climatic conditions as bases. The actual design solution may actually have a different configuration that must however match the limit prescribed by the incremental setbacks.*

D. SIDEWALKS

1. Subject to existing laws and regulations, the **local planning authority** shall determine which street shall have an **open sidewalk or an arcaded (covered) sidewalk**, or a **combination** of both.

2. The **minimum** width of the sidewalk for a **RROW width of 9.00 meters or more shall be 1.20 meters on each side of the RROW** or a total of 2.40 meters on both sides of the RROW (***Fig. VIII.G.14.***). For the minimum width of sidewalk for RROW of less than 9.00 meters wide, refer to ***Table VIII.G.3***.

3. Sidewalk widths shall be based on the following considerations:

   a. Volume of pedestrians (end-users, visitors and the like) who will use the sidewalk on a regular basis;
   b. Type, intensity or level of operation and size/expanse of the allowed uses/ occupancies along the RROW;
   c. The types and volume of street furniture, e.g., street lighting and traffic signs/signal supports, pedestrian barriers/aids, etc., and other urban design elements that will be allowed as permanent developments design elements that will be allowed as permanent developments within the width of the sidewalk;
   d. The width of the planting strips;
   e. The spatial needs for servicing utility/service lines underneath the sidewalk and for utility/service poles;
   f. Compliance with accessibility requirements as stipulated under *Batas Pambansa Blg.* 344 (Accessibility Law);
   g. Provisions for commuters, e.g., waiting sheds, loading/unloading areas and the like;
   h. Provisions for vehicle crossings/driveways between the roadway/carriageway and the front yards of lots or buildings/structures or provisions for loading/unloading platforms if allowed;
   i. Need for introduction of allowed uses/ elements within the sidewalk area only if there is sufficient sidewalk width, e.g., bicycle lanes, jogging lanes and the like; and
   j. Climate, light, ventilation, safety, security and overall maintenance of the sidewalk and all its surface areas.

4. Sidewalks shall be of **uniform width** throughout the entire length of the street. The sidewalk width grade and finish of the **dominant use**/occupancy along the RROW shall be generally observed.

5. The width of the sidewalk shall be as follows:

Table VIII.G.4. **Range of Required Sidewalk and Planting Strip Widths (total at both sides of RROW) by RROW Width**

Road Right-Of-Way (RROW) Width	Range of Required Sidewalk Widths (Total at both sides of RROW)
30.00 meters & above	From 1/6 up to 1/4 of RROW Width
25.00 - 29.00 meters	From 1/6 up to 1/3 of RROW Width
20.00 - 24.00 meters	From 1/6 up to 1/3 of RROW Width
10.00 - 19.00 meters	From 1/4 up to 1/3 of RROW Width
Below 10.00 meters	From 1/4 up to 1/3 of RROW Width

6. The width of the sidewalk shall include both the paved and unpaved (planted) portions. (see Table VIII.G.5.)

Table VIII.G.5. **Minimum Planting Strip Widths by RROW Width**

Road Right-Of-Way (RROW) Width	Total Minimum Widths of Planting Strip within RROW* (width per sides of RROW) (meters)
30.00 meters & above	1.20 (0.60)
25.00 - 29.00 meters	0.60 (0.30)
20.00 - 24.00 meters	0.60 (0.30)
10.00 - 19.00 meters	0.40 (0.20)
Below 10.00 meters	Optional

Note:

* *Minimum width of planting strip (for grass and shrubs) is 200 millimeters for* ***each side*** *of the RROW. The minimum width of planting strip (for trees) is 300 millimeters for* ***each side*** *of the RROW.*

7. For allowed, disallowed and prohibited structures/developments at RROW, refer to **Sections C.1. (a) and C.1. (b) of this Guideline**.

8. The sidewalk pavement shall have a non-slip surface and shall slope down from the building line towards the curb line at not more than 1/50 and shall level off with the curb. (***Fig. VIII.G.14.***)

9. Sidewalks of 2.00 meters or more in width shall include on its outer side a planting strip of not less than 800 millimeters in width up to a maximum of 1/3 of the allowed sidewalk width, separating the curb from the sidewalk pavement. The planting strip must always be near the curbline. (***Fig. VIII.G.15.***)

10. Combined open and arcaded sidewalks shall be provided with a planting strip of not less than 800 millimeters in width up to a maximum of 1/3 of the allowed sidewalk width, as a separating strip between the arcaded portion and the open portion of the sidewalk. (***Fig. VIII.G.16.***)

11. Grade of Sidewalks
    a. Sidewalks shall, as much as possible, be level and of uniform grade throughout the entire length of the street.
    b. Whenever the slope of the street does not exceed 1/12 the sidewalk grade shall follow the level or slope of the street. (***Fig. VIII.G.17.***)
    c. Whenever the slope of the street is 1/10, the sidewalk shall be maintained level for every 20.00 to 40.00 meters of run (***Fig. VIII.G.18.***). Sidewalks of different levels shall be joined by means of a ramp having any convenient slope not exceeding 1/6. (***Fig. VIII.G.18.***)
    d. When the grade of two (2) connecting sidewalks are between 1/10 and 1/8, the two sidewalks shall be joined by means of a ramp having any convenient slope not exceeding 1/10.

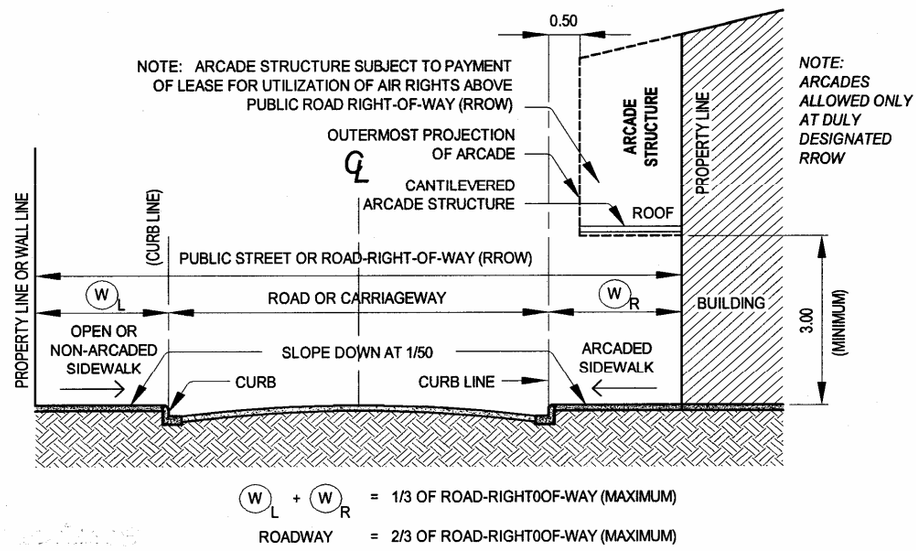


Figure VIII.G.14.

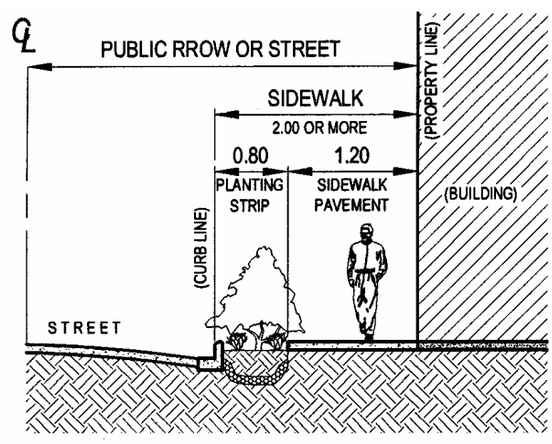


Figure VIII.G.15.
SIDEWALKS & PLANTING STRIPS

Figure VIII.G.16.
SIDEWALKS & PLANTING STRIPS

*Annotation: The arcades shown above were originally for **widened** RROWs where **property recovery** was necessary through **air rights utilization**. If **no** road widening occurs, **arcade structures** above sidewalks represent the **use of public domain**, for which leases need to be paid to the LGU or the DPWH as the case may be. Arcades and arcade structures are best sited **within** the property limits.*

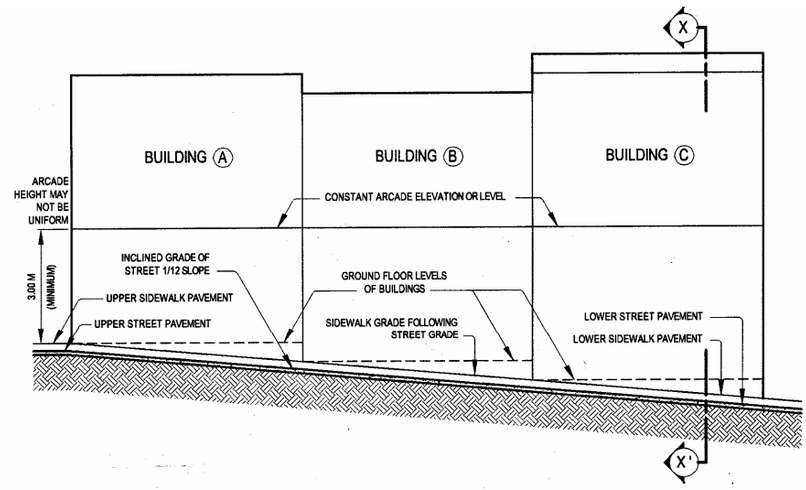


Figure VIII.G.17.

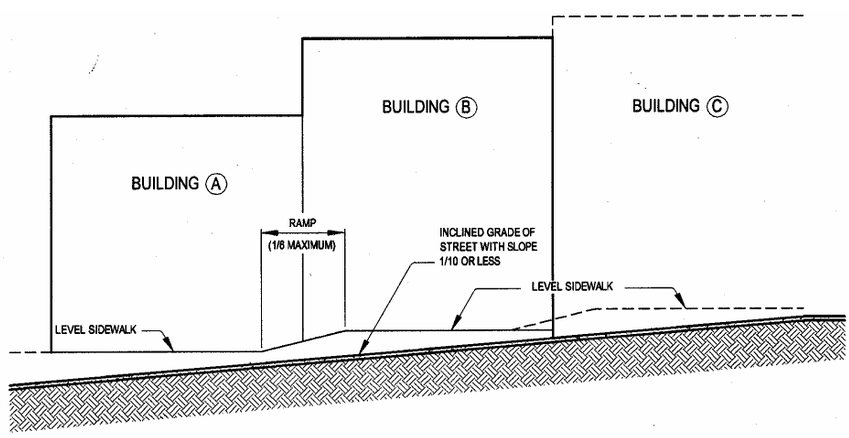


Figure VIII.G.18.

GRADE OF SIDEWALKS

Annotation: Ramped or inclined sections of the sidewalk should have heavily textured surfaces for traction and better surface drainage. Sever inclines for sidewalks should be accompanied by railings or guides for additional safety of the end-users.

12. Driveways, Entrances and Exits

    a. Driveways Across Sidewalks

        i. To maximize the use of the sidewalk area, the surface of the sidewalk and the driveway shall as much as possible, be at the same plane. The entry ramp of the driveway connecting the roadway surface to the sidewalk surface shall have a slope ranging from 1/3 to 1/4. (***Figs. VIII.G.19.*** and ***VIII.G.20.***)

        ii. Whenever the height of the curb is more than 200 millimeters, driveways may be constructed across the entire width of the sidewalk, provided that the driveway shall be joined to the sidewalk by means of a ramp of rough finish have a slope of not more than 1/8. The driveway and the ramp shall be made of the same materials as that of the sidewalk. (***Figs. VIII.G.19., VIII.G.20.,*** and ***VIII.G.21.***)

        iii. Entrances and exits of buildings abutting sidewalks shall be made of either ramps or steps.

        iv. Entrance and exits ramps shall have a slope not exceeding 1/10. (***Fig. VIII.G.22.***)

        v. Entrance or exit steps shall have treads of not less than 300 millimeters. The minimum number of steps shall be two (2) with risers not exceeding 100 millimeters.

        vi. **No portion of either entrance or exit ramps or steps shall intrude into the sidewalk pavement**.

13. Obstruction on Sidewalks

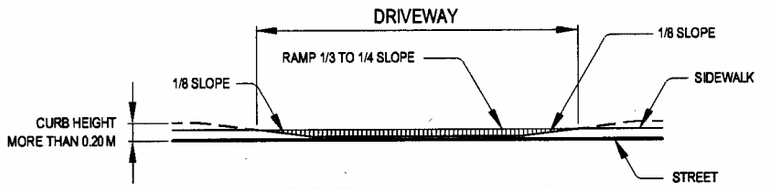
    a. Under no circumstances shall obstruction of any kind be allowed on sidewalks, whether open or arcaded. This specifically refers to all forms of commercial signs and commercial structures that impede sight lines or pedestrian traffic along the sidewalk.

    b. Planted areas forming part of the sidewalk or arcade shall not be fenced in to allow passage of pedestrians and disabled in transit.

14. Curb Configurations

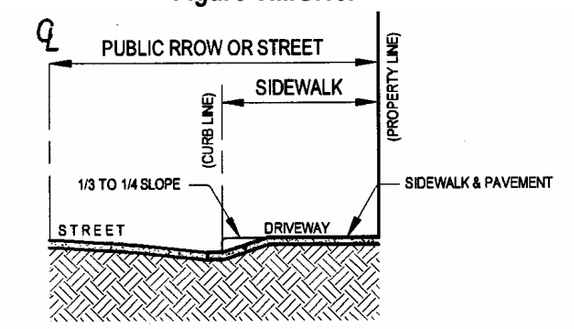
    a. **Mountable** curbs shall only be allowed if the sidewalk width on each side of the RROW is at a minimum of 5.00 meters wide.

    b. For greater protection of pedestrians and the disabled, **raised** curbs are encouraged for use along sidewalks that are less than 5.00 meters in width.



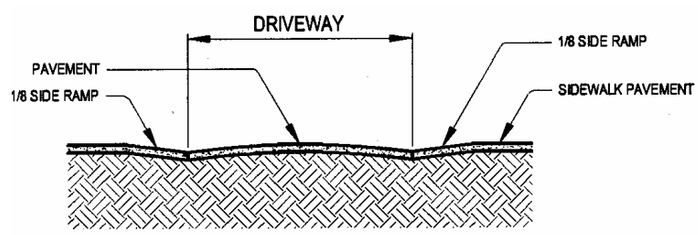
FRONT ELEVATION OF DRIVEWAY

Figure VIII.G.19.



SIDE ELEVATION OF DRIVEWAY

Figure VIII.G.20.



CROSS SECTION OF DRIVEWAY

Figure VIII.G.21.

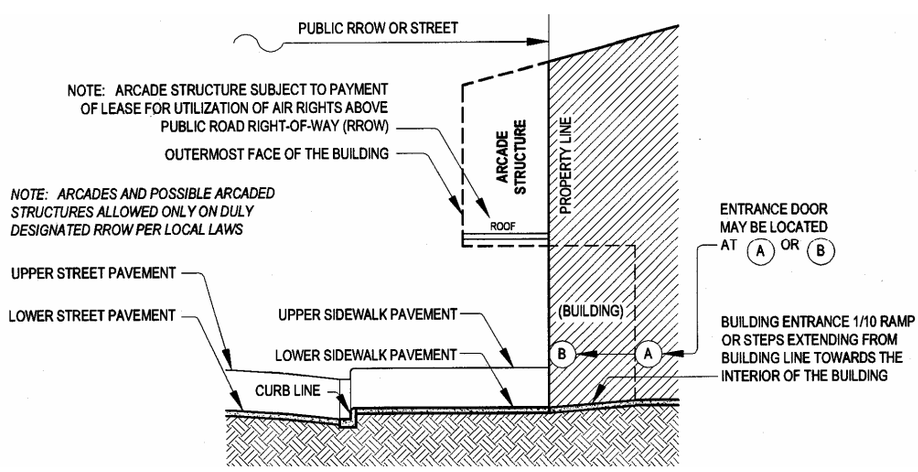


Figure VIII.G.22.

DRIVEWAYS ACROSS SIDEWALKS

Annotation: The foregoing examples are particularly important for basement/below grade and above grade entrances/exits to covered parking areas

E. TOTAL OPEN SPACE REQUIREMENTS ON LOTS BY USE/OCCUPANCY, TYPE/LOCATION AND SUGGESTED MINIMUM LOT SIZES, LOT DIMENSIONS & TYPES BY USE/OCCUPANCY

Table VIII.G.6. **Minimum TOSL Requirements by Lot Type/Location**
Note: Higher Percentages (%) may apply for lots with ***Minimum*** *Total Lot Area (****TLA****).*

LOT TYPE/ LOCATION*	MINIMUM PERCENTAGE OF OPEN SPACE BY OCCUPANCY TYPE** (for Proposed Developments **without Firewalls** or Abutments)			MINIMUM PERCENTAGE OF OPEN SPACE BY OCCUPANCY TYPE** (for Proposed Developments **with Permitted Firewalls** or Allowed Abutments)		
	A & B (Residential or Institution-al) & C, D, E-2 and H (Institutional)	H-1, H-2, H-4 and I (Cultural) and E-1 and E-3 (Transportat-ion/Utility)	All Other Uses/ Occu-pancy	A & B (Residential or Institutional) & C, D,E-2 and H (Institutional)	H-1, H-2, H-4 and I (Cultural) and E-1 and E-3 (Transportat-ion/Utility)	All Other Uses/ Occu-pancy
Interior or Rear Lot (Lot located in the interior of a block made accessible from a public street or alley by means of a private access road); see ***Figure VIII.2.***	40% (for **R-1** use or occupancy only), 30% (for **R-2** use or occupancy only) and 30% (for other residential uses or occupancy); and 50% (for all classes of institutional uses or occupancy)	40% (for all classes of cultural use or occupancy) and 50% (for **all** classes of transportat-ion/ utility use or occupancy)	20%	* 25%** (for **R-2**) 20%*** (for other residential) 40%**** (for **all** institutional)	30% # (for **all** cultural) 40% ## (for **all** transportat-ion/ utility/ services)	15%

Inside Lot otherwise referred to as a Regular Lot (Non - corner or single frontage lot); see ***Figure VIII.3.***	50% (for R-1 use or occupancy only), 40% (for R-2 use or occupancy only) and 30% (for other residential uses or occupancy); and 50% (for all classes of institutional uses or occupancy)	40% (for all classes of cultural use or occupancy) and 50% (for all classes of transport-ation/utility use or occupancy)	25%	* 30%** (for R-2) 20%*** (for other residential) 40%**** (for all institutional)	30% # (for all cultural) 40% ## (for all transportation / utility/ services)	15%
Corner Lot+ or Through Lot; see ***Figures VIII.4. and VIII.5***. +Note: For corner lots, the largest setback requirement shall apply to the two (2) sides serviced by the RROW.	30% (for R-1 and all other residential uses or occupancy); and 40% (for all classes of institutional uses or occupancy)	35% (for all classes of cultural use or occupancy) and 40% (for all classes of transport-ation/ utility use or occupancy)	20%	* 25%** (for R-2) 20%*** (for other residential) 30%**** (for all institutional)	30% # (for all cultural) 30% ## (for all transportation / utility/ services)	10%

End Lots bounded on two (2) or more sides by the property line of the subdivision or by public open spaces such as easements of lake/ sea-shores, rivers, esteros, etc. and accessible only through one (1) side of the lot; see ***Figure VIII.8.***	40% (for **R-1** use or occupancy only), 30% (for **R-2** use or occupancy only) and 30% (for other residential uses or occupancy) and 50% (for all classes of institutional uses or occupancy)	40% (for **all** classes of cultural use or occupancy) and 50% (for **all** classes of transportat-ion/utility use or occupancy)	20%	* 25%** (for **R-2**) 20%*** (for other residential) 40%**** (for **all** institutional)	30% # (for **all** cultural) 40% ## (for **all** transportation /utility /services)	15%

Corner-Through Lots or Corner Lots+ abutting three (3) or more public open spaces such as streets, alleys, ease-ment of lake/sea-shores, rivers, esteros, etc.; see ***Figures VIII.6 . and VIII.7.*** +Note: For corner lots, the largest setback requirement shall apply to the two (2) sides serviced by the RROW.	30% (for **R-1** and all other residential and commercial uses or occupancy) and 40% (for **all** classes of institutional uses or occupancy)	35% (for **all** classes of cultural use or occupancy) and 40% (for **all** classes of transportat-ion/utility use or occupancy)	10%	* 25%** (for R-2) 20%*** (for other residential and commercial) 30%**** (for all institutional)	30% # (for **all** cultural) 30% ## (for **all** transportat-ion/utility/ services)	5%

Notes:

* *with absolutely no firewalls/abutments allowed for R-1 use.*

** *with firewall/abutment allowed on only one (1) side property line and absolutely no firewall/abutment at front and rear property lines for R-2 use.*

*** *with firewalls/ abutments allowed on two (2) side property lines only or on one (1) side property line and the rear property line and absolutely no firewall/abutment at front property lines for R-3 and R-5 uses; and with firewalls/ abutments allowed on two (2) side property lines only and absolutely no firewall/abutment at the front and rear property lines for R-4 use.*

**** *with firewalls/abutments for all classes of institutional uses.*

\# *with firewall/abutment allowed on only one (1) side for all classes of cultural uses.*

\#\# *with firewalls/abutments allowed on two (2) sides only or on one (1) side and rear boundary for all classes of transportation/utility uses.*

\+ *Refer to Rule VIII - Figures VIII.2. through VIII.8. for lot type/location.*

++ *Refer to Rule VII for occupancy grouping.*

Table VIII.G.7. **Suggested Minimum Lot Sizes, Lot Dimensions and Types by Use or Occupancy**

Use or Occupancy (preferably based on Duly-Approved Local Zoning Ordinance)	Lot Location/Type				
	Interior (or Rear) Lot (See **Rule VIII-*Figure VIII.2.***)	**Inside (or Regular) Lot** (See **Rule VIII-*Figure VIII.3.***)	**Corner Lot or Through Lot** (See **Rule VIII-*Figures VIII.4.& VIII.5.***)	**End Lot** (See **Rule VIII-*Figure VIII.8.***)	**Corner-Through Lot or Corner Lot Abutting 3 or More Streets, etc.** Rivers, etc. (See **Rule VIII-*Figs. VIII.6. & VIII.7.***)
Residential 1 (**R-1**)	301.00 sq. meters 21.50 meters wide *(w)* x 14.00 meters deep *(d)*	301.00 sq. meters 14.00 meters *(w)* x 21.50 meters *(d)*	365.00 sq. meters 17.00 meters *(w)* x 21.50 meters *(d)*	548.00 sq. meters 25.50 meters *(w)* x 21.50 meters *(d)*	365.00 sq. meters 17.00 meters *(w)* x 21.50 meters*(d)*
Basic Residential 2 (**R-2**) Medium Density Housing (single family dwelling unit with a **BHL** of 10.00 meters)	**Not** Allowed	80.00 sq. meters 8.00 meters *(w)* x 10.00 meters *(d)*	96.00 sq. meters 9.60 meters *(w)* x 10.00 meters *(d)*	140.00 sq. meters 14.00 meters *(w)* x 10.00 meters *(d)*	96.00 sq. meters 9.60 meters *(w)* x 10.00 meters *(d)*
Maximum **R-2** Medium Density Housing (multiple family dwelling units within one building/ structure with a **BHL** of 15.00 meters)	**Not** Allowed	192.00 sq. meters 12.00 meters *(w)* x 16.00 meters *(d)*	261.00 sq. meters 14.50 meters *(w)* x 18.00 meters *(d)*	378.00 sq. meters 21.00 meters *(w)* x 18.00 meters *(d)*	261.00 sq. meters 14.50 meters *(w)* x 18.00 meters *(d)*

Basic Residential 3 (**R-3**) High Density Housing (single family dwelling unit with a **BHL** of 10.00 meters)	**Not** Allowed	50.00 sq. meters 4.00 meters *(w)* x 12.50 meters *(d)*	75.00 sq. meters 6.00 meters *(w)* x 12.50 meters*(d)*	200.00 sq. meters 16.00 meters *(w)* x 12.50 meters *(d)*	75.00 sq. meters 6.00 meters *(w)* x 12.50 meters *(d)*
Maximum R-3 High Density Housing (multiple Family dwelling units within one building/ structure with a **BHL** of 36.00 m)	Not Allowed	400.00 sq. meters 16.00 meters (w) x 25.00 meters (d)	475.00 sq. meters 19.00 meters (w) x 25.00 meters (d)	700.00 sq. meters 28.00 meters (w) x 25.00 meters (d)	475.00 sq. meters 19.00 meters (w) x 25.00 meters (d)
Residential 4 (**R-4**) Individual Townhouse Lots	**Not** Allowed	96.00 sq. meters 8.00 meters (w) x 12.00 meters (d)	120.00 sq. meters 10.00 meters (w) x 12.00 meters (d)	180.00 sq meters 15.00 meters (w) x 12.00 meters (d)	120.00 sq. meters 10.00 meters (w) x 12.00 meters (d)
Residential 5 (**R-5**)	**Not** Allowed	500.00 sq. meters 18.50 meters (w) x 27.00 meters (d)	540.00 sq. meters 20.00 meters (w) x 27.00 meters (d)	945.00 sq. meters 35.00 meters (w) x 27.00 meters (d)	540.00 sq. meters 20.00 meters (w) x 27.00 meters (d)
Commercial 1 (**Com-1**)	**Not** Allowed	204.00 sq. meters 12.00 meters (w) x 17.00 meters (d)	238.00 sq. meters 14.00 meters (w) x 17.00 meters (d)	**Not** Allowed	238.00 sq. meters 14.00 meters (w) x 17.00 meters (d)
Commercial 2 (**Com-2**)	**Not** Allowed	301.00 sq. meters 14.00 meters (w) x 21.50 meters (d)	365.00 sq. meters 17.00 meters (w) x 21.50 meters (d)	**Not** Allowed	365.00 sq. meters 17.00 meters (w) x 21.50 meters (d)
Commercial 3* (**Com-3**)	**Not** Allowed	600.00 sq. meters 20.00 meters (w) x 30.00 meters (d)	813.00 sq. meters 25.00 meters (w) x 32.50 meters (d)	**Not** Allowed	813.00 sq. meters 25.00 meters (w) x 32.50 meters (d)

Note:

* *Suggested minimum lot sizes, lot dimensions, types and restrictions for Commercial 3 (C-3) lots may also apply to Industrial (I), General Institutional (GI) and Cultural (C) Uses or Occupancies.*

F. BASEMENTS

1. Maximum Configuration of Basement Levels

   While basements may be developed for medium to very high density residential, commercial, institutional and mixed-use developments, its planning, design and construction shall observe the following limitations:

   a. The **minimum** road right-of-way (RROW) width that services the lot on which the basement can be constructed should be at least 10.00 meters wide;

   b. For basements to be allowed, the prescribed setbacks and yards must be satisfied for the building/structure above grade inasmuch as the very same setbacks shall apply below grade to determine the maximum depth or width of the basement level;

   c. If the Code prescriptions for introducing natural light and ventilation into all basement levels are first satisfied (refer to ***Fig. VIII.G.23.***), the maximum depth of the basement can then be made equal to one-half of the height of the building above grade; if the prescriptions for natural lighting and ventilation are satisfied, the basement depth can therefore be as much as one-third of the combined height of the building to be constructed above grade and below grade;

   d. The center portion of all basement levels shall be reserved for the satisfaction of the basement level may extend by a minimum clear distance of 1.40 meters from the outermost face of the building (**OFB**) at grade level;

   e. The **OFB** at the second and lower basement levels shall follow the line of the **OFB** at grade level; and

   f. All drainage structures below grade shall not exceed the **OFB** below grade.

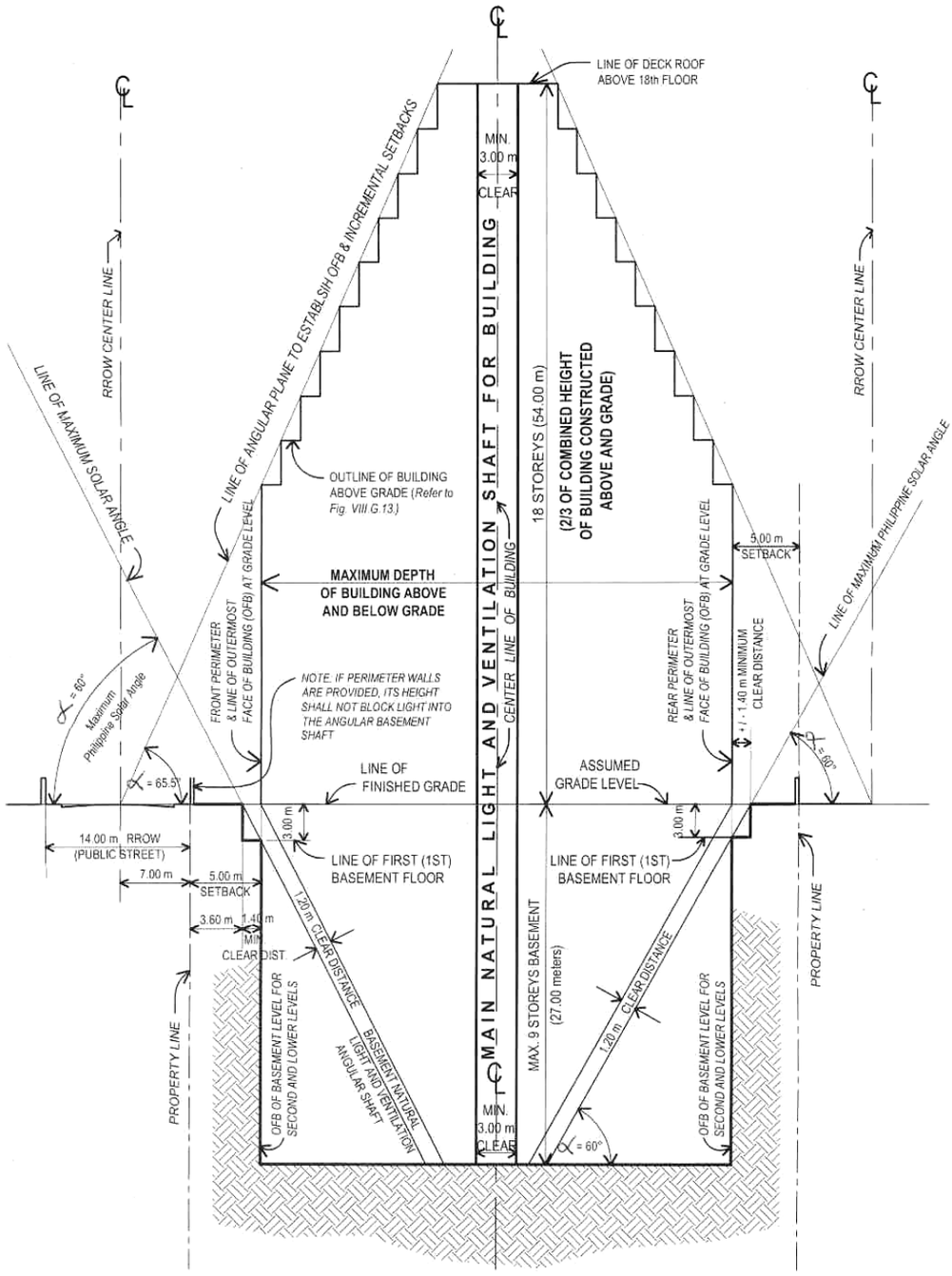
2. Minimum Provisions for Natural Lighting and Ventilation at Basement Levels

   If basements are to be developed, the following minimum provisions for natural light and ventilation shall be satisfied:

   a. A primary or main natural light and ventilation shaft (vertical) with a clear distance of at least 3.00 meters shall be located at the center of the building and shall traverse the entire combined height of the building above and below grade; (refer to ***Fig. VIII.G.23***)

   b. Secondary or support natural light and ventilation shaft/s (angular) with a clear distance of at least 1.20 meters shall emanate from the front and rear perimeters of the building and shall traverse the entire depth of the basement; the angular shaft/s shall be at an angle of 60º from the horizontal, consistent with the **maximum** Philippine solar angle; separate angular shafts emanating from the side perimeters of the building are encouraged; and

   c. Both the vertical and angular shafts shall only be used for natural air and light intake and shall not be used for any form of exhaust or air exchange to keep the temperature inside the shafts at a minimum.



MAXIMUM BASEMENT CONFIGURATION AND MINIMUM NATURAL VENTILATION PROVISIONS FOR BASEMENT CONSTRUCTION

FOR A C-3 BUILDING ALONG 14.00 m RROW

Figure VIII.G.23.

Annotation: The diagonal light shafts through the basement levels consist of imaginary lines of available natural light i.e. not an actual diagonal light shaft. The diagonal lines partly represent natural light-connected grated openings on the basement floors.

G. DESIGN OF PUBLIC BUILDINGS/STRUCTURES

1. General

a. Public buildings/structures are permanent edifices owned by the government, whether national or local, its agencies, including government-owned and/or controlled corporations.

b. Design of public buildings/structures shall conform to the applicable provisions of the preceding rules and regulations. Aside from being logically functional and structurally sound, should promote, enhance and express the aesthetic presentability, customs and traditions, socio-economic values environmental quality and cultural heritage of the region concerned towards evolving a distinct Filipino Architecture.

c. The architectural character of public buildings/structures must fully express the nature of their function, use or occupancy and should reflect their identity as public buildings/structures compatible with their total macro and microenvironment.

d. Public buildings/structures should be designed for permanence but with maximized flexibility to allow for future adjustments in their uses/occupancies.

e. Use of indigenous and/or locally manufactured/produced materials such as marble, stone, adobe, clay tiles, wood, coco wood, *kapis* shells, should be maximized unless their production or usage are banned or regulated by the government to promote the efforts to conserve natural resources.

f. Use of natural light and ventilation by means of proper orientation, cross ventilation, convection, sun control devices and the like should be maximized.

g. Choice of finishes should aim to minimize maintenance costs.

h. The architectural plan and design must basically reflect the functional manner or spatial utilization and/or the evolving Filipino, Asian or International usage of spaces that need to be projected if required or used, more than just attention to pure forms/images.

i. Only the use of good to high quality materials, labor, technologies and construction methods within the approved budget, must be specified by its planners and designers to ensure permanence, long continued use and low maintenance cost of public buildings or structures.

j. Plans and designs of all public buildings must fully comply with all of the planning and design requirements under the **Code** and this **IRR** including the Fire Code of the Philippines (**PD No. 1185**) and the Accessibility Law (**BP Blg. 344**).

k. Strictly consider proper landscaping analysis and design not only for aesthetics but more so for the prevention of erosion of its site and immediate vicinity, and for ecological balance.

l. These requirements are not intended to limit the creativity of the designer nor preclude the use of advanced or innovative technology particularly in instances wherein mandated compliance under this Guideline shall present a major difficulty in or hamper the proper execution of the plan, design or architectural concept.

2. Site Selection

   a. Where a project site is yet to be selected, the potential site must be compatible with the project usage. The site should be accessible, and near power, water, sewerage, drainage as well as transportation, communication and solid waste management system for practical and economic considerations.

   b. Site analysis should show an accurate and thorough understanding of the site. It should include, but not limited to, consideration of topography, point of access, existing buildings/structures/utilities/services, trees, soil characteristics, existing and approved land uses, views and vulnerabilities to flooding, erosion, seismic activity or other threats.

   c. The site must be properly and completely described, clearly defining its technical boundaries, showing access thereto such as highway, road or alley and indicating easements, encroachments, approved building lines, proposed road widening, existing buildings/structures, utilities/services and trees. For site on rolling grounds or steep slope, its contour lines must be shown at convenient intervals.

3. Site Development

   a. *Location and Orientation* - Locate and orient the buildings to maximize the use of natural ventilation and lighting and minimize energy consumption within the constraints of the functional requirements, the topography and site configuration. North-south exposure of buildings has the advantage of maximizing the cooling effect of prevailing winds coming from the southeasterly and southwesterly directions. Such exposures minimize the effect of afternoon solar heat at the same time.

   b. *Site Drainage* - Drainage is a basic site design consideration and must be done in conjunction with siting and orientation of buildings, location of parking lots and roads, consideration of topography and compliance with functional site requirements. Parking lots, roads and walks must be graded to assure positive drainage for each major site element and must be coordinated into a total drainage system. Existing drainage ways, if any, should be utilized to retain the original character of the site and to avoid unnecessary earthwork.

   c. *Grading Design* - Balance the cut and fill for the entire site as closely as possible to eliminate the need for hauling earth on or off the site. If topography for areas required for parking, roadways and other site features require cut and fill, selection of finished elevations for backfilling of the entire site should be well studied and appropriate.

   d. *Vehicular and Pedestrian Access and Circulation* - Access and circulation patterns to and within the site must be studied in the process of site planning. Easy and direct access and smooth circulation should be provided for vehicles and pedestrians including for disabled persons.

   e. *Site Utilities and Services* - Provide adequate underground utilities and services such as concrete or masonry trench with retractable covers for maintenance and avoid diggings of new roads. The trench alignments shall be coordinated with paving of roads and landscape, including future extensions, to avoid conflicts with these site elements. Provide most economical run, and minimize the possibility of utility relocation. Coordinate the location of underground site utilities and services such as power, water supply, sewerage communications and drainage systems to reduce the possibility of utility/service crossing and contamination.

(emphases, underscoring and annotations supplied)

Rule IX follows