Kenny Drain Stormwater Management OS-09-182-11-OS

Environmental Study – Update Report Volume 2 of 2 December 2011

Prepared for: City of Owen Sound 808 – 2<sup>nd</sup> Avenue East Owen Sound, ON N4K 2H4

Prepared by: GENIVAR Inc. 1450 1<sup>st</sup> Avenue West, Suite 101 Owen Sound, Ontario N4K 6W2

**Project No. OS-09-182-11-OS** 

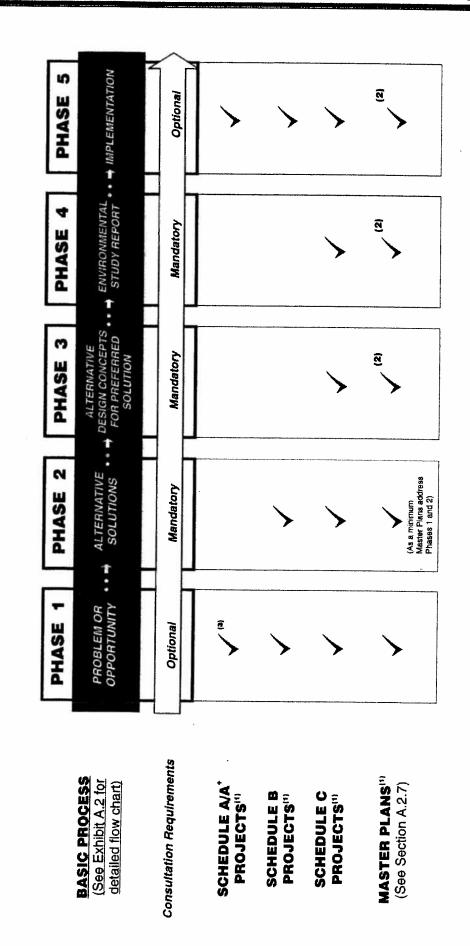
Appendix A

Class EA Process

## EXHIBIT A.1

# KEY FEATURES OF THE MUNICIPAL CLASS EA

This flow chart is to be read in conjunction with Part A of the Municipal Class EA NOTE:



### NOTES:

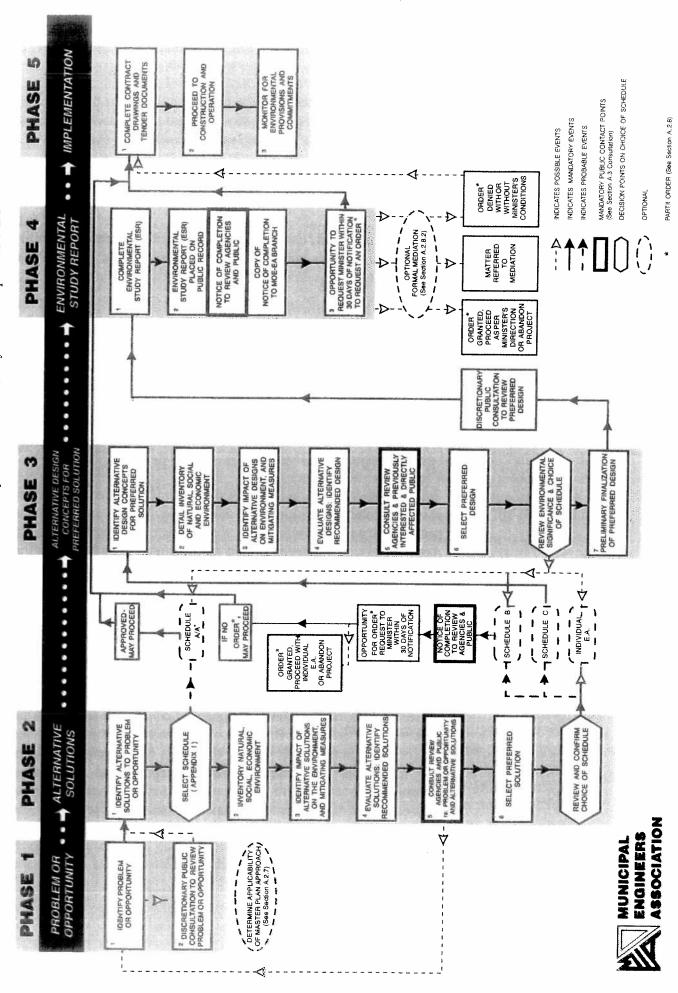
Actions required during relevant phase

- Schedule A, A, B and C projects and Master Plans can also be integrated with the requirements of the Planning Act (See Section A.2.9)
- (2) Complete Phases 3 and 4 for any Schedule C projects included in the Master Plan prior to implementation
- (3) For Schedule A\* projects, public to be advised. See Section A.1.2.2.

### EXHIBIT A.2

# **MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS**

This flow chart is to be read in conjunction with Part A of the Municipal Class EA NOTE:



December 2011

### Appendix B

B-1 Public Notices, Agency and Property Owners Letters



## SCHEDULE B FIRST MANDATORY PUBLIC CONTACT -- PHASE 2 MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL STUDY -- UPDATE REPORT KENNY DRAIN STORMWATER MANAGEMENT CITY OF OWEN SOUND

NOTICE OF STUDY COMMENCEMENT
AND
NOTICE OF PUBLIC MEETING
WEDNESDAY, FEBRUARY 16, 2011
6:00 P.M.
CITY COUNCIL CHAMBERS, CITY HALL
808 2<sup>rd</sup> AVENUE EAST, OWEN SOUND

## PUBLIC COMMENT INVITED

The City of Owen Sound is updating the previously completed Environmental Study Report (1993) for the above noted project. The Kenny Drain Waterway is the stormwater outlet for the City's east side including the hospital, 16<sup>th</sup> Street East commercial area, Industrial Park and areas northerly including Kiwanis Soccer Complex (as shown on the Key Plan below).

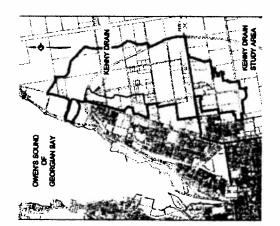
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The above project is being planned under Schedule B of the Municipal Class Environmental Assessment. As noted above, a public information centre will commence at 6:00pm followed by a formal presentation at approximately 7:00pm in conjunction with a meeting of the City's Operations Advisory Committee.

Public input and comments are invited for incorporation into the planning and preliminary design of this project, and will be received until March 18, 2011. Subject to comments received and receipt of necessary approvals and funding, the City of Owen Sound intends to proceed with the planning and preliminary design of this project to be completed in 2011.

An EA project file (including Draft Report and preliminary design) are available on the City's website, <u>www.owensound.ca</u> and at the office of the City's Manager of Engineering Services.

This notice was issued February 4, 2011 in the Sun Times and on the City of Owen Sound's website, www.owensound.ca.





### **ASSESSMENT** SCHEDULE B SECOND MANDATORY PUBLIC CONTACT - PHASE ENVIRONMENTAL STUDY - UPDATE REPORT KENNY DRAIN STORMWATER MANAGEMENT CITY OF OWEN SOUND MUNICIPAL CLASS ENVIRONMENTAL A NOTICE OF COMPLETION

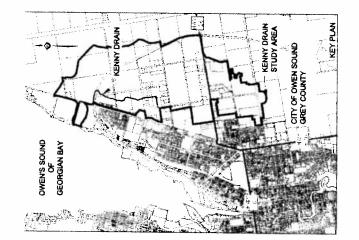
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Minister of the Environment 35 St. Clair Avenue 0th Floor oronto, ON M4V 1P5 This notice was issued November 1, 2011 in the Sun Times and available on the City of Owen Sound website, www.owensound.ca



Mr. Chris Webb, P. Eng., Manager of Engineering Services City of Owen Sound, Public Works Building 1900 – 20th Street East Owen Sound, ON

N4K 5N3 Tel: 519-376-1440

4 7 4

OS-09-182-11-OS

February 23, 2011

391949 Ontario Ltd. 1594 16<sup>th</sup> Street East R.R. #1 Owen Sound, ON N4K 5N3

Re:

Property Owner Notification: Roll #4259010006239400000.00

Environmental Study Update Kenny Drain Stormwater Works

### **Dear Property Owner:**

This letter is to serve as the First Mandatory Notice inviting input and comments for the above-noted environmental study update in accordance with the Municipal Class Environmental Assessment, Phase II, Schedule B undertaking.

This individual notice to the affected property owner is additional to the public notice that was published on February 4, 2011 in the Owen Sound Sun Times (copy attached).

Please note that a public meeting was held on February 16, 2011 as per the published public notice.

Your input and comments are invited as part of this public review process that must be received in writing within 30 days of this notice (by March 28, 2011), addressed to the undersigned.

Should you have any questions concerning this notice and undertaking, please contact George Prentice, P. Eng., Project Manager at 519-376-7612, ext. 215.

Yours truly,

GENIVAR Inc.

George L. Prentice, P. Eng. Senior Civil Engineer Transportation – Urban Infrastructure GLP/lem Encl.



## FIRST MANDATORY PUBLIC CONTACT – PHASE 2 MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL STUDY – UPDATE REPORT KENNY DRAIN STORMWATER MANAGEMENT CITY OF OWEN SOUND SCHEDULE B

NOTICE OF STUDY COMMENCEMENT NOTICE OF PUBLIC MEETING WEDNESDAY, FEBRUARY 16, 2011 6:00 P.M.

CITY COUNCIL CHAMBERS, CITY HALL 808 2<sup>rd</sup> AVENUE EAST, OWEN SOUND

## PUBLIC COMMENT INVITED

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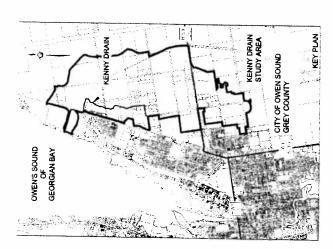
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This notice was issued February 4, 2011 in the Sun Times and on the City of Owen Sound's website, www.owensound.ca.



Mr. Chris Webb, P. Eng., Manager of Engineering Services City of Owen Sound, Public Works Building 1900 – 20<sup>th</sup> Street East Owen Sound, ON

N4K 5N3

Ph: 519-376-4530 ext 3300



OS-09-182-11-OS

February 23, 2011

Tenneco 1800 17<sup>th</sup> Street East Owen Sound, ON N4K 5Z9

Re:

Property Owner Notification: Roll #4259010006229020000.00

Environmental Study Update Kenny Drain Stormwater Works

### Dear Property Owner:

This letter is to serve as the First Mandatory Notice inviting input and comments for the above-noted environmental study update in accordance with the Municipal Class Environmental Assessment, Phase II, Schedule B undertaking.

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Yours truly,

GENIVATA Inc.

George L. Prentice, Pl Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem Encl.

### **KENNY DRAIN PROPERTY OWNERS LIST**

Roll #	Owner 1	Owner 2	Mailing Address 1	Mailing Address 3	City/Prov/Country	Postal Code
4259010006229020000.00	TENNECO		Contraction	P O BOX 800 MAIN	OWEN SOUND ON	N4K 5Z9
4259010006238000000.00	PITSBURG PLATE GLASS (PPG)	C/O TAX ADMINISTRATION		834 CALEDONIA ROAD	NORTH YORK ON	M6B 3X9
4259010006239000000.00	OWEN SOUND CITY		C/O CITY CLERK	808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010006239150000.00	KRUEGER CUSTOM STEEL & MACHINING LTD		C/O RONALD KRUEGER	PO BOX 187 MAIN	OWEN SOUND ON	N4K 5P3
4259010006239200000.00	PRAXAIR CANADA INC			1 CITY CENTRE DR SUITE 1200	MISSISSAUGA ON	L5B 1M2
4259010006239220000.00	2002178 ONTARIO INC			1507 9TH AVE E	OWEN SOUND ON	N4K 3E9
4259010006239240000.00	ANDPET REALTY LIMITED TRUSTEE			1545 16TH STE RR 1	OWEN SOUND ON	N4K 5N3
4259010006239250000.00	J & D FLANAGAN SALES & DISTRIBUTION LTD			PO BOX 367 MAIN	OWEN SOUND ON	N4K 5P5
4259010006239260000.00	IMPERIAL OIL LIMITED			PO BOX 422 DON MILLS	NORTH YORK ON	M3C 2T2
4259010006239270000.00	IMPERIAL OIL LIMITED			PO BOX 422 DON MILLS	NORTH YORK ON	M3C 2T2
4259010006239300000.00	LOTI HOLDINGS INC		1700 20TH ST E	PO BOX 803 MAIN	OWEN SOUND ON	N4K 5W9
4259010006239350000.00	BRUCE J BEATTIE APPLIANCES LTD			1104 7TH ST E	OWEN SOUND ON	N4K 6K5
4259010006239400000.00	391949 ONTARIO LTD			1594 16TH ST E RR 1	OWEN SOUND ON	N4K 5N3
4259010006239500000.00	848295 ONTARIO LTD		C/O TERRY PRIEBE 207 BALMY BEACH RD	RR 2 STN MAIN	OWEN SOUND ON	N4K 5N4
4259010006239510000.00	INTERCONTINENTAL GRAPHITE INC		C/O HAROLD ELDERS PRES	PO BOX 730	MARKDALE ON	NOC 1HO
4259010006239540000.00	ELDERS HAROLD GEORGE			PO BOX 730	MARKDALE ON	NOC 1HO
4259010006338000000.00	OWEN SOUND CITY		C/O CITY CLERK	808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010006338060000.00	429639 ONTARIO LIMITED			PO BOX 312 MAIN	OWEN SOUND ON	N4K 5P5
4259010006338500000.00	UNION GAS LIMITED		PROPERTY TAX DEPARTMENT UNION GAS LIMITED	50 KEIL DR N	CHATHAM ON	N7L 3V9
4259010006340000000.00	GREYFAIR HOLDINGS INC			PO BOX 741 MAIN	OWEN SOUND ON	N4K 5W9
4259010005101000000.00	PREMARK CANADA INC			PO BOX 278 MAIN	OWEN SOUND ON	N4K 5P5
4259010005101980000.00	OWEN SOUND CITY	% CITY CLERK		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010005103000000.00	1589240 ONTARIO INC			PO BOX 325 MAIN	OWEN SOUND ON	N4K 5P5
4259010005104000000.00	CONSERVATION AUTHORITY GREY AND SAUBLE	C/O CITY OF OWEN SOUND TREAS CIT ALL		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010005106000000.00	CONSERVATION AUTHORITY GREY AND SAUBLE	C/O CITY OF OWEN SOUND TREAS CITY HALL		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010006248100000.00	OWEN SOUND CITY	C/O CITY CLERK		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010006342000000.00	OWEN SOUND CITY	C/O CITY CLERK		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010006348010000.00	MOYER DAVID FREDERICK			901 3RD AVE E	OWEN SOUND ON	N4K 2K7
4259010006349000000.00	OWEN SOUND CITY	C/O CITY CLERK		808 2ND AVE E	OWEN SOUND ON	N4K 2H4
4259010007388000000.00	GREY COUNTY	C/O COUNTY CLERK AVENUE		595 9TH AVE E	OWEN SOUND ON	N4K 3E3
4259010006225020000.00	SWIFTY MUFFLER LIMITED	C/O DELBERT SEAMAN		625 4TH AVE W	OWEN SOUND ON	N4K 4V3
4259010006239100000.00	854377 ONTARIO LIMITED	C/O BERT WAKEFORD	1580 20TH STREET E	BOX 368 MAIN	OWEN SOUND ON	N4K 5P5
4259010006255000000.00	J.D. MCARTHUR HOLDINGS INC.			P O BOX 247 MAIN	OWEN SOUND ON	N4K 5P3
4259010006268000000.00	R.K. RADBOURNE LTD			PO BOX 485 MAIN	OWEN SOUND ON	N4K 5P7
4259010006268100000.00	R.K. RADBOURNE LTD			PO BOX 485 MAIN	OWEN SOUND ON	N4K 5P7



## SCHEDULE B FIRST MANDATORY PUBLIC CONTACT – PHASE 2 MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL STUDY – UPDATE REPORT KENNY DRAIN STORMWATER MANAGEMENT CITY OF OWEN SOUND

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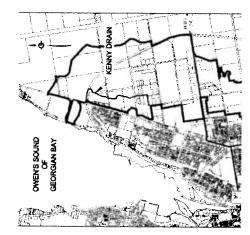
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OS-09-182-11-OS

October 28, 2011

Mr. Kevin Hawthorne, Area Supervisor Ministry of Natural Resources 1450 - 7th Avenue East OWEN SOUND, ON N4K 2Z1

Re:

Kenny Drain Stormwater Management Environmental Study – Update Report City of Owen Sound

### Dear Mr. Hawthorne:

Please find enclosed the Second Mandatory Public Contact Notice for the above-noted project as a Schedule B (Screening) project under the Municipal Class Environmental Assessment process, as an update to the previously completed ESR of 1993.

Please be advised that this same notice is being circulated to all government/agencies for information and comments.

Please review the attached notice and should you have any questions or concerns, please do not hesitate to contact myself at our Owen Sound office.

Yours truly,

GENIVAR Inc.

George L. Prentice, P. Eng. Senior Civil Engineer Transportation – Urban Infrastructure GLP/lem Encl.

cc Mr. Chris Webb, P. Eng., Manager of Engineering Services, City of Owen Sound



## SCHEDULE B SECOND MANDATORY PUBLIC CONTACT - PHASE 2 ENVIRONMENTAL STUDY - UPDATE REPORT KENNY DRAIN STORMWATER MANAGEMENT CITY OF OWEN SOUND MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT NOTICE OF COMPLETION

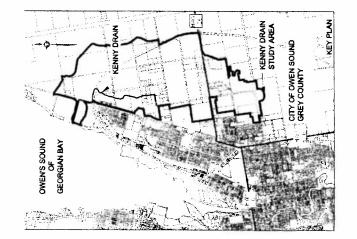
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Minister of the Environment 135 St. Clair Avenue 10<sup>th</sup> Floor Toronto, ON M4V 1P5 This notice was issued November 1, 2011 in the Sun Times and available on the City of Owen Sound website, www.owensound.ca.



Mr. Chris Webb, P. Eng., Manager of Engineering Services City of Owen Sound, Public Works Building 1900 – 20<sup>th</sup> Street East Owen Sound, ON NAK 5N3
Tel: 519-376-1440

OS-09-182-11-OS

October 28, 2011

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Property Owner Notification: Roll #4259010006229020000.00

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Yours truly,

GENIVAR Inc.

George L. Prentice, P. Eng. Senior Civil Engineer Transportation – Urban Infrastructure GLP/lem Encl.



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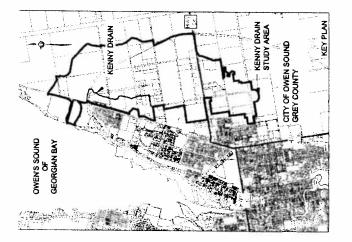
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Mr. Chris Webb, P. Eng., Manager of Engineering Services City of Owen Sound, Public Works Building 1900 – 20th Street East

Owen Sound, ON N4K 5N3

519-376-1440  OS-09-182-11-OS

----, 2011

Mr. Ron Griffiths
Ministry of the Environment
Environmental Assessment
Evaluation Issues Management Coordinator
733 Exeter Road
LONDON, ON
N6E 1L3

Re:

Kenny Drain Stormwater Management Environmental Study – Update Report

City of Owen Sound

Dear Mr. Griffiths:

Please find enclosed the Second Mandatory Public Contact Notice for the above-noted project as a Schedule B (Screening) project under the Municipal Class Environmental Assessment process, as an update to the previously completed ESR of 1993.

Please be advised that this same notice is being circulated to all government/agencies and adjacent property owners for information and comments.

Please review the attached notice and should you have any questions or concerns, please do not hesitate to contact myself at our Owen Sound office.

Yours truly,

GENIVAR Inc.

George L. Prentice, P. Eng. Senior Civil Engineer Transportation – Urban Infrastructure GLP/lem Encl.

cc Mr. Chris Webb, P. Eng., Manager of Engineering Services, City of Owen Sound

### **APPENDIX B**

B-2 Agency and Public Comments and Reply Correspondence

### **George Prentice**

From:

George Prentice

Sent:

January 24, 2011 12:31 PM 'Armstrong, Bill (ENE)'

To: Cc:

'Potter, Sean'

Subject:

RE: Kenny Drain EA Update

Hi Bill:

Thank you for your email.

Yes, it is an update of the 1993 EA completed by Henderson Paddon and Associates (HPA) Ltd. That requires updating due the 5 year approval time period (now 10 years), still outdated.

As you likely know, HPA is now Genivar and we are completing this update study for the Owen sound.

We are working on a draft report that we can fwd. to you now if

you wish or after our public meeting and comments/input received. A project file shall be maintained through the process.

Best Regards, George

From: Armstrong, Bill (ENE) [mailto:Bill.Armstrong@ontario.ca]

Sent: January 21, 2011 1:18 PM

To: George Prentice

Subject: Kenny Drain EA Update

Hi George....happy 2011..... is this the update report for the Kenny Drain?

http://www.owensound.ca/operations/servicing\_study\_vol2.php

### Bill Armstrong

W. Armstrong M.E.S., RPP
Regional Environmental Planner
Southwestern Region
Ministry of the Environment
733 Exeter Road
London, On
519-873-5013
519-873-5020(fax)

### email: bill.armstrong@ontario.ca



### **George Prentice**

From:

George Prentice

Sent:

January 24, 2011 12:37 PM

To:

George Prentice; 'Armstrong, Bill (ENE)'

Cc:

'Potter, Sean'

Subject:

RE: Kenny Drain EA Update

Bill;

PS to my previous email;

Please note a letter a letter was send to Ron Griffiths and Rick Chappell, last week as part of the agencies consultation comments.

George

From: George Prentice

Sent: January 24, 2011 12:31 PM

To: 'Armstrong, Bill (ENE)'

Cc: 'Potter, Sean'

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Subject: Kenny Drain EA Update

Hi George....happy 2011..... is this the update report for the Kenny Drain?

http://www.owensound.ca/operations/servicing\_study\_vol2.php

### Bill Armstrong

W. Armstrong M.E.S., RPP
Regional Environmental Planner
Southwestern Region
Ministry of the Environment
733 Exeter Road
London, On
519-873-5013
519-873-5020(fax)

email: <u>bill.armstrong@ontario.ca</u>



### **George Prentice**

To: 'Tim Lanthier'

Cc: Dick Hibma (hibmar@sympatico.ca); Peter Lemon(plemon@e-owensound.com); Webb,

Chris; Coulter, Pam; Kyle Simmons

Subject: RE: GSCA Comments - Kenny Drain Stormwater Management Environmental Study

Tim; Thank you for your comments, that are noted to be reviewed by myself and Chris Webb as part of the agency review of the EA process.

A reply shall be prepared and send to you in the near future.

I may suggest that a meeting with yourself and other Authority staff, may be necessary in order to address the issues raised and incorporated in the final report.

Regards, George



George L. Prentice, P. Eng.
GENIVAR | Constructive People
945 Third Avenue East, Suite 212, Owen Sound, ON N4K 2K8
T 519-376-7612 #215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

From: Tim Lanthier [mailto:t.lanthier@greysauble.on.ca]

Sent: February 11, 2011 1:37 PM

To: George Prentice

Cc: Dick Hibma (hibmar@sympatico.ca); Peter Lemon(plemon@e-owensound.com); Webb, Chris; Coulter, Pam

Subject: GSCA Comments - Kenny Drain Stormwater Management EnvironmentalStudy

Mr. Prentice,

Please accept these preliminary comments from the Grey Sauble Conservation Authority for the above noted report.

Regards,

Tim Lanthler
Environmental Planning Technician
Grey Sauble Conservation Authority
o: 519-376-3076 ext. 235
fr 519-371-0437



### 237897 Inglis Falls Road, R.R.#4, Owen Sound, ON N4K 5N6 Telephone 519.376.3076 Fax 519.371.0437 Email admin@greysauble.on.ca www.greysauble.on.ca

February 10, 2011

Mr. George Prentice Genivar Consultants LP 945 Third Avenue East, Suite 212 Owen Sound, ON N4K 2K8

Dear Mr. Prentice:

RE: Kenny Drain Stormwater Management Environmental Study

City of Owen Sound Our File: P9532

The Grey Sauble Conservation Authority (GSCA) has reviewed the above noted study in accordance with our mandate and policies for natural hazards, for natural heritage issues as per our Memorandum of Agreement with your municipality, under our Level II agreement with Fisheries and Oceans Canada, and relative to our policies for the implementation of Ontario Regulation 151/06. We offer the following preliminary comments.

1. The second paragraph in Section 2.0 refers to "Telford Creek". This creek is often referred to as "Telfer Creek", however, properly, it is an unnamed tributary of Bothwell be Made. Creek. Telfer Creek refers to a separate distinct branch of this system.

- The third paragraph in Section 2.0 states that the proposed works are planned to "accommodate increased run-off as future development occurs". It should be noted that site level controls should still be implemented where practical.
- "Figure 1" in the report outlines the watershed area draining though the Kenny Drain system. This delineation is inaccurate in certain areas and is inconsistent with "Figure 2" and "Figure 5"
  - a. The portion of the watershed identified as "Catchment 166" in "Figure 2" continues to drain through the original Kenny Drain outlet, not through the reconstructed channel as shown throughout this report.
  - b. The Villarboit property (Louis' Steakhouse) is included in the watershed area in "Figure 1" and excluded in "Figure 2" and "Figure 5". We don't believe that either of these scenarios is correct as previous site visits indicate that a portion of this property drains to the Kenny Drain system and a portion drains to the Bothwell's Creek system. Additionally, the adjacent railway spur appears to drain to the Bothwell's Creek system.
- 4. The fourth paragraph of 'Section 4.0' states that meetings were held with the GSCA

Lot 3





Mr. George Prentice Kenny Drain Stormwater Management Environmental Study City of Owen Sound Lebruary 10, 2011 Our File No. P9532

regarding this undertaking. We would like to clarify that <u>one</u> very preliminary meeting was held with the GSCA prior to this undertaking. No further comment has been solicited from our office until receipt of this report.

- 5. 'Table 3' in the report indicates that regional storm flows are exceeded by the 100-year event at nodes 3, 4, 5, 6, 8, 9 & 10, and by the 25-year event at nodes 5, 6 & 8. 'Table 6' indicates the same at nodes 3 & 4. The report should provide some discussion on these results and the reasons for them. What are the implications of these results?
- 6. We note from 'Section 6.2' that the proposed management system is being developed around the MIDUSS modelling as it is more conservative with regards to high-flows. We request clarification on whether this will over control and affect base flow conditions.
- 7. 'Section 6.3', 'Point 5' states that channelization is proposed on 16<sup>th</sup> Avenue East, downstream of 20<sup>th</sup> Street East, and refers to 'Table 6', 'Point 7'. 'Point 7' on 'Table 6' speaks to a new channel between 17<sup>th</sup> Street East and 20<sup>th</sup> Street East, and does not mention the downstream portion. Please clarify.
  - 'Section 6.3', 'Point 16' states that a culvert is proposed on 20<sup>th</sup> Avenue East. Where on 20<sup>th</sup> Avenue East is this proposed?
  - 9. 'Section 7.0' discusses flood plain mapping. The 1:100-year storm has been used for determination of the floodplain. Please note that the regulatory storm event for this watershed is the regional storm event unless the 1:100-year event is the greater of the two. Please clarify. If the 1:100-year event is greater than the regulatory (Timmins) event, please document the reasons.
  - 10. We note several instances of warnings occurring within the HEC-RAS readout for the flood plain modelling. Is this indicative of an error in the modelling numbers or is this a standard occurrence?
  - 11. The second paragraph of 'Section 7.0' does not accurately represent any comments made by the GSCA. We do not know where this information was obtained. Our verbal comments were that a culvert could not be reduced under the rail line making the existing flood conditions worse.
  - 12. The fourth paragraph in 'Section 8.0' states that "the floodplain mapping reported and shown on Figure 6 is based on the 1:100 year storm event flows and can be utilized to establish setback requirements for future development and land use of adjacent lands within the Kenny Drain Watershed". We do not accept this statement for the following reasons:

Mr. George Prentice Kenny Drain Stormwater Management Environmental Study City of Owen Sound February 10, 2011 Our File No. P9532

- a. The regulatory flood for this system is the regional event.
- b. This event should be reviewed assuming existing downstream backwater with no upstream controls.
- c. Development setbacks from stream systems include other components beyond flood plain mapping (ie: erosion setbacks, natural heritage issues, water quality considerations, etc.)
- 13. A note should be included in paragraph five of 'Section 8.0' between the completion of final detailed design and construction implementation that states that a permit shall be acquired from the GSCA.
- 14. Paragraph six of 'Section 8' again states that the 100-year flood plain mapping can be used for land use development approvals. This statement may need to be amended based on the worst-case flood scenario as noted above.
- 15. We would like to note that the Kenny Drain is fish habitat and any changes to this system will require approval from Fisheries and Oceans Canada.
- 16. Additionally, any changes to this system will require a permit from the GSCA under Ontario Regulation 151/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

If any questions should arise, please contact our office.

Regards,

Tim Lanthier

**Environmental Planning Technician** 

Cc via email: Mr. Dick Hibma, Authority Director, City of Owen Sound

Mr. Peter Lemon, Authority Director, City of Owen Sound Mr. Chris Webb, Engineering Services, City of Owen Sound

Ms. Pam Coulter, Director of Community Services, City of Owen Sound

PUBLIC CONSULTATION MEETING WEDNESDAY, FEBRUARY 16, 2011

COUNCIL CHAMBERS - CITY HALL

## KENNY DRAIN STORMWATER MANAGEMENT ENVIRONMENTAL STUDY – DRAFT REPORT

## REGISTRATION

NAME	TELEPHONE #	EMAIL ADDRESS
(PLEASE PRINT)		
Lan Chamberlain	519-371-4746	have 47 @ gmail , com
		0 .0

### George Prentice

From:

George Prentice

Sent:

February 24, 2011 11:32 AM 'davidc@metisnation.org'

To: Cc:

'Potter, Sean'

Subject:

RE: re Kenny Drain - Environmental Assessment - update study

Attachments:

MY SCAN\_20110125\_0019.PDF; MY SCAN\_20110125\_0014.PDF; MY SCAN\_20110125\_

0015.PDF; MY SCAN\_20110125\_0016.PDF; MY SCAN\_20110125\_0017.PDF; MY SCAN\_

20110125\_0018.PDF

Dave, Attached plans. Please confirm receipt.

Thanks, George

From: George Prentice

Sent: February 24, 2011 11:31 AM Fo: 'davidc@metisnation.org'

Cc: 'Potter, Sean'

Subject: re Kenny Drain - Environmental Assessment - update study

Hi David, further to our phone conversation and Malcolm Dixon's enquiry call to the City of Owen Sound for more information concerning the above, please find attached the draft study report that you can send to Malcolm for his review.

Also, I attach the public notice ad of Feb. 4/11, published in the Sun Times and the revised page 4.1 of the report. The plans shall follow in a separate email.

Please call should you or Malcolm have any questions.

Regards, George

### **GENTVAR**

### George L. Prentice, P. Eng.

GENIVAR | Constructive People

345 Third Avenue East, Suite 212, Owen Sound, ON N4K 2K8

T 519-376-7612 #215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

### Kevin DeLeebeeck

From: Potter, Sean [spotter@owensound.ca]

Sent: Wednesday, March 02, 2011 11:11 AM

Fo: Kevin DeLeebeeck
Cc: Webb, Chris

**Subject:** Métis Organization of Ontario (Kenny Drain ESR)

Kevin,

Please have the draft version of the Kenny drain ESR update delivered to Mr. Malcolm Dixon at the Métis Organization of Ontario, Owen Sound Branch.

380 9<sup>th</sup> Street East Owen Sound, Ontario V4K1P1

Thank you.

Fean Potter
Engineering Technologist
City of Owen Sound
Engineering Services

hone: 519-376-4530 ext 3301

Fax: 519-372-1209



### **TRANSMITTAL**

letis Organization of Ontario 30 9 <sup>th</sup> Street East wen Sound, ON 4K 1P1		Date: Re:	March 3, 2010 Kenny Drain Sto	ormwater Management
r. Malcolm Dixon		Project No.:	OS-09-182-11-0	OS .
<b>ing:</b> ed Drawings				Sent Via: Courier Mail
gs e Orders cations s pondence es Separate Cover	For Review 8 Reviewed Reviewed As Return	Comment Noted		<ul><li>☑ Hand Delivered</li><li>☐ Fax/Original By Mail</li><li>☐ To be Picked Up</li></ul>
	Description			Purpose
Please find attached the abov	e noted report as r	equested. Volu	ume 2 (Appendic	es) is available upon request.
Inc.  A Uu  Je Prentice, P. Eng.	Copy:			If material received is not as liste Please notify us immediately
	r. Malcolm Dixon  ing: ed Prawings gs e Orders cations s pondence es Separate Cover  Kenny Drain Stormwater Man  Please find attached the above  Inc.	## Inc.  ##	AK 1P1  r. Malcolm Dixon  Project No.:  Ing:    For Approval	AK 1P1  r. Malcolm Dixon  Project No.: OS-09-182-11-0  Ing:

### MINISTRY OF THE ENVIRONMENT

### SOUTHWESTERN REGION

733 Exeter Road London, Ontario, N6E 1L3 519-873-5013/FAX 873-5020

### FAX COVER SHEET

DATE:

FROM:

March 10, 2011

NO. of PAGES:

(including cover)

Bill Armstrong

TO:

George Prentice

Genivar

FAX NO: (519) 376-8008

MESSAGE:

Re. Kenny Drain Environmental Stydy Update

IF YOU DO NOT RECRIVE THE SPECIFIED NUMBER OF PAGES, OR THE COPY IS ILLEGIBLE, PLEASE CONTACT THE RECEPTIONIST AT: 873-5000

### 519-873-5020

### Ministry of the Environment

733 Exeter Road 733, rue London ON NSE 1L3 London

Tel': 519 873-5000 Fax: 519 873-5020 Ministère de l'Environnement

733, rue Exeter London ON NSE 1L3 Tél.: 519 873-5000 Téléc.: 519 873-5020



### BY FAX ONLY

March 10, 2010

George Prentice, P.Eng Genivar Suite 212 945 Third Avenue East Owen Sound, Ontario N4K 2K8

Dear Mr. Prentice:

RE: Update of Kenny Drain Stormwater Management, Environmental Study, November 2010

We appreciate receiving and being asked to offer comment on the draft Kenny Drain Environmental Study update report. The report is primarily an engineering assessment of peak flows based on hydrologic modeling. Table 6 lists stormwater management measures which could provide relief from flooding and the control of crosion and sedimentation.

The draft report lacks a discussion of the aquatic environmental conditions of Kenny Drain or the shoreline area where the drain discharges to Owen Sound bay. Some information in regard to these two "environmental" interests would provide a basis for deciding on the level of water quality control which is needed to protect local water resources. The Environmental Study report should then be able to reach a more comprehensive conclusion on the adequacy of the proposed works for environmental protection as well as flood relief and erosion/sedimentation issues.

To the extent to which the measures being contemplated may affect the nature and quality of stormwater discharging to Owen Sound bay, the Saugeen Ojibway Nation may have a interest in this project. We recommend you initiate discussion with the Saugeen Ojibway Nation. For this purpose we take the position that the mailing of notices etc is not sufficient by itself and direct methods should be initiated.

If questions arise or if clarification is needed please contact the undersigned at (519) 873-5013 or via email at <a href="mailto:hill.armstrong@outario.ca">hill.armstrong@outario.ca</a>.

Yours Tuly,

W. Armstrong, M.E.S, RPP Regional Environmental Planner Southwestern Region

cc. S. Abernethy
I. Mitchell

DECEIVED

### SCOTT C. VINING

Barrister & Solicitor B.A., J.D.

249 10th Street West Owen Sound, Ontario N4K 3R2 Phone: (519) 371-6210

Fax: (519) 371-6238

Email: vininglaw@bellnet.ca

May 13, 2011

Mr. George L. Prentice, P. Eng.
Senior Civil Engineer
Transportation – Urban Infrastructure
Genivar
212-945 Third Avenue East
Owen Sound, Ontario
N4K 2K8

Dear Mr. Prentice:

Re: R.K. Radbourne Building Ltd.

Environmental Study Update Kenny Drain Stormwater Works Roll #42-59-010-006-26800-0000 Roll #42-59-010-006-26810-0000

I act on behalf of R.K. Radbourne Building Ltd. who is the owner of the above noted properties.

My client has received and reviewed the First Mandatory Notice and Schedule B.

Mr. Radbourne intends to maintain his legal status with respect to the subject properties and requests to receive copies of all documentation pertaining to this project.

Yours very truly,

"Scott C. Vining" SCOTT C. VINING PERINW

SCV:rw

c.c. – R.K. Radbourne Building Ltd. Chris Webb, City Engineer



OS-09-182-11-OS

May 18, 2011

Mr. Scott Vining Barrister & Solicitor 249 10<sup>th</sup> Street West Owen Sound, ON N4K 3R2

Re:

Kenny Drain Environmental Study Update

City of Owen Sound

Dear Mr. Vining:

This is to acknowledge receipt of your letter of May 13, 2011 on behalf of R. K. Radbourne Building Ltd., owner of one of the adjoining properties who received the First Mandatory Notice.

In accordance with the notice, comments and replies that were to be received by March 28, 2011, this date precedes the date of your letter that we received on May 17, 2011. However, we will note your letter in the project file and a copy of the final Study Report shall be sent to Mr. Radbourne.

Should you have any questions, please call me at your convenience.

Yours truly,

GENIVAR Inc.

George L. Prentice, P. Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem

CC

R. K. Radbourne Building Ltd.

Mr. Chris Webb, P. Eng., Manager of Engineering Services, City of Owen Sound

From: KIM LEFEBVRE [mailto:kmlefebvre01@gmail.com]

**Sent:** March 15, 2011 1:19 PM

To: Webb, Chris

Cc: george.prentice@genivar.com

Subject: the Kenny Drain SWM, a Municipal Drain?

March 15, 2011

Kim Lefebvre

#2501 - 3rd Avenue East

Owen Sound, Ontario N4K 2M5

BY ELECTRONIC TRANSMISSION

Chris Webb, P.Eng., Manager of Engineering Services

City of Owen Sound

**Public Works Building** 

#1900 - 20th Street East

Owen Sound, Ontario N4K 5N3

### RE: Kenny Drain Stormwater Management Environmental Study Update Report

Dear Mr. Webb,

The name "Kenny Drain" would suggest that this watercourse may have status as a Municipal Drain constructed at some time under the *Drainage Act*. If so, will the project adhere to the provisions of the *Drainage Act*, R.S.O. 1990, Ch. 17, as amended October 25, 2010?

Respectfully,

Kim Lefebvre

cc: George Prentice, P.Eng., Genivar

From:

Webb, Chris [cwebb@owensound.ca]

Sent:

March 17, 2011 10:31 AM

To: Cc: George Prentice Potter, Sean

Subject:

FW: the Kenny Drain SWM, a Municipal Drain?

George.

For the project file.

Chris

From: KIM LEFEBVRE [mailto:kmlefebvre01@qmail.com]

**Sent:** March 16, 2011 12:02 PM

To: Webb, Chris

Subject: Re: the Kenny Drain SWM, a Municipal Drain?

Hello Chris,

Thank you for your quick reply in answer to my question.

Regards, Kim

On Tue, Mar 15, 2011 at 1:52 PM, Webb, Chris < <a href="mailto:cwebb@owensound.ca">cwebb@owensound.ca</a>> wrote: Kim.

I had wondered about that as well in the past but the Kenny Drain is not a Municipal Drain as contemplated under the Drainage Act. It is an integrated system of constructed works such as ditches and protected/armoured channels, stormwater management facilities together with existing natural water courses. Under the Drainage Act, the municipality, among other things, has the ability to assess and recover costs of a municipal drain from existing benefitting property owners. This is not the case for the Kenny Drain. The City will be recovering the cost of proposed works from future developers and/or through general taxation or eligible grant funding, as the case may be. This has been the case for this system to date and no change is contemplated or proposed.

The name has been used historically and as a matter of convenience to identify a stormwater drainage system (and catchment area) that is integrated upstream with the City's storm sewer system. I believe the name "Kenny" bears homage to the former Kenny Family Farm over which a significant portion of the "drain" is located.

I suppose a different word other than "drain" could be used but, as noted, the term has been used as a matter of convenience.

I hope this clarifies the matter.

Regards.

Chris Webb, P.Eng.

Vanager of Engineering Services

City of Owen Sound



# COURIER

# **TRANSMITTAL**

10:	Georgian Bay Metis Cour 355 Cranston Crescent Midland, ON L4R 4K6	cil	Date: Re:	March 25, 2011 Kenny Drain Sto	ormwater Management
Attn:	Mr. Alden Barty, Consultat Coordinator	ion Assessment	Project No.:	OS-09-182-11-0	OS
We Are Ser	nding:	Transmitted:			Sent Via:
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☐ Shop	Drawings		nformation		☐ Mail
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	November, 2010				
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emarks: ENIVAR			requested. Volui Mr. Sean Potter, C		s) is available upon request.
1	Mille	-			
r:	. • • • •				
Georg	e Prentice, P. Eng.				If material received is not as listed Please notify us immediately
WEN SOL	JND 945 Third Avenue Eas	st. Suite 212 Owen Sc	und Ontario NAK	2K9 Tel. (510)	376-7612 Fax: (519) 376-8008

From:

Wagner, Teresa (MTC) [Teresa.Wagner@ontario.ca]

Sent:

April 12, 2011 6:39 PM

To:

George Prentice

Subject: Attachments: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment BuiltHeritage-CHL-Checklist-MTC-Nov2010.pdf; Archaeological Potential Checklist MTC

February 2011.pdf

Project: Location: Kenny Drain Stormwater Management City of Owen Sound, County of Grey

MTC File:

42EA010

Good evening, George.

Thank you for sending the PIC Displays for the above-mentioned project.

As part of the Environmental Assessment Act, the Ministry of Tourism and Culture (MTC) has an interest in the conservation of cultural heritage resources including archaeological resources, built heritage resources, and cultural heritage landscapes.

#### Archaeology:

The subject property of this EA project is considered to have archaeological potential based on provincial archaeological criteria for the following reasons:

within 300 meters of a primary water sources (lakeshore, river, large creek)

An archaeological assessment by an archaeologist licensed under the Ontario Heritage Act Is recommended for this project including temporary roads/detours or work areas prior to any ground disturbance. The assessment reports must conform to the Ministry of Tourism and Culture's Standards and Guidelines for Consultant Archaeologists (2011). The licensed archaeologist will forward all completed archaeological assessment reports to the Ministry of Tourism and Culture for review by an Archaeology Review Officer.

#### **Built Heritage and Cultural Heritage Landscape:**

In addition, in order to determine the existing cultural conditions, known and potential built heritage resources and cultural heritage landscapes should be identified. It is suggested that you contact the City Clerk to determine if there are any properties that have been listed or designated under the *Ontario Heritage Act*. I have also attached our Ministry's standard checklist for identifying potential heritage resources within the study area. When completing this checklist, you should contact the municipal heritage committee or any relevant community heritage organizations.

Please return the completed checklist to me, with any additional relevant information, including photographs and site plans, so that MTC could further advise on any cultural heritage assessment work that will be recommended.

Please do not hesitate to contact me if you have any questions.

Regards,

Feresa B. Wagner

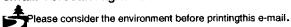
VHeritage Planner

Vinistry of Tourism andCulture

Programs&Services Branch 401 Bay St. Suite 1700 Toronto, Ontario M7A 0A7

Tel.: 416-314-7147 Fax: 416-212-1802

email: Teresa.Wagner@ontario.ca



From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: April 12, 2011 2:48 PM To: Wagner, Teresa (MTC) Cc: Webb, Chris; Potter, Sean

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

Hello Teresa;

Thank you for your email.

I have attached our power point presentation at the public meeting.

Should you have any questions, please email them to me.

Regards, George



George L. Prentice, P. Eng.
GENIVAR | Constructive People
945 Third Avenue East, Suite 212, Owen Sound, ON N4K 2K8
T 519-376-7612 #215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

From: Wagner, Teresa (MTC) [mailto:Teresa.Wagner@ontario.ca]

Sent: April 12, 2011 1:19 PM

To: George Prentice

Subject: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

Dear Mr. Prentice,

As part of the Environmental Assessment Act, the Ministry of Tourism and Culture (MTC) has an interest in the conservation of cultural heritage resources including archaeological resources, built heritage resources, and cultural heritage landscapes.

I have located a Notice of Study Commencement and Public Meeting for the above-mentioned project.

Would it be possible to acquire a copy of the display boards presented at the Public Meeting to allow MTC to advise on whether any cultural heritage assessments would be recommended as part of this Environmental Assessment project?

Regards,

Teresa B. Wagner

A/Heritage Planner
Ministry of Tourism and Culture
Programs & Services Branch
401 Bay St. Suite 1700
Toronto, Ontario
M7A 0A7

Tel.: 416-314-7147 Fax: 416-212-1802

email: Teresa.Wagner@ontario.ca



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#### CONFIDENTIALITY WARNING:

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information which is privileged, confidential, proprietary or exempt from disclosure under applicable law. If you are not the intended recipient or the person responsible for delivering the message to the intended recipient, you are strictly prohibited from disclosing, distributing, copying or in any way using this message. If you have received this communication in error, please notify the sender, and destroy and delete any copies you may have received.

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From:

George Prentice

Sent:

April 12, 2011 2:48 PM

To: Cc:

'Wagner, Teresa (MTC)'

Subject:

'Webb, Chris'; 'Potter, Śean'

Attachments:

RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment PowerPoint Presention - PublicMeeting.pdf

Hello Teresa;

Thank you for your email.

I have attached our power point presentation at the public meeting.

Should you have any questions, please email them to me.

Regards, George



George L. Prentice, P. Eng. GENIVAR | Constructive People 945 Third Avenue East, Suite 212, Owen Sound, ON N4K 2K8 T 519-376-7612 #215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

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Sent: April 12, 2011 1:19 PM

To: George Prentice

Subject: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

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Regards.

Feresa B. Wagner

VHeritage Planner Ministry of Tourism and Culture <sup>3</sup>rograms & Services Branch 101 Bay St. Suite 1700 oronto, Ontario 17A 0A7

el.: 416-314-7147

Fax: 416-212-1802 email: <u>Teresa.Wagner@ontario.ca</u>



Please consider the environment before printing this e-mail.

# Screening for Impacts to Built Heritage and Cultural Heritage Landscapes

This checklist is intended to help proponents determine whether their project could affect known or potential cultural heritage resources. The completed checklist should be returned to the appropriate Heritage Planner or Heritage Advisor at the Ministry of Tourism and Culture.

itep 1	L — Scr	eening for	Recognized Cultural Heritage Value
YES	NO	Unknown	
ت ا	ه ا	۵	<ol> <li>Is the subject property designated or adjacent* to a property designated under the Ontario Heritage Act?</li> </ol>
		۵	<ol> <li>Is the subject property listed on the municipal heritage register or a provincial register/list?</li> <li>(e.g. Ontario Heritage Bridge List)</li> </ol>
	a		3. Is the subject property within or adjacent to a Heritage Conservation District?
۵		۵	4. Does the subject property have an Ontario Heritage Trust easement or is it adjacent to such a property?
	a	۵	5. Is there a provincial or federal plaque on or near the subject property?
	a		6. Is the subject property a National Historic Site?
	ם		7. Is the subject property recognized or valued by an Aboriginal community?
Step :	2-Scr	eening Po	tential Resources
			Built heritage resources
YES	NO	Unknown	<ol> <li>Does the subject property or an adjacent property contain any buildings or structures over forty years old<sup>†</sup> that are:</li> </ol>
	ū		<ul> <li>Residential structures (e.g. house, apartment building, shanty or trap line shelter)</li> </ul>
		ם	<ul> <li>Farm buildings (e.g. barns, outbuildings, silos, windmills)</li> </ul>
			<ul> <li>Industrial, commercial or institutional buildings (e.g. a factory, school, etc.)</li> </ul>
		۵	<ul> <li>Engineering works (e.g. bridges, water or communications towers, roads, water/sewer systems, dams, earthworks, etc.)</li> </ul>
	<b>a</b>	۵	<ul> <li>Monuments or Landmark Features (e.g. cairns, statues, obelisks, fountains, reflecting pools, retaining walls, boundary or claim markers, etc.)</li> </ul>
		a	2. Is the subject property or an adjacent property associated with a known architect or builder?
	a	۵	3. Is the subject property or an adjacent property associated with a person or event of historic interest?
a	a	۵	4. When the municipal heritage planner was contacted regarding potential cultural heritage value of the subject property, did they express interest or concern?
VE0	NO	Unknown	Cultural heritage landscapes
YES	NO	Unknown	5. Does the subject property contain landscape features such as:
			Burial sites and/or cemeteries
			<ul> <li>Parks or gardens</li> </ul>
			<ul> <li>Quarries, mining, industrial or farming operations</li> </ul>
			<ul> <li>Canals</li> </ul>
	۵	۵	<ul> <li>Prominent natural features that could have special value to people (such as waterfalls, rocky outcrops, large specimen trees, caves, etc.)</li> </ul>
a	a	۵	<ul> <li>Evidence of other human-made alterations to the natural landscape (such as trails, boundary or way-finding markers, mounds, earthworks, cultivation, non-native species, etc.)</li> </ul>
			6. Is the subject property within a Canadian Heritage River watershed?
		o o	7. Is the subject property near the Rideau Canal Corridor UNESCO World Heritage Site?
	ם	۵	8. Is there any evidence from documentary sources (e.g., local histories, a local recognition program, research studies, previous heritage impact assessment reports, etc.) or local knowledge or Aboriginal oral history, associating the subject property/ area with historic events, activities or persons?

#### Note:

If the answer is "yes" to any question in Step 1, proceed to Step 3.

The following resources can assist in answering questions in Step 1:

Municipal Clark or Planning Department - Information on properties designated under the Ontario Heritage Act (individual properties or Heritage Conservation Districts) and properties listed on a Municipal Heritage register.

Ontario Heritage Trust - Contact the OHT directly regarding easement properties. A list of OHT plaques can be found on the website: Ontario Heritage Trust

Parks Canada - A list of National Historic Sites can be found on the website: Parks Canada

Ministry of Tourism and Culture – The Ontario Heritage Properties Database includes close to 8000 identified heritage properties. Note while this database is a valuable resource, it has not been updated since 2005, and therefore is not comprehensive or exhaustive. Ontario Heritage Properties Database

Local or Provincial erchives

Local heritage organizations, such as the municipal heritage committee, historical society, local branch of the Architectural Conservancy of Ontario, etc.

Consideration should also be given to obtaining oral evidence of CHRs. For example, in many Aboriginal communities, an important means of maintaining knowledge of cultural heritage resources is through oral tradition.

If the answer is "yes" to any question in Step 2, an evaluation of cultural heritage value is required. If cultural heritage resources are identified, proceed to Step 3.

If the answer to any question in Step 1 or to questions 2-4, 6-8 in Step 2, is "unknown", further research is required.

If the answer is "yes" to any of the questions in Step 3, a heritage impact assessment is required.

If uncertainty exists at any point, the services of a qualified person should be retained to assist in completing this checklist. All cultural heritage evaluation reports and heritage impact assessment reports <u>must</u> be prepared by a qualified person. Qualified persons means individuals (professional engineers, architects, archaeologists, etc.) having relevant, recent experience in the identification and conservation of cultural heritage resources. Appropriate evaluation involves gathering and recording information about the property sufficient to understand and substantiate its heritage value; determining cultural heritage value or interest based on the advice of qualified persons and with appropriate community input. If the property meets the criteria in Ontario Regulation 9/06 under the Ontario Heritage Act, it is a cultural heritage resource.

Step	3-S	creening for Potential Impacts
YES	NO	Will the proposed undertaking/project involve or result in any of the following potential impacts to the subject property or an adjacent* property?
		Destruction, removal or relocation of any, or part of any, heritage attribute or feature.
		<b>Alteration</b> (which means a change in any manner and includes restoration, renovation, repair or disturbance).
		Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden.
		<b>Isolation</b> of a heritage attribute from its surrounding environment, context or a significant relationship.
		<b>Direct or indirect obstruction</b> of significant views or vistas from, within, or to a built or natural heritage feature.
	<b>a</b>	A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces.
0	٥	Soil disturbance such as a change in grade, or an alteration of the drainage pattern, or excavation, etc.

<sup>†</sup> The 40 year old threshold is an indicator of potential when conducting a preliminary survey for identification of cultural heritage resources. While the presence of a built feature that is 40 or more years old does not automatically signify cultural heritage value, it does make it more likely that the property could have cultural heritage value or interest. Similarly, if all the built features on a property are less than 40 years old, this does not automatically mean the property has no cultural heritage value. Note that age is not a criterion for designation under the Ontario Heritage Act.

<sup>\*</sup> For the purposes of evaluating potential impacts of development and site alteration "adjacent" means: contiguous properties as well as properties that are separated from a heritage property by narrow strip of land used as a public or private road, highway, street, lane, trail, right-of way, walkway, green space, park, and/or easement or as otherwise defined in the municipal official plan.

# **Ministry of Tourism and Culture Criteria for Determining Archaeological Potential**

# A Checklist for the Non-Specialist

Fea	ture of Archaeological Potential	Yes	No	Unknown
1.	Known archaeological sites within 300 m of property	۵	0	0
Phy	sical Features	Yes	No	Unknown
2.	Water on or near the property If yes, what kind of water?	۵	0	
	<ul> <li>a) Primary water source (lake, river, large creek, etc)</li> <li>within 300 m, OR</li> <li>50 m for properties in northern Ontario and Canadian Shield terrain*</li> </ul>	٥	٥	<b>a</b>
	<ul> <li>b) Secondary water source (stream, spring, marsh, swamp, etc)</li> <li>within 300 m, OR</li> <li>50 m for properties in northern Ontario and Canadian Shield terrain*</li> </ul>			٥
	c) Past water source (beach ridge, river bed, relic creek, ancient shoreline, etc) within 300 m, OR 150 m for properties in northern Ontario and Canadian Shield terrain*	ם ا		
3.	Elevated topography on property (knolls, drumlins, eskers, plateaus, etc)	۵	<b>Q</b>	<b>Q</b>
4.	Pockets of sandy soil in a clay or rocky area on property	۵	Q	0
5.	Distinctive land formations on property (mounds, caverns, waterfalls, peninsulas, etc)	0	0	<b>a</b>
Cult	ural Features	Yes	No	Unknown
6.	Known burial site or cemetery on or adjacent to the property (cemetery is registered with the Cemeteries Regulation Unit)	۵	a	
7.	Food or scarce resource harvest areas on property (traditional fishing locations, agricultural/berry extraction areas, etc)	<u> </u>		0
8.	Indications of early Euro-Canadian settlement within 300 m of property (monuments, cemeteries, structures, etc)	Q	a	<b>a</b>
9.	Early historic transportation routes within 100 m of property (historic road, trail, portage, rail corridor, etc)	۵	0	Q
Prop	erty-specific Information	Yes	No	Unknown
10.	Property is designated and/or listed under the Ontario Heritage Act (municipal register and lands described in Reg. 875 of the Ontario Heritage Act)	0	Q.	<u> </u>
11.	Local knowledge of archaeological potential of property (from aboriginal communities, heritage organisations, municipal heritage committees, etc)	0	۵	<u> </u>
12.	Recent ground disturbance <sup>†</sup> (post-1960, extensive and deep land alterations)	0	0	o
ha*	re property should be screened for archaeological potential, not only the footprint wher			

<sup>\*</sup>Northern Ontario is defined as Manitoulin Island, the Districts of Muskoka, Haliburton and Nipissing, and areas to the north. The Canadian Shield is defined as the area of Ontario underlain by the Precambrian Shield.

<sup>&</sup>lt;sup>†</sup> Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as 'disturbed' or 'disturbance', and may include: quarrying, major landscaping involving grading below topsoil, building footprints, sewage and infrastructure development. Activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.

#### Scoring the results:

If Yes to <u>any</u> of 1, 2a-c, 6 or 11 If Yes to <u>two or more</u> of 3 to 5 or 7-10 If Yes to 12 <u>or</u> No to 1 to 10

- → archaeological potential is **determined** assessment is required
- → archaeological potential is determined assessment is required
- → low archaeological potential is determined assessment may or may not be required (depending on answers from 1-11)

If 3 or more Unknown

→ more research is required (See note below for more information)

**Note**: If archaeological potential features are unknown, a professional archaeologist licensed under the *Ontario Heritage Act* should be retained to carry out a minimum Stage 1 archaeological assessment report confirming potential or low potential. All reports are to be in compliance with provincial archaeological assessment standards and guidelines.



OS-09-182-11-OS

May 18, 2011

Mr. W. Armstrong, Regional Environmental Planner Ministry of the Environment 733 Exeter Road LONDON ON N6E 1L3

Re:

Update E.S.R. - Kenny Drain Stormwater Management

City of Owen Sound

#### Dear Mr. Armstrong:

Your reply comments to the "draft" ESR in your letter received by fax dated March 10<sup>th</sup>, 2011 are welcomed and the following is prepared as an outline in addressing the items raised.

Based on comments received from the Grey Sauble Conservation Authority (GSCA), it has been noted that the Kenny Drain is fish habitat and any changes to that system may require approval from Fisheries and Oceans Canada. This process of approval shall be triggered by the GSCA during the approval and design stage of the proposed projects.

With regards to the environmental protection of the outlet discharge to Owen's Sound (Bay), we believe that this has been addressed by the construction of the water quality control pond completed in 1993 including the rip-rap lined channel downstream to the shoreline outlet. It is the City's intent to continue to achieve the highest level of water quality control. Erosion and sedimentation control measures shall be incorporated into the final detailed design and construction of the proposed works. Also, it is noted that the City's site plan approval policy for development requires enhanced level of treatment for storm water discharged from the site to the receiving storm sewers/waterway systems.

Please be advised that all of the above shall be included as discussions and conclusions in the final ESR update report.

With respect to First Nation consultation, in addition to the mailed notices sent to the Chiefs of the local Saugeen Ojibway Nation (SON) for this project, the City is presently engaged in discussions with SON regarding a consultation/protocol agreement for the Wastewater Treatment Plant upgrading project. Included in this dialogue are discussions regarding the establishment of relationship or consultation/protocol agreement(s) between the City and SON for other and future projects of interest to SON. It must be noted that this is an ongoing negotiation process that will take time; however there is an ultimate objective to establish formal agreement(s) between SON and the City that will set out the expectations of both parties relating to the duty to consult.

Also, notice has been sent to local Métis Nations that includes a copy of the draft ESR being provided for their review. Inquiries for further information have been received and information has been provided. The extent of consultation has been based on specific requests for information.

I trust this letter identifies how your issues raised are being addressed and included in the documentation of the final ESR, a copy shall be provided to your office.

Yours truly,

GENIVAR Inc

George L. Prentice, P. Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem Encl.

cc: Mr. Scott Abernethy, Water Evaluator, Ministry of Environment

Mr. Ian Mitchell, P. Eng., Ministry of the Environment

Mr. Chris Webb, P. Eng., Manager of Engineering Services, City of Owen Sound

# MINISTRY OF THE ENVIRONMENT

#### SOUTHWESTERN REGION

733 Exeter Road London, Ontario, N6E 1L3 519-873-5013/FAX 873-5020

# FAX COVER SHEET

DATE:

May 31, 2011

NO. of PAGES: 2

(including cover)

FROM:

Bill Armstrong

TO:

George Prentice

Genivar

FAX NO:

(519) 376-8008

MESSAGE:

Re. Kenny Drain

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#### BY FAX ONLY

May 31, 2011

George Prentice, P.Eng Genivar Suite 212 945 Third Avenue East Owen Sound, Ontario N4K 2K8

Dear Mr. Prentice:

Update of Kenny Drain Stormwater Management, Environmental Study, November 2010 RE:

LONDON REGIONAL MOE

This acknowledges your letter of May 18, 2011 in which a response is provided to the ministry's comment of March 10, 2011. Your letter describes how the process intends to respond to the ministry's interests in water quality and impacts upon Owen Sound bay as well as consultations with potentially affected Aboriginal and Métis communities. We have no issues per se with what is proposed and look forward to receipt of the Environmental Study Report.

If questions arise or if clarification is needed please contact the undersigned at (519) 873-5013 or via email at bill.armstrong@ontario.ca.

Yours truly,

W. Armstrong, M.E.S, RPP Regional Environmental Planner Southwestern Region

cc. S. Abernethy I. Mitchell

From: Tim Lanthier@greysauble.on.ca]

**Sent:** June 10, 2011 9:12 AM

To: George Prentice
Cc: Potter, Sean; John Bittorf; Webb, Chris; Andrew Sorensen

Subject: RE: KENNY DRAIN

#### George,

Sounds good. If you could show both the 1:100 yr event and the regional event on the mapping with a bolder outline showing the greater of the two as it moves through the system that would be beneficial. There is direction within the Provincial Policy Statement under the Planning Act to use the greater of the two.

With regards to your letter dated May 17, 2011, I was wondering about the "48-hour" Timmins event noted. The Timmins storm (not hurricane) is based on a 12-hour storm event as detailed in the attached legislation.

Thanks,

# Tim Lanthier Environmental Planning Technician

**Grey Sauble Conservation Authority** 

p: 519-376-3076 ext. 235

f: 519-371-0437

From: George Prentice [mailto:George.Prentice@genivar.com]

**Sent:** Thursday, June 09, 2011 5:53 PM

To: Tim Lanthier

Cc: Potter, Sean; John Bittorf; Webb, Chris

Subject: RE: KENNY DRAIN

#### Tim;

Thank you for your reply.

Based on these catchment area as adjusted, we shall re-run the MIDUS model accordingly to update the report, as per my letter to you of May 17<sup>th</sup>.

I can include in the discussion section of the study report that more detailed analysis of these catchment areas may be require at the site plan approval stage as development proposals are submitted.

The next step would be to complete HEC-RAS modeling for these new flows and adjust the flood plain mapping for the regional storm event.

The final Flood mapping to be reported would be for the greater flow of either the 1:100 yr. or regional storm event at the different nodes to be updated in Table 4

that I shall submit to you for confirmation prior to the flood plain mapping plan being completed.

Please reply that you concur with this approach in order that we can proceed to complete the study report in this manner.

Regards, George

# **GENIVAR**

George L. Prentice, P. Eng.

GENIVAR | Constructive People

1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2

T 519-376-7612 #13215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

From: Tim Lanthier [mailto:t.lanthier@greysauble.on.ca]

Sent: June 9, 2011 9:09 AM

To: George Prentice

Cc: Potter, Sean; John Bittorf; Webb, Chris

Subject: RE: KENNY DRAIN

#### George,

I think this generally covers it. Some areas may require more detailed analysis at the time of site plan proposals, but I think for the current proposal (master stormwater plan) this will suffice.

Thanks,

# Tim Lanthier Environmental Planning Technician Grev Sauble Conservation Authority

p: 519-376-3076 ext. 235 f: 519-371-0437

From: Potter, Sean [mailto:spotter@owensound.ca]

Sent: Tuesday, June 07, 2011 1:17 PM

To: George Prentice; Tim Lanthier; John Bittorf; Webb, Chris

Subject: RE: KENNY DRAIN

All,

I believe that this is what we agreed to at our meeting last week. With that being said I would appreciate the GSCAs comments prior to moving forward.

Sean Potter

From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: Tuesday, June 07, 2011 8:49 AM

To: Tim Lanthier; John Bittorf; Webb, Chris; Potter, Sean

Subject: FW: KENNY DRAIN

#### Gentlemen;

Please review the attached plan showing the revised catchment area as per our site visit.

Please confirm that you agree with the areas as now shown.

Thanks, George



George L. Prentice, P. Eng.

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EMAILED

OS-09-182-11-OS

May 17, 2011

Mr. Tim Lanthler, Environmental Planning Technician Grey Sauble Conservation Authority R.R. #4 (Fire No. 237897 Inglis Falls Road) Owen Sound, ON N4K 5N6

Re:

Kenny Drain Stormwater Management Environmental Study

City of Owen Sound GSCA File No. P9532

#### Dear Mr. Lanthier:

Thank you for our meeting in your office when we further discussed the review comments of your February 10, 2011 letter for the above noted "draft" update report. We have prepared the following explanation of the major Item 5 concerning the flows reported in Tables 3 and 4:

#### Concerning Table 3 reported flows:

The MIDUSS modeling that was completed for the Kenny Drain did not include any of the hydrograph shifts that the SWMHYMO modeling did. This results in a harsher model with higher peaks due to more hydrograph peak matching, which occur at an overall faster runoff time. It was noted that some predevelopment events peak higher than the regional event. This occurs due to the above noted peaking matching as well as the fast runoff time displayed by the catchments as modeled. Additionally, the catchments around nodes 1 to 5 are highly urbanized and therefore, are less affected by the soaking effect of the Hurricane Timmins storm event. The instantaneous peak of the 100-year hydrograph is higher than the instantaneous peak of the 48-hour Hurricane Timmins event. The MIDUSS model does display that the overall runoff volume for the regional event is much more significant than the 100-year even though the 100-year instantaneous peak is higher using MIDUSS.

#### And those reported for Table 4:

Under the proposed works, the extended soaking rainfall of the Hurricane Timmins storm event fills the stormwater basins prior to the peak of the event passing through. These basins were sized to attenuate the 100-year storm event, but are not equipped to deal with the volume of water that they experience during the regional event. The fact that the soaking rainfall fills the pond prior to the storm peaking means that the peak of the Timmins event essentially passes the ponds with minimal attenuation, leaving the peak flow essentially unchanged.

Regarding your Item 10, some warnings are normal during the creation of the HECRAS model, although there are some technically serious warnings. We believe that these serious warnings were eliminated. We will review the HECRAS computer modeling to ensure that is the case.

# Concerning your Item 3:

Adjustments shall be made to the catchment area as discussed with a field review that you are invited to attend. After which, MIDUSS modeling shall be re-run.

Similarly, the HEC-RAS model shall be confirmed and flood plain mapping adjusted for regional storm event, being the regulatory flood for this system.

All of which, is prepared and submitted as an explanation to address these major issues raised. Once we have your concurrence as to our approach, we shall proceed, keeping you updated of interim results in order to complete the study report including the other issues raised in your letter of February 12, 2011 being addressed.

Should you have any questions, please call me at your convenience.

Yours truly,

GENIVAR Inc

George L. Prentice, P. Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem

CC

Mr. Dick Hibma, Authority Director, City of Owen Sound

Mr. Peter Lemon, Authority Director, City of Owen Sound

Mr. Chris Webb, P. Eng., Manager of Engineering Services, City of Owen Sound

Ms. Pam Coulter, Director of Community Services, City of Owen Sound

From:

George Prentice

Sent:

July 21, 2011 11:24 AM

To:

'Tim Lanthier'; John Bittorf; Webb, Chris; 'Potter, Sean'

Cc:

Tom Wylie

Subject:

Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update

Attachments:

Scan001.PDF

To All; Please find attached the updated flow summary tables, based on the adjusted catchment areas.

The MIDUS model has been adjusted for the 2,5,25 and 100 year rainfall events based on most current rainfall data (MTO 1989) for Owen Sound.

The input for the regional Timmins storm was checked to be correct as previously entered. Final flows shown reductions as was expected.

Please review these results and should they be acceptable, our next task is to determine the flood plain mapping using either the 100 or regional (Highest flow) as previously discussed. Based on these results a short meeting may be needed to which flows to select to be used for the mapping.

Regards, George

George L. Prentice, P. Eng.

GENIVAR | Constructive People 1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2 T 519-376-7612 #13215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

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----Original Message-----

From: <a href="mailto:owensound@genivar.com">owensound@genivar.com</a>]

Sent: July 21, 2011 7:03 AM

To: George Prentice

Subject: Scan from a Xerox WorkCentre Pro

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre Pro.

Sent by: Guest [owensound@genivar.com]

Number of Images: 2

Attachment File Type: PDF

WorkCentre Pro Location: Fax Machine - North Side

For more information on Xerox products and solutions, please visit <a href="http://www.xerox.com">http://www.xerox.com</a>

TABLE 5
FLOW COMPARISON SUMMARY – (100 YEAR AND REGIONAL) – ESR, ESMS AND ES-UR
July 2011

Node	ESR	ESMS-SV		·	IR – MIDUSS	ESR-UP	R – MIDUSS
	(m³/sec.)	100 Y			O YEAR	Re	gional
		Post Without Pond (m³/sec.)	Post With Pond (m³/sec.)	Existing With Future (m³/sec.)	Proposed Improvements (m³/sec.)	Existing With Future (m³/sec.)	Proposed Improvements (m³/sec.)
1	N/A	5.05	5.05	4.49	4.50	7.97	7.97
2	8.4	6.43	5.97	7.75	7.76	9.48	9.48
3	10.1	8.27	5.86	16.26	16.28	13.38	13.38
4	N/A	17.60	16.15	23.66	23.68	20.40	20.40
5	30.8	21.31	19.01	30.28	17.83	24.87	21.69
6	N/A	28.37	20.39	39.43	22.44	29.97	27.25
8	33.4	30.30	21.76	40.72	24.02	31.80	28.91
9	36.0	30.69	22.46	40.67	17.97	33.99	31.10
10	36.3	31.31	22.94	41.71	18.21	34.75	31.79

JULY 2011

OS-09-182-11-OS

Frequency				Flo	Flow Rate (m³/sec.)	c.)			
Event	Node 1	Node 2	Node 3	Node 4	Node 5	Node 6	Node 8	Node 9	Node 10
2 Yr.	1.68	3.12	5.17	8.23	10.51	13.33	13.29	13.32	13.25
5 Yr.	2.32	4.34	8.17	11.94	15.57	19.59	20.34	19.93	20.19
25 Yr.	3.37	6.30	12.83	18.42	24.21	31.13	31.47	31.90	31.91
100 Yr.	4.49	7.75	16.26	23.66	30.28	39.43	40.72	40.67	41.71
Regional	7.97	9.49	13.37	20.40	24.87	29.87	31.80	33.99	34.75

# TABLE 4: SUMMARY OF PROPOSED WORKS MODEL RESULTS

Frequency				Fic	Flow Rate (m³/sec.)	c.)			·
Event	Node 1	Node 2	Node 3	Node 4	Node 5	Node 6	Node 8	Node 9	Node 10
2 Yr.	1.68	3.12	5.17	8.23	5.43	6.77	7.02	4.73	4.80
5 Yr.	2:32	4:34	8.17	11.94	8.39	10.54	11.08	7.71	7.81
25 Yr.	3.37	6.30	12.83	18.42	13.64	17.07	18.15	13.16	13.33
100 Yr.	4.50	7.76	16.28	23.68	17.83	22.44	24.02	17.97	18.21
Regional	7.97	9.48	13.38	20.40	21.69	27.25	28.91	31.10	31.79

G:/2009/11/09-182-11/Reports/Table 3 & 4 - SUMMARY OF EXISTING CONDITIONS MODEL RESULTS (July 2011).doc

From:

George Prentice

Sent: To: August 5, 2011 9:31 AM 'Tim Lanthier'; 'John Bittorf'

Cc:

'Webb, Chris'; 'Potter, Sean'; Tom Wylie

Subject:

RE: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update

Attachments:

Flows(Exist.& Prop)-FloodPlainMapping.pdf

#### Hi Tim and John;

Hopefully you have reviewed the previously send flow summaries.

I have circled the Max. flows that we propose to input for the flood plain mapping. You will notice that there is no change from Node 1 to 4 since the results of the improvements occur at Node 5.

Please reply that this is acceptable.

Regards, George

----Original Message----

From: George Prentice

Sent: July 21, 2011 11:24 AM

To: 'Tim Lanthier'; John Bittorf; Webb, Chris; 'Potter, Sean'

Cc: Tom Wylie

Subject: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update

To All; Please find attached the updated flow summary tables, based on the adjusted catchment areas.

The MIDUS model has been adjusted for the 2,5,25 and 100 year rainfall events based on most current rainfall data (MTO 1989) for Owen Sound.

The input for the regional Timmins storm was checked to be correct as previously entered. Final flows shown reductions as was expected.

Please review these results and should they be acceptable, our next task is to determine the flood plain mapping using either the 100 or regional (Highest flow) as previously discussed. Based on these results a short meeting may be needed to which flows to select to be used for the mapping.

Regards,

George

George L. Prentice, P. Eng.
GENIVAR | Constructive People

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8008 | www.genivar.com | george.prentice@genivar.com

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# TABLE 3: SUMMARY OF EXISTING CONDITIONS MODEL RESULTS JULY 2011

				Flo	Flow Rate (m³/sec.)	c.)				
Frequency	Node 1	Node 2	Node 3	Node 4	Node 5	Node 6	Node 8	Node 9	Node 10	
2 Yr.	1.68	3.12	5.17	8.23	10.51	13.33	13.29	13.32	13.25	
5 Yr.	2.32	4.34	8.17	11.94	15.57	19.59	20.34	19.93	20.19	
25 Yr.	3.37	6.30	12.83	18.42	24.21	31.13	31.47	31.90	31.91	
100 Yr.	4.49	7.75	16.26	23.66	30.28	39.43	40.72	40.67	41.71	*
Regional	79.7	9.49	13.37	20.40	24.87	29.87	31.80	33.99	34.75	

\* FLOUS - EXIST FLOOD TABLE 4: SUMMARY OF PROPOSED WORKS MODEL RESULTS

Event         Node 1           2 Yr.         1.68           5 Yr.         2.32				riom nate (iii /ecc.)	6				
							<u> </u>		
	Node 2	Node 3	Node 4	Node 5	Node 6	Node 8	Node 9	Node 10	
	3.12	5.17	8.23	5.43	6.77	7.02	4.73	4.80	
	4.34	8.17	11.94	8.39	10.54	11.08	7.71	7.81	
25 Yr. 3.37	6.30	12.83	18.42	13.64	17.07	18.15	13.16	13.33	
100 Yr. 4.50	7.76	16.28	23.68	17.83	22.44	24.02	17.97	18.21	
Regional 7.97	9.48	13.38	20.40	21.69	27.25	28.91	31.10	31.79	<b>み</b>

\*\* FLOWS-PROPERD FLOOD OLAIN MAPPING.

G:2000411V9-182-11VRaports/Table 3 & 4 - SUMMARY OF EXISTING CONDITIONS/MODEL RESULTS (July 2011); doc  $4/\rho \Omega_0 \rho_0 SR\rho$  .

TABLE 5
FLOW COMPARISON SUMMARY - (100 YEAR AND REGIONAL) - ESR, ESMS AND ES-UR
July 2011

Node	ESR	ESMS-SW		ESR-U	R - MIDUSS	ESR-UA	- MIDUSS
	(m³/sec.)	100 Y	EAR		O YEAR	Re	gionai
		Post Without Pond (m³/sec.)	Post With Pond (m³/sec.)	Existing With Future (m³/sec.)	Proposed improvements (m³/sec.)	Existing With Future (m³/sec.)	Proposed improvements (m³/sec.)
1	N/A	5.05	5.05	4.49	4.50	7.97	7.97
2	8.4	6.43	5.97	7.75	7.76	9.48	9.48
3	10.1	8.27	5.86	16.26	16.28	13.38	13.38
4	N/A	17.60	16.15	23.66	23.68	20.40	20.40
5	30.8	21.31	19.01	30.28	17.83	24.87	21.69
6	N/A	28.37	20.39	39.43	22.44	29.97	27.25
8	33.4	30.30	21.76	40.72	24.02	31.80	28.91
9	36.0	30.69	22.46	40.67	17.97	33.99	31.10
10	36.3	31.31	22.94	41.71	18.21	34.75	31.79

<b>GENIVAR</b>	FA (23 37 W)	FAX TRANSMISSION
TO: TERESA WAGNER	2.	DATE: AUG. 30/1/11
COMPANY: M.T. C.	-	TELEPHONE: 416-34-7147
SUBJECT: KBNNY DRAIN SWM	EA.	FAX: 1-416-212-1802
PROJECTN°: MT. C. FILE 42E	4010.	NUMBER OF PAGES: (INCLUDING COVER SHEET)
REMARKS	09-182-11-	THE ORIGINAL WILL FOLLOW
HI THR ESA!		
I was u	n able To	5 emailthis
To you of unat	le to pho	ne. you without
your betonsion 7		
phone BXTN.#		
SHOULD AN	OTHIM PM	reson now be
essigned to this	f.le p	please advise
My EMA	1c & pho	me # 16 on
the attached	opies	
		entire!
FROM:	phone Ful	7: 13216.
c.c.: enac	l: george.	n: 13216. prentico@genivar.a

OWEN SOUND 1450 1st Avenue West, Suite 101, Owen Sound, Ontario N4K 6W2 Tel.: (519) 376-7612 Fax: (519) 376-8008

From:

George Prentice

Sent:

August 31, 2011 10:53 AM

To: Cc: 'Wagner, Teresa (MTC)'

'Potter, Sean'; 'Webb, Chris'; 'Parks, Sandra'

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

Hi Teresa; Thank you for your email, the City through myself are now proceeding to final the update Study report. The outlet work within 450m of Georgian Bay was completed prior to 1995. Hence, the study's proposed works are outside the 300m distance.

We are in the process of completing the check list and confirming details with the City's Heritage Planner. Regards, George

From: Wagner, Teresa (MTC) [mailto:Teresa.Wagner@ontario.ca]

Sent: April 12, 2011 6:39 PM

To: George Prentice

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

**Project:** Location: Kenny Drain Stormwater Management City of Owen Sound, County of Grey

MTC File:

42EA010

Good evening, George.

Thank you for sending the PIC Displays for the above-mentioned project.

As part of the Environmental Assessment Act, the Ministry of Tourism and Culture (MTC) has an interest in the conservation of cultural heritage resources including archaeological resources, built heritage resources, and cultural heritage landscapes.

#### **Archaeology:**

The subject property of this EA project is considered to have archaeological potential based on provincial archaeological criteria for the following reasons:

within 300 meters of a primary water sources (lakeshore, river, large creek)

An archaeological assessment by an archaeologist licensed under the Ontario Heritage Act is recommended for this project including temporary roads/detours or work areas prior to any ground disturbance. The assessment reports must conform to the Ministry of Tourism and Culture's Standards and Guidelines for Consultant Archaeologists (2011), The licensed archaeologist will forward all completed archaeological assessment reports to the Ministry of Tourism and Culture for review by an Archaeology Review Officer.

#### **Built Heritage and Cultural Heritage Landscape:**

In addition, in order to determine the existing cultural conditions, known and potential built heritage resources and cultural heritage landscapes should be identified. It is suggested that you contact the City Clerk to determine if there are any properties that have been listed or designated under the Ontario Heritage Act. I have also attached our Ministry's standard checklist for identifying potential heritage resources within the study area. When completing this checklist, you should contact the municipal heritage committee or any relevant community heritage organizations.

Please return the completed checklist to me, with any additional relevant information, including photographs and site plans, so that MTC could further advise on any cultural heritage assessment work that will be recommended.

Please do not hesitate to contact me if you have any questions.

Regards,

Teresa B. Wagner

A/Heritage Planner
Ministry of Tourism andCulture
Programs&Services Branch
401 Bay St. Suite 1700
Toronto, Ontario
M7A 0A7

Tel.: 416-314-7147 Fax: 416-212-1802

email: Teresa.Wagner@ontario.ca



Please consider the environment before printingthis e-mail.

From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: April 12, 2011 2:48 PM To: Wagner, Teresa (MTC) Cc: Webb, Chris; Potter, Sean

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

Hello Teresa;

Thank you for your email.

I have attached our power point presentation at the public meeting.

Should you have any questions, please email them to me.

Regards, George

# **GENIVAR**

George L. Prentice, P. Eng.
GENIVAR | Constructive People
945 Third Avenue East, Suite 212, Owen Sound, ON N4K 2K8
T 519-376-7612 #215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

From: Wagner, Teresa (MTC) [mailto:Teresa.Wagner@ontario.ca]

Sent: April 12, 2011 1:19 PM

To: George Prentice

Subject: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

Dear Mr. Prentice,

As part of the Environmental Assessment Act, the Ministry of Tourism and Culture (MTC) has an interest in the conservation of cultural heritage resources including archaeological resources, built heritage resources, and cultural heritage landscapes.

I have located a Notice of Study Commencement and Public Meeting for the above-mentioned project.

Would it be possible to acquire a copy of the display boards presented at the Public Meeting to allow MTC to advise on whether any cultural heritage assessments would be recommended as part of this Environmental Assessment project?

Regards,

Teresa B. Wagner

A/Heritage Planner
Ministry of Tourism and Culture
Programs & Services Branch
401 Bay St. Suite 1700
Toronto, Ontario
M7A 0A7

Tel.: 416-314-7147 Fax: 416-212-1802

email: Teresa.Wagner@ontario.ca



Please consider the environment before printing this e-mail.

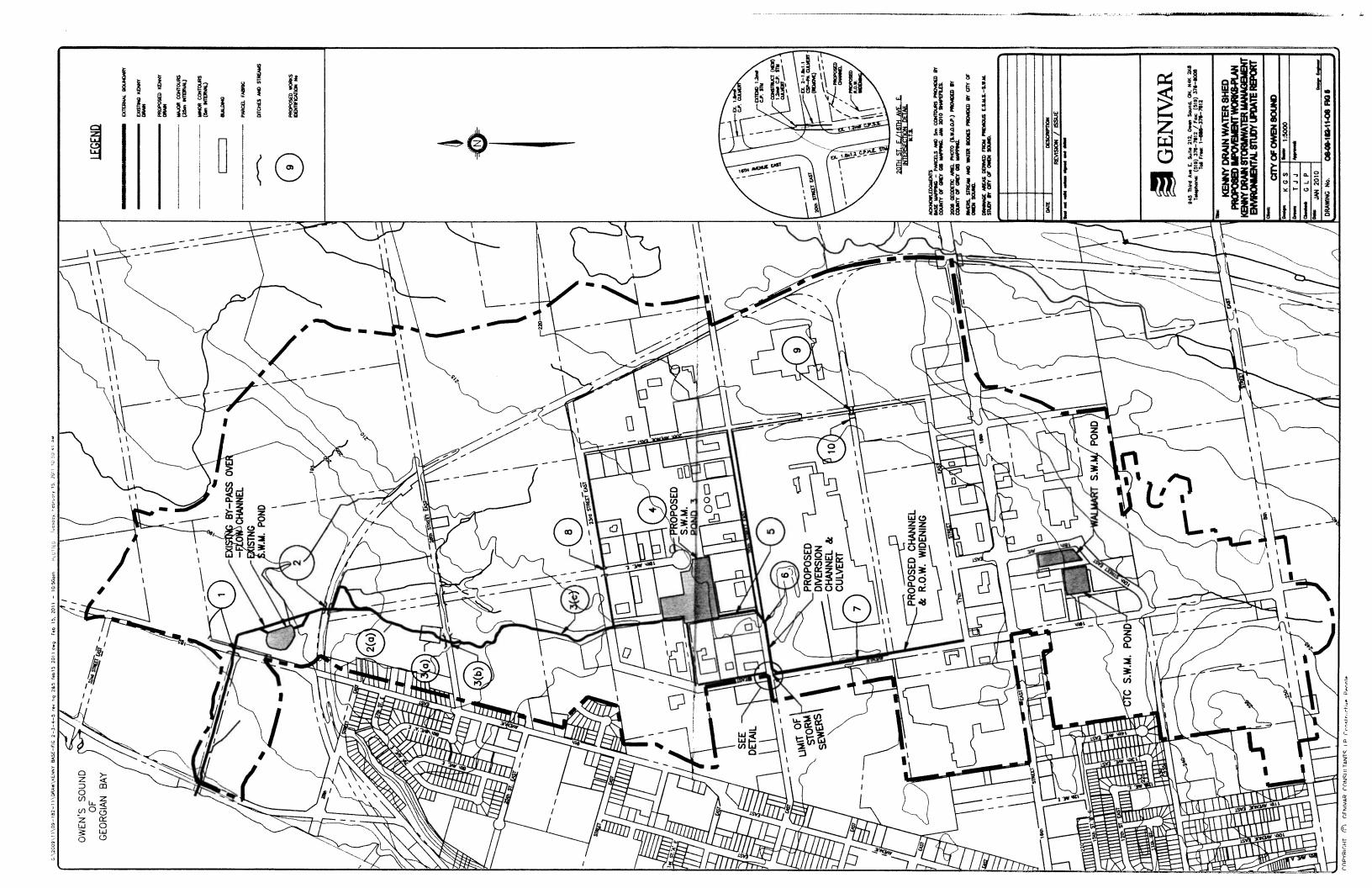
#### CONFIDENTIALITY WARNING:

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To:

Parks, Sandra

Subject:

RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

From: Parks, Sandra [mailto:sparks@owensound.ca]

Sent: September 1, 2011 12:30 PM

To: George Prentice

Cc: Potter, Sean; Webb, Chris; Coulter, Pam

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

#### George,

Thank you for the opportunity to comment on the possible impacts of the proposed Kenny Drain improvements on adjacent built and cultural heritage landscapes.

I've reviewed the maps and aerial photos of the proposed improvements and the Kenny Drain water shed. I consulted the City of Owen Sound Register of Properties of Cultural Value or Interest (<a href="www.owensound.ca/heritage/heritage/heritageinventory.php">www.owensound.ca/heritage/heritageproperties-designated.php</a>) - there are no designated or listed properties on or adjacent to the proposed improvements or in the Kenny Drain water shed.

I've completed the two check sheets to the best of my knowledge and attached them.

I'd like to make several comments about the sections where I checked 'yes' a building or structure is older than 40 years.

Farm Buildings - I believe there are a few farm buildings (barn, silo) in the Kenny Drain water shed, but I don't believe they will be impacted by the proposed works. They are no longer in use and I believe they will be demolished once these lands are developed. While the City has few farm buildings within its boundaries, in the area they are not rare, unique, representative or an early example of a style, type, expression, material or construction method, nor of historic value.

Industrial & Commercial Buildings - though not listed on the Heritage Register, there are several industrial and commercial buildings in the Kenny Drain water shed which I believe are older than 40 years and may have some historic value, such as Tenneco Canada at 1800 17<sup>th</sup> Street East, PPG at 1799 20<sup>th</sup> Street East, and Transcontinental (RBW Graphics) at 2049 20th St East, as representative examples of large industrial complexes in the City. Tenneco and PPG are close to an area of proposed channel & right-of-way widening. From your comments, I don't believe the proposed works will adversely affect either of these buildings. As well, the improvements in drainage will protect them from possible flood damage, etc.

Other Human-made Alterations - the former CPR track way travels through the Kenny Drain water shed; the rails were removed circa 1997. Today it is part of the Tom Thomson Trail system developed and maintained by the City and the County of Grey. It is in the City's best interests to ensure it is not adversely affected by these proposed works. Again, the improvements in drainage will protect it from possible flood damage, etc.

I hope these comments prove useful. Please contact me if you have any further questions.

Thanks,

#### Sandra Parks

Heritage Planning Co-ordinator

808 Second Avenue East OWEN SOUND, ON N4K 2H4 (519) 376-4440, ext. 1275 fax (519) 371-0511 sparks@owensound.ca www.owensound.ca

# Ministry of Tourism and Culture Criteria for Determining Archaeological Potential

# A Checklist for the Non-Specialist

	1 7,475 00	No	Unknown
Known archaeological sites within 300 m of property	u	X	a
Physical Features	Yes	No	Unknown
2. Water on or near the property If yes, what kind of water?	娫	۵	<u>י</u> פ
a) Primary water source (lake, river, large creek, etc)  within 300 m, OR  50 m for properties in northern Ontario and Canadian Shield terrain*	<b>\$</b> X	а	a /
b) Secondary water source (stream, spring, marsh, swamp, etc)  within 300 m, OR:  50 m for properties in northern Ontario and Canadian Shield terrain*	a	A	a /
c) Past water source (beach ridge, river bed, relic creek, ancient shoreline, etc)  within 300 m, OR:  150 m for properties in northern Ontario and Canadian Shield terrain*	ם	X	ے د
3. Elevated topography on property (knolls, drumlins, eskers, plateaus, etc)  (knolls, drumlins, eskers, plateaus, etc)	o	区	9
Pockets of sandy soil in a clay or rocky area on property	Ü	×	ü
5. Distinctive land formations on property (mounds, caverns, waterfalls, peninsulas, etc)	Ü	×	ره
Cultural Features	Yes	No	Unknown
6. Known burial site or cemetery on or adjacent to the property (cemetery is registered with the Cemeterles Regulation Unit).	u	¥	O
7. Food or scarce resource harvest areas on property (traditional fishing locations, agricultural/berry extraction areas, etc.)	ם	×	Ü
8. Indications of early Euro-Canadian settlement within 300 m of property (monuments, cemeteries, structures, etc.)	u	×	u
9. Early historic transportation routes within 100 m of property (historic road, trail, portage, rail corridor, etc)	*4	G	O
Property-specific Information	Yes	No	Unknown
Property is designated and/or listed under the Ontario Heritage Act  10. (municipal register and lands described in Reg. 875 of the Ontario Heritage  Act)	a	×	a
Local knowledge of archaeological potential of property  11. (from aboriginal communities, heritage organisations, municipal heritage committees, etc)	ü	×	O
Recent ground disturbance <sup>t</sup>	濣	g	

Sept. 1/11 - Sandia Parks

<sup>\*</sup>Northern Ontario is defined as Manitoulin Island, the Districts of Muskoka, Haliburton and Nipissing, and areas to the north. The Canadian Shield is defined as the area of Ontario underlain by the Precambrian Shield.

Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as 'disturbed' or 'disturbance', and may include: quarrying, major landscaping involving grading below topsoit, building footprints, sewage and infrastructure development. Activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.

#### Scoring the results:

If Yes to <u>any</u> of 1, 2a-c, 6 or 11 If Yes to <u>two or more</u> of 3 to 5 or 7-10 If Yes to 12 <u>or</u> No to 1 to 10

- → archaeological potential is determined assessment is required
- → archaeological potential is **determined** assessment is required
- → low archaeological potential is determined assessment may or may not be required (depending on answers from 1-11)

If 3 or more Unknown

→ more research is required (See note below for more information)

**Note**: If archaeological potential features are unknown, a professional archaeologist licensed under the *Ontario Heritage Act* should be retained to carry out a minimum Stage 1 archaeological assessment report confirming potential or low potential. All reports are to be in compliance with provincial archaeological assessment standards and guidelines.

# Screening for Impacts to Built Heritage and Cultural Heritage Landscapes

This checklist is intended to help proponents determine whether their project could affect known or potential cultural heritage resources. The completed checklist should be returned to the appropriate Heritage Planner or Heritage Advisor at the Ministry of Tourism and Culture.

Step 1 – Screening for Recognized Cultural Heritage Value			
YES	NO	Unknown	
a	×	a	Is the subject property designated or adjacent* to a property designated under the Ontario Heritage Act?
	×	۵	Is the subject property listed on the municipal heritage register or a provincial register/list?     (e.g. Ontario Heritage Bridge List)
	X		3. Is the subject property within or adjacent to a Heritage Conservation District?
a	×		4. Does the subject property have an Ontario Heritage Trust easement or is it adjacent to such a property?
	X	u	5. Is there a provincial or federal plaque on or near the subject property?
	M		6. Is the subject property a National Historic Site?
ū	X	o o	7. Is the subject property recognized or valued by an Aboriginal community?
Step 2 - Screening Potential Resources			
			Built heritage resources
YES	NO	Unknown	Does the subject property or an adjacent property contain any buildings or structures over forty years old that are:
	A	a	Residential structures: (e.g. house, apartment building, shanty or trap line shelter)
×		a	Farm buildings: (e.g. barns; outbuildings, silos, windmills)
X		U	<ul> <li>Industrial, commercial or institutional buildings (e.g. a factory, school, etc.)</li> </ul>
۵	X	a	<ul> <li>Engineering works (e.g. bridges, water or communications towers, roads, water/sewer systems, dams, earthworks, etc.)</li> </ul>
ū	0	×	<ul> <li>Monuments or Landmark Features (e.g. cairns, statues, obelisks, fountains, reflecting pools, retaining walls, boundary or claim markers, etc.)</li> </ul>
	A	a	2. Is the subject property or an adjacent property associated with a known architect or builder?
٦	A	a	3. Is the subject property or an adjacent property associated with a person or event of historic interest?
۵	K	<b>a</b>	4. When the municipal heritage planner was contacted regarding potential cultural heritage value of the subject property, did they express interest or concern?
YES	NO	Unknown	Cultural heritage landscapes
			5. Does the subject property contain landscape features such as:
	ָם	X	Burial sites and/or cemeteries
Ĺ	义		Parks or gardens
X	Ĵ		<ul> <li>Quarries, mining, industrial or farming operations.</li> </ul>
<b>3</b>	X		Canals
ם	X	u	<ul> <li>Prominent natural features that could have special value to people (such as waterfalls, rocky outcrops, large specimen trees, caves, etc.)</li> </ul>
X	נ	a	<ul> <li>Evidence of other human-made alterations to the natural landscape (such as trails, boundary or way-finding markers, mounds, earthworks, cultivation, non-native species, etc.)</li> </ul>
ַ ב	X	u	6. Is the subject property within a Canadian Heritage River watershed?
נ	X	ט	7. Is the subject property near the Rideau Canal Corridor UNESCO World Heritage Site?
ם	×	0	8. Is there any evidence from documentary sources (e.g., local histories, a local recognition program, research studies, previous heritage impact assessment reports, etc.) or local knowledge or Aboriginal oral history, associating the subject property/ area with historic events, activities or persons?

November 2010

Sop. 1/11 - Sandra Parles

### Note:

If the answer is "yes" to any question in Step 1, proceed to Step 3.

The following resources can assist in answering questions in Step 1:

Municipal Clerk or Planning Department – Information on properties designated under the Ontario Hentage Act (individual properties or Hentage Conservation Districts) and properties listed on a Municipal Hentage register.

Onterio Heritage Trust - Contact the OHT directly regarding easement properties. A list of OHT plaques can be found on the website: Onsets Hentage Trust
Parks Canada - A list of National Historic Sites can be found on the website: Parks Canada - A list of National Historic Sites can be found on the website: Parks Canada - A list of National Historic Sites can be found on the website: Parks Canada - A list of National Historic Sites can be found on the website: Parks Canada - A list of National Historic Sites can be found on the website: Onsets - A list of National Historic Sites can be found on the website: Onsets - A list of OHT plaques can be found on the website: Onsets - A list of National Historic Sites - Canada - Canada - A list of National Historic Sites - Canada - Can

Ministry of Tourism and Culture — The Ontario Heritagia Properties Database includes close to 8000 identified heritagia properties. Note while this database is a valuable recourse, it has not been updated since 2005, and therefore is not comprehensive or exhaustive. On the Heritagia Properties Database. Local or Provincial archives.

Local heritage organizations, such as the municipal heritage committee, historical society, local brainch of the Architectural Conservancy of Ontario, etc.

Consideration should also be given to obtaining oral evidence of CHRs. For example, in many Aboriginal communities, an important means of maintaining knowledge of cultural heritage resources is through oral tradition.

If the answer is "yes" to any question in Step 2, an evaluation of cultural heritage value is required. If cultural heritage resources are identified, proceed to Step 3.

If the answer to any question in Step 1 or to questions 2-4, 6-8 in Step 2, is "unknown", further research is required.

If the answer is "yes" to any of the questions in Step 3, a heritage impact assessment is required.

If uncertainty exists at any point, the services of a qualified person should be retained to assist in completing this checklist. All cultural heritage evaluation reports and heritage impact assessment reports <u>must</u> be prepared by a qualified person. Qualified persons means individuals (professional engineers, architects, archaeologists, etc.) having relevant, recent experience in the identification and conservation of cultural heritage resources. Appropriate evaluation involves gathering and recording information about the property sufficient to understand and substantiate its heritage value; determining cultural heritage value or interest based on the advice of qualified persons and with appropriate community input. If the property meets the criteria in Ontario Regulation 9/06 under the Ontario Heritage Act, it is a cultural heritage resource.

Ste	3 – S	creening for Potential Impacts
YES	NO	Will the proposed undertaking/project involve or result in any of the following potential impacts to the subject property or an adjacent* property?
	A	Destruction, removal or relocation of any, or part of any, heritage attribute or feature:
	À	Alteration (which means a change in any manner and includes restoration, renovation, repair or disturbance).
	Ä	Shadows created that after the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden.
	A	<b>Isolation</b> of a heritage attribute from its surrounding environment, context or a significant relationship.
	×	Direct or Indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature.
	×	A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces.
g	X	Soil disturbance such as a change in grade, or an alteration of the drainage pattern, or excavation, etc.

Sept. 1/11 - Samon Parles

The 40 year old threshold is an indicator of potential when conducting a prelaminary survey for identification of cultural heritage resources. While the presence of a built feature that is 40 or more years old does not automatically signify cultural heritage value, it does make it more likely that the property could have cultural heritage value or interest. Similarly, if all the built features on a property are less than 40 years old, the does not automatically mean the property has no cultural heritage value. Note that age is not a cirterion for designation under the *Orizano Heritage Act*.

<sup>\*</sup> For the purposes of avaluating potential impacts of development and site alteration "adjacerd" means; configuous properties as well as properties that are separated from a nentage property by narrow stop of land used as a public or private road, highway, street, lane, trad, right-of way, walkway, green space, park, and/or easement or as otherwise defined in the monorpal official plan.





# FAX TRANSMISSION

To: Teresa Wagner	DATE: Sept. 1/11
COMPANY: MTC	TELEPHONE: 416-314-7147
SUBJECT: Kenny Orain SWM E.A.	FAX: 416-313-1802
PROJECT Nº: MTC File 42EA010	NUMBER OF PAGES: (INCLUDING COVER SHEET)
REMARKS GENLUAR FILE NO. 09-182-11-05	
A	
FROM: George Prentice, P. Eng. c.c.:	
OWEN SOLIND 1450 1st Avenue West Suite 101 Owen Sound Ontario N4K 6W2	

From:

George Prentice

Sent: To: September 1, 2011 3:34 PM

Cc:

'Wagner, Teresa (MTC)'

Subject: Attachments: 'Potter, Sean'; 'Webb, Chris'; 'Parks, Sandra' RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

email& fax-TeresaW,Aug13,11.pdf; CityHeritagePlannerComments & CompletedCheck

List.pdf

### Teresa;

Further to my email /Fax of August 31 (copy attached), Please find attached the completed Check List that was completed mostly by Sandra Parks, City Heritage Planner, and by myself, submitted for your review.

I trust you have everything to complete your review. Please email or call should you need additional information or detail.

Also, this submission shall be faxed and mail to your office, since your emails are not going through.

Regards, George

From: George Prentice

**Sent:** August 31, 2011 11:09 AM **To:** 'Wagner, Teresa (MTC)'

Cc: 'Potter, Sean'; 'Webb, Chris'; 'Parks, Sandra'

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

### Teresa;

Further to my previous email of today, Please see attached Key plan and Figure 5 that shows where the proposed work shall occur, for your review.

Regards, George

## **GENIVAR**

### George L. Prentice, P. Eng.

GENIVAR | Constructive People

1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2

T 519-376-7612 #13215 | F 519-376-8008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

From: George Prentice

**Sent:** August 31, 2011 10:53 AM

To: 'Wagner, Teresa (MTC)'

Cc: 'Potter, Sean'; 'Webb, Chris'; 'Parks, Sandra'

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

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To:

Parks, Sandra

Subject:

RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

From: Parks, Sandra [mailto:sparks@owensound.ca]

Sent: September 1, 2011 12:30 PM

To: George Prentice

Cc: Potter, Sean; Webb, Chris; Coulter, Pam

Subject: RE: Kenny Drain Stormwater Management Municipal Class Environmental Assessment

### George,

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Industrial & Commercial Buildings - though not listed on the Heritage Register, there are several industrial and commercial buildings in the Kenny Drain water shed which I believe are older than 40 years and may have some historic value, such as Tenneco Canada at 1800 17<sup>th</sup> Street East, PPG at 1799 20<sup>th</sup> Street East, and Transcontinental (RBW Graphics) at 2049 20th St East, as representative examples of large industrial complexes in the City. Tenneco and PPG are close to an area of proposed channel & right-of-way widening. From your comments, I don't believe the proposed works will adversely affect either of these buildings. As well, the improvements in drainage will protect them from possible flood damage, etc.

Other Human-made Alterations - the former CPR track way travels through the Kenny Drain water shed; the rails were removed circa 1997. Today it is part of the Tom Thomson Trail system developed and maintained by the City and the County of Grey. It is in the City's best interests to ensure it is not adversely affected by these proposed works. Again, the improvements in drainage will protect it from possible flood damage, etc.

I hope these comments prove useful. Please contact me if you have any further questions.

Thanks,

### Sandra Parks

Heritage Planning Co-ordinator

808 Second Avenue East OWEN SOUND, ON N4K 2H4 (519) 376-4440, ext. 1275 fax (519) 371-0511 sparks@owensound.ca www.owensound.ca

# Ministry of Tourism and Culture Criteria for Determining Archaeological Potential

### A Checklist for the Non-Specialist

Fee	ture of Archaeological Potential	Yes	No	Unknown
1	Known archaeological sites within 300 m of property	ت ا	X	0
Phy	sical Features	Yes	No	Unknown
2.	Water on or near the property If yes, what kind of water?	×	ú	υ¬
	a) Primary water source (lake, river, large creek, etc) within 300 m, OR  50 m for properties in northern Ontano and Canadian Shield terrain*	虹	а	ם
	b) Secondary water source (stream, spring, marsh, swamp, etc) within 300 m, OR 50 m for properties in northern Ontario and Canadian Shield terrain*	ם	×	<b>a</b> /
	c) Past water source (beach ridge, river bed, relic creek, ancient shoreline, etc) within 300 m, OR 150 m for properties in northern Ontario and Conadian Shield terrain*	u	红	3/9
3.	Elevated topography on property (knolis, drumlins, eskers, plateaus, etc)	٥	M	<b>3</b>
4.	Pockets of sandy soil in a clay or rocky area on property	Ü	×	
5.	Distinctive land formations on property (mounds, caverns, waterfalls, peninsulas, etc.)	U	×	رد
Cult	tural Features	Yes	No	Unknown
6.	Known burial site or cemetery on or adjacent to the property (cemetery is registered with the Cemeteries Regulation Unit)	ú	Ä	Ü
7.	Food or scarce resource harvest areas on property (traditional fishing locations, agricultural/berry extraction areas, etc)	L	×	U
8.	Indications of early Euro-Canadian settlement within 300 m of property (monuments, cemeteries, structures, etc)	Ü	*	J
9.	Early historic transportation routes within 100 m of property (historic road, trait, portage, rait corridor, etc)	×	L	J
Pro	perty-specific Information	Yes	No	Unknown
10.	Property is designated and/or listed under the Ontario Heritage Act (municipal register and lands described in Reg. 875 of the Ontario Heritage Act)	a	¥	a
11.	Local knowledge of archaeological potential of property (from aboriginal communities, heritage organisations, municipal heritage committees, etc)	u	×	ú
12.	Recent ground disturbance <sup>t</sup> (post-1960, extensive and deep land alterations)	×	<b>3</b>	e a Principija Wytercukreane da uza 🔍 - n .
1				

The entire property should be screened for archaeological potential, not only the footprint where work is proposed.

Sept. 1/11 - Sardia Parks

<sup>\*</sup>Northern Ontario is defined as Manitoulin Island, the Districts of Musikoka, Haliburton and Nipissing, and areas to the north The Canadian Shield is defined as the area of Ontario undertain by the Precambrian Shield.

Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any suchaeological resources. This is commonly referred to as 'disturbed' or 'disturbance', and may include: quarrying, major andscaping involving grading below topsoil, building footponts, sewage and infrastructure development. Activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.

# Screening for Impacts to Built Heritage and Cultural Heritage Landscapes

This checklist is intended to help proponents determine whether their project could affect known or potential cultural heritage resources. The completed checklist should be returned to the appropriate Heritage Planner or Heritage Advisor at the Ministry of Tourism and Culture.

	70,10	3173111 0170 01	70.	
Step :	1 – Scr	eening fo	ecognized Cultural Heritage Value	
YES	NO	Unknown		
ב	Ø	ت	Is the subject property designated or adjacent* to a property designated under the C Heritage Act?	Ontario
J	¥	۵	<ol> <li>Is the subject property listed on the municipal heritage register or a provincial registi (e.g. Ontario Heritage Bridge List)</li> </ol>	er/list?
<b>_</b>	X	a	l. Is the subject property within or adjacent to a Heritage Conservation District?	
۵	风	۵	Does the subject property have an Ontario Heritage Trust easement or is it adjacent property?	to such a
a	X		i. Is there a provincial or federal plaque on or near the subject property?	
ם	X		i. Is the subject property a National Historic Site?	
ם	X	<u> </u>	. Is the subject property recognized or valued by an Aboriginal community?	
Step :	2 — Scr	eening Po	ntial Resources	
			uilt heritage resources	
YES	NO	Unknown	<ul> <li>Does the subject property or an adjacent property contain any buildings or structures forty years old<sup>†</sup> that are:</li> </ul>	over
0	A	a	<ul> <li>Residential structures (e.g. house, apartment building, shanty or trap line shelter)</li> </ul>	
Ħ	<u> </u>	g	<ul> <li>Farm buildings: (e.g. barns, outbuildings, silos, windmills)</li> </ul>	
X	Ü	ú	<ul> <li>Industrial, commercial or institutional buildings (e.g. a factory, school, etc.)</li> </ul>	
a	×	۵	<ul> <li>Engineering works (e.g. bridges, water or communications towers, roads, water/sersystems, dams, earthworks, etc.)</li> </ul>	wer
u		×	<ul> <li>Monuments or Landmark Features (e.g. cairns, statues, obelisks, fountains, reflectir retaining walls, boundary or claim markers, etc.)</li> </ul>	g pools.
ם	A	ם	Is the subject property or an adjacent property associated with a known architect or b	uilder?
ן כ	A	a	Is the subject property or an adjacent property associated with a person or event of h interest?	istoric
ם	¥	3	When the municipal heritage planner was contacted regarding potential cultural hents of the subject property, did they express interest or concern?	3ge value
YES	NO	Unknown	ultural heritage landscapes	
			Does the subject property contain landscape features such as:	
u	<u> </u>	×	Burial sites and/or cemeteries	
Ĵ	义	ü	Parks or gardens	i
X		<b>3</b>	Quarries, mining, industrial or farming operations	
<b>1</b>	X	J	• Canals	
L	X	u ·	<ul> <li>Prominent natural features that could have special value to people (such as waterfall outcrops, large specimen frees, caves, etc.)</li> </ul>	s, rocky
X	נ	ü	<ul> <li>Evidence of other human-made alterations to the natural landscape (such as trails, bor way-finding markers, mounds, earthworks, cultivation, non-native species, etc.)</li> </ul>	oundary
	X	<b>u</b> :	Is the subject property within a Canadian Heritage River watershed?	
ا د	X	u	Is the subject property near the Rideau Canal Corridor UNESCO World Heritage Site	?
a	×	٥	Is there any evidence from documentary sources (e.g., local histories, a local recognit program, research studies, previous heritage impact assessment reports, etc.) or local knowledge or Abonginal oral history, associating the subject property/ area with history activities or persons?	ıl .

November 2010

### Note:

If the answer is "yes" to any question in Step 1, proceed to Step 3.

The following resources can assist in answering questions in Step 1:

Municipal Clerk or Planning Department - Information on properies designated under the Ostario Heritage Act (individual properies or Heritage Conservation Districts) and properties tisted on a Municipal Heritage register.

Ontario Heritage Trast - Contact the OHT directly regarding exeminal properties. A list of OHT plaques can be found on the website: (2014) or heritage Trast

Parks Canada - A list of National Historic Sites can be found on the website; (2014) or heritage Trast.

Ministry of Tourism and Culture - The Ontano Haritage Properties Database includes close to 8009 visionized heritage properties. Note while this database is a visionized in the root been updated since 2005, and therefore is not comprehensive or exhaustive. \*\*\*Contractive Properties Database Succession Dat

Local or Provincial archives

Local heritage organizations, such as the municipal heritage committee, historical society, local branch of the Architectural Conservancy of Ortano, etc.

Consideration should also be given to obtaining oral evidence of CHRs. For example, in many Aboriginal communities, an important means of maintaining knowledge of cultural heritage resources is through oral inadison.

If the answer is "yes" to any question in Step 2, an evaluation of cultural heritage value is required, if cultural heritage resources are identified, proceed to Step 3.

If the answer to any question in Step 1 or to questions 2-4, 6-8 in Step 2, is "unknown", further research is required.

If the answer is "yes" to any of the questions in Step 3, a hentage impact assessment is required.

If uncertainty exists at any point, the services of a qualified person should be retained to assist in completing this checklist. All cultural heritage evaluation reports and heritage impact assessment reports <u>must</u> be prepared by a qualified person. Qualified persons means individuals (professional engineers, architects, archaeologists, etc.) having relevant, recent experience in the identification and conservation of cultural heritage resources. Appropriate evaluation involves gathering and recording information about the property sufficient to understand and substantiate its heritage value; determining cultural heritage value or interest based on the advice of qualified persons and with appropriate community input. If the property meets the criteria in Ontario Regulation 9/06 under the Ontario Heritage Act, it is a cultural heritage resource.

The 40 year old threshold is an indicator of polential when conducting a preliminary survey for identification of cultural heritage resources. While the presence of a built feature that is 40 or more years old doze not automatically signify cultural heritage value, if does make it more likely that the property could have cultural heritage value or interest. Similarly, if as the built leasures on a property are less than 40 years old, this does not automatically mean the property has no cultural horitage value. Note that age is not a colorino for designation under the Chizaro Heritage Act.

Ste	p 3 – S	creening for Potential Impacts
YES	NO	Will the proposed undertaking/project involve or result in any of the following potential impacts to the subject property or an adjacent* property?
	74	Destruction, removal or relocation of any, or part of any, heritage attribute or feature.
۵	*	Alteration (which means a change in any manner and includes restoration, renovation, repair or disturbance).
۵	À	Shadows created that alter the appearance of a heritage attribute or change the exposure or visibility of a natural feature or plantings, such as a garden.
ם	A	Isolation of a heritage attribute from its surrounding environment, context or a significant relationship.
O	×	Direct or Indirect obstruction of significant views or vistas from, within, or to a built or natural heritage feature.
۵	X	A change in land use such as rezoning a battlefleld from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces.
a	X	Soil disturbance such as a change in grade, or an alteration of the drainage pattern, or excavation, etc.

<sup>\*</sup> For the purposes of evaluating potential impacts of durwhopment and site attention "adjacent" means; configuous properties as well as properties that are separated from a "rentingle property by narrow sino of land used as a public or private road, hiptoway, street, lane, first, right-of wity, walkney, green space, park, and/or exterement or as otherwise realized to the municipal official plan.

Sept 1/11 - Samon Pales

From: Tim Lanthier [t.lanthier@greysauble.on.ca]

**Sent:** September 1, 2011 10:38 AM

To: George Prentice

Cc:'Webb, Chris'; 'Potter, Sean'; Tom Wylie; John Bittorf; Andrew SorensenSubject:RE: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR updateAttachments:9532\_KENNYDRAIN\_REPORT\_SWM\_LETTER\_10FEB2011.PDF

### George,

I have had a chance to review all of the information that has been sent to us since our initial comments were issued. Based on a review of this information in relation to our original comments, I think we will want to see a copy of the final report to ensure that all of our concerns have been addressed. I will go through our comments from our letter of February 10, 2011 to list/clarify any outstanding issues. These comments are listed in the same order as our original comments and thus will need to be read in conjunction with those comments. I have attached a copy of our February letter for ease of reference:

- 1. This was a technicality that I anticipate will be amended in the final report.
- 2. Report could presumably include a statement that site level controls should still be implemented/utilized/required where appropriate.
- 3. It is my understanding that these issues have been addressed following our site meeting. We will just be looking to verify this in the final report.
- 4. Technically, meetings with GSCA have now occurred and this statement in the report is now true.
- 5. We have seen the amended tables provided by email. We do not anticipate any issues with these in the updated report, however, the report should still provide some discussion around the 100-yr and in some instances, the 25-yr events exceeding the regional event peak flows.
- 6. In reviewing the updated Table 3 and Table 4 as provided, we note that the two-year event is greatly reduced through the proposed controls. We require information in the text of the report stating that this pond is to be utilized as a by-pass of high flows only and is not to negatively impact base flows in the existing adjacent and downstream channels.
- 7. This will presumably be clarified in the report.
- 8. This will presumably be clarified in the report.
- 9. We have discussed this at various meetings and you have indicated in the revised Table 3 and Table 4 that the 100-yr is frequently greater than the regional event in the system. Please note we would like to see the 100-yr and the regional storms delineated separately as this will save any future confusion if one or the other is re-calculated. Additionally, we require that the flood plain mapping for these storms delineates the non-controlled event. When reviewing flood plain, we cannot factor in upstream controls as the future safety of any downstream development would become dependent on these controls. It should be noted that downstream backwater concerns should still be included.
- 10. It is our understanding that you are reviewing this issue.
- 11. We anticipate that this will be corrected.

- 12. This statement in the report should either be removed or modified to account for the appropriate storm event, potential 100-yr rate of erosion issues and/or natural heritage concerns.
- 13. We anticipate this will occur.
- 14. See statement 12.
- 15. No additional comments.
- 16. No additional comments.

If you have any questions or would like to discuss any of these points further please call. I should be in the office all day today. I understand that the final report is supposed to be to City Engineering by the Sept. 12. If it is at all possible for our office to receive this report prior to that date, we will strive to provide a final review in time for you to get it to the City on time.

### Regards,

Tim Lanthier
Environmental Planning Technician
Grey Sauble Conservation Authority
p: 519-376-3076 ext. 235
f: 519-371-0437

----Original Message----

From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: Wednesday, August 31, 2011 12:31 PM

To: Tim Lanthier; John Bittorf

Cc: 'Webb, Chris'; 'Potter, Sean'; Tom Wylie

Subject: RE: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update

Hi Tim;

Further to my phone message and Sean's call; Items you need to receive and review:

- -model data output (MIDUS and HES RAS)
- -Flood plain mapping plan
- -Report sections-SWM-Hydrology (Storm Run-off) and Hydraulic Flow Analysis
  - -Discussion
  - -Proposed SWM Improvement Works
  - -Flood Plain Mapping
  - -Conclusions

Also, all other plans, figures and tables.

As Sean suggested once we have all this together and you have had a chance to review this, A final meeting to confirm everything would then be held.

Regards,

George

George L. Prentice, P. Eng.
GENIVAR | Constructive People
1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2 T 519-376-7612 #13215 | F 519-3768008 | www.genivar.com | george.prentice@genivar.com

Please consider the environment before printing...

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----Original Message----
From: George Prentice
Sent: August 30, 2011 5:49 PM
To: 'Tim Lanthier'; 'John Bittorf'
Cc: 'Webb, Chris'; 'Potter, Sean'; Tom Wylie
Subject: RE: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update
Hi Tim and John; Please let me know if this is acceptable as the City is requesting that our
report be final draft by Sept. 14th.
Then, be ready to go to Operations Advisory Committee, September 21st.
Regards, George
----Original Message----
From: George Prentice
Sent: August 5, 2011 9:31 AM
To: Tim Lanthier; John Bittorf
Cc: Webb, Chris; Potter, Sean; Tom Wylie
Subject: RE: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update
Hi Tim and John;
Hopefully you have reviewed the previously send flow summaries.
I have circled the Max. flows that we propose to input for the flood plain mapping.
You will notice that there is no change from Node 1 to 4 since the results of the
improvements occur at Node 5.
Please reply that this is acceptable.
Regards, George
----Original Message----
From: George Prentice
Sent: July 21, 2011 11:24 AM
To: 'Tim Lanthier'; John Bittorf; Webb, Chris; 'Potter, Sean'
Cc: Tom Wylie
Subject: Summary MIDUS Flow Table 3,4 and 5 - Kenny Drain ESR update
To All; Please find attached the updated flow summary tables, based on the adjusted catchment
areas.
The MIDUS model has been adjusted for the 2,5,25 and 100 year rainfall events based on most
current rainfall data (MTO 1989) for Owen Sound.
The input for the regional Timmins storm was checked to be correct as previously entered.
Final flows shown reductions as was expected.
Please review these results and should they be acceptable, our next task is to determine the
flood plain mapping using either the 100 or regional (Highest flow) as previously discussed.
Based on these results a short meeting may be needed to which flows to select to be used for
the mapping.
Regards,
George
George L. Prentice, P. Eng.
GENIVAR | Constructive People
```

Please consider the environment before printing...

8008 | www.genivar.com | george.prentice@genivar.com

1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2 T 519-376-7612 #13215 | F 519-376-

From:

Tim Lanthier [t.lanthier@greysauble.on.ca]

Sent:

September 13, 2011 1:25 PM

To:

George Prentice

Cc: Subject: Potter, Sean; John Bittorf; Andrew Sorensen RE: Kenny Drain ESR - Table 6 & Figure 5, 6 & 7

George,

We are generally satisfied with the Kenny Drain Stormwater Management Environmental Study as completed (Sep. 13,2011). From our perspective the specific details surrounding design and habitat requirements can be ironed out at the time of implementation.

Regards,

Tim Lanthier

Environmental Planning Technician Grey Sauble Conservation Authority

p: 519-376-3076 ext. 235

f: 519-371-0437

----Original Message----

From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: Tuesday, September 13, 2011 12:12 PM

To: Tim Lanthier; Potter, Sean

Subject: RE: Kenny Drain ESR - Table 6 & Figure 5, 6 & 7

Tim; this section for primarily for new SWM pond. It does not add much for existing conditions and should be removed in figure 6 that we shall do...OK?

George

----

----Original Message----

From: Tim Lanthier [mailto:t.lanthier@greysauble.on.ca]

Sent: September 13, 2011 12:05 PM To: George Prentice; Potter, Sean

Subject: RE: Kenny Drain ESR - Table 6 & Figure 5, 6 & 7

George,

Those Figures look good, except that Figure 6, Section 39 is blank.

Tim Lanthier Environmental Planning Technician Grey Sauble Conservation Authority p: 519-376-3076 ext. 235

f: 519-371-0437

----Original Message----

From: George Prentice [mailto:George.Prentice@genivar.com]

Sent: Tuesday, September 13, 2011 11:40 AM

To: Tim Lanthier; Potter, Sean

Subject: FW: Kenny Drain ESR - Table 6 & Figure 5, 6 & 7

Tim and Sean; Final plan for Figure 5 and Flood plain mapping 6 & 7.

For your review, as requested.

Figure 5 Proposed Improvements Work Plan Figure 6 shows the Flood Plain levels for Existing conditions 100 and Regional Storms.

Figure 7 shows the Flood Plain levels for Proposed conditions 100 and Regional Storms.

Regards, George

----Original Message----

From: <a href="mailto:owensound@genivar.com">owensound@genivar.com</a>]

Sent: September 12, 2011 11:59 AM

To: George Prentice

Subject: Scan from a Xerox WorkCentre Pro

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre

Sent by: Guest [owensound@genivar.com]

Number of Images: 1

Attachment File Type: PDF

WorkCentre Pro Location: Fax Machine - North Side

For more information on Xerox products and solutions, please visit <a href="http://www.xerox.com">http://www.xerox.com</a>

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From:

**George Prentice** 

Sent:

November 17, 2011 3:34 PM

To:

Webb, Chris; 'Potter, Sean'

**Subject:** 

RE: Kenny Drain Stormwater Management Environmental Study - Update Report,

OS-09-182-11-OS

Hi Chris and Sean; This is a follow up on a phone call I received from David Mc Phail, lawyer for PPG who received the notice and enquired as to impact on the property.

I told him there is actually positive impact with proposed improvements recommended in the study. His Phone # is 416-369-7836.

Regards, George

Cc to file

From: Loreen Miller

**Sent:** November 17, 2011 2:54 PM To: dmcphail@dalelessmann.com

Cc: George Prentice

Subject: Kenny Drain Stormwater Management Environmental Study - Update Report, OS-09-182-11-OS

Mr. McNeil:

Further to your discussions with George Prentice, please find attached the Kenny Drain Stormwater Management Environmental Study - Update Report as requested.

## GENIVAR

Loreen Miller | Senior Administrative Assistant GENIVAR | Constructive People 1450 1st Avenue West, Suite 101, Owen Sound, ON N4K 6W2 T 519-376-7612 #13205 F 519-376-8008 | www.genivar.com | loreen.miller@genivar.com

Please consider the environment before printing....

Mr Chris Webb Manager of Engineering Services cwebb@owensound.ca

### Dear Sir;

The Sydenham Sportsmen's Association wishes to comment on the Kenny Drain Storm Water Management Environmental Update Report of August 2011.

We are happy to support the Update Report of August 2011 provided that it solves the major pollution issue presently existing.

Our concern with the present state of the Kenny Drain relates to the abundant red clay which, in our opinion, pollutes the bay portion of Georgian Bay both north and south of the drain flow into the bay. To this end, the SSA, for the past year, has been building a case regarding our concerns on the Kenny Drain's negative impacts on Georgian Bay.

It is evident to all who drive along Bayshore Road East, after a heavy rain, that the red clay plume flows several hundred metres into the bay. On numerous occasions it has been observed to travel north of Hibou Point, if a south wind is present. If a north wind is prevailing, the plume travels south towards our water treatment plant. Obviously, this red clay settles to the bottom of Georgian Bay and therefore must have a negative impact on the existing bottom structure and the aquatic marine life found there.

We hope that this updated plan will solve this major pollution problem; one which the 1993 plan failed to do. In fact, we are mystified that the Ministry of the Environment has permitted this very negative situation to continue to exist! Never the less, if this update plan solves the very serious erosion problems which are evident at numerous locations along the system, we will be contented to look on it as being a step in the right direction.

We understand that the waste water from the industrial park on 20<sup>th</sup> street and from other commercial locations in the area must be directed eventually to Georgian Bay; however, allowing red clay to enter the bay in huge quantities is totally unacceptable.

The Sydenham Sportsmen's Association has spent many years, thousands of volunteer hours and a considerable amount of money to provide a top quality recreational fishery in Georgian Bay. We have been, and are currently involved in a large number of area stream enhancement projects designed to improve the fishery. To ensure that all the work that has been done to date doesn't suffer from avoidable and severe setbacks, we are hoping that the clay that forms the plume will soon be removed from the drainage water, before it flows through the last culvert and out into the bay.

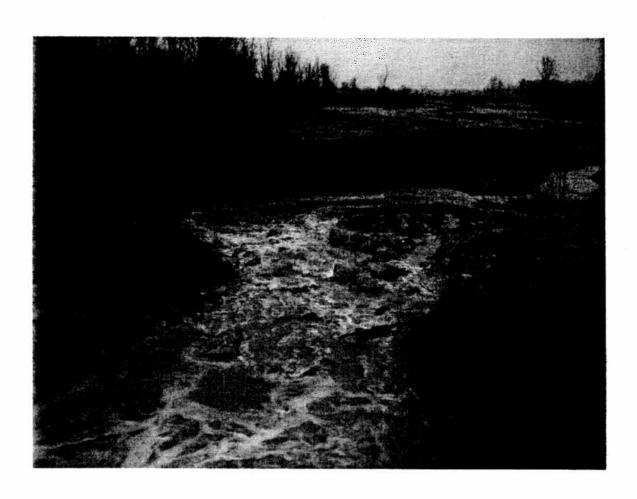
We note that this is a multiyear project and that it is dependent on appropriate budget approvals. Hopefully Owen Sound City Council will view this project as high priority and provide the necessary funding.

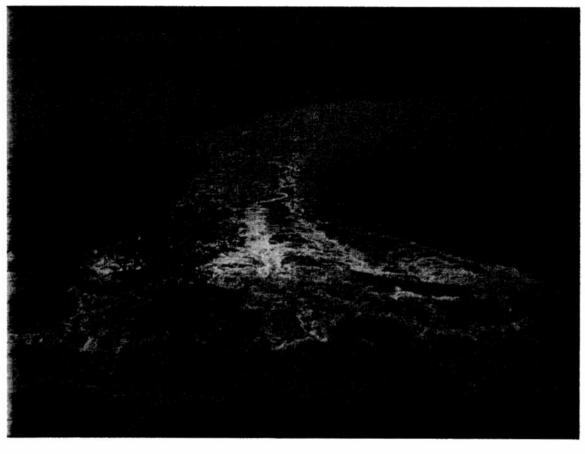
Please find attached some photos that we have taken showing the clay that moves along the drain, forming the plume that flows into Georgian Bay.

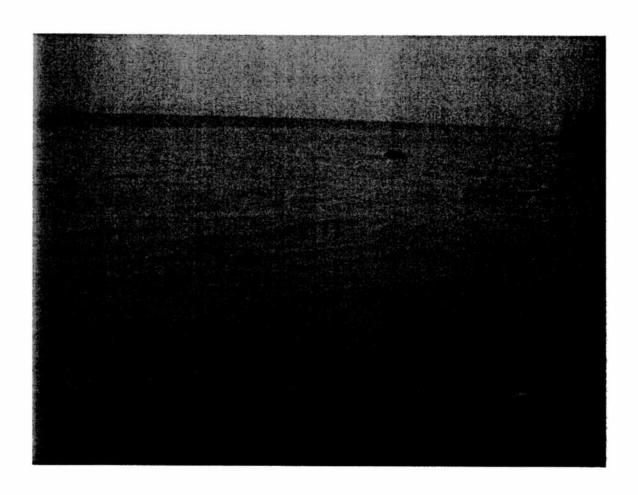
Yours in conservation Dennis Wiseman SSA President











From: Webb, Chris [cwebb@owensound.ca]

**Sent:** November 23, 2011 3:23 PM

To: Dennis Wiseman

Cc: McRoberts, Brad; Davis, Kim; Potter, Sean; Prentice, Matt; George Prentice

Subject: FW: Kenny Drain / Sydenham Sportsmen's Association

Attachments: Kenny Drain Letter & Photos.docx

### Dennis,

Thank you for your comments. These comments and attached photos will be included in the final report and brought to the attention of the City's Operations Advisory Committee (the lead Committee dealing with this matter) and ultimately, City Council.

Sean – for our project file George – for inclusion into the Final Kenny Drain ESR Update Kim – Correspondence attached for next OAC meeting Agenda

Chris Webb, P.Eng.

Manager of Engineering Services
City of Owen Sound

From: Dennis Wiseman [mailto:taxman2001@rogers.com]

Sent: Wednesday, November 23, 2011 3:10 PM

To: Webb, Chris

Cc: David (MNR)Reid; ShawnCarey; jason.ritchie@mnr.gov.on.ca; Rick (MOE)Chappell

Subject: Kenny Drain / Sydenham Sportsmen's Association

### Chris;

Please see the attached file on the Sydenham Sportsmen's Association position on the Kenny Drain, its present condition and the need to address the environmental issues associated with it.

### **Thanks**

Dennis Wiseman SSA President



# CORPORATION OF THE COUNTY OF GREY PLANNING & DEVELOPMENT DEPARTMENT

Randy Scherzer, Director 595 9th Avenue Best Owen Sound ON N4K 3B3 (519) 376-2205 1-800-567-GREY Pax: (519) 376-7970 randy.scherzer@grey.ca

November 29, 2011

Mr. Chris Webb, P. Eng.
Manager of Engineering Services
City of Owen Sound Public Works Building
1900 20th Street East
OWEN SOUND, Ontario N4K 5N3

Re:

Kenny Drain Stormwater Management Environmental Study - Update Report FILE: 57 00 15
REFER TO:

Dear Mr. Webb.

This correspondence is in response to the above update report. We have had the opportunity to review the report and offer the following comments.

From a planning perspective staff do not have any concerns with regard to the report.

The County Clerk's department has provided the following comments:

In consultation with County of Grey staff, City of Owen Sound staff has been aware of erosion issues caused by increased water flow within the Kenny Drain system in the area of 26th Street east, impacting the County owned CP Rail Trail and its users. The County would respectfully request that consideration of realignment of the water collection pond and increase in water flow capacity to the south west of the CP Rail Trail in order to accommodate increased water flows in this area be a priority in the study update. There is current flooding in this area as well as the adjacent Kiwanis soccer complex area.

The County Transportation Services department has indicated that the only concern that they have is with the outlet that flows under Grey County Road 15. If there can be assurances that these works will not adversely affect the County Road, then Transportation Services do not have any further comment.

Provided the concerns raised by both the Clerk's and Transportation Services department can be addressed, the County has no further comment.

The County requests notice of any decision rendered with respect to this file.

If you wish to discuss this matter further, please do not hesitate to contact me.

Yours truly.

THE COUNTY OF GREY

Sarah Morrison, Hons: BA, MCIP, RPP

Planner



OS-09-182-11-OS

December 7, 2011

Ms. Sarah Morrison, Planner County of Grey 595 – 9<sup>th</sup> Avenue East Owen Sound, ON N4K 3E3

Re:

Second Notice (Study Completion) Kenny Drain ESR (Update Report)

City of Owen Sound

Dear Ms. Morrison:

This to acknowledge your letter of November 29, 2011 for the above noted. Your letter that includes your comment shall be inserted in the final report document.

Your concern shall be taken into consideration as part of the detailed design during the implementation of the proposed works.

Yours truly,

GENIVAR/Inc.

George L. Prentice, P. Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem

Encl.

Mr. Chris Webb, Manager of Engineering Services, City of Owen Sound

November 29, 2011

Genivar George Prentice, P. Eng. Owen Sound, Ontario N4K 6W2

1450 First Avenue West, Suite 101

Dear Mr. Prentice:

Re: Property Owner Notification, Kenny Drain Stormwater Works, Second Mandatory Notice, Environmental Study Update

An initial review of the proposed Kenny Drain Stormwater Works indicates potential adverse affects on my properties.

Furthermore, any proposed Kenny Drain Works will be required to meet the same Stormwater Management Standards previously dictated to private property owners by the City of Owen Sound.

Please continue to include me in any mailings or notifications concerning this matter.

Yours truly,

Ron Radbourne

R.K. Radbourne Building Ltd.



OS-09-182-11-OS

**December 7, 2011** 

R. K. Radbourne Ltd. 1887 9<sup>th</sup> Avenue East P.O. Box 485 Owen Sound, ON N4K 5P7

Re:

Second Notice (Study Completion)

Kenny Drain ESR (Update Report)

City of Owen Sound

Dear Mr. Radbourne:

Thank you for your letter of November 29, 2011 regarding the above noted study completion. Your letter shall be included with the final report documentation.

Your concerns shall be taken into consideration as the City implements any design and approvals of the proposed works which may proceed subject to City Council budget approval.

Yours truly,

**GENIVAR I** 

George L. Prentide, P. Eng.

Senior Civil Engineer

Transportation - Urban Infrastructure

GLP/lem

Encl.

Mr. Chris Webb, Manager of Engineering Services, City of Owen Sound

Appendix C

Table A1 (1993 ESR)

# KENNY DRAIN WATERSHED - PROPOSED STORMWATER MANAGEMENT DESIGN COMPONENTS

PRIORITY a N \$146,000 \$124,000 \$152,000 2300,000 \$275,000 \$156,000 **Economic** Lands are presently owned by the Lands are presently owned by the :25 year event from washing out Structure within Industrial Park Channelization within Industrial Channelization within Industrial Structure within Industrial park Protects collector road during Pond will be fenced to keep Redirects run-off away from Redirects run-off away from present flood-prone areas present flood-prone areas Social Zoned Industrial lands City of Owen Sound Zoned industrial lands City of Owen Sound children out Net Environmental Impacts Controls 80% of suspended solids Reduces BOD, Heavy Metals & Total Reduces erosion and sedimentation Reduces erosion and sedimentation Contains peak flows within channel Contains peak flows within channel Controls outlet velocity to channel Dissipates energy within channel Dissipates energy within channel Settles particles larger than and Will not significantly reduce red Allows passage of peak flows Reduces present floodplain Effective for high velocities Reduces present floodplain Effective for high velocities No thermal enhancement Within existing urbanized Industrial Park Within existing urbanized Industrial Park without overtopping road Natural of Owen Sound Bay of Owen Sound Bay equal to coarse silt Permits infiltration Permits infiltration plume in bay Nitrogen Control sediment from the Kenny Drain by constructing a water quality pond - bound to south by C.P.R. and Improvements to Kenny Drain Channel 9th Ave. to East Kenny Drain Channelization C.P.R. to 9th Ave. E. (See Improved Kenny Drain Structure (W2) - 9th Ave. E. 2 -Bayshore Rd (see page 5.4 - Sites 8, 7 and between Site 7 & 6) 6.0m x 1.8m x 25m cast in place concrete structure Stormwater Management Works Channelization along east side of 12th Ave. E downstream of 20th St. E (see page 5.4) Diversion channel 16th Ave. & 20th St. E (see page 5.4) west by 9th Ave. E. (see page 5.4) page 5.4 between Site 7 & 6) 2.b 2a 4 က် က်

# KENNY DRAIN WATERSHED - PROPOSED STOPMWATER MANAGEMENT DESIGN COMPONENTS

<u>_</u>		Net Environmental Impacts	cts		
	Stormwater Management Works	Natural	Social	Economic	PRIORITY
	6. 14th Ave. E. and 20th St. E. (K5) structure placement 3.0m x 0.9m x 20m concrete box culvert (see page 5.4)	Pip rap treatment to prevent erosion     Installation in summer to reduce     erosion during construction period     Alignment parallel with channel     provides better hydraulics and     reduced backwash (flooding).     Culvert ends outside of fill stope     "except alignment angled to reduce entrance losses"	Reduce flooding during infrequent events west of 16th Ave. E. between 16th St. E. and 20th St. E. Protect local road from washout during 1:10 year event	\$71,000	N
<u> </u>	<ol> <li>Control active gully erosion by constructing a rip rap channel c/w 1m armour stone drop structures - Kenny Drain from 26th St. E. southerly to a point 285m upstream, (see page 5.4 - Sites # 1)</li> </ol>	Descripts infiltration     Dissipates energy within channel     Effective control of high velocities     Reduces channel erosion and limits sediment     Reduces clay particles causing red plume in Bay     Replaces steep eroding channel with a stepped channel with a flatter grade	. Reduces existing channel velocities, but dangerous to children playing within channel	\$222,000	е
80	8. Control active ditch erosion by constructing rock check dams to act as sediment traps resulting in flatter grade channel with 0.5m drops - earth ditch upstream of 26th St. E. (see page 5.4 Site # 3). Ditch dimensions are 0.9m wide by 0.6m deep	<ul> <li>Slows channel velocities and reduces erosion</li> <li>Ponding behind structure allows for settling of suspended solids</li> </ul>	. Located in the Industrial Park	\$2,000	м
<b>റ</b>	<ol> <li>Kenny Drain at 26th St. E., (K2) structure replacement</li> <li>3.0m x 1.5m x 20m concrete box culverts</li> <li>(see page 5.4)</li> </ol>	Rip rap treatment to prevent erosion installation in summer to reduce erosion during construction period Alignment parallel with channel provides better hydraulics and reduced backwash (flooding). Culvert ends outside of fill slope	Structure within Industrial Park Reduces floodplain area and potential flood damage Protects collector road from washing out during 1:25 year event	\$163,000	m
10.	. Control future peak flows to pre-development condition by constructing 2 stormwaler detention ponds - south of Hwy 26. (see page 5.4)	. Reduction in peak flows discharged downstream of Hwy 26 . No thermal enhancement	Ponds will contain water only during run-off events Structures bound to the south by a Residential Area and to the north by an industrial area	\$383,000	*

# KENNY DRAIN WATERSHED - PROPOSED STORMWATER MANAGEMENT DESIGN COMPONENTS

		Net Environmental Impacts	cts		
	Stormwater Management Works	Natural	Social	Economic	PRIORITY
<u> </u>	. Storm sewer replacement at 17th St. E & 12th Ave. E. (see page 5.4)	. Within existing urbanized industrial Park	Eliminate Inconvenience and risks associated with frequent flooding.     Sorm sewer within Industrial Park.	\$462,000	4
2 2	Control active channel erosion and future flooding by constructing a rip rap channel c/w 1m armour stone drop structures - Kenny Drain 26th St. to C.P.R. (400m) (see page 5.4 - Site # 6)	Permits infiltration     Disspates energy within channel     Effective control of high velocities     Reduces channel erosion and limits sediment     Reduces clay particles causing red plume in Bay     Replaces steep eroding channel with a stepped channel with a flatter grade     Reduces floodplain width	. Reduces existing channel velocities, but dangerous to children playing within channel	\$312,000	က
13.	Kenny Drain at C.P.R. (K1) structure replacement 2 - 3.6m x 1.5m x 30m concrete box culverts (see page 5.4)	Rip rap treatment to prevent erosion     Installation in summer to reduce     erosion during construction period     Alignment parallel with channel     provides better hydraulics and     reduced backwash (flooding).     Culvert ends outside of fill slope	Structure within Industrial Park Reduces floodplain area and potential flood damage	\$276,000	က
4	Kenny Drain at 23rd St. E. (K3) structure placement 2 - 2.4m x 12m x 20m concrete box culverts (see page 5.4)	Rip rap treatment to prevent erosion     Installation in summer to reduce     erosion during construction period     Alignment parallel with channel     provides better hydraulics and     reduced backwash (flooding).     Culvert ends outside of fill slope	Structure within industrial Park  Reduces floodplain area and potential flood damage  Protects collector road from washing out during 1:25 year event washout during 1:25 year event	\$138,000	φ
15.	14th Ave. E. and 23rd St. E. (K4) structure placement 2 - CSPA 0.91m x 0.66m x 20m (see page 5.4)	Rip rap treatment to prevent erosion Installation in summer to reduce erosion during construction period Alignment parallel with channel to reduce entrance losses Culvert ends outside of fill slope	Protect local road from washout during 1:10 year event Structure within industrial Park Reduces floodplain area and potential flood damage	000'5\$	ø

KENNY DRAIN WATERSHED - PROPOSED STOPMWATER MANAGEMENT DESIGN COMPONENTS

L		Not Carlotte			
	Stormwater Management Works	Natural Matural	Coclai	Economic	
7	16. 16th Ave. E. (K7) structure placement 2 - CSPA 0.68m x 0.50m x 20m (see page 5.4)	Rip rap treatment to prevent erosion installation in summer to reduce erosion during construction period     Alignment parallel with channel provides better hydraulics and reduced backwash (flooding).     Culvert ends outside of fill slope "except alignment angled to reduce entrance losses."	. Reduce flooding during infrequent events west of 16th Ave. E. between 16th St. E. and 20th St. E Protect local road from washout during 1:10 year event	24,000	φ
17	17. C.P.R. spurline at 16th Ave. E. (K6) structure placement 2 - CSPA 0.68m x 0.50m x 20m (see page 5.4)	Rip rap treatment to prevent erosion installation in summer to reduce erosion during construction period. Alignment parallel with channel provides better hydraulics and reduced backwash (flooding). Culvert ends outside of fill slope	Protects local road from washout during 1:10 year event Reduce flooding during infrequent events west of 16th Ave. E. between 16th St. E. and 20th St. E.	<b>2</b> ,000	ဖ
18.	. Improved Kenny Drain structure (W1) - East Bayshore Rd. (presently constructed) 2 - 4.8m × 2.4m × 24m concrete box culverts (see page 5.4)	Allows passage of peak flows     without overtopping road Controls outlet velocity at Owen Sound Bay	Structure within industrial park Protects arterial road during 1:100 year event from washing out	\$271,000 (cost incurred)	9
<u>5</u>	TOTAL ESTIMATED PROJECT COST			43 466 000	