

**FINAL DRAFT**  
**O.S.P.E. LAND DRAINAGE COMMITTEE**  
**MINUTES OF MEETING**  
**Thursday, October 23, 2008**  
**Ramada Conference Centre – Pinetree Room B**  
**Guelph, Ontario**

**1.0 Attendance and Call to Order**

Members Present: Tim Oliver, Chairman; Bill Dietrich, Secretary; Chris Allen, Mike DeVos, Tom Pridham, John Kuntze

Liaison Members Present: Sid Vander Veen, OMAFRA; Davin Heinbuck, Conservation Authorities (ABCA); Art Groenveld, MTO; Pat Shaver and Steve Fleish, Office of Open Learning, University of Guelph;

Absent Members: Leo Christl, MNR; Gina VandenBurg, O.S.P.E.; Dana Boyter, Fisheries and Oceans Canada

Chairman Tim Oliver called the meeting to order at 10:40 a.m.

**2.0 Approval of Agenda**

Motion by Tom Pridham, seconded by John Kuntze, that the agenda as prepared by the Chairman be accepted. Carried.

**3.0 Minutes of Last Meeting**

Motion by John Kuntze, seconded by Tom Pridham that the minutes of Friday, June 6, 2008 O.S.P.E. Land Drainage Committee Meeting be accepted. Carried.

**4.0 Business Arising From the Minutes**

**4.1 Drain Maintenance Guidance Document**

-Mike DeVos has prepared and circulated a copy to the Land Drainage Committee members a draft section for works under a new Engineer's report for the Revised Drain Maintenance Guidance Documents.

-This document has not yet been reviewed by DAWG. Jane Sadler Richards has sent out a table of contents for this document.

4.2 Maintenance of Pumped Drain Systems

-Eric Chamberlain, President DSAO is to set up a meeting with DFO in the Chatham-Kent area to work on maintenance procedures with respect to fish issues and pumped drain systems.

4.3 Missed Tile Drain connections to New Municipal Tile Drains

-John Kuntze to follow this up with a reply from the LDC to DSAO and LICO.

4.4 LDC Expense Accounts

-Tim Oliver to follow up with O.S.P.E. with respect to payment of LDC expenses and the status of O.S.P.E. and the LDC.

4.5 Endangered Species Act (ESA)

-The LDC sent in a reply to the MNR with respect to concerns with the ESA and drainage.

-The LDC recommends drainage practitioners notify their district MNR office of all new projects being constructed under the Drainage Act.

4.6 DART

-John Kuntze is LDC representative

-DART has prepared a draft Terms of Reference

-Next meeting is Tuesday October 28, 2008

**5.0 Correspondence**

5.1 -Ken Slack, P.E.O. is looking into retaining an expert witness for drainage activities.

-PEO no longer wants to be involved in the activities of the LDC.

-LDC should wait until we receive further contact from PEO before responding.

5.2 Drain Enclosures, research paper prepared by Katie Stemmler

-LDC feels the study should have included all projects.

-Recommendations to limit drain enclosures should apply to large watersheds only.

**6.0 Liaison Report – Ministry of Transportation**

Art Groenveld

6.1 MTO Gravity Pipe Design Guidelines implemented in September 2007 as the official sewer and pipe design process for ministry contracts. Designs based on hydraulics, structural integrity, material durability and life cycle costs. Available through MTO

online catalogue library. Information that the drainage engineers should be aware when a portion of the municipal drain is a pipe in the ministry right of way or under the highway.

- 6.2 New pipe culvert and sewer contract specifications were implemented in 2007 with the MTO Gravity Pipe Design Guidelines. Specifications allow designers to specify the minimum requirements for any pipe material that is deemed through design to be suitable for the installation site. Information that the drainage engineers should be aware of when specifying the portion of the municipal drain that is a pipe in the ministry right of way or under the highway.
- 6.3 Beginning November 1, 2008, the ministry is implementing new quality standards on pipe product manufacturers. By May 1, 2009 only accepted certified pipe products will be permitted for installation on ministry contracts. Information that the drainage engineers should be aware of so that the portion of the municipal drain that is a pipe in the ministry right of way or under the highway is an accepted certified pipe product.
- 6.4 MTO is currently working on creating a post installation inspection requirement for pipe sewers and culverts. Will keep LDC apprised of the progress and potential impacts on municipal drains when pipes are used under highways or in the right of way.
- 6.5 MTO Drainage Management Manual which was introduced in 1997 is slated for an update starting this year. It will be a four year project with the information published yearly as design guidelines. Once all guidelines are complete, they will be finalized into a new design manual. Will keep LDC apprised of the progress and potential impacts on municipal drains when pipes are used under highways or in the right of way.
- 6.6 In February 2008, new MTO Highway Drainage Design Standards were introduced. Information that the drainage engineers should be aware of so that the portion of the municipal drain that is a pipe in the ministry right of way or under the highway is designed in accordance with MTO requirements.
- 6.7 MTO provided information during a drainage engineers' conference regarding the outlet assessments applied to ministry portions of municipal drains. Is this study being referenced and used by the drainage engineers in the province? Looking for feedback.
- 6.8 MTO currently has a directive PHY B63 which outlines procedures for ministry staff to follow when dealing with municipal drains. It is in the process of being updated and will be introduced in 2009 as official policy. It reflects ministry organizational changes as

well as MMAH organizational changes. Information that the drainage engineers should be aware of to understand ministry involvement in the petition process.

- 6.9 Gravity Pipe Design Software following the new design process implemented in 2007 is in development at this time. A prototype is expected to be ready for testing at the end of November. The final version is expected to be ready for introduction by March 2009. Information that the drainage engineers should be aware of as an assistance tool to meet ministry requirements for that portion of the municipal drain that is a pipe in the ministry right of way or under the highway.
- 6.10 We are currently working at developing a database of information relative to the drainage infrastructure on ministry highways. The Drainage Infrastructure Information Management System (DIIMS) would provide information about any drainage element on the highway with respect to design, construction, inspection and maintenance. Information that would be helpful to the drainage engineers when designing that portion of the municipal drain in the ministry right of way or under the highway.
- 6.11 Directive B014, Drainage Management on Provincial Highways was implemented in December 2007. The main feature of the policy relevant to the drainage engineers regards locating municipal drains on the highway right of way. The new directive is available on the ministry's public website.
- 6.12 MTO has a study through the University of Waterloo to develop IDF curves based on climatic zones in the province. Useful for drainage engineers when deriving flow rates for municipal drain designs. Will keep LDC apprised of the progress of this project.
- 6.13 MTO will in 2009 begin a design assessment study on box culverts, similar to the study done for circular pipe culverts in 2007. Hydraulics, structural integrity, durability of different materials and life cycle costs will once again be the main themes of design in this study. Will keep LDC apprised of the progress of this project.
- 6.14 Since there is a great deal of information that may influence the design of or be a requirement for municipal drains in the highway right of way, the ministry is offering an information session for the drainage engineering community. The session would be approximately 2 ½ to 3 hours in length and the time and location to be determined at some future meeting. 1 or 2 drainage engineers to assist in the preparation of the seminar would help to make sure the information provided is relevant. Topics would cover what information documents are available, the relevance of each document to drainage engineers, what is a design requirement and what is design information only and how to locate the documents using the ministry's public website.

## **7.0 Liaison Report – Conservation Authorities Report**

Davin Heinbuck

### 7.1 Drains and Section 28 (Conservation Authorities Act)

DART Committee - Davin will continue with the committee as an alternate for CA staff. John Kuntze is the Land Drainage Committee representative and will provide an update. The 2<sup>nd</sup> DART meeting is scheduled for October 28<sup>th</sup> in Guelph.

### 7.2 Drainage BMP's

Davin Heinbuck has been asked by OMAFRA to sit on the review committee for the Drainage BMP. At this time, affiliation is as a representative with a Conservation Authority perspective. This membership may seek Conservation Ontario endorsement in the future.

### 7.3 Drain Improvement Request/New Drain Petition Supplement

The forms are available to Drainage Superintendents as a means to provide information on a project including; location, name and type of watercourse, proposed works and environmental features. The more detailed the information, the easier it is for the reviewing agency to expedite initial screening. These forms can be found at:

<http://www.omafra.gov.on.ca/english/landuse/facts/petition.htm>

## **8.0 Liaison Report – Ministry of Agriculture, Food and Rural Affairs**

Sid Vander Veen

### 8.1 General

-Jim Richardson is the new Director of the Environmental Management Branch in OMAFRA. He comes to OMAFRA from the Ministry of Environment.

-Jim Myslik has retired last March. He has been replaced by Andrew Jamieson, an engineering graduate of McGill University.

-The 2009 Drainage Superintendents Course will be held from March 2 to 6, 2009 in Guelph. Dates have not been set for other municipal drainage courses.

-In the past year Armtex has bought out Bruce Tile (Walkerton) and Ideal Plastics (Embros). Also, an American Manufacturer is now selling pipe in Ontario.

-Starting a project to eliminate the regulations that specify the forms under the Drainage Act and the Tile Drainage Act and replace them with Director specified forms.

### 8.2 Agricultural Drainage Infrastructure Program (ADIP)

-A letter initiating the ADIP review was sent out on October 9/08 requesting comments by November 21/08. It was sent to municipalities and to stakeholder organizations. It was not sent to individual engineering firms.

-The results of the review will be summarized and the document will be updated. A copy of the review summary and revised policy document will be sent to municipalities engaged in Drainage Act activities and to the involved organizations.

### 8.3 Drainage BMP (Best Management Practices)

-We are in the initial stages of developing a Drainage BMP. The purpose of the Drainage BMP is to help farmers and other rural land owners learn about cropland drainage.

-This book is intended as a primer on agricultural land drainage and, as such will cover the benefits, challenges, principles and management practices relevant to cropland sub-surface drainage systems and surface drains with a special regard to environmental sustainability.

-The primary audience is the farming community, but it should also be valuable to regulatory and environmental agency staff, municipal employees, drainage contractors, engineers, farm organizations, teachers and government agency staff.

-The target completion date for the Drainage BMP is February 2010.

-Members on the working group include: Don Lobb, Ken McCutcheon, Peter Darbyshire, Jim Myslik, John Fitzgibbon, Tom Hoggarth, Davin Heinbuck, Dave Richards, John Warbick, Harold Ruby, Greg Nancekevill, Wade Morrison and some OMAFRA representatives.

### 8.4 Endangered Species Act (ESA)

-MNR administers the Endangered Species Act:

[www.mnr.gov.on.ca/en/Business/Species](http://www.mnr.gov.on.ca/en/Business/Species).

-Act prohibits activities that threaten the lives and habitat of endangered species (inc.plants)

-An endangered species is any living being that is at risk of extinction or disappearance.

-Actions can still be authorized through a permitting process, but this could be onerous.

-Drain maintenance/repair activity can be permitted through an agreement process, provided the agreement is in place before June 30, 2010.

-Municipalities should work with MNR to identify drains that have endangered species and then enter into agreements for these drainage projects.

### 8.5 WRIP Rural Drainage Project

-Andrew Turvey and Colleen Fuss from our CIS Unit, in conjunction with MNR, are working on a pilot project to integrate tile drainage and constructed drains into a watershed model.

-Currently working on 3 watersheds, Holland River in the Lake Simcoe Region, Kerry's Creek in Huron County, and Oswego Creek in Haldimand County.

-A watershed model will be created which will determine the area drained by each of the aforementioned rivers and the outlets of the drains and tile. It will attempt to create an accurate picture of the drainage occurring within these watersheds.

-Completion of the project is expected to be mid-December, and will be followed with a report detailing the findings and results of the project.

#### 8.6 Drainage Website

-A public drainage website is being developed by MNR on behalf of OMAFRA.

-The public will be able to access the lot and concession layout, watercourses, municipal drains(including names and classifications), tile drainage, road and railway network, areas with potential for controlled drain, soils information, woodlands, orthophotography

-Bob Steiss (OMAFRA GIS) will be giving a live demonstration of the new website at the annual LICO/DSAO convention.

#### 8.7 Clean Water Act, 2006

-Act was passed on 2006 with the goal to establish measures that mitigate existing and prevent future significant drinking water threats.

-Will establish “intake protection zones” around water intakes. Any activities within the intake protection zone could be limited.

-Good potential that, as result of municipal drain and tile drainage flow pathways, the intake protection zones will increase, which could capture more farm land.

-OMAFRA is working to ensure that MOE understand rural drainage practises.

### **9.0 Liaison Report – Office of Open Learning, University of Guelph**

Pat Shaver

#### 9.1 Conference

-40<sup>th</sup> Anniversary slide show. Melanie has put together a four-minute slide show of some of the previous 40 years.

#### 9.2 Registrations

-As of 11 am Wednesday, 99 paid participants including exhibitors, plus two unpaid, and eight speakers.

-Registration break-down:

- Engineer/surveyor – 24
- Contractor – 1
- Technician/Technologist – 8
- Municipal Government – 31
- Prov./Fed. Government – 4
- Student – 1
- Other: Acting Drainage Referee, Lawyer

9.3 Exhibitors

- Five exhibitors this year: Atlantic Industries Ltd.  
Terrafix Geosynthetics Inc.  
Armtec  
Fisheries and Oceans Canada  
Maccaferri Canada

9.4 Registration Guidelines

Protocol for Speaker registration/payment

“If the Committee is agreeable, I would say that for this year, we let the speakers choose to register or not. For those inquiring, I would suggest they pay only if they are a practitioner or a regular attendee to the conference. We should discuss this at our next meeting (Oct 23) and decide on a policy for future conferences.”

9.5 Marketing

- E-Newsletters
- Website – I will continue to update the web site.
- Folders – Only two exhibitors registered prior to the print date.

9.6 Location for 41<sup>st</sup> Drainage Engineers Conference

- Continue with the Ramada

**10.0 Sub-Committee Report (DAWG)**

Mike DeVos

10.1 Pumped drains – Dave Balint DFO to deal with this issue

10.2 Funding

- Growing Forward – most of these funds are going into environmental farm plans
- DFO does not provide direct funding for fishery enhancements on drain work

10.3 Guidance Document – no progress

10.4 Changes in Drain Classifications

- Drain activity should not trigger a classification change

10.5 Approvals

- Contact Tom Hoggarth, DFO with issues with drain construction approval

**11.0 Next Meeting**

11.1 The next meeting of the LDC will be held on Thursday, January 22, 2009 at 10:00 a.m. at the Best Western Lamplighter Inn, London, Ontario.

11.2 The 2009 Drainage Engineers Conference (41<sup>st</sup>) will be held again at the Ramada Conference Centre in Guelph, Ontario on Friday October 30, 2009.

**12.0 Adjournment**

The meeting was adjourned at 4:45 p.m. Moved by Tom Pridham and seconded by John Kuntze.

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Tim Oliver, Chairman

Bill Dietrich, Secretary