

COMMITTEE OF THE WHOLE – APRIL 18, 2006

STORMWATER MANAGEMENT POND INVENTORY AND FENCING

Recommendation

The Commissioner of Engineering and Public Works recommends:

That this report BE RECEIVED for information purposes.

Economic Impact

There are no immediate budgetary impacts resulting from the adoption of this report.

Purpose

This report has been prepared in response to Council's requests respecting;

- the compilation of a list of all stormwater management ponds throughout the City, and
- the feasibility of installing a fence surrounding the existing Rutherford Road and Weston Road stormwater management pond.

Background – Analysis and Options

Item 8, Report No. 87, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on December 6, 2004, recommended:

“That staff provide a list of all SWM Ponds; and

That a fence for the Rutherford Road and Weston Road SWM Pond be reviewed.”

Inventory of Stormwater Management Ponds

A list of the stormwater management ponds that are assumed in the City of Vaughan is identified in Attachment No. 1. There are currently 70 ponds in total. It is anticipated that approximately 25 ponds will be added to the inventory within the next five years.

Stormwater Management Pond Design Criteria

Stormwater management ponds are generally designed to encourage safe public access and are integrated as much as possible into the natural environment and trail systems. Current City criteria requires that stormwater management facilities have a curvilinear and natural configuration with varying side slopes between 3:1 and 7:1 with an average of 5:1. It is typical that side slopes steeper than 5:1 will require a 1.5 metre high fence to be installed around the perimeter of this area. Should the slopes be less than 5:1, fencing is usually not mandatory.

In addition, in accordance with the most recent City design criteria and standards, perimeter fencing is required along the property lines of residential, commercial and industrial or institutional lands where they abut a stormwater management facility block.

Warning signs in accordance with Standard Drawing No. K-6 as identified in Attachment No. 2 are required near pedestrian traffic routes or walkways located near the perimeter of a stormwater management facility. The number and placement of the warning signs varies depending on the size of the pond and its general layout.

As part of the 2006 Capital Budget Program, the Development/Transportation Engineering Department will undertake a Stormwater Management Criteria Study. This will include a review and update of the City's stormwater management design criteria and ensure compliance with all current MOE, MNR and DFO requirements.

Rutherford Road and Weston Road Stormwater Management Pond

The existing stormwater management pond at the northwest corner of Rutherford Road and Weston Road was constructed as part of the Phase 1 development of the Vellore Village plan of subdivision described by 19T-89024. It services a large drainage area within Block 39 and is tributary to Black Creek. Refer to Attachment No. 3.

Given the size of this existing facility, provisions have been made with the developer to install additional warning signs (in accordance with Standard Drawing No. K-6) along the ponds perimeter to Fossil Hill Road, Rutherford Road and the existing commercial plaza immediately east of the pond. The locations of the required additional warning signs are identified on Attachment No. 3.

Privacy fencing 1.8 metres in height currently exists along the northern property line of the pond adjacent to the existing residential lots. Given that the existing driveway access to Rutherford Road for the commercial plaza immediately east of the pond is adjacent to the pond's easterly limits, and that the sloping in this area of the pond block is gradual, fencing along the pond's east limit is not required.

Relationship to Vaughan Vision 2007

In consideration of the strategic priorities related to service delivery excellence as established by Vaughan Vision 2007, the recommendations of this report will assist in establishing and communicating service level standards that are affordable and sustainable; and in respecting the review of enforcement, compliance and monitoring of regulations related to public safety.

This report is therefore consistent with the priorities previously set by Council. All necessary resources have been allocated and approved.

Conclusion

As requested by Council, a current list of all assumed stormwater management facilities is provided in Attachment No. 1.

The existing pond at the northwest corner of Rutherford Road and Weston Road is adequately fenced along its northern perimeter behind the existing residential lots. Additional fencing is not required due to the gradual slopes surrounding the stormwater management facility. However, given the size of the pond additional warning signs in accordance with City Standards will be installed by the developer.

Attachments

1. List of Assumed Stormwater Management Facilities
2. Storm Water Facility Pond Warning Sign – Standard Drawing K-6
3. Vellore Village Stormwater Management Pond Location Plan

Report prepared by

Michael Frieri, Development Supervisor, Engineering Planning & Studies, Ext. 8729

Respectfully submitted,

Bill Robinson, P. Eng.
Commissioner of Engineering and Public Works

Michael Won, P. Eng.
Director of Development/
Transportation Engineering

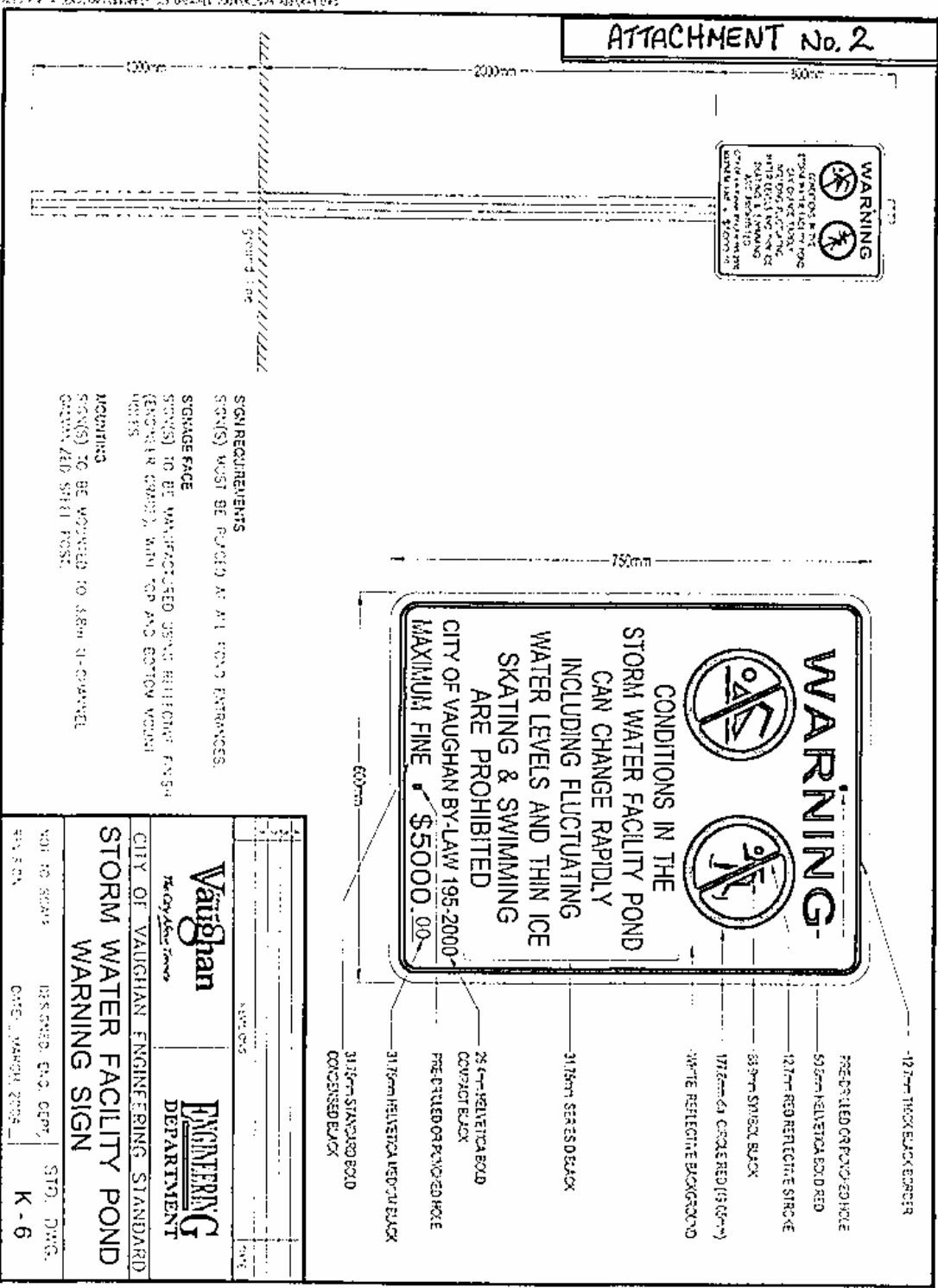
Attachment No. 1

List of Assumed Stormwater Management Facilities

Ward	SWM Facility Name	Nearest Street Intersection	Disck
1	Pond 1 - Woodland Acres	Woodland Acres/Barnst	13
1	Maple Neighbourhood 2 Pond	Barrt L Rd/Longo Ct	18
1	Fairgate SWM Pond	Fairgate Dr/Dina Rd.	18
1	Maple Neighbourhood Pond	SW of Waterside Cres.	25
1	Vaughan Joint Operations Centre - Pond 1	Rutherford Rd/Melville Ave. (JOC)	25
1	York Reg on Maintenance Yard Pond	Rutherford Rd/Melville Ave. (York R.)	25
1	West Maple Creek - Pond A	Parktree Dr/Lonsdale Ct.	25
1	West Maple Creek - Pond B	Parktree Dr/Lonsdale Ct.	25
1	Kelvin & Lumar Developments	McNaughton Rd./Major Mackenzie Dr	28
1	Mackenzie Glen Pond Z1	Major Mackenzie Dr/Melville Ave. (NW)	28
1	Mackenzie Glen Pond Z2	Major Mackenzie Dr/Melville Ave. (NE)	28
1	Mackenzie Glen - McNaughton Rd Pond	McNaughton Rd/Glenholme Ave.	28
1	Mackenzie Glen - Pond 5	Fletcher Dr/Clarkson Mews	28
1	Mackenzie Glen - Pond 4	Fletcher Dr/Clarkson Cres.	28
1	Mackenzie Glen - Upper Pond	Cunningham Dr/Santa Ct	28
1	Humberlye SWM Pond	Simpro Ct	28
1	Maple Meadows Pond	Ridgeway Ct/Wilow Tree St	28
1	Royal Pinetree SWM Pond	St. John of Arc Ave/Roseanna Cres.	28
1	Venture SWM Pond	John De Spain Blvd/Harris Ave.	33
1	Victoria SWM Pond	Foss Hill Rd/Rutherford Rd. (NE)	35
1	Kerridge Pond	Pine Valley Dr/Rutherford Rd. (NW)	46
1	North Humber Pond	Westridge Dr/Brentwood Blvd	54
1	Millview SWM Pond	Treelawn Blvd/Washington Ave.	54
1	Burbidge Subdivision Pond	English Dairy Ct. (SW of)	61
2	Riverside Gardens	Vencho Dr/Dalhousie Ct.	43
2	Village Pine Estates	Park Dr/Queen Post Rd.	44
2	Wycliffe Fairways of Woodlands Golf Course Outlet	Wycliffe Ave/Cresters Rd.	45
2	Humber Green Estates	Angelina Ave/Sure St.	50
2	Hwy 7 & Hwy 27 Lands Pond	Regina Rd./Napoleon Rd.	50
2	Acumen Investments Pond	Kaizer Dr. (east)	51
2	Marin Grove/Roxana Ave 1599 Ruffel 15.5a (Pond 5a)	Roxana Ave./North Lane Rd	51
2	West Woodbridge Investments	Ashledge Circle (NE of)	51
2	German Inc. Pond	Royal Park Way/Vaughan Mills Dr.	52
2	Woodbridge Highlands South Pond	Humberlye Dr/Vaughan Mills Rd.	52
2	Doiores Cres. Pond	Flomona Ct. (south of)	52
2	Woodbridge Highlands North Pond	Thompson Creek/Roselawn Dr.	52
2	Awdel Developments	Awdel Ave/St. Michels Pl.	52
2	Barker SWM Pond	Turning Leaf Dr/Kerrigan Ct.	53
2	Fanshore SWM Pond	Napa Valley Ave./Rutherford Rd.	53
2	Mighty SWM Pond	May Vista Pl.	53
2	Glen Group SWM Pond	Sunset R./Dawson Ave.	53
3	Weston 400 Industrial Park	Chrysea/Joyce Northway	33
3	Weston 400 North Pond	Chrysea Rd/Terecar Dr.	31
3	Pine Valley Business Park	Aviva Park Dr. (west of)	33
3	Canada Housing & Mortgage	Blue Willow/Michels Dr.	37
3	East Woodbridge Developments	Naxle Point/Cover Leaf (south of)	37
3	Garth Pond	Rainco Ct./Royal Garden Blvd.	37
3	Weston Downs Pond	Beit Harbour Pl./Julian Ct.	33
4	Concord Storm Drainage - Pond A	Loma Vista Dr/Rivendo Dr.	9
4	Concord Storm Drainage - Pond B	Redondo Dr/Venice Ct.	9
4	North of Sisset Ct.	Bathurst St/Sisset Court	9
4	Thornhill/Vaughan Community - Pond D (Marilyn Payne Park)	Boyne Highlands Ct.	15
4	Longstaff Eco-Park	Rivemede North/Rivemede	16
4	Concord Storm Drainage - Pond A	Bratwick (SW of)	16
4	Aldridge Estates	Derrywood Dr/Be'wood Blvd.	17
4	Tudor South Drift on Pond Outlet Structure	Jacob Kiefer Pkwy/Basilic Rd. (SW)	17
4	Kyle 407	Hwy 7/CNR (Kyle 407)	22
4	Koelo Steeles-Juno Indus. Area	Juno St/Steeles Ave. (NE corner)	23
4	Concord Storm Drainage - Pond B	Hwy 7/North Rivemede	23
4	Pond #1 - Vaughan 400 MOP	Talman Ct. (south and SW of)	23
4	Pond #2 - Vaughan 400 MOP	Talman Ct. (south and SW of)	23
4	Ketter SWM Pond	Creststone Rd./Humberlye Rd	24
4	Snider SWM Pond	Creststone Rd/Tig Ct.	24
4	Adesso Drive Industrial Park	Juno St/Steeles Ave. (NW corner)	29
4	Juno 400 SWM Pond	Four Mile Cr./Gibberley Blvd	31
5	Thornhill/Vaughan Neighbourhood (A4) - Pond 4	Markwood/Melina Gardens/Franklin	1
5	Thornhill/Vaughan Neighbourhood (A4) - Pond 1	Campbell Ave.	1
5	Thornhill/Vaughan Neighbourhood (A4) - Pond 2	Campbell Ave.	1
5	Thornhill/Vaughan Neighbourhood (A4) - Pond 3	Campbell Ave.	1
5	Linkerlaw Estates Ltd	Atkinson/Dundrum	2

Note: There are approximately an estimated additional 25 ponds City-wide under construction that are expected to be assumed in the next 5 years.

ATTACHMENT No. 2



SGN REQUIREMENTS
 SIGN(S) MUST BE PLACED AT ALL POND ENTRANCES.
STORAGE FACE
 SIGN(S) TO BE MANUFACTURED USING MILLIFORM FINISH (ENCOUNTER GRANITE) WITH TOP AND BOTTOM WOUND LAMINATES.
ANCHORING
 SIGN(S) TO BE WORNED TO 38mm DI-GRAVEL GRAVEL AND STEEL POST.

WARNING

CONDITIONS IN THE
 STORM WATER FACILITY POND
 CAN CHANGE RAPIDLY
 INCLUDING FLUCTUATING
 WATER LEVELS AND THIN ICE
 SKATING & SWIMMING
 ARE PROHIBITED

CITY OF VAUGHAN BY-LAW 195-2000
 MAXIMUM FINE \$5000.00

City of Vaughan The City of Vaughan		ENGINEERING DEPARTMENT	
CITY OF VAUGHAN ENGINEERING STANDARD STORM WATER FACILITY POND WARNING SIGN			
NOT TO SCALE DATE: MARCH 2004	DESIGNED: GAO, GEPY DATE: MARCH 2004	STD. DWG.	K - 6

ATTACHMENT NO. 3

