MALAYSIAN STANDARD

MS 2526-1:2012

Urban stormwater management - Part 1: Design acceptance criteria

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Committee representation

The Industry Standards Committee on Building, Construction and Civil Engineering (ISC D) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Construction Industry Development Board
Department of Irrigation and Drainage Malaysia
Department of Standards Malaysia
Dewan Bandaraya Kuala Lumpur
Federation of Malaysian Manufacturers
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerajaan Tempatan
Jabatan Kerja Raya Malaysia
Malaysian Timber Council
Malaysian Timber Industry Board
Master Builders Association Malaysia
Pertubuhan Akitek Malaysia
Projek Lebuhraya Utara-Selatan Berhad
Real Estate and Housing Developers' Association Malaysia
SIRIM Berhad (Secretariat)
Suruhanjaya Perkhidmatan Air Negara
The Cement and Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Planning and Design of Urban Stormwater Management Facilities which developed this Malaysian Standard is managed by the Department of Irrigation and Drainage Malaysia in its capacity as an authorised Standards-Writing Organisation and consists of representatives from the following organisations:

Association of Consulting Engineers Malaysia
Construction Industry Development Board
Department of Environment
Department of Irrigation and Drainage Malaysia (Secretariat)
Department of Town and Country Planning
Jabatan Kerja Raya Malaysia
Master Builders Association Malaysia
Ministry of Housing and Local Government
National Landscape Department
Pertubuhan Akitek Malaysia
Real Estate and Housing Developers' Association Malaysia
SIRIM Berhad
The Institution of Engineers, Malaysia

Co-opted members:

Department of Irrigation and Drainage Malaysia
PWM Associates Sdn Bhd

Foreword

This Malaysian Standard was developed by the Technical Committee on Planning and Design of Urban Stormwater Management under the authority of the Industry Standards Committee on Building, Construction and Civil Engineering. Development of this standard was carried out by the Department of Irrigation and Drainage Malaysia which is the Standards-Writing Organisation (SWO) appointed by SIRIM Berhad to develop standards for urban stormwater management.

This Malaysian Standard on Urban stormwater management is part of a series of standards developed for stormwater management design practices in Malaysia. The series from Parts (1 to 20) cover the majority of stormwater facilities, from quantity design to erosion and sediment control. However, Parts (1 to 3) of these standards set the general criteria, common to all facilities, needed to design for either stormwater quantity or quality control and Parts (4 to 20) of these standards set the specific criteria for the design of the individual facility or Best Management Practices (BMP).

These standards are derived mainly from the *Urban Stormwater Management Manual for Malaysia, 2nd Edition (MSMA 2nd Edition)*, which already contains extensive explanatory material as well as detailed technical guides, including work examples. As such, these standards do not replicate the design manual. Rather, they summarise the pertinent aspects of the manual which the user shall comply with as minimum requirements in designing stormwater facilities.

It is hoped that with these standards, stormwater management in the country can be properly implemented and regulated in minimising the present haphazard flash floods as well as deterioration in water quality resulting from developing and developed catchment areas.

This Malaysian Standard does not purport to include all the necessary provisions of a contract. Users of Malaysian Standards are responsible for their correct application.

MS 2526:2012 consists of the following parts, under the general title *Urban stormwater management:*

Part 1: Design acceptance criteria

Part 2: Quantity design fundamentals

Part 3: Quality design fundamentals

Part 4: Roof and property drainage

Part 5: On-site detention

Part 6: Rainwater harvesting

Part 7: Detention ponds

Part 8: Infiltration facilities

Part 9: Bioretention systems

Foreword *(continued)*

Part 10: Gross pollutant traps

Part 11: Water quality ponds and wetlands

Part 12: Erosion and sediment control

Part 13: Pavement drainage

Part 14: Drains and swales

Part 15: Pipe drains

Part 16: Engineered channels

Part 17: Bioengineered channels

Part 18: Culverts

Part 19: Gate and pump

Part 20: Hydraulic structures

Compliance with a Malaysian Standard does not in itself confer immunity from legal obligations.