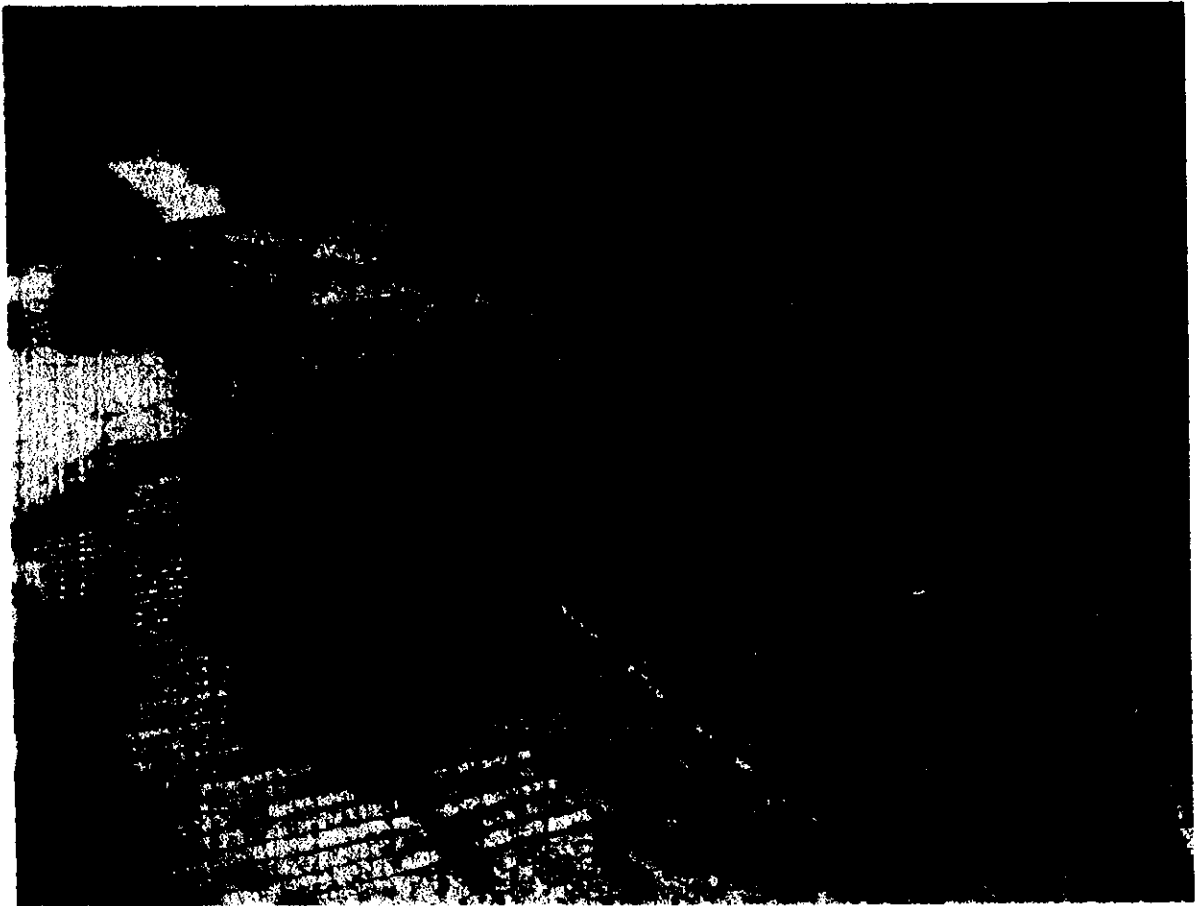


**SSTRIMM**  
**Traffic Management Manual**



Annex A  
**Transport and Traffic Terms**

---

# Annex A

## Transportation and Traffic Terms

Some terms and definitions used in this Manual and commonly used in Traffic Management, are presented in this annex.

**Abandoned vehicle** – any vehicle left unattended for more than twenty-four (24) hours on a public highway.

**Acceleration lane** – a speed change lane used for increasing speed and merging with fast moving vehicles.

### Accidents

**Motor Vehicle Accident** – Any event that results in unintended injury or property damage attributable directly or indirectly to the motion of a motor vehicle or its load.

**Motor Vehicle Traffic Accident** – Any motor vehicle accident occurring on any highway, street, or road, or any way or place of which any part is open for the use of the public.

**Acquisition or Taking** – The process of obtaining right of way.

**Alley** – A narrow lane between houses or buildings giving access to the rear of those houses or buildings.

**Allotment** – An action by administrative authority making funds available for obligations and expenditures for specified purposes and for certain periods.

**Apportionment** – An administrative assignment of funds based on a prescribed formula by a governmental unit to another governmental unit for specific purposes and for certain periods.

- Appropriation** – An act of a legislative body which makes funds available for expenditures with specific limitations as to amount, purpose, and period.
- Authorized maintenance vehicle** – any vehicle of the city government used in street lighting, traffic signal, highway construction and highway repair and maintenance works.
- Authorized tow vehicle** – any vehicle specially constructed for towing vehicles, other than trucks and farm or road tractors, which is designated as an authorized tow vehicle by the City.
- Auxiliary Lane** – The portion of the roadway adjoining the through traveled way for parking, speed change, turning, storage for turning, weaving, truck climbing or for other purposes supplementary to through traffic movement.
- Average Daily Traffic** – The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year. The term is commonly abbreviated as ADT.
- Average Overall Travel Speed** – For all traffic, or component thereof, the summation of distances divided by the summation of overall travel times.
- Average Running Speed** – For all traffic, or component thereof, the summation of distances divided by the summation of running times.
- Average Spot Speed** – The arithmetic mean of the speeds of all traffic, or component thereof, at a specified point.
- Betterment** – The improvements, adjustments, or additions to a highway which more than restore it to its former good condition and which result in better traffic serviceability without major changes in its original construction.
- Bicycle** – any two-wheeled vehicle designed to be propelled solely by human power.
- Bicycle path or lane** – a way established for the exclusive use of bicycle, including tricycles propelled by human power, but excluding push carts and animal drawn vehicles.
- Budget** – A plan showing estimates of costs and revenue for proposed activities for a given period.
- Built-up area** – an area with streets normally characterized by relatively low speeds, wide ranges of traffic volumes, narrower lanes, frequent intersections and driveways, significant pedestrian traffic, and prevalence of businesses and houses; any area with entries and exits especially sign posted as such or defined in domestic legislation
- Capacity** – The maximum number of vehicles which has a reasonable expectation of passing over a given section of a lane or a roadway in one direction, or in both directions for a two-lane or a three-lane highway, during a given time period under prevailing roadway and traffic conditions.
- Carriageway** – the part of the road normally used by vehicular traffic.
- Center** – in relation to a thoroughfare, means a line or series of lines, marks or other indications placed at the middle of the thoroughfare or, in the absence of any such line, lines, marks, or other indications, the middle of the main traveled portion of the thoroughfare.

- Channelized intersection** – an intersection provided with islands meant to guide and limit vehicle movements.
- Clearway** – a length of carriageway generally defined by signs, along which vehicles may not stop or be left standing at times of the day as provided on the signs.
- Condemnation** – The process by which property is acquired for public purposes through legal proceedings under power of eminent domain.
- Control of Access** – The condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority.
- Full control of access** means that the authority to control access is exercised to give preference to through traffic by providing access connections with selected public roads only, by prohibiting crossings at grade or direct private driveway connections.
- Partial control of access** means that the authority to control access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected public roads, there may be some crossings at grade and some private driveway connections.
- Conveyance** – A written instrument by which a title, estate, or interest in property is transferred.
- Corridor** – A strip of land between two termini within which traffic, topography, environment and other characteristics are evaluated for transportation purposes.
- Crosswalk** – A marked lane for passage of pedestrians, bicycles, etc., traffic across a road.
- Cul-de-sac Street** – A local street open at one end only and with special provision for turning around.
- Curb Loading Zone** – Roadway space adjacent to a curb and reserved for exclusive use of vehicles during loading or unloading of passengers or property.
- Cycle** – any vehicle which has at least two wheels and is propelled solely by the muscular energy of the persons on that vehicle, in particular by means of pedals or hand-crank.
- Cycle Time** – The time required for one complete sequence of signal indications.
- Dead-end Street** – A local street open at one end only without special provision for turning around.
- Deceleration Lane** – a speed change lane used for decreasing speed, preparatory to stopping or exiting a fast lane.
- Dedication** – The setting apart by the owner and acceptance by the public of property for highway use, in accordance with statute or common law.
- Delay** – The time lost while traffic is impeded by some element over which the driver has no control.
- Fixed Delay** – Delay caused by traffic controls.
- Operational Delay** – Delay caused by interference between components of traffic.

**Depressed Median** – A median that is lower in elevation than the traveled way and so designed to carry a certain portion of the surface water.

**Design Capacity** – The maximum number of vehicles that can pass over a lane or a roadway during one hour without operating conditions falling below a pre-selected design level.

**Design Speed** – A speed determined for design and correlation of the physical features of a highway that influence vehicle operation. It is the maximum safe speed that can be maintained over a specified section of highway when conditions are so favorable that the design features of the highway govern.

**Design Volume** – A volume determined for use in design, representing traffic expected to use the highway. Unless otherwise stated, it is an hourly volume.

**Detectors** – Mechanical or electronic devices that sense and signal the presence or passage of vehicular traffic at one or more points in the roadway.

**Direction of traffic and appropriate to the direction of traffic** – the right-hand side if, under domestic legislation, the driver of a vehicle must allow an oncoming vehicle to pass on his left; otherwise these expressions mean the left-hand side.

**Directional Distribution** – The directional split of traffic during the peak or design hour, commonly expressed as percent in the peak and off-peak flow directions.

**Diverging** – The dividing of a single stream of traffic into separate streams.

**Divided road** – a highway or road with separated carriageways for traffic traveling in opposite directions.

**Domestic legislation** – the entire body of national or local laws and regulations in force.

**Drainage Easement** – An easement for directing the flow of water.

**Driver** – any person who drives a motor vehicle or other vehicle (including a cycle), or who guides cattle, singly or in herds, or flocks or draught, pack or saddle animals on a road.

**Driveway** – A private road giving access from a public way to a building on abutting grounds.

**Easement** – A right to use or control the property of another for designated purposes.

**Emergency Signal** – Any type of traffic control device installed solely for the purpose of assigning right of way to emergency vehicles at locations where standard traffic control devices are unwarranted.

**Emergency vehicle** means a motor vehicle:

1. conveying member of the police force on urgent police duty,
2. of a fire brigade traveling to or on duty at any place in consequence of a fire or an alarm of fire,
3. being an ambulance or any other vehicle, answering an urgent call or conveying to a hospital any injured or sick person urgently requiring treatment,
4. being used to obtain or convey blood or other supplies, drugs or equipment for a person urgently requiring treatment which may or may not carry a siren, bell or repeater horn for use as a warning instrument, or

5. duly authorized as an emergency vehicle for purposes of this Code by the appropriate authority.

**Eminent Domain** – The power to take private property for public use without the owner’s consent, upon payment of just compensation.

**Encroachment** – Unauthorized use of highway right of way or easements as for signs, fences, buildings, etc.

**Expressway** – A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.

**Flow** – Movement of traffic.

**Footway** – that portion of road set aside for pedestrian use only.

**Frontage Road** – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

**Frontage Street** – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

**Grade** – The rate of ascent or descent of a roadway, expressed as a percent; the change in roadway elevation per unit of horizontal length.

**Grade separation** – A crossing of two highways, or a highway and a rail- road, at different levels.

**Green Time** – That period of any phase assigning right of way to that movement(s) of vehicular traffic.

**Guardrails** – Traffic barriers used to shield hazardous areas from errant vehicles.

**Headway** – The spatial distance or time interval between the front ends of vehicles moving along the same lane or track in the same direction.

**High beam** – means a beam of light projected from vehicle headlights such that the main bright portion of the beam thereof rises above the horizontal plane passing through the lamp centers parallel to the road level upon which the vehicle stands.

**Highway** – any public thoroughfare, public boulevard, avenue, park alley and callejon, but shall not include roadway upon grounds owned by private persons, colleges, university or other similar institutions.

**Horn** – includes any or every device for signaling by sound.

**Interchange** – A system of interconnecting roadways in conjunction with one or more grade separations, providing for the movement of traffic between two or more roadways on different levels.

#### **Interchange Types**

**Cloverleaf** – A 4-leg interchange with loops for left turns and outer connections for right turns or two-way ramps in these turns. A full cloverleaf has ramps for two turning movements in each quadrant.

**Diamond Interchange** – A 4-leg interchange with a single one-way ramp in each quadrant. All left turns are made directly on the minor highway.

**Directional Interchange** – An interchange, generally having more than one highway grade separation, with direct connections for the major left-turning movements.

**Interrupted** – Non-continuous movement of traffic.

**Intersection** – any level crossroad, junction or fork, including open areas formed by such crossroad or fork.

**Intersection** – the place at which two or more roads cross.

**Interval** – A discrete portion of the signal cycle during which signal indications do not change.

**Inverse Condemnation** – A legal process which may be initiated by a property owner to compel the payment of just compensation where his property has been taken or damaged for a public purpose.

**Laden mass** – the actual mass of the vehicle as loaded, with the crew and passengers on board.

**Lane** – A strip of roadway used for a single line of vehicles; one of the longitudinal strips from which the carriageway can be divided, whether or not defined by longitudinal road markings

**Laned thoroughfare** – means a thoroughfare divided into two or more marked lanes for vehicular traffic.

**Level of Service** – A qualitative rating of the effectiveness of a highway in serving traffic, measured in terms of operating conditions. Note: The Highway Capacity Manual identifies operating conditions ranging from "A" for best operation (low volume, high speed) to "E" for poor operations at possible capacity load.

**Level-crossing** – any level intersection between a road and a railway or tramway track with its own track formation.

**LGU** – an acronym for Local Government Units, either provincial, city or municipal government, empowered under RA 7160 to pursue traffic management plans and programs.

**Local Road** – A street or road primarily for access to residence, business or other abutting property.

**Local Street** – A street or road primarily for access to residence, business or other abutting property.

**Low beam** – means a beam of light projected from vehicle headlights such that none of the main bright portion of the beams thereof rises above a horizontal plane passing through the lamp centers parallel to the road level upon which the vehicle stands.

**Major Street** – An arterial highway with intersections at grade and direct access to abutting property, and on which geometric design and traffic control measures are used to expedite the safe movement of through traffic.

- Marked cross-walk** – means a portion of a thoroughfare between two parallel lines marked across the thoroughfare, intended for use of pedestrian.
- Median** – The portion of a divided highway separating the traveled ways for traffic in opposite directions.
- Median Lane** – A speed-change lane within the median to accommodate left-turning vehicles.
- Merging** – the converging of separate streams of traffic into a single stream.
- Moped** – any two-wheeled or three-wheeled vehicle which is fitted with an internal combustion engine having a cylinder capacity not exceeding 50 cc and a maximum design speed not exceeding 50 km per hour. LGUs, are free, however, not to regard as mopeds, under their domestic legislation, vehicles which do not have the characteristics of a cycle with respect to their use, in particular the characteristic that they can be propelled by pedals, or whose maximum design speed, whose mass, or certain of whose engine characteristics exceed certain limits. Nothing in this definition shall be construed as preventing LGUs from treating mopeds exactly as cycles in applying the provisions of their domestic legislation regarding road traffic.
- Motorcycle** – means any two-wheeled vehicle, with or without a side-car, which is equipped with a propelling engine. LGUs may also treat as motorcycles in their local ordinances three-wheeled vehicles whose unladen mass does not exceed 400 kg. The term "motor cycle" does not include mopeds, although LGUs may, provided they make a declaration to this effect treat mopeds as motorcycles.
- Motor vehicle** – any power-driven vehicle which is normally used for carrying persons or goods by road or for drawing on the road, vehicles used for the carriage of persons or goods. This term embraces trolley-buses, that is to say, vehicles connected to an electric conductor and not rail-borne. It does not cover vehicles, such as agricultural tractors, which are only incidentally used for carrying persons or goods by road or for drawing, on the road, vehicles used for the carriage of persons or goods. Exceptions are roadrollers, trolley cars, street sweepers, sprinklers, lawn mowers, bulldozers, graders, fork-lifts, amphibian trucks, and cranes if not used on public highways and vehicles run only on rails or tracks, and tractors, trailers and traction engines of all kinds used exclusively for agricultural purposes
- Motorway** – a road specially designed and built for motor traffic, which does not serve properties bordering on it, and which:
- (i) Is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other either by a dividing strip not intended for traffic or, exceptionally, by other means;
  - (ii) Does not cross at level with any road, railway or tramway track, or footpath; and,
  - (iii) Is specially sign-posted as a motorway;
- Negotiation** – The process by which property is sought to be acquired for highway purposes through discussion, conference, and mutual agreement upon the terms for transfer of such property.



- No parking area** – means a portion of a thoroughfare between two consecutive “No Parking” signs and with arrows pointing generally towards each other or other appropriate signs.
- Off-Premise Sign** – An outdoor sign, display or device advertising a service or product at a location other than on the property where such service or product may be obtained.
- One-Way thoroughfare** – means a thoroughfare on which vehicles are permitted to travel in one direction only, as indicated by appropriate signs or signals.
- On-Premise Sign** – Outdoor sign, display or device advertising activities conducted on the property on which it is located or the sale or lease of that property.
- Option** – A written agreement granting a privilege to acquire property or interest therein at a fixed price within a specified period.
- Overall Travel Speed** – The speed over a specified section of highway, being the distance divided by overall travel time.
- Overall Travel Time** – The time of travel, including stops and delays except those off the traveled way.
- Overpass** – A grade separation where the subject highway passes over an intersecting highway or railroad; also called Overcrossing.
- Overtake** – to pass or attempt to overtake or pass a slower-moving vehicle traveling in the same direction.
- Park or Parking** – The act of stopping and keeping a motor vehicle for a time on a public way.
- Parked** – a vehicle is said to be parked if it is stationary for the period during which the vehicle is not limited to the time needed to pick up or set down persons or goods.
- Parking** – a vehicle is said to be parked if it is stationary for the period during which the vehicle is not limited to the time needed to pick up or set down persons or goods.
- Parking area** – means a portion of the thoroughfare where parking is permitted as indicated by appropriate notices or parking signs.
- Parking Lane** – An auxiliary lane primarily for the parking of vehicles.
- Partial Taking** – The acquisition of a portion of a parcel of property.
- Passenger Car Equivalence** – The representation of larger vehicles, such as trucks and buses, as equal to a quantity of passenger cars for use in Level of Service and capacity analyses. The magnitude of the equivalency is dependent upon vehicle size and weight, vehicle operating characteristics, vehicle speeds, and roadway characteristics such as gradient.
- Passing** – The length of highway required for a vehicle to execute a normal passing maneuver as related to design conditions and design speed.
- Pedestrian** – A person traveling on foot.
- Pedestrian** – any person on foot or in a perambulator.
- Pedestrian Path** – A footway or track reserved for use by pedestrians or joggers.

- Permissible maximum mass** – the maximum mass of the laden vehicle declared permissible by the competent authority of the State in which the vehicle is registered.
- Phase** – Those right of way and clearance intervals in a cycle assigned to any independent movement(s) of vehicular traffic or pedestrians.
- Planting Easement** – An easement for reshaping roadside areas and establishing, maintaining, and controlling plant growth thereon.
- Power-driven vehicle** – any self-propelled road vehicle, other than a moped in cities / municipalities which do not treat mopeds as motor cycles, and other than a rail-borne vehicle.
- Pre-Timed Signal** – Any type of traffic control device installed solely for the purpose of assigning right of way to emergency vehicles at locations where standard traffic control devices are unwarranted.
- Profile Grade** – The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline of the roadbed. Profile grade means either elevation or gradient of such trace according to the context.
- Progressive Signal System** – A series of traffic control signals timed and coordinated in such a way as to provide optimum movement of traffic through the system.
- Remainder** – The portion of a parcel of land retained by the owner after a part of such parcel has been acquired.
- Remnant** – A remainder of land so small or irregular that it usually has little or no economic value to the owner.
- Right Turn on Red (RTOR)** – A turning movement at an intersection which provides for movement of traffic during a fixed delay. Usually allowed and regulated by statute.
- Right-of-Way** – A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.
- Right-of-Way Appraisal** – An expert opinion of the market value of property including damages, if any, as of a specified date, resulting from an analysis of facts.
- Right-of-Way Estimate** – An approximation of the market value of property including damages, if any, in advance of an appraisal.
- Right-of-Way Map** – A plan of a highway improvement showing its relation to adjacent property, the parcels or portions thereof needed for highway purposes, and other pertinent information.
- Road** – A general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way. (Recommended usage: in urban areas - highway or street; in rural areas - highway or road); entire surface of any street open to traffic.
- Road marking** – any traffic control device laid out or painted on the surface of the road or carriageway used to regulate traffic or to warn or guide road users, used either alone or in

conjunction with other signs or signals to emphasize or clarify their meaning. Median islands are not defined as road markings.

**Roadside Control** – The public regulation of the roadside to improve highway safety, expedite the free flow of traffic, safeguard present and future highway investment, conserve abutting property values, or preserve the attractiveness of the landscape.

**Roadside Development** – Those items necessary to the complete highway which provide for the preservation of landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching and the placing of other ground covers; such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the highway.

**Roadside Zoning** – The application of zoning for roadside control.

**Roadway** – (General) The portion of a highway, including shoulders, for vehicular use. A divided highway has two or more roadways. (In construction specifications) The portion of a highway within limits of construction.

**Roundabout** – an intersection where all traffic travels in one direction around a central or circular island.

**Running Speed** – The speed over a specified section of highway, being the distance divided by running time.

**Running Time** – The time the vehicle is in motion.

**Scenic Easement** – An easement for conservation and development of roadside views and natural features.

**Semi-trailer** – any trailer designed to be coupled to a motor vehicle in such a way that part of it rests on the motor vehicle and that a substantial part of its mass and of the mass of its load is borne by the motor vehicle.

**Separation line** – a line marked on the pavement of a thoroughfare to separate traffic traveling in opposite directions.

**Setback Line** – A line outside the right of way, established by public authority or private restriction, on the highway side of which the erection of buildings or other permanent improvements is controlled.

**Severance Damages** – Loss in value of the remainder of a parcel resulting from a partial taking of real property.

**Shoulder** – The portion of the roadway contiguous with the traveled way primarily for accommodation of stopped vehicles for emergency use, and lateral support of base and surface courses.

**Sidewalk** – That portion of the roadway primarily constructed for the use of pedestrians.

**Sight Distance** – The length of highway visible to the driver.

**Sight Line Easement** – An easement for maintaining or improving the sight distance.

- Signal Change Interval** – That portion of any phase warning the vehicular traffic or pedestrians of that movement(s) of the impending termination of the right of way for that movement.
- Signal Head** – An assembly containing one or more signal lenses which control a vehicular traffic or pedestrian movement.
- Signal Indication** – The illumination of traffic signal lens or of a combination of lenses at the same time.
- Slope Easement** – An easement for cuts or fills.
- Spacing** – The distance between consecutive vehicles measured front to front.
- Speed** – The rate of vehicular movement, generally expressed in miles per hour.
- Speed-Change Lane** – An auxiliary lane, including tapered areas, primarily for the acceleration or deceleration of vehicles entering or leaving the through traveled way.
- Standing** – a vehicle is said to be standing if it is stationary for the time needed to pick up or set down persons or to load or unload goods.
- Stop line** – a line marked across the thoroughfare near a traffic control signal, stop sign, children's crossing or intersection.
- Stop or Stopping** – The act of bringing a motor vehicle to a halt.
- Stopping Distance** – The length of highway required to safely stop a vehicle traveling at design speed.
- Street** – A general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way.
- Thirtieth Highest Hourly Volume** – The hourly volume that is exceeded by 29 hourly volumes during a designated year. (Corresponding definitions apply to any other ordinal highest hourly volume, as tenth, twentieth, etc.)
- Thoroughfare** – means that portion of a road improved, designed or used for vehicular travel exclusive of the shoulder.
- Through Street** – Every highway or portion thereof on which vehicular traffic is given preferential right of way and at the entrances to which vehicular traffic from intersecting highways is required by law to yield right of way to vehicles on such through highway in obedience to either a stop sign or a yield sign, when such signs are erected.
- Through Traveled Way** – The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.
- Time Cycle** – The time required for one complete sequence of signal indications.
- Toll Road or Toll Tunnel** – A highway or tunnel open to traffic only upon payment of a direct toll or fee.
- Traffic Actuated Signal** – A traffic control signal whose right of way interval selection and interval times are varied by the demands of vehicular traffic for those intervals or movements.

- Traffic Control Device** – A sign, signal, marking or other device placed on or adjacent to a street or highway by authority of a public body or official having jurisdiction to regulate, warn, or guide traffic.
- Traffic Control Signal** – Any device whether manually, electrically, or mechanically operated by which traffic is alternately directed to stop or permitted to proceed.
- Traffic Island** – a defined area within the roadway, usually at an intersection and set off above ground level, from which traffic is intended to be excluded and which is used for control of vehicular movements and as pedestrian refuge.
- Traffic Lane** – The portion of the traveled way for the movement of a single line of vehicles.
- Traffic management authority** – refers to the city's or municipality's organization or office designated and authorized to perform traffic engineering, planning, education, and/or enforcement activities.
- Traffic Markings** – All lines, patterns, words, colors, or other devices, except signs, set into the surface of, applied upon, or attached to the pavement or curbing or to the objects within or adjacent to the roadway, officially placed for the purpose of regulating, warning, or guiding traffic.
- Traffic Operation Plan** – A program of action designed to improve the utilization of a highway, a street, or highway and street network, through the application of the principles of traffic engineering.
- Traffic Sign** – A device mounted on a fixed or portable support whereby a specific message is conveyed by means of words or symbols, officially erected for the purpose of regulating, warning, or guiding traffic.
- Traffic Signal** – A power-operated traffic control device by which traffic is regulated, warned, or alternately directed to take specific actions.
- Trailer** – a vehicle not otherwise self-propelled, includes caravan but excludes the rear portion of an articulated vehicle.
- Trailer** – any vehicle designed to be drawn by a power-driven vehicle and includes semi-trailers.
- Transportation Plan** – A program of action to provide effectively for present and future demands for movement of people and goods. This program must necessarily include consideration of the various modes of travel.
- Traveled Way** – The portion of the roadway for the movement of vehicles, exclusive of shoulders.
- Two-way Thoroughfare** - means any thoroughfare where traffic is permitted in opposite directions.
- Underpass** – A grade separation where the subject highway passes under an intersecting highway or railroad; also called Undercrossing.
- Uninterrupted** - Continuous movement of traffic.
- Urban roads** – roads where the speed limit is 60 km/h or less

**U-turn** – means a movement which causes a vehicle facing or traveling in one direction to face or travel in the opposite, or substantially the opposite direction.

**Vehicle** – means any conveyance or other device propelled or drawn by any means and includes an articulated vehicle and a bicycle and, where the context permits, includes an animal driven or ridden, but does not include a train.

**Vehicle** – is said to be:

- (i) Standing" if it is stationary for the time needed to pick up or set down persons or to load or unload goods; and
- (ii) Parked" if it is stationary for any reason other than the need to avoid interference with another road-user or collision with an obstruction or to comply with traffic regulations, and if the period during which the vehicle is stationary is not limited to the time needed to pick up or set down persons or goods; It shall be open to LGUs to regard as "standing" any vehicle which is stationary for a period not exceeding that fixed by domestic legislation, and to regard as "parked" any vehicle which is stationary for a period exceeding that fixed by domestic legislation;

**Volume** – The number of vehicles passing a given point during a specified period of time.

**Waiting** – means a vehicle permitted to remain stationary with the motor running.

**Weaving** – The crossing of traffic streams moving in the same general direction accomplished by merging and diverging.

**Zoning** – The division of an area into districts and the public regulation of the character and intensity of use of the land and improvements thereon.

**SSTRIMM**  
**Traffic Management Manual**



**Annex B**  
**Example of a**  
**Transport Improvement Project**

---

# Annex B

## **Example of a Transport Improvement Project**

One of the identified traffic bottleneck points in the SSTRIMM Project is the junction of Shaw Boulevard / Wack-wack Road / Lee Street / Old Wack-wack Road in Mandaluyong. It was given the code "MD-01" under the SSTRIMM Project.

This Annex contains documents prepared as part of the SSTRIMM traffic improvement plans for the said junction.



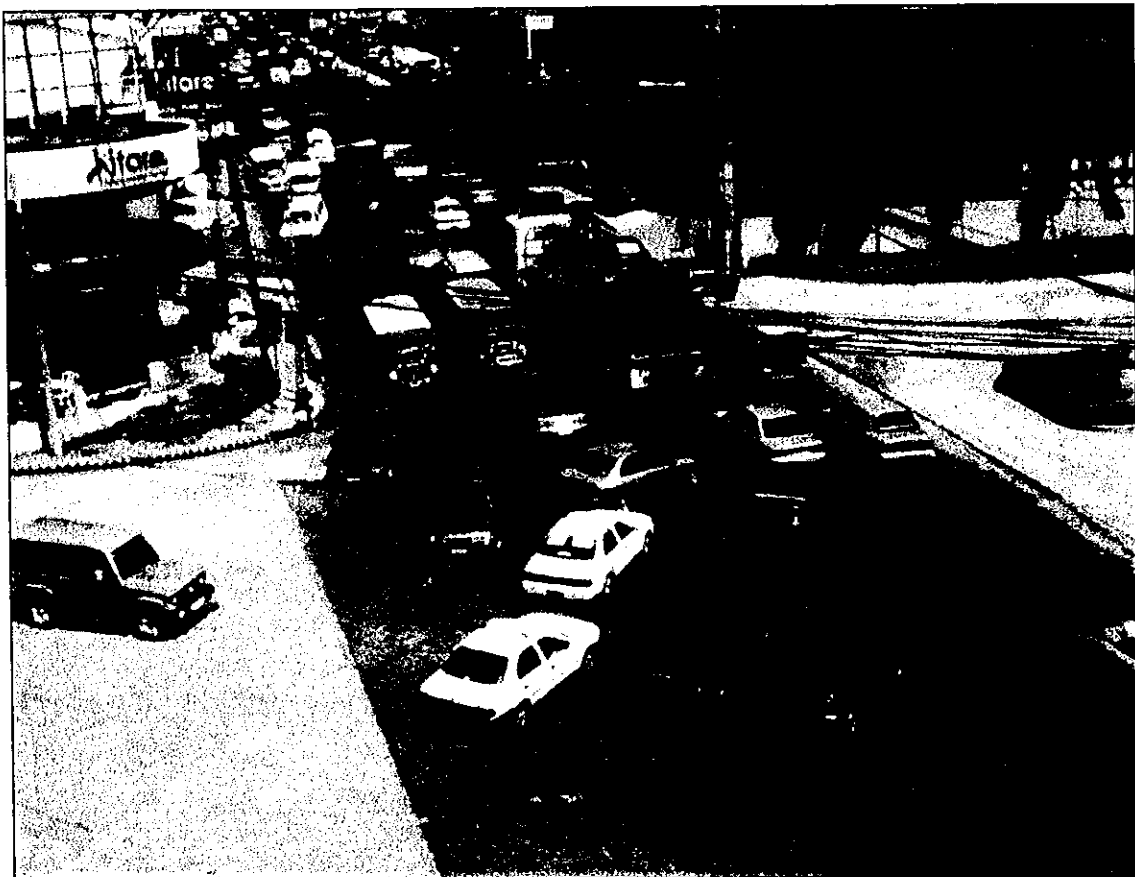
## B.1 Identifying the Problem

Shown below is an image of the MD-01 junction prior to undertaking any improvements.

The junction is a five-leg (star) intersection with many conflicting flows.

The junction is a wide space with no channelization. Vehicles from Wack-wack road and Lee Street try to squeeze into every available space in an attempt to clear the junction.

Shaw Boulevard is a major thoroughfare that is also a major public transport corridor.



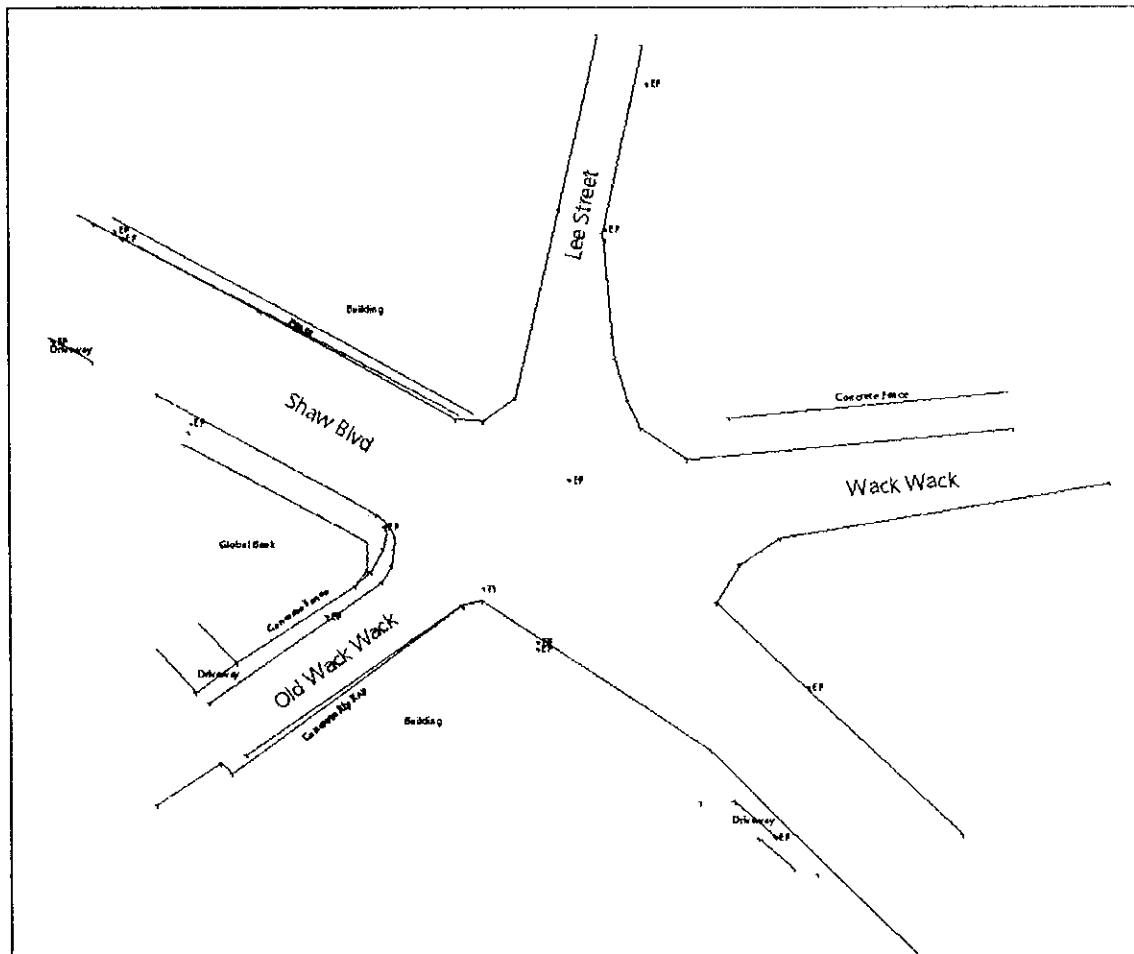
### B.1.1 Physical Configuration

Figure B.1-1 shows the layout of the intersection. Lee Street is the leg on the north, Wack-wack Road is the leg towards the east. Shaw Boulevard runs in a general northwest - southeast direction. Old Wack-wack road leads to the southwest, and is one-way from Shaw Boulevard.

The junction is unsignalized. The main road, Shaw Blvd., could accommodate five lanes; whereas, the other intersecting roads have only two lanes each with width varying from 6.15 meters to 7.52 meters. Shaw Blvd. is presently asphalt paved in good condition and the pavement edges have curbs and gutters. The other roads are paved with concrete in good condition, and the smooth surface provides unrestricted vehicle movements.

The physical condition of the existing intersection is adequate in terms of geometric standards as all of the pavement corners have adequate turning radius. While the geometric conditions of the existing intersection meet standards, still the area is continuously being subjected to heavy congestion due to uncontrolled traffic movements.

Figure B.1-1 Layout of Shaw Blvd / Lee St / Wack-wack Rd / Old Wack-wack Rd Junction



Almost all turning movements at the five-leg intersection are allowed, presenting numerous traffic conflicts. Heavy vehicles (delivery trucks, concrete mixers) are parked along Lee St due to ongoing construction activities for a residential building at the junction. Construction debris and stockpiled materials from the said building construction spills over to Lee Street, practically closing down one traffic lane.

Lee St is being utilized as an alternative route by vehicles coming from San Juan and Kalentong. Vehicles turning left from Shaw (EDSA side) into Old Wack-wack Road occupy the exit lane of the northbound approach

### B.1.3 Surveys

Given the numerous conflicts that the different vehicle turning movements are subjected to, vehicle volume counts were undertaken in order to determine the distribution of vehicular flows for each turning movement.

The counts were conducted for the morning peak period (6:00 - 10:00) and in the afternoon / evening peak period (16:00 - 20:00). Vehicles were classified according to type, using 11 different classifications, as follows: 1) Motorcycle, 2) Tricycle, 3) Car / Jeep / Van, 4) Public Utility Jeepney, 5) Taxi, 6) FX Taxi, 7) Bus, 8) Light Goods Vehicle, 9) 2 Axle Trucks, 10) 3 Axle Trucks (and those with more than 3 axles), and 11) Others.

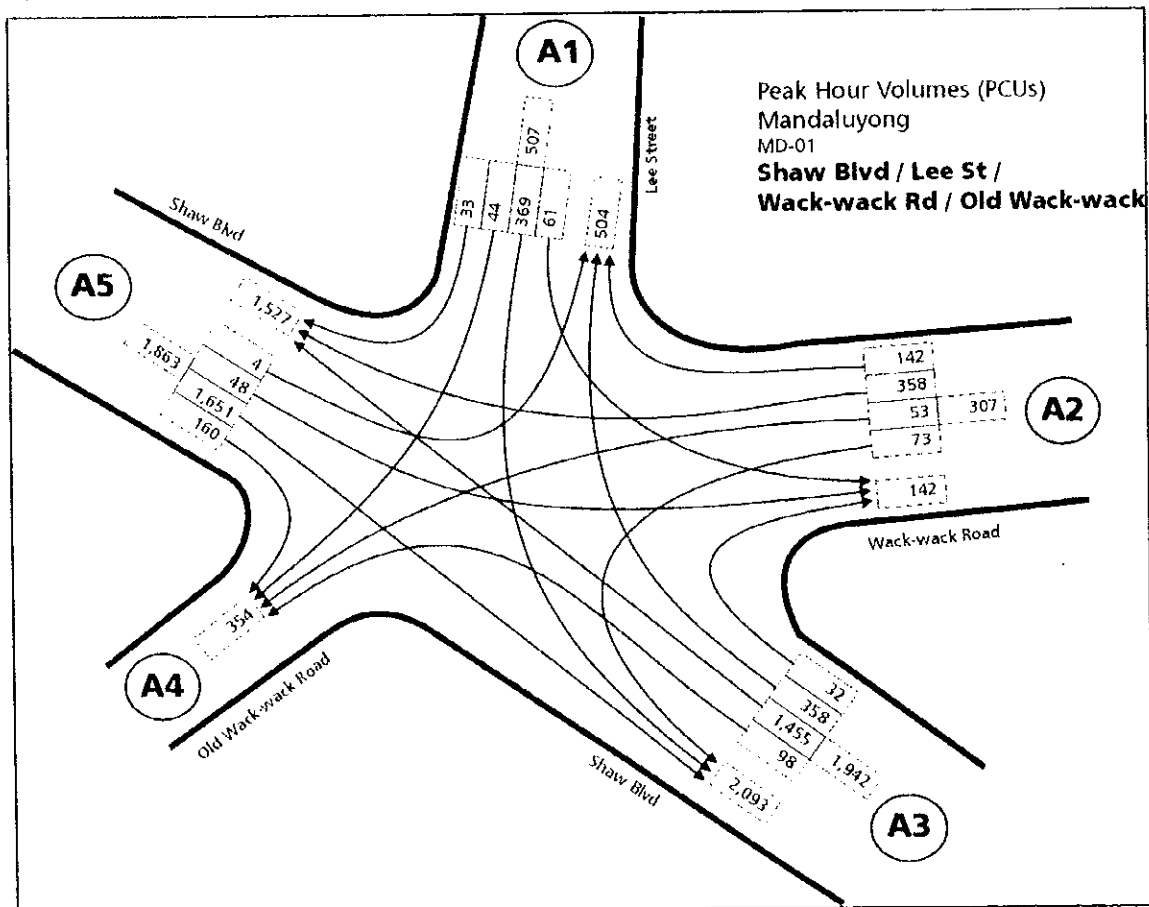
The different vehicle volumes for the different turning movements were then converted into equivalent passenger car units (PCUs) and tabulated. Figure B.1-2 shows the tabulated turning movement count results:

Figure B.1-2 Turning Movement Count Summary for MD-01

Location: Shaw Boulevard and Wack-wack Intersection																	
Date: 23 February 2001																	
Hourly Vehicle Volumes																	
Time Period	From Lee				From Wack Wack Rd				From Shaw Blvd / EDSA				From Shaw Blvd / Kalentong				
	l-w	l-2	l-3	l-4	w-1	w-2	w-3	w-4	2-1	2-w	2-3	2-4	4-1	4-w	4-2	4-3	
06:00	07:00	31	191	14	15	94		11	38	140	36	7	1054	1	21	1152	20
07:00	08:00	50	431	64	18	120		21	31	211	34	62	1188		36	1587	89
08:00	09:00	42	443	53	13	75	90	13	50	181	37	89	1171	1	21	1483	77
09:00	10:00	62	366	33	5	95	73	13	41	192	46	84	1055	2	35	1426	86
10:00	11:00						84				46						
11:00	12:00						51				46						
12:00	13:00						57				32						
13:00	14:00						71				41						
14:00	15:00						74				20						
15:00	16:00						95				51						
16:00	17:00	63	395	41	22	156	80	49	48	285	28	135	1319	4	32	1418	143
17:00	18:00	63	354	39	31	141	73	56	47	336	33	95	1290	4	49	1457	156
18:00	19:00	75	253	50	12	257	63	8	62	30	37	52	516	10	42	1282	75
19:00	20:00	63	213	25	17	210	74	9	34	133	45	52	1182	6	24	1255	102
20:00	21:00	35	134	26	5	92	63	9	44	126	34	45	1032	6	36	1225	104
21:00	22:00	9	80	9	5	65	29	7	16	71	47	37	753	4	30	745	46
Hourly PCU Volumes																	
Time Period	From Lee				From Wack Wack Rd				From Shaw Blvd / EDSA				From Shaw Blvd / Kalentong				
	l-w	l-2	l-3	l-4	w-1	w-2	w-3	w-4	2-1	2-w	2-3	2-4	4-1	4-w	4-2	4-3	
06:00	07:00	30	197	10	14	93		9	37	142	36	6	1199	1	23	1284	20
07:00	08:00	44	433	58	15	120		16	28	213	34	62	1351		36	1801	89
08:00	09:00	38	470	50	11	79	108	11	44	198	39	94	1354	2	24	1684	77
09:00	10:00	56	397	39	6	98	76	13	36	214	51	89	1245	2	32	1661	86
10:00	11:00						86				51						
11:00	12:00						60				49						
12:00	13:00						60				34						
13:00	14:00						74				44						
14:00	15:00						71				20						
15:00	16:00						98				50						
16:00	17:00	60	406	42	22	168	85	50	44	306	29	141	1486	4	30	1589	154
17:00	18:00	61	369	44	33	142	73	53	40	358	32	98	1455	4	48	1651	160
18:00	19:00	73	264	47	12	265	64	7	56	27	39	50	625	10	39	1414	77
19:00	20:00	64	212	25	21	215	73	9	29	133	46	54	1311	6	24	1396	104
20:00	21:00	37	138	23	4	91	64	9	43	132	32	44	1177	6	34	1388	106
21:00	22:00	8	81	6	3	66	28	6	13	72	49	39	869	3	37	846	47

A traffic flow diagram was then prepared in order to visualize the vehicle volumes in a graphical manner. This would assist in evaluating which turning movements have heavier volumes, and which ones are light. Figure B.1-3 shows the traffic flow diagram for MD-01.

Figure B.1-3 Turning Movement Count Summary for MD-01



The traffic flows at the junction are shown in the diagram, and the numbers represent the hourly passenger car unit equivalents for each turning movement.

## B.2 Analyzing the Problem

The physical configuration of the junction, which poses several conflicts for the various turning maneuvers, was the main root of the problem. Vehicles do not follow an orderly path in clearing the junction.

It became evident that certain turning movements will have to be regulated, discouraged, or banned. The results of the turning movement counts proved very useful in determining which turning movements would be affected.

Through movements along Shaw Blvd. cannot be banned, as it is the major street. Old Wack-wack Road was already operating one-way from Shaw Boulevard. The turning movements with the least volumes were the ones from Wack-wack Road to Old Wack-wack Road, and from Lee Street to Wack-wack Road.

In addressing the problem at the junction, the main feature of the proposed improvement was to minimize turning movement conflict points, by providing a means of channelizing flows. Secondary was to eliminate some of the minor flows, as they only add to the delay of the majority of users of the junction.

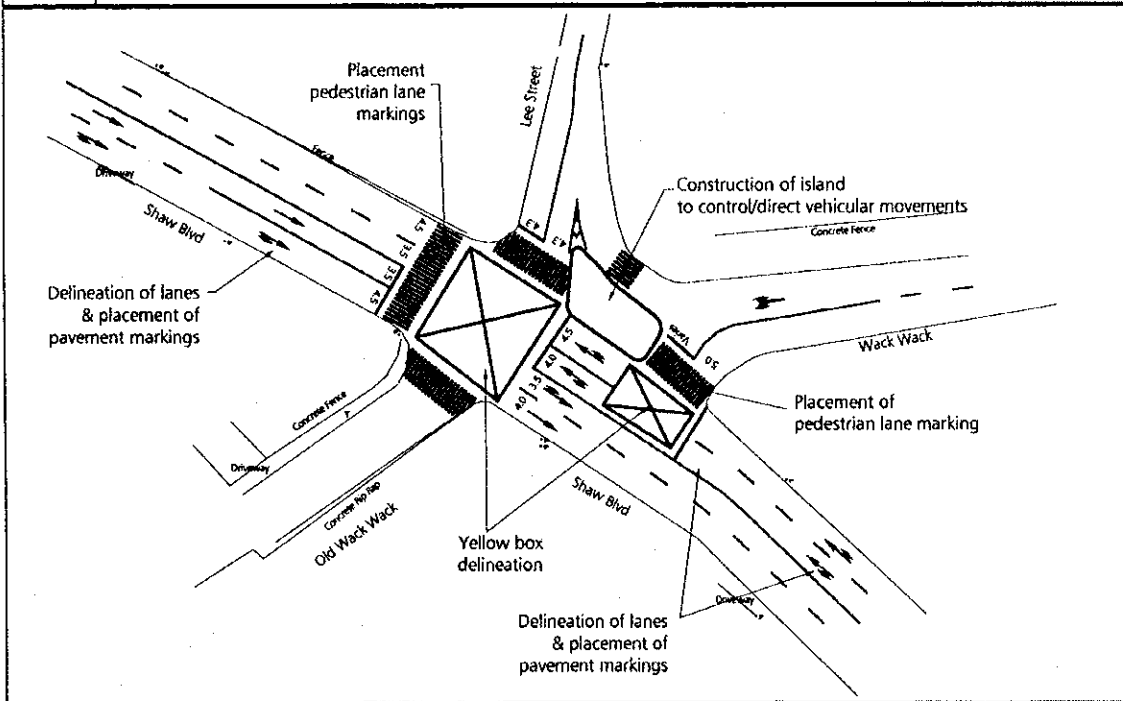




### B.3 Developing the Solution

The table shown below summarizes the proposed solutions for the Lee St. / Wack-wack Rd / Shaw Blvd junction.

Name	Shaw Blvd / Lee Rd / Wack-Wack Rd / Old Wack-Wack Rd	Code	MD-01
Sheet	Proposed Improvements	LGU	Mandaluyong
<b>Engineering</b>	1) Two yellow boxes, first at the Lee St. (A1) / Old Wack Wack Rd (A4) and second at the Wack Wack / Shaw Boulevard (A3) zone.		
	2) Construction of islands near the corner of Lee St. and Wack Wack Road (A1-A2) to prevent short cuts by vehicles moving from Lee St. to Shaw Boulevard (A1-A3), Shaw Boulevard to Lee St. (A3-A1) and also prevent short cuts for vehicles moving from Wack Wack Road to Shaw Boulevard (A2-A3).		
	3) Zebra markings for pedestrians across Shaw Boulevard, Lee St, and Wack Wack Road. None on Old Wack Wack Road		
	4) Lane markings on pavements of Shaw Boulevard, Lee St, Wack Wack Road and Old Wack Wack Road to guide motorists on acceptable movements.		
	5) Signages to be installed at designated spots.		
<b>Enforcement</b>	1) Strictly enforce "Yellow Box Rule", except when the movement is next on phase and will not obstruct current traffic streams		
	2) Until traffic signals are installed, adopt and execute a regular pattern of 4 phases, giving longer green time to through traffic along Shaw Boulevard, second priority only to the simultaneous movements of left turn from Lee St to Shaw Boulevard and through from Lee St. to Old Wack Wack.		
	3) Ban left turns from Shaw Boulevard to Lee St, can be merged with left turns from Shaw Boulevard to Wack Wack Road at the smaller junction.		
	4) Restrict tricycles, ban them on Shaw Boulevard, including crossing from Lee St. (A1) to Old Wack Wack Road (A4).		
	5) Direct vehicles on Wack Wack Road (A2) to Old Wack Wack Road (A4) to wait in front of second (smaller) yellow box, before executing their movements. Similarly and simultaneously, for Lee St left turn movements to Wack Wack Road (A2 to A3).		






## B.4 Implementing the Solution

### B.4.1 Cost

Cost estimates for the proposed improvements were prepared, bids were solicited for implementation. Shown in Figure B.4-1 is the quotation from the winning bidder.

Figure B.4-1 Quotation for Traffic Improvements at MD-01

 <b>Traffic Control Products Corp.</b> <small>TFC Bldg. Electronics Ave., F11 Complex, Taguig, Metro Manila            Tels: 838-4683 • 838-4712 • 838-4718 • 838-4725            Fax: 838-4711 • 838-4612 • E-mail: tcpc-lanemark@pacific.net.ph</small>			
18 June 2001			
<b>SSTRIMM</b> G/F MMDA Building Orense St. cor. Edsa Guadalupe Makati City  <b>ATTENTION: ENGR. RENE SANTIAGO</b> Project Team Leader			
Sir:			
We are pleased to submit our proposal for the following scope of works for your STRIMM project located at Shaw Blvd. to wit:			
Description	Quantity	Unit Price	Amount
<b>I.) PAINT REMOVAL</b>			
<b>a.) Along Shaw Blvd. from Edsa Crossing</b>			
30 cm wide	96 lm.	P 80.00	P 7,680.00
45 cm wide	7 lm.	120.00	840.00
15 cm wide	79 lm.	40.00	3,160.00
			<u>11,680.00</u>
<b>b.) Along Shaw Blvd. from City of Manila</b>			
30 cm wide	84 lm.	80.00	6,720.00
45 cm wide	7 lm.	120.00	840.00
15 cm wide	77 lm.	40.00	3,080.00
			<u>10,640.00</u>
<b>c.) Lee St.</b>			
30 cm wide	68 lm.	80.00	5,440.00
<b>d.) Wack Wack Road</b>			
30 cm wide	105 lm.	80.00	8,400.00
<b>e.) 20 cm wide</b>			
	238 lm.	53.00	<u>12,506.00</u>
		<b>Sub-Total</b>	<b>48,686.00</b>
<b>II.) THERMOPLASTIC APPLICATION</b>			
<b>a.) Old Wack-Wack/Shaw Blvd./ Lee St.</b>			
15cm Broken line	192 lm.	90.00	17,280.00
15cm Solid line	214 lm.	90.00	19,260.00
20cm yellow box	175 lm.	120.00	21,000.00
30cm Pedestrian line	381.4 lm.	180.00	68,652.00
45cm Stop line	37 lm.	270.00	9,990.00
45cm Chevron	2 lm.	270.00	540.00
Thru Arrow	3 pcs.	845.00	2,535.00
Turn Arrow	1 pc.	1,165.00	1,165.00
Combined Arrow	6 pcs.	1,575.00	9,450.00
		<b>Sub-Total</b>	<b>146,572.00</b>
Above are assumed quantities only. Final billing will depend on actual accomplishment upon completion of the project.			
<b>III.) ROAD SIGN (supply and installation)</b>			
30 x 80 cm (R2-3 (L))	1 pc.	4,780.00	4,780.00
75 triangle (W6-1) & 80 Octagonal (R1-1)	2 pcs.	7,575.00	15,150.00
		<b>Sub-Total</b>	<b>19,930.00</b>
<b>Specifications:</b> Engineering Grade, Reflective sheeting 1.5mm, Aluminum Substrate 1" diameter G.I. Pipe frame w/ clamp 2" diameter G.I. Pipe post			



**Traffic Control Products Corp.**

TFC Bldg. Electronics Ave., FTI Complex, Taguig, Metro Manila  
 Tel: 838-4693 • 838-4712 • 838-4718 • 838-4725  
 Fax: 838-4711 • 838-4612 • E-mail: tcpc@anemark@pacific.net.ph

**IV.) CONCRETING OF ISLAND**

1 lot P 50,000.00 50,000.00

GRAND TOTAL P 265,170.00

- Taxes : Inclusive of 10% VAT
- Terms of payment : 20% downpayment, Balance 15 days upon completion
- Validity : 10 days upon receipt of this proposal
- Mobilization : 30 days upon receipt of P.O and downpayment
- Exclusion : Permit fees, and testing of any kind  
 Clearing and cleaning of work area

We hope you find the above offer acceptable and merit your approval.

Very truly yours,

  
 FRANCIS T. GABIS, JR.  
 Head Sales

### B.4.2 Public Information Campaign

A four-page brochure was prepared to launch the information campaign for the proposed traffic improvement project. This is shown below.

*A Primer on the*  
**Shaw Boulevard  
Wack-wack Road  
Lee Street  
Intersection**  
in Mandaluyong City

*AN EXERCISE IN  
LOCAL TRAFFIC MANAGEMENT INITIATIVES*

Prepared by:  
**City of Mandaluyong (Traffic Task Force)  
Metro Manila Development Authority  
(Project SSTRIMM)**

with the assistance of Japan International Cooperation Agency

**THE AUGEAN TASK**  
Wrestling with the traffic problems of Metro Manila is probably even more difficult than Hercules cleaning up the Augean stable. But it is not impossible. Everybody has to pitch in; a minor alleviation here and there ultimately becomes a deluge. Take the intersection of Shaw Boulevard and Wack-wack with Lee Street in Mandaluyong. The congestion there is not the worse in Metro Manila, but bad enough to warrant priority attention of the City of Mandaluyong.

**THE PROBLEM**  
Nature abhors a vacuum. Filipino drivers abhor too much road space. That may explain in a nutshell why traffic congestion occurs now and then, especially during rush hours, at the intersection of Shaw Boulevard, Wack-wack Road, Lee Street, and Old Wack-wack. It is a complicated vehicular junction – with 5 legs and 2 intersections in one place. Each leg allows 3 turning movements each. More than 4,600 vehicles were counted over 1 hour at peak – large but not as crowded as other streets in Metro Manila. In fact, the junction has wide approaches. And therein lies the problem: drivers tend to jump the queue and occupy all available spaces at the approaches, thereby multiplying the points of conflicts. And make life for Traffic Enforcers extremely difficult and frustrating to manage and to untangle.

The basic solution is to reduce the points of conflicts and force drivers to queue – through diannetization, pavement markings, proper signage, yellow box rule.

**WHO WILL BENEFIT (OR SUFFER)?**  
Any change from the existing situation produces 'winners' as well as 'losers'. Queue breakers will be losers. Law-abiding drivers will benefit. Left turners from Lee Street to Wack-wack Road (1.3% of peak-hour hour volume), as well as left turners from Wack-wack Road to Old Wack-wack Road (1.2%), will suffer. The dominant traffic flows along Shaw Boulevard and Lee Street will be winners.

**WHY NOT PUT IN TRAFFIC SIGNALS?**  
The DPWH is planning to install the so-called SCAT traffic signals, but it is still 2 to 3 years away. Meantime, what should be done? Small-scale traffic engineering measures should alleviate the congestion now. And sets the stage for the computerized signals of DPWH.

**WHY NOT MAKE LEE STREET ONE-WAY?**  
It was an option considered, but eventually drop. A parallel road would have to become one-way also, in the opposite direction, to accommodate the flow of vehicles displaced at Lee Street. S Laurel and Ideal Streets can not take up this role. Paired one-way streets work best in a grid-pattern road network. Such a configuration, unfortunately, does not exist in the area.

**HOW DID THE PROPOSED SCHEME COME INTO BEING?**  
It evolved from a study called Small Scale Traffic Improvement Measures for Metro Manila (SSTRIMM), funded with grant money from the Japan International Cooperation Agency (JICA) and coordinated by the Metro Manila Development Authority. The purpose of SSTRIMM is to assist the 17 local government units (that comprise metropolitan Manila) develop their capability to initiate and solve a number of traffic problems. The Shaw-Wack-wack intersection was identified by the City of Mandaluyong as its top priority traffic problem. As a consequence, it got into the planning scope of SSTRIMM traffic consultants. Traffic counts were made, and a practical scheme formulated. After several reviews, the chosen scheme was discussed extensively with Mandaluyong local officials sometime in May and June 2001. The Barangay gave its thumbs up for the implementation of the scheme.

Consultations have been made. Such a process should become standard operating procedure of LGUs. However, it does not mean a decision by popular vote by the residents of Wack-wack nor 100% satisfaction of those consulted. For practical reasons, the consultation did not include motorists from San Juan, Pasig, Manila, Makati and Quezon City who regularly pass the junction.

**WILL THE SCHEME WORK?**  
There are no guarantees. Traffic management deals with 'unquantifiable' human behavior as well as 'measurable' traffic data. It should work, if experiences with similar chokepoints elsewhere are any gauge.

As a concession to 'doubters', the proposed 'island' at the corner of Lee and Wack-wack (side of the goat country club) will not be built immediately. A temporary barrier will first be set up.

To make sure that we – especially Mandaluyong traffic personnel – learn from the scheme – whether a success or a failure, an evaluation of the traffic delays "before" and "after" will be made. It will attempt to answer: was there really an improvement? An impact evaluation is a pre-condition of JICA. It is intrinsic to a more scientific approach to our urban traffic problems.

Comments may be sent to:  
Mandaluyong Traffic Task Force:  
MMDA Project SSTRIMM  
Ornise St. corner EDSA  
Guadalupe, Makati  
Telefax: 882-0898  
e-mail: sstrimm@transportas.com

In addition to the brochure, a billboard was prepared to be located at the site, although this was not done in the implementation of this particular project.

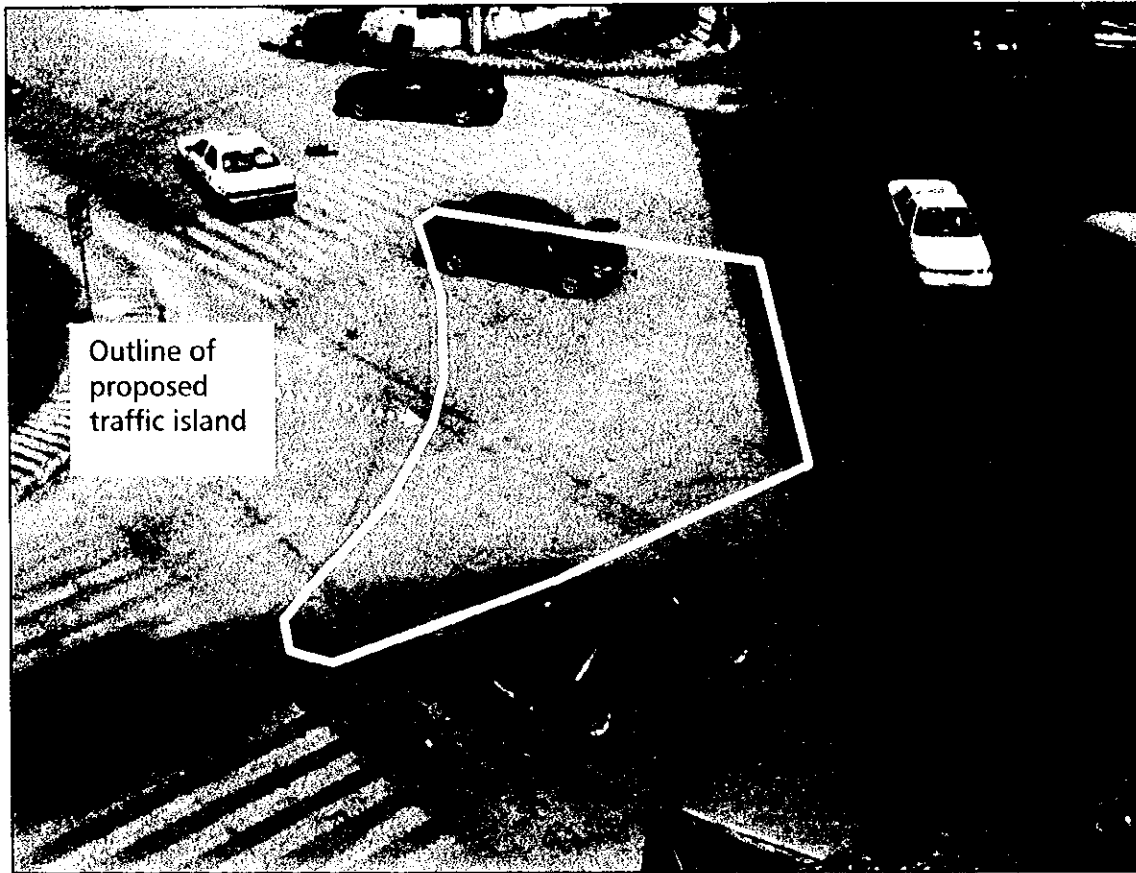
The sample billboard is shown below.

**For the information of all Motorists**

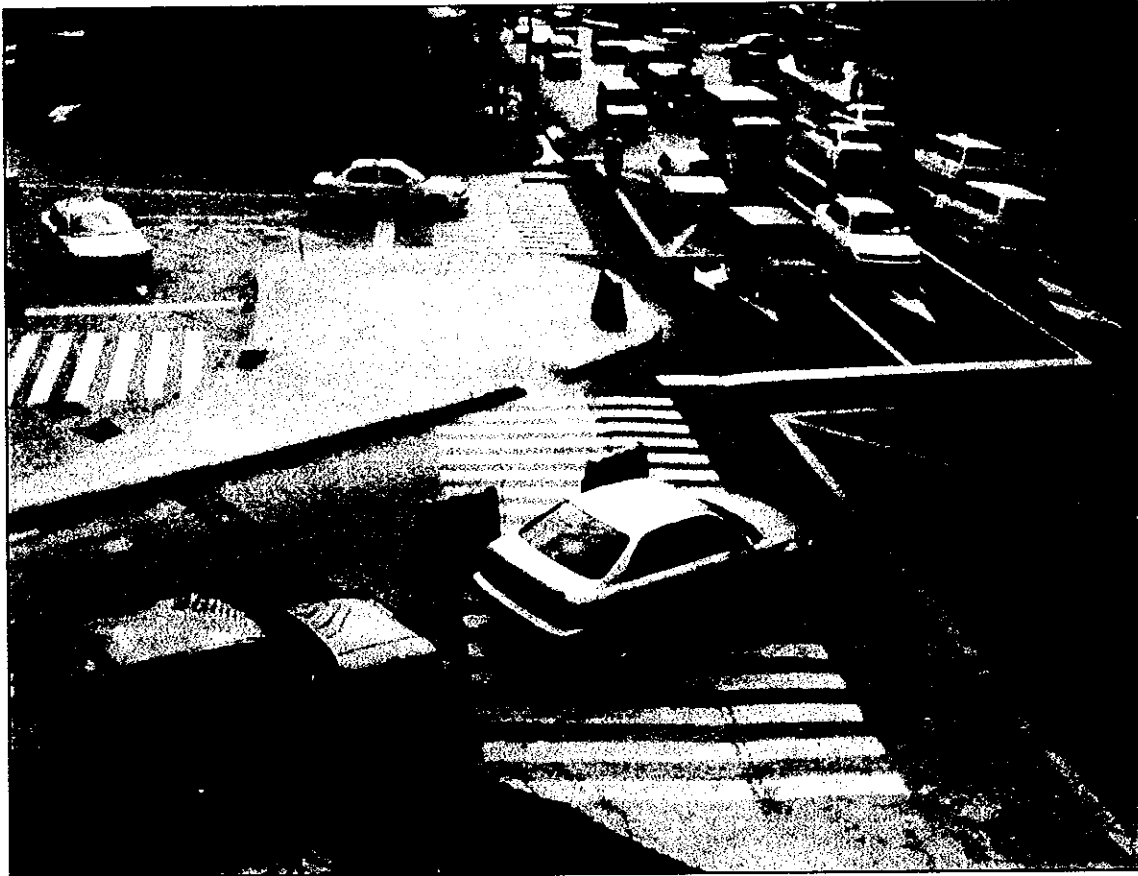
Effective 21 August 2001, the traffic flows illustrated in the following charts will be implemented on a trial basis.

The diagrams illustrate traffic flow changes at an intersection involving 'S. Main Ave to Mackinac Co. Rd', 'S. Pine St', 'S. Elm St', and 'S. Oak St'. The diagrams show various lane configurations and traffic flow directions, including one-way streets and turning movements. The diagrams are arranged in a 2x2 grid, showing different traffic flow scenarios for the intersection.

View of the junction showing outline of proposed traffic island, where the red vehicle is positioned. When implemented, maneuvers from Wack-wack Road will be more organized.



View of the implemented Traffic Improvement Project



**SSTRIMM**  
**Traffic Management Manual**



Annex C  
**Traffic Survey Forms**

---

# Annex C

## **Survey Forms**

Commonly used data collection forms are contained in this Annex. Each form may be removed or photocopied for reproduction as printed forms.



		<b>Traffic Volume Count</b> Tally Sheet
--	--	--

Station Code	Station Name	Checker
Survey Date	Location	Encoder
Weather	Direction	
Recorder / Enumerator	From (place)	Filename
Field Supervisor	To (place)	Sheet                      of

Time Period							
From	To						



		<b>Traffic Volume Count</b> Field Sheet
--	--	--

Station Code	Station Name	Checker
Survey Date	Location	Encoder
Weather	Direction	
Recorder / Enumerator	From (place)	Filename
Field Supervisor	To (place)	Sheet            of

Time Period							
From	To						
<b>06:00</b>	06:15						
06:15	06:30						
06:30	06:45						
06:45	07:00						
<b>07:00</b>	07:15						
07:15	07:30						
07:30	07:45						
07:45	08:00						
<b>08:00</b>	08:15						
08:15	08:30						
08:30	08:45						
08:45	09:00						
<b>09:00</b>	09:15						
09:15	09:30						
09:30	09:45						
09:45	10:00						
<b>10:00</b>	10:15						
10:15	10:30						
10:30	10:45						
10:45	11:00						
<b>11:00</b>	11:15						
11:15	11:30						
11:30	11:45						
11:45	12:00						
<b>12:00</b>	12:15						
12:15	12:30						
12:30	12:45						
12:45	13:00						
<b>13:00</b>	13:15						
13:15	13:30						
13:30	13:45						
13:45	14:00						

		<b>Traffic Volume Count</b> Field Sheet
--	--	--

Station Code	Station Name	Checker
Survey Date	Location	Encoder
Weather	Direction	
Recorder / Enumerator	From (place)	Filename
Field Supervisor	To (place)	Sheet _____ of _____

Time Period							
From	To						
<b>14:00</b>	14:15						
14:15	14:30						
14:30	14:45						
14:45	15:00						
<b>15:00</b>	15:15						
15:15	15:30						
15:30	15:45						
15:45	16:00						
<b>16:00</b>	16:15						
16:15	16:30						
16:30	16:45						
16:45	17:00						
<b>17:00</b>	17:15						
17:15	17:30						
17:30	17:45						
17:45	18:00						
<b>18:00</b>	18:15						
18:15	18:30						
18:30	18:45						
18:45	19:00						
<b>19:00</b>	19:15						
19:15	19:30						
19:30	19:45						
19:45	20:00						
<b>20:00</b>	20:15						
20:15	20:30						
20:30	20:45						
20:45	21:00						
<b>21:00</b>	21:15						
21:15	21:30						
21:30	21:45						
21:45	22:00						

		<b>Traffic Volume Count</b> Field Sheet
--	--	--

Station Code	Station Name	Checker
Survey Date	Location	Encoder
Weather	Direction	
Recorder / Enumerator	From (place)	Filename
Field Supervisor	To (place)	Sheet                      of

Time Period							
From	To						
<b>22:00</b>	22:15						
22:15	22:30						
22:30	22:45						
22:45	23:00						
<b>23:00</b>	23:15						
23:15	23:30						
23:30	23:45						
23:45	00:00						
<b>00:00</b>	00:15						
00:15	00:30						
00:30	00:45						
00:45	01:00						
<b>01:00</b>	01:15						
01:15	01:30						
01:30	01:45						
01:45	02:00						
<b>02:00</b>	02:15						
02:15	02:30						
02:30	02:45						
02:45	03:00						
<b>03:00</b>	03:15						
03:15	03:30						
03:30	03:45						
03:45	04:00						
<b>04:00</b>	04:15						
04:15	04:30						
04:30	04:45						
04:45	05:00						
<b>05:00</b>	05:15						
05:15	05:30						
05:30	05:45						
05:45	06:00						

# Journey Time Survey Field Sheet

<b>Project</b>	<b>Survey Date</b>	<b>Recorder</b>			<b>T - General Congestion</b>
<small>Route Code</small>	<small>Run Number</small>	<small>Sheet</small>	<small>of</small>		<b>PED - Pedestrians Crossing</b>
<small>Route Name</small>	<small>Start Time</small>	<small>Checker</small>	<small>Encoder</small>		<b>BP - Buses / JP - Jeeps/Jeeps (un)loading</b>
<small>Direction</small>	<small>Weather</small>	<small>Filename</small>			<b>S - Traffic Signal SS - Stop Sign</b>
					<b>PK - Parked Vehicles</b>
					<b>LT - Left Turning Vehicles</b>
					<b>A - Traffic Accident</b>
					<b>O - Others (specify)</b>

Station Name / Intersection / Landmark	Kilometer Reading	Passing Time	Delay 1			Delay 2			Delay 3			Delay 4									
			Stop	Re-Start	Cause	Stop	Re-Start	Cause	Stop	Re-Start	Cause	Stop	Re-Start	Cause							

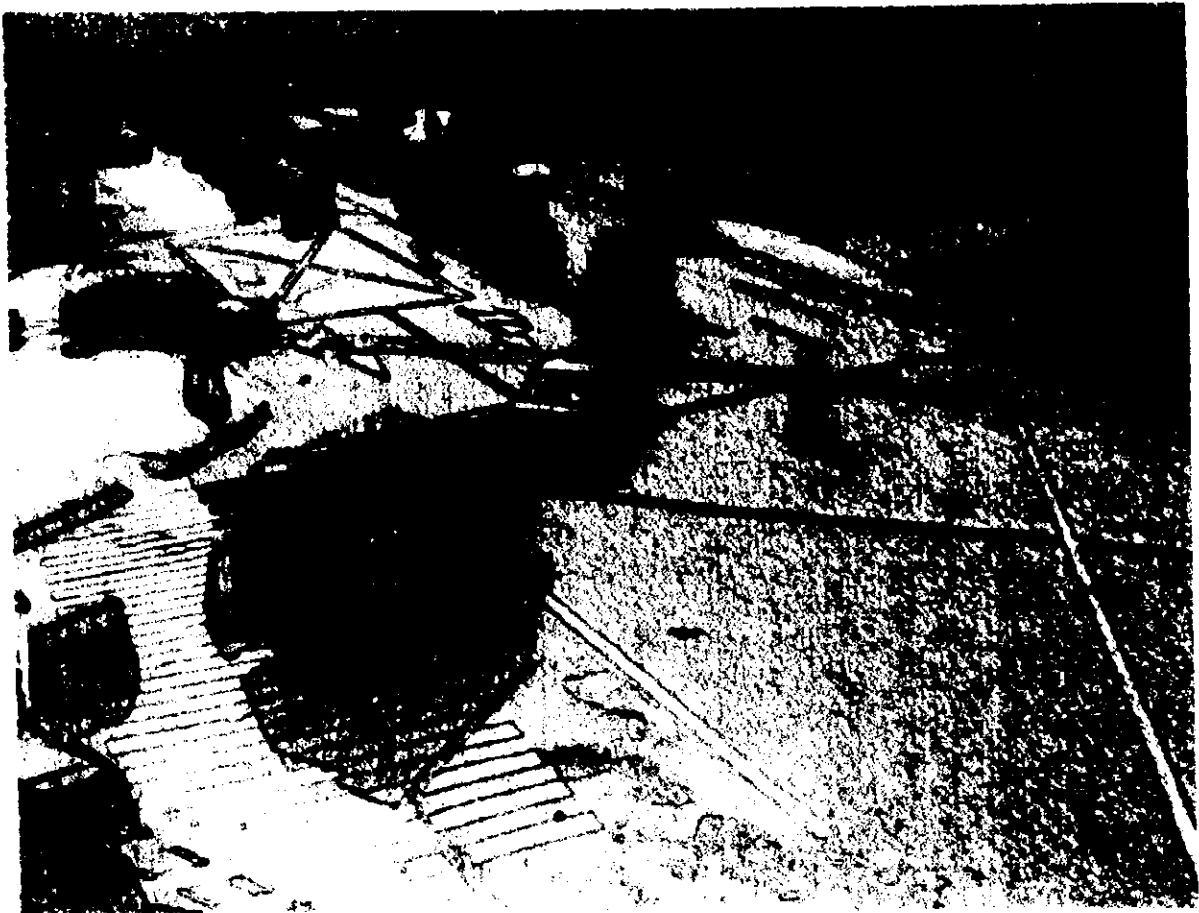


<b>Public Transport Usage</b> Field Sheet	Vehicle Mode	License Plate Number	Survey Date	Checker
	Route Code	Seating Capacity	Weather	Encoder
	Route Name		Start Time	Sheet   of
	Direction		Run Number	Filename
	From (place)	To (place)	Recorder	

Route Segment / Location	Distance Reading	Time Reading	Passengers Boarding	Passengers Alighting



**SSTRIMM**  
**Traffic Management Manual**



Annex D  
**Traffic Signs**

---

# Annex D

## **Standard Road Traffic Signs<sup>7</sup>**

Road signs are traffic control devices which inform motorists and other road users of regulations and provide warning and guidance needed for the safe, uniform, and efficient operation of all elements of the traffic stream.

The provisions contained in this Annex of the Traffic Management Manual follow the provisions indicated in the International Convention on Road Traffic Signs, which the Philippines follows, through the DPWH Philippine Road Signs Manual (revised edition), published in 1982. The DPWH Manual prescribes the warrants, design and location for road traffic signs in the country.

The Code Numbers for traffic signs given in this Annex conform to those in the Vienna Convention, and where available, the corresponding DPWH Road Signs Manual Code Numbers are also given.

---

<sup>7</sup> Adapted from the International Convention of Road Traffic Signs (United Nations, Vienna, Austria, 1968) and amended in 1993; the DPWH Philippine Road Signs Manual (MPWH-TEAM, 1982); and the Manual on Uniform Traffic Control Devices (MUTCD), Millennium Edition, December 2000, and amended July 2001.

## D.1 Danger Warning Signs

### D.1.1 Model for Danger Warning Signs

The International Convention on Road Signs and Signals state the following:

The "A" DANGER WARNING signs shall be of model Aa or model Ab both described here.

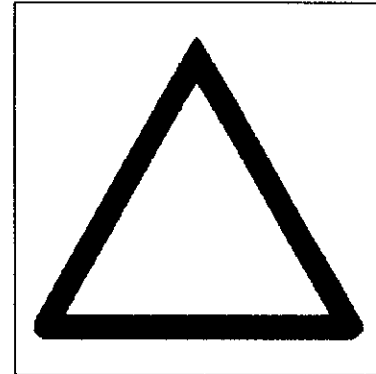
Model A<sup>a</sup> is an equilateral triangle having one side horizontal and the opposite vertex above it; the ground is white or yellow and the border red. (The figures on the right show Model A<sup>a</sup> with white background and Model A<sup>a'</sup> with yellow background). Model A<sup>b</sup> is a square with one diagonal vertical; the ground is yellow and the border, which is only a rim, is black.

Unless the description specifies otherwise, the symbols displayed on these signs shall be black or dark blue.

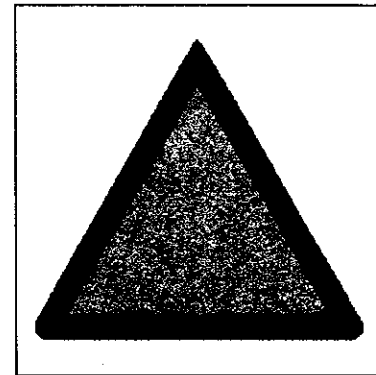
Article 5, paragraph 2 of the Vienna Convention also states that "where this Convention allows a choice between several signs or several symbols, the Contracting Parties undertake to adopt only one of such signs or symbols for the whole of their territories..."

In this regard, the DPWH has adopted Model A<sup>a</sup> for danger warning signs throughout the country. Note, however, that the DPWH Road Signs Manual prescribe warning signs of Model A<sup>a</sup> (white background) in some instances, whereas in others are of Model A<sup>a'</sup> (yellow background).

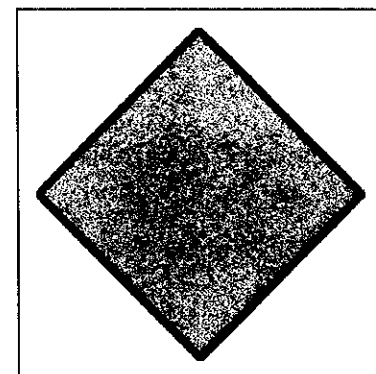
For purposes of standardization, it is recommended that Danger Warning Signs to be used by Metro Manila LGUs be of Model A<sup>a</sup> with white background.



Model A<sup>a</sup>



Model A<sup>a'</sup>

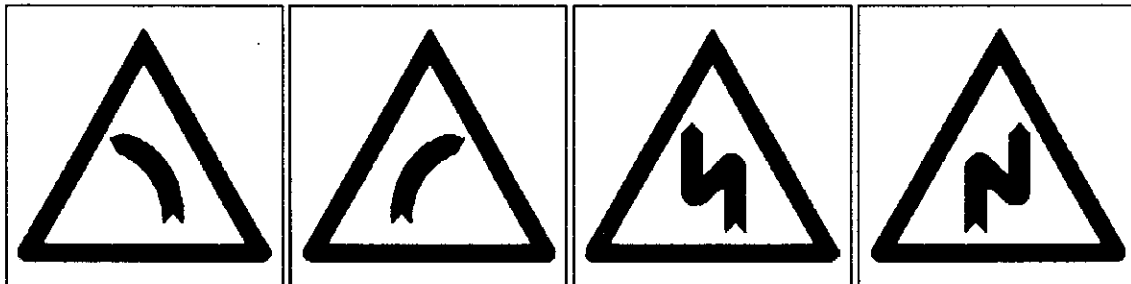


Model Ab

**D.1.2 Dangerous bend or bends**

Warning of a dangerous bend or succession of dangerous bends shall be given by one of the following symbols, whichever is appropriate:

- (a) A,1<sup>a</sup> : left bend
- (b) A,1<sup>b</sup> : right bend
- (c) A,1<sup>c</sup> : double bend, or succession of more than two bends, the first to the left
- (d) A,1<sup>d</sup> : double bend, or succession of more than two bends, the first to the right.



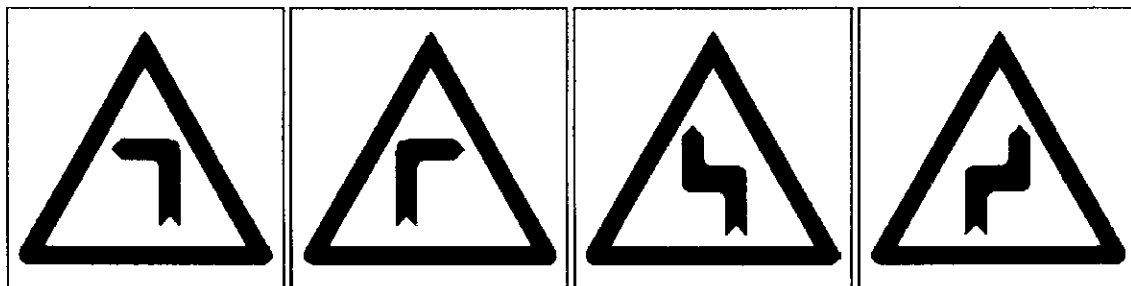
**A,1<sup>a</sup>: Left Bend**  
DPWH Code: W1-3 (L)

**A,1<sup>b</sup>: Right Bend**  
DPWH Code: W1-3 (R)

**A,1<sup>c</sup>: Double Bend - left**

**A,1<sup>d</sup>: Double Bend - right**

Additional types of warning signs for bends are as follows:

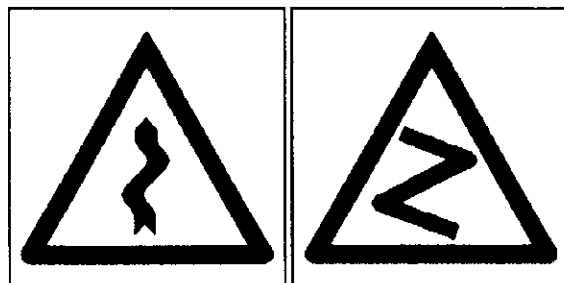


**A,1<sup>e</sup>: Left Sharp Turn**  
DPWH Code: W1-1 (L)  
(on yellow background)

**A,1<sup>f</sup>: Right Sharp Turn**  
DPWH Code: W1-1 (R)  
(on yellow background)

**A,1<sup>g</sup>: Left Reverse Turn**  
DPWH Code: W1-2 (L)  
(on yellow background)

**A,1<sup>h</sup>: Right Reverse Turn**  
DPWH Code: W1-2 (R)  
(on yellow background)

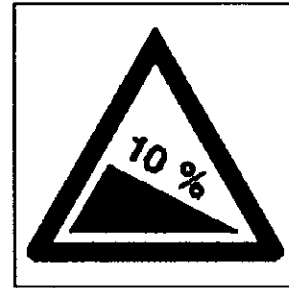


**A,1<sup>i</sup>: Winding Road**  
DPWH Code: W1-5 (L) / (R)  
(on yellow background)

**A,1<sup>j</sup>: Zig-zag Road**

### D.1.3 Dangerous descent

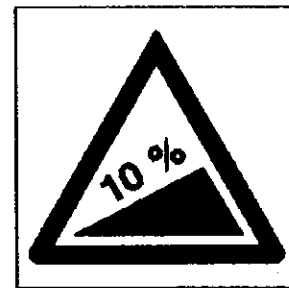
To give warning of a steep descent, in advance of a downgrade wherein vehicle speeds are likely to increase to an extent which would make a vehicle difficult to control, symbol A,2<sup>a</sup> shall be used. The left-hand part of symbol A,2<sup>a</sup> shall occupy the left-hand corner of the sign panel and its base shall extend over the whole width of the panel. The figure in symbols A,2<sup>a</sup> shows the gradient as a percentage (10% in the example); it may be replaced by a ratio (e.g. 1:10).



**A,2<sup>a</sup>: Dangerous Descent**  
DPWH Code: W5-4  
*(The example shows 10% descent.  
This should be changed to reflect  
actual gradient.)*

### D.1.4 Steep ascent

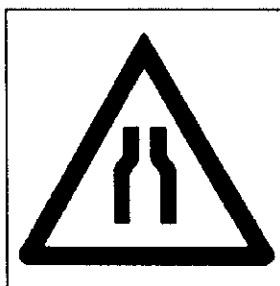
To give warning of a long, steep ascent or climb of 10% gradient or more, symbol A,3<sup>a</sup> shall be used. The right-hand part of symbol A,3<sup>a</sup> shall occupy the right-hand corner of the sign panel and its base shall extend over the whole width of the panel. The figure in symbol A,3<sup>a</sup> shows the gradient as a percentage; it may be replaced by a ratio (e.g. 1:10).



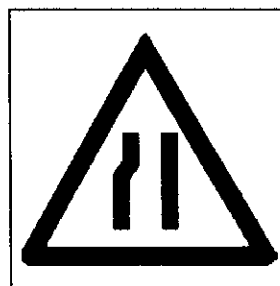
**A,3<sup>a</sup>: Steep Ascent**  
DPWH Code: W5-5  
*(The example shows 10% ascent.  
This should be changed to reflect  
actual gradient.)*

### D.1.5 Carriageway narrows

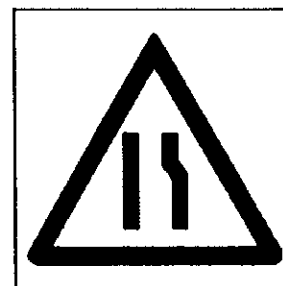
Warning that the carriageway ahead is narrower, constituting a hazard. These signs are used on a two-lane road where there is a reduction in pavement width of 1.2m or more, or the left lane is reduced in width by 0.6m or more, or the pavement is reduced to 5.0m or less. These are also used for a multi-lane road, including one carriageway of a divided road, when there is a reduction in the number of lanes. These warnings shall be given by the symbol A,4<sup>a</sup> or by a symbol showing the outline of the road more clearly, such as A,4<sup>b1</sup> or A,4<sup>b2</sup>.



**A,4<sup>a</sup>: Carriageway Narrows**  
DPWH Code: W4-2



**A,4<sup>b1</sup>**



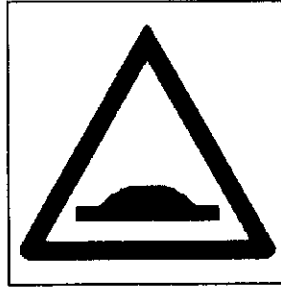
**A,4<sup>b2</sup>**

### D.1.6 Uneven Road

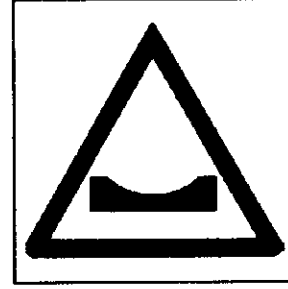
Warning of dips, hump bridges or ridges, or of sections where the carriageway is in bad condition shall be given by symbol A,7<sup>a</sup>. To give warning of a hump bridge or ridge, symbol A,7<sup>a</sup> may be replaced by symbol A,7<sup>b</sup>. To give warning of a dip, symbol A,7<sup>a</sup> may be replaced by symbol A,7<sup>c</sup>.



**A,7<sup>a</sup>: Uneven Road**  
DPWH Code: W5-2



**A,7<sup>b</sup>: Hump Ahead**  
DPWH Code: W5-3



**A,7<sup>c</sup>: Dip Ahead**

### D.1.7 Dangerous shoulders

Warning of a section of road where the shoulders are particularly dangerous shall be given by symbol A,8. The symbol may be reversed.

### D.1.8 Slippery Road

Warning that the section of road ahead may be particularly slippery shall be given by symbol A,9. DPWH equivalent code is W5-9.

### D.1.9 Loose Gravel

Warning of a section of road on which gravel may be thrown up shall be given by symbol A,10<sup>a</sup>.



**A,8: Dangerous Shoulders**



**A,9: Slippery Road**  
DPWH Code: W5-9



**A,10<sup>a</sup>: Loose Gravel**

### D.1.10 Pedestrian Crossing

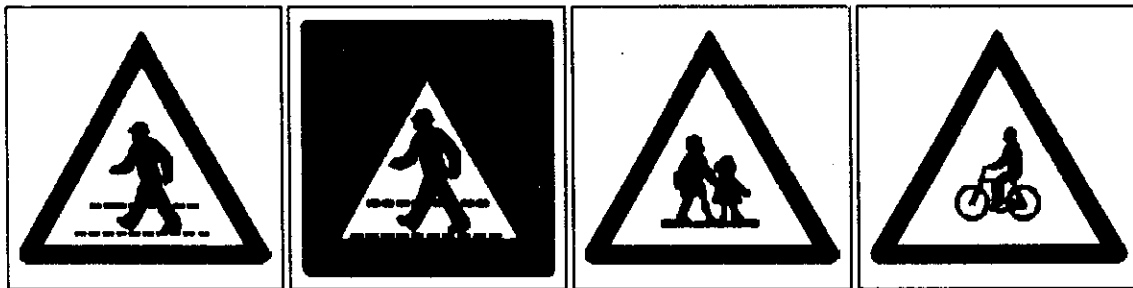
Warning of a pedestrian crossing indicated either by road markings, or by sign E,12 (also shown for reference) shall be given by symbol A,12. The symbol may be reversed.

### D.1.11 Children

Warning of a section of road frequented by children, such as the exit from a school or playground shall be given by symbol A,13.

### D.1.12 Cyclists entering or crossing

Warning of a point at which cyclists frequently enter or cross the road shall be given by symbol A,14. The symbol may be reversed.



**A,12: Pedestrian Crossing Ahead**  
DPWH Code: W6-1

**E,12: Pedestrian Crossing**  
*Used at pedestrian crossing location*

**A,13: Children**  
DPWH Code: W6-2

**A,14: Cyclists entering or Crossing**

### D.1.13 Road Works

Warning that work is in progress on the section of the road ahead shall be given by symbol A,16.



**A,16: Road Works Ahead**  
DPWH Code: W6-1

**D.1.14 Traffic Light Signals Ahead**

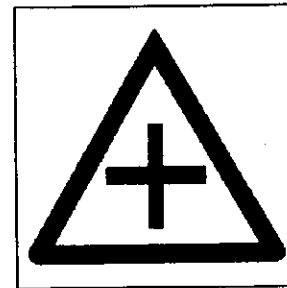
If it is considered essential to give warning of a section of road on which traffic is regulated by three-color light signals, because road users would not expect such a section, symbol A,17 shall be used. This symbol shall be in the three colors of the lights of which it gives warning. Note that the DPWH Manual provision (W3-1) differs slightly in that it does not have the black background for the three-color signal legend given in symbol A,17<sup>b</sup>.



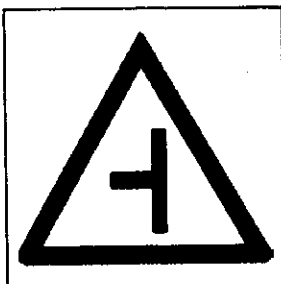
**A17b: Signals Ahead**  
DPWH Code: W3-1

**D.1.15 Intersection where the priority is prescribed by the general priority rule**

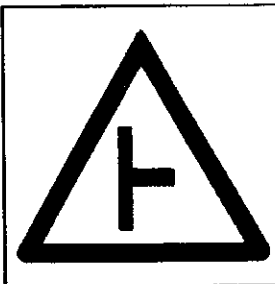
Warning of an intersection where the priority is that prescribed by the general priority rule in force shall be given by the symbol A,18<sup>b</sup>. Symbol A,18<sup>b</sup> may be replaced by symbols which show the nature of the intersection more clearly, such as A,18<sup>c</sup>; A,18<sup>d</sup>; A,18<sup>e</sup>; A,18<sup>f</sup> and A,18<sup>g</sup>.



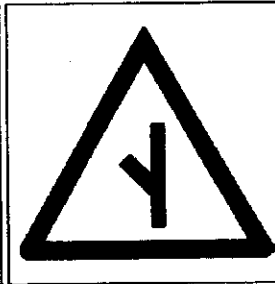
**A,18: Cross Road**  
DPWH Code: W2-1  
(on yellow background)



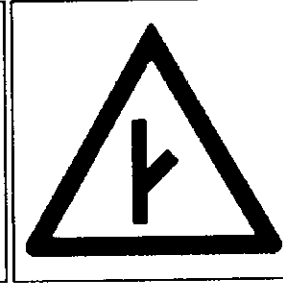
**A,18<sup>c1</sup>**  
DPWH Code: W2-6 (L)  
(on yellow background)



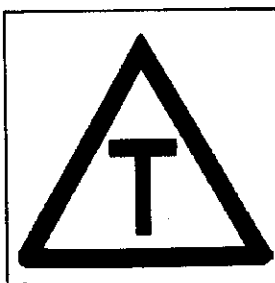
**A,18<sup>c2</sup>**  
DPWH Code: W2-6 (R)  
(on yellow background)



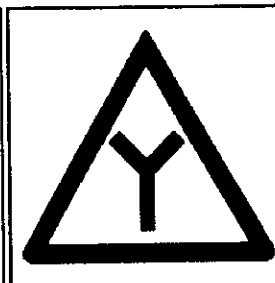
**G,3: Suggested Route for Left Turn**



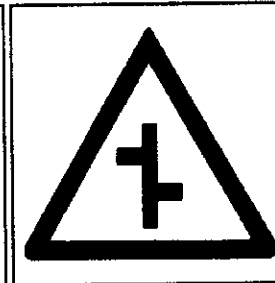
**A,18<sup>d1</sup>**  
DPWH Code: W2-6 (R)  
(on yellow background)



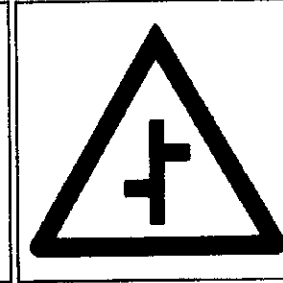
**A,18<sup>e</sup>**  
DPWH Code: W2-4  
(on yellow background)



**A,18<sup>f</sup>**  
DPWH Code: W2-5  
(on yellow background)



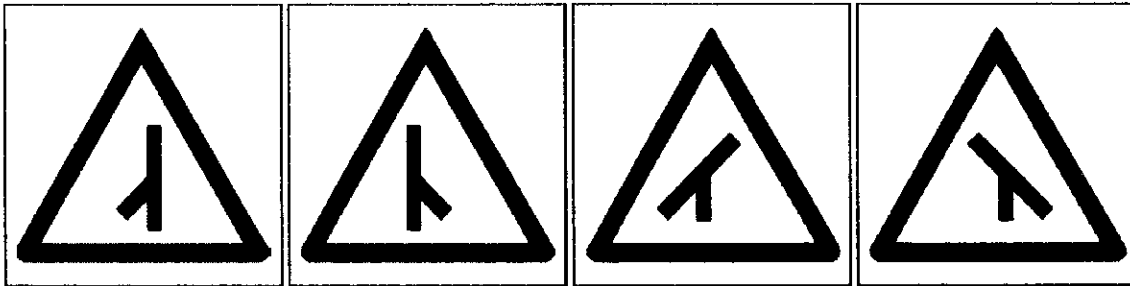
**A,18<sup>g1</sup>**  
DPWH Code: W2-2 (L)  
(on yellow background)



**A,18<sup>g2</sup>**  
DPWH Code: W2-2 (R)  
(on yellow background)



Additional warning signs of an intersections ahead are given by symbols A,18<sup>h1</sup>; A,18<sup>h2</sup>; A,18<sup>i1</sup>; A,18<sup>i2</sup>; A,18<sup>j1</sup> and A,18<sup>j2</sup>.

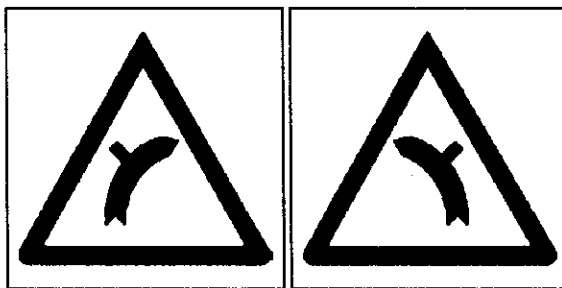


A,18<sup>h1</sup>

A,18<sup>h2</sup>

A,18<sup>i1</sup>

A,18<sup>i2</sup>

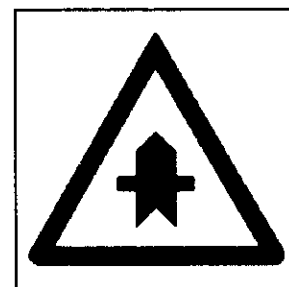


A,18<sup>j1</sup>

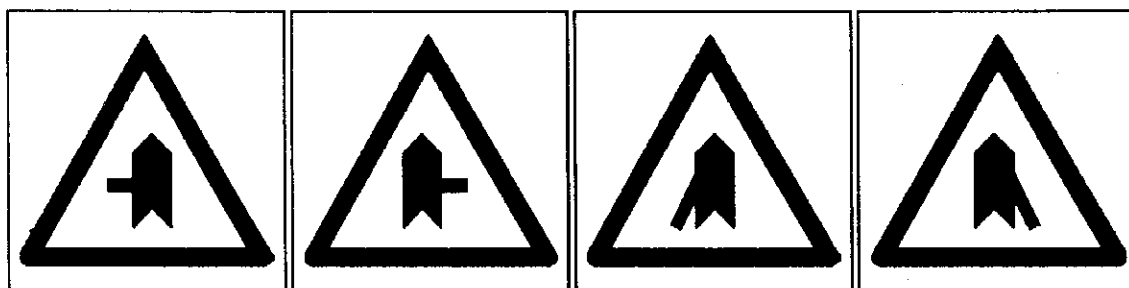
A,18<sup>j2</sup>

**D.1.16 Intersection with a road the users of which must give way**

Warning of an intersection with a road the users of which must give way shall be given by symbol A,19<sup>a</sup>. Symbol A,19<sup>a</sup> may be replaced by symbols which show the nature of the intersection more clearly, such as A,19<sup>b</sup> and A,19<sup>c</sup>. These symbols may be used on a road only if "STOP" or "GIVE WAY" signs (shown later here in this Annex) are placed on the road or roads with which it forms the intersection of which warning is given, or if these roads are such (for example, paths or earth-tracks) that, under domestic legislation, drivers using them are required to give way at the intersection even in the absence of such signs.



**A,19<sup>a</sup>: Priority Road**  
DPWH Code: W2-4  
(on yellow background)



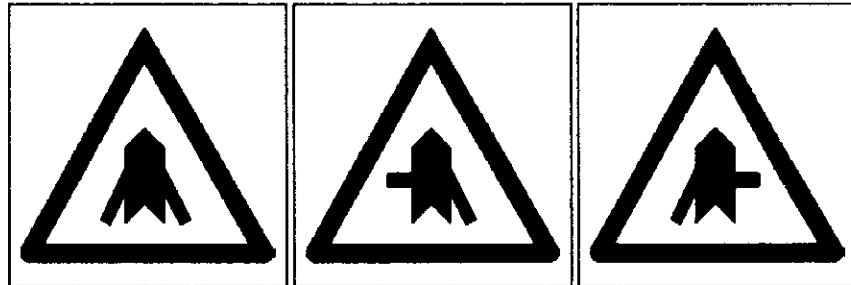
**A,19<sup>b1</sup>**  
DPWH Code: W2-9 (L)  
(on yellow background)

**A,19<sup>b2</sup>**  
DPWH Code: W2-9 (R)  
(on yellow background)

**A,19<sup>c1</sup>**  
DPWH Code: W2-10 (L)  
(on yellow background)

**A,19<sup>c2</sup>**  
DPWH Code: W2-10 (R)  
(on yellow background)

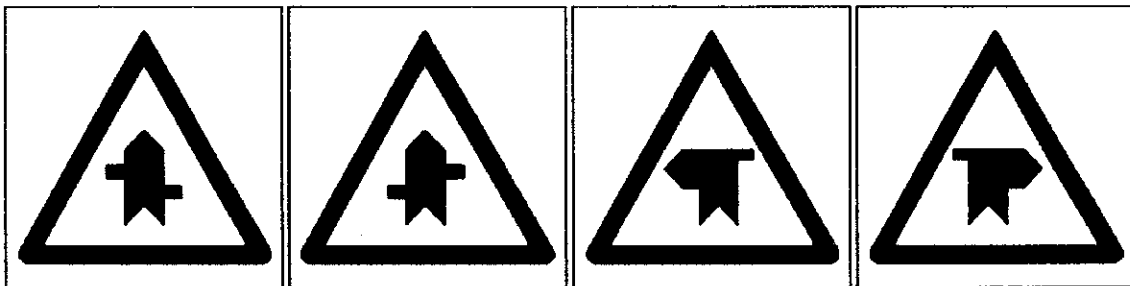
Additional warning signs for an intersection with a road the users of which must give way and more closely graphically representing the road alignments are given by symbols A,19<sup>d</sup>, A,19<sup>e1</sup>, A,19<sup>e2</sup>, A,19<sup>f1</sup>, A,19<sup>f2</sup>, A,19<sup>g1</sup>, and A,19<sup>g2</sup>.



A,19<sup>d</sup>

A,19<sup>e1</sup>

A,19<sup>e2</sup>



A,19<sup>f1</sup>

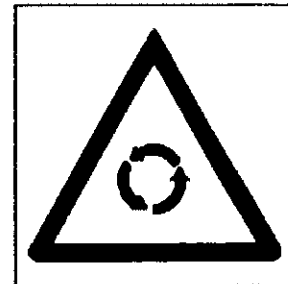
A,19<sup>f2</sup>

A,19<sup>g1</sup>

A,19<sup>g2</sup>

**D.1.17 Roundabout**

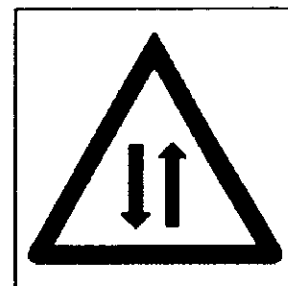
Warning of a roundabout shall be given by symbol A,22.



**A,22: Roundabout Ahead**  
DPWH Code: W2-7  
(on yellow background)

**D.1.18 Two-way Traffic**

Warning of a section of road temporarily or permanently carrying two-way traffic on the same carriageway when, on the previous section, traffic was carried on a one-way road or on a road comprising several one-way traffic carriageways, shall be given by the symbol A,23. The sign bearing this symbol shall be repeated at the beginning of the section and along the section as frequently as may be necessary.



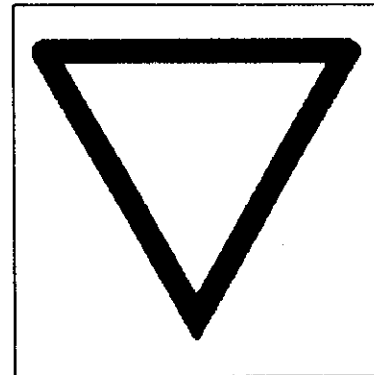
**A,23: Two-way Traffic**

## D.2 Priority Signs

### D.2.1 "GIVE WAY" Sign

The International Convention on Road Signs and Signals state the following: The "GIVE WAY" sign shall be sign B,1. It shall consist of an equilateral triangle having one side horizontal and the opposite vertex below it. The ground shall be white (yellow in other countries) and the border red. The International Convention on Road Signs state that the sign shall bear no symbol, although in the Philippines, the common practice is to indicate the sign with the words "GIVE WAY".

The side of the normal sized sign shall measure approximately 0.90 m; the side of the small sign shall measure not less than 0.60 m.



**B,1: GIVE WAY**  
(with no symbol)



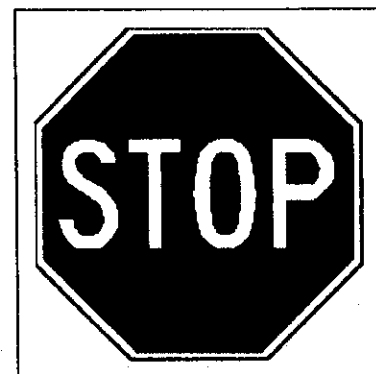
**DPWH Code R1-2**  
**GIVE WAY sign with symbol**

### D.2.2 "STOP" Sign

The "STOP" sign is used where a complete stop is necessary for vehicles from an approach road for safety reasons. It is intended to ensure that drivers have sufficient time in which to assess the degree of hazard prevailing before entering an intersection.

The "STOP SIGN" shall be sign B,2. It is octagonal with a red ground bearing the word "STOP" in white in English.

The height of the word shall be not less than one third of the height of the panel;



**B,2: STOP**  
DPWH Code: R1-1

Additional signs not included in the Priority Series of Regulatory Signs in the DPWH Road Signs Manual are as follows:

#### D.2.3 "PRIORITY ROAD" Sign

The "PRIORITY ROAD" sign shall be sign B,3. It shall consist of a square with one diagonal vertical. The rim of the sign shall be black; the sign shall have in its centre a yellow or orange square with a black rim; the space between the two squares shall be white. The side of the normal sized sign shall measure approximately 0.50 m; the side of the small sign shall measure not less than 0.35 m.

#### D.2.4 "END OF PRIORITY " Sign

The "END OF PRIORITY" sign shall be sign B,4. It shall consist of sign B,3 above with the addition of a black or grey median band perpendicular to the lower left and upper right sides of the square, or of black or grey parallel lines forming such a band.

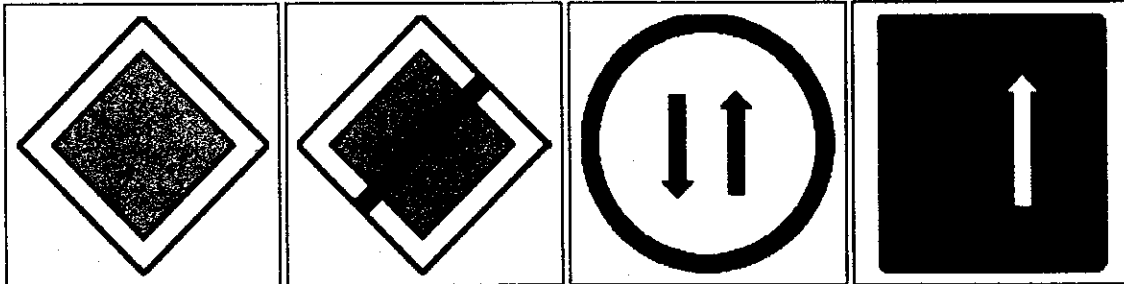
#### D.2.5 Sign indicating priority for oncoming traffic

If, on a narrow section of road where passing is difficult or impossible, traffic is regulated and if, because drivers can see the whole length of the section clearly both at night and by day, such regulation is carried out by giving priority to traffic moving in one direction and not by installing traffic light signals, sign B,5 "PRIORITY FOR ONCOMING TRAFFIC" shall be set up facing the traffic on the side which does not have priority. This sign shall mean that entry into the narrow section is prohibited so long as it is not possible to pass through that section without obliging oncoming vehicles to stop.

This sign shall be round, with a white ground and a red border; the arrow indicating the direction having priority shall be black and that indicating the other direction red.

### D.2.6 Sign indicating priority over oncoming traffic

To notify drivers that on a narrow section of road they have priority over oncoming vehicles the sign used shall be B,6. This sign shall be rectangular with a blue ground; the arrow pointing upwards shall be white and the other arrow red. When sign B,6 is used, a sign B,5 shall be placed on the road, at the other end of the narrow section, for traffic moving in the opposite direction.

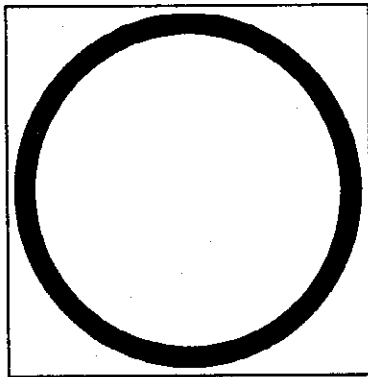
**B,3: PRIORITY ROAD****B,4: END OF PRIORITY****B,5: Priority for  
Opposite Direction****B,6: Priority over  
Opposite Direction**

## D.3 Prohibitory, Restrictive or Regulatory Signs

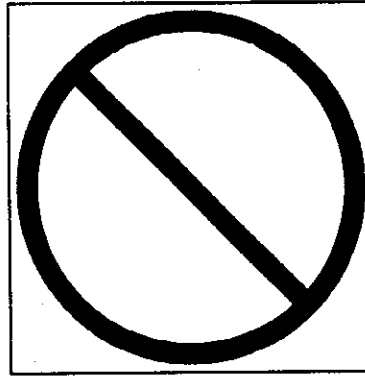
### D.3.1 Model for Prohibitory / Restrictive / Regulatory Signs

Prohibitory and restrictive signs shall be circular; their diameter shall be not less than 0.60 m outside built-up areas and not less than 0.40 m or 0.20 m for signs prohibiting or restricting standing and parking in built-up areas.

Unless otherwise specified where the signs in question are described, prohibitory or restrictive signs shall have a white background for signs prohibiting or restricting standing and parking with a wide red border. The symbols and the inscriptions, if any, shall be black and the oblique bars, if any, shall be red and shall slope downwards from left to right.



**Standard Prohibitory Sign**  
without oblique bar  
*(used in other countries)*

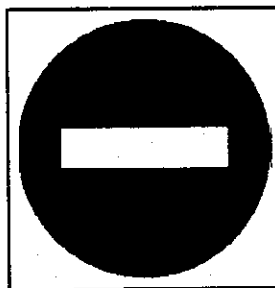


**Standard Prohibitory Sign**  
with oblique bar  
*(used in the Philippines)*

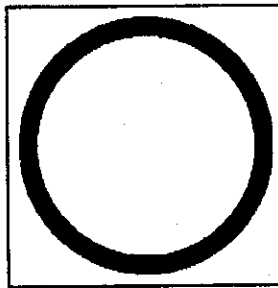
### D.3.2 Prohibition and Restriction of Entry

Notification that entry is prohibited for all vehicles shall be given by sign C,1<sup>a</sup>, "NO ENTRY".

Notification that all vehicular traffic is prohibited in both directions shall be given by sign C,2, "CLOSED TO ALL VEHICLES IN BOTH DIRECTIONS".

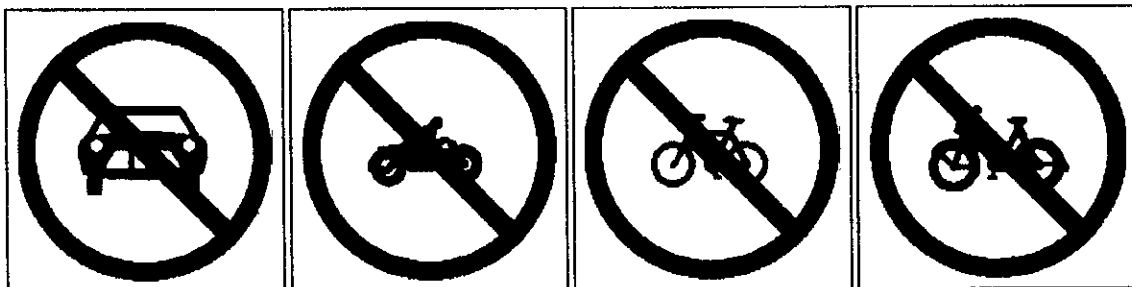


**C,1<sup>a</sup>: No Entry**  
DPWH Code: R3-1



**C,2: Closed to All Vehicles**  
**in Both Directions**

Notification that entry is prohibited for a certain category of vehicle or road-user only, shall be given by a sign bearing as a symbol the silhouette of the vehicles or road-users whose entry is prohibited. Examples are shown in the following signs and corresponding descriptions. (Not shown here are Philippine signs for entry restrictions such as those for jeepneys [R3-3] and tricycles [R3-6].)

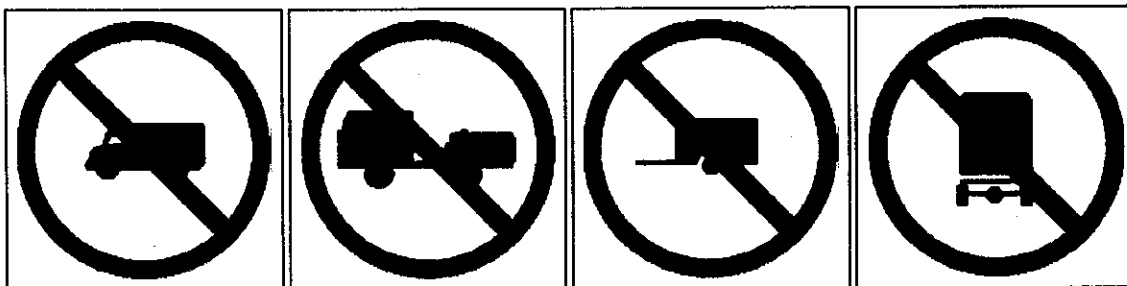


**C,3<sup>a</sup>**  
**No Entry for any Power Driven Vehicle except Two-Wheeled Motor Cycles without Side-Car**  
 DPWH Code: W2-9 (L)

**C,3<sup>b</sup>**  
**No Entry for Motorcycles**  
 DPWH Code: R3-5

**C,3<sup>c</sup>**  
**No Entry for Cycles**  
 DPWH Code: R3-4

**C,3<sup>d</sup>**  
**No Entry for Mopeds**



**C,3<sup>e</sup>: No Entry for Goods Vehicles**  
 DPWH Code: R3-8

The inscription of a tonnage figure, either in a light color on the silhouette of the vehicle or on an additional panel placed below sign C,3<sup>e</sup>, shall mean that the prohibition applies only if the permissible maximum mass of the vehicle or combination of vehicles exceeds that figure

**C,3<sup>f</sup>: No Entry for any Power Driven Vehicle Drawing a Trailer other than a Semi-Trailer or a Single Axle Trailer**  
 DPWH Code: R3-9

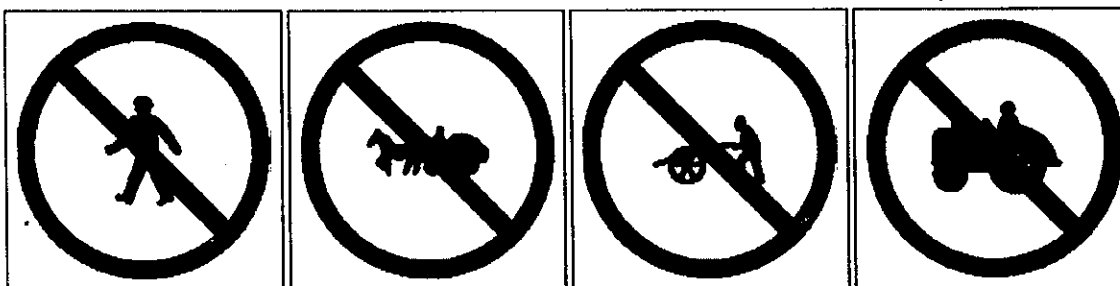
The inscription of a tonnage figure, either in a light color on the silhouette of the trailer or on an additional panel placed below sign C,3<sup>f</sup>, shall mean that the prohibition applies only if the permissible maximum mass of the trailer exceeds that figure.

**C,3<sup>g</sup>: No Entry for any Power-Driven Vehicle Drawing a Trailer**

The inscription of a tonnage figure, either in a light color on the silhouette of the trailer or on an additional panel placed below sign C,3<sup>g</sup>, shall mean that the prohibition applies only if the permissible maximum mass of the trailer exceeds that figure.

**C,3<sup>h</sup>: No Entry for Vehicles Carrying Dangerous Goods for which Special Sign Plating is Prescribed**

To indicate no entry for vehicles carrying certain types of dangerous goods, the sign C,3<sup>h</sup> may be used in conjunction, if necessary, with an additional panel. The information given on this additional panel specifies that this prohibition applies only to the carriage of dangerous goods as defined by domestic legislation



**C,3<sup>i</sup>: No Entry for Pedestrians**  
 DPWH Code: R3-10

**C,3<sup>j</sup>: No Entry for Animal-Drawn Vehicles\***  
 DPWH Code: R3-11

**C,3<sup>k</sup>: No Entry for Handcarts**  
 DPWH Code: R3-12

**C,3<sup>l</sup>: No Entry for Power-Driven Agricultural Vehicles**

Notification that entry is prohibited for several categories of vehicle or road user, may be given either by displaying as many prohibitory signs as there are prohibited classes, or by a single prohibitory sign which shows the silhouettes of the various vehicles or road-users whose entry is prohibited. Signs C,4<sup>a</sup>, "NO ENTRY FOR POWER DRIVEN VEHICLES"; and C,4<sup>b</sup> "NO ENTRY FOR POWER DRIVEN VEHICLES OR ANIMAL-DRAWN VEHICLES" are examples of such signs.

Signs showing more than two silhouettes may not be set up outside built-up areas, and signs showing more than three silhouettes may not be set up in built-up areas.

Notification that entry is prohibited for vehicles whose mass or dimensions exceed certain limits shall be given by the following signs:

- C,5: "No Entry For Vehicles Having an Overall Width Exceeding \_\_\_\_\_ Meters"
- C,6: "No Entry For Vehicles Having an Overall Height Exceeding \_\_\_\_\_ Meters"
- C,7: "No Entry For Vehicles Exceeding \_\_\_\_\_ Tons Laden Mass"
- C,8: "No Entry For Vehicles Having a Mass Exceeding \_\_\_\_\_ Tons on One Axle"
- C,9 "No Entry For Vehicles or Combinations of Vehicles Exceeding \_\_\_\_\_ Meters In Length"

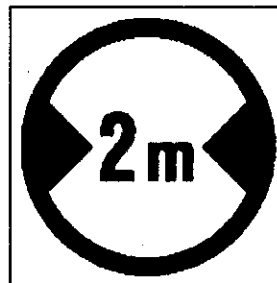
Notification that vehicles shall not be driven closer together than the distance sign C,10, "Driving of Vehicles Less Than \_\_\_\_\_ Meters Apart Prohibited".



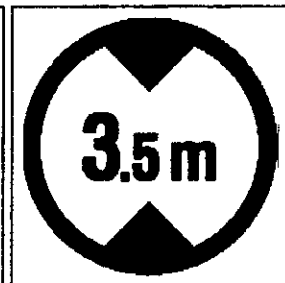
C,4<sup>a</sup>  
No Entry for Power Driven Vehicles



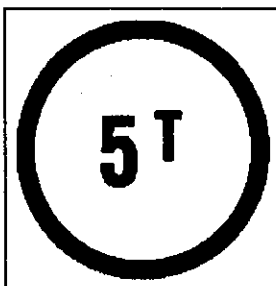
C,4<sup>b</sup>  
No Entry for Power Driven Vehicles or Animal-Drawn Vehicles



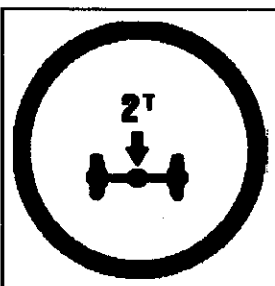
C,5: No Entry for Vehicles Having an Overall Width Exceeding \_\_\_\_\_ Meters  
(2m in example)  
DPWH Code: R6-2



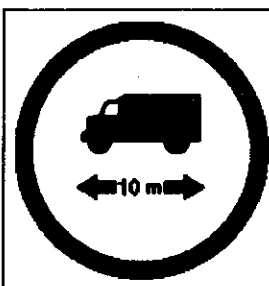
C,6: No Entry for Vehicles Having an Overall Height Exceeding \_\_\_\_\_ Meters  
(3.5m in example)  
DPWH Code: R6-3



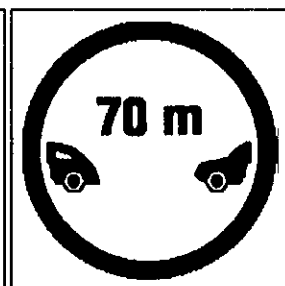
C,7: No Entry for Vehicles Exceeding \_\_\_\_\_ Tons Laden Mass  
(5T in example)  
DPWH Code: R6-4



C,8: No Entry for Vehicles Having a Mass Exceeding \_\_\_\_\_ Tons on One Axle  
(2T in example)  
DPWH Code: R6-5



C,9: No Entry for Vehicles or Combinations of Vehicles Exceeding \_\_\_\_\_ Meters in Length  
(10mT in example)  
DPWH Code: R6-6



C,10: Driving of Vehicles Less than \_\_\_\_\_ Meters Apart Prohibited  
(70m in example)

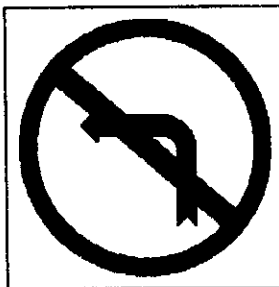


### D.3.3 Prohibition of Turning: No Left Turn and No Right Turn

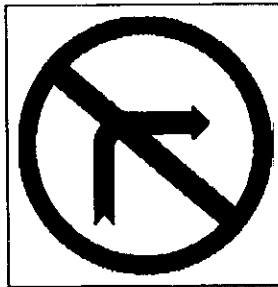
Notification that turning is prohibited (to the right or to the left according to the direction of the arrow) shall be given by sign C,11<sup>a</sup> "NO LEFT TURN" or sign C,11<sup>b</sup> "NO RIGHT TURN".

### D.3.4 Prohibition of U Turns

Notification that U-turns are prohibited shall be given by sign C,12 "NO U-TURN".



**C,11<sup>a</sup>: No Left Turn**  
DPWH Code: R3-13



**C,11<sup>b</sup>: No Right Turn**  
DPWH Code: R3-14

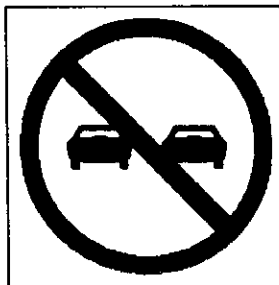


**C,12: No U-Turn**  
DPWH Code: R3-15

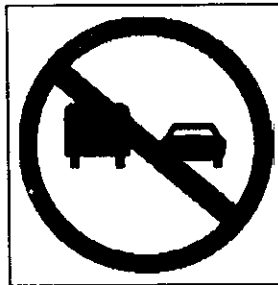
### D.3.5 Prohibition of Overtaking

Notification that, in addition to the general rules on overtaking laid down by the regulations in force, the overtaking of power-driven vehicles other than two-wheeled mopeds and two-wheeled motor cycles without side-car traveling on a road is prohibited, shall be given by sign C,13<sup>a</sup> "OVERTAKING PROHIBITED".

Notification that overtaking is prohibited only for goods vehicles having a permissible maximum mass exceeding 3.5 tons shall be given by sign C,13<sup>b</sup> "OVERTAKING BY GOODS VEHICLES PROHIBITED".



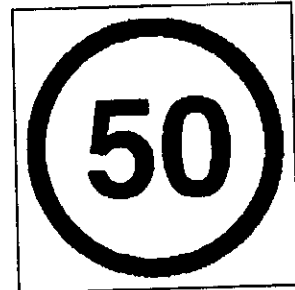
**C,13<sup>a</sup>: No Overtaking**  
DPWH Code: R3-16



**C,13<sup>b</sup>: No Overtaking  
for Goods Vehicles**

### D.3.6 Speed Limit

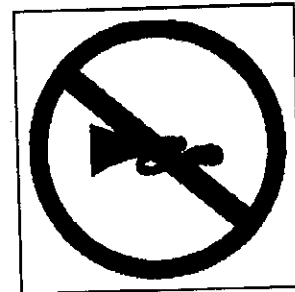
Notification of a speed limit shall be given by sign C,14, "MAXIMUM SPEED LIMITED TO THE FIGURE INDICATED". The figure appearing on the sign shall indicate the maximum speed in kilometers per hour. To indicate a speed limit applicable only to vehicles of a permissible maximum mass exceeding a given figure, an inscription comprising that figure shall be placed on an additional panel below the sign. For mandatory minimum speed, see section C.4.7.



**C,14**  
Maximum Speed Limit  
(Example shows 50 km/hr)  
DPWH Code: R4-1

### D.3.7 Prohibition of the use of audible warning devices

Notification that the use of audible warning devices is prohibited, except to avoid an accident, shall be given by sign C,15 "USE OF AUDIBLE WARNING DEVICES PROHIBITED". This sign, if not placed at the beginning of a built-up area beside or shortly after the sign identifying the built-up area, shall be accompanied by an additional panel H,2 described in Section C.8 showing the distance over which the prohibition applies. It is recommended that this sign should not be placed at the beginning of built-up areas when the prohibition applies in all built-up areas and that it be provided that the sign identifying a built-up area placed at the beginning of that area shall notify road users that the traffic regulations applicable to built-up areas in that country apply from that point onwards.



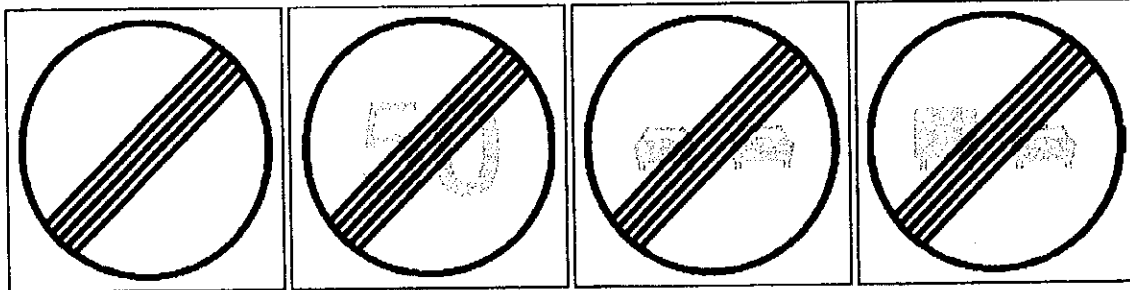
**C,15: Prohibition on Use of Audible Warning Device (No Blowing of Horns)**  
DPWH Code: R6-1

### D.3.8 End of prohibition or restriction

The point at which all prohibitions notified by prohibitory signs for moving vehicles cease to apply shall be indicated by sign C,17<sup>a</sup> "END OF ALL LOCAL PROHIBITIONS IMPOSED ON MOVING VEHICLES". This sign shall be circular and have a white ground; it shall have no border or only a black rim, and shall bear a diagonal band, sloping downward from right to left, which may be black or dark grey or consist of black or grey parallel lines.

The point at which a particular prohibition or restriction notified to moving vehicles by a prohibitory or restrictive sign ceases to apply shall be indicated by sign C,17<sup>b</sup> "END OF SPEED LIMIT" or sign C,17<sup>c</sup> "END OF PROHIBITION OF OVERTAKING", or SIGN C,17<sup>d</sup> "END OF PROHIBITION OF OVERTAKING FOR GOODS VEHICLES". These signs shall be similar to sign C,17<sup>a</sup>, but shall show, in addition, in light grey the symbol of the prohibition or restriction which has ceased. The signs referred to in this paragraph may be placed on the reverse

side of the prohibitory or restrictive sign intended for traffic coming in the opposite direction.



**C,17<sup>a</sup>: End of All Local Prohibitions Imposed on Moving Vehicles**

**C,17<sup>b</sup>: End of Speed Limit**  
*(50 km/hr limit in example)*

**C,17<sup>c</sup>: End of Prohibition of Overtaking**

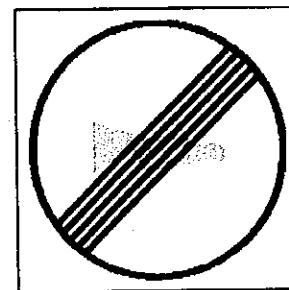
**C,17<sup>d</sup>: End Of Prohibition of Overtaking for Goods Vehicles**

**D.3.9 Prohibition or restriction of standing and parking**

Places where parking is prohibited shall be indicated by sign C,18, "PARKING PROHIBITED"; places where standing and parking are prohibited shall be indicated by sign C,19, "STANDING AND PARKING PROHIBITED".

The scope of the prohibition may be restricted by inscriptions on an additional plate below the sign specifying, as the case may be, the days of the week or month or the times of day during which the prohibition applies; the time in excess of which parking is prohibited by sign C,18 or standing and parking is prohibited by sign C,19; the exceptions granted for certain classes of road user. The time in excess of which parking or standing is prohibited may also be inscribed on the lower part of the red circle of the sign instead of appearing on an additional plate.

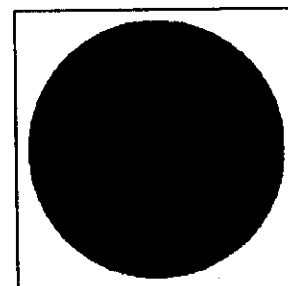
The International Convention in Road Signs also state that "Where parking is authorized on opposite sides of the road alternately, signs C,20<sup>a</sup> and C,20<sup>b</sup>, "ALTERNATE PARKING", shall be used instead of sign C,18; The prohibition of parking shall apply to the sign C,20<sup>a</sup> side on odd number dates and to the sign C,20<sup>b</sup> side on even number dates; the time at which the side changes shall be prescribed by domestic legislation and need not necessarily be midnight. Domestic legislation may also prescribe an alternation other than a daily alternation for parking; the numerals I and II shall in that case be replaced on



**C,17<sup>e</sup>: End of Prohibition on Use of Audible Warning Devices**



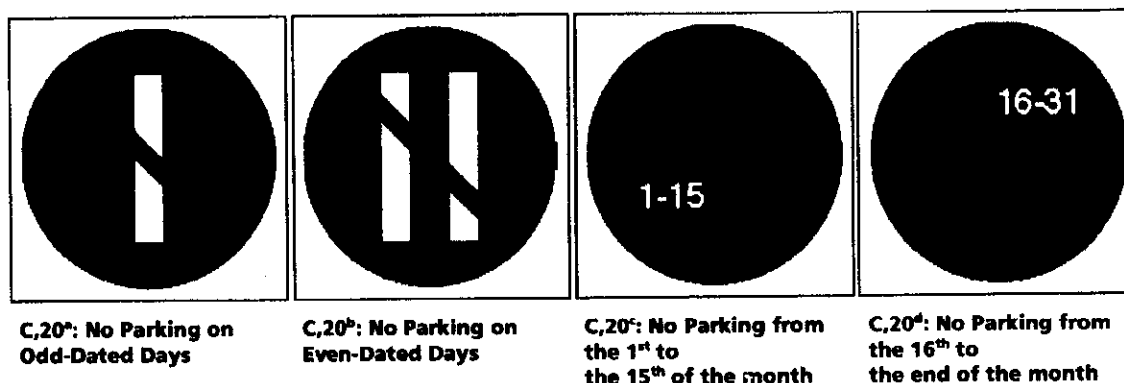
**C,18: No Parking**  
DPWH Code: RS-1



**C,19<sup>f</sup>: No Standing (No Waiting)**

the signs by the period of alternation, e.g., 1-15 and 16-31 for an alternation on the first and sixteenth day of each month."

In the Philippines, the special restrictions on parking are indicated in text format below the circular "No Parking" sign. Often, a rectangular plate is used, either 300mm X 450mm or 450mm X 675mm, which includes both the circular disc and the text below it. (DPWH Codes R5-1P, R5-2P and R5-3P).



Except in special cases, the signs shall be so placed that their disc is perpendicular to the axis of the road, or at a slight angle to the plane perpendicular to that axis. All the prohibitions and restrictions of parking shall apply only on the side of the carriageway on which the signs are placed. Except as may be otherwise indicated: on an additional panel H,2 of section H of this annex and showing the distance over which the prohibition applies, the prohibitions shall apply from a point level with the sign to the next point of entry of a road.

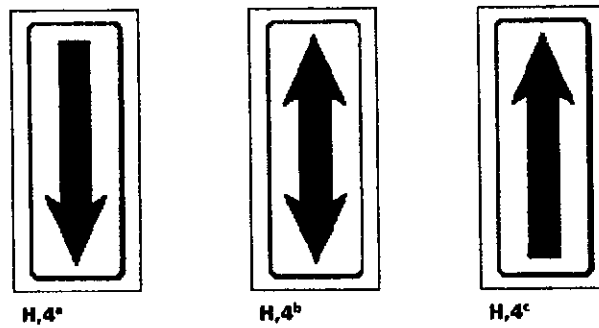
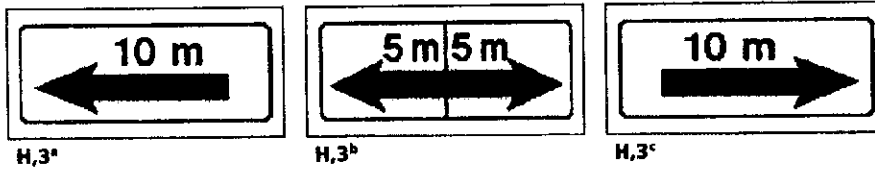
An additional panel H,3<sup>a</sup> or H,4<sup>a</sup> may be placed below the sign at the point where the prohibition begins. An additional panel H,3<sup>b</sup> or H,4<sup>b</sup> may be placed below signs repeating the prohibition. A further prohibition sign supplemented by an additional panel H,3<sup>c</sup> or H,4<sup>c</sup> may be placed at the point where the prohibition ceases to apply. Panel H,3 shall be placed parallel to the axis of the road, and panel H,4 perpendicular to that axis. The distances, if any, shown by panels H,3 shall be those over which the prohibition applies in the direction of the arrow.

If the prohibition ceases to apply before the next point of entry of a road, the sign bearing the additional end-of-prohibition panel (described in Section D.3.8 above) shall be set up. However, where the prohibition applies only over a short distance, it shall be permissible to set up only one sign: Showing in the red circle the distance on which it applies, or bearing an additional panel H,3.

Where parking-meters are installed, their presence shall signify that parking is subject to payment and is limited to the period for which the meter operates. In zones in which the duration of parking is limited but parking is not subject to payment, this limitation instead

of being indicated by sign C,18 supplemented by additional panels, may be notified by a blue band at a height of approximately 2 m on lampposts, trees, etc., bordering the carriageway, or by lines on the curb.

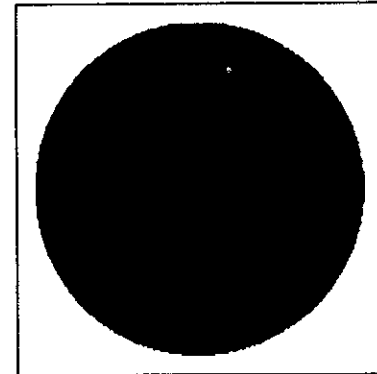
**Additional panels indicating extent of parking prohibition**



## D.4 Mandatory Signs

### D.4.1 General Characteristics and Symbols

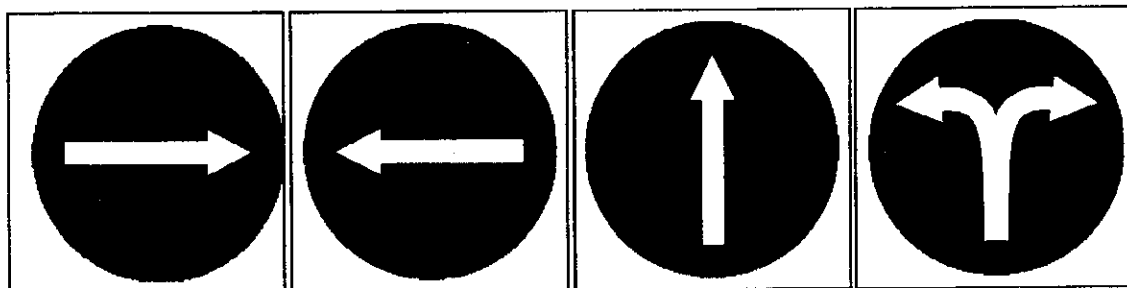
Mandatory signs shall be circular, except signs D,10<sup>a</sup>, D,10<sup>b</sup>, and D,10<sup>c</sup>, which shall be rectangular. Their diameter shall be not less than 0.60 m outside built-up areas and not less than 0.40 m in built-up areas. However, signs having a diameter of not less than 0.30 m may be used in conjunction with traffic light signals or on bollards on traffic islands. Unless provided otherwise, the signs shall be blue and the symbols shall be white or of a light color.



Standard Mandatory Sign

### D.4.2 Direction to be followed

The direction in which vehicles are obliged to proceed, or the only directions in which they are permitted to proceed, shall be indicated by model D,1<sup>a</sup> of sign D,1, "DIRECTION TO BE FOLLOWED" on which the arrow or arrows shall point in the appropriate direction or directions. However, instead of using sign D,1<sup>a</sup>, sign D,1<sup>b</sup> may be used. Sign D,1<sup>b</sup> shall to be black with a white rim and a white symbol.

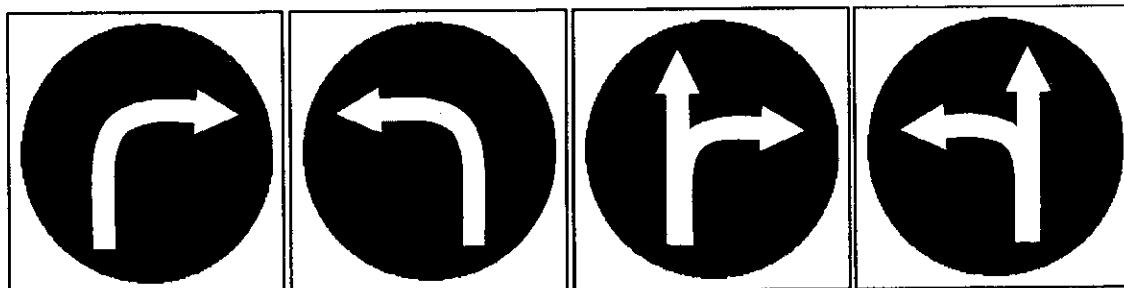


D,1<sup>a-1</sup>: Left Turn Only

D,1<sup>a-2</sup>: Right Turn Only

D,1<sup>a-3</sup>: No Turns Allowed

D,1<sup>a-4</sup>: Turn Left or Right



D,1<sup>a-1</sup>: Mandatory Right Turn

D,1<sup>a-2</sup>: Mandatory Left Only

D,1<sup>a-3</sup>: Straight or Turn Right Only

D,1<sup>a-4</sup>: Straight or Turn Left Only



D,1<sup>b-1</sup>

D,1<sup>b-2</sup>

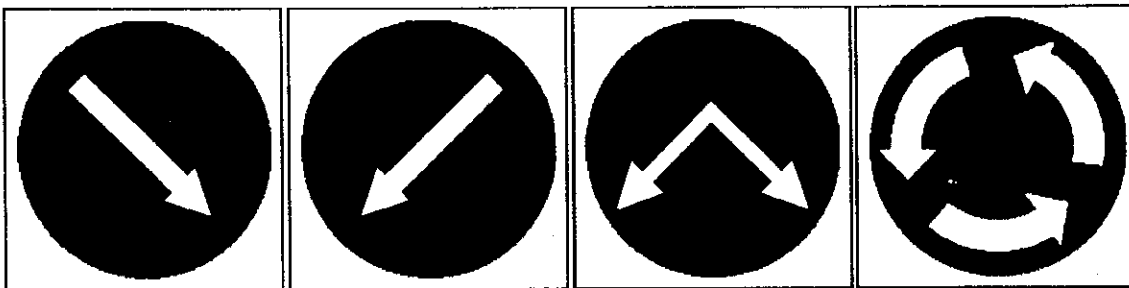
D,1<sup>b-3</sup>

#### D.4.3 Pass This Side

Sign D,2 "PASS THIS SIDE", placed on an island or before an obstacle on the carriageway, shall mean that vehicles must pass on the side of the island or obstacle indicated by the arrow.

#### D.4.4 Compulsory Roundabout

Sign D,3 "COMPULSORY ROUNDABOUT", shall notify drivers that they must comply with the rules concerning roundabouts.



D,2<sup>a1</sup>: Pass on Right Side

D,2<sup>a2</sup>: Pass on Left Side

D,2<sup>b</sup>: Pass on Either Left or Right Side

D,3: Compulsory Roundabout

The DPWH Road Signs Manual also presents the option of mandatory signs placed in a rectangular panel with dimensions 450mm x 750mm. The design uses a disc diameter of 600mm for the blue field, and 80DM letter sizes. Words are as follows:

- R2-1P: "NO TURNS" (with a D,1<sup>a-b</sup> sign)
- R2-2P: "ONE WAY" (with a D,1<sup>a+1</sup> or D,1<sup>a+2</sup> sign, depending on direction)
- R2-3P: "KEEP RIGHT" (with a D,2<sup>a1</sup> sign)
- R2-4P: "ALL TRAFFIC" (with either a D,1<sup>a+c1</sup> or D,1<sup>a+c2</sup> sign)

Additional mandatory signs in the DPWH Manual include the following:

- R2-7 (L) "LEFT LANE MUST TURN LEFT"
- R2-7 (R) "RIGHT LANE MUST TURN RIGHT"

These two signs are with black letters and border on a reflectorized white background 450mm X 750mm in size, with 80EN letter size and series, or in a larger version 600mm x 900mm, with 100EN letter size and series.

#### D.4.5 Compulsory cycle track

Sign D,4 "COMPULSORY CYCLE TRACK" shall notify cyclists that the track at the entrance to which it is placed is reserved for them, and shall notify the drivers of other vehicles that they are not entitled to use that track. Cyclists shall be required to use the track if the track is running along a carriageway, footpath or track for riders on horseback and leading into the same direction. However, drivers of mopeds shall also be required, in the same conditions, to use the cycle track if domestic legislation so provides or if notification of this requirement is given by an additional panel bearing an inscription or the symbol of sign C,3<sup>d</sup>.

#### D.4.6 Compulsory footpath

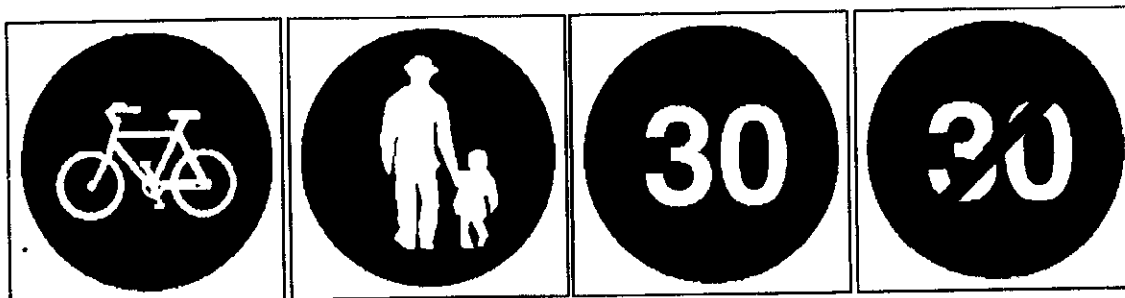
Sign D,5 "COMPULSORY FOOTPATH" shall notify pedestrians that the path at the entrance to which it is placed is reserved for them, and shall notify other road users that they are not entitled to use that path. Pedestrians shall be required to use the path if the path is running along a carriageway, cycle track or track for riders on horseback and leading into the same direction.

#### D.4.7 Compulsory minimum speed

Sign D,7 "COMPULSORY MINIMUM SPEED", shall mean that vehicles using the road at the entrance to which it is placed shall travel at not less than the speed specified, the figure shown on the sign shall express this speed (in kilometers per hour).

#### D.4.8 End of compulsory minimum speed

Sign D,8 "END OF COMPULSORY MINIMUM SPEED", shall mean that the compulsory minimum speed imposed by sign D,7 is no longer in effect. Sign D,8 shall be identical to sign D,7, except that it shall be crossed by an oblique red bar running from the upper right edge to the lower left edge. (Note difference in use with sign C,17<sup>b</sup>, which denotes the end of a maximum speed limit.)



**D,4:**  
Compulsory Cycle Path

**D,5:**  
Compulsory Footpath

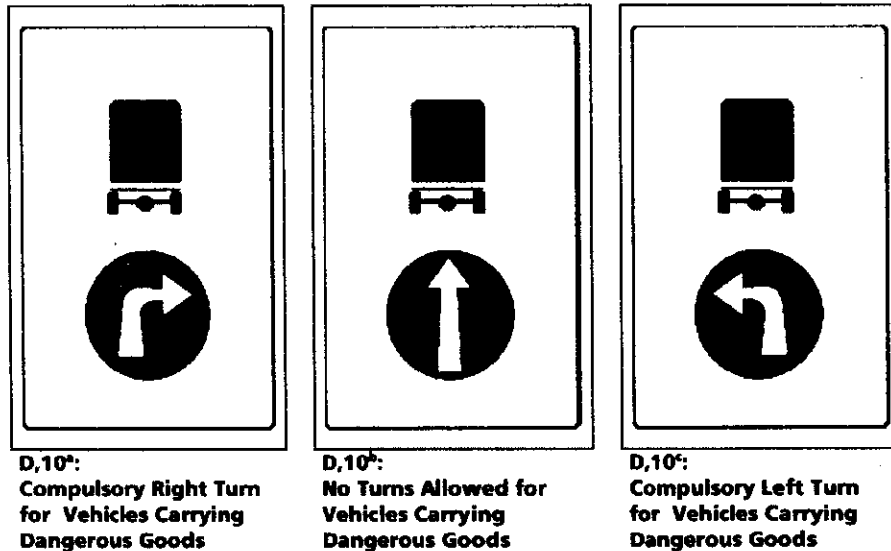
**D,7: Compulsory**  
Minimum Speed

**D,8: End of Compulsory**  
Minimum Speed



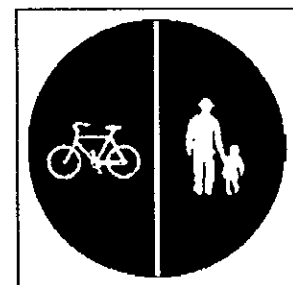
#### D.4.9 Compulsory direction for vehicles carrying dangerous goods

Sign D,10<sup>a</sup>; D,10<sup>b</sup> and D,10<sup>c</sup> shall indicate the direction in which vehicles carrying dangerous goods shall proceed.

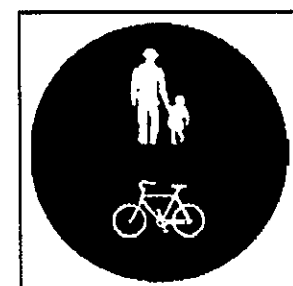


#### D.4.10 Remarks concerning the combination of signs

Notification that a path or track is reserved to two categories of road users and prohibited to other users shall be indicated by a mandatory sign bearing the two symbols for the categories of users entitled to use the path or track at the entrance to which it is placed. When the symbols are placed side by side on the sign and separated by a vertical line through the centre of the sign, each symbol shall be understood to mean that the relevant category must use the side of the path or track reserved for that category and shall notify other road users that they are not entitled to use that side. The two sides of the path or track shall be clearly separated, by physical means or road markings. When the symbols are placed one above the other, the sign shall notify the relevant categories of users that they may jointly use the path or track. The order in which the symbols are placed shall be optional. Where necessary the precautions to be taken by both categories of users shall be laid down in domestic legislation.



**D,11<sup>a</sup>**



**D,11<sup>b</sup>**

Sign D,11<sup>a</sup> and D,11<sup>b</sup> are examples of the combination of signs D,4 and D,5.

## D.5 Special Regulation Signs

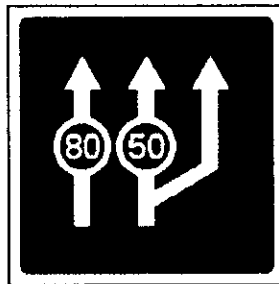
### D.5.1 General Characteristics and Symbols

Special regulation signs are usually square or rectangular with a blue ground and a light colored symbol or inscription, or with a light colored ground and a dark colored symbol or inscription.

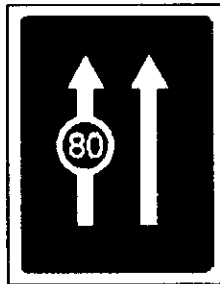
### D.5.2 Signs indicating a regulation or danger warning applying to one or more traffic lanes

Signs such as those given below mean that a regulation or danger warning applies only to one or more lanes, defined by longitudinal lane markings, on a multi-lane carriageway for traffic moving in the same direction. They may also indicate lanes allocated to oncoming traffic. The sign relating to the regulation or danger warning shall be shown on each of the arrows concerned:

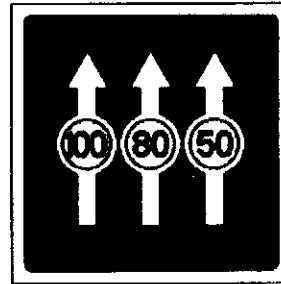
- E,1<sup>a</sup> COMPULSORY MINIMUM SPEED APPLYING TO DIFFERENT LANES".
- E,1<sup>b</sup> "COMPULSORY MINIMUM SPEED APPLYING TO ONE LANE".  
This sign may be used as way of creating a "slow lane".
- E,1<sup>c</sup> "SPEED LIMITS APPLYING TO DIFFERENT LANES".  
Borders of the circles shall be red and letters black.



E,1<sup>a</sup>:  
Compulsory Minimum  
Speed Applying to  
Different Lanes



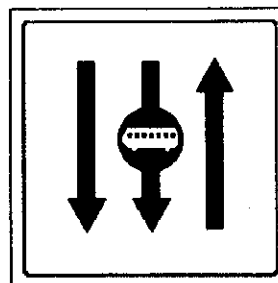
E,1<sup>b</sup>:  
Compulsory Minimum  
Speed Applying to  
One Lane



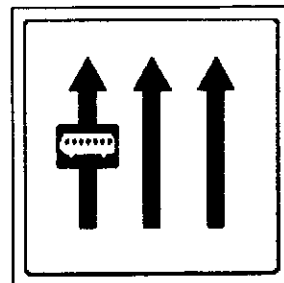
E,1<sup>c</sup>:  
Speed Limits to  
Different Lanes

### D.5.3 Signs indicating lanes reserved for buses

Signs such as E,2<sup>a</sup> and E,2<sup>b</sup> are examples of signs showing the position of the lane reserved for buses



E,2<sup>a</sup>



E,2<sup>b</sup>

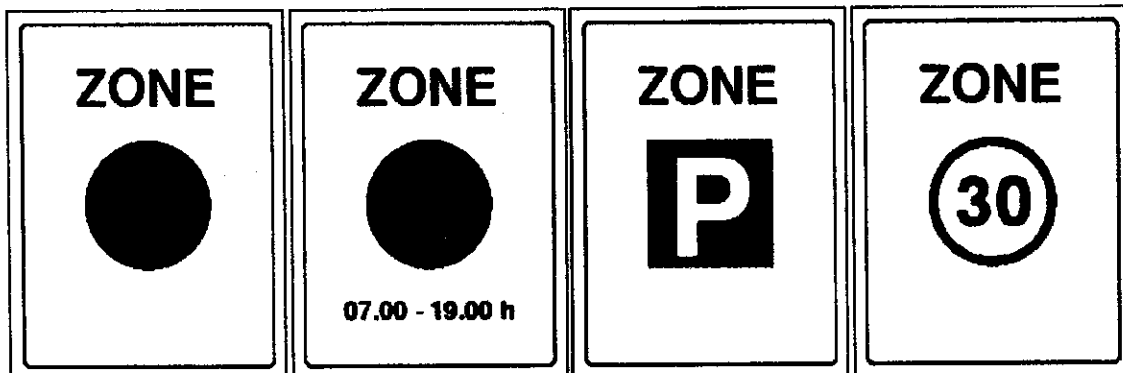
#### D.5.4 Signs having "Zonal" Validity

**Beginning of a zone.** To indicate that a sign applies to all roads in a zone (zonal validity), the sign shall be displayed on a rectangular panel with a light-colored ground. The word "ZONE" or its equivalent may be displayed above or below the sign on the panel. Specific details of the restrictions, prohibitions or obligations indicated by the sign may be given below the sign on the panel or on an additional panel.

Signs applying to all roads in a zone (zonal validity) shall be set up at all roads giving access to the zone concerned. The zone preferably should only include roads which have similar characteristics.

Signs E,9<sup>a</sup>; E,9<sup>b</sup>; E,9<sup>c</sup> and E,9<sup>d</sup> are examples of signs applying to all roads in a zone (zonal validity):

- E,9<sup>a</sup> Zone in which parking is prohibited
- E,9<sup>b</sup> Zone in which parking is prohibited at certain times
- E,9<sup>c</sup> Parking zone
- E,9<sup>d</sup> Maximum speed zone



E,9<sup>a</sup>:  
Prohibited Parking Zone

E,9<sup>b</sup>:  
Zone wherein  
Parking is Prohibited  
at Certain Times

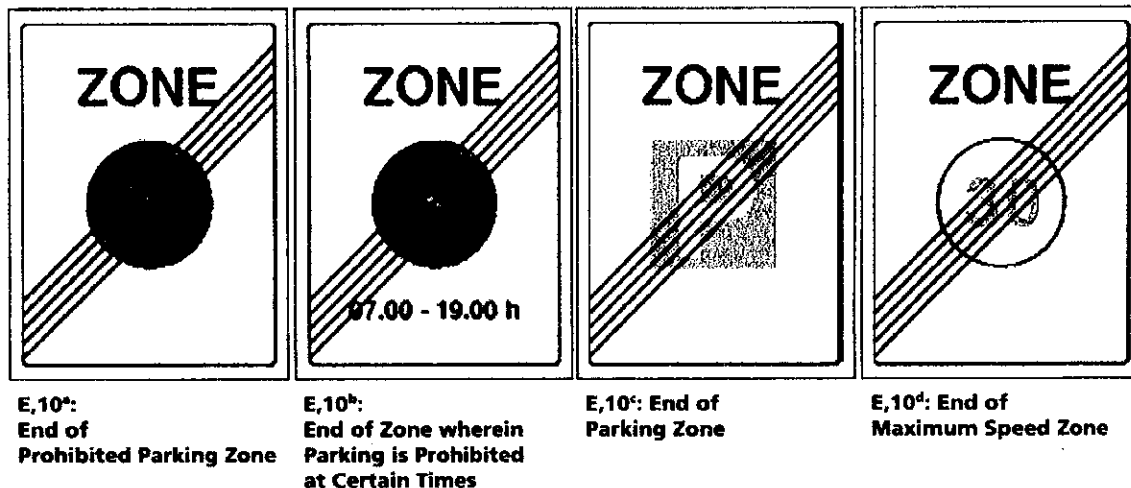
E,9<sup>c</sup>: Parking Zone

E,9<sup>d</sup>:  
Maximum Speed Zone

**Exit from a zone.** To indicate the exit from a zone in which a sign has zonal validity, the same sign displayed on a rectangular panel shall be set up as that placed at the entry to the zone but it shall be grey on a rectangular panel with a light colored ground. A black or dark grey diagonal band or parallel grey or black lines forming such a band shall slope downwards across the sign from right to left. Signs indicating the exit from a zone shall be set up on all roads which may be used to leave that zone.

Signs E,10<sup>a</sup>; E,10<sup>b</sup>; E,10<sup>c</sup> and E,10<sup>d</sup> are examples of signs indicating the exit from a zone in which a sign applies to all roads (zonal validity):

- E,10<sup>a</sup> End of zone in which parking is prohibited
- E,10<sup>b</sup> End of zone in which parking is prohibited at certain times
- E,10<sup>c</sup> End of parking zone
- E,10<sup>d</sup> End of maximum speed zone



#### D.5.5 "PEDESTRIAN CROSSING" Sign

Sign E,12<sup>a</sup>, "PEDESTRIAN CROSSING", is used to show pedestrians and drivers the position of a pedestrian crossing. The ground of the panel shall be blue or black, the triangle white or yellow and the symbol black or dark blue; the symbol displayed shall be symbol A,12.

#### D.5.6 "HOSPITAL" Sign

This sign, E,13<sup>a</sup>, shall be used to notify drivers of vehicles that they should take the precautions required near medical establishments; in particular, that they should not make any unnecessary noise.

#### D.5.7 "PARKING" Sign

Sign E,14<sup>a</sup>, "PARKING", which may be set up parallel to the axis of the road, shall indicate places where the parking of vehicles is authorized. The panel shall be square. It shall bear the letter or ideogram used to denote "Parking", the capital letter "P" in the case of the Philippines. The ground of this sign shall be blue.

The direction in which the parking place lies or the categories of vehicle for which it is reserved may be shown on the sign itself or on an additional panel below the sign. Such inscriptions may also limit the period for which parking is permitted or indicate that public transport is accessible from the parking place by means of a "+" sign followed by an indication of the type of transport, in word or symbol form.

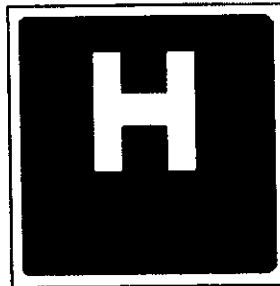
Signs E,14<sup>b</sup> and E,14<sup>c</sup> are examples of the signs which may be used to indicate a car park more particularly intended for vehicles whose drivers wish to use a means of public transport.

#### D.5.8 Signs notifying a bus or tramway stop

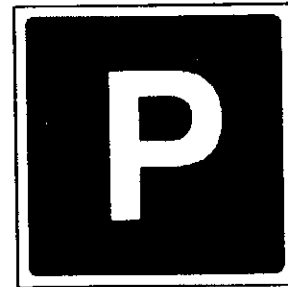
E,15 "BUS STOP" and E,16 "TRAMWAY STOP". Alternatively used in the Philippines is "JEEPNEY STOP" with a silhouette of a jeepney in place.



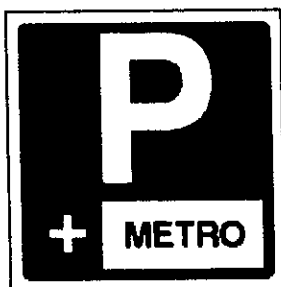
E,12:  
Pedestrian Crossing



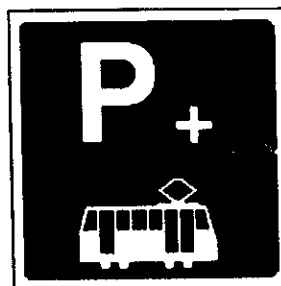
E,13: Hospital



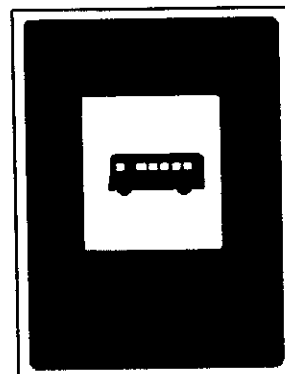
E,14: Parking



E,14<sup>b</sup>:  
Parking and Metro (LRT)



E,14<sup>c</sup>: Parking and Tram



E,15: Bus Stop

## D.6 Information, Facilities or Service Signs

### D.6.1 General Characteristics and Symbols

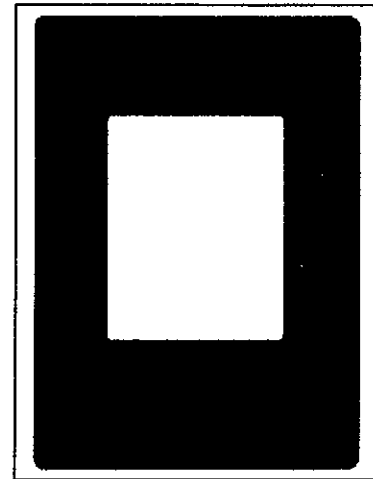
Signs for Information, Facilities or Services, denoted by the letter "F", shall have a blue or green ground; they shall bear a white rectangle on which the symbol shall be displayed.

On the blue or green band at the bottom of the sign, the distance to the facility indicated, or to the entry to the road leading to it, may be inscribed in white.

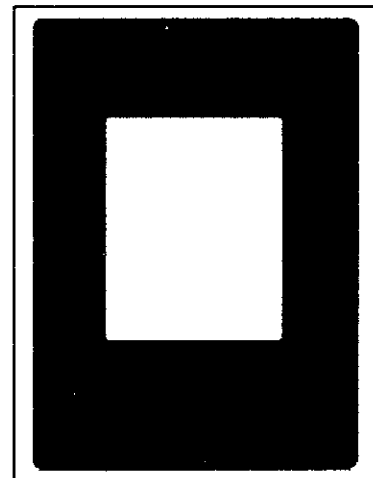
On the sign bearing symbol F,5 the word "HOTEL" or "MOTEL" may be inscribed in the same way.

The signs may also be set up at the entry to the road leading to the facility and may then bear a white direction arrow on the blue or green part at the bottom.

The symbol shall be black or dark blue, except the symbols F,1<sup>a</sup> or F,1<sup>b</sup>, which shall be red.



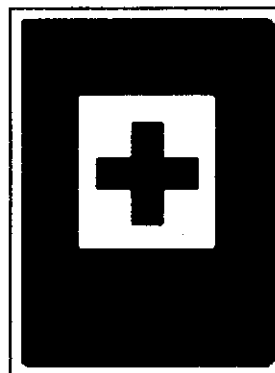
Model F<sup>a</sup>



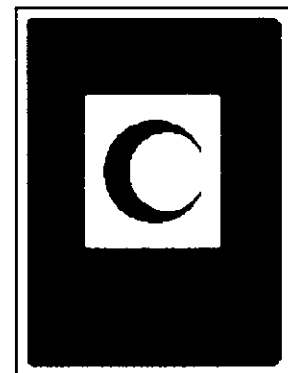
Model F<sup>b</sup>

### D.6.2 "FIRST AID STATION" Symbol

The symbols depicting first aid stations shall be given by signs F,1<sup>a</sup> and F,1<sup>b</sup>, whichever is applicable.

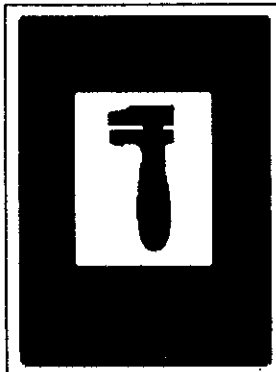


F,1<sup>a</sup>: First Aid Station

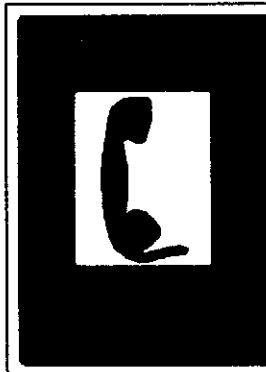


F,1<sup>b</sup>: First Aid Station

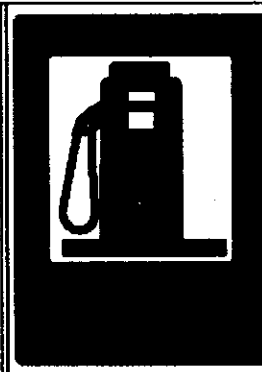
D.6.3 Miscellaneous Symbols



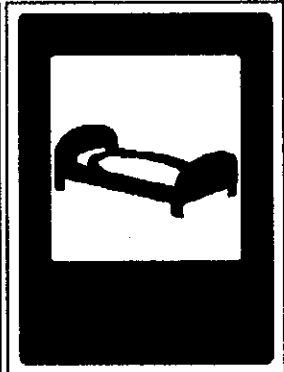
F,2: Breakdown Service



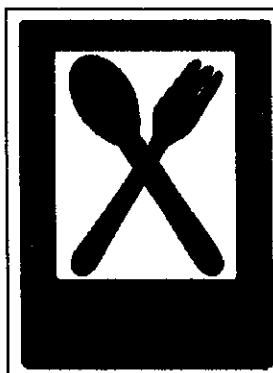
F,3: Telephone



F,3: Filling Station



F,4: Hotel or Motel



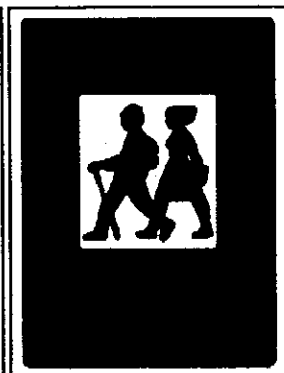
F,6: Restaurant



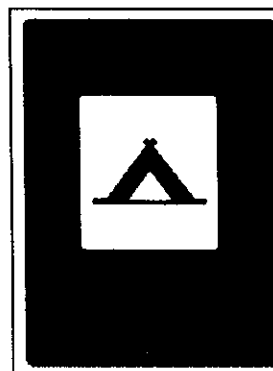
F,7: Refreshment or Cafeteria



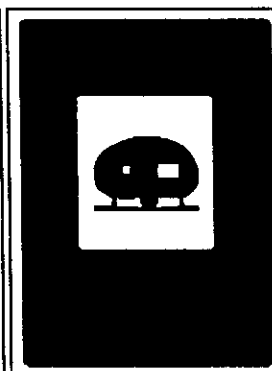
F,8: Picnic Site



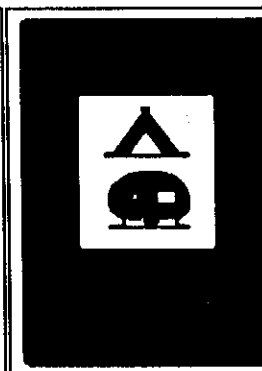
F,9: Starting Point for Walks



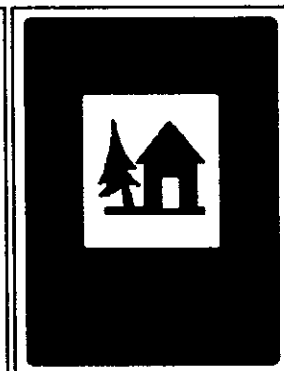
F,10: Camping Site



F,11: Caravan Site



F,12: Camping and Caravan Site



F,13: Youth Hostel

## D.7 Direction, Position or Indication Signs

### D.7.1 General Characteristics and Symbols

Informative signs are usually rectangular; however, direction signs may be in the shape of an elongated rectangle with the longer side horizontal, terminating in an arrowhead. Informative signs shall bear either white or light-colored symbols or inscriptions on a dark ground, or dark-colored symbols or inscriptions on a white or light-colored ground; the color red may be used only exceptionally and must never predominate.

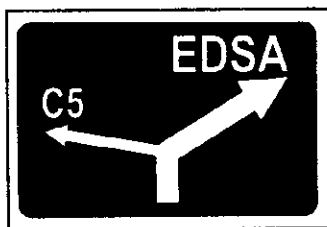
Advance direction signs or direction signs relating to motorways or roads treated as motorways shall bear white symbols or inscriptions on a blue or green ground. On such signs the symbols used on signs E,5<sup>a</sup> and E,6<sup>a</sup> may be reproduced on reduced scale.

Signs indicating temporary conditions such as road works, diversions or detours may have orange or yellow ground with black symbols and inscriptions.

### D.7.2 Advance Direction Signs

Advance direction signs give information about the general direction leading to a place. Examples of such signs are given in symbols G,1<sup>a</sup>, G,1<sup>b</sup> and G,1<sup>c</sup>. (*Note: signs are just examples, and distances or directions given may not correspond to actual conditions.*)

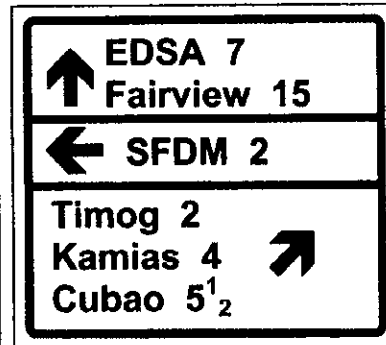
Advance direction signs of the G,1 type may bear the symbols used on other signs informing road users of the characteristics of the route or of traffic conditions (for example: symbols A,2; A,5; C,3<sup>a</sup>; C,6; E,5<sup>a</sup>; F,2).



G,1<sup>a</sup>:  
Advance Direction Sign  
Example



G,1<sup>b</sup>:  
Advance Direction Sign  
Example

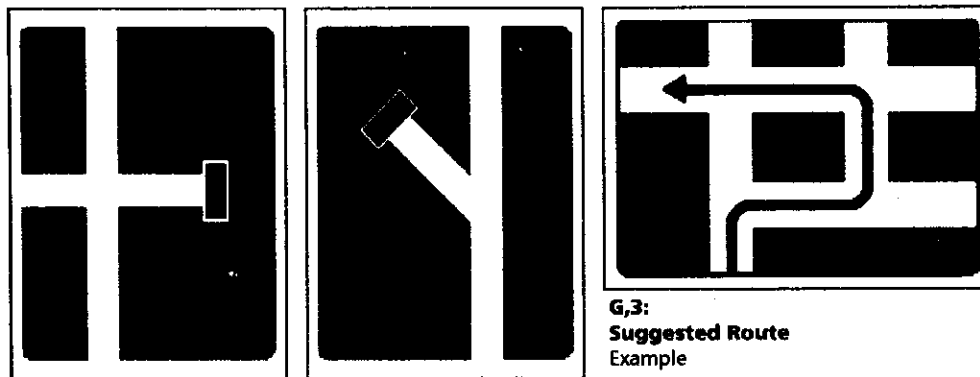


G,1<sup>c</sup>:  
Advance Direction Sign  
Example



Examples of advance direction signs for "NO THROUGH ROAD" are given in symbols G,2<sup>a</sup> and G,2<sup>b</sup>. The red rectangle shows the area with the "dead end". The white lines indicate the configuration of the local street network.

Another example of an advance direction sign that is used for a route to be followed in order to turn left is shown in symbol G,3. In this case, a left turn at the next intersection is prohibited, and a suggestion on the route to be taken is displayed. The placement of street names on the white portions indicating local streets may be done for clearer information.



G,2:  
No Through Road  
Examples

G,3:  
Suggested Route  
Example

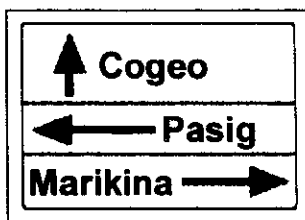
Examples of signs showing the direction of a place are shown in symbols G,4<sup>a</sup>, G,4<sup>b</sup>, G,4<sup>c</sup> and G,5, while examples of signs showing the direction of an airport or airfield are shown in symbols G,6<sup>a</sup>, G,6<sup>b</sup> and G,6<sup>c</sup>.



G,4<sup>a</sup>: Direction Sign

G,4<sup>b</sup>: Direction Sign

G,4<sup>c</sup>: Direction Sign



G,5: Direction Sign



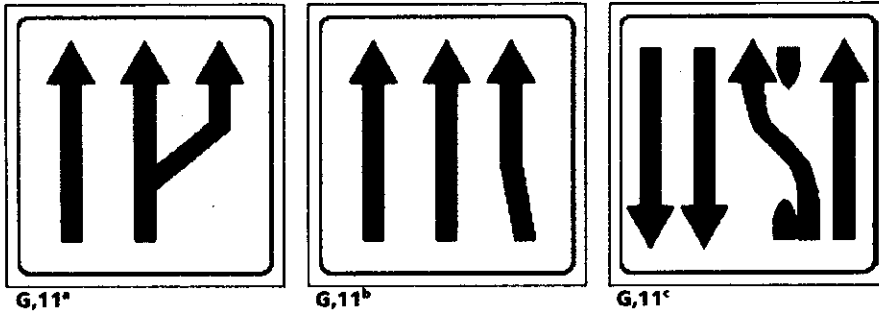
G,6<sup>a</sup>: Direction Sign for Airport

G,6<sup>b</sup>: Direction Sign for Airport

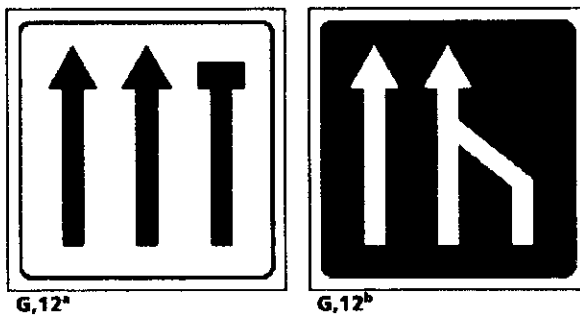
G,6<sup>c</sup>: Direction Sign for Airport

### D.7.3 Indication Signs

Signs indicating the number and direction of traffic lanes. Signs such as G,11<sup>a</sup>; G,11<sup>b</sup> and G,11<sup>c</sup> shall be used to notify drivers on the number and direction of traffic lanes. They must comprise the same number of arrows as the number of lanes allocated to traffic in the same direction; they may also indicate lanes allocated to oncoming traffic.

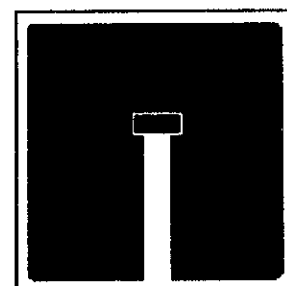


Signs indicating closure of a traffic lane. Signs such as G,12<sup>a</sup> and G,12<sup>b</sup> shall indicate to drivers closure of a traffic lane.



### D.7.4 "NO THROUGH ROAD" sign

Sign G,13, "NO THROUGH ROAD", placed at the entry to a road, shall mean that there is no throughway.

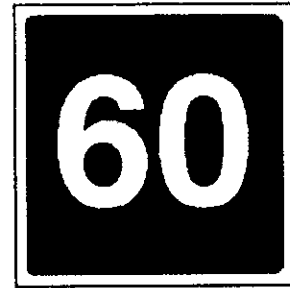


G,13: No Through Road

### D.7.5 "ADVISORY SPEED" sign

Sign G,17 "ADVISORY SPEED" shall be used to show the speed at which it is advisable to drive if circumstances permit and if the driver is not required to comply with a lower limit specific to his category of vehicle.

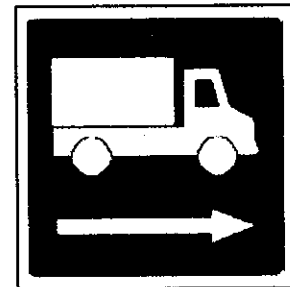
The figure or range of figures appearing on the sign shall indicate the speed in the unit of measurement (in km/hr).



G,17: Advisory Speed

### D.7.6 Sign notifying advised itinerary for heavy vehicles

G,18 "ADVISED ITINERARY FOR HEAVY VEHICLES"



G,18: Advised Itinerary for Heavy Vehicles

### D.7.7 Sign notifying a pedestrian overpass or underpass

Sign G,20 is used to indicate a pedestrian overpass or underpass. Sign G,21 is used to indicate an overpass or underpass without steps. The symbol for handicapped persons may also be used on this sign.



G,20: Overpass / Underpass

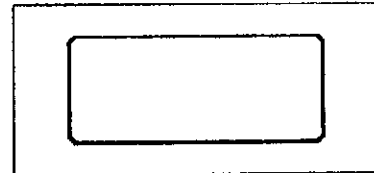


G,21: Overpass / Underpass without Steps

## D.8 Additional Panels

### D.8.1 General Characteristics and Symbols

These panels shall have either a white or yellow ground and a black, dark blue or red rim, in which case the distance or length or symbol shall be inscribed in black or dark blue; or a black or dark blue ground and a white, yellow or red rim, in which case the distance or length or symbol shall be inscribed in white or yellow.

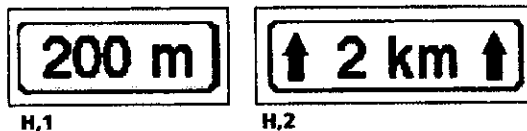


**Model H  
Additional Panels**

Additional panels H,1 show the distance from the sign to the beginning of the dangerous section of road or of the zone to which the regulation applies.

Additional panel H,2 shows the length of the dangerous section of road or of the zone to which the regulation applies.

Additional panels are placed under the signs.



H,1

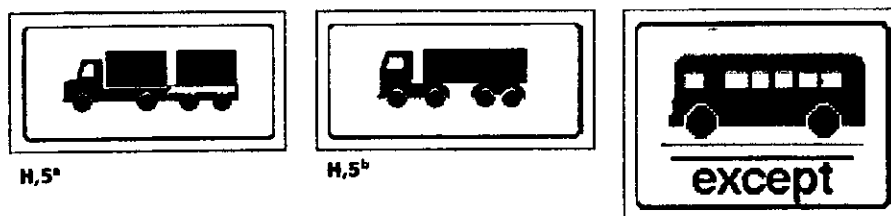
H,2

### D.8.2 Additional panels for parking prohibitions or restrictions

The additional panels H,3 and H,4 concerning parking prohibitions or restrictions are of models H,3<sup>a</sup>; H,3<sup>b</sup> and H,3<sup>c</sup> and H,4<sup>a</sup>; H,4<sup>b</sup> and H,4<sup>c</sup>, respectively. (Please refer to Section C.3.8)

### D.8.3 Additional panels for other regulatory signs

Regulatory signs may be restricted to particular road users by displaying the symbol for their category. For example: H,5<sup>a</sup> and H,5<sup>b</sup>. In cases where the regulatory sign is to be regarded as not applying to a certain category of road users this is indicated by the symbol for their category and by the term "EXCEPT" (Example: H,6).



H,5<sup>a</sup>

H,5<sup>b</sup>

**H,6  
Except Buses**

### D.8.4 Handicapped Parking

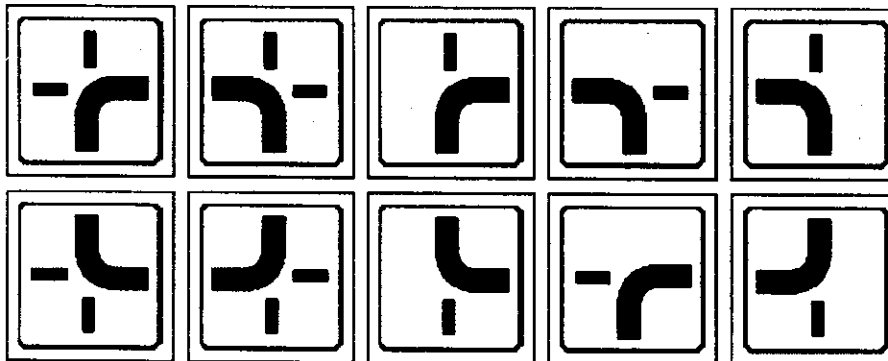
To indicate parking space reserved for handicapped persons, panel H,7, should be used with signs C,18 or E,14.



H,7: Handicapped Parking

### D.8.5 Priority Roads

The additional panel H,8 displays a diagram of the intersection in which broad strokes indicate priority roads and thin strokes indicate the roads on which signs B,1 (Give Way) or B,2 (Stop) are set up.



H,8: Additional Panel to Indicate Priority Road

## D.9 Street Name Signs

### D.9.1 Purpose

Street Name signs indicate to pedestrians and motorists the names of roads and streets which they are passing or entering. Street Name signs should be installed in urban areas at all street intersections regardless of other route signs that may be present.

### D.9.2 Location and Height

The DPWH Road Signs Manual stipulates that Street Name signs should be located on posts as near as practicable to the intersection so that they are clearly visible to both pedestrians and motorists. In addition to the name of the street, the sign may also carry the house number for one block.

In business districts and on principal arterials, Street Name signs should be placed at least on diagonally opposite corners so that they will be on the far right side of the intersection for traffic on the major street. In residential areas, at least one Street Name sign should be mounted at each intersection. Signs naming both streets should be installed at each intersection. They should be mounted with their faces parallel to the streets they name.

Street name signs may be installed at both midblock and intersection locations. To optimize visibility, Street Name signs may be mounted overhead. On intersection approaches, a supplemental Street Name sign may be installed separately or below an intersection-related warning sign. Street Name signs may also be placed above a regulatory or STOP sign with no required vertical separation.

At intersection crossroads where the same road has two different street names for each direction of travel, both street names may be shown on the same sign along with directional arrows.

Where street name signs are installed on footpaths, the height should not be less than 2.20 m nor more than 3.00 m measured to the underside of the sign. Where they are erected in a verge or at other locations clear of pedestrian ways, a lower height may be adopted. Where two street name signs are to be carried on a single post, they should not be mounted in the same horizontal plane.

### D.9.3 Shape and Size

Street name signs shall be rectangular in shape, with their long axis horizontal. The length of the signs should not be less than 500mm nor more than 1.20 m. The vertical dimension is dependent upon the information given on the sign.

For signs containing both street name and house numbers, the minimum height shall be 200mm while signs having only street names should not be less than 100mm in height.

### D.9.4 Color

The DPWH Road Signs Manual further states that street name signs should preferably have black legend on white background, although other color combinations are allowed, provided that red is not used as a background color, and that the legend and background shall be of contrasting colors. Street name signs in white legend on green background are more common. A border, if used, should be the same color as the legend.

Street name signs shall be retroreflective or illuminated to show the same shape and similar color both day and night.

When combined with a warning sign, the color of the supplemental Street Name sign should be a black message and border on a yellow background.

### D.9.5 Lettering and Numerals

Lettering on street name signs are preferably at least 150mm high in capital letters or 150mm upper-case letters with 110mm lower-case letters. Larger letter heights should be used for street name signs mounted overhead. For local roads where prevalent speeds are 40 km/h or less, the lettering height may be a minimum of 100 mm. Numerals used for house numbers should not be less than 60mm. Lettering for municipality names should preferably be in capital letters not greater than 40mm in height.

Supplementary lettering to indicate the type of street (such as Street, Avenue, or Road) or the section of the city (such as NW) may be in smaller lettering, at least 75mm high.

A symbol or letter designation may be used to identify the governmental jurisdiction, e.g. the city or municipal logo. If a symbol or letter designation is used, the width of the symbol or letter designation shall not exceed the letter height of the sign. The symbol or letter designation should be positioned to the left of the street name.

### D.9.6 Abbreviations

Conventional abbreviations may be used except for the street name itself.

The following abbreviations are allowed:

Avenue .....	AV
Boulevard .....	BLVD
Crescent .....	CRES
Drive.....	DR
Expressway.....	EXPWY
Highway .....	HWY
Lane .....	L
Parade.....	PDE
Place.....	PL
Road.....	RD
Street.....	ST
North.....	N
East .....	E
South.....	S
West.....	W

### D.9.7 Examples of Street Name Signs

**JUAN LUNA AVE**

**JUAN LUNA AVE**

 **C P GARCIA AVE**