

APPENDIX

APPENDIX 1

INTEGRATED URBAN DRAINAGE

(LEGISLATIVE REVIEW)

Federal Constitution	
9 th Schedule	: Drainage and Irrigation comes under the Concurrent List
Item 6 (State List)	: State works on water supply, river and canals are within State competence. State has absolute ownership of all rivers within the boundaries of the State
Item 11(b) (Federal List)	: Federal works relating to water supply, rivers and canals shared by more than one state is Federal competence

National Land Code 1965	
Section 5	: Definition of river to mean river, stream, creek or other natural water course or artificial deviation thereof
S49	: Encroachment of alienated land by river will render the land State land
S62	: State Authority to reserve river reserve by Notification in the Gazette
S63	: State Authority may lease reserve land for a period not exceeding 21 years
S124, 124A and S135	: Conversion and subdivision of land <ul style="list-style-type: none">• Subdivision plan to conform to the Development Plan (Local Plan) for the area• Sufficient river or drain reserves and outlet drains have to be met.
S70, 71, 72 & 74	: Land administrator to issue permit for extraction, removal and transportation of rock material especially sand mining operation

Waters Act : 1920

Applies only to Negeri Sembilan, Pahang, Perak, Malacca, Penang and Federal Territory. Kedah has its own Enactment

Section 2	:	Defines the river to include tributary of river or any <u>canal</u> that is <u>gazetted</u>
S.3	:	Entire property and control of river in the State is vested solely in Ruler of the State except for <u>reserve land</u>
S.4	:	State Authority (SA) to direct any person who interferes with river banks to restore the same
S.5	:	Prohibit act affecting the river including the felling of trees into rivers, obstruct or interfere with any river build any bridge, or jetty over or beside the river except under a license
S.7	:	Prohibition of diversion of river except with license
S.7A	:	Prohibit the pollution of rivers, inland waters and subterranean water resources
S.14	:	No building or structures within <u>50 ft</u> from any bank or flood channel

Local Government Act : 1976

Enacted under Article 76(4) of the Constitution for the purpose of ensuring uniformity of law and policy.

9 th Schedule : Constitution:	:	Local Government is on the State list
S.69, 70 and 71	:	Local Authority has the power to recover any expenses incurred in carrying out any work as a result of any person who commits a nuisance or deposits any filth in or upon the bank of any stream, channel, public drain or other watercourses.
S.73 (a)(ii) and (b)(i)	:	Gives power to Local Authority to make, amend or revoke by-laws to keep public places (including streams, channel or watercourses. These by-laws shall not have effect unless it is confirmed by the State Authority and gazetted.
S.101 (ee)	:	Power to divert, strengthen, define and canalize the course of any stream, channel or watercourse subject to the consent of the appropriate authorities and after giving notice and making compensation.

- S.40 : All moneys received by the local authority shall be constituted into a Local Authority Fund to be controlled and administered by the Local Authority.
- S.127-132 : Local Authorities may impose
i) annual assessment rates on properties
ii) drainage rate to meet the cost of construction
- Annual assessment rate may not exceed 35% of the annual value of properties and 5% annual value for drainage rates.

Street, Drainage and Building Act 1974

Consolidate the provisions relating to construction and maintenance of street, drains and building in local authority areas.

- S.50 : Local authority to construct/cause to be constructed surface and storm water drains, culverts and gutters. State authority may acquire land for such purposes.
- S.51 (1) & (2) : Empowers local authority to recover all cost relating to the construction of storm water drains including the cost of acquiring land. Such cost to be paid by frontages
- S.51(3) : Developers to deposit money or offer security for storm water improvement before proceeding with the development. Criteria to be considered in determining the amount to be paid by frontages or developers:
- area
 - use of respective premise
 - conditions of land
 - degree of benefit
 - value of previous improvements
 - cost of premises voluntarily surrendered
- S.52 : Buildings not to be erected unless surface or storm water drains are provided on such premises
- S.53 : Local Authority to maintain, repair, alter, discontinue or close any surface or storm water drain
- S.54 : Local authority to ensure that surface and storm water drains are properly cleared, cleaned and emptied

- S132 : Establishment of an Improvement Service Fund to be administered by the Local Authority. All monies collected or recovered for the construction of drains, culverts and gutters goes into the fund. This fund is sometimes incorporated into the "Local Authority Fund" established under S.40 Local Government Act.
- S.133 (xviii) : The State Authority shall have power to make by laws on the provision, construction, maintenance and repair of drains.

Drainage Works Ordinance 1954

An ordinance to consolidate and amend the law with reference to drainage works.

- S.2 : Definition of drainage works:
Construction and maintenance of drains and water courses, embankments, culverts, watergate, access path in drainage reserves.
- S.3 : State authority to declare any area in the State as a Drainage Area and specify the boundaries.
- S.4 : State Authority to appoint a Drainage Board in respect of every drainage area. Functions to include
- Hear objection from owners and occupiers
 - Extend or alter boundaries of drainage areas
 - Improvement to existing drainage work
 - Proposal for new drainage works
- S.8 : State Authority to impose drainage rates to meet the cost of drainage works. No rate to be collected until the drainage work is completed
- S.10 : Mode of collection to be similar to that for the collection of land revenue

Earthworks by-laws:

- These by-laws are formulated under the provisions of S.70A SDBA 1974. These by-laws have to be gazetted by the State Government and adopted by individual local authorities.
- Power is given to Local Authority to control earthworks to prevent soil erosion, disturbance and pollution.
- Plans and particulars have to be submitted to Local Authority for Approval before earthworks could proceed
- Local Authority may impose conditions as necessary
 - drainage, provision of adequate bunds and culverts
 - silt traps are adequately provided and properly maintained
 - retaining structures are provided
 - slopes protected against erosion
 - surface of roads are sealed to prevent silt from being washed into water courses
 - fills are compacted

Town and Country Planning Act 1976

This Act was enacted pursuant to Article 76 (4) of the Constitution for the proper control and regulation of town and country planning in local authority areas. An Amendment Act A933 was included in 1995:

- S.4 : Establishment of the State Planning Committee
- S.5 : Local Authority to be the Local Planning Authority
- S.8 : Local Authority to prepare a structure plan for its area formulating policy and general proposals for the development and use of land including measures for the improvement of the physical environment.
- S.12 : Local Authority to prepare a Local Plan formulating in further detail proposals on:-
(a) Amendment provisions :
i) The development of;
ii) The use of land in;
iii) The protection and improvement of the physical environment of;
iv) The preservation of the natural topography of;
v) The improvement of the landscape of;
vi) The preservation and planting of trees in;
vii) The making up of open spaces in;
viii) The preservation and enhancement of character and appearance of buildings in;
ix) The improvement of communications in;
x) The management of traffic in,

The area of the local plan; and'.

(b) Any other matters prescribed by the State Planning Committee:
- S.18 : No person shall use any land or building unless it conforms to the Local Plan
- S.19 : No person to commence development without planning permission
- S.30 : Requisition notice issued by local authority to owner of land to discontinue any use or impose new conditions for the continued use
- S.21A : An application for planning permission to be supported by the Development Proposal Report (DPR) and a layout plan. The DPR shall contain:-
(a) the development concept and justification
(b) a location map and a site plan;
(c) particulars of land ownership and restrictions, if any;
(d) (i) a description of the land including its physical environment, topography, landscape, geology, contours, drainage, water bodies and catchments and natural features thereon;

- (ii) a survey of the trees and all forms of vegetation; and
- (iii) particulars of a building

which may be affected by the development

- (e) a land use analysis and its effect on the adjoining land;
 - (f) layout plans, the details of which are specified in section 21B; and
 - (g) such other matters as may be prescribed by the local planning authority
- S.32 : Local Authority may impose development charge where a local plan effect a change of use or density so as to enhance the value of the land
- S.37 : Land owner may serve a Purchase Notice to Local Authority if his land is intended in the local plan to be used for public purpose and is incapable of reasonable beneficial use.
- S.38 : Declaration of a Development Area after the Local Plan for an Action Area has been adopted. Local Authority has to acquire the land by purchase or compulsory acquisition.

Environmental Quality Act 1974

An Act relating to the prevention, abatement, control of pollution and enhancement of the environment

- S.10 : Director General to be the Licencing Authority
- S.18 : All prescribed premises to be licensed
- S.21 : Ministers to specify acceptable conditions for discharge
- S.25 : Inland water pollution control. Prohibits any discharge or deposit any wastes (unless licensed) into any inland water including rivers, streams, drains, lakes, etc. Prohibits any raising or lowering of receiving water temperature by more than the prescribed limits.
- S.51 : Power to make regulations.

Environmental Quality Regulations

(Prescribed premises, Sewerage and Industrial Effluent) : Crude Palm-oil (1977), Raw Natural Rubber (1978), Sewage and Industrial Effluent (1979), E.Q (Schedule Wastes) Regulation 1989.

Environmental Quality Order 1987 (Environmental Impact Assessment - Prescribed Activities)

Prevention through conservation rather than on curative measures (pollution). The need to carry out EIA studies for prescribed activities. This list however does not specifically mention urban drainage as a prescribed activity.

Land Conservation Act 1960

An act to consolidate the law relating to the conservation of hill land and the protection of soil from erosion and the inroad of silt. This Act is made pursuant to Article 76 (3) of the Constitution.

- S.1 : The Act needs to be adopted by the states before it comes into operation
- S.3 : Hill area need to be gazetted.
- S.5 : Prohibits short-term crop on hill land except under permit
- S.6 : Prohibits land clearing of hill land unless under permit
- S.11 : Power to control sources of soil erosion by making an order to the laying of drains and watercourses.

National Forestry Act 1984 (Forestry Rules 1986)

- S7. : Permanent Forest reserve can be divided into 2 major categories;
- A. No logging allowed : For scientific research and recreational purposes, or for water catchment preservation.
- B. Controlled logging

Mining Enactment 1936 (F.M.S. Cap 147)

- S.61 : Entire property and control of waters of all rivers, streams, and watercourse shall in the Ruler of the State
- S.64 : No interferences with river banks unless permitted.
- S.65 : Need for a license to divert, make use of and discharge water.
- S.69 : Power to set conditions for water use such as quantity, pipe, pump, drain, dam, etc for mining purposes.
- S.74 : Water used in mining operation should be free of hazardous chemicals and excessive solid matters before it is discharged to a river or natural watercourse.

Relevant guidelines:

1. Guideline for the prevention and control of soil erosion and siltation in Malaysia - DOE
2. Urban Drainage Design Standards and Procedure in Malaysia - DID
3. Guidelines on River front development-DID
4. Use of Flood Retention Ponds as open space - Town and Country Planning Department 1997