

Chapter - 3 DEVELOPMENT PLAN PROPOSALS

3.1 Abiding Policy Frameworks of Higher Level Plans

The Study Area (Location-15) covers two Strategic Planning Zones (SPZs) having diversified characteristics. DMDP Structure Plan and Urban Area Plan provide different policies for their development depending on the nature and character of the area. For the planning purposes, those SPZs are again regrouped into Detailed Planning Zones (DPZ). The regrouping has been done according to the local condition considering their contiguousness. As such, all the Detailed Planning Zones are continuous, separated from each other either by natural barriers or administrative boundaries.

This section deals with the policies that have been presented by higher level plans as policy guidelines for development control before the preparation of Detailed Area Plans for particular area.

3.2 Planning Principles and Standards

3.2.1 Guiding Principles

In the Detailed Area Plan, recommendations have been made as to how expansion should proceed in the future to ensure best possible physical environment keeping in view the most economic use of land. Since these recommendations or proposals would affect both the natural and socio-economic environments, certain principles are specified in the Dhaka Metropolitan Development Plan (1995-2015) and those principles are considered here as guiding principles for the preparation of Detailed Area Plan. Those principles are as follows:

- Minimize the spillover effects where a landuse in one location imposes environmental or other costs on adjoining sites or the community as a whole.
- Increase efficiency by guiding development to preferred locations and uses.
- Allocate land for infrastructure and community services.
- Create an attractive urban environment.
- Improve distribution of land among different income groups, and ensure that benefits accrue to the community.
- Improve living condition for all income groups.
- Effective drainage through minimum hindrance to Flood Flow and Sub-Flood Flow zones.
- Smooth and effective functioning of industries, specially export oriented industries.
- Develop to serve the surrounding hinterlands.
- Safe yet faster connectivity.

3.2.2 Planning Standards

Many standards and codes for guiding and controlling of development are found in Bangladesh National Building Code [BNBC], Building Construction Rules and Environmental Act. For ascertaining minimum space requirement for different physical features and functions, Private Land Development Rules and for density control of an area, Floor Area Ratio [FAR] are the two very important legal instruments.

DMDP Structure Plan and Urban Area Plan too have fixed certain minimum standards for certain facilities. All those standards provided in various documents have been studied and then suitable standards for community services, roads etc. have been recommended in DAP. Different standards given in various documents are presented in the following Tables.

Table No. 3.1: Target Standards for Provision of Community Services

Type of Service	Population	Surface Area Needed Per Unit
Primary schools	15000	1 acre
Secondary schools	23000	2 acres
Colleges	---	---
Playgrounds	---	---
Parks	25000	4 acres
Graveyards	Ward basis	Minimum 5 acres
Neighbourhood centres	Ward basis	0.3 acre
Health post	Ward basis	---
Welfare centre	Ward basis	---
Hospital	---	---
Markets	Ward basis	0.3 acre
Police / fire station	---	---

Source: Urban Area Plan, DMDP.

Table No. 3.2: BNBC Guidelines for Development of Minimum Standard Housing

One Room Houses	Maximum Density	175 units per house
	Minimum Plot in metro area	30 m ²
	Minimum plot outside metro area	40 m ²
	Minimum plot in dense inner city	25 m ²
Two Room Houses	Minimum Plot in metro area	40 m ²
	Minimum plot outside metro area	60 m ²
	Minimum plot frontage	3.5 m ²
	Height limitation	6 storeys, but 5 storeys preferred

Source: BNBC.

Table No. 3.3: Road Standards

Road Type	Width of the Road
Main Road	24.0 metre (78 ft) ROW
Arterial Road	14.5 metre (47.5) ROW
Collector Road	13.0 metre (42.6) ROW
Access Road	9.0 metre (29.5) ROW
Access Road	6.0 metre (19.7) ROW
Non Motorized Road	4.0 metre (13.1) ROW
Footpath	2.5 metre (8.2) ROW

Source: Urban Area Plan, DMDP.

Planned development ensuring community's active participation is the key to successful transformation of today's Dhaka into tomorrows adorned green Dhaka. Keeping that vision in mind, the consultants developed an optimum standard for the amenities and community facilities that the city dwellers deserve (Table No. 3.5).

Table No. 3.4: Facility Standard at Neighbourhood Level

Sl. No.	Name of the Facility	Quantity		Area		
		Min.	Max.	Minimum for Unit Facility	Sub Class Total	Class Total
		(No.)	(No.)			
1	Primary School(Public or private)	2	3	1 Acre		3
2	High School(Public or private)	1	2	1.5 Acre		3
3	Open space			10 Acre		12
	i)Park/children's park	1	2	0.3 Acre	1 Acre	
	ii)Water body/ Canal/Pond	As per Planner		1.5 Acre	6 Acre	

	iii) Play field	2	3	1 Acre	3 Acre	
	iv) Green/Vegetation/Water Front	As per Planner		0.5 Acre	2 Acre	
4	Mosque and Maktab/ Worship Places	2	3	0.2 Acre		0.6
5	Library(central)	1	1	0.1 Acre		0.2
6	Services			0.3 Acre		0.5
	i) Dentist/Doctor's Chamber	2	3	40 sq.m	120 sq.m	
	ii) Beauty Parlour	1	2	50 sq.m	100 sq.m	
	iii) Laundry	2	3	16 sq.m	50 sq.m	
	iv) Hair Dresser	2	3	12 sq.m	40 sq.m	
	v) Cyber Café/Internet service provider	1	2	50 sq.m	100 sq.m	
	vi) Photocopy / mobile / land phone / fax	2	2	12 sq.m	40 sq.m	
	vii) Computer based (word processing, printing etc) services	1	1	30 sq.m	30 sq.m	
	viii) Motor bike Repair, vulcanising etc.(optional)	1	1	50 sq.m	50 sq.m	
	ix) NMT repair service (Rickshaw, bicycle etc)	1	2	30 sq.m	60 sq.m	
	x) Post Office / Courier Services	1	2	20 sq.m	40 sq.m	
	xi) Sports / Recreational facilities(games, indoor games etc)	1	2	50 sq.m	100 sq.m	
	xii) Rickshaw/Auto stand (General)	2	4	100 sq.m	400 sq.m	
	xiii) Restaurant, Tea bar, Fast food	2	4	10 sq.m	100 sq.m	
	xiv) Tailoring	1	2	20 sq.m	40 sq.m	
7	Solid waste transfer station(may also small scale processing)	1	1	0.5 Acre		1
8	Utility Facilities					1*
9	Neighborhood Co-operative Office Complex			0.33 Acre		0.5
	i) Offices	2	4	15 sq.m	60 sq.m	
	ii) Committee rooms	2	3	40 sq.m	120 sq.m	
	iv) Community Club including indoor games (male and female)	2	2	200 sq.m	400 sq.m	
	v) Cultural Facilities (Rehearsal, Music room etc)	1	2	30 sq.m	60 sq.m	
	vi) Community Police Barrack	1	1	40 sq.m	50 sq.m	
	vii) Technician Service (Electrical, Plumber, AC, Freeze etc.)	2	4	25 sq.m	100 sq.m	
10	Community Hall	1	2	0.33 Acre		0.5
11	Shops			0.33 Acre		0.5
	i) General store	3	4	25 sq.m	100 sq.m	
	ii) Grocery	4	6	25 sq.m	150 sq.m	
	iii) Stationary	2	3	25 sq.m	150 sq.m	
	iv) Confectionary / Bakery	2	3	25 sq.m	80 sq.m	
	v) Departmental Store**	1	2	100 sq.m	200 sq.m	
	vi) Medicine Shop	2	3	25 sq.m	80 sq.m	
	vii) Sweet Meat Shop	2	3	25 sq.m	80 sq.m	
	viii) Book / Newspaper Stall	2	3	10 sq.m	30 sq.m	
	ix) Fresh Corner (Vegetable, fish, meat, egg, chicken etc.)	2	3	12 sq.m	40 sq.m	
	x) Fruit Shop	2	3	10 sq.m	30 sq.m	
	xi) Flower Stall	2	2	10 sq.m	30 sq.m	
	xii) Gift shop	1	2	10 sq.m	30 sq.m	
Total Area for the Neighborhood Facilities				22.8 Acres (approx.)		

Source: Proposed by the Consultants

* May be added as per decision of the Nagar Unnayan Committee under New use category

**Area under Departmental Store shall be calculated on the basis of the spaces allocated against one of the

corresponding services in this Table (cumulative area)

Recommended Road Standards

In order to promote development of all roads in a systematic manner, new road standards were recommended for both built up areas, as well as for less built-up areas (Table-3.6). These will replace the old standards, which were included in the DMDP. The standards, when adopted will facilitate earmarking the right of way (ROW) for all major roads.

RAJUK will be required to establish a road classification based on a specific study to identify the primary and the secondary as well as other existing roads based on the volume of traffic carried, and / or their likely importance keeping in view their role in the near future. In order to earmark the ROW for all new primary and secondary roads, road geometric standards proposed in this Detailed Area Plan (DAP) should be adopted, and initiative taken to implement these strictly, including earmarking the ROWs, where no other types of development other than roads should be allowed.

It is proposed that the RAJUK should initiate an exercise to carry out the task of “Road Classification” in close collaboration with the DCC, DTCCB, RHD and LGED. In the context of City road network, “road classification” should have at least 4 classes of roads which should follow a hierarchical pattern. For clarity, these roads could be termed as

- (a) Primary Roads
- (b) Secondary Roads
- (c) Tertiary Roads
- (d) Access Roads

Table-3.5: Geometric Design Standards for Road

Sl. No.	Class of Roads	Standards recommended under DAP	
		Built-up Area	Less built-up Area
1	Primary Road	80 ft.	170 ft, 130 ft, 100 ft
2	Secondary Road	60 ft, 40 ft	80 ft, 60 ft
3	Tertiary Road	40, 30 ft	40 ft
4	Access Road	24 ft, 20 ft	30ft, 24 ft

To provide further clarity about the quality of the various roads the following details are provided:

Primary Road Type-1 : 170ft

This is a dual three lane major arterial road with provision of service lanes for local traffic, shoulder for emergency stop space for service lines (utility services) and footpaths on both sides of roads. This road type will have limited access points for local traffic to mix with traffic in the main section and this type of road will be designed in such a way that for providing utility services or repairing utility lines, traffic flow will not be disturbed. Non-motorized transports will be strictly prohibited in the main section of this road (Fig-1). Provision of service lanes will keep the traffic in the main section free from local congestion and allow faster movement, thereby bring in efficiency. The space reserved for utility services will keep the road surface free from frequent cuttings, as this space will be covered by removable slab, and the surface could be used a shoulder for temporary parking.

Primary Road Type-2: 130ft

This is a dual two lane major arterial road with provision of service lanes for local traffic, shoulder for emergency stop space for service lines (utility services) and footpaths on both sides of roads. This road type has will also have limited access point for local traffic to mix with traffic in the main section will be designed in such a way for providing utility services or for repairing utility lines that traffic flow will not be disturbed. Non-motorized transport will be strictly prohibited in the main section of this road (Fig-2)

Primary Road Type-3 : 100ft

This is also a dual two lane arterial road with provision of service lanes for local traffic, and provision for shoulder/ space for utility service and footpaths on both sides of roads. This road type will also have limited access point for local traffic to mix with traffic in the main section. Non-motorized transports are strictly prohibited in the main section of this road (Fig-3)

Secondary Road Type-1 : 80ft

This is a dual two lane secondary arterial road with provision of shoulder/ space for utility services and footpath on both sides of roads. This road is allowed for movement of mix traffic (Motorized & non-motorized) and will have easy access of local traffic to mix with main traffic. (Fig-4)

Secondary Road Type-2 : 60ft

This is a dual two lane secondary arterial road with provision of footpaths on both sides of the road. This road will allow movement of mixed traffic (Motorized & non-motorized) , Fig-5.

Tertiary Road Type-1 : 40ft

This is a two lane road with provision of footpaths on both sides of the road. It acts as a collector road. This type of road will allow movement of mix traffic (Motorized & non-motorized) , Fig-6.

Access Road Type-1 : 30ft

This is also a two lane road with provision of footpath on both sides of roads and acts as a collector road. This type of road will allow movement of mixed traffic (Motorized & non-motorized), Fig-7.

Access Road Type-2: 24ft

This is a two lane road with provision of footpaths on both sides of the road. It gives direct access to the plots. This type of road will allow movement of mixed traffic (Motorized & non-motorized), Fig-8.

Access Road Type-3: 20ft

This local access road has footpath on one side to allow for non-motorized traffic. Fig-9.

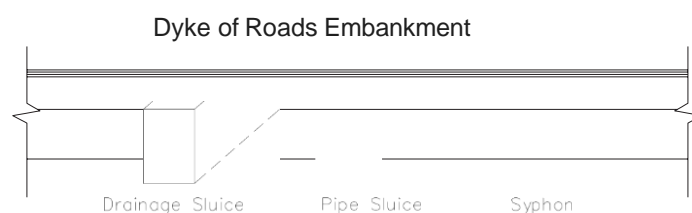
3.3.1 Drainage

Sluice gates, Regulators and Navigation locks: These types of structures are provided on the flood control embankments. Sluice gates are functioning to vent out water from the countryside to the river. Flap gates are generally installed in the riverside so that river water cannot enter into the main land. On the other hand whenever the river water level becomes low and countryside water level is high, countryside water drains out through sluice.

Regulators also serve the similar purpose as sluice gates; however the size of regulators is much bigger than sluice gates. Regulators may have control gates in the countryside and in the riverside. Drainage of water to the river or flashing of water into countryside are possible by operating simultaneously countryside and riverside mechanical gates. Navigation lock sometimes is provided on the flood embankment to allow boat and ferry passages from the river and from the countryside. It is a simple structure with bigger chamber and large lift gates both at riverside and countryside. By operating these gates, boats and river crafts can be transferred from the river to countryside and vice versa.

Drainage sluices, pipe sluices and siphons: Drainage sluices, pipe sluices and siphons are provided on the embankments. Embankments protect the area from floods coming from outside rivers and make the study area free from flood.

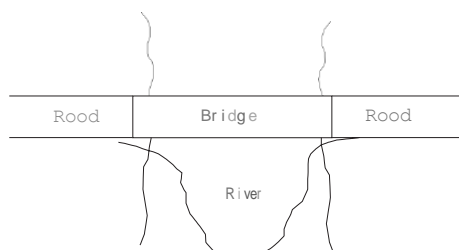
However, storm water from rainfall-runoff within the area causes localized flood, drainage congestion and submergence. Sketch below shows a few of such structures. A schematic view of drainage sluice, pipe sluice and siphon on embankment, which relieve drainage congestion presents below.



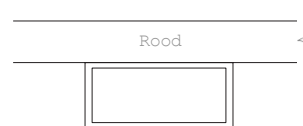
Rainfall is the source of storm drainage water irrespective of urban or rural catchments. Average annual rainfall in Dhaka is about 2200mm. After infiltration, deep percolation and evaporation is about 50% of this rainfall water takes

the form of drainage water for semi-urban and urban areas.

Bridges, Culverts and Box culverts: These structures are provided at places wherever roads cross the drainage network system. Such structures are built on the roads for free passage of drainage water and sometimes to provide navigation / boat passages. Consequently, conflict between drainage and road networks is mitigated. Sketches below show bridge and culverts in such system.



Definition Sketch Bridge



Definition Sketch Culvert

Physical features survey on river, khal / drainage, etc. have been conducted and base map prepared. Details of the bridges, culverts and box-culverts are available in the mouza maps. Database is also prepared showing dimensions and existing conditions of those structures.

3.3.2 Residential Development

- Subdivide Residential Landuse Zone based on the potentiality, trend and opportunity.
- Adopt Neighbourhood concept for new residential developments and for need assessment of community facilities.
- Minimize through traffic and heavy vehicles within the neighbourhoods.
- Provide adequate safe and easy to move footpaths.
- Ensure community facilities and services of appropriate scale at neighbourhood level.

3.3.3 Industrial Development

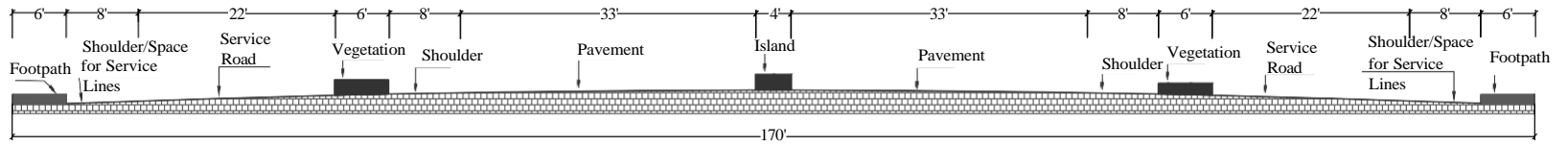
- Ensure provision of central effluent treatment plant in case of industrial clusters.
- Ensure own treatment plant in case of individual facilities.
- Prohibit high hazard industries within the area.
- Relocate industries from predominantly residential zones in phases.
- Provide essential support facilities for effective functioning of the industries.

3.3.4 Mixed Use Development

- Relocate Noxious and heavy industries to Heavy Industrial Zone within as soon as practicable.
- Allow the red industries to maintain their status under strict abiding conditions until shifting.
- Ensure adequate safety and security of the people especially of the families residing in such mixed zones.
- Provide sufficient quantity of wide, easy to use and safe footpaths.
- Provide zebra crossing at road crossings instead of foot over path to ease the lives of major portion of low income workers likely to traverse on foot to reach their likely abode in the busy areas.
- Ensure adequate utility services to ensure uninterrupted production.

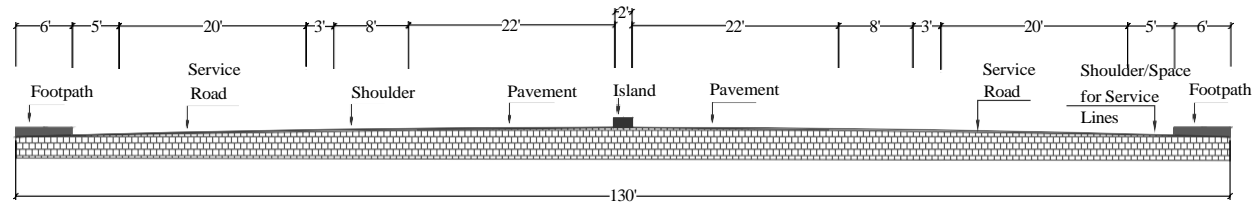
A. Primary Road

Figure:01



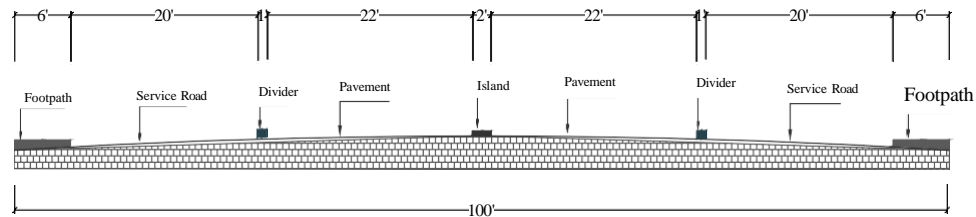
Type - 1 : 170 ft ROW

Figure:02



Type - 2 : 130 ft ROW

Figure:03



Type - 3 : 100 ft ROW

B. Secondary Roads

Figure:04

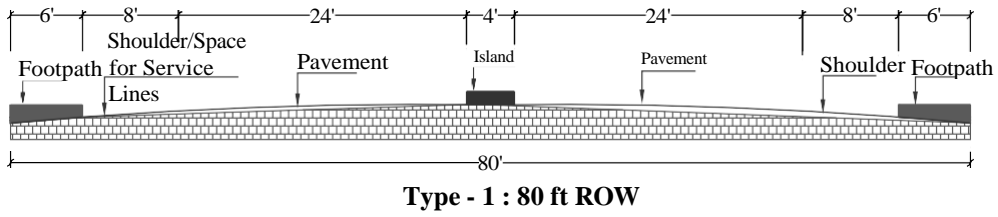
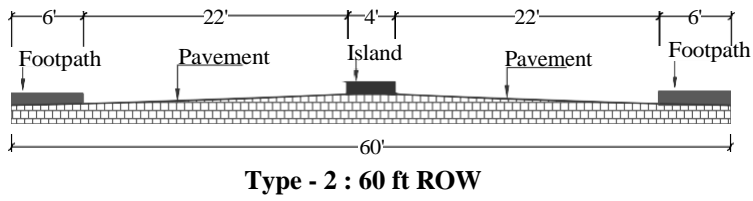
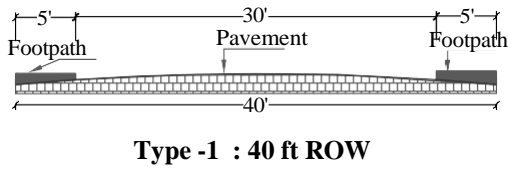


Figure:05



C. Tertiary Road

Figure:06



D. Access Road

Figure:07

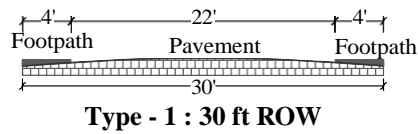


Figure:08

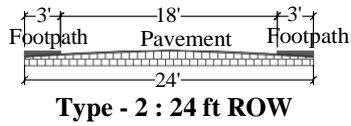
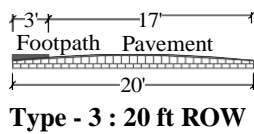


Figure:09



3.3.5 Transport and Connectivity

In order to develop an integrated and efficient transport system for the area covered by Group-A, the following vision was adopted:

- Development of an efficient, environmentally sound and integrated transport system.
- Public transport to receive priority.
- Providing a role for Non-motorized transport (NMT) in urban areas.
- Road hierarchy to be properly established and a new set of road design standards be adopted to meet future requirements.
- All new primary roads to have service lanes.
- Reserve space for service lines on main roads (Primary Roads).
- Complete missing links both arterial and local on priority, and widen some tertiary roads to make networks for efficient circulation.
- Reserve ROW for all major roads and encourage incremental development of network to ensure cost-effectiveness.
- Provide adequate pedestrian facilities, and off-street parking wherever needed.
- Strengthen traffic management in all sections of urban area.

Future Development of Transport System

Within the framework of existing major national and regional road networks and other transport infrastructures, as well as those road networks proposed by both DMDP and STP which have been adopted as part higher level guidance, a number of new primary and secondary road networks were proposed as part of a Detailed Area Plan for development of less developed areas, keeping in view the existing and futuristic land uses. Before proceeding further with the actual planning of the future transport system, it was necessary to address the critical planning issues identified earlier.

a. Addressing the Critical Issues

This section attempts to suggest certain solutions and strategies in order to address the various critical issues which were identified in Chapter: 2 of this plan document. The various strategies suggested for addressing those issues are indicated below:

Traffic Management

In order to ensure that road space of the city and the pedestrian facilities are available for the road traffic and pedestrians respectively, it is crucial that traffic management is strictly enforced. The city should have adequate number of transport planners and engineers, as well as qualified and trained police personnel in adequate numbers. These officials should be supported by proper equipments, tools and vehicles as required.

Road Hierarchy and Earmarking Right of Way (ROW)

It is highly important that a proper "Road Classification" be adapted for the city of Dhaka, to facilitate the development of various roads in an organized manner. A revised "Geometric Design Standard" has already been suggested as part of the Detailed Area Plan (DAP). The road classification needs to be completed soonest so that the city roads could be improved/ developed in line with the new geometric design standards. Once the "Road classification" has been completed and the revised "Geometric Design Standard" has been adopted, ROW should be strictly earmarked on the ground for all new roads.

Pedestrian Facilities

During the preparation of the Urban Transport Policy for Dhaka, as part of the Strategic Transport Plan (STP) for Dhaka, it was observed that the pedestrian facilities in Dhaka, compared to the requirements, are grossly inadequate. The Detailed Area Plan (DAP) has therefore, laid special emphasis to provide footpaths and other pedestrian facilities in all the areas proposed for development. Widths of footpaths, however, vary depending on the category of the road.

b. Development of the Road Network

In order to provide opportunities for infrastructure led development, it is necessary to promote an arterial system having North-South and East-West corridors following the guidelines provided by the RAJUK. Depending on the landuse proposed for a particular area, strategic road networks were proposed at an interval of around 1500-2000m in the North-South direction and 2000-3000m in the East-West direction. In terms of road classification, these strategic corridors could be termed as primary. These strategic roads were proposed in such a way that a Gridiron pattern is developed so that several alternative routes are available for movement in East-West and North-South directions.

In case of residential areas and areas where mixed landuses are proposed, primary roads were proposed in line with the guidelines indicated above, so that no one is required to walk more than 10 minutes to reach up to a primary road where buses / public transport are expected to run. In proposing these strategic corridors, adequate attention has given to the existing major national and regional highways as well as those proposed in the DMDP and STP, so that an integrated network is developed.

In order to propose secondary road networks, emphasis has given on the existing and future requirements of land. In case of residential areas and mixed landuses, secondary road networks were proposed at 500m to 1000m distances so that mobility within the area is facilitated. Within the area covered by secondary networks, tertiary and access roads were proposed to enhance circulation and access to properties.

In deciding the alignment of new primary, secondary and tertiary roads, adequate care was taken to avoid such alignment where road widening will call for demolishing large number of structure already built, although many of these were built without RAJUK permission.

In built up areas, it was recommended to complete some of the missing links, and widen some of the narrow sections to form a network of minor roads which could facilitate easy circulation of Non-motorized Transport (NMT) and provide better accessibility of the residents to major networks of the city.

Most of the major road networks were proposed to be kept free from Non-motorized Transport (NMT). The narrow roads were proposed for widening to at least 20 ft. if not 24 ft. to facilitate movement of "Fire Engines" in case of fire hazards.

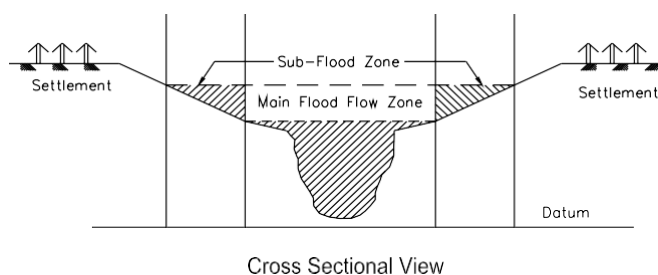
In the areas which are still less developed and mostly agricultural, emphasis was laid on to earmark the strategic road networks and not to allow any development within the right of way (ROW) of those networks.

To facilitate ear marking the right of way (ROW), necessary for different classes of roads, some standards were worked out and recommended for both built-up and less built-up areas, as shown in the next section.

3.3.6 Flood Flow Zones

A river in its flow regime maintains width within which the flood flows and sub-flood flows occur during flooding time. Rivers and flood plains play an important role in both the ecology and economy of the region. Land development within the designated flood plain areas requires control to avoid obstruction to flood flow, which might otherwise result in adverse hydraulic effects like rise of flood water levels, and changes in flow direction.

Main flood flow zone is the cross section area of a river that carries dominant flood flow whereas, sub-flood zone is the zone that carries less frequent and high magnitude flood in a season. Schematic diagram below shows the theoretical flood flow zones of a river.



3.3.7 Non-urban Areas

Non-urban areas considered as urban fringe area and defined as the area, which was developed in post 1983. They will take some further more decades to reach the population densities of the urban core. Low initial densities in these areas do not justify supply of full range of services, as they will initially be underused. However, it is essential that planning and reservation of rights of way, at least for primary networks, be undertaken soon to enable provision when justified by increased density levels and allowed by resources. In line with the spatial strategy of gradual change, major investment in satellite or new towns is accorded very low priority in the timeframe of the DMDP Structure Plan. This development option capitalizes least on existing and presently committed urban infrastructure investments, and fails to address the shelter needs and priorities of the urban majority, including the urban poor, and the existing low mobility levels of this group and its need for close proximity to employment opportunities.

The DMDP Structure Plan's strategy for dispersal is that priority locations in metropolitan Dhaka are those, which benefit from elements, optimize resource expenditure, minimizes development costs, most importantly, acts as a catalyst for appropriate and affordable development. The key elements of this strategy are:

- Relatively high, flood-free land;
- Minimal conflict with high quality of agricultural land;
- Existing transport links to Dhaka city and between the location and other regional centers;
- An existing core settlement or settlements;
- The vesting of an existing urban economic base;
- Existing institutions of government;
- Ease of infrastructure provision, particularly water and electricity;
- Relatively low land costs affording secure tenure rights;
- Impetus of current development trends.

On the basis of these criteria, there are only two locations in the DMDP Structure Plan area for consideration in the planned period to 2015. The designated area fallen under Location-15 is the area of Dhamsona and Yearpur.

3.3.8 Water Body and Open Spaces

Large tanks, ponds, Dighis, lakes, etc. serve as immediate retention areas for storm water. Those structures are man-made and also natural; may be privately owned or government owned or khas land. These waterbodies function as drainage relief and source of water for emergency use, fisheries, duckeries, environment and nature preservation. For every mouza such reservoir is available. Physical feature survey maps and field survey maps (tank, pond and reservoir) show the existence of reservoirs and database shows their dimensions. In the Detailed Area Plan those water body and open spaces have been suggested to be preserved and not to be disturbed by any development.

3.3.9 Amenities and Community Facilities

- Consider neighbourhood concept of residential development for estimating community facilities and amenities requirement.
- Prohibit construction of religious structure unless built on its own land.
- Relocate unauthorized religious structures from road right of way to safe guard greater interest of the people specially the city dwellers.
- Evacuate unauthorized structures and uses from road right of way to safe guard greater interest of the people specially the city dwellers.
- Close/relocate existing schools with highly inadequate class rooms, play field and essential facilities and gradually replace with standard one, one per 12000 population per acre.

3.3.10 Solid Waste Management

- Provision of dumping ground in a suitable location.

- Recycling plant near the dumping ground.
- Door to door collection of solid waste.
- Involvement of Local Govt. Authority and NGOs with the collection and management procedure.

3.3.11 Water Supply

- Safe and available drinking water for the inhabitants.
- Extraction of ground water as minimum as possible.
- Involvement of Local Govt. Authority or DPHE for extraction and distribution of water.
-

3.3.12 Electricity

- Connection of electricity with all households in the study area.
- Involvement of DESA with the electricity distribution system.
- No system loss encouraged in the plan.

3.3.13 Gas Supply

- Encourages increasing and expanding gas supply network where necessary.
- Titas Gas Transmission and Distribution Authority may be responsible for this.

3.3.14 Conservation of Monument and Heritage

- Encourage conservation of monuments in their original form, colour and structure.
- Encourage conservation of heritage site and proposed for new heritage site where necessary.
- Discourages unauthorized occupation and administrative use in the monumental buildings.

3.3.15 Environmental Management

The major environmental issues and parameters that may be affected by the implementation of the proposed project components, as well as an assessment of the current status of these issues and parameters have been discussed in Chapter-2. Mitigation measures are essential to be considered for all potential impacts during construction and operational phase on the natural environment, which comprises the physico-chemical and ecological aspects. Mitigation measures on social environment will include human interest, quality of life, resettlement issues, etc. The mitigation measures are described below:

Mitigation Measures

For Controlling Landuse Change

- Careful planning to reduce change of agricultural landuse and rural setup.
- Keep water bodies and productive agricultural land free from urban development as far as possible. Vertical development may be encouraged rather than horizontal.
- Economical use of land.

For Controlling Drainage Congestion

- Re-excavate primary khals, and renovate the secondary and tertiary drains.
- Make proper drainage network in new area considering the slope and local topographical condition.
- Remove all unauthorized structures, which developed on drainage structures.
- Prohibit the people in dumping of rubbish and solid waste in drain.
- Regular cleaning and maintenance by the concerned authorities.
- Demarcation and preservation of water bodies, which can act as retention pond and to avoid water logging

from heavy rainfall.

- Demarcation of Right of Way to preserve the natural channels.

For Controlling Surface Water Pollution

- Suggestions are given for implementation of proper effluent control from polluting sources on both sides of Dhaleswari and Buriganga Rivers and other small canals.
- Create underground sewerage system for the existing urban area.
- Use pucca latrine with septic tank and soak well.
- Prohibit indiscriminate dumping of medical and solid waste in drainage khals, beels and rivers.
- Improve sanitation condition of slaughterhouse, fish market and katcha bazars.
- Prohibit the direct discharge of wastewater to any khals, beels and rivers.
- Establish wastewater and sewerage treatment plant.

For Controlling Groundwater Table Declination

- Introduce rainwater harvesting system and use in the study area.
- Stop land filling of ponds and water bodies to maintain the groundwater level through recharge and leaching process.

For Controlling Groundwater Pollution

- Use surface water of Dhaleswari and Buriganga River for water supply system.
- Introduce rainwater-harvesting system.
- Reduce dependency on groundwater.
- Preserve surface water in ponds, khals, Beels, ditches and rivers for irrigation.

For Controlling Loss of Wetlands

- Cutting of drainage outlets to the beels and ponds.
- Stop housing estate, industries and other development work on wetlands.
- Stop earth filling of ponds in the study area through creation of public awareness.
- Strict implementation of Wetland Conversation Act, 2000.

For Controlling Loss of Biodiversity

- Avoid critical ecological area from development activities.
- Aware people for keeping some trees and bushes around the homesteads.
- Increase tree plantation in roadsides and homesteads.
- Preserve the Beels for aquatic birds and fishes and some bush areas as wildlife preservation sites.
- Ban on hunting of birds and wildlife.

For Controlling Loss of Productive Agriculture Land

The EIA Guidelines given by the DOE should be emphasized on the avoidance of productive (high value) agricultural land during any development project. The urban expansion and land acquisition should be based on the growth rate of urban population.

For Solid Waste Management

- Formation of legislation regarding solid waste management
- Incentive for introduction of environmentally clean and efficient technology for waste disposal, which would help reduce the volume of waste and facilitate more, recycling.
- Development of separate collection and disposal system of different types of wastes such as domestic, industrial and clinical.
- Maintenance of adequate data regarding waste generation, composition and characteristic.
- There is tremendous possibility of involving NGO's and CBO's in solving solid waste problem. NGOs can act

as intermediaries between government, municipal authority and CBOs. It can serve as linkage between government, local level and community. For these reasons, more NGOs and CBOs involvement should be enhanced in the solid waste disposal system.

- For efficient management of solid waste activities vehicles maintenance and cleaners (sweepers) should be under one Division for better coordination and control.
- Introduction of new taxation system for conservancy operation.

3.3.16 Supporting the Surrounding Hinterland

- Easy accessibility from the surrounding hinterlands especially growth centers.
- Ensure facilities such as cold storage, wholesale/retail market facilities for needful commodities (fertilizer, insecticide, agro-machineries etc.) and shopping centers of regional standards to support population living in the surrounding hinterlands.

3.4 Major Infrastructure Proposals

In the detailed area plan recommendations have been made as to how expansion should proceed in the future to ensure best possible physical environment keeping in view the most economic use of land. Since these recommendations or proposals would affect both the natural and socio-economic environments, certain principles have been specified in the Dhaka Metropolitan Development Plan (1995-2015) as follows:

- Minimize the spillover effects where a landuse in one location imposes environmental or other costs on adjoining sites or the community as a whole.
- Increase efficiency by guiding development to preferred locations and uses.
- Allocate land for infrastructure and community services.
- Create an attractive urban environment.
- Improve distribution of land among different income groups, and ensure that benefits accrue to the community.
- Improve living condition for all income groups.

3.4.1 Transport

Road

Table-3.6 Shows the major road proposals of Location-15.

Road ID	Road Name	Proposed (ROW) (m)	Proposed ROW (ft)	Area in Sq.m	Length in km.
NS-1	New Road	24	80	147334.48	6.06
NS-3	New Road	18	60	134456.97	7.36
NS-4	New Road	18	60	112843.93	6.18

Commuter Rail Network: The DMDP proposed long term plan as a part of development of a commuter rail network, to serve the densely populated areas of the main urbanized area. It is anticipated that Dhaka, at the end of DMDP Structure Plan period of 2015, could have a population of some 15 million, as a result it would need a mass transit system capable of easing the pressures on the city road network which will experience inevitable and growing congestion.

Following commuter rail links, recommended by the DMDP Structure Plan, falls in the Location-15. No action yet being initiated to implement R8 (Dhamsona to Gazipur). Attached rail links and proposed road considered in the Detailed Area Plan presents in the **Map-3.1**. The commuter rail link proposed in the DMDP Structure Plan is considered to prepare the Detailed Area Plan also.

Water Transportation: The DMDP Structure Plan also made a recommendation with regard to water transport, to efficiently utilize the available natural resources with a view to:

- Develop navigability of the encircling waterways;
- Install new berthing points;
- Disperse traffic loads to be carried by water transport;
- Reduce congestion in old Dhaka roads;
- Develop water transport to serve different points around the city.

The whole component included dredging of channels and canals and installation of berthing points. Navigability of the encircling waterways would enhance the riverine recreational facilities as well as movement of goods to different parts of the city by water transport. Introduction of water transport could reduce the cost of transportation for both goods and passengers. Based on this concept, the waterways proposed in the DMDP Structure Plan also considered in the Detailed Area Plan.

In the area covered by Location-15, Old Brammaputra is the major river uses extensively by water transport vessels for carrying goods and passengers in summer. The river is connected with the Turag River. There is a proposal to develop circular waterways around Dhaka, using both Balu and Tongi rivers together with Turag and Buriganga Rivers on the western and southern side of Dhaka City. The Strategic Transport Plan of Dhaka supported this proposal. When this circular waterway will be developed, the people living on the eastern part of Location-15 would greatly be benefited.

3.4.2 Utility Services

Water Supply: The DMDP viewed that future basic water supply system will be needed piped water abstracts from ground sources. Excessive water extraction from the ground might deplete the reserve and asked to impose control on private abstractions. Private developers should be encouraged to connect municipal system where possible. Outlined standards cover basic requirements for water supply including main distribution lines and shared community supply, including public standpipes. Present extraction of water by existing pipe might endanger for healthy supply in near future. Introduction of specific one-way meters is recommended to solve the problem.

For water supply WASA jurisdiction should be extended upto the study area and restriction imposed on free extraction of ground water. Immediate steps are to be taken to install production tubewell and creation of service networks.

Electricity: Regarding electric supply the DMDP raised such issues as:

- Location of power lines;
- Adequate line clearances;
- Locations for transformers; and
- Street lighting arrangements.

Communal arrangements are suggested for the low-income neighborhoods.

Such concept has considered in the Detailed Area Plan to prepare an effective electric supply.

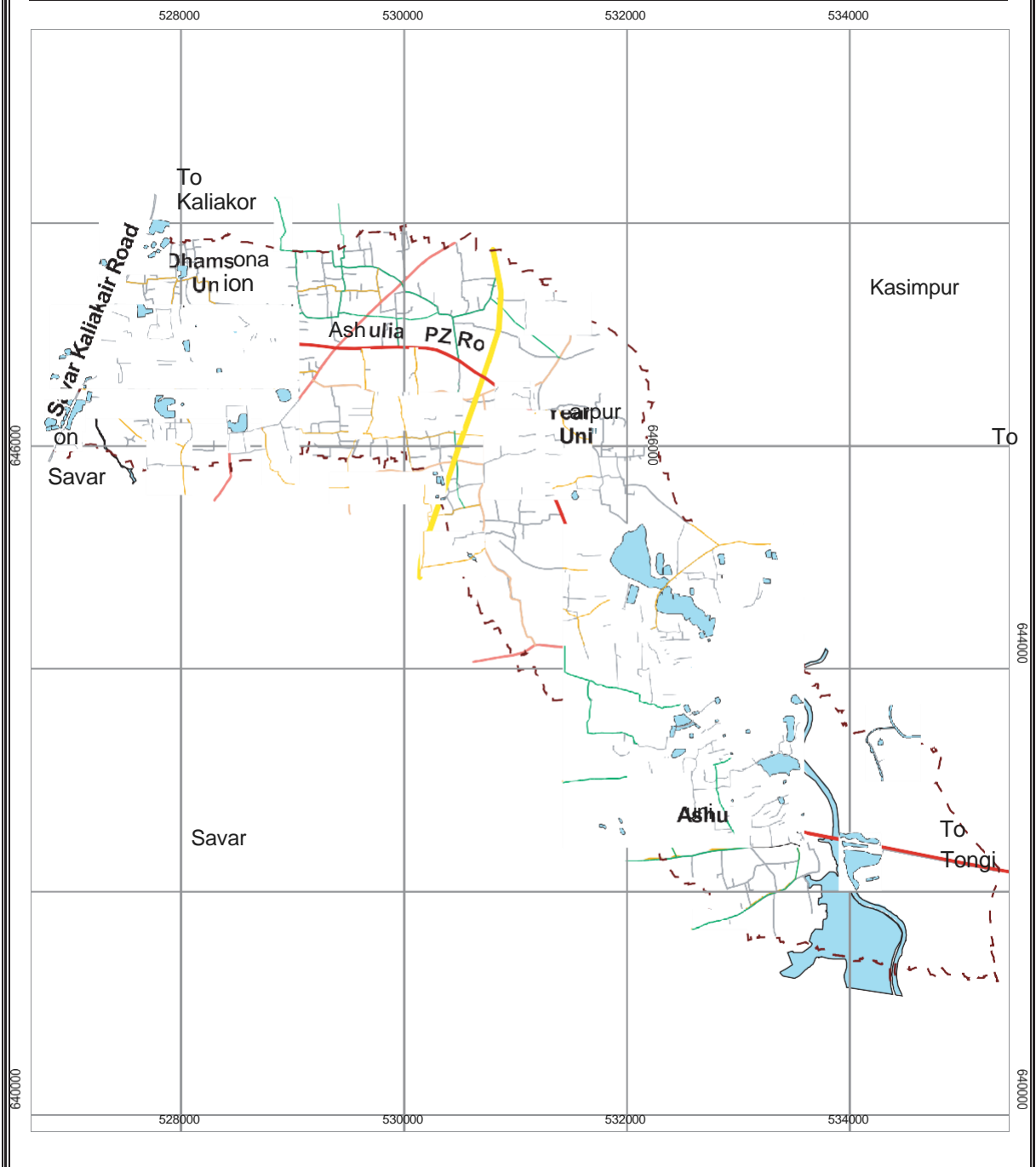
Telecommunication: The main considerations for telephone standards in the areas are adequacy of trench sizes and clearance for underground line installation with suitable clearances to poles and wires. It virtually made no recommendations about telephone.



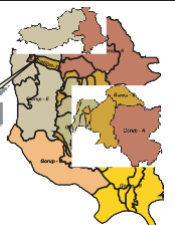
Gas Supply: The DMDP did not suggest for setting special standards of gas supply, the respective company named Titas Gas Transmission and Distribution Co. is applying them effectively. Demand for this service currently exceeds supply. Most gas consumption is by non-domestic users. Changing pattern of industrial distribution will therefore affect demand priorities. Densification will also increase pressure in established areas. Provision of community cooking facilities will be needed.

Solid Waste: The DMDP addresses some issues regarding solid waste management. Those are:

- Location of collection points;
- Ease of vehicle access;

MAP 3.1: PROPOSED ROAD NETWORK OF THE STUDY AREA



<p>CONSULTANT</p> <p> Development Design Consultants Ltd. 4z Mohakhali c/A, dhaka 1212, bangladesh</p>	<p>Detailed Area Plan for DMDP Area (Location-15)</p> <p>500 0 500 1000 1500 Meters</p>	<p> Ministry of Housing and Public Works Rajdhani Unnayan Karttripakkha (RAJUK)</p>											
<p>Location - 15</p> 	<p>LEGEND</p> <table border="0"> <tr> <td>Project Boundary</td> <td>Proposed Road (Feet)</td> </tr> <tr> <td>Union Boundary</td> <td>100ft</td> </tr> <tr> <td>Existing Road</td> <td>70ft</td> </tr> <tr> <td rowspan="4">Waterbody</td> <td>30ft</td> </tr> <tr> <td>40ft</td> </tr> <tr> <td>60ft</td> </tr> <tr> <td>80ft</td> </tr> </table>	Project Boundary	Proposed Road (Feet)	Union Boundary	100ft	Existing Road	70ft	Waterbody	30ft	40ft	60ft	80ft	<p>NOTES</p>
Project Boundary	Proposed Road (Feet)												
Union Boundary	100ft												
Existing Road	70ft												
Waterbody	30ft												
	40ft												
	60ft												
	80ft												

- Adequate space around container for employing and cleaning;
- Well drained container base; and
- An open location visible to the public to minimize misuse of the waste.

Based on the above issues proposal on solid waste is prepared. For efficient collection and dumping of the solid waste Dhaka City Corporation authority may involve the local NGOs. Waste management should be vested with the local authority with door to door collection system established through involvement of CBOs.

Sanitation: Present drainage trend of the study area is aligned to east and west that is towards two main channels flowing north to south by the two edges of the study area. On the eastern edge the Turag River and its tributaries flow from north to south. On the western edge Dhaleswari – Bangsi River flows north to south. The flood free high lands of the study area are crisscrossed by low-lying drainage channels that drain water into the flood plains. These drainage channels can retain water for substantial time period even after the rains that are used for growing paddy when water recedes. The deeper channels called khals serve as natural drainage system round the year. The Detailed Area Plan proposes to retain all existing natural drainage canals. Most of the low-lying lands belong to the state or khas lands, so it is easier to mark and preserve them. For the purpose of preventing encroachment, a 5m wide free land on both sides of canal and rivers, serving as buffer zone, has been proposed. This buffer zone can be developed as roads with trees. Apart from the drainage channels, the flood flow zone delineated in the Structure Plan, should be strictly maintained to allow smooth flow of floodwater during monsoon. Moreover unplanned settlement areas will be enabled as free from flood risk.

Proposal on sanitary facilities cover storm sewers and on-site sewerage system. However, the increasing density of development in the city will require more consideration to be given to the sustainability of a sewerage system. In established areas and adjacent fringe areas as on-site systems will become increasingly difficult to provide facilities more expensive. In peripheral areas, slow rate of land development will make it expensive to provide initial services at affordable levels.

3.5 Amenity and Urban Facility Proposals

Health: The area is not well established with required health facilities. Absences of such health facilities make people depend on central Dhaka to secure these services. Private clinics and health care facilities are existing mostly in Yearpur Union. Mostly Residential buildings are being used to deliver such facilities. In the Detailed Area plan, an independent and well equipped public hospital is being proposed in Dhamsona Union.

Education: Due to the low density of population, the area is not well developed with sufficient educational facilities. No further provision of educational facilities has been envisaged in the Detailed Area Plan. Existing educational buildings may be expanded vertically with the gradual increase in enrollment.

Recreation: The main purpose of this plan is to identify the condition, use and maintenance of the existing parks and playgrounds of the study area from the users' perspectives of selected communities. The study has yielded useful results, which can be used by planners for the development and maintenance of recreational spaces in this area. About 121 acres of land has been proposed for recreational purposes.

Construction of new parks and playgrounds: Government should take proper measures to construct new parks and playground. It is recommended that for this purpose government khas land available in the study area may be utilized. Any additional land provided in the plan which cannot be consumed for housing, can fruitfully be used for establishing mini parks and playgrounds.

Need for separate Department for park and playground: Savar Pourashava should have separate department for conservation, preservation and improvement of the open spaces, parks and playgrounds in Ashulia. All of the parks and other open spaces should be brought under the supervision and control of the concerned departments, which in turn, should coordinate with different agencies responsible. It should work through cooperative organizations or with private organizations, clubs, community societies, educational institutes etc. to manage the existing and new parks and playgrounds.

Prevent encroachment in parks and playgrounds: Some parks and playground are encroached by another use like

katcha bazar, slum, small shop, etc. Government and local authority should be aware of this and be strict in preventing any such encroachments..

Provide cleanliness of parks and playgrounds: Authority should take proper measures to provide cleanliness of the existing parks and playgrounds. They can appoint more responsible manpower to maintain these. Proper measure should be taken for providing clean and healthy environment of the parks and gardens by protecting those from garbage dumping and urination.

Need to ensure proper security: It is very important for ensuring proper security of the parks. These should be protected by periphery iron fence and on-duty gate gatekeepers. There should be proper lighting in the parks..The security guards will be on round-the-clock duty. Separate children zone will be added to the Park zone with seating arrangement for the mothers of the children. For increasing attractiveness of the existing parks, these should be improved and modernized with provision of more rides and games.

3.6 Description of the Plan

The integrated Detailed Area Plan is prepared under the framework of the Structure Plan and Urban Area Plan and by incorporation of inputs received from the stakeholders.

Prior to DAP formulation, the overall existing situation of the study area is summarized, followed by explanation of the planning process, planning components and finally the plan proposals in details. Following the guidelines of Structure Plan, land uses have been proposed. The Table-3.9 shows the details of proposed land use Table-3.7: Proposed land use

Proposed Land use Type	Area (acre)	%
Agricultural Zone	1604.9	31.8
Rural Settlement Zone	996.8	19.8
Flood Flow Zone	843.5	16.7
Mixed Use Zone (Residential-Commercial-General Industry)	472.3	9.4
Urban Residential Zone	394.2	7.8
Proposed Road Network	267.3	5.3
Non-Conforming Use	191.9	3.8
Waterbody	119.6	2.4
Overlay Zone	87.6	1.7
Transportation & Communication	42.3	0.8
Open Space	19.8	0.4
Total	5040.0	100.0

Agricultural zone

Approximately 1605 acres (32%) of land have been proposed under agricultural use. This category includes paddy field, cropland, grazing land, horticulture, orchard etc. Preservation of agriculture land is considered as main concept to design the agriculture zone. The zone is being distributed dispersly in different locations of the study area.

Flood Flow Zone

In Structure Plan, a significant part of land of Location-15 was proposed as Main Flood Flow and Sub-flood Flow Zone. In Detailed Area Plan, Main Flood Flow and Sub-flood Flow Zone have been merged and renamed as Flood Flow Zone for better controlling mechanism to safeguard flood plain lands from development. The total demarcated land for this zone is around 843 acres (17%).

Rural Settlement Zone

A new zone named Rural Settlement Zone has been proposed to accommodate and confine traditional rural settlements. The rural homesteads must be confined in this zone. This zone was proposed to safeguard the agricultural land from continuous extending of rural housing. The total proposed area under this zone is around 997 acres (17%).

Mixed Use Zone (Residential-Commercial-General Industrial)

About 473 acres (9.5%) of land in the study area is proposed as mixed use zone (Residential-Commercial-General Industrial). Such type of mixed use zone is found in the Dhamsona and Yearpur unions around the Savar EPZ. Such mixed use zone located in other areas is proposed as non-conforming use.

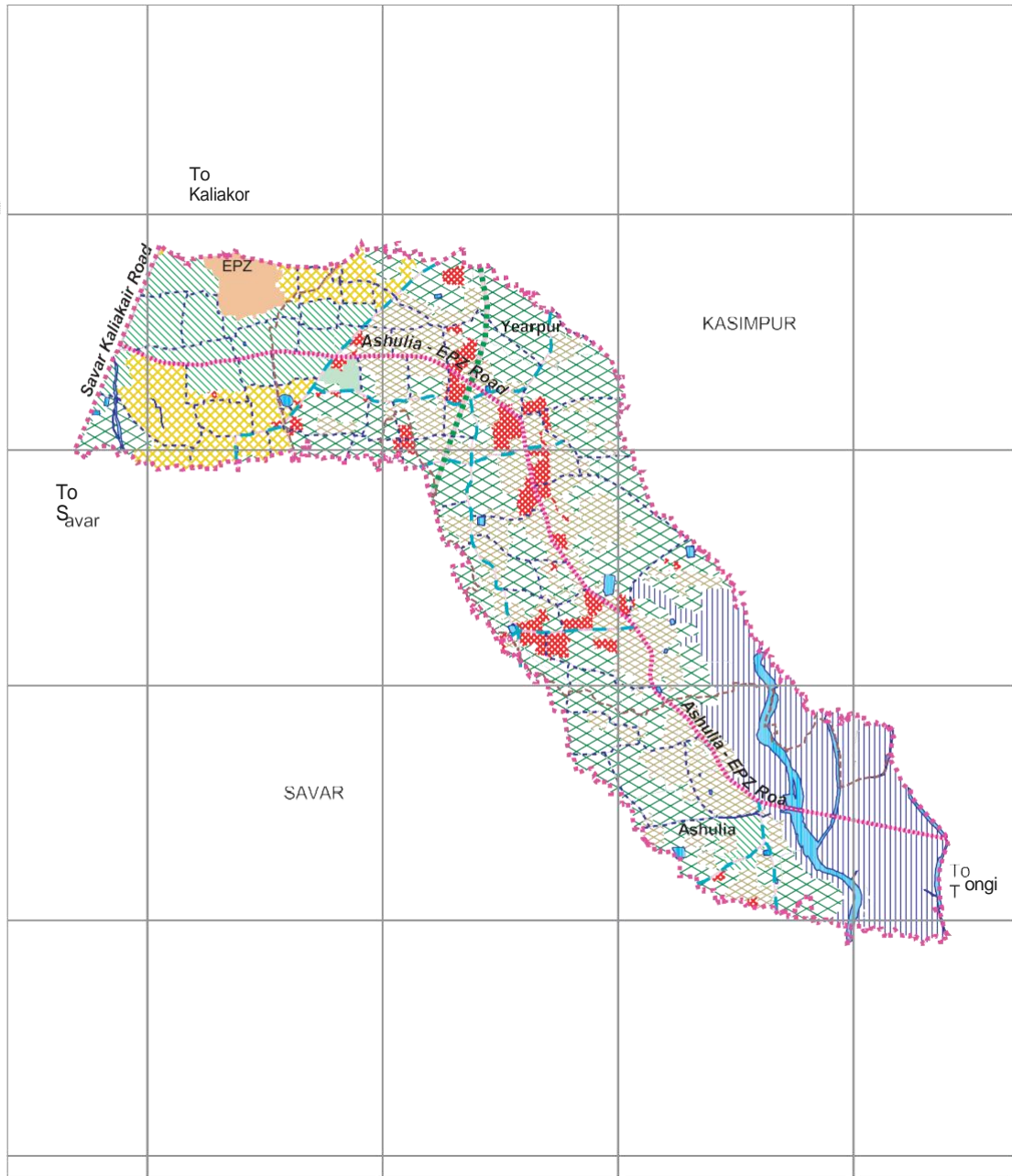
Water body

The size of waterbody which is more than 0.3 acres in this region is recommended to preserve. It may be khal, pond, marshland etc. The total water body which must be protected from any type of development is around 120 acres (2.4%)

Road Network

To promote development in a planned manner in less developed areas, and to improve circulation in the built-up and semi built-up areas, a network of Primary and Secondary roads, as well as tertiary and access roads have been proposed. Please see Map-3.2, to get details of the proposed roads.

MAP 3.2: PROPOSED LANDUSE PLAN FOR LOCATION-15



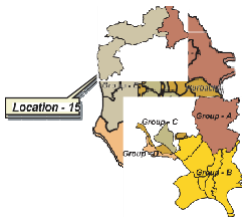
COWSULTAWT

Detailed Area Plan for DMDP Area (Location - 15)

CLIENT

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0 500 1000 1500 2000 Meters



Admin boundary

- Proposed Road (Feet)
- 24
- 30
- 40
- 60
- 80
- 100
- 120
- 130
- 160
- 170
- 270

Proposed Landuse

- Administrative Zone
- Agricultural Zone
- Commercial Zone (Business)
- Commercial Zone (Office)
- Transportation & Communication
- Flood Flow Zone
- General Industrial Zone
- Heavy Industrial Zone
- Institutional Zone
- Open Space
- Overlay Zone

- Non-Conforming Use
- Proposed Road Network
- Rural Settlement Zone
- Transportation Facilities
- Urban Residential Zone
- Water Retention Area
- WaterBody
- Mixed Use Zone (Commercial-General Industrial)
- Mixed Use Zone (Residential-Commercial)
- Mixed Use Zone (Residential-Commercial-General Industrial)
- Mixed Use Zone (Residential-General Industrial)

Chapter - 4

PLAN IMPLEMENTATION

4.1 Implementation Strategy

Traditionally owing to administrative complexities, government does not usually advocate people's participation in the formulation and planning process of any infrastructure project and attempts to implement it with own fund through land acquisition. Such policy has some built-in insurmountable problems that strongly resist its implementation at later stage.

People feel that they have the right to know about the plan which has direct bearing on their future livelihood and property. There has been instances in the past that govt. plan, regardless of its quality and benevolent objectives and goals, uproots many people from their roots and community they belong. Thus a strong and desperate group of affected people together with their friends and allies resist the implementation process. with their united strength

In Bangladesh, during Registration of immovable Land properties, there is a tendency among the people to record land at a considerably lower price than that which actually prevails in the market. This reality ultimately makes people financially looser. Land Compensation all over the world is a complicated process. Brokers prop up to bridge the gap between innocent people and the government administrative machinery. Money sticks to brokers' hands. Eventually another group of victimized people emerges to resist plan implementation process.

Plan Implementation through Active Community Participation Technique is the answer to offset these insurmountable obstacles on the way to plan implementation.

4.2 Land Management

Land Management is the process to make best use of the resources of land to achieve sustainable food and other agricultural products in the future. It covers all activities concerned with the management of land as a resource both from an environmental and from an economic perspective. It includes farming, mineral extraction, property and estate management and physical planning of towns and countryside. It embraces such matters as:

- Property conveyance including decisions on mortgages and investment
- Property assessment and valuation
- Development and management of utilities and services
- Management of land resources such as forestry, soils, or agriculture
- Formation and implementation of land use policies
- Environmental impact assessment
- Monitoring of all activities on land that effect the best use of that land.

(Ref. *UN Economic Commission for Europe, Land Administration Guidelines, final draft-June 14, 1995*)

Land management can be defined as the process of managing the use and development (in both urban and rural settings) of land resources in a sustainable way. Land resources are used for a variety of purposes which interact and may compete with one another; therefore, it is desirable to plan and manage all uses in an integrated manner.

Although Land is part of people's natural heritage, access to land will have to be controlled by ownership patterns. Land is divided for administrative and economic purposes, and it is used and transformed in a myriad ways. This is the reason why land management is so important for all of the associated professional groups.

Under the inevitable urbanization of poverty, particularly during the last decade, there has been a clear recognition of the importance of urban land management in helping to alleviate urban poverty in the developing countries.

Land is both an economic asset and a means to achieve social goals. Therefore, development of land markets and their competitiveness should be among the primary objectives of a land management strategy. But land cannot be

treated only as a commodity subject to markets. Access to land and tenure security by the urban poor should also be considered among the primary objectives of land management. The demands on land management includes security of tenure, land market regulation, land use control and land use planning, land registration and land information, land reform etc.

Land is the scarcest commodity since it is of fixed quantum in terms of supply having ever increasing demand with the population influx. In Dhaka the scenario is even worse due to unplanned and uncontrolled development race.

4.2.1 Land Management Techniques

Experts worldwide optimize the benefit through adoption of appropriate Land Development Techniques and thereby create humane living environment. A general understanding and the appropriateness of some popular techniques are furnished follow:

- Urban Renewal
- Urban Upgrading
- Land Readjustment
- Guided Land Development
- Land Sharing
- Taxation
- Land Pooling
- Land Banking

Application of these techniques as implementation strategy for Participatory Action Plan at some smaller cohesive parts within Group-A area has been proposed. It may be mentioned that one well known technique, namely, Site and Services, is not being included here for description due to that it has been successfully managed and implemented by RAJUK and many private land developers in Dhaka since long.

Urban Renewal

Urban Renewal is the process of redeveloping the deteriorated section of a city, often through demolition and new construction. Although urban renewal may be privately funded, it is most often associated with government renewal programs. The typical program attempts to demolish concentrations of dilapidated housing and attract developers of middle-income or mixed housing. Often, however, urban renewal areas become sites for new public buildings, such as civic auditoriums, sports arenas, and universities.

Urban Upgrading

Upgrading or slum improvement as it is also called - in low income urban communities, involves a package of basic services: clean water supply and adequate sewage disposal to improve the living environment of the community. But fundamental 'legalizing' and 'regularizing' of properties in situations of insecure or unclear tenure causes hindrances.

Upgrading customarily provides a package of improvements of streets, footpaths and drainage as well. Solid waste collection is frequently included with its positive impact on health, along with street lights for security and activities during night. Electricity supply to houses is often initiated at a later stage - and sometimes even before- by private companies.

This technique would specially fit in for the improvement of living conditions of thousands of our urban poor, who deserves a safe and secure shelter to return to after dawn to dusk hard work and this mechanism helps running the mega city Dhaka as a vibrant capital.

Land Readjustment

Land Readjustment (LR) is an operation by which land parcels in a LR project area shall be re-distributed to the respective former landowners after adjustment or consolidation of all parcels of land according to the project layout and land use plan.

Guided Land Development

Guided Land Development is similar to Land Pooling but with less public sector involvement. Government provides secondary road network and owners/ developers develop the land subject to approved planning and building standards set out by regulating authorities. Guided land development uses the provision of infrastructure as a mechanism to guide urban development. It is done in partnership with landowners who pay for the cost of servicing their land through donation of land for public infrastructure and payment of a betterment levy.

Land Sharing

Land sharing is such a process where tenure of land is divided among the groups, which is more or less similar to land readjustment. Land sharing usually results in major improvements in housing and a significant increase in asset formation. The conditions for its success are assessed by comparing land sharing slums with other slums with potential for land sharing. It is not successful where communities are weak, and once implemented, may result in the resale of some of the houses, which then command a higher market value.

Land Pooling

Land Pooling (LP) is a technique for managing the planned development of urban-fringe lands, whereby a government agency consolidates a selected conglomeration of land parcels and then designs, services and subdivides them into a layout of streets, open spaces and serviced building plots, with the sale of some of the plots for cost recovery and the distribution of the remaining plots back to the landowners to develop or to sell for development. Widely used in Japan, South Korea and Taiwan, LP is being adopted in Indonesia, Nepal and Malaysia. The community benefits that the technique provided under Thailand situation of weak urban land-use controls and inadequate provision of urban network infrastructure are outlined as reference. The landowner benefits accrued from the technique makes it a fully acceptable and feasible technique.

Land Banking

In anticipation of future development, investors and city, county or state governments may purchase and hold land that is vacant, rural or underutilized at a relative bargain before its value skyrockets once it eventually falls in the path of development. This practice is called land banking and it is the practice of acquiring land and holding it for future use. It may be defined as the purchase of properties by a government, presumably to reduce development pressure or to preserve the parcel as a park or as open space or any other type of community facility use. Land banking is done for a number of reasons. Local governments can engage in it in order to preserve stretches of land or to have the option of changing their use at some time in the future. Individuals also utilize land banking as a potentially very lucrative investment.

4.2.2 Area Specific Appropriate Land Management Techniques

Community Based Area Development Plan (CBADP): Community Based Area Development Plan (CBADP) is prepared for control of existing spontaneous sprawl and unplanned development responsible for degradation of physical environment. Community based Committees may be formed with some members headed by the Ward Commissioner. He is considered as the legal authority to organize the meeting regarding the problems of that community. Objective of such plans will be to promote civic facilities and improvement of livable environment. The main features of CBADP are as follows:

- a) Development authority should provide road and other basic infrastructure.
- b) Community may or may not share space with others or the cost of infrastructure and services development.
- c) Development authority will create livable environment and enable the landowners to build their structures.
- d) Widening of existing narrow roads up to appropriate level to allow smooth movement of traffic and easy accessibility.
- e) New link roads will be created to open up congested areas.
- f) Solid waste disposal, environmental issues, health and sanitation facilities, educational issues may be provided through participatory program.
- g) Contributions from local communities may be provided to share development cost in the form of land or money; development authority will bear the initial cost of development.

- h) In case the beneficiaries fail to share development cost, development authority can charge betterment fees as per their applicable Ordinances to minimize the cost.
- i) Development cost may be minimized from the beneficiaries through development of appropriate mechanism.

People's participation: It confirms that the plan is for the betterment of people and all the benefit of the planning task will be enjoyed by the masses. Therefore, people should be allowed to perform significant role on the implementation of planned development as proposed in the detailed area plan. On the basis of this objective, people should involve themselves on some particular aspects like –

- Widening of some existing roads as proposed in the plan. The roads having 20 feet (6.09 meter) width in the plan should be widened by the process of people's participation.
- People should remove their unauthorized construction from public property at their own cost and effort.
- The local authorities supported by the local peoples should process demand on environmental facilities. The local people should maintain those facilities. All public efforts on those aspects must be considered with local masses.
- People should be aware of their responsibilities on the planned development of their areas.

Procedure of involvement: People should involve themselves with the planned development through some procedures, which are as follows:

- Formulation of community base awareness. The term community may vary according to the necessity and responsibilities. As an example, for widening of a road, participation of the community should be ensured with all the establishments existing along the road. The said community may be named as road widening community. This community should perform all the activities for the widening of a particular road.
- To increase people's awareness about planned city and better living environment, all the public authorities should be notified about their role and people's awareness from time to time through local seminar, wall sticker, handbill and with the use of mass media.

Primarily, the local people with a written statement should follow any type of demand by the people regarding sustainable environment. Secondly, the local authority such as Union Parishad or Ward Commissioner with a further statement should refer to the concerned public authority. Thirdly, the statement should be placed with the concerned authority who will try to fulfill the demand according to the process followed by the local people.

4.3 Areas for Action Area Plan

There are several patches of land in the Ashulia, Dhamsona and Yearpur areas where planned development can be achieved through use of Land Readjustment Technique. Those areas are designated as areas for Action Area Plan to be prepared by RAJUK on completion of DAP. Development of Recreational Facilities, Savar Export Processing Zone, Height Restriction within one kilometer from Ashulia Bridge toward Nabinagar, restriction of housing development on flood flow zones etc. are recommended to be developed through Action Area Plan.

4.4 Public Sector Action Program

According to the Annual Development Plan of 2007-2008, two public sector development programs are found. Some private industrial development has been registered in the Board of Investment in 2006 located in the EPZ and Dhamsona areas. It is envisaged that up to the year 2015, one commuter train line will be constructed and made operational. Further, any new irrigation project should be discouraged. Public sector through different authority, local government and private sector encourages for all types of physical development.

4.5 Area Development Priorities and Phasing

4.5.1 Phasing

The DAP implementation phases are categorized as Phase-1: Short Term (2010-2012), Phase-2 : Medium Term (2013-2015) and Phase-3 : Long Term (Beyond 2015).

Table-4.1: Phasing of development proposal

ID	Location (Union)	Development Proposal	Implementation Authority	Phasing of Development
1	Boro Raddo Mati Mouza, Yearpur Union	Establishment of Graveyard at Boro Raddo Mati mouza in Ashulia Union	RAJUK/Union Parishad Authority	2010-2012
2	Jirabo mouza, Yearpur Union	Construction of Community Center at Jirabo mouza in Yearpur Union	RAJUK/Union Parishad Authority	2010-2012
3	Norsinghopur / Diakhali mouza, Yearpur union	Development of Community Center at Norsinghopur/Diakhali mouza in Yearpur union	RAJUK/Union Parishad Authority	2013-2015
4	Norsinghopur / Diakhali mouza, Yearpur union	Development of Playground at Norsinghopur / Diakhali, mouza in Yearpur union	RAJUK/Union Parishad Authority	2010-2012
5	Norsinghopur / Monosantaspur mouza, Yearpur union	Construction of Fire Service Station at Norsinghopur / Monosantaspur mouza in Yearpur union	Fire Service and Civil Defense	2013-2015
6	Ashulia Mouza, Ashulia	Construction of Police Outpost at Ashulia Mouza in Ashulia	DMP Authority	2013-2015
7	Norsinghopur / Diakhali mouza, Yearpur union	Establishment of recreational park at Norsinghopur / Diakhali mouza of Yearpur union	RAJUK/Union Parishad Authority	2010-2012
8	Norsinghopur / Monosantaspur mouza, Yearpur union	Establishment of recreational park at Norsinghopur / Monosantaspur mouza of Yearpur union	RAJUK/Union Parishad Authority	2010-2012
9	Ashulia Mouza, Ashulia	Construction of Cinema Hall at Ashulia Mouza of Ashulia union	Private Sector	2010-2012
10	Baipail mouza, Dhamsona Union	Construction of Cinema Hall at Baipail mouza, Dhamsona Union	Private Sector	2013-2015
11	Norsinghopur / Diakhali mouza, Yearpur union	Establishment of Hospital at Norsinghopur / Diakhali mouza of Yearpur union	Ministry of Health/Private Sector	2010-2012

Any such program will require top-level government decisions as it involves many line agencies, Ministries and Departments. Coordinated public sector action program is very much essential for Multi-Sectoral Investment Planning (MSIP). MSIP is an extremely difficult task and cannot be accomplished by any single organization like, RAJUK and City Corporation. To make the decisions of MSIP binding on every Ministry and its affiliated agencies it may need legislative provisions. Prime responsibilities depend on the authority. Phasing considers sector wise projects against thumb rule budgets. But such projects mean of being of very little significance to other Ministries than the Ministry of Housing and Public Works. The Structure Plan proposed many such policies and development proposals involving many Ministries, but none of them have received any response from other Ministries / departments as no initiative was taken to carry out MSIP by RAJUK

It is proposed that RAJUK will have to move with the issue of MSIP and convince other relevant Ministries to undertake coordinated development projects for mega Dhaka including coordination of development budget allocations.

4.5.2 Priorities

Priority-1 considers the core areas of Ashulia, Dhamsona and Yearpur Unions. Those areas are developed at the beginning of development in the study area. Highest concentration of population and services are involved in those areas. All development activities are in informal shape. Roads are narrow and irregular and insufficient.

Priority-2 considers the By-pail Road. It has been observed that the highest number of traffic flows through this road. Priority should be taken according to the following aspects:

- Development of roads in a regular shape as proposed in the detailed area plan.
- Control on residential development should be emphasized according to the setback rule prescribed in the Dhaka City Building Construction Rules, 2006.
- Any type of new industrial erection will be encouraged in the areas prescribed in the Detailed Area plan and existing industries should be rearranged according to the Factories Act, 1965 and environmental regulations prescribed in the Environment Conservation Act, 1995.
- Improvement of existing daily bazars will highly emphasize proper sanitary and garbage facilities.
- Injection of sewerage facilities is highly recommended including other facilities related with the public health.
- Re-excavation of existing drainage channels should be necessary as proposed in the detailed area plan.

4.6 Landuse Zoning

Zoning is a form of legal power which is delegated to development authorities/municipalities through enabling legislation to ensure the welfare of the community by regulating the most appropriate use of the land. Zoning is a classification of land uses that limits what activities can or cannot take place on a parcel by establishing a range of development options. Zoning has been defined as an action through legislation provided to a development authority/municipality to control...

- a) the heights to which buildings may be erected;
- b) the area of lots that must be left un-built upon; and
- c) the uses to which buildings and lots may be put.

- **Area Zoning**

The objective of area zoning is to specify which types of land use are considered appropriate for different areas or 'zones', and it therefore indicates the planning control objectives of the authority or municipality within its administrative area. The authority is obliged under the planning acts to designate in its development plan objectives for the use solely and primarily of particular areas for particular purposes.

- **Density Zoning**

The aim of the density zoning is to provide an acceptable density which is related to the designed facilities and amenities especially in the residential areas. This will ensure a healthy community and enjoyable community life.

- **Height Zoning**

This zoning provides height limits for structures and objects of natural growth and standards for use in a designated area which encourage and promote the proper and sound development. It is also applicable to height restrictions for flight safety around airports or other similar purposes.

For effective development control, in addition to landuse zoning, individual facility and the structures therein is to comply with regulations imposed to ensure desirable end. Relation between ground cover of buildings and the land parcel that house it, minimum setback of building from the adjoining plot boundaries, and the maximum floor area that can be constructed in relation to plot size and the connecting roads, among many other details, are controlled by RAJUK's Building Construction Rules. Besides, Bangladesh National Building Code focuses on the appropriate materials, construction method, building safety and associated issues. In absence of DAP the above rules did not have scope for area specific rules and hence were common for the whole development process.

According to the Building Construction Rule, 2008, minimum permissible road width for obtaining plan permit is to be shown, construction is allowed on plots connected by narrow roads provided the plot owner leaves formally half of the additional land area needed to make the road 6m for widening the road to the permitted minimum. Perhaps the intension behind this was that gradually the whole road would raise up to 6m in short time and it is true for new areas coming under urban development as most of the structures are not permanent and they are to correct under this rule to permanent buildings making the whole road 6m in the process. But congested unplanned Dhaka represents an alarming picture. Most of the plots are occupied almost entirely by

pucca structures several storied high soaring right from the property line connected by the narrow pathways, these owners did not bother for RAJUK's plan permit and a handful of those who obtained a plan permit did not bother to follow them.

4.6.1 Landuse Classification

Detailed Area Plan as its Area Zoning responsibility classified the Landuse of DMDP area into the following zones:

- a. Urban Residential Zone
- b. Commercial Zone (Business)
- c. Commercial Zone (Office)
- d. General Industrial Zone
- e. Heavy Industrial Zone
- f. Mixed Use Zone (Commercial-General Industrial)
- g. Mixed Use Zone (Residential-Commercial)
- h. Mixed Use Zone (Residential-Commercial-General Industrial)
- i. Mixed Use Zone (Residential-General Industrial)
- j. Institutional Zone
- k. Administrative Zone
- l. Agricultural Zone
- m. Flood Flow Zone
- n. Open Space
- o. Overlay Zone
- p. Rural Settlement Zone
- q. Water Retention Area
- r. Water Body

Following sections deal with the general definition of these uses and description of associated permitted and conditionally permitted uses under each Landuse zone one by one. The uses not listed here in any of the category shall be treated as **Restricted Use** for the corresponding landuse category and shall not be permitted only except unanimously decided otherwise by the Nagar Unnayan Committee. In such situations, the use shall get permission in the category of **New Use**.

a. Urban Residential Zone

Urban Residential Zone is intended primarily for housing development but may also include a range of other uses particularly those that have the potential to foster the development of new residential communities such as schools, small shops, doctors' chambers, open space like playing fields and so on. Limited commercial facilities within this zone shall be planned and developed as an integral retail or business unit which, comply with the planned mixed-use concept of the Urban Area Plan.

Purpose

The prime objective of this zone is to provide the space for living as well as to meet the daily needs of the residents.

The main purposes of this zone are:

- To provide for residential development, associated services and to protect and improve residential amenities.
- To improve the quality of existing residential areas and strengthen the provision of local community services and amenities.
- To control unscheduled development on individual lots or tracts, promote economical and efficient land use.
- To provide for a variety of housing types and densities to meet current and future residential needs.
- To provide an appropriate mix of house sizes, types and tenures in order to meet household needs; to promote balanced communities; and to promote higher densities in the development centre to facilitate day and evening activity and ensure a 'living' centre.

The urban areas that are already densely and haphazardly built are termed here as Spontaneous Residential Zone.

These zones primarily support living with some civic facilities. The main purpose of this landuse zone is to provide enough space for residence. There will have some supporting uses, too, for the residents.

The areas that have some scope to develop as a planned area are declared as Planned Residential Zone. In Planned Residential Zone, there will have a variety of supporting uses such as small retail, parking, post box etc. with primarily residential use. Planned residential area in the neighbourhood form should be followed for new urban development.

The neighbourhood is a walk able community in human scale, with a frequently interconnected street network which weave a mix of housing types, and small local scale retail and service uses that serve the local population. The services designed here are in walking distances considering the day to day needs. Service standards for neighbourhood level are already mentioned in the previous standard section of this chapter. For purposes of administering the DAP Permitted Land Uses in the neighborhood, the design specification, standards and guidelines about the area and number must be maintained.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.2: Landuse Permitted for Urban Residential Zone

All Types of Residential House	Housing Project
Apartment Housing	Housing Projects
Artisan’s Shop	Landscape and Horticultural Services
Assisted Living or Elderly Home	Memorial Structure (Ancillary)
ATM Booth	Monument (Neighborhood Scale)
Barber Shop	Mosque, Place of Worship
Bill Payment Booth	Newspaper Stand
Boarding and Rooming House	Nursery School
Book Stall	Orphanage
CBO Office	Photocopying and Duplicating Services (No Outside Storage)
Child Daycare / Pre-school	Pipelines and Utility Lines
Children’s Park (Must Have Parking)	Playing Field
Cleaning / Laundry Shop	Primary School
Communication Service Facilities	Private Garages (Ancillary Use)
Communication Tower Within Permitted Height	Project Identification Signs
Community Center	Property Management Signs
Condominium or Apartment	Public Transport Facility
Confectionery Shop	Retail Shops / Facilities
Cottage	Satellite Dish Antenna
Cultural Exhibits and Libraries	Shelter (Passers By)
Cyber Café	Shoe Repair or Shoeshine Shop (Small)
Daycare Center (Commercial or Nonprofit)	Special Dwelling
Departmental Stores	Stationery Store
Doctor / Dentist Chamber	Specialized School: Dance, Art, Music, Physically Challenged & Others
Dormitory	Temporary Pandle for Permitted Function
Drug Store or Pharmacy	Temporary Tent
Dwelling	Transmission Lines
Eidgah	Urban-Nature Reserve
Employee Housing (Guards / Drivers) / Ancillary Use	<i>Uses in Neighborhood Center* (Where Neighborhood Center exists)</i>
Fast Food Establishment / Food Kiosk	Water Pump / Reservoir
Fitness Centre	Woodlot
Flowers, Nursery Stock and Florist Supplies	
Gaming Clubs	
General Store	
Grocery Store	
High School	
Household Appliance and Furniture Repair Service (No Outside Storage)	

*Permit of Neighborhood Center Facilities in absence of formal neighborhood should be subject to Landuse Permit Committee

Landuse Conditionally Permitted

The following uses will be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedures while the application meets the criteria mentioned in the requirement.

Table No. 4.3: Landuse Conditionally Permitted for Urban Residential Zone

Addiction Treatment Center	Graveyard / Cemetery
Amusement and Recreation (Indoors)	Guest House
Art Gallery, Art Studio / Workshop	Market (Katcha Bazaar) Place
Automobile Driving Academy	Neighborhood Co-Operative Office
Beauty and Body Service	Optical Goods Sales
Billiard Parlor / Pool Hall	Outdoor Café
Building Maintenance/Cleaning Services, No Outside Storage	Overhead Water Storage Tanks
Bus Passenger Shelter	Paints and Varnishes Store
Coffee Shop / Tea Stall	Parking Lot
Community Hall	Patio Homes
Correctional Institution	Photofinishing Laboratory
Courier Service	Plantation (Except Narcotic Plant)
Crematorium	Police Station
Electrical Sub Station	Post Office
Emergency Shelter	Postal Facilities
Energy Installation	Row House
Fire Brigade Station	Slaughter House
Flood Management Structure	Sports and Recreation Club
Fruit Markets	Static Transformer Stations
Funeral Services	Telephone Sub Station
Furniture & Variety Stores	Temporary Rescue Shed
Garages	Tennis Club
Garden Center or Retail Nursery	Tourist Home or Resort

Restricted Uses

All uses except permitted and conditionally permitted uses.

b. Commercial Zone (Business)

Commercial areas generally contain one or more of a wide variety of uses that includes business uses, offices, hotel, public houses, and limited forms of retailing. Uses that are particularly appropriate to these areas include wholesale, business service uses, the sale of motor vehicles and limited forms of retailing that involve the sale of bulky goods unsuitable to be carried away by pedestrians. This would allow uses that are compatible with, or reinforce, the commercial function of the area. As a whole, Commercial Zone is intended to provide all the facilities & services with the commercial landuse that are designed for basically trade and business.

Commercial zones are classified into two types: office and business predominated zones. Commercial Business Zone is a business predominated commercial zone that mainly supports business. This zone is intended to support large commercial developments in major incorporated areas such as retail distribution, retail warehouse, retail storage and retail logistics facilities.

The Commercial Business Zone is intended to provide areas for logistical and retail warehousing activities, including storage, distribution and packaging of goods and products as well as activities which require a large site and space.

Purpose

- The intent of this zone is to provide commercial nodes in convenient and strategic locations of the area to meet urban needs and to encourage clustering commercial development as opposed to strip commercial development and commercial sprawl.

- The main objective for designating this zone is to promote trade and commerce compactly associated with all other facilities.

Commercial business zone is mainly intended for supporting the business and associated works. There are several functions that are permitted in this zone.

Landuse Permitted

Commercial Zone (Business) is mainly intended for supporting the Business related activities. There are several functions that are permitted in this zone.

Table No. 4.4: Landuse Permitted for Commercial Zone(Business)

Accounting, Auditing or Bookkeeping Services	Courier Service
Agri-Business	Cyber Café
Agricultural Sales and Services	Day-care Center (Commercial or Nonprofit)
Ambulance Service	Department Stores, Furniture & Variety Stores
Antique Store	Doctor / Dentist Chamber
Appliance Store	Drug Store or Pharmacy
ATM Booth	Electrical and Electronic Equipment & Instrument Sales
Auction Market	Fast Food Establishment / Food Kiosk
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Freight Handling, Storage & Distribution
Auto Leasing or Rental Office	Freight Transport Facility
Auto Paint Shop	Freight Yard
Auto Parts and Accessory Sales (Indoors)	Fruit and Vegetable Markets
Auto Repair Shop (With Garage)	General Store
Automobile Sales	Grocery Store
Automobile Wash	Guest House
Bakery or Confectionery Retail	Hotel or Motel
Bank & Financial Institution	Inter-City Bus Terminal
Barber Shop	Jewelry and Silverware Sales
Beauty and Body Service	Market (Bazar) Place
Bicycle Shop	Mosque, Place of Worship
Billboards, Advertisements & Advertising Structure	Motorcycle Sales Outlet
Billiard Parlor/Pool Hall	Multi-Storey Car Park
Book or Stationery Store	Newspaper Stand
Building Material Sales or Storage (Indoors)	Outdoor Recreation, Commercial Outdoor Recreation
Bulk Mail and Packaging	Parking Lot (Commercial)
Bus Passenger Shelter	Pet Store
Cinema Hall	Photocopying and Duplicating Services
Commercial Office	Photofinishing Laboratory & Studio
Communication Service Facilities	Pipelines and Utility Lines
Communication Tower Within Permitted Height	Post Office
Computer Maintenance and Repair Shop	Preserved Fruits and Vegetables Facility/ Cold Storage
Computer Sales & Service Shops	Printing, Publishing and Distributing House
Confectionery Shop	Professional Office
Conference Center	Project Identification Signs
Construction Company Offices	Property Management Signs

Public Transport Facility
Refrigerator or Large Appliance Repair
Resort
Restaurant
Retail Shops / Facilities
Satellite Dish Antenna
Shelter (Passers By)
Shopping Mall/ Plaza
Slaughter House
Social Forestry
Software Development Firm
Sporting Goods and Toys Sales Centers
Super Store

Taxi Stand
Telephone Exchanges
Television, Radio or Electronics Repair (No Outside Storage)
Theater (Indoor)
Transmission Lines
Utility Lines
Vehicle Sales & Service, Leasing or Rental
Veterinarian Clinics, Animal Hospitals
Warehousing
Water Pump / Reservoir
Wood Products
Woodlot

Landuse Conditionally Permitted

Some functions are permitted with some condition in this zone.

Table No. 4.5: Landuse Conditionally Permitted for Commercial Zone (Business)

Amusement and Recreation (Indoors)
Bicycle Assembly, Parts and Accessories
Broadcast Studio / Recording Studio (No Audience)
Coffee Shop / Tea Stall
Concert Hall, Stage Shows
Construction, Survey, Soil Testing Firms
Container Yard
Trade Shows
Craft Workshop
Plantation (Except Narcotic Plant)
Energy Installation
Re-fuelling Station
Firm Equipment Sales & Service
Agricultural Chemicals, Pesticides or Fertilizers Shop
Fitness Centre
Flowers, Nursery Stock and Florist Supplies
Forest Products Sales
Fuel Dealers
Garages
Garden Center or Retail Nursery
Police Box / Barrack

Fire / Rescue Station
Grain & Feed Mills
Household Appliance and Furniture Repair Service
Incineration Facility
Indoor Amusement Centers, Game Arcades
Indoor Theatre
Junk / Salvage Yard
Lithographic or Print Shop
Motor Vehicle Fuelling Station / Gas Station
Musical Instrument Sales or Repair Shop
Optical Goods Sales
Painting and Wallpaper Sales
Paints and Varnishes Store
Parking Lot
Patio Homes
Private Garages
Retail Shops Ancillary To Studio / Workshop
Stone / Cut Stone Products Sales
Salvage Processing Activities
Truck/Covered Van Stand

Restricted Uses

All uses except permitted and conditionally permitted uses.

c. Commercial Zone (Office)

The Commercial Zone (Office) is intended to provide all the facilities and services with commercial landuse. Commercial Office Zone is an office pre-dominated commercial zone that mainly supports the official works. It supports other types of commercial activities, too. Proposals for these areas involve large-scale buildings and require a high degree of accessibility and parking space for car users and delivery vehicles.

Landuse Permitted

Following uses in the table proposed to be applicable for this zone only.

Table No. 4.6: Landuse Permitted for Commercial Zone (Office)

Accounting, Auditing or Bookkeeping Services	Freight Transport Facility
Ambulance Service	General Store
Antique Store	Government Office
Art Gallery, Art Studio / Workshop	Health Office
ATM Booth	Hotel
Auditorium, Meeting Halls, and Conference Facilities, Convention Center	Hotels
Auto Leasing or Rental Office	Indoor Amusement Centers, Game Arcades
Automobile Driving Academy	Mosque, Place of Worship
Automobile Wash	Multi-Storey Car Park
Bank & Financial Institution	Newspaper Stand
Billboards, Advertisements & Advertising Structure	Parking Lot (Commercial)
Boarding and Rooming House	Pathological Lab
Book Stall	Photocopying and Duplicating Services
Bulk Mail and Packaging	Photofinishing Laboratory & Studio
Bus Passenger Shelter	Post Office
Catering Service	Professional Office
Chinese Restaurant	Project Identification Signs
Cinema Hall	Project Office
Clinic	Property Management Signs
Coffee Shop / Tea Stall	Public Transport Facility
Commercial Office	Real Estate Office
Communication Service Facilities	Restaurant
Communication Tower Within Permitted Height	Retail Shops / Facilities
Computer Maintenance and Repair	Sales Office of Industries
Computer Sales & Services	Satellite Dish Antenna
Confectionery Shop	Software Development Firm
Conference Center	Stationery Store
Construction Company	Taxi Stand
Construction, Survey, Soil Testing Firms	Telephone Exchanges
Courier Service	Toys and Hobby Goods Processing and Supplies
Cyber Café	Training Centre
Day-care Center (Commercial or Nonprofit)	Utility Lines
Dental Laboratory	Utility Lines
Department Stores, Furniture & Variety Stores	Vehicle Sales & Service, Leasing or Rental
Diagnostic Center	Veterinarian Hospitals
Doctor / Dentist Chamber	Water Pump / Reservoir
Food Court	Woodlot
Freight Handling, Storage & Distribution	

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure.

Table No. 4.7: Landuse Conditionally Permitted for Commercial Zone (Office)

Amusement and Recreation (Indoors)	Outdoor Café
Beauty and Body Service	Painting & Wallpaper Sales
Broadcast Studio / Recording Studio (No Audience)	Paints and Varnishes Store
Civic Administration	Parking Lot (Commercial)
Concert Hall, Stage Shows	Patio Homes
Counseling Services	Plantation (Except Narcotic Plant)
Dental Clinic / Lab	Police Box / Barrack
Diagnostic Center / Pathological Lab	Printing, Publishing and Distributing
Drug Store or Pharmacy	Psychiatric Hospital
Fast Food Establishment / Food Kiosk	Radio / Television or T&T Station With Transmitter Tower
Fire / Rescue Station	Retail Shops Ancillary To Studio / Workshop
First Aid & Ambulance Service	Super Store
Fitness Centre	Theater (Indoor)
Flowers, Nursery Stock and Florist Supplies	Transmission Lines
Fuelling Station	Vulcanizing Services
Garage	Workers' Dormitory
Lithographic or Print Shop	
Optical Goods Sales	

Restricted Uses

All uses except permitted and conditionally permitted uses.

d. General Industrial Zone

Promoting the development of industrial areas as the primary locations for uses including manufacturing, repairs, warehousing, distribution, open-storage, waste materials treatment and recovery, and transport operating centers, industrial zone has been earmarked. The development of inappropriate mixes of uses, such as office based industry and retailing will not normally be encouraged here.

It is an objective to ensure that, normally, new buildings in primarily industrial areas are single storey with high ceilings to provide versatility and adaptability to accommodate a broad range of types of plant, machinery and delivery vehicles throughout their design life.

It is an objective to ensure that the likely demand for car parking and delivery vehicle facilities are fully met within the site, to apply the highest standards of design, hard and soft landscaping and to ensure that pedestrian access is provided and that provision is made for public transport.

Purpose

The intent of this zone is to accommodate certain industrial uses which, based on their operational characteristics, is incompatible with residential, social, medical, and commercial environs. As a result, the establishment of such zones shall be restricted to areas geographically buffered from such environs, and the operations of such uses monitored by performance standards to ensure environmental compatibility.

- The purpose and intent of industrial zone is to provide areas in appropriate locations where various light and heavy industrial operations can be conducted without creating hazards to surrounding land uses. Industrial zones are cohesive, planned tracts, with all elements sharing the same or compatible architectural and landscaping themes within a parcel.
- Areas intended to accommodate a variety of industrial establishments which: 1) employ high environmental

quality standards; 2) may function as an integral part of an overall development area; and, 3) have minimal impacts on adjacent uses.

- The purpose and intent of General industrial zone is to provide areas in appropriate locations for certain types of light manufacturing, processing or fabrication, warehousing establishments of non-objectionable products or adjacent uses because they are characterized by a minimum of material, processes or machinery likely to cause undesirable effects upon nearby or adjacent residential or commercial property.

General Industrial Zone is to accommodate Green, Orange A, Orange B types of industries of Department of Environment (DOE) prepared categories and Urban Area Plan designated light industries and general industries along with some other new types. Here the industries will not be noxious and heavy.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.8: Landuse Permitted for General Industrial Zone

Aluminum products	Effluent Treatment Plant
Artificial Fiber Production	Electric cable
Assembling and manufacturing of clocks and watches	Engineering works
Assembling and manufacturing of electrical and Electronic home products etc.	Fabric washing Plant
Assembling and manufacturing of electrical and Electronic home products etc.	Factory for production of chocolate and lozenge.
Assembling and manufacturing of toys (except plastic items)	Fire / Rescue Station
Assembling of motor vehicles	Flour (large) Mill
Assembling of telephones	Freight Transport Facility
ATM Booth	Furniture Manufacture of wood/iron, aluminium, etc.
Automatic rice mill.	Galvanizing
Bakery	Garments and sweater Factory
Bakery.	Glass factory
Bank & Financial Institution	Glue (excluding animal glue)
Bicycle Assembly, Parts and Accessories	Grinding/husking wheat, rice, turmeric, chilly, pulses - machine above 0 Horse Power
Blacksmith	Grocery Store
Bus Passenger Shelter	Hotel, multi-storied commercial building.
Chocolate and lozenge Factory	Household Appliance and Furniture Repair Service
Cinema Hall	Ice-cream
Clinic and Pathological lab	Jute mill
Cold storage	Lime
Communication Tower Within Permitted Height	Machine Sheds
Confectionery Shop	Manufacture of Agricultural tools, equipments and small machinery.
Dry-cleaning	Manufacture of Industrial tools, equipment and machinery.
Edible oil	Manufacturing of wooden vessel
	Match Factory

Meat and Poultry (Packing & Processing)
Metal utensils/spoons etc
Mosque, Place Of Worship
Motor vehicles repairing works
Newspaper Stand
Packaging Industries
Perfumes, cosmetics
Pharmaceutical Industry
Photocopying and Duplicating Services
Photographic Film Factory
Pipelines and Utility Lines
Plastic & rubber goods (excluding PVC)
Police Box / Barrack
Power Loom
Printing and writing ink manufacturing Industry
Printing Press
Printing, Publishing and Distributing
Processing : fish, meat and food
Processing and bottling of drinking water and carbonated drinks
Production of artificial leather goods
Production of Artificial leather goods
Production of Comb, hair band, hair clip etc.
Production of gold ornaments.
Production of Pin, board pin, U Pin etc.
Production of powder milk/condensed milk/dairy.
Production of shoes and leather goods
Production of spectacles frames.
Production of utensils and souvenirs of brass and bronze.
Public Transport Facility
Repairing of refrigerators
Restaurant
Restaurant

Retail Shops / Facilities
Salt Industry
Salt production
Salvage Processing
Salvage Yards
Satellite Dish Antenna
Sawmill, Chipping and Pallet Mill
Shelter (Passers By)
Shoes and leather goods production
Soap
Social Forestry
Sodium silicate Factory
Spinning mill
Sports goods Production
Starch and glucose factory
Stone grinding, cutting and polishing
Tea processing
Television, Radio or Electronics Repair (No Outside Storage)
Tire re-treading
Transmission Lines
Truck Stop & Washing or Freight Terminal
Utensils made of clay and china clay/sanitary wares (ceramics)
Utility Lines
Water Pump / Reservoir
Water Purification Plant
Weaving and handloom.
Wood Products
Wood treatment
Wood/iron/aluminum Furniture production
Woodlot

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee following appropriate procedure.

Table No. 4.9: Landuse Conditionally Permitted for General Industrial Zone

Amusement and Recreation (Indoors)
Appliance Store
Assembling and manufacturing of clocks and watches
Assembling and manufacturing of electrical and Electronic home products etc.
Assembling and manufacturing of toys (except plastic items)

Assembling of motorcycles, bicycles and toy cycles
Assembling of scientific and mathematical instruments
Assembling of telephones
Bamboo and cane goods
Book-binding
Candle Production
Carpet and mat production

Cork items Production
Cyber Café
Daycare Center (Commercial or Nonprofit)
Doctor / Dentist Chamber
Electrical and Electronic Equipment and Instruments Sales
Employee Housing
Energy Installation
Fast Food Establishment / Food Kiosk
Garages
Gold ornaments Production
Grain & Feed Mills
Incineration Facility
Laundry
Lithographic or Print Shop
Manufacturing of Artificial flower
Medical and surgical instrument production
Motor Vehicle Fuelling Station / Gas Station
Motorcycle Sales Outlet
Musical instruments

Outdoor Fruit and Vegetable Markets
Outside Bulk Storage
Overhead Water Storage Tanks
Painting and Wallpaper Sales
Paints and Varnishes
Parking Lot
Parking Lot (Commercial)
Pen and ball-pen Factory
Photographic Lab (except ultra violet and infra red)
Plantation (Except Narcotic Plant)
Private Garages
Production of artificial leather goods
Re-packing of milk powder (excluding production)
Retail Shops Ancillary To Studio / Workshop
Rope and coir mat production
Sports goods (excluding plastic made items)
Super Store
Tea packing (excluding processing)
Washing Plant

Restricted Uses

All uses except permitted and conditionally permitted uses.

e. Heavy Industrial Zone

The purpose and intent of Heavy Industrial Zone is to provide areas in appropriate locations where various heavy industrial operations can be conducted without creating hazards to surrounding land uses.

Areas are intended to accommodate manufacturing and fabricating establishments that are generally characterized as producing noise, vibration, heavy freight traffic, fumes, and other forms of pollution which may be objectionable to adjacent uses is characterized as Heavy Industrial Zone.

Heavy industries are those industries listed as red industries in the DOE Industry Type list and industries listed in the Urban Area Plan as noxious industries including mining/quarrying.

Purpose

- To confine heavy, noisy and vibration generating industries as they harm human living in the surrounding area.
- To ensure that industrial development achieves high environmental standards of cleaner production, waste disposal, noise and air quality
- To encourage the design and construction of energy-efficient, functional and flexible industrial and commercial facilities.
- To restrict heavy and noxious industrial developments along major approach routes and major roads.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.10: Landuse Permitted for Heavy Industrial Zone

Acids and their salts (organic or inorganic) Industry	Ordnance Factory
Animal Glue	Other Chemicals Industry
Artificial Rubber Industry	Outside Bulk Storage
Asbestos Factory	Paper and Pulp Mill
ATM Booth	Pesticides, Fungicides and Herbicides Industry
Bank & Financial Institution	Phosphorus and its Compounds/Derivatives Industry
Basic Industrial Chemicals Industry	Photo Films,
Battery Industry	Photo papers and Photo Chemicals Industry
Bicycle Assembly, Parts and Accessories	Pipelines and Utility Lines
Bitumen Industry	Plastic Raw Materials (PVC, PP/Iron, Polyesterin etc.) Factory
Board Mills	Police Box / Barrack
Bus Passenger Shelter	Power plant
Carbon rod Industry	Public Transport Facility
Cement Industry	Raw materials of Medicines and Basic Drugs Industry
Chemical dyes, Polish, Varnish, Enamel Paint Factory	Refractory
Chemical Industry	Refrigerator/Air-conditioner/Air-cooler manufacturing
Chlorine, Fluorine, Bromine, Iodine and their Compounds/Derivatives Industry	Re-rolling Mills
Communication Tower Within Permitted Height	Re-rolling Mills
Detergent Factory	Road Network
Distillery	Rodenticide Industry
Effluent Treatment Plant	Satellite Dish Antenna
Electroplating	Saw Mills
Explosive Industry	Scrap industry
Fabric Dyeing and Chemical Processing Industry	Sewage Treatment Plant
Fibre-glass Factory	Shelter (Passers By)
Fire / Rescue Station	Ship Manufacturing
Flood Control Structures	Social Forestry
Formaldehyde Industry	Sugar Mill
Fuel Oil Refinery	Tannery
Grocery Store	Tire and Tubes
Heavy Engineering Workshop	Tobacco Processing, Cigarette/Bidi Factory
Heavy Repairing of Motor Vehicles	Transmission Lines
Hospital	Truck Stop & Washing
Incineration Facility	TSP Fertilizer Factory
Industrial Estate	Urea Fertilizer Factory
Industrial Gas (Oxygen, Nitrogen & Carbon-dioxide) Industry	Utility Line
Iron and Steel Mill	Utility Lines
Jute Mill	Various Products made from Petroleum and Coal Industry
Life Saving Drugs Industry	Waste Incinerator
Lumber and building supply	Water Pump / Reservoir
Metallic Boat Manufacturing	Water Treatment Plant
Mosque, Place of Worship	Wooden Boat Manufacturing
Murat of Potash Manufacturing	Woodlot
Newspaper Stand	
Non-iron Basic Metals Industry	

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee following appropriate procedure.

Table No. 4.11: Landuse Conditionally Permitted for Heavy Industrial Zone

Amusement and Recreation (Indoors)	Motor Vehicle Fuelling Station / Gas Station
Cyber Café	Nitrogen Compounds (Cyanide, Cyanamid etc.)
Daycare Center (Commercial or Nonprofit)	Industry
Doctor / Dentist Chamber	Parking Lot
Employee Housing	Parking Lot (Commercial)
Energy Installation	Plantation (Except Narcotic Plant)
Freight Transport Facility	Private Garages
Garages	Retail Shops Ancillary To Studio / Workshop
Machine Sheds	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses.

f. Mixed Use Zone (Commercial-General Industrial)

There are areas where the mixture of uses is such that they can't be segregated, the areas are declared as mixed use zone. An appropriate mix of landuses will be maintained in these types of zones. Four types of mixed use zones have been proposed here. Each of them has unique characteristics.

In Industrial cum Commercial area exclusive residential landuse will not be permitted except in the form of quarters for the employees within the Industrial complex.

Purpose

The purpose of the Commercial-Industrial zone is to provide areas in the city primarily for medium to high density mixed-use developments, with commercial, office and industrial uses that are sensitive to the adjacent residential areas; to support an urban growth centre where there will be a bulk of trade and commerce. The Commercial-Industrial zone is intended to achieve cohabitation of uses, while ensuring that negative impacts on residents are minimized. The spaces created in the Commercial-Industrial zone are intended to encourage a diminished need for motorized travel and shall possess characteristics of the both area of commercial and industrial. The Mixed Use Zone allows a wide variety of uses including, warehouse, shop, office and accommodation with condition.

- To preserve and promote viable industries that can coexist with more commercially oriented uses,
- To meet the need for a mix of lower rent bulky goods retailing, specialized industrial, commercial and service activities alongside general industry.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.12: Landuse Permitted for Mixed Use Zone (Commercial-General Industrial)

Accounting, Auditing or Bookkeeping Services	Grocery Store
Agricultural Chemicals, Pesticides or Fertilizers Shop	Home Furnishings
Agricultural Sales and Services	Mosque, Place of Worship
Agro-Based Industry (Rice Mill, Saw Mill, Cold Storage)	Motorcycle Sales Outlet
Antique Store	Multi-Storey Car Park
Appliance Store	Musical Instrument Sales or Repair
Art Gallery, Art Studio / Workshop	Newspaper Stand
Artisan's Shop	Photocopying and Duplicating Services
ATM Booth	Pipelines and Utility Lines
Auto Leasing or Rental Office	Preserved Fruits and Vegetables Facility / Cold Storage
Auto Paint Shop	Project Identification Signs
Auto Parts and Accessory Sales (Indoors)	Property Management Signs
Auto Repair Shop (With Garage)	Public Transport Facility
Automobile Sales	Public Utility Stations & Substations
Automobile Wash	Real Estate Office
Bakery or Confectionery Retail	Refrigerator or Large Appliance Repair
Barber Shop	Research organization (Agriculture / Fisheries)
Bicycle Shop	Restaurant
Billboards, Advertisements & Advertising Structure	Retail Shops / Facilities
Billiard Parlor / Pool Hall	Rickshaw / Auto Rickshaw Stand
Blacksmith	Satellite Dish Antenna
Boarding and Rooming House	Shelter (Passers By)
Book or Stationery Store or Newsstand	Social Forestry
Broadcast Studio / Recording Studio (No Audience)	Sporting Goods and Toys Sales
Building Material Sales or Storage (Indoors)	Stone / Cut Stone Products Sales
Bulk Fuel Sales Depot	Storage & Warehousing
Bulk Mail and Packaging	Television, Radio or Electronics Repair (No Outside Storage)
Bus Passenger Shelter	Toys and Hobby Goods Processing and Supplies
Cinema Hall	Training Centre
Commercial Recreational Buildings	Transmission Lines
Communication Service Facilities	Truck Stop & Washing or Freight Terminal
Communication Tower Within Permitted Height	Utility Lines
Confectionery Shop	Vehicle Sales & Service, Leasing or Rental
Construction, Survey, Soil Testing Firms	Warehousing
Courier Service	Water Pump / Reservoir
Doctor / Dentist Chamber	Wood Products
Firm Equipment Sales & Service	Woodlot
Fuel and Ice Dealers	
Funeral Services	
General Store	

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table No. 4.13: Landuse Conditionally Permitted for Mixed Use Zone (Commercial-General Industrial)

Assembling and manufacturing of clocks and watches	Freight Handling, Storage & Distribution
Assembling and manufacturing of electrical and Electronic home products etc.	Freight Transport Facility
Assembling and manufacturing of electrical and Electronic home products etc.	Freight Transport Facility
Assembling and manufacturing of toys (except plastic items)	Gallery / Museum
Assembling of telephones	Garages
Auction Market	Government Office
Bank & Financial Institution	Grain & Feed Mills
Beauty and Body Service	Grocery Store
Bicycle Assembly, Parts and Accessories	Hotel or Motel
Blacksmith	Household Appliance and Furniture Repair Service
Bus Passenger Shelter	Household Appliance and Furniture Repair Service
Coffee Shop / Tea Stall	Machine Sheds
Communication Tower Within Permitted Height	Meat and Poultry (Packing & Processing)
Computer Maintenance and Repair	Meat and Poultry (Packing & Processing)
Computer Sales & Services	Optical Goods Sales
Concert Hall, Stage Shows	Outdoor Fruit and Vegetable Markets
Confectionery Shop	Outside Bulk Storage
Conference Center	Painting and Wallpaper Sales
Construction Company	Paints and Varnishes
Cottage	Plantation (Except Narcotic Plant)
Counseling Services	Police Box / Barrack
Craft Workshop	Printing, Publishing and Distributing
Cyber Café	Project Office
Department Stores, Furniture & Variety Stores	Retail Shops Ancillary To Studio / Workshop
Drug Store or Pharmacy	Telephone Exchanges
Energy Installation	Television, Radio or Electronics Repair (No Outside Storage)
Fabric Store	Theater (Indoor)
Fast Food Establishment / Food Kiosk	Trade Shows
Fire / Rescue Station	Transmission Lines
Forest Products Sales	Truck Stop & Washing or Freight Terminal

Restricted Uses

All uses except permitted and conditionally permitted uses.

g. Mixed use zone (Residential–Commercial)

Mixed-use development shall mean a development consisting of one or more lots developed as a cohesive project and designed with a blend of various compatible uses such as commercial and residential. These landuse areas will contain residential and limited commercial activities only, such as small retail, general store, food kiosk etc.

Purpose

Industrial uses within the Mixed Use zone should be restricted to those uses that have a minimal amenity impact on adjoining uses and surrounding residential use. The main purposes of this type of landuse classification are:

- To provide for a mixed use development centre in conjunction with the development plan for the overall development, and to provide for high-density residential development, and to identify, reinforce, strengthen and promote urban design concepts and linkages with the existing town centre activity areas so that the pressure on vacant land are minimized.

- The aim is to develop a zone scale retail development in a mixed use centre by densification of appropriate commercial and residential developments ensuring a mix of commercial, recreational, community, educational, civic, cultural, leisure, residential uses, urban streets and urban open spaces, while delivering a quality urban environment which will enhance the quality of life of resident, visitor and workers alike.
- Provide for a range of commercial and service activities at a scale that will protect the planned hierarchy of commercial centres and the territory's preferred locations for office development.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.14: Landuse Permitted for Mixed use zone (Residential–Commercial)

Accounting, Auditing or Bookkeeping Services	Employee Housing
Addiction Treatment Center	Fabric Store
Agricultural Sales and Services	Fast Food Establishment / Food Kiosk
Antique Store	Funeral Services
Apartments	General Store
Appliance Store	Grocery Store
Art Gallery, Art Studio / Workshop	Guest House
Artisan's Shop	Hospital
Assisted Living or Elderly Home	Housing Projects
ATM Booth	Individual Housing
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Jewelry and Silverware Sales
Auto Leasing or Rental Office	Landscape and Horticultural Services
Automobile Driving Academy	Mosque, Place of Worship
Automobile Wash	Newspaper Stand
Bakery or Confectionery Retail	Nursery School
Bank & Financial Institution	Photocopying and Duplicating Services
Barber Shop	Pipelines and Utility Lines
Bicycle Shop	Primary School
Billboards, Advertisements & Advertising Structure	Project Identification Signs
Billiard Parlor / Pool Hall	Property Management Signs
Blacksmith	Public Transport Facility
Boarding and Rooming House	Resort
Book or Stationery Store or Newsstand	Rickshaw / Auto Rickshaw Stand
Bus Passenger Shelter	Satellite Dish Antenna
Child Daycare / Preschool	Shelter (Passers By)
Children's Park	Shoe Repair or Shoeshine Shop (Small)
Cleaning / Laundry Shop	Slaughter House
Commercial Recreational Buildings	Social Forestry
Communication Service Facilities	Social organization
Communication Tower Within Permitted Height	Software Development
Community Center	Special Dwelling
Condominium or Apartment	Toys and Hobby Goods Processing and Supplies
Confectionery Shop	Training Centre
Correctional Institution	Transmission Lines
Courier Service	Utility Lines
Cyber Café	Vehicle Sales & Service, Leasing or Rental
Daycare Center (Commercial or Nonprofit)	Warehousing
Doctor / Dentist Chamber	Water Pump / Reservoir
Dormitory	Woodlot

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table No. 4.15: Landuse Conditionally Permitted for Mixed use zone (Residential–Commercial)

Agricultural Chemicals, Pesticides or Fertilizers Shop	Health Office, Dental Laboratory, Clinic or Lab
Amusement and Recreation (Indoors)	Hotel or Motel
Beauty and Body Service	Household Appliance and Furniture Repair Service
Broadcast Studio / Recording Studio (No Audience)	Indoor Amusement Centers, Game Arcades
Building Maintenance / Cleaning Services, No Outside Storage	Indoor Theatre
Building Material Sales or Storage (Indoors)	Lithographic or Print Shop
Coffee Shop / Tea Stall	Market (Bazar)
Commercial Office	Musical Instrument Sales or Repair
Computer Maintenance and Repair	Optical Goods Sales
Computer Sales & Services	Outdoor Café
Concert Hall, Stage Shows	Outdoor Fruit and Vegetable Markets
Conference Center	Painting and Wallpaper Sales
Construction Company	Paints and Varnishes
Construction, Survey, Soil Testing Firms	Patio Homes
Cottage	Photofinishing Laboratory & Studio
Counseling Services	Plantation
Craft Workshop	Poultry
Crematorium	Printing, Publishing and Distributing
Cultural Exhibits and Libraries	Project Office
Department Stores, Furniture & Variety Stores	Psychiatric Hospital
Drug Store or Pharmacy	Radio / Television or T&T Station With Transmitter Tower
Energy Installation	Refrigerator or Large Appliance Repair
Fitness Centre	Restaurant
Flowers, Nursery Stock and Florist Supplies	Retail Shops / Facilities
Freight Handling, Storage & Distribution	Retail Shops Ancillary To Studio / Workshop
Freight Transport Facility	Sporting Goods and Toys Sales
Gaming Clubs	Sports and Recreation Club, Firing Range: Indoor
Garages	Telephone Exchanges
Garden Center or Retail Nursery	Television, Radio or Electronics Repair (No Outside Storage)
Government Office	
Graveyard / Cemetery	

Restricted Uses

All uses except permitted and conditionally permitted uses.

h. Mixed Use Zone (Residential-Commercial-General Industrial)

The Residential- Commercial- General Industrial zone is intended to achieve cohabitation of uses, while ensuring that negative impacts on residents are minimized. The spaces created in this zone are intended to encourage a diminished need for motorized travel and shall possess characteristics of all of the three- Residential, Commercial and Industrial.

Purpose

The main purpose of this zone is to support the diversification and expansion of the area's industrial base and employment growth as well as to facilitate investment in a wide range of industrial and related activities, with efficient land utilization and provision of infrastructure. To make provision for small-scale services that support surrounding industrial activities, or which meet the needs of the local workforce is a primary aim of this type of landuse. Provide convenient access for the area and regional residents to industrial goods, services and employment opportunities, too, is an important purpose of this zone.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.16: Landuse Permitted for Mixed Use Zone (Residential-Commercial-General Industrial)

Accounting, Auditing or Bookkeeping Services	Fire / Rescue Station
Antique Store	General Store
Appliance Store	Grocery Store
ATM Booth	Guest House
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Hospital
Auto Leasing or Rental Office	Landscape and Horticultural Services
Auto Paint Shop	Mosque, Place of Worship
Auto Parts and Accessory Sales (Indoors)	Newspaper Stand
Auto Repair Shop (With Garage)	Nursery School
Automobile Driving Academy	Photocopying and Duplicating Services
Automobile Sales	Pipelines and Utility Lines
Automobile Wash	Police Box / Barrack
Bakery or Confectionery Retail	Primary School
Bank & Financial Institution	Project Identification Signs
Barber Shop	Property Management Signs
Bicycle Assembly, Parts and Accessories	Public Transport Facility
Bicycle Shop	Rickshaw / Auto Rickshaw Stand
Billboards, Advertisements & Advertising Structure	Satellite Dish Antenna
Billiard Parlor / Pool Hall	Service Garage
Blacksmith	Service Stations, Full Service (With Minor Repair)
Boarding and Rooming House	Sewage Treatment Plant
Book or Stationery Store or Newsstand	Shelter (Passers By)
Bulk Mail and Packaging	Shoe Repair or Shoeshine Shop (Small)
Bus Passenger Shelter	Social Forestry
Children's Park	Social organization
Cleaning / Laundry Shop	Solid Waste Recycling Plant
Commercial Recreational Buildings	Special Dwelling
Communication Service Facilities	Transmission Lines
Communication Tower Within Permitted Height	Utility Lines
Confectionery Shop	Water Pump / Reservoir
Construction, Survey, Soil Testing Firms	Woodlot
Courier Service	

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.17: Landuse Conditionally Permitted for Mixed Use Zone (Residential-Commercial-General Industrial)

Agricultural Chemicals, Pesticides or Fertilizers Shop	Garages
Amusement and Recreation (Indoors)	Garden Center or Retail Nursery
Auction Market	Government Office
Beauty and Body Service	Grain & Feed Mills
Building Maintenance / Cleaning Services, No Outside Storage	Health Office, Dental Laboratory, Clinic or Lab
Building Material Sales or Storage (Indoors)	Hotel or Motel
Bulk Fuel Sales Depot	Household Appliance and Furniture Repair Service
Coffee Shop / Tea Stall	Incineration Facility
Computer Maintenance and Repair	Indoor Theatre
Computer Sales & Services	Jewelry and Silverware Sales
Concert Hall, Stage Shows	Lithographic or Print Shop
Condominium or Apartment	Market (Bazar)
Conference Center	Musical Instrument Sales or Repair
Construction Company	Outdoor Fruit and Vegetable Markets
Correctional Institution	Painting and Wallpaper Sales
Counseling Services	Paints and Varnishes
Craft Workshop	Pet Store
Cyber Café	Photofinishing Laboratory & Studio
Daycare Center (Commercial or Nonprofit)	Plantation
Department Stores, Furniture & Variety Stores	Project Office
Drug Store or Pharmacy	Psychiatric Hospital
Employee Housing	Refrigerator or Large Appliance Repair
Energy Installation	Restaurant
Fabric Store	Retail Shops / Facilities
Fast Food Establishment / Food Kiosk	Retail Shops Ancillary To Studio / Workshop
Firm Equipment Sales & Service	Sporting Goods and Toys Sales
Fitness Centre	Sports and Recreation Club, Firing Range: Indoor
Flowers, Nursery Stock and Florist Supplies	Telephone Exchanges
Forest Products Sales	Television, Radio or Electronics Repair (No Outside Storage)
Freight Transport Facility	
Gaming Clubs	

Restricted Uses

All uses except permitted and conditionally permitted uses.

i. Mixed Use Zone (Residential-General Industrial)

The areas with the mix of residence and industry will make up the Residential-General Industrial zone that will create an industrial urban environment to strengthen the industrial base of the area as well as the entire country.

Purpose

The main purpose of this zone is to provide an industrial area supported by employees' housing, additional civic amenities, utilities and services. This zone will be composed of some light industries that are declared as green categories of industries by Department of Environment (DoE) with some additional facilities like appliance store; bakery or confectionery shop; bank & financial institution; barber shop; book or stationery store or newspaper stand; caretaker dwelling; child day-care or preschool; cleaning or laundry shop; communication service facilities, cyber café; addiction treatment centre etc.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.18: Landuse Permitted for Mixed Use Zone (Residential-General Industrial)

Addiction Treatment Center	Cyber Café
Appliance Store	Fire / Rescue Station
Art Gallery, Art Studio / Workshop	General Store
Assisted Living or Elderly Home	Grocery Store
ATM Booth	Newspaper Stand
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Nursery School
Auto Leasing or Rental Office	Photocopying and Duplicating Services
Bank & Financial Institution	Pipelines and Utility Lines
Barber Shop	Police Box / Barrack
Bicycle Assembly, Parts and Accessories	Project Identification Signs
Bicycle Shop	Property Management Signs
Billiard Parlor / Pool Hall	Public Transport Facility
Blacksmith	Rickshaw / Auto Rickshaw Stand
Book or Stationery Store or Newsstand	Satellite Dish Antenna
Broadcast Studio / Recording Studio (No Audience)	Service Garage
Bulk Fuel Sales Depot	Service Stations, Full Service (With Minor Repair)
Bus Passenger Shelter	Shelter (Passers By)
Child Daycare / Preschool	Shoe Repair or Shoeshine Shop (Small)
Children’s Park	Social Forestry
Cleaning / Laundry Shop	Social organization
Commercial Recreational Buildings	Special Dwelling
Communication Service Facilities	Training Centre
Communication Tower Within Permitted Height	Transmission Lines
Condominium or Apartment	Utility Lines
Confectionery Shop	Water Pump / Reservoir
	Woodlot

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.19: Landuse Conditionally Permitted for Mixed Use Zone (Residential-General Industrial)

Amusement and Recreation (Indoors)	Energy Installation
Beauty and Body Service	Fast Food Establishment / Food Kiosk
Building Maintenance / Cleaning Services, No Outside Storage	Firm Equipment Sales & Service
Building Material Sales or Storage (Indoors)	Flowers, Nursery Stock and Florist Supplies
Coffee Shop / Tea Stall	Forest Products Sales
Computer Maintenance and Repair	Freight Transport Facility
Computer Sales & Services	Garages
Concert Hall, Stage Shows	Hotel or Motel
Conference Center	Household Appliance and Furniture Repair Service
Daycare Center (Commercial or Nonprofit)	Incineration Facility
Department Stores, Furniture & Variety Stores	Lithographic or Print Shop
Drug Store or Pharmacy	Market (Bazar)
Employee Housing	Musical Instrument Sales or Repair
	Outdoor Fruit and Vegetable Markets

Overhead Water Storage Tanks
Painting and Wallpaper Sales
Plantation
Psychiatric Hospital
Refrigerator or Large Appliance Repair
Restaurant
Retail Shops / Facilities

Retail Shops Ancillary To Studio / Workshop
Sporting Goods and Toys Sales
Sports and Recreation Club, Firing Range: Indoor
Telephone Exchanges
Television, Radio or Electronics Repair (No Outside Storage)

Restricted Uses

All uses except permitted and conditionally permitted uses.

j. Institutional Zone

Institutional Zones are designed to provide some institutional boundaries. These will help improving the socio-economic condition of the area by enhancing educational status.

Purpose

The purpose of these zones is mainly to provide locations for institutional uses such as libraries, public and private schools of special needs, colleges or universities, research centres, cultural academies etc. Housing facilities for the students, teachers, employees and their families within the compound are also allowed in the zone.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.20: Landuse Permitted for Institutional Zone

Addiction Treatment Center
Art Gallery, Art Studio / Workshop
ATM Booth
Automobile Driving Academy
Billboards, Advertisements & Advertising Structure
Bus Passenger Shelter
Child Daycare / Preschool
College, University, Technical Institute
Communication Service Facilities
Communication Tower Within Permitted Height
Confectionery Shop
Conference Center
Correctional Institution
Cultural Exhibits and Libraries
Cyber Café
Dormitory
Freight Transport Facility
General Store
Grocery Store
High School
Hospital
Lithographic or Print Shop
Mosque, Place of Worship
Multi-Storey Car Park

Newspaper Stand
Nursery School
Outdoor Religious Events
Photocopying and Duplicating Services
Post Office
Primary School
Professional Office
Project Identification Signs
Property Management Signs
Public Transport Facility
Satellite Dish Antenna
School (Retarded)
Scientific Research Establishment
Shelter (Passers by)
Social Forestry
Specialized School: Dance, Art, Music & Others
Training Centre
Transmission Lines
Utility Lines
Veterinary School / College and Hospital
Vocational, Business, Secretarial School
Water Pump / Reservoir
Woodlot

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.21: Landuse Conditionally Permitted for Institutional Zone

Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Flowers, Nursery Stock and Florist Supplies
Bank & Financial Institution	Gallery / Museum
Barber Shop	Garages
Boarding and Rooming House	Indoor Theatre
Coffee Shop / Tea Stall	orphanage
Counseling Services	Outdoor Café
Courier Service	Parking Lot
Daycare Center (Commercial or Nonprofit)	Pipelines and Utility Lines
Doctor / Dentist Chamber	Plantation
Drug Store or Pharmacy	Postal Facilities
Fast Food Establishment / Food Kiosk	Psychiatric Hospital
	Stationery Store or Newsstand

Restricted Uses

All uses except permitted and conditionally permitted uses.

k. Administrative Zone

Administrative zone will allow agglomeration of administrative structures to make a convenient communication among them. This zone houses important government machinery such as the National Assembly Complex, Nagar Bhaban, Secretariate, High Court Complex etc.

Purpose

The main purpose of this zone is to agglomerate the administrative structures within a certain boundary for convenience of people.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.22: Landuse Permitted for Administrative Zone

Accounting, Auditing or Bookkeeping Services	Newspaper Stand
ATM Booth	Outdoor Religious Events
Bus Passenger Shelter	Photocopying and Duplicating Services
Civic Administration	Post Office
Communication Service Facilities	Professional Office
Communication Tower within Permitted Height	Project Office
Confectionery Shop	Public Transport Facility
Construction, Survey, Soil Testing Firms	Satellite Dish Antenna
Cultural Exhibits and Libraries	Scientific Research Establishment
Cyber Café	Shelter (Passers By)
Emergency Shelter	Social Forestry
Freight Transport Facility	Training Centre
General Store	Transmission Lines
Government Office	Utility Lines
Grocery Store	Water Pump / Reservoir
Guest House	Woodlot
Multi-Storey Car Park	

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.23: Landuse Conditionally Permitted for Administrative Zone

Amusement and Recreation (Indoors)	Flowers, Nursery Stock and Florist Supplies
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Freight Handling, Storage & Distribution
Bank & Financial Institution	Freight Yard
Boarding and Rooming House	Gallery / Museum
Book or Stationery Store or Newsstand	Garages
Coffee Shop / Tea Stall	Lithographic or Print Shop
Conference Center	Mosque, Place of Worship
Courier Service	Outdoor Café
Daycare Center (Commercial or Nonprofit)	Parking Lot
Detention Facilities	Parking Lot (Commercial)
Doctor / Dentist Chamber	Pipelines and Utility Lines
Energy Installation	Plantation (Except Narcotic Plant)
Fast Food Establishment / Food Kiosk	Police Box / Barrack
Fire / Rescue Station	Postal Facilities

Restricted Uses

All uses except permitted and conditionally permitted uses.

I. Agricultural Zone

Agricultural Zone is the zone of 'food production' where predominantly agricultural production will be encouraged. All types of agricultural activity such as crop production; aquaculture etc. will be dominant and will be permitted to ensure food security. The Agricultural zone is intended to prevent scattered indiscriminate conversion of crop land into settlements.

Purpose

- To safeguard food security by protecting agricultural land from indiscriminate conversion in the name of development.
- To promote farming activity and farming operation in the land especially suitable for the purpose.
- To conserve agricultural lands within urban areas and encourage the long term viability of agricultural operations and the supporting agricultural industry.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.24: Landuse Permitted for Agricultural Zone

Animal Shelter	Wall etc)
Aquaculture	Shallow Tube Well
Aquatic Recreation Facility (Without Structure)	Social Forestry
Arboriculture	Static Transformer Stations
Cash Crop Cultivation	Temporary Structure (Agricultural)
Dairy Farming	Transmission Lines
Deep Tube Well	Tree Plantation (Except Narcotic Plant)
Duckery	Utility Lines
Food Grain Cultivation	Vegetable Cultivation
Horticulture	Woodlot
Irrigation Facilities (Irrigation Canal, Culvert, Flood	

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure subject to compliance of the condition mentioned in the requirement by the applicant.

Table No. 4.25: Landuse Conditionally Permitted for Agricultural Zone

Communication Tower Within Permitted Height	Graveyard / Cemetery
Crematorium	

Restricted Uses

All uses except permitted and conditionally permitted uses.

m. Flood Flow Zone

The area over which the flow of floodwater during monsoon passes through is termed here as flood flow zone.

Purpose

The intent of the Flood Flow Zone is to protect adverse hydrological impact, human life and health, minimize property damage, encourage appropriate construction practices, and minimize public and private losses due to overflow of water.

Additionally, this zone is intended to maintain the sound use and development of flood-prone areas and to restrict potential home buyers by notifying that property is in a flood area. The provisions of this zone is intended to minimize damage to public facilities and utilities such as water and gas mains, electricity, telephone, and sewer lines, street and bridges located in the floodplain, and prolonged business interruptions; and to minimize expenditures of public money for costly flood control projects and rescue and relief efforts associated with flooding.

Landuse Permitted

In the zone, uses permitted by the Authority are:

Table No.4.26: Landuse Permitted for Flood Flow Zone

Aquatic Recreation Facility (Without Structure)	Plantation (Except Narcotic Plant)
Dry Season Play Field	Static Transformer Stations
Marina / Boating Facility	Transmission Lines
Pipelines and Utility Lines	Utility Lines

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table No. 4.27: Landuse Conditionally Permitted for Flood Flow Zone

Communication Tower Within Permitted Height	Poultry
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Restricted Uses

All uses except permitted and conditionally permitted uses.

n. Open Space

The primary uses in these areas include playgrounds, parks, and other areas for outdoor activities, sports centers, sports pitches, outdoor recreation and landscaped areas. High standards of accessibility are essential in this zone. Accessibility standard is related to the use of that particular open space. For example, local amenity areas and playgrounds may require emphasis on access for pedestrians and cyclists. Sports Centers serving a wider catchments area will require accessibility by public transport and car users.

Purpose

To provide for the active and passive recreational needs of the city and the protection of its bountiful natural resources as well as to protect the natural and aesthetic qualities of the area for the general welfare of the community. The purpose of this zone is:

- To provide for, protect and improve the provision, attractiveness, accessibility and amenity value of public open space and amenity areas.
- To provide for, protect and improve the provision, attractiveness and accessibility of public open space intended for use of recreational or amenity purposes. Only development that is incidental to, or contributes to the enjoyment of open space, amenity or recreational facilities will be permitted within this zone.
- To preserve and provide for open space and recreational amenities. The zoning objective seeks to provide recreational and amenity resources for urban and rural populations subject to strict development controls. Only community facilities and other recreational uses will be considered and encouraged by the Planning Authority.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.28: Landuse Permitted for Open Space

Botanical Garden & Arboretum	Playing Field
Bus Passenger Shelter	Social Forestry
Carnivals and Fairs	Special Function Tent
Circus	Tennis Club
Landscape and Horticultural Services	Transmission Lines
Memorial Structure	Urban-Nature Reserve
Open Theater	Utility Lines
Park and Recreation Facilities (General)	Woodlot
Pipelines and Utility Lines	Zoo
Plantation (Except Narcotic Plant)	

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.29: Landuse Conditionally Permitted for Open Space

Communication Tower Within Permitted Height	Motorized Recreation
Fitness Centre	Trade Shows
Flowers, Nursery Stock and Florist Supplies	

Restricted Uses

All uses except permitted and conditionally permitted uses.

o. Overlay Zone

The uses that are not compatible to the surrounding landuse but to honour the aspiration of the people or for any other unavoidable reason shall continue to maintain its present status are called overlay sites and the sites compose the Overlay Zone.

Purpose

There are some very important purposes of overlay zones. These are not zones; actually, these are sites only. The locally, regionally or nationally important things or uses that don't conform to surrounding landuses will remain unchanged that are called Overlay Zone. No other use except the use of overlay site is permitted in this zone.

There is no scope for permitting or conditionally permitting the functions or uses as the zone itself is an overlay. The present and proposed use of the zone will continue until the next zoning regulation is imposed on those specific parcels of land.

There are a variety of overlay zones within the project area. Some of the important types of overlay and their purpose are listed below:

Historic Preservation Overlay Site

The places that are historically important as fort or historic building will not be demolished and these will remain as Historic Preservation Overlay Site. Recognizing the area's unique character and promoting the conservation and preservation of the area's historic resources and properties, to maintain, preserve, protect and enhance the architectural excellence, cultural significance, economic vitality, visual quality and historic importance of the area overlay zone is delineated.

Purpose

The purpose of this zone is to provide for protection against destruction or encroachment upon historic areas, buildings, monuments or other features or buildings and structures of recognized architectural significance which contribute or will contribute to the cultural, social, economic, political, artistic or architectural heritage. The main purposes of this zone are:

To protect the area's valuable cultural and historic resources from degradation or destruction and promote the adaptive reuse of older buildings and structures, and enhance residents' experience of the area's environmental resources through the protection of scenic landscapes and roads, to maintain non-residential uses in historic structures in the historic Preservation Overlay Zone.

The Zone is designed to protect designated landmarks and other historic or architectural features and their surroundings within a reasonable distance from destruction, damage, defacement and obviously incongruous

development or uses of land. It is also designed to ensure that buildings, structures or signs shall be erected, reconstructed, altered or restored so as to be architecturally compatible with the historic landmark buildings or structures within the Zone.

It is the intent and purpose of the Historic Preservation Overlay Site is to encourage and promote the educational and cultural welfare of the citizens by preserving and protecting historic structures, sites, monuments, streets, areas etc. which serve as visible reminders of the history and cultural heritage of the community. Furthermore, the purpose is, by stabilizing and improving property values in historic areas, and to encourage construction and development that will be harmonious with existing historic structures and areas.

□ **Environmental Protection Overlay Site**

To preserve, protect and manage the area's natural resources including streams and other water bodies, wetlands, woodlands, and wildlife habitats, development in some areas will be precluded. These will be treated as Environmental Protection Overlay Site.

Purpose

The purpose of this zone is to protect from misuse and to ensure, for future generations the areas of environmentally sensitive, wetlands, marshes, rivers, creeks, and other natural resources critical to the ecosystems they support, and however, the above is not intended to discourage quality development.

Due to the fragile nature of these resources, development standards for this zone generally are more rigid than elsewhere in the area, requiring closer attention to the environment, and mitigation of land disturbing activity which would negatively impact such resources.

To promote the use of flexible and creative planning, open space management, land stewardship, and engineering practices to facilitate protection and enhancement of the natural, cultural, agricultural, scenic, historic and recreational resources of the area.

To encourage an attractive community that represents the natural environment provides for land uses located in proper relationship to each other, and to land, energy, water and air resources, and to further development at an orderly pace.

□ **Graveyard Overlay Site**

The existing graveyards have been treated as Graveyard Overlay Site where there will have restrictions to build it other way.

□ **Sports and Recreation Overlay Site**

Some open spaces, water bodies etc. are demarcated as Sports and Recreation Overlay Site to safeguard the future need of the people. Here no use will be permitted except sports and recreation.

□ **Special Use Overlay Site**

There are some areas that will be used for special use. These are termed as Special Use Overlay Site. Special Temporary Events like Carnivals, Fairs, Hats etc. will be permitted in this zone.

p. Rural Settlement Zone

Rural Settlement Zones are the island like isolated clusters of rural homestead that preserve country's traditional agrarian community beside agricultural zones within DMDP jurisdiction from indiscriminate and insane conversion into urban use so as to safeguard food security; preserve appropriate opening in between mounds that are essential to allow uninterrupted flow of annual flood water and safeguard our complex hydrological system.

The intent of this classification is to preserve, sustain, and protect rural areas and resources, particularly forest and agricultural land from suburban encroachment and maintain a balanced rural-urban environment.

The retention of open lands, woodlands, plantations, and farmlands, which make up a large part of this area, are essential to clean air, water, wildlife, many natural cycles, and a balanced environment, among other things. Even more essential from an economic perspective are the agricultural lands and farming operations in this area.

Purpose

The purpose of this zone is to protect the natural environment; promote appropriate compact development and to promote creative developments that provide a range of housing styles and prices that suit the needs of local people.

- Protect the natural environment,
- Making development economically viable by concentrating the activities,
- To provide for development in an orderly manner that preserves the rural character of the area by guiding higher density residential and commercial development according to compatible and supportive land uses, available infrastructure, and other facilities and services.

□ **Rural Homestead**

Rural homestead zone is the zone that contains the traditional rural character of the area. In this zone housing that are compatible to this character, mainly farmhouse, single or multifamily housing are the focus of this area. These buildings should be maximum two-storied so as to maintain the rural nature.

Purpose

As stated earlier, Isolated Rural Homestead will preserve the rural and traditional Character of the area. Isolated Rural Homestead zone will be composed of dwelling, small shops, some special uses and pure landscaping elements. Cluster uses that are compatible with and complementary to existing facilities, particularly with regard to food processing and warehousing and the markets, including some small scale food retailing are permitted here.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.30: Landuse Permitted for Rural Settlement Zone

Agricultural Dwellings	Nursery School
Animal Husbandry	orphanage
Animal Shelter	Outdoor Religious Events (Eidgah)
Child Daycare / Preschool	Plantation (Except Narcotic Plant)
Communication Tower Within Permitted Height	Playing Field
Cottage	Primary School
Crematorium	Satellite Dish Antenna
Dairy Farming	Social Forestry
General Store	Special Dwelling (E.G. Dorm For Physically Challenged Etc.)
Graveyard / Cemetery	Specialized School: Dance, Art, Music, Physically Challenged & Others
Grocery Store	Static Electrical Sub Stations
Handloom (Cottage Industry)	Temporary Shed / Tent
Housing For Seasonal Firm Labor	Transmission Lines
Memorial Structure	Utility Lines
Mosque, Place of Worship	Woodlot
Newspaper Stand	
NGO / CBO Facilities	

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table No. 4.31: Landuse Conditionally Permitted for Rural Settlement Zone

Artisan's workshop (Potter, Blacksmith, Goldsmith Etc.)	Fish Hatchery
Emergency Shelter	Garden Center or Retail Nursery
Energy Installation	Research organization (Agriculture / Fisheries)
	Sports and Recreation Club, Firing Range: Indoor

Restricted Uses

All uses excepting permitted and conditionally permitted uses.

□ Growth Center

According to the location theorists, "Such settlements which are nuclei or central to their influence area are called growth centres". In the context of Bangladesh, growth Centres are rural market places that have been identified by the Planning Commission on the basis of socio-economic and administrative criteria for making development investment. There are about 8,000 rural market places throughout Bangladesh that are popularly known as 'hat' or 'bazaar'. Realizing their importance in the rural sector, the government felt the need to upgrade them with some infrastructure facilities in order to enhance their efficiency. However, due to fund constraint it was not possible to include all the 'hats' or 'bazaars' for development investment. Thus, initially 1,400 of them were selected in 1984 and later in 1993; another 700 'hats' or 'bazaars' were added to this list to take the final number to 2,100. In our planning area, there are some growth centres that contain substantially the following characteristics:

- It incorporates a mix of uses that typically include or have the potential to include the following: retail, office, services, and other commercial, civic, recreational, industrial, and residential uses, within a densely developed, compact area;
- It incorporates existing or planned public spaces that promote social interaction, such as public parks, civic buildings (e.g., post office, municipal offices), community gardens, and other formal and informal places to gather.
- It is organized around one or more central places or focal points, such as prominent buildings of civic, cultural, or spiritual significance or a square.
- It results in compact concentrated areas of land development that are served by existing or planned infrastructure and are separated by rural countryside or working landscape.

Rural commercial centre in the "Growth centre" form is one of important feature for rural economic sustainability. In growth centre, people can find their necessary service activity in a easy accessible distance apart from the urban area. In this sense the permitted uses for growth centre are the following:

Table No. 4.32: Landuse Permitted for Growth Center

Accounting, Auditing or Bookkeeping Services	Amusement and Recreation (Indoors)
Addiction Treatment Center	Ancillary Dwelling
Agricultural Chemicals, Pesticides or Fertilizers Shop	Animal Husbandry
Agricultural Dwellings	Antique Store
Agricultural Product Sales	Appliance Store
Agro-Based Industry (Rice Mill, Saw Mill, Cold Storage)	Auction Market
Agro-Based Industry (Rice Mill, Saw Mill, Feed mill)	Auto Repair Shop (With Garage)
Ambulance Service	Bank & Financial Office

Barber Shop
Barber Shop
Billboards, Advertisements & Advertising Structure
Blacksmith
Boarding and Rooming House
Book or Stationery Store or Newsstand
Bus Passenger Shelter
Cinema Hall
Cleaning / Laundry Shop
Coffee Shop / Tea Stall
Cold Storage
College/Technical Training School / Centers / Agro Based Trading
Communication Service Facilities
Communication Tower Within Permitted Height
Community Center
Computer Maintenance and Repair
Computer Sales & Services
Confectionery
Courier Service
Craft Workshop
Cyber Café
Dairy Farming
Daycare Center (Commercial or Nonprofit)
Department Stores
Doctor / Dentist Chamber
Dormitory
Drug Store or Pharmacy
Electrical and Electronic Equipment and Instruments Sales
Emergency Shelter
Energy Installation
Fabric Store
Family Welfare Center
Fast Food Establishment / Food Kiosk
Firm Equipment Sales & Service
Fish Hatchery
Fitness Centre
Flowers, Nursery Stock
Freight Transport Facility
Fuel and Ice Dealers
Funeral Services
Furniture Stores
Garages
Garden Center or Retail Nursery
General Store
Grain & Feed Mills
Grocery Store
High School
Motel

Household Appliance and Furniture Repair Service
Housing For Seasonal Firm Labor
Indoor Amusement Centers
Indoor Theatre
Jewelry and Silverware Sales
Katcha Bazar
Loom (Cottage Industry)
Mosque, Place of Worship
Newspaper Stand
NGO / CBO Office
Nursery School
Open Theater
Optical Goods Sales
Orphanage
Outdoor Fruit and Vegetable Markets
Outdoor Religious Facility (Eidgah)
Paints and Varnishes Shop
Photo Studio
Photocopying and Duplicating Services
Postal Facilities
Primary School
Public Utility Stations & Substations
Research organization (Agriculture / Fisheries)
Restaurant
Retail Shops / Facilities
Rickshaw / Auto Rickshaw Stand
Satellite Dish Antenna
Sawmill
Shoe Repair or Shoeshine Shop (Small)
Signboard / Billboard
Slaughter House
Small Workshop
Social Forestry
Specialized School: Dance, Art, Music & Others
Specialized School: Dance, Art, Music, Physically Challenged & Others
Static Transformer Stations
Storage & Warehousing
Taxi Stand
Television, Radio or Electronics Repair
Theater (Indoor)
Transmission Lines
Truck Stand & Freight Terminal
Utility Lines
Variety Stores
Vehicle, Leasing or Rental Service
Veterinary Centre
Veterinary Clinic / Center
Wood Products
Woodlot

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table No. 4.33: Landuse Conditionally Permitted for Growth Centre

Artisan's Shop	Library
Auto Leasing or Rental Office	Motor Vehicle Fuelling Station / Gas Station
Beauty Parlor	Musical Instrument Sales or Repair
Building Maintenance/Cleaning Services (No Outside Storage)	Pet Store
Building Material Sales or Storage (Indoors)	Plantation (Except Narcotic Plant)
Carnivals and Fairs	Police Station
Circus	Poultry
Correctional Institution	Preserved Fruits and Vegetables Facility / Cold Storage
Fire Brigade Station	Sports and Recreation Club
Freight Handling, Storage & Distribution	Stage Shows
Freight Yard	Temporary Rescue Shed
Guest House	Trade Shows

**All of the Commercial Activities shall be located at Growth Centres*

Restricted Uses

All uses except permitted and conditionally permitted uses.

q. Water Retention Area

Retaining water is the main purpose of this type of Landuse.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table No. 4.34: Landuse Permitted for Water Retention Area

Aquatic Recreation Facility (Without Structure)
Fishing Club (non-structural)
Utility Lines
Water Parks

r. Waterbody

Water body serves the natural flow of water along their alignment.

Purpose

This zone tends to preserve flow and level of water across all seasons along their natural alignment. DMDP area is covered by a network of natural water body including river, canal and pond. To promote and provide environmentally safe and sound living for the people of the area and for the future generation, water body has an immense important. Water body should be preserved not only for environmental concern but also for active and passive recreation purposes.

Purpose

This zone tends to preserve flow and level of water across all seasons along their natural alignment. DMDP area is covered by a network of natural water body including river, canal and pond. To promote and provide environmentally safe and sound living for the people of the area and for the future generation, water body has an immense important. Water body should be preserved not only for environmental concern but also for active and passive recreation purposes.

Landuse Permitted

Following uses in the tables proposed to be applicable for this zone only.

Table No. 4.35: Landuse Permitted for Waterbody

Aquatic Recreation Facility (Without Structure)
Fishing Club (Non-structural)
Utility Lines
Water Parks

Landuse Conditionally Permitted

Following uses will be permitted or denied in this zone after review and approval by the authority/committee.

Table No. 4.36: Landuse Conditionally Permitted for Waterbody

Marina / Boating Facility
Water based Recreation

Restricted Uses

All uses except permitted and conditionally permitted uses.

a. Special Functional Options

Besides above categories of landuse, some situations are not so infrequent in nature. Successful control of development needs specific regulations for handling such functional options too.

New Use

Considering a scenario where a new electric substation needs to be installed in a residential neighborhood to cover the additional demand load. The plot in which it is to be installed is of course, earmarked as urban residential landuse. But since this facility is not permitted within the urban residential zone, this electric substation cannot be legally installed in the zone unless the landuse of the plot is altered to allow it. This process of changing the permitted use of a particular plot or land parcel to allow uses not presently permitted in the corresponding landuse zone is termed as New Use. Conversion of the permitted use to accommodate new function shall require formal permission of the Nagar Unnayan Committee.

Nonconforming Use

Some functions, structures or facilities may have been in the area prior to landuse zone declaration and the facility does not conform to the new landuse zone. Considering the degree of incompatibility or the adverse impact on the surrounding landuse, such functions, structures or facilities have been termed as non-conforming to the permitted facilities of the zone. Nonconforming use/function, structure or facility may either be legal or illegal depending on the plan permit status but in either case they have to be discontinued in the corresponding zone and may be relocated in the prescribed zone in due course.

Basic Nonconforming Elements

Any nonconforming facility is comprised of one or a combination of two or three of basic nonconforming elements in varying combinations, namely, use/function, structure and development over the site. In case of relocation of many nonconforming use/functions, especially foot loose industries such as RMGs and RKGs, packaging industries, small engineering works etc., structure need not to be demolished since it can house zone permitted functions and continue. Few industries and plants such as chemical industries, rerolling mills, brick fields etc., may require demolition of structures or plants that are meant specifically for that facility. Besides these, some nonconforming developments, such as land fill in flood flow, water retention area and agricultural zones requires clearing of landfill materials to restore uninterrupted flow of perennial flood water, to maintain design capacity for water retention and to safeguard food security respectively.

General Regulatory Provisions

The continued existence of nonconformities is frequently inconsistent with the purposes for which the “zoning” of the area has been worked out and thus, the gradual elimination of such nonconformities is generally desirable.

The following provisions shall apply to all uses/functions, structures and/or developments set forth as nonconforming to the respective zone as per this Zoning Regulation.

- There must be a time frame of up to 5 years within which the non-conforming uses have to be relocated to places where those specific uses are permitted according to this regulation. This time frame for relocating a particular non-conforming use will be determined by RAJUK subject to approval by the Nagar Unnayan Committee. However, the time frame may vary depending on that particular use but shall not exceed five years unless decided otherwise by the Nagar Unnayan Committee.
- RAJUK shall formulate strict conditions for nonconforming facilities restricting enlargement, alteration, expansion, restoration of those uses within interim period till its relocation to permitted zone.
- RAJUK shall closely monitor non-conforming facilities to guard against non-compliance of the abiding conditions and also to ensure relocation to permitted zone. In case of noncompliance in terms of conditions or of relocation to permitted location within set time frame, action to ensure immediate discontinuation or to restrict the facility or to relocate it in the permitted zone shall be initiated by RAJUK.
- To expedite relocation of nonconforming facilities to permitted zones, imposing higher tax for continuation in the present location as opposed to incentives in the form of subsidy, tax holiday etc. if relocated to the prescribed zone may be actively considered by the government.

Identification and Registration of Non-conforming Uses and Structures

All uses and structures existing at the effective date of this Regulation which do not conform to the requirements set forth in this Regulation, or any amendments thereto, should be identified and registered by RAJUK. Failure or negligence of the authority to identify or register uses or structures which are non-conforming as defined in this Regulation or subsequent amendments does not exempt such use or structures from the applications of this Regulation.

Continuation of Non-conforming Uses and Structures

Any non-conforming use or structure may be continued up to their time frame, provided such use or structure:

- (1) Shall not be moved to another location where such use or structure would be non-conforming.
- (2) Shall not be changed to another non-conforming use or structure without approval of NUC and then only to a use or structure which, in the opinion of the NUC is of the same or of a more restricted nature in accordance with the Restrictions above.
- (3) Shall not be re-established if such use or structure has been discontinued for any reason for a period of twelve (12) months or more, or has been changed to, or replaced by, a conforming use or structure. Intent to

resume a non-conforming use shall not confer the right to do so.

- (4) Shall not be restored for other than a conforming use after damage from any cause, unless the non-conforming use or structure is reinstated within twelve (12) months of such damage; if the restoration of such structure is not completed within the said twelve (12) month period, the non-conforming use of such structure shall be deemed to have been discontinued, unless such non-conforming use is carried on without interruption in the undamaged portion of such structure.

Maintenance

Maintenance of a building or other structure containing or used for a non-conforming use will be permitted when it includes necessary non-structural repairs and incidental alterations which do not extend or intensify the non-conforming building or use.

Reconstruction

A non-conforming use which has been damaged by fire, explosion, or an act of God, to the extent of sixty (60%) percent of its reproduction value at the time of damage shall be restored in conformity with the current regulations of the zone in which it is located. When damaged by less than sixty (60%) percent of its reproduction value a non-conforming use may be repaired or reconstructed and used as before the time of damage, provided such repairs or reconstruction are started within one (1) year from the date of such damage.

Discontinuance or Abandonment

A non-conforming structure occupied by a non-conforming use may be re-occupied by a conforming use following relocation of the nonconforming use. If a non-conforming use is abandoned for a period of two (2) years, any future use of the premises shall be in conformity with the provisions of this Resolution and shall not again be used except in conformity with the current regulations of the zone in which it is located.

Unsafe Structure

Any non-conforming structure or portion thereof containing a non-conforming use is allowed to undergo routine and ordinary maintenance, repairs or replacement of non-load bearing walls, fixtures, wiring, or plumbing, provided that the floor area and floor height shall not be increased. However, only in case the structure/s or a portion thereof declared to be unsafe by any official in charge of protecting public safety, strengthening or restoring of any building or part thereof to make it safe upon order of such official shall be allowed. But in such cases it will require approval of the Nagar Unnayan Committee.

Termination and Removal of Non-Conforming uses, Structures or Developments

Uses, structures or developments of land listed as non-conforming shall be brought into compliance with the Zoning Regulation or be completely removed from the premises on or before the expiration within maximum five year period.

b. Principal Use and Accessory Use

Use of any facility may be categorized under two broad heads: Principal Use and Accessory Use. Any use may be principal in one zone while accessory in another or vice versa. Also, same use may simultaneously be principal and accessory in the same zone based on the nature of facility that house it. Principal Use indicates functions which the facility is primarily intended for. The Academic Building in a school is definitely its principal use. But an entire primary school would fall under accessory use category when it is located in the university complex to facilitate children of the teachers and officials working there. Ancillary functions of any facility are grouped as accessory use. A garage of a residence is an accessory use. But multi storied commercial parking in Motijheel is definitely its primary function.

The functional uses belonging to different landuse classes under both unconditional and conditional category have been further labeled as principal and accessory uses in the following paragraphs:

4.6.2 Development Permit

Development Permit is the most important function of RAJUK and for that matter of any City Development Authority. DAP will have no bearing unless development can be channelized to its desirable direction through effective permit procedure. DAP has developed its plan using GIS database and other advanced computer software of world standard. The number of planners necessary to handle this database is presently available in the country. This combination provides RAJUK the unique opportunity to make its plan permit procedure fast, well managed and transparent. This is also in line with the idea of digital Bangladesh pronounced by the present govt.

a. Computerization of the Permit procedure

Maintaining information of all the development activities within the DMDP jurisdiction is a mammoth task and maintaining these in the present manual method is neither possible nor necessary. Consultants recommend development of customized software for this purpose. Necessary software expertise are currently available locally. The system would prove worthwhile by saving in the form of time, cost, ease of management, ease of upgrading of information, control of corruption and so forth.

b. Landuse Permit

RAJUK has the legal responsibility to develop plan for the wellbeing of the citizens within its jurisdiction and implement the same by channelizing all developments through appropriate control mechanisms. And also to Issue Plan Permit to private plot owners or developers working with the consent of the owners that comply the set regulations that constitute the most part of development control activity conducted by RAJUK. In the following paragraphs, the structures of the proposed landuse control Authority has been elaborated considering that RAJUK shall be strengthened adequately and that in that situation planner's ranks would be as under [in light of the Sthapatya Adhidaptar]:

- Chief Town Planner
- Additional Chief Town Planner
- Deputy Chief Town Planner
- Assistant Chief Town Planner
- Assistant Town Planner

Structure of Landuse Permit Authority

The Landuse Permit Authority shall be comprised of three vertically linked tiers:

- At the entry level Landuse Permit Planner [LPP]
- At the mid level Landuse Permit Committee [LPC] to control LPPs, clarify legal provisions regarding land use permit decisions on a case to case basis, and
- At the top level Nagar Unnayan Committee comprised of representatives from planning departments, professional institutions, imminent scholars and citizens of the city.

Figure No. 4.1 shows the tiers along with their inter links.

Landuse Permit Planner

Landuse Permit will be issued under the signature of Landuse Permit Planner [LPP] appointed by the Chairman, RAJUK from among the Planners not below the rank of Assistant Town Planner. Landuse Permit issued by the LPP/s shall be null and void, even if signed, unless the use sought for is permitted in the landuse options of the respective zone that contains the plot.

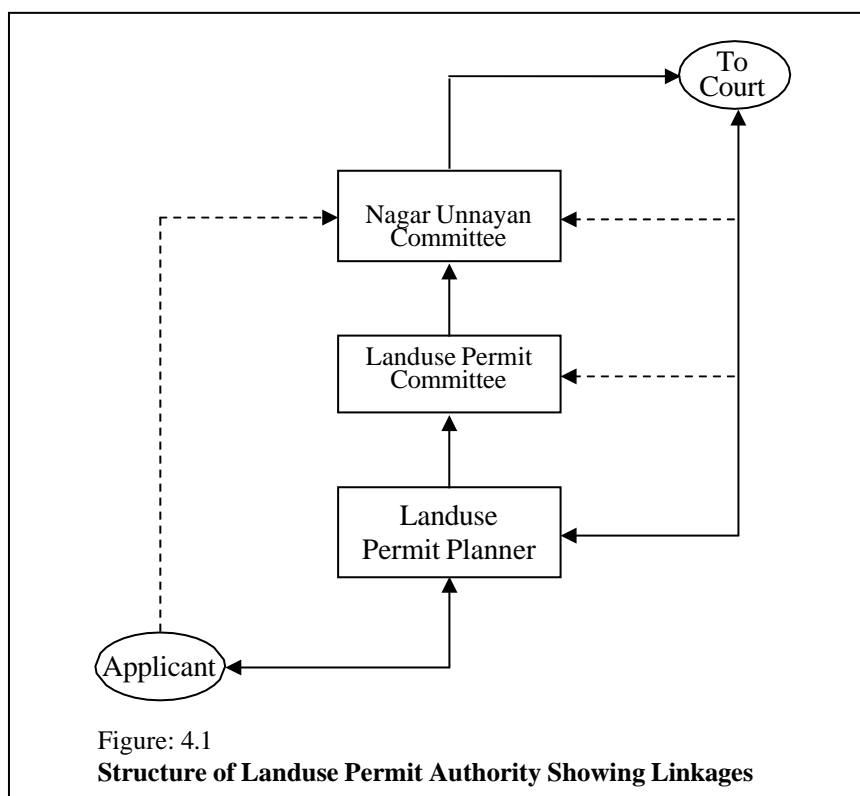
To cover the vast DMDP area under RAJUK jurisdiction, Paurashava Planners [PP] working in the Paurashava within the DMDP area, in addition to RAJUK's main stream LPPs, may be delegated with the power to act as LPP and issue Plan Permit and control development within the provision of DAP on RAJUK's behalf. He/she must have needful Inspectors and GIS facility with logistics and knowledgeable personnel to operate so as to accomplish such

responsible job. For all plan permit activities PPs shall be accountable to, controlled by and act in close communication with Landuse Permit Committee at RAJUK.

Landuse Permit Committee

At the mid level Landuse Permit Committee [LPC] shall function for effective control of LPPs [both main stream and Paurashava] and to clarify legal provisions regarding landuse permit decisions on a case to case basis. LPC shall be a maximum seven member committee headed by RAJUK's Chief Town Planner [CTP]. LPC Members shall be not below the rank of Assistant Chief Town Planner while Deputy Chief Town Planner, Development Control shall act as the Member Secretary of this Committee. The activities of LPC will include

- Clarify the legal provisions for the LPPs as per their request.
- Make recommendations in case of New Use or Conditional Use and send it to the Nagar Unnayan Committee [NUC] for decision.
- Earmark plot numbers under non-conforming uses and notify the owners about the time span to relocate the facility, procedure and conditions that must be strictly maintained to avoid immediate eviction.



Nagar Unnayan Committee

Nagar Unnayan Committee [NUC] shall be the supreme authority regarding Landuse Permit within RAJUK jurisdiction. The Members of the Nagar Unnayan Committee are (not as per the protocol):

- Head : Secretary, Ministry of Housing and Public Works, GoB
- Member Secretary : Chief Town Planner of RAJUK
- Members : Chairman RAJUK
- : Head of the Department of URP, BUET
- : President BIP
- : President IAB
- : Chief Town Planner, Dhaka City Corporation
- : Mayor, Paurashava [within RAJUK jurisdiction]
- : Chief of Concerned Line Agencies
- : Three eminent citizens of Dhaka

NUC shall be well supported by a secretariat and shall be empowered both authoritatively and financially to carry out study and/or survey, arrange public hearing, round table conference, seminar, or if necessary, engage experts.

NUC shall decide whether the proposed New Uses should be permitted or denied; in case of Conditional Permit impose the conditions to comply; accept variances for specific cases and so forth. Besides, NUC shall decide strict conditions to nonconforming uses and the action against its violation if so happens.

Landuse Permit Option

For a plot seeking landuse permit there can be three possible options:

- Landuse permitted
- Landuse conditionally permitted, or
- Landuse restricted

Landuse Permitted

Landuse that unconditionally permitted in the zone are listed in this category. When permission is sought for a residential landuse on a plot earmarked as urban residential zone then it falls under this category.

Landuse Permitted with Condition

Landuse that generally not incompatible or harmful for the community but whose number, location or specific use nature may pose threat to community's lifestyle, privacy, safety or security etc. then the landuse is permitted but with a condition to fulfill so that the potential threat is avoided. For example, in a Residential-General Industrial Mixed use zone a request is made seeking landuse permit for a composite textile mill with a dyeing unit. Since the use is compatible in the zone except for the release of noxious effluent to the surrounding, the permit may be issued with a pre condition to exclude the dyeing unit in order to get landuse permit. Now, following the formal agreement by the applicant to comply the condition the permit is issued against the plot. A list of such conditional uses is maintained in this category.

Landuse Restricted

Landuse that is harmful for the community are restricted by law. Such harmful landuse is listed in this category. A cinema hall in a neighborhood may be cited as an example under this category. But for convenience, any use not listed in the permitted and conditionally permitted use category is considered as restricted for the zone.

Landuse Permit Procedures

Land use permit procedure is a product of a number of interlinking activities. The whole process has been shown in a flow diagram for clearer understanding in Figure 4.2.

The procedure is commenced with the submission of formal application by the applicant to the Chairman of RAJUK. The applicant must submit along with other information and documents a mauza map showing his plot including plot no, mauza name etc. The concerned official designated as Landuse Permit Planner (LPP), will then check the compliance of the land use desired by the applicant with the land use zone containing his plot and the uses permitted therein.

Four situations may be possible:

- Desired Use is listed as Permitted in the zone
- Desired Use overlaid
- Desired Use is listed as Conditionally Permitted in the zone, and
- Desired is not listed under any of the categories and may be permitted as New Use

If the desired use is listed as Permitted or Overlaid then it will be permitted without any question. If the desired use is listed as Conditionally Permitted the LPP would refer it to the LPC for further action.

In case of desired use not found in the permitted or conditionally permitted lists of the zone, the LPP shall reject the desired landuse as it is not allowed in the zone. At this stage if the rejection decision taken by the LPP is not

satisfactory to the applicant, he/she can appeal to the NUC. If the decision of the NUC goes in favor of the applicant, LPP shall then issue the permit. NUC may also ask the applicant to make some modifications to make his/her claim appropriate for approval. The applicant may comply accordingly and apply afresh.

If the applicant is not satisfied with the decision of the NUC he/she may go to the court for decision.

If the LPP is convinced that the desired use should be allowed for the greater interest of the people and therefore deserves to be considered under New Use category, he may recommend it to the LPC furnishing reasons in favour. The LPC if convinced by the reasoning will send the case to the NUC with recommendation to permit desired land use in the New Use category. Following necessary study and investigation if the NUC is also convinced about permitting the use as recommended by the LPC, they may decide so and authorize the LPP to issue permit for the desired land use in the New Use category.

c. Field Level Vigilance

Development cannot be channelized as per the plan unless an effective control at the field level is achieved. Due to unhealthy concentration of political, administrative, financial and even judicial power in the capital city, almost entire in-migrant population from all over the country rush to Dhaka to try their luck. This is the root cause of all the problems Dhaka has been and will be facing in time. Land value and rent of space within the city soaring sky high exerting tremendous development pressure that tempts opportunists to fill out low lying areas completely disregarding its legality provisions set by the plan. Land classified in plan as agriculture, flood flow or retention pond is indiscriminately filled out for making plots every day. Such environmentally catastrophic activities must be guarded to save our city through effective Field level vigilance. And as a custodian of DAP the responsibility falls on to RAJUK's shoulder.

Another kind of damage to plan takes place at the implementation level in the form of illegal structures, unauthorized structures, deviation from the approved plan and so forth. These too need close vigilance from RAJUK's end.

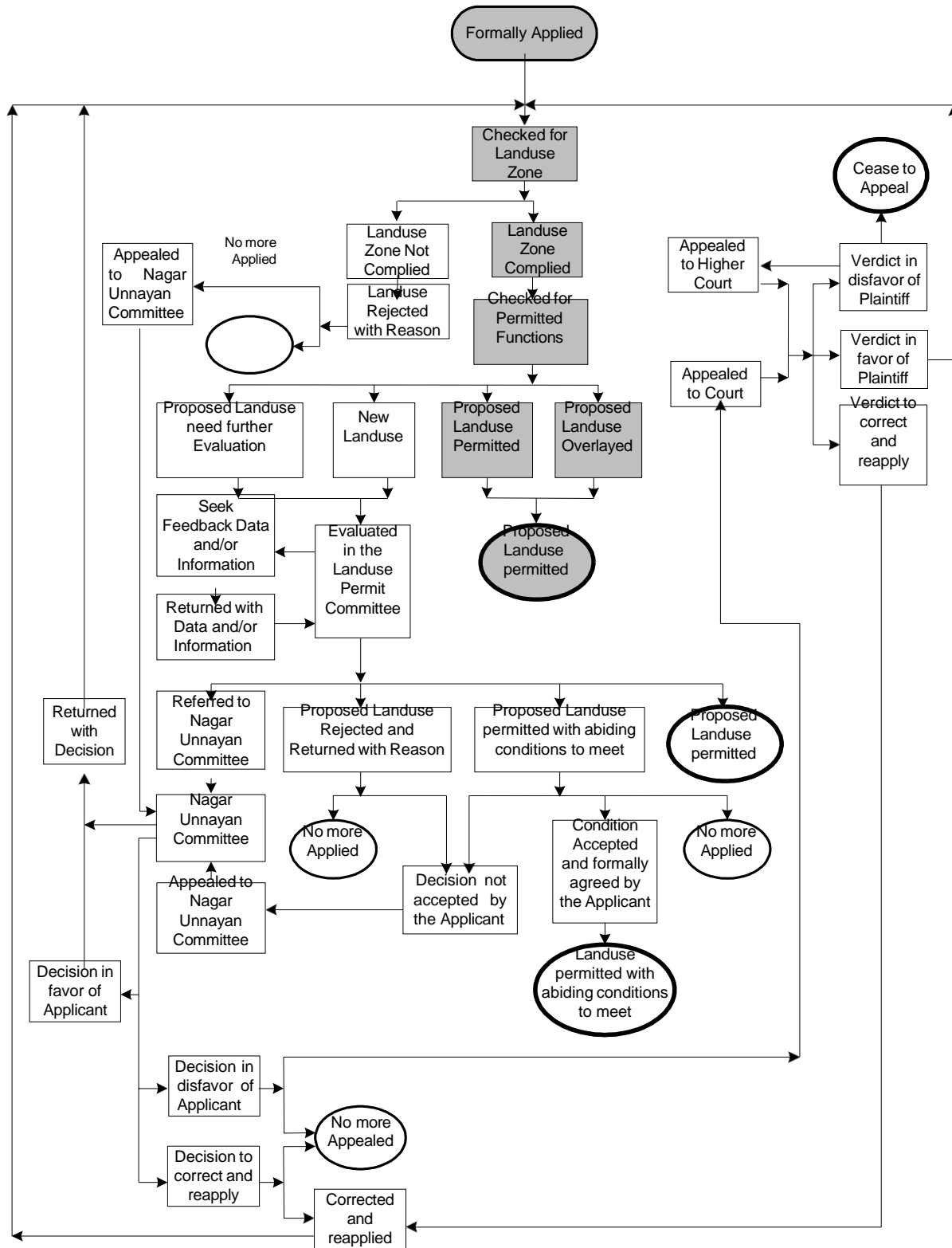


Figure No: 4.2 Flow Diagram Showing Activity Linkage of Plan Permit Procedure

Vigilance is very vital for identification of overlay and non-conforming structures and to ensure their compliance to plan permitted use and maintenance protocols.

Consultants recommend a large, strong, committed and effective department with appropriate personnel and logistics to guard against all such evil activities.

d. Interaction with People

Plans and Reports furnish various information that has direct bearing on the people since they need to follow the guidelines provided in these documents while developing their parcel of land/s. Presently RAJUK makes it difficult for the common people to gather information that are necessary for various development ventures on their land parcel/s. This attitude makes way for unplanned developments and people feel reluctant to come to RAJUK for plan permit. But in reality availability of information has a vital role to play towards effective plan implementation.

Planning Department of RAJUK should have close interaction with the citizen of Dhaka at large in order to make people aware of the benefits of a good plan which in turn steer people's social responsibility to promote plan implementation and resist contraventions. A specific Interactive Cell is recommended to be put to operation in this respect with following objectives:

- Provide pre-application advice to residents, consultants and developers about landuse management issues and application procedures for the submission of development applications.
- Interact with communities, especially spontaneously developed ones, lacking specific needs and provide them with proper planning guidance to overcome them through collective efforts.
- Listen to people informing about contraventions, deviations to approved plans, damage to planned developments, obstruction to flow of water or filling out of retention areas for personal or group benefits and inform them about the remedial measures taken and thereby encouraging inclusion of people in guarding the implemented plan.
- Appraise the citizens about the planning and landuse management related legislation and zoning scheme regulations.
- Investigate and report to the higher authority about complaints made by the citizens about plan violation, violation of landuse of a zone and miscellaneous complaints.

Such interactive windows may be opened at convenient locations. Answers to frequently asked questions may be provided in the internet. Besides, these may be publicized in the print and electronic media time to time.

RAJUK should immediately open up in all possible ways to reach people and earn their confidence.

Chapter - 5 PROJECT PLAN

5.1 Introduction

In this part of the Detailed Area Plan, the consultant highlights the projects with preliminary cost estimates and design. The projects included in this chapter are to be executed in the first phase of implementation that is 2007-2011. The project categories are: site and services, park and play ground, lake and road development.

5.2 Description of Projects

The identified projects are based on site and services component. Location of the project has primarily been selected in different parts of the study area. The area needs to be facilitated with the improved accessibility. Detail of the project is presented in the following steps.

a. Site and Services Project for Low income Group

Site and services project for the working class people on long term hire-purchase basis to enable them to have a housing plot at affordable cost.

Location : Savar, Gonakbari and Baipail Mouza

Area of Land : 37.0 acres

b. Project for Recreational Facilities

Location : Savar, Boro-ashulia Mouza; Sheet No. 1 and Jiraba Mouza

Area of Land : 200.0 acres

5.3 Indication of Project Cost

The identified projects are based on site and services concept. Locations are primarily selected in different parts of the study area. The area should be facilitated with the improved accessibility. Details of the project is presented in the following:

a. Site and Services Project for Low income Group

Detailed Cost Breakup

Sl. No.	Description of Item	Unit	Quantity	Rate	Total Cost
1.	Land acquisition	acre	37 acre	Tk. 200000.00	Tk. 0.74 crore
1.	Land Development	Sft.	1611726 sft.	Tk. 50.00	Tk. 8.05 crore
2.	Road Development	km	7 km	Tk. 80 lakh	Tk. 5.60 crore
Total :					Tk. 14.39 crore

Source: Local Tahsil Office, 2008 and estimated from previous project.

b. Project for Recreational Facilities

Detailed Cost Breakup

Sl. No.	Description of Item	Unit	Quantity	Rate	Total Cost
1.	Land acquisition	acre	200 acre	Tk. 200000.00	Tk. 4.00 crore
1.	Land Development	Sft.	8712035 sft.	Tk. 50.00	Tk. 43.56 crore
2.	Road Development	km	2 km	Tk. 80 lakh	Tk. 1.60 crore
Total :					Tk. 49.16 crore

Source: Local Tahsil Office, 2008 and estimated from previous project.

Chapter – 6

FOLLOW UP ACTION

6.1 Introduction

This chapter is the concluding part of the planning report that illustrates the actions that are necessary to be undertaken in order to effectively execute the plan proposals. It also includes issues, such as measures needed for plan document circulation and publicity of the plan, recommended actions for plan deviation and other legal and institutional issues.

It should be realized that implementation of Detailed Area Plan is a time consuming, huge task and needs a group of capable professionals from multi-disciplinary sectors. Though planning role is prominent but other activities are also important including administration. Planning is a continuous process and this process should be followed according to the present demand and development of the society. Planning is not rigid, it is flexible and this flexibility should be considered with the continued supervision and study of the development trend.

Implementation, monitoring and evaluation are the prerequisites of the Detailed Area Plan. An efficient implementation of the plan depends on a team of capable and efficient manpower of the authority responsible for the same. Availability of technology and technical know-how of the employees may support the implementation procedure effectively. In this case, RAJUK should be enriched with those two. Government commitment is also helpful for the implementation of the Detailed Area Plan. Monitoring of the implementation activities and procedures are also related with technology and efficiency. But, monitoring should be specific and timely. At present, RAJUK is not capable enough for implementation and monitoring of the Detailed Area Plan efficiently due to its inherent structural weakness. As such RAJUK should be strengthened with the re-organization of the organizational set up.

RAJUK should act as the key agency for monitoring the development work and exercising the development control within the study area as stipulated in the Plan. Annual Development Plan should be prepared by the Local Government involved within the jurisdiction of the Detailed Area Plan and it should be approved by the government on a project to project basis. The Local Government should seek advice from RAJUK in case of any difficulty in the implementation of the plan.

Since all development agencies in the study area are integrated for the purpose of carrying out development work, the Local Government will also monitor the progress with the Sectoral Agencies at Regional and National levels.

6.2 Follow up Actions

6.2.1 Awareness Building

It has been mentioned that town planning has not become a part of our cultural practice. This is mostly due to ignorance about the benefit of planned development and the evils of haphazard sprawl development. This can be achieved by way of propagation and direct contact with people. Easy availability of plan document also enables people to become aware of the plan and thereby follow the guidelines. As such RAJUK should take initiatives so that the plan document is available easily and at minimum cost.

6.2.2 Willingness of the Authorities to implement the Plan

RAJUK on adoption of the planning document should show its intent to implement the plan through effective control measures. This calls for equipping it with necessary logistic and efficient manpower.

6.2.3 Revision of Existing and Formulation of New Legal Provisions Relevant to DAP

A large number of regulatory involvements are found in the Town Improvement Act, 1953. That attachment proves importance of RAJUK activities. Implementation of the planning activities and development control are the key issues of RAJUK activities. The regulations prescribed in the Town Improvement Act, 1953 are as follows:

1. Building Construction Act, 1952 [Section 77(6) of the T.I Act, 1953].
2. Acquisition and Requisition of Immovable Property Ordinance, 1982 [Section 79(2) of the T.I Act, 1953].
3. Dacca Municipal Corporation Act, 1974.
4. Pourashava Ordinance, 1977.
5. Contract Act, 1872 [Section 109 of the T.I Act, 1953].
6. Trust Act, 1882 [Section 130(b) of the T.I Act, 1953].
7. Penal Code, 1860 [Section 159 of the T.I Act, 1953].
8. Telegraph Act, 1885 [Section 164 of the T.I Act, 1953].
9. Railways Act, 1890 [Section 164 of the T.I Act, 1953].
10. Code of Criminal Procedure, 1898 [Section 165 of the T.I Act, 1953].
11. Public Demands Recovery Act, 1713 [Section 193 of the T.I Act, 1953].
12. Dhaka Metropolitan City Building Construction Rules, 2008.

All of the above laws are involved in different sections of the Town Improvement Act, 1953. Most of those regulations are found to be obsolete, not appropriate for efficient implementation of the Detailed Area plan.

Except the above regulatory involvement, a large number of laws will be needed during the implementation of the Detailed Area Plan. Those laws are as follows:

1. Agricultural and Sanitary Improvement Act, 1920.
2. Ancient Monuments Preservation Act, 1904.
3. Bangladesh Cottage Industries Corporation Act, 1973.
4. Canal and Drainage Act, 1873.
5. Canals Act, 1864.
6. Civil Aviation Authority Ordinance, 1965.
7. Displaced Person (Compensation and Rehabilitation) Act, 1958.
8. Irrigation Act, 1876.
9. Bengal Alluvial Land Settlement Act, 1858.
10. Bengal Alluvion and Diluvion Act, 1847.
11. Public Parks Act, 1904.
12. Survey Act, 1875.
13. Tolls Act, 1888.
14. Water Hyacinth Act, 1936.
15. Bangladesh Hotels and Restaurants Ordinance, 1982.
16. Local Government Ordinance, 1976.
17. Environment Pollution Control Ordinance, 1977.
18. Ground Water Management Ordinance, 1985.
19. Inland Shipping Ordinance, 1976.
20. Land Development Tax Ordinance, 1976.
21. Land Development Tax (2nd Amendment) Ordinance, 1986.
22. Paurashava Ordinance, 2009.
23. Town Improvement Act, 1953.

24. Dhaka City Corporation Ordinance, 1983.
25. Conservation of Environment Act, 1995.
26. Local Government Ordinance, 1976.
27. *Besharkari Abashik Prokalper Bhumi Unnayan Bidhimala*, 2004.
28. Playfield, open space, garden and natural tank in urban areas preservation Act, 2000.

Above laws should be referred to the Town Improvement Act, 1953 for implementation of the Detailed Area Plan or a separate Act may be formulated accompanying with those laws.

Necessary Reformation of the contemporary regulations: It is obvious that specific regulation on the Detailed Area Plan is absent. Contemporary regulations are in the Master Plan. According to the planning context, both of those two plans are different with different meaning. In another sense, according to the Town Improvement Act, 1953, RAJUK can do anything whatever it likes. It can prepare any type of plan and change that whenever it thinks fit. Different sections of the Town Improvement Act, 1953 support these views.

Section 74(2) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953) states, “the Kartipakkha may, from time to time, with the approval of the government and the government may at any time, **amend or alter any specific provision of the Master Plan**. Any such amendment or alteration shall be published in the Official Gazette.” Such provision should be removed from the Act.

Changes of any landuse (prescribed in the Detailed Area plan) by the private landowner is possible if the landowner follow the regulations prescribed in the section 75(1) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953). It is said in the section that, “if **any person** desires to use any land for any purpose other than that laid down in the Master Plan approved under sub-section (5) of section 73, he may apply in writing to the **Chairman** for permission so to do.” In this case, Chairman of the RAJUK preserves sole right to make opinion against the Detailed Area plan. Such provision should be removed.

Dhaka City Corporation and Pourashavas are obliged to submit their building plans to RAJUK for approval. Section 77(1) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953) states: “all plans for the erection of building approved under the provisions of the [Pourashava Ordinance, 1977 (XXVI of 1977)] and the Dacca Municipal Corporation Act, 1974 (LVI of 1974) **shall be submitted to the Chairman for sanction**.” Again, it is said in the section 77(5) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953) that, “the Corporation or Pourashava shall refuse to grant permission for erection of any structures **which have not been sanctioned by the Chairman or the Kartipakkha** under this section.” According to the regulations, Chairman of the RAJUK or any employee authorized by the Chairman of RAJUK may refuse or sanction the building plan within the jurisdiction of the City Corporation or Pourashava. Because, RAJUK performs sole responsibility to execute the Building Construction Act and to perform such responsibility an Authorized Section is established in RAJUK (no such section is in the Pourashava). Section 77(6) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953) is more clear about the execution of the Building Construction Act, 1953. It is said in the section that, “the Chairman or any other member or any officer of the Kartipakkha, from such date as the Government may, by notification, declare, shall be deemed to be only “authorized officers” within the meaning of **clause (a) of section 2 of the Building Construction Act, 1952 (E.B.Act II of 1953)**, which Act shall be deemed to be modified to that extent, so far as it relates to the area within the jurisdiction of the Kartipakkha.” (*Section 2 (a) of the Building Construction Act, 1952 (E.B.Act II of 1953)*, “Authorized Officer” means an officer appointed by the Government, by notification in the Official Gazette, to exercise in any area the **functions of an Authorized Officer** under this Act.)

RAJUK can change the character of any land whether the land is flood flow, sub-flood flow or high value agriculture. But, those changes may be possible under a scheme approved by the Government. The permission has been given by the section 40(g) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953). It is said in the section that “RAJUK may involve with the raising, lowering or leveling of any land in the area comprised in the scheme.” Such type of regulation will always encourage RAJUK to change the Detailed Area plan. This should be reviewed.

New attachment / formation of regulations:

1. To control the zoning provision prescribed in the Detailed Area plan, separate regulation may be prescribed in the Town Improvement Act, 1953 as a new attachment or a detailed zoning regulation as a new Rule may be framed.
2. Section 69 of the Town Improvement Act, 1953 is not sufficient to maintain the building line and street line, it should be detailed as new attachment. The regulations on open space prescribed in the Town Improvement Act, 1953 should be detailed.
3. There is no regulation in the Town Improvement Act, 1953 on functional change of building. Such change should be controlled through regulations. New regulation on functional change of building may be incorporated in the Town Improvement Act, 1953 as an attachment.
4. Locational control on the Filling Station, Hotel and Cinema Hall should be guided through the regulations. Side affect of those establishments creates urban environmental problems. New attachment may be prescribed in the Town Improvement Act, 1953 to control their haphazard location.
5. New regulation on Ward Action Plan may be prescribed in the Town Improvement Act, 1953 as a new attachment or separate regulation as a Rule on Ward Action Plan may be formed.

6.2.4 Identification and Preparation of Policies for Non Conforming Uses

There are many structures constructed in various areas, not conforming to the landuse of the area. Those structures were identified through Physical Feature Survey and proposed as of non conforming use in the Detailed Area Plan. Those identified structures should be relocated gradually in the relevant landuse zone or existing use of those structures should be changed in conformity with the landuse proposed for that area. To implement such procedure, a legal coverage should be included in the TI Act or a separate regulation may be formed.

6.2.5 Preparation of Action Area Plan

Mere preparation of Detailed Area Plan will not be sufficient due to resource constraint. Securing Right of way for circulation network and utility corridor needs huge funds which cannot be met from public exchequer. To minimize the cost of development RAJUK should involve the land owners in the development process. This can be achieved by declaring some of the developing corridors as concession for development through people's participation where land-owners will become development partners and share the development cost through contribution of a portion of their land. RAJUK has to prepare Action Area Plan for those areas utilizing development techniques like Guided Land Development or Land Readjustment. RAJUK has to show strong determination and willingness as this is a very difficult task to accomplish involving hundreds of people. RAJUK has to increase its efficiency and do the work at the appropriate time.

6.2.6 Resolving Duality of Power in Granting Planning Permit

It is found that local authorities like Paurashava or Union Parishad grant planning permits within RAJUK's jurisdiction area. The Local Government Ordinance provides power to the local government institutes to issue planning permits. This has given rise to duality in the performance of development control function resulting in chaos as RAJUK and local government institutes follow different rules.

6.2.7 Decentralization of RAJUK Function

RAJUK zonal office should be more powerful and zonal offices should be set up at Paurashava level, if not union level. The zonal office should be given appropriate authority to enable them to handle these functions more prudently.

6.2.8 Bringing Potential Areas for Urban Growth under Municipal Authority

At present, different Pourashavas are involved in the current jurisdiction of the Detailed Area Plan. Except those Pourashavas, Dhaka City Corporation is also involved for the core areas of the Detailed Area Plan. It is not necessary to re-arrange the present municipal coverage up to the year 2015. It is necessary that all planning activities of the Local Government jurisdiction should be guided according to this Detailed Area Plan. But, Government should promulgate a Gazette Notification about the involvement of those Local Governments with the activities of the Detailed Area Plan.

6.2.9 Strengthening of Planning Department of RAJUK

Substantial agency support would be necessary for the implementation of the Detailed Area Plan. This support needs to be forth-come from different sectors of urban management and development at the initial stage. The important public agencies will be involved directly in implementation phase's are-

- RAJUK, Upazila Parishad, Pourashava, LGED, RHD.
- Bangladesh Water Development Board (BWDB).
- Department of Public Health Engineering (DPHE).
- Power Development Board (PDB) and Rural Electrification Board (REB).
- Bangladesh Telecommunication Company Limited (BTCL).
- Titas Gas Transmission and Distribution Authority.
- Directorate of Health.
- Directorate of Environment.
- Bangladesh Agriculture Development Corporation.
- Dhaka City Corporation.

A close co-ordination among the above public authorities will be needed for implementation of the Detailed Area Plan. For this, planning section of RAJUK should be strengthened with the involvement of experienced employees from different background. Furthermore, to strengthen the planning section of RAJUK, following steps should be followed:

1. Three more branch offices of RAJUK should be established headed by a Deputy Town Planner for maintaining development control. Those branch offices should be accompanied with planning section, authorized section and land clearance section.
2. Except development control, a small scale project based on the Detailed Area Plan may be prepared by those branch offices and they will implement those projects. That might provide sufficient inputs / guidelines for taking up the project on a bigger scale. In all cases, planned development of Dhaka City should be ensured by the project.
3. Different committee for planning activities and development control should be formed. Stakeholders including political decision makers at local level should be the member of the committee.
4. Since RAJUK is a service providing agency, its activities should be transparent to the service recipients. The people should know details of its day to day activities, functions and operations in general. Status of files should be notified for knowledge of the applicants. It should go for automation immediately to augment transparency through E-governance. Targets of transparency can be better achieved through changes in legal provisions. RAJUK should be made accountable to its service recipients for its activities and this accountability provision should be incorporated in the new Act.

6.2.10 Co-ordination among Related Authorities/ Agencies

RAJUK should take initiative to foster better co-ordination among the stakeholders especially line agencies. Through this, RAJUK will be able to stop unauthorized construction by public sector agencies.

6.2.11 Enforcement of Law for Restoring Plan

The Detailed Area Plan is a broad guideline for development work. The proposals of the plan are prepared on the basis of existing conditions and the trend of future growth. Therefore, for any significant change in the proposal, revision of some of the proposals may be required. Hence, the plan should be reviewed periodically and should accommodate necessary unforeseen changes in the plan. RAJUK may undertake a Five Yearly Program to review the plan.

The Detailed Area Plan of RAJUK should be a guideline for development and control of development trend in a systematic and well regulated manner through the imposition of development control. This plan is a basis on those development efforts, which will be further practiced by the related agencies.

The plan is a rural based urban plan. Part of the study area will be controlled with rural character. It will be highly effective to control environment pollution. At the same time, it will result in preserving agriculture land.

All private housing should be controlled according to the objective of the plan. Private housing estate should follow the garden city concept. Only Building Construction Rules, 2008, Private Housing Rules, 2004 should not be the prime controlling regulations of building construction in the study area. Some of the rules are needed as the guidelines for the development of private housing estate, because the planning area has been considered as rural-based urban area.

It is observed in the implementation of Master Plan 1959 that the development control authority defined every component of the master plan according to their wishful practice. The regulation also encourages their practice. Section 74(2) of the Town Improvement Act, 1953 (E.B.Act XIII of 1953) says, “the Kartipakkha may, from time to time, with the approval of the government and the government may at any time, **amend or alter any specific provision of the Master Plan**. Any such amendment or alteration shall be published in the Official Gazette.” As a result, negative impact of the planning will be viewed and the city will lose her living environment. Such type of decision is not acceptable. Most of those violations are the causes of twin practices, one is the order of the political decision makers and other is the malpractice by the officers and employees.

6.2.12 Provision of Penalty for Plan Violation

Change of Detailed Area Plan should follow a procedure like –

1. Show the importance of change and identify the causes and prepare a Report.
2. Send the Report to the related Ministry for approval.
3. The Steering Committee who approves the plan before Gazette Notification. Such type of a Committee should analyze the Report before approval. This is not fair and justified that a Technical Management Committee and a Steering Committee prepare the plan but a political decision maker or an officer / employee (whoever the officer / employee is or political decision maker) change the plan as his wishful practice.
4. Any violation and change of the plan should be punishable according to the Penal Code of 1860, Official Secrets Act, 1923, Patents and Designs Act, 1911 and Prevention of Corruption Act, 1911, Anti-Corruption Commission Act, 2004, not by the Bangladesh Service Rule.
5. Court case may be filed without any restriction by any person as a citizen of Bangladesh against the person who changes the Detailed Area Plan.

6.2.13 Plan Review

RAJUK should take initiative to review the performance and functioning of the Plan during the planning period. It should also make arrangement for regular updating of the plan. Provision should also be made to prepare fresh plans on expiry of a plan period.

Chapter - 7

CONCLUSION

7.1 Conclusion

Dhaka as the capital city of the country encounters a host of problems perpetuating for decades. With the growing importance of the city and mounting up pressure of population, the problems are getting more and more precarious every year. Amid all these problems, uncontrolled sprawl development is perhaps the most irritating one particularly for a development control agency like RAJUK. The unwanted sprawl originates not only due to ineffective development control but also due to failure of the equilibrium between demand and supply of buildable and livable urban land.

The DMDP plan package was correctly framed to address the development issues of the city that covers development. The Detailed Area Plan components of the plan package have the most direct and practical implications on micro level development. Understanding of the framework, concept and ideas stated in the Structure Plan interacted with the site and its environments to produce a plausible solution. A realistic and adequately accurate assessment of the existing situation was a pre-condition to form an effective basis for this planning effort. In order to accomplish those stated objectives, the Consultants have taken utmost care to best analyze and understand the study area by making a comprehensive survey in order to expose all details of its physical, social and economic aspects.

The experts and staff of the project teams made constant liaison with RAJUK to keep the activities on track all through various levels of the plan preparation. Needs and requirements of RAJUK regarding the content, form and principles of the specific object for Detailed Area Plan was well taken care of through repeated discussion with Project Director and Project Manager of RAJUK or their designated/nominated officials and professionals.

It may be emphasized here that planning works are not always limited to physical exercises of surveys, analyses and production of maps. Planning process is also one kind of intellectual and academic exercise. In Detailed Area Planning, there were involvements of the client, consultants, beneficiaries, stakeholders, developers, GO and NGOs. As a result, all issues of proper planning and opinions were considered and expressed by the Consultants.

The Consultants prepared the Detailed Area Plan in considering the details requirements of the ToR. However, though late, RAJUK took up the preparation of Detailed Area Plan in one go, although initially the idea was to proceed selectively, taking the high pressure zones first and then gradually taking up lesser priority zones. This strategy was adapted as Structure Plan which accepts and recognizes the uncertainty of future and leaves more detailed problems for resolution nearer the time they occur. This is more applicable for areas where growth of population and economic development cannot be determined with any degree of precision. But events in metro-Dhaka overtook this assumption and it is observed that in reality development has been initiated by private and individual developers in areas designated as of low priority, flood flow zones and retention pond reserves. Naturally, it was an imperative to prepare Detailed Area Plan for whole of metro-Dhaka and this bold decision by RAJUK may prove to be beneficial for the city in particular in the long run and the country as a whole.

Annexure 01

List of RS Mouza and its area for Location 15

MOUZA_JL No_Sheet No	Area (Sq Meter)	Area (Acre)
ATICHANDGAON 120 00	222522.4	55.0
BAIPAIL 79 01	1319324.6	326.0
BAIPAIL 79 02	1653721.1	408.6
BARA ASHULIA 115 01	1714949.8	423.8
BARA ASHULIA 115 02	457111.1	113.0
BARA ASHULIA 115 03	710226.3	175.5
BARA ASHULIA 115 04	1135058.7	280.5
BARA RANGAMATIA 113 01	41739.4	10.3
CHAK BASAID 121 00	144641.8	35.7
CHITRASAIL 75 00	119131.8	29.4
CHOTA KAKAR 122 00	579989.8	143.3
DHANANJOU PUR 76 01	136237.6	33.7
DHANANJOU PUR 76 03	44426.8	11.0
DHANANJOY PUR 76 01	17644.3	4.4
DIAKHALI 74 01	1327602.0	328.1
DIAKHALI 74 02	1585533.8	391.8
DIAKHALI 74 03	817378.5	202.0
GANAK BARI 62 04	126195.0	31.2
GAURIPUR 111 00	17978.5	4.4
JIRABA 116 00	853471.4	210.9
MANA SANTOSH 72 01	896913.8	221.6
PALASH BARI 80 01	193328.9	47.8
PURBA NARASINGPUR 73 00	1708204.4	422.1
RUDRA PUR 119 02	306352.5	75.7
SADHU PARA 123 00	30461.8	7.5
SRIKHANDIA 114 00	472014.5	116.6
TAIABPUR 117 01	1182797.5	292.3
TAIABPUR 117 02	1909580.4	471.9
TAIABPUR 117 03	671806.1	166.0
Total	20396344.8	5040.0