

Corporation of the Municipality of South Huron Revised Agenda - Regular Council Meeting

Monday, October 15, 2018, 6:00 p.m. Council Chambers - Olde Town Hall

Accessibility of Documents:

Documents are available in alternate formats upon request. If you require an accessible format or communication support, please contact the Clerk's Department at 519-235 -0310 or by email at clerk@southhuron.ca to discuss how best we can meet your needs.

Pages

1

1. Meeting Called To Order

Welcome & O Canada

- 2. Public Meeting
- 3. Amendments to the Agenda, as Distributed and Approved by Council

Addition of 9.1 - Deferred Business

Addition of 12.3 and 12.6 - Communications

Recommendation: That South Huron Council approves the Agenda as amended.

- 4. Disclosure of Pecuniary Interest and the General Nature Thereof
- 5. Delegations
 - 5.1 Dashwood Men's Club Presentation to Council

Recommendation: That South Huron Council receives the delegation as presented from the Dashwood Men's Club.

- 5.2 Drainage Act Meeting to Consider the Engineer's Report
 - 5.2.1 Morrissey, Fleming Morrissey Regan Municipal Drains 2018

Recommendation: That South Huron Council receives the delegation as prepared and presented by Mr. W. J. Dietrich, P.Eng.

4

			Page 2
6.	Minut	es	
	6.1	Minutes of the Regular Council Meeting of October 1, 2018	74
		Recommendation: That South Huron Council adopts the minutes of the Regular Council Meeting of October 1, 2018, as printed and circulated.	
7.	Coun	cillor Board and Committee Reports	
	7.1	Lake Huron Primary Water Supply System Joint Board of Management - Meeting of October 4, 2018	83
		7.1.1 2019 Operating and Capital Budget	169
	7.2	Grand Bend Area Joint Sewage Operations - Proposed 2019 Budget	191
		Referenced Staff Report provided on October 1 Agenda	
		Recommendation: That the minutes and reports of the following committees and/or boards be received as presented to Council:	
		 Lake Huron Primary Water Supply System Joint Board of Management meeting agenda of October 4, 2018 including 2019 Operating and Capital Budget; and 	
		 Grand Bend Area Joint Sewage Operations - Proposed 2019 Budget. 	

8. <u>Staff Reports</u>

8.1 Planning

8.2 **Operations and Infrastructure** 195 8.2.1 D. Giberson, Director of Operations and Infrastructure - Tender Results for the Supply of Winter Sand **Recommendation:** That South Huron Council receive the report from Don Giberson, Director of Operations and Infrastructure RE: Tender Results for the Supply of Winter Sand; and That South Huron Council accept the tender received from the low bidder N.C. Jones & Sons and authorize the award of a contract for Supply of Winter Sand in the amount of \$35,002.88 (including HST). 199 8.2.2 D. Giberson, Director of Operations and Infrastructure - Tender Results for the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments. **Recommendation:** That South Huron Council receive the report from Don Giberson, Director of Operations and Infrastructure RE: Tender Results for the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments. AND: That South Huron Council accept the tender received from the low bidder Huron Tractor Ltd and authorize the award of a contract for Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments in the amount of \$115,300 (including applicable HST). 8.3 **Financial Services** 203 8.3.1 S. Becker, Director of Financial Services - 2018 Council Expenses as of September 30, 2018 **Recommendation:** That South Huron Council receives the report from S.Becker, Director of Financial Services/Treasurer re: 2018 Council Expenses as of September 30, 2018 Recommendation: That South Huron Council receives the report from S.Becker, Director of Financial Services/Treasurer re: 2018 Council Expenses as of September 30, 2018

			0
	8.3.2	S. Becker, Director of Financial Services - 2018 Third Quarter Operating Variance Report	206
		Recommendation: That South Huron Council receive the report from S. Becker, Director of Financial Services re: 2018 Third Quarter Operating Variance Report for information only.	
	8.3.3	S. Becker, Director of Financial Services - 2018 Capital Progress Report – September	218
		Recommendation: That South Huron Council receives the report from S. Becker, Director of Financial Services re: 2018 Capital Progress Report – September completed as of September 30, 2018 for information only.	
	8.3.4	S. Becker, Director of Financial Services - Annual Investment Report	229
		Recommendation: That South Huron Council receives the report from Sandy Becker, Director of Financial Services/Treasurer, re: Annual Investment Report as information only.	
8.4	Adminis	tration	
	8.4.1	D. McNab, Development Services Manager/CBO - Q3 July to September Building Activity Report and 2018 Year to Date Building Activity Report	234
		Recommendation: That South Huron Council receives the reports from D. McNab, Development Services Manager/CBO re: Q3 July to September Building Activity Report and 2018 Year to Date Building Activity Report.	

		r ugo o
8.4.2	R. Msuya-Collison, Clerk - Application for Tile Drain Loan Provisional Approval	238
	Recommendation: That South Huron Council receives the report from R. Msuya- Collison, Clerk re: Application for Tile Drain Loan; and	
	That South Huron Council provisionally approves a Tile Drain Loan in the amount of \$50,000 for Concession 3 Part Lot 13, Stephen Ward, Municipality of South Huron.	
8.4.3	R. Msuya-Collison, Clerk - Brock Miller Branch A Municipal Drain - Section 78 - Request for Drainage Improvement	240
	Recommendation: That South Huron Council receives the report from R. Msuya- Collison, Clerk re: Requests for Drain Improvement under Section 78 of the Drainage Act; and	
	That South Huron Council hereby appoints William J. Dietrich, P. Eng., from Dietrich Engineering Ltd. as the Municipal Drainage Engineer to prepare a report for Drain Improvement.	
8.4.4	R. Msuya-Collison, Clerk - Request for Service, Complaints and By-Law Summary	244
	Recommendation: That South Huron Council receives the report from R. Msuya- Collison, Clerk re: Request for Service, Complaints and By-Law Summary, for information.	
8.4.5	R. Msuya-Collison, Clerk - Appoint Members to Court of Revision for Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018	249
	Recommendation: That South Huron Council receives the report from R. Msuya- Collison, Clerk, re: Appoint Members to Court of Revision for Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018; and	
	That South Huron Council hereby appoints the following members to the Court of Revision for above Municipal Drains to be held on November 19, 2018 at 5:00 p.m., prior to the regularly scheduled Council meeting; and	
	That be appointed Chair.	

		8.4.6	R. Msuya-Collison, Clerk - South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference.	252
			Recommendation: That South Huron Council receives the report of R. Msuya- Collison, Clerk regarding the proposed South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference; and	
			That Council approve the South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference. as presented; and	
			That the necessary by-law be forwarded to Council for the required three readings.	
		8.4.7	D. Best, Chief Administrative Officer/Deputy Clerk - Dashwood Community Centre RFP Results	273
			Recommendation: That the memo of D. Best, Chief Administrative Officer dated October 15, 2018 regarding the Dashwood Community Centre project RFP results be received; and That Brannon Construction be awarded the project to design and construct the washroom renovations at the Dashwood Community Centre for the price of \$107,300 plus HST.	
9.	Deferre	ed Busin	ess	
	9.1		e Motion 461-2018 - OPP Detachment Move to Clinton and to South Huron Satellite Office	287
10.	Notice	s of Motio	on	
11.	Mayor & Councillor Comments and Announcements			
12.	Communications			
	12.1	FCM - S	Scholarships for Young Women	290
	12.2		y of Community Safety and Correctional Services - Information on gulations	292
	12.3	OMAFI Delega	RA Parliamentary Assistant R. Pettapiece - AMO Conference tion	294

		Page 7
12.4	OPP - Update of Remaining 2018 Court Security and Prisoner Transportation Grant allotment	295
12.5	Municipality of Bluewater - C67-18 Tuckey Farms Limited	296
12.6	Castlevalley Developments Inc Announcement re Development	313
12.7	Thames Road Elimville Community Park - Request - Community Partnership Agreement -	315
12.8	Exeter Legion - Request for Road Closure for Remembrance Day Parade	316
	Recommendation: That South Huron Council hereby approve the temporary closure of roads for the route of the annual Legion Remembrance Parade to be held on Sunday November 11, 2018 beginning at 9:45 a.m. at the Legion, proceeding to the Cenotaph then to the Trivitt Memorial Church following the Cenotaph Ceremony; and	
	That a wreath be purchased for the cenotaph ceremony at a cost of \$50.00.	
12.9	Township of Montague - Resolution - AMO Request for Consultation	317
12.10	Township of Amaranth- Resolution - Commercial Water Bottling Facilities	318
	Recommendation: That South Huron Council receive communication items not otherwise dealt with.	
Closed	Session	

14. Report From Closed Session

15. By-Laws

13.

15.1 By-Law No. 83-2018 - Morrissey, Fleming Morrissey, Regan Municipal 319 Drains 2018

First and Second Reading only

Recommendation: That the South Huron Council gives first and second reading to By-Law #83-2018, being a by-law to provide for the Morrissey, Fleming Morrissey and Regan Municipal Drains 2018 in the Municipality of South Huron.

16. Confirming By-Law

16.1 By-Law No. 84-2018 – Confirming By-Law

Recommendation:

That the South Huron Council gives first, second and third and final reading to By-Law #84-2018, being a by-law to confirm matters addressed at the October 15, 2018 Council meeting.

17. Adjournment

Recommendation:

That South Huron Council hereby adjourns at _____ p.m., to meet again on November 5, 2018 at 6:00 p.m. or at the Call of the Chair.

MUNICIPALITY OF CORPORATION OF THE MUNICIPALITY OF SOUTH HURON 322 Main Street South P.O. Box 759 Exeter Ontario NOM 1S6 Phone: 519-235-0310 Fax: 519-235-3304 Toll Free: 1-877-204-0747 www.southhuron.ca

October 12, 2018

Superintendent M.M. (Marc) Bedard Commander, Municipal Policing Bureau 777 Memorial Avenue Orillia, ON L3V 7V3

RE: OPP Detachment Move to Clinton and Impacts to South Huron Satellite Office

Dear Superintendent Bedard;

The Province recently announced that it will fund construction of nine (9) new OPP detachments spending more than \$182M including our Huron County-Detachment. This is welcome news but has created much speculation and concern regarding the future of our OPP satellite office located in Exeter.

As a result, the following resolutions were passed at the Council meeting of October 1, 2018:

Motion: 461-2018 Moved: W. DeLuca Seconded: T. Tomes

Whereas there have been concerns raised regarding the closure of the Exeter OPP Station; and

Whereas MPP Lisa Thompson has indicated that a new detachment will be coming to her riding in Clinton; and

Whereas the municipality of South Huron Council has not been provided the opportunity for dialogue while the process took place;

Be it resolved that a letter be sent to Lisa Thompson MPP Huron-Bruce, Michael Tibollo, Minister of Community Safety and Correctional Services, Monte McNaughton, Minister of Infrastructure, and the OPP Municipal Policing Bureau for an up to date status report on the future of the Exeter OPP Station.



CORPORATION OF THE MUNICIPALITY OF SOUTH HURON

322 Main Street South P.O. Box 759 Exeter Ontario NOM 1S6 Phone: 519-235-0310 Fax: 519-235-3304 Toll Free: 1-877-204-0747 www.southhuron.ca

Disposition: Carried

Motion: 462-2018 Moved: W. DeLuca Seconded: M. Vaughan

That South Huron Council direct CAO Best to write and send a letter requesting an up to date status report on the new detachment and submit the letter for information at the next Council meeting.

Disposition: Carried

At this time, the Municipality is seeking a response to the following:

- What impacts (if any) the announcement regarding the Huron County OPP Detachment move from Goderich to Clinton will have on the Exeter OPP Satellite Office?
- What are the future plans for the Exeter OPP Satellite Office?
- An overall update on the construction project including timelines.

We hope you are able to respond as quickly as possible to the above in order to ensure that the correct information is provided to our community.

If you have any questions, or if you or staff from the Municipal Policing Bureau would like to present to our Council, please feel free to contact me directly at 519 235-0310 ext.228 or via email at <u>cao@southhuron.ca</u>

Kind regards,

Dan Best MPA, BA



Chief Administrative Officer

 cc. Hon. Michael Tibollo, MPP Vaughan-Woodbridge, Minister of Community Safety and Correctional Services
 Hon. Lisa Thompson, MPP Huron-Bruce, Minister of Education
 Hon. Monte McNaughton, MPP Lambton-Kent-Middlesex, Minister of Infrastructure
 J.V.N. (Vince) Hawkes, OPP Commissioner
 Mary Silverthorn, OPP Provincial Commander, Corporate Services South Huron Council

Municipality of South Huron 322 Main St. S. Box 759 Exeter ON NOM 1S6

Notice of Meeting to Consider the Engineer's Report

Drainage Act. R.S.O. 1990, c. D.17, s. 42

To:

Enter Name and Current Address of Property Owner

In accordance with section 42 of the Drainage Act, you as an owner of land affected by the proposed drainage works for the

Morrissey, Fleming-Morrissey	and Regan Municip	al Drains	
		lame of drain)	
are requested to attend a council meet	ting to consider the fina	I report filed with the	Municipality
of South Huron			for this drainage works.
The meeting will take place			
Date (yyyy/mm/dd) 2018/10/15	Time 6:00pm	Location Council C	hambers. South Huron
If the share of the project cost assessed to	o your property is more th	an \$100, a copy of the	report is included with this potice
Name of Clerk (Last Name, First Name) Msuya-Collison, Rebekah			
Name of Municipality	· · · · · · · · · · · · · · · · · · ·		
Municipality of South Huron			
Signature of Clerk		Date (yyyy/mm/dd	100/10
Failure to attend meeting: If you do not a project, you will continue to receive notifica	ittend the meeting, it will pation as required by the D	proceed in your absence	e. If you are affected or assessed by this proposed

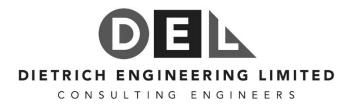
Activities at the meeting to consider the report:

- Usually the engineer will present a summary of the report to council
- For drains initiated by petition;
 - · Petitioners will be given an opportunity to withdraw their name from the petition
 - · Other owners that benefit from the drain will be given an opportunity to add their name to the petition
- Council must decide whether or not to proceed with the project by provisionally adopting the engineer's report by by-law; they also have the
 option to refer the report back to the engineer for modifications.
- All property owners affected by the drain will have an opportunity to influence council's decision
- There is no right to appeal assessments or other aspects of the engineer's report at this meeting; these appeal rights will be made available later in the procedure. Drainage Act, R.S.O. 1990, c. D.17, s. 47 - 54.

Petitioners: After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the original petitioners are responsible for the costs in shares proportional to their assessment in the engineer's report. *Drainage Act*, R.S.O. 1990, c. D. 17 s. 43



Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018



Reference No. 1536

August 26, 2018



TABLE OF CONTENTS

1.0	Introduction1
2.0	Authorization1
3.0	History1
4.0	On-Site Meeting2
5.0	Information Meeting2
6.0	Findings
7.0	Recommendations
8.0	Environmental Considerations
9.0	Summary of Proposed Works
10.0	Working Area and Access4
11.0	Watershed and Soils Characteristics4
12.0	Allowances
13.0	Estimated Construction Costs
14.0	Summary of Estimated Project Costs
15.0	Assessment
16.0	Abandonment of Existing Municipal Drains
17.0	Maintenance7
18.0	Schedule A – Allowances
19.0	Schedule B – Estimated Construction Costs9
20.0	Schedule C – Assessment for Construction
21.0	Schedule D –Assessment for Maintenance21

Specification for Construction of Municipal Drainage Works

DIVISION A – General Conditions

DIVISION B – Specification for Open Drains

DIVISION C – Specification for Tile Drains

DIVISION E - Specification for Drainage Crossings by the Boring Method

DIVISION H – Special Provisions



CONSULTING ENGINEERS

10 Alpine Court, Kitchener, ON, N2E 2M7 T: (519) 880-2708 F: (519) 880-2709 E: mail@dietricheng.com

Kitchener, Ontario

August 26, 2018

Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018

To the Mayor and Council of the Municipality of South Huron

Members of Council:

1.0 Introduction

We are pleased to present our report on the "Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018", serving the following Lots and Concessions in the Municipality of South Huron, Stephen Ward, County of Huron:

Part of Lot 3, Concession 9 And Parts of Lots 16 to 18, S.B.C.

And serving the following Lots and Concessions in the Municipality of North Middlesex, McGillivray Ward County of Middlesex:

Part Lot 3, Concession 13 and parts of Lots 16 to 18, N.B.C.

The attached Plan, Profiles, and Drawings No.'s 1 and 2 Reference No. 1536, Specifications and the Instructions to Tenderers form part of this report. They show and describe in detail the location and extent of the work to be done and the lands which are affected.

2.0 Authorization

Authority to prepare this report was obtained by a resolution of the Municipality of South Huron Council at its June 15, 2015 meeting to appoint Dietrich Engineering Limited to prepare an Engineer's Report.

In accordance with your instructions pursuant to a request received by Council under Section 78 of the Drainage Act, R.S.O. 1990, we have made an examination and survey of the affected area and submit herewith our Report which includes Plan, Profile and Specifications for this work.

3.0 History

3.1 Morrissey Municipal Drain

The existing Morrissey Drain was originally constructed under the authority of a report prepared by James A Howes, O.L.S. dated July 7, 1962. This tile drainage system consisted of the installation of 1218 feet of 12" diameter tile and incorporating 592 feet of existing 12" diameter tile. The Morrissey Drain outlets into the

Del

Page 8

Regan Drain in Lot 17, N.B.C. Municipality of North Middlesex, McGillivray Ward. The upper end of the Morrissey Drain is at the Lot 16/17. S.B.C. in the Municipality of South Huron. Stephen Ward. Improvements

Morrissey Drain is at the Lot 16/17, S.B.C. in the Municipality of North Middlesex, McGillivray Ward. The upper end of the Morrissey Drain is at the Lot 16/17, S.B.C. in the Municipality of South Huron, Stephen Ward. Improvements to the Morrissey Drain were undertaken under the authority of a report submitted by C.P. Corbett and Company Limited, dated May 31, 1973. This report provided for the installation of 720 feet of 16" diameter tile in Lot 17, N.B.C. in the Municipality of North Middlesex, McGillivray Ward.

3.2 Fleming-Morrissey Municipal Drain

This drainage system was constructed under the authority of a report prepared by C.P. Corbett and Company Limited, dated April 22, 1975. Approximately 2275 feet of 8" diameter to 14" diameter tile were installed from an outlet in the Regan Drain in Lot 17, N.B.C.; Municipality of North Middlesex, McGillivray Ward, upstream into Lot 18, S.B.C.; Municipality of South Huron, Stephen Ward. A pumping station was constructed on the Drain, North side of Mount Carmel Drive adjacent to Lot 17, S.B.C., Municipality of South Huron, Stephen Ward.

3.3 Regan Municipal Drain

The Regan Drain is an open drain located in Lot 3, Concession 13 and Lot 17, N.B.C., Municipality of North Middlesex, McGillivray Ward. The Regan Drain outlets into the Lewis Drain. Improvements were undertaken under the authority of a report submitted by C.P. Corbett and Company Limited dated August 16, 1976. This report provided for a cleanout of the Regan Drain in its entirety which consisted of the excavation of 2700 feet of open drain.

4.0 On-Site Meeting

In accordance with Section 9(1) of the Drainage Act, R.S.O. 1990, an on-site meeting was held on December 23, 2015. The place of meeting was at the Municipality of South Huron Municipal Office. Persons in attendance were:

William J. Dietrich, P.Eng.	Dietrich Engineering Limited
Glen Bullock	Drainage Superintendent, Municipality of North Middlesex
Gerry Rychlo	County of Middlesex

Landowners:	
Fred Van Osch	
Gerald Van Osch	
Stephen Morrissey	
Helen Ryan	
Larry Ryan	
Mike Groot	(representing M.S. Muller Farms Ltd)

5.0

Information Meeting

An information meeting was held on July 18, 2018 at the Municipality of South Huron Municipal Office. Persons in attendance were:

William J. Dietrich, P.Eng.	Dietrich Engineering Limited
Dwight Kinsman	Roads Department, Municipality of South Huron
Glen Bullock	Drainage Superintendent, Municipality of North Middlesex



Johnathan LampmanNorth MiddlesexLandowners:Paul GlavinMichael Groot, representing M.S. Muller Farms Ltd.Helen RyanStephen MorrisseyLarry Ryan

The information provided proposed upgrading the existing Municipal Drains and replacing sections of the tile drains with a new Municipal tile drainage system. This meeting provided a review of the design of the proposed drainage system, the estimated costs of the project and proposed assessments.

6.0 Findings

We have made an examination of the drainage area and have found the following:

- 1. The existing tile drains (Morrissey Drain and Fleming-Morrissey Drains) are neither of sufficient capacity nor depth to drain the surrounding and upstream lands within the watershed at today's standards of drainage.
- 2. The pumping system on the Fleming-Morrissey Drain is not functioning.
- 3. The Regan Drain has silted up and requires a cleanout in its entirety.

7.0 Recommendations

It is our recommendation that:

Morrissey Drain

- 1. A new tile drainage system be constructed from the outlet in the Regan Drain upstream to the Northerly side of Mount Carmel Drive adjacent to Lot 17, S.B.C. Municipality of South Huron, Stephen Ward.
- 2. This new tile drainage system consists of the installation of 251 metres of 600mm diameter tile.
- 3. The existing tile drains constructed under the authority of reports prepared by James Howes OIL.S. dated July 7, 1962 and C.P. Corbett and Company Limited, dates May 31, 1973 shall be abandoned.
- 4. The drainage coefficient design standard used for the drain is 38mm of rainfall per 24 hours.

Fleming-Morrissey Drain

- 1. A new tile drainage system be constructed from the outlet in the Regan Drain upstream to the property line between Lots 17 and 18, S.B.C. Municipality of South Huron, Stephen Ward.
- 2. This new tile drainage system consists of the installation of 379 metres of 300 mm diameter to 450 mm diameter tile.
- 3. The pumping station on the North side of Mount Carmel Drive adjacent to Lot 17, S.B.C. Municipality of South Huron, Stephen Ward shall be decommissioned and removed.
- 4. The existing drainage system constructed under the authority of a report prepared by C.P. Corbett and Company Limited, dated April 22, 1975, shall be abandoned.
- 5. The drainage coefficient design standard used for this drain is 38mm of rain fall per 24 hours.



Page 10

<u>Regan Drain</u>

1. The construction consists of 829 metres of open ditch excavation and the installation of one 1400mm diameter corrugated metal pipe culvert and sta. 0+692.

This new drainage system shall be known as the "Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018".

8.0 Environmental Considerations

The Ontario Ministry of Agriculture, Food and Rural Affairs' Agricultural Information Atlas indicates that the Department of Fisheries and Oceans has classified the Regan Drain as an 'F' Drain. Drain Classification F indicates an intermittently flowing system which is dry for significant periods of the year.

9.0 Summary of Proposed Works

The proposed work consists of:

- 1. Approximately 829 metres of open ditch excavation;
- 2. The installation of one (1) farm lane culvert
- 3. The installation of approximately 582 metres of 300mm to 600mm diameter concrete field tile and HDPE pipes.
- 4. The installation of 48 metres of 600mm O.D. smooth wall steel casing by the Boring Method; and
- 5. The installation of five (5) concrete catch basins

10.0 Working Area and Access

Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

10.1 Open Work

The working area shall be a width of 20 metres for construction purposes, and a width of 10 metres for maintenance purposes on the side of the drain where the excavated material is to be placed and levelled.

10.2 Closed Work

The working area shall be an average width of twenty-five (25) metres for construction purposes, and a width of ten (10) metres for maintenance purposes along the alignment of the proposed tile drain.

11.0 Watershed and Soils Characteristics

The watershed was established through analysis of tile drainage maps, previous engineer's reports, field investigations, surveys, and data analysis of the Southwestern Ontario Orthophotographic Project (SWOOP).

The drainage area for the Morrissey Drain comprises of approximately 66.7 hectares plus 10.1 hectares of subsurface waters drained to the Morrissey Drain.

The drainage area for the Fleming-Morrissey Drain comprises of approximately 20 hectares. The drainage area for the Regan Drain comprises of approximately 144.4 hectares plus 10.1 hectares of subsurface waters drained to the Morrissey Drain.



The Ontario Ministry of Agriculture, Food and Rural Affairs' Agricultural Information Atlas describes the soil types within the watershed and along the route of the drain as clay loam.

12.0 Allowances

In accordance with Sections 29 and 30 of the Drainage Act, R.S.O. 1990, we have calculated Allowances payable to Landowners using the following methodology.

12.1 Allowances for Right-of-Way (Section 29)

The land values used for calculating allowances for Right-of-Way was \$45,000/ha.

Allowances for Right-of-Way were not provided in the previous Engineers' Reports, which authorized the construction of the existing drains.

12.1.1 <u>Open Drain</u>

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 were calculated based on 100% of the land value for the additional land required to widen the existing channel.

12.1.2 <u>Closed Drain</u>

The allowances for Right-of-Way under Section 29 of the Drainage Act, R.S.O. 1990 for closed drains were calculated based on 25% of the land value for a ten metre Right-of-Way.

12.2 Allowances for Damages to Lands and Crops (Section 30)

Allowances for Damages to Lands and Crops under Section 30 of the Drainage Act, R.S.O. 1990 were primarily calculated to compensate landowners for crop losses and land damages due to the construction of the drain, including access to the working corridor.

We determined the allowances payable to Landowners entitled thereto as shown in Schedule A.

Total Allowances, under Sections 29 and 30 of the Drainage Act, R.S.O. 1990;

Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018:

<u>\$25,350</u>

13.0 Estimated Construction Costs

We have made an estimate of the cost of the proposed work based on labour, equipment and materials. A detailed description of the costs involved can be found in Schedule B of this report.

The total estimated construction costs for this project are as follows:

Total Estimated Construction Costs	 133,665
C) Total Estimated Construction Costs – Regan Drain	\$ 28,420
B) Total Estimated Construction Costs – Fleming-Morrissey Drain	\$ 55,485
A) Total Estimated Construction Costs – Morrissey Drain	\$ 49,760

14.0 Summary of Estimated Project Costs

The total estimated project costs are as follows:

Allowances under Sections 29 and 30 of the Drainage Act, R.S.O. 1990 (Refer to Schedule A)	\$ 25,350
Total Estimated Construction Costs	\$ 133,665
Meetings, survey, design, preparation of preliminary cost estimates, preparation of final drainage report, consideration of report and attendance at the Court of Revision (if necessary)	\$ 27,700
Preparation of contract documents, contract administration, supervision and inspection of construction	\$ 17,900
Contingencies, Interest and net H.S.T.	\$ 7,885
TOTAL ESTIMATED PROJECT COSTS	
Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018	\$ 212,500
The estimated east of the work in the Municipality of South Llyron is 6 FC COO	

The estimated cost of the work in the Municipality of South Huron is \$ 56,600.

The estimated cost of the work in the Municipality of North Middlesex is \$155,900.

15.0 Assessment

We assess the cost of this work against the lands and roads liable for assessment for benefit and outlet as shown in the annexed Schedule C - Assessment for Construction. We have determined that there is no injuring liability assessment involved.

15.1 Special Assessments (Section 26)

Whether or not the Counties of Huron and Middlesex elects to do the work on their property, Sta. 0+221 to Sta. 0+251, (Mount Carmel Drive; Morrissey Drain) they shall be assessed the actual increased costs to the drainage works due to the construction and operation of the road as Special Assessments in addition to any benefit and outlet assessments. The Special Assessments shall be made up of the actual construction costs plus an allowance for administration costs.

Whether or not the Counties of Huron and Middlesex elects to do the work on their property, Sta. 0+262 to Sta. 0+292, Mount Carmel Drive; Fleming-Morrissey Drain) they shall be assessed the actual increased costs to the drainage works due to the construction and operation of the road as Special Assessments in addition to any benefit and outlet assessments. The Special Assessments shall be made up of the actual construction costs plus an allowance for administration costs.

16.0 Abandonment of Existing Municipal Drains

The existing Morrissey Municipal Drain constructed under the reports of James A. Howes. O.L.S dated July 7, 1962 and C.P. Corbett and Company Limited dated May 31, 1973, shall be abandoned and cease to be municipal drains after the Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018 is constructed. The ownership of the existing tile drains shall be reverted to the landowners for that portion of the drain which is situated on their respective properties.



17.0 Maintenance

After completion, this drainage system shall be maintained by the Municipalities of South Huron and North Middlesex at the expense of all the lands and roads assessed in the attached Schedule D - Assessment for Maintenance and in the same relative proportions until such time as the assessment is changed under the Drainage Act, except for those portions of the drain constructed within road right-of-ways. These portions of the drain shall be maintained at the expense of the road authority having jurisdiction over said road.

Respectfully submitted, DIETRICH ENGINEERING LIMITED

W. J. Dietrich, P.Eng.

WJD:sm





Schedule A - Allowances

					Damages to Lands and	
Lot or Part	Con.	Landowner	Roll No.	Right-of-Way (Sec. 29)	Crops (Sec. 30)	Total Allowances
Morrissey	<u> Drain</u>					
Municipo	ality of Sou	uth Huron (Stephen Ward	<u>d)</u>			
17	S.B.C.	S. & J. Morrissey	27-057		\$500	\$500
Municipo	ality of No	rth Middlesex (McGillivro	ay Ward <u>)</u>			
E. Pt. 17	N.B.C.	C. & S. Glavin	30-097	\$2,540	\$2,760	\$5,300
Total Allo	wances, N	Norrissey Drain		\$2,540	\$3,260	\$5,800
Fleming-	Morrissey	<u> Drain</u>				
Municipo	ality of Sou	uth Huron (Stephen Ward	<u>d)</u>			
17	S.B.C.	S. & J. Morrissey	27-057	\$980	\$1,870	\$2,850
18	S.B.C.	M.S. Muller Farms Ltd.	27-056		\$500	\$500
Municipo	ality of No	orth Middlesex (McGillivro	ay Ward <u>)</u>			
Pt. 17	N.B.C.	B. Van Osch	30-098	\$2,950	\$3,120	\$6,070
Total Allowances, Fleming-Morrissey Drain			\$3,930	\$5,490	\$9,420	
<u>Regan Drain</u>						
Municipo	Municipality of North Middlesex (McGillivray Ward)					
Pt. 17	N.B.C.					
Pt. 3	Con. 13	C. & S. Glavin	30-097	\$2,000	\$7,130	\$9,130
W. Pt. 17	N.B.C.	B. Van Osch	30-098		\$1,000	\$1,000
Total Allo	wances, R	egan Drain		\$2,000	\$8,130	\$10,130
<u>Total Allo</u>	wances		:	\$8,470	\$16,880	\$25,350

Total Allowances, under Sec.s 29 and 30 of the Drainage Act, R.S.O. 1990;

Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018. \$25,350



Schedule B - Estimated Construction Costs

The estimated construction costs for the outlined proposed work below is as follows:

De	scription	Estimated Quantity	\$/Unit	Total
A) [Morrissey Municipal Drain			
1	Supply 600mm diameter concrete field tile Installation	215 m 215 m	\$46.00 \$30.00	\$9,890.00 \$6,450.00
2	Supply 600mm diameter HDPE outlet pipe complete with rodent grate	6 m	\$100.00	\$600.00
	Installation of 600mm diameter outlet pipe complete with quarry stone rip-rap protection and geotextile filter material (25m ²)	l.s.		\$2,500.00
		1.5.		\$2,500.00
3	Tile connections	l.s.		\$860.00
Sub	o-Total			\$20,300.00
4	Work to be done on the Huron/Middlesex County R (Sta. 0+221 to Sta. 0+251)	oad Allowance, (Mo	ount Carmel Drive.))
а) Supply 600mm O.D. smooth wall steel casing, 9.53mm wall thickness	24 m	\$200.00	\$4,800.00
	Installation of 600mm O.D. smooth wall steel casing by the Boring Method (Sta. 0+227 to Sta. 0+251)	24 m	\$650.00	\$15,600.00
b) Supply 600mm diameter HDPE Pipe (Boss 2000 or equivalent)	6 m	\$120.00	\$720.00
	Installation of 600mm diameter HDPE Pipe (Boss 2000 or equivalent). Sta. 0+221 to Sta. 0+227	6 m	\$80.00	\$480.00
С) Supply and install 900mm X 1200mm concrete ditch inlet catch basin at Sta. 0+251 (inline type)	1 ea	\$3,000.00	\$3,000.00
d) Supply and install 900mm X 1200mm concrete ditch inlet catch basin offset 4 metres West of Sta. 0+221	1 ea	\$2,500.00	\$2,500.00
e) Supply 300mm diameter HDPE Pipe (Boss 2000 or equivalent)	4 m	\$40.00	\$160.00

					Page
U		Morrissey	v, Fleming-Morriss	sey and Regan Mur	nicipal Drains 2018
	Installation of 300mm diameter HDPE	Pipe			
	(offset DICB connection at Sta. 0+221)		4 m	\$50.00	\$200.00
f) Supply and install 1-600mm x 300mm	HDPE tee	l.s.		\$500.00
g) Grout existing 300mm diameter C.M.P		l.s.		\$1,500.00
Sub	o-Total				\$29,460.00
	al Estimated Construction Costs rrissey Municipal Drain				\$49,760.00
<u>B) f</u>	leming-Morrissey Municipal Drain				
1)	Supply 450mm diameter concrete field Installation	l tile	256 m 256 m	\$28.00 \$30.00	\$7,168.00 \$7,680.00
2)	Supply 300mm diameter concrete field	l tile	87 m	\$20.00	\$1,740.00
	Installation		87 m	\$25.00	\$2,175.00
3)	Supply 450mm diameter HDPE outlet p complete with rodent grate	pipe	6 m	\$70.00	\$420.00
	Installation of 450mm diameter outlet quarry stone rip-rap protection and ge filter material (25m ²)		l.s.		\$2,500.00
4)	Supply and install 1 standard 600mm x concrete catch basin at Sta. 0+379 (inli		1 ea	\$2,000.00	\$2,000.00
5)	Removal and disposal of pumping stati 0+292	on at Sta.	l.s.		\$1,500.00
6)	Tile connections				\$702.00
Sub	o-Total				\$25,885.00
7)	Work to be done on the Huron/Middle (Mount Carmel Drive) (Sta. 0+262 to St	-	Road Allowance		
а) Supply 600mm O.D. smooth wall steel 9.53mm wall thickness	casing,	24 m	\$200.00	\$4,800.00
	Installation of 600mm O.D. smooth wa casing by the Boring Method (Sta. 0+26 0+292)		24 m	\$650.00	\$15,600.00
b) Supply 600mm diameter HDPE Pipe (Bo or equivalent)	oss 2000	6 m	\$120.00	\$720.00



мс	TAL ESTIMATED CONSTRUCTION COSTS DRRISSEY, FLEMING-MORRISSEY AND REGAN MUNICIPAL AINS 2018			\$133,665.00
	al Estimated Construction Costs gan Municipal Drain			\$28,420.00
6)	Fill in eroded areas and place quarry stone rip- rap protection filter material on sideslopes (40m ²)	l.s.		\$2,209.00
	Installation of 1 - 10 metre length of 1400 mm diameter laneway culvert at approx. Sta. 0+692 complete with quarry stone rip-rap protection and geotextile filter material (30m ²) and including the removal of the existing 1200 mm diameter culvert	l.s.		\$5,000.00
5)	Supply 1 - 10 metre length of 1400mm diameter, 2.80mm thickness corrugated metal pipe laneway culvert (125mm x 25mm corrugations)	10 m	\$300.00	\$3,000.00
4)	Clearing and grubbing	l.s.		\$800.00
3)	Levelling of excavated material	829 m	\$3.00	\$2,487.00
2)	Seeding	829 III I.s.	\$10.00	\$1,660.00
<u>C)</u> 1)	Regan Municipal Drain Open ditch excavation including stripping topsoil (approx 2900m ³)	829 m	\$16.00	\$13,264.00
	al Estimated Construction Costs ming-Morrissey Municipal Drain			\$55,485.00
Sub	o-Total			\$29,600.00
d) Grout existing 375mm diameter C.M.P.	l.s.		\$2,000.00
С) Supply and install standard 900mm X 1200mm concrete catch basins, inline type at Sta. 0+262 and Sta. 0+292	2 ea	\$3,000.00	\$6,000.00
	Installation of 600mm diameter HDPE Pipe (Boss 2000 or equivalent). Sta. 0+262 to Sta. 0+268	6 m	\$80.00	\$480.00



Summary of Construction Costs

	TAL ESTIMATED CONSTRUCTION COSTS RRISSEY, FLEMING-MORRISSEY AND REGAN MUNICIPAL	\$133,665.00
C)	Total Estimated Construction Costs - Regan Municipal Drain	\$28,420.00
B)	Total Estimated Construction Costs - Fleming-Morrissey Municipal Drain	\$55,485.00
A)	Total Estimated Construction Costs - Morrissey Municipal Drain	\$49,760.00

	ш	
(

Lot or Part	Con.	Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
Morrissey Municipal Drain Municipality of South Huro	Aunicipa y of Sout	<u>Morrissey Municipal Drain</u> Municipality of South Huron (Stephen Ward)	(ard)								
ſ	6	R. Ryan	9-001	8.9		\$2,381		\$2,381	\$794		\$1,587
16	S.B.C	Van Osch Farms Ltd.	27-057-10	34.3	\$1,500	\$9,718		\$11,218	\$3,739		\$7,479
* 16	S.B.C	R. Harrigan	27-058	0.5		\$157		\$157			\$157
17	S.B.C	S. & J. Morrissey	27-057	18.2	\$1,500	\$5,582		\$7,082	\$2,361	\$500	\$4,221
Total Assessment on Lands	ient on La	nds			\$3,000	\$17,838		\$20,838	\$6,894	\$500	\$13,444
Mount Carmel Drive	I Drive	County of Huron		0.8	\$2,000	\$866	\$20,060	\$22,926			\$22,926
Babylon Line		Municipality of South Huron	Huron	0.4		\$433		\$433			\$433
Total Assessment on Roads	lent on Ro	bads			\$2,000	\$1,299	\$20,060	\$23,359			\$23,359
Total Assessment on Lands a Municipality of South Huron	าent on Li of South F	Total Assessment on Lands and Roads, Municipality of South Huron			\$5,000	\$19,137	\$20,060	\$44,197	\$6,894	\$500	\$36,803

NOTES: 1. * Denotes lands not eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a

one-third (1/3) Provincial grant, and allowances, if applicable.

4
ш

Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
Morrissey Municipal Drain Municipality of North Middlesex (McGillivray Ward)	ivray Ward								
16 N.B.C. C. Glavin	30-096	1.6		\$215		\$215	\$72		\$143
Pt. 17 & Pt. 3 N.B.C. & C. & S. Glavin Con. 13	30-097	1.2	\$9,000	\$162		\$9,162	\$3,054	\$5,300	\$808
Total Assessment on Lands			000 65	¢377		¢9 377	\$3.176	\$5.300	<u> </u>
			000/04				70,110		+) }
Mount Carmel Drive County of Middlesex		0.8	\$2,000	\$866	\$20,060	\$22,926			\$22,926
Total Assessment on Roads			\$2,000	\$866	\$20,060	\$22,926			\$22,926
Total Accessment on Lands and Roads									
Municipality of North Middlesex			\$11,000	\$1,243	\$20,060	\$32,303	\$3,126	\$5,300	\$23,877
Total Assessment on Lands and Roads, Morrissey Municipal Drain 2018			\$16,000	\$20,380	\$40,120	\$76,500	\$76,500 \$10,020	\$5,800	\$60,680
NOTES: 1. All the above lands are eligible for ADIP grants. 2. The NET ASSESSMENT is the total estimated assessment less a	are eligible for VT is the total	 ADIP grants estimated as 	sessment les	ت ب					

one-third (1/3) Provincial grant, and allowances, if applicable.

ш

Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
Fleming-Morrissey Municipal Drain Municipality of South Huron (Stephen Ward)	(ard)								
17 S.B.C S. & J. Morrissey	27-057	7.3	\$6,000	\$5,187		\$11,187	\$3,729	\$2,850	\$4,608
18 S.B.C MS Muller Farms Ltd.	27-056	6.1	\$5,000	\$9,722		\$14,722	\$4,907	\$500	\$9,315
Total Assessment on Lands			\$11,000	\$14,909		\$25,909	\$8,636	\$3,350	\$13,923
Mount Carmel Drive County of Huron		0.7	\$2,500	\$2,132	\$19,465	\$24,097			\$24,097
Total Assessment on Roads			\$2,500	\$2,132	\$19,465	\$24,097			\$24,097
Total Assessment on Lands and Roads, Municipality of South Huron			\$13,500	\$17,041	\$19,465	\$50,006	\$50,006 \$8,636	\$3,350	\$38,020

NOTES: 1. All the above lands are eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a

one-third (1/3) Provincial grant, and allowances, if applicable.

(

					l	l		l	
Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
Fleming-Morrissey Municipal Drain									
Municipality of North Middlesex (McGillivray Ward)	Ilivray Ward	Ţ							
Pt. 17 N.B.C. B. Van Osch	30-08	3.6	\$9,500	\$259		\$9,759	\$3,253	\$6,070	\$436
18 N.B.C. B. Van Osch	50-160	1.6		\$1,038		\$1,038	\$346		\$692
Total Association of the Association				00 7 4			ço EOO	ο <u>τ</u> ο 35	00112
l otal Assessment on Lands			005,85	\$1,29/		\$10,/9/	44°,5¢	70/N	\$1,128
Mount Carmel Drive County of Middlesex		0.7	\$2,500	\$2,132	\$19,465	\$24,097			\$24,097
Total Assessment on Roads			\$2,500	\$2,132	\$19,465	\$24,097			\$24,097
Total Assessment on Lands and Roads,									
Municipality of North Middlesex			\$12,000	\$3,429	\$19,465	\$34,894	\$3,599	\$6,070	\$25,225
Total Assessment on Lands and Roads,									
Fleming-Morrissey Municipal Drain 2018			\$25,500	\$20,470	\$38,930	\$84,900	\$84,900 \$12,235	\$9,420	\$63,245
NOTES: 1. All the above lands are eligible for ADIP grants. 2. The NFT ASSESSMENT is the total estimated assessment less a	are eligible for VT is the total	ADIP grants. estimated ass	essment less	c					
uollo kao taona loivai val (C/T/ bridt coo				1					

one-third (1/3) Provincial grant, and allowances, if applicable.

ш
0

Lot or Part	Con.	Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
<u>Regan Municipal Drain</u>	cipal D	rain									
Municipality	r of Sou	Municipality of South Huron (Stephen Ward)	(ard)								
m	6	R. Ryan	9-001	8.9		\$1,870		\$1,870	\$623		\$1,247
16	S.B.C	Van Osch Farms Ltd.	27-057-10	34.3		\$7,632		\$7,632	\$2,544		\$5,088
* 16	S.B.C	R. Harrigan	27-058	0.5		\$124		\$124			\$124
17	S.B.C	S. & J. Morrissey	27-057	25.5		\$5,921		\$5,921	\$1,974		\$3,947
18	S.B.C	MS Muller Farms Ltd.	27-056	6.1		\$1,286		\$1,286	\$429		\$857
Total Assessment on Lands	ent on L	ands				\$16,833		\$16,833	\$5,570		\$11,263
Mount Carmel Drive	l Drive	County of Huron		1.6		\$1,326		\$1,326			\$1,326
Babylon Line		Municipality of South Huron	luron	0.4		\$340		\$340			\$340
Total Assessment on Roads	ent on R	oads				\$1,666		\$1,666			\$1,666
Total Assessm	ent on L	Total Assessment on Lands and Roads,									
Municipality of South Huron	f South	Huron				\$18,499		\$18,499	\$5,570		\$12,929

NOTES: 1. * Denotes lands not eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a

one-third (1/3) Provincial grant, and allowances, if applicable. 3. The NET ASSESSMENT is provided for information purposes only.

(

Lot or Part Con. Landowner	Roll No.	Approx. Hectares Affected	Benefit (Sec. 22)	Outlet Liability (Sec. 23)	Special Assessment (Sec. 26)	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
Regan Municipal Drain Municipality of North Middlesex (McGillivray Ward)	illivray Ward	J							
16 N.B.C. C. Glavin	30-096	20.2		\$1,495		\$1,495	\$498		\$997
Pt. 17 & Pt.3 N.B.C. & C. & S. Glavin Con. 13	30-097	20.2	\$19,000	\$1,435		\$20,435	\$6,812	\$9,130	\$4,493
Pt. 17 N.B.C. B. Van Osch 18 N.B.C. B. Van Osch	30-098 50-160	20.2 4.9	\$7,000	\$1,801 \$544		\$8,801 \$544	\$2,934 \$181	\$1,000	\$4,867 \$363
Total Assessment on Lands			\$26,000	\$5,275		\$31,275	\$10,425	\$10,130	\$10,720
Mount Carmel Drive County of Middlesex		1.6		\$1,326		\$1,326			\$1,326
Total Assessment on Roads				\$1,326		\$1,326			\$1,326
Total Assessment on Lands and Roads, Municipality of North Middlesex			\$26,000	\$6,601		\$32,601	\$32,601 \$10,425	\$10,130	\$12,046
Total Assessment on Lands and Roads, Regan Municipal Drain 2018			\$26,000	\$25,100		\$51,100	\$51,100 \$15,995	\$10,130	\$24,975

NOTES: 1. All the above lands are eligible for ADIP grants.

2. The NET ASSESSMENT is the total estimated assessment less a

one-third (1/3) Provincial grant, and allowances, if applicable.

ш

Lot or Part	Con.	Lot or Part Con. Landowner	Roll No.	Morrissey Municipal Drain	Fleming- Morrissey Municipal Drain	Regan Municipal Drain	Total Assessment	Less 1/3 Gov't Grant	Less Allowances	Net Assessment
<u>Municipalit</u>	y of Sou	<u>Municipality of South Huron (Stephen Ward)</u>								
Ω	б		9-001	\$2,381		\$1,870	\$4,251	\$1,417		\$2,834
16	S.B.C	arms Ltd.	27-057-10	\$11,218		\$7,632	\$18,850	\$6,283		\$12,567
* 16	S.B.C	R. Harrigan	27-058	\$157		\$124	\$281			\$281
17	S.B.C	S. & J. Morrissey	27-057	\$7,082	\$11,187	\$5,921	\$24,190	\$8,063	\$3,350	\$12,777
18	S.B.C	MS Muller Farms Ltd.	27-056		\$14,722	\$1,286	\$16,008	\$5,336	\$500	\$10,172
Total Assessment on Lands	ient on La	ands		\$20,838	\$25,909	\$16,833	\$63,580	\$21,099	\$3,850	\$38,631
Mount Carmel Drive Babylon Line	el Drive	County of Huron Municipality of South Huron		\$22,926 \$433	\$24,097	\$1,326 \$340	\$48,349 \$773			\$48,349 \$773
Total Assessment on Roads	lent on Ro	bads		\$23,359	\$24,097	\$1,666	\$49,122			\$49,122
Total Assessment on Lands a Municipality of South Huron	nent on L of South I	Total Assessment on Lands and Roads, Municipality of South Huron		\$44,197	\$50,006	\$18,499	\$112,702	\$21,099	\$3,850	\$87,753

NOTES: 1. * Denotes lands not eligible for ADIP grants.



Net Assessment	\$1,140	\$5,301	\$5,303 \$1,055	\$12,799	\$48,349	\$48,349	\$61,148	\$148,901
	\$1,			\$12,	\$48,	\$48,	\$61,	\$148
Less Allowances		\$14,430	\$7,070	\$21,500			\$21,500	\$25,350
Less 1/3 Gov't Grant	\$570	\$9,866	\$6,187 \$527	\$17,150			\$17,150	\$38,249
Total Assessment	\$1,710	\$29,597	\$18,560 \$1,582	\$51,449	\$48,349	\$48,349	\$99,798	\$212,500
Regan Municipal Drain	\$1,495	\$20,435	\$8,801 \$544	\$31,275	\$1,326	\$1,326	\$32,601	\$51,100
Fleming- Morrissey Municipal Drain			\$9,759 \$1,038	\$10,797	\$24,097	\$24,097	\$34,894	\$84,900
Morrissey Municipal Drain	\$215	\$9,162		\$9,377	\$22,926	\$22,926	\$32,303	\$76,500
Roll No. cGillivray Ward)	30-096	30-097	30-098 50-160					Municipal Drains
Lot or Part Con. Landowner Roll No Municipality of North Middlesex (McGillivray Ward)	. C. Glavin	. & C. & S. Glavin L3	. B. Van Osch . B. Van Osch	Lands		Roads	Total Assessment on Lands and Roads, Municipality of North Middlesex	Total Assessment on Lands and Roads, Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018
r Part Con . icipality of No	N.B.C.	Pt. 17 & Pt.3 N.B.C. & Con. 13	N.B.C. N.B.C.	Total Assessment on Lands	Mount Carmel Drive	Total Assessment on Roads	Total Assessment on Lands and F Municipality of North Middlesex	Assessment on issey, Fleming-1
Lot o Muni	16	Pt. 17	Pt. 17 18	Total	Mour	Total	Total Muni	Total Morri 2018

NOTES: 1. All the above lands are eligible for ADIP grants.

Schedule D - Assessment For Maintenance

				Approx. Hectares	Portion of Maintenance
Lot or Part	Con.	Landowner	Roll No.	Affected	Cost
<u>Morrissey</u>	<u>Municipal D</u>	rain			
<u>Municipali</u>	ty of South I	Huron (Stephen Ward)			
3	9	R. Ryan	9-001	8.9	11.5%
16	S.B.C	Van Osch Farms Ltd.	27-057-10	34.3	46.6%
* 16	S.B.C	R. Harrigan	27-058	0.5	0.8%
17	S.B.C	S. & J. Morrissey	27-057	18.2	26.9%
Total Asses	sment on Lai	nds			85.8%
Mount Carı	mel Drive	County of Huron		0.8	4.2%
Babylon Lin	ie	Municipality of South Huron		0.4	2.1%
Total Asses	sment on Ro	ads			6.3%
Total Asses	sment on La	nds and Roads,			
Municipalit	y of South H	uron			92.1%
<u>Municipali</u>	<u>ty of North I</u>	<u> Middlesex (McGillivray Ward)</u>			
16	N.B.C.	C. Glavin	30-096	1.6	2.1%
Pt. 17 & Pt.	3 N.B.C. & C	Con. 13C. & S. Glavin	30-097	1.2	1.6%
Total Asses	sment on Lai	nds			3.7%
Mount Carı	mel Drive			0.8	4.2%
Total Asses	sment on Ro	ads			4.2%
Total Asses	sment on La	nds and Roads,			
Municipalit	y of North N	1iddlesex			7.9%
Total Asses	sment on La	nds and Roads,			
Morrissey I	Municipal Dr	ain 2018			100.0%

NOTES: 1. * Denotes lands not eligible for ADIP grants.

Schedule D - Assessment For Maintenance

Lot or Part	Con.	Landowner	Roll No.	Approx. Hectares Affected	Portion of Maintenance Cost
Fleming-M	<u>orrissey Munici</u>	pal Drain			
<u>Municipali</u>	t <u>y of South Hurc</u>	on (Stephen Ward)			
17	S.B.C	S. & J. Morrissey	27-057	7.3	29.5%
18	S.B.C	MS Muller Farms Ltd.	27-056	6.1	24.7%
Total Assess	sment on Lands				54.2%
Mount Carr	nel Drive	County of Huron		0.7	12.2%
Total Assess	sment on Roads				12.2%
	sment on Lands y of South Huroi				66.4%
<u>Municipali</u>	ty of North Mide	<u>dlesex (McGillivray Ward)</u>			
<u>Municipali</u> Pt. 17	t <mark>y of North Midd</mark> N.B.C.	<u>dlesex (McGillivray Ward)</u> B. Van Osch	30-098	3.6	14.8%
	•	• • •	30-098 50-160	3.6 1.6	14.8% 6.6%
Pt. 17 18	N.B.C.	B. Van Osch			
Pt. 17 18	N.B.C. N.B.C. sment on Lands	B. Van Osch			6.6%
Pt. 17 18 Total Assess Mount Carr	N.B.C. N.B.C. sment on Lands	B. Van Osch		1.6	6.6% 21.4%
Pt. 17 18 Total Assess Mount Carr	N.B.C. N.B.C. sment on Lands nel Drive	B. Van Osch		1.6	6.6% 21.4% 12.2%
Pt. 17 18 Total Assess Mount Carr Total Assess	N.B.C. N.B.C. sment on Lands nel Drive	B. Van Osch B. Van Osch		1.6	6.6% 21.4% 12.2%
Pt. 17 18 Total Assess Mount Carr Total Assess	N.B.C. N.B.C. sment on Lands nel Drive sment on Roads	B. Van Osch B. Van Osch and Roads,		1.6	6.6% 21.4% 12.2%
Pt. 17 18 Total Assess Mount Carr Total Assess	N.B.C. N.B.C. sment on Lands nel Drive sment on Roads	B. Van Osch B. Van Osch and Roads,		1.6	6.6% 21.4% 12.2% 12.2%
Pt. 17 18 Total Assess Mount Carr Total Assess Total Assess Municipalit	N.B.C. N.B.C. sment on Lands nel Drive sment on Roads	B. Van Osch B. Van Osch and Roads, lesex		1.6	6.6% 21.4% 12.2% 12.2%

NOTES: 1. * Denotes lands not eligible for ADIP grants.

Schedule D - Assessment For Maintenance

					Approx.	Portion of
Lot	or Part	Con.	Landowner	Roll No.	Hectares Affected	Maintenance Cost
Rec	Regan Municipal Drain					
<u>Mu</u>	unicipality	of South Huror	<u>n (Stephen Ward)</u>			
3		9	R. Ryan	9-001	8.9	7.8%
16		S.B.C	Van Osch Farms Ltd.	27-057-10	34.3	31.9%
* 16		S.B.C	R. Harrigan	27-058	0.5	0.5%
17		S.B.C	S. & J. Morrissey	27-057	25.5	24.7%
18		S.B.C	MS Muller Farms Ltd.	27-056	6.1	5.4%
Tot	al Assessr	ment on Lands				70.3%
Мо	unt Carm	el Drive	County of Huron		1.6	5.5%
Bab	oylon Line		Municipality of South Huron		0.4	1.5%
Tot	al Assessr	ment on Roads				7.0%
Tot	Total Assessment on Lands and Roads,					
Mu	inicipality	of South Huron				77.3%
<u>Mu</u>	<u>inicipality</u>	of North Midd	lesex (McGillivray Ward)			
16		N.B.C.	C. Glavin	30-096	20.2	4.7%
Pt.	17 & Pt.3	N.B.C. & Con. 1	3C. & S. Glavin	30-097	20.2	4.4%
Pt.	17	N.B.C.	B. Van Osch	30-098	20.2	6.1%
18		N.B.C.	B. Van Osch	50-160	4.9	2.0%
Tot	al Assessr	ment on Lands				17.2%
Мо	unt Carm	el Drive	County of Middlesex		1.6	5.5%
Tot	al Assessr	ment on Roads				5.5%
Total Assessment on Lands and Roads,						
Mu	inicipality	of North Middle	esex			22.7%
Total Assessment on Lands and Roads,						
Reg	gan Munio	cipal Drain 2018				100.0%

NOTES: 1. * Denotes lands not eligible for ADIP grants.

Schedule D - Assessment For Maintenance

Lot or Part	Con.	Landowner	Roll No.	Approx. Hectares Affected	Portion of Maintenance Cost
Regan Muni	cipal Drain (Culve	ert at Sta. 0+692)			
<u>Municipality</u>	of South Huron (S	<u>tephen Ward)</u>			
3	9	R. Ryan	9-001	8.9	2.5%
16	S.B.C	Van Osch Farms Ltd.	27-057-10	34.3	10.1%
[•] 16	S.B.C	R. Harrigan	27-058	0.5	0.2%
17	S.B.C	S. & J. Morrissey	27-057	25.5	7.8%
18	S.B.C	MS Muller Farms Ltd.	27-056	6.1	1.7%
Total Assessm	nent on Lands				22.3%
Mount Carme	el Drive	County of Huron		1.6	1.8%
Babylon Line		Municipality of South Huron		0.4	0.5%
Total Assessm	nent on Roads				2.3%
	of South Huron	ex (McGillivray Ward)			24.6%
16	N.B.C.	C. Glavin	30-096	20.2	5.6%
Pt. 17 & Pt.3	N.B.C. & Con. 13	C. & S. Glavin	30-097	20.2	61.0%
Pt. 17	N.B.C.	B. Van Osch	30-098	20.2	5.6%
18	N.B.C.	B. Van Osch	50-160	4.9	1.4%
Total Assessm	nent on Lands				73.6%
Mount Carmel DriveCounty of Middlesex1.6		1.8%			
Total Assessment on Roads		1.8%			
Total Assessment on Lands and Roads,Municipality of North Middlesex75.4%					
Total Assessment on Lands and Roads, Regan Municipal Drain (Culvert at Sta. 0+692) 100.0%				100.0%	

NOTES: 1. * Denotes lands not eligible for ADIP grants.

SPECIFICATIONS FOR THE CONSTRUCTION OF MUNICIPAL DRAINAGE WORKS

- **DIVISION A General Conditions**
- **DIVISION B Specifications for Open Drains**
- **DIVISION C Specification for Tile Drains**
- DIVISION E Specification for Drainage Crossings by the Boring Method
- **DIVISION H Special Provisions**

DIVISION A GENERAL CONDITIONS

<u>A</u> <u>CONTENT</u>

PAGE

A.1	SCOPE	1
A.2	TENDERS	1
A.3	EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS	1
A.4	PAYMENT	2
A.5	CONTRACTOR'S LIABILITY INSURANCE	2
A.6	LOSSES DUE TO ACTS OF NATURE, ETC.	2
A.7	COMMENCEMENT AND COMPLETION OF WORK	3
A.8	WORKING AREA AND ACCESS	3
A.9	SUB-CONTRACTORS	3
A.10	PERMITS, NOTICES, LAWS AND RULES	3
A.11	RAILWAYS, HIGHWAYS AND UTILITIES	4
A.12	ERRORS AND UNUSUAL CONDITIONS	4
A.13	ALTERATIONS AND ADDITIONS	4
A.14	SUPERVISION	4
A.15	FIELD MEETINGS	4
A.16	PERIODIC AND FINAL INSPECTIONS	5
A.17	ACCEPTANCE BY THE MUNICIPALITY	5
A.18	WARRANTY	5
A.19	TERMINATION OF CONTRACT BY THE MUNICIPALITY	5
A.20	TESTS	6
A.21	POLLUTION	6
A.22	SPECIES AT RISK	6
A.23	ROAD CROSSINGS	6
A.24	LANEWAYS	7
A.25	FENCES	8
A.26	LIVESTOCK	8
A.27	STANDING CROPS	9
A.28	SURPLUS GRAVEL	9
A.29	IRON BARS	9
A.30	RIP-RAP	9
A.31	CLEARING, GRUBBING AND BRUSHING	9
A.32	RESTORATION OF LAWNS	9

Page 33

DIVISION A GENERAL CONDITIONS

A.1 SCOPE

The work to be done under this contract consists of supplying all labour, equipment and materials to construct the drainage work as outlined in the Scope of Work, Drawings, General Conditions and other Specifications.

A.2 TENDERS

Tenders are to be submitted on a lump sum basis for the complete works or a portion thereof, as instructed by the Municipality. The Scope of Work must be completed and submitted with the Form of Tender and Agreement. A certified cheque is required as Tender Security, payable to the Treasurer of the Municipality.

All certified cheques, except that of the bidder to whom the work is awarded will be returned within ten (10) days after the tender closing. The certified cheque of the bidder to whom the work is awarded will be retained as Contract Security and returned when the Municipality receives a Completion Certificate for the work.

A certified cheque is not required if the Contractor provides an alternate form of Contract Security such as a Performance Bond for 100% of the amount of the Tender or other satisfactory security, if required/permitted by the Municipality. A Performance Bond may also be required to insure maintenance of the work for a period of one (1) year after the date of the Completion Certificate.

A.3 EXAMINATIONS OF SITE, DRAWINGS AND SPECIFICATIONS

The Tenderer must examine the premises and site to compare them with the Drawings and Specifications in order to satisfy himself of the existing conditions and extent of the work to be done before submission of his Tender. No allowance shall subsequently be made on behalf of the Contractor by reason of any error on his part. Any estimates of quantities shown or indicated on the Drawings, or elsewhere are provided for the convenience of the Tenderer. Any use made of these quantities by the Tenderer in calculating his Tender shall be done at his own risk. The Tenderer for his own protection should check these quantities for accuracy.

The standard specifications (Divisions B through G) shall be considered complementary and where a project is controlled under one of the Divisions, the remaining Divisions will apply for miscellaneous works.

Page | 2





In case of any inconsistency or conflict between the Drawings and Specifications, the following order of precedence shall apply:

- Direction of the Engineer
- Special Provisions (Division H)
- Scope of Work
- Contract Drawings
- Standard Specifications (Divisions B through G)
- General Conditions (Division A)

A.4 PAYMENT

Progress payments equal to $87\pm\%$ of the value of work completed and materials incorporated in the work will be made to the Contractor monthly. An additional ten per cent $(10\pm\%)$ will be paid 45 days after the final acceptance by the Engineer, and three per cent $(3\pm\%)$ of the Contract price may be reserved by the Municipality as a maintenance holdback for a one (1) year period from the date of the Completion Certificate. A greater percentage of the Contract price may be reserved by the same one (1) year period if in the opinion of the Engineer, particular conditions of the Contract requires such greater holdback.

After the completion of the work, any part of this reserve may be used to correct defects developed within that time from faulty workmanship and materials, provided that notice shall first be given to the Contractor and that he may promptly make good such defects.

A.5 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of any work, the Contractor shall file with the Municipality evidence of compliance with all Municipality insurance requirements (Liability Insurance, WSIB, etc.) for no less than the minimum amounts as stated in the Purchasing Procedures of the Municipality. All insurance coverage shall remain in force for the entire contract period including the warranty period which expires one year after the date of the Completion Certificate.

The following are to be named as co-insured: Successful Contractor

Sub-Contractor Municipality Dietrich Engineering Ltd.

A.6 LOSSES DUE TO ACTS OF NATURE, ETC.

All damage, loss, expense and delay incurred or experienced by the Contractor in the performance of the work, by reason of unanticipated difficulties, bad weather, strikes, acts of nature, or other mischances shall be borne by the Contractor and shall not be the subject of a claim for additional compensation.



A.7 COMMENCEMENT AND COMPLETION OF WORK

The work must commence as specified in the Form of Tender and Agreement. If conditions are unsuitable due to poor weather, the Contractor may be required, at the discretion of the Engineer to postpone or halt work until conditions become acceptable and shall not be subject of a claim for additional compensation.

The Contractor shall give the Engineer a minimum of 48 hours notice before commencement of work. The Contractor shall then arrange a meeting to be held on the site with Contractor, Engineer, and affected Landowners to review in detail the construction scheduling and other details of the work.

If the Contractor leaves the job site for a period of time after initiation of work, he shall give the Engineer and the Municipality a minimum of 24 hours notice prior to returning to the project. If any work is commenced without notice to the Engineer, the Contractor shall be fully responsible for all such work undertaken prior to such notification.

The work must proceed in such a manner as to ensure its completion at the earliest possible date and within the time limit set out in the Form of Tender and Agreement.

A.8 WORKING AREA AND ACCESS

Where any part of the drain is on a road allowance, the road allowance shall be the working area. For all other areas, the working area available to the Contractor to construct the drain is specified in the Special Provisions (Division H).

Should the specified widths become inadequate due to unusual conditions, the Contractor shall notify the Engineer immediately. Where the Contractor exceeds the specified working widths without authorization, he shall be held responsible for the costs of all additional damages.

If access off an adjacent road allowance is not possible, each Landowner on whose property the drainage works is to be constructed, shall designate access to and from the working area. The Contractor shall not enter any other lands without permission of the Landowner and he shall compensate the Landowner for damage caused by such entry.

A.9 SUB-CONTRACTORS

The Contractor shall not sublet the whole or part of this Contract without the approval of the Engineer.

A.10 PERMITS, NOTICES, LAWS AND RULES

The Contractor shall obtain and pay for all necessary permits or licenses required for the execution of the work (but this shall not include MTO encroachment permits, County Road permits permanent easement or rights of servitude). The Contractor shall give all necessary notices and pay for all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public's health and safety.



A.11 RAILWAYS, HIGHWAYS AND UTILITIES

A minimum of 72 hours' notice to the Railway or Highways, exclusive of Saturdays, Sundays, and Statutory Holidays, is required by the Contractor prior to any work activities on or affecting the applicable property. In the case of affected Utilities, a minimum of 48 hours' notice to the utility owner is required.

A.12 ERRORS AND UNUSUAL CONDITIONS

The Contractor shall notify the Engineer immediately of any error or unusual conditions which may be found. Any attempt by the Contractor to correct the error on his own shall be done at his own risk. Any additional cost incurred by the Contractor to remedy the wrong decision on his part shall be borne by the Contractor. The Engineer shall make the alterations necessary to correct errors or to adjust for unusual conditions during which time it will be the Contractor's responsibility to keep his men and equipment gainfully employed elsewhere on the project.

The Contract amount shall be adjusted in accordance with a fair evaluation of the work added or deleted.

A.13 ALTERATIONS AND ADDITIONS

The Engineer shall have the power to make alterations in the work shown or described in the Drawings and Specifications and the Contractor shall proceed to make such changes without causing delay. In every such case, the price agreed to be paid for the work under the Contract shall be increased or decreased as the case may require according to a fair and reasonable evaluation of the work added or deleted. The valuation shall be determined as a result of negotiations between the Contractor and the Engineer, but in all cases the Engineer shall maintain the final responsibility for the decision. Such alterations and variations shall in no way render the Contract void. No claims for a variation or alteration in the increased or decreased price shall be valid unless done in pursuance of an order from the Engineer and notice of such claims made in writing before commencement of such work. In no such case shall the Contractor commence work which he considers to be extra before receiving the Engineer's approval.

A.14 SUPERVISION

The Contractor shall give the work his constant supervision and shall keep a competent foreman in charge at the site.

A.15 FIELD MEETINGS

At the discretion of the Engineer, a field meeting with the Contractor or his representative, the Engineer and with those others that the Engineer deems to be affected, shall be held at the location and time specified by the Engineer.

A.16 PERIODIC AND FINAL INSPECTIONS

Periodic inspections by the Engineer will be made during the performance of the work. If ordered by the Engineer, the Contractor shall expose the drain as needed to facilitate inspection by the Engineer.

Final inspection by the Engineer will be made within twenty (20) days after he has received notice from the Contractor that the work is complete.

A.17 ACCEPTANCE BY THE MUNICIPALITY

Before any work shall be accepted by the Municipality, the Contractor shall correct all deficiencies identified by the Engineer and the Contractor shall leave the site neat and presentable.

A.18 WARRANTY

The Contractor shall repair and make good any damages or faults in the drain that may appear within one (1) year after its completion (as dated on the Completion Certificate) as the result of the imperfect or defective work done or materials furnished if certified by the Engineer as being due to one or both of these causes; but nothing herein contained shall be construed as in any way restricting or limiting the liability of the Contractor under the laws of the Country, Province or Locality in which the work is being done. Neither the Completion Certificate nor any payment there under, nor any provision in the Contract Documents shall relieve the Contractor from his responsibility.

A.19 TERMINATION OF CONTRACT BY THE MUNICIPALITY

If the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should refuse or fail to supply enough properly skilled workmen or proper materials after having received seven (7) days notice in writing from the Engineer to supply additional workmen or materials to commence or complete the works, or if he should fail to make prompt payment to Sub-Contractors, or for material, or labour, or persistently disregards laws, ordinances, or the instruction of the Engineer, or otherwise be guilty of a substantial violation of the provisions of the Contract, then the Municipality, upon the certificate of the Engineer that sufficient cause exists to justify such action, may without prejudice to any other right or remedy, by giving the Contractor written notice, terminate the employment of the Contractor and take possession of the premises, and of all materials, tools and appliances thereon, and may finish the work by whatever method the Engineer may deem expedient but without delay or expense. In such a case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract price will exceed the expense of finishing the work including compensation to the Engineer for his additional services and including the other damages of every name and nature, such excess shall be paid by the Contractor. If such expense will exceed such unpaid balance, the Contractor shall pay the difference to the Municipality. The expense incurred by the Municipality, as herein provided, shall be certified by the Engineer.

Page | 6





If the Contract is terminated by the Municipality due to the Contractor's failure to properly commence the works, the Contractor shall forfeit the certified cheque bid deposit and furthermore shall pay to the Municipality an amount to cover the increased costs, if any, associated with a new Tender for the Contract being terminated.

If any unpaid balance and the certified cheque do not match the monies owed by the Contractor upon termination of the Contract, the Municipality may also charge such expense against any money which may thereafter be due to the Contractor from the Municipality.

A.20 TESTS

The cost for the testing of materials supplied to the job by the Contractor shall be borne by the Contractor. The Engineer reserves the right to subject any lengths of any tile or pipe to a competent testing laboratory to ensure the adequacy of the tile or pipe. If any tile supplied by the Contractor is determined to be inadequate to meet the applicable A.S.T.M. standards, the Contractor shall bear full responsibility to remove and/or replace all such inadequate tile in the Contract with tile capable of meeting the A.S.T.M. Standards.

A.21 POLLUTION

The Contractor shall keep their equipment in good repair. The Contractor shall refuel or repair equipment away from open water.

If polluted material from construction materials or equipment is caused to flow into the drain, the Contractor shall immediately notify the Ministry of the Environment, and proceed with the Ministry's protocols in place to address the situation.

A.22 SPECIES AT RISK

If a Contractor encounters a known Species at Risk as designated by the MNR or DFO, the Contractor shall notify the Engineer immediately and follow the Ministry's guidelines to deal with the species.

A.23 ROAD CROSSINGS

This specification applies to all road crossings (Municipality, County, Regional, or Highway) where no specific detail is provided on the drawings or in the standard specifications. This specification in no way limits the Road Authority's regulations governing the construction of drains on their Road Allowance.

A.23.1 Road Occupancy Permit

Where applicable, the Contractor must submit an application for a road occupancy permit to the Road Authority and allow a minimum of five (5) working days for its review and issuance.



A.23.2 Road Closure Request and Construction Notification

The Contractor shall submit written notification of construction and request for road closure (if applicable) to the Road Authority and the Engineer for review and approval a minimum of five (5) working days prior to proceeding with any work on the road allowance. The Contractor shall be responsible for notifying all applicable emergency services, schools, etc. of the road closure or construction taking place.

A.23.3 Traffic Control

The Contractor shall supply flagmen, and warning signs and ensure that detour routes are adequately signed in accordance with no less than the minimum standards as set out in the Ontario Traffic Manual's Book 7.

A.23.4 Weather

No construction shall take place during inclement weather or periods of poor visibility.

A.23.5 Equipment

No construction material and/or equipment is to be left within three (3) metres of the travelled portion of the road overnight or during periods of inclement weather.

If not stated on the drawings, the road crossing shall be constructed by open cut method. Backfill from the top of the cover material over the subsurface pipe or culvert to the under side of the road base shall be Granular "B". The backfill shall be placed in lifts not exceeding 300mm in thickness and each lift shall be thoroughly compacted to 98% Standard Proctor. Granular "B" road base for County Roads and Highways shall be placed to a 450mm thickness and Granular "A" shall be placed to a thickness of 200mm. Granular road base materials shall be thoroughly compacted to 100% Standard Proctor.

Where the road surface is paved, the Contractor shall be responsible for placing HL-8 Hot Mix Asphalt patch at a thickness of 50mm or of the same thickness as the existing pavement structure. The asphalt patch shall be flush with the existing roadway on each side and without overlap.

Excavated material from the trench beyond 1.25 metres from the travelled portion or beyond the outside edge of the gravel shoulder may be used as backfill in the trench in the case of covered drains. The material shall be compacted in lifts not exceeding 300mm.

A.24 LANEWAYS

All pipes crossing laneways shall be backfilled with material that is clean, free of foreign material or frozen particles and readily tamped or compacted in place unless otherwise specified. Laneway culverts on open ditch projects shall be backfilled with material that is not easily erodible. All backfill material shall be thoroughly compacted as directed by the Engineer.



Culverts shall be bedded with a minimum of 300mm of granular material. Granular material shall be placed simultaneously on each side of the culvert in lifts not exceeding 150mm in thickness and compacted to 95% Standard Proctor Density. Culverts shall be installed a minimum of 10% of the culvert diameter below design grade with a minimum of 450mm of cover over the pipe unless otherwise noted on the Drawings.

The backfill over culverts and subsurface pipes at all existing laneways that have granular surfaces on open ditch and closed drainage projects shall be surfaced with a minimum of 300mm of Granular "B" material and 150mm of Granular "A" material. All backfill shall be thoroughly compacted as directed by the Engineer. All granular material shall be placed to the full width of the travelled portion.

Any settling of backfilled material shall be repaired by or at the expense of the Contractor during the warranty period of the project and as soon as required.

A.25 FENCES

No earth is to be placed against fences and all fences removed by the Contractor shall be replaced by him in as good a condition as found. Where practical the Contractor shall take down existing fences in good condition at the nearest anchor post and roll it back rather than cutting the fence and attempting to patch it. The replacement of the fences shall be done to the satisfaction of the Engineer. Any fences found in such poor condition where the fence is not salvageable, shall be noted and verified with the Engineer prior to commencement of work.

Fences damaged beyond repair by the Contractor's negligence shall be replaced with new materials, similar to those materials of the existing fence, at the Contractor's expense. The replacement of the fences shall be done to the satisfaction of the Landowner and the Engineer.

Any fences paralleling an open ditch that are not line fences that hinder the proper working of the excavating machinery, shall be removed and rebuilt by the Landowner at his own expense.

The Contractor shall not leave fences open when he is not at work in the immediate vicinity.

A.26 LIVESTOCK

The Contractor shall provide each landowner with 48 hours notice prior to removing any fences along fields which could possibly contain livestock. Thereafter, the Landowner shall be responsible to keep all livestock clear of the construction areas until further notified. The Contractor shall be held responsible for loss or injury to livestock or damage caused by livestock where the Contractor failed to notify the Landowner, or through negligence or carelessness on the part of the Contractor.



A.27 STANDING CROPS

The Contractor shall be responsible for damages to standing crops which are ready to be harvested or salvaged along the course of the drain and access routes if the Contractor has failed to notify the Landowners 48 hours prior to commencement of the work on that portion of the drain.

A.28 SURPLUS GRAVEL

If as a result of any work, gravel or crushed stone is required and not all the gravel or crushed stone is used, the Contractor shall haul away such surplus material.

A.29 IRON BARS

The Contractor is responsible for the cost of an Ontario Land Surveyor to replace any iron bars that are altered or destroyed during the course of the construction.

A.30 RIP-RAP

Rip-rap shall be quarry stone rip-rap material and shall be the sizes specified in the Special Provisions. Broken concrete shall not be used as rip-rap unless otherwise specified.

A.31 CLEARING, GRUBBING AND BRUSHING

This specification applies to all brushing where no specific detail is provided on the drawings or in the Special Provisions.

The Contractor shall clear, brush and stump trees from within the working area that interfere with the installation of the drainage system.

All trees, limbs and brush less than 150mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and neatly stacked in piles designated by the Landowners.

A.32 RESTORATION OF LAWNS

This specification applies to all lawn restoration where no specific detail is provided on the drawings or in the Special Provisions and no allowance for damages has been provided under Section 30 of the Drainage Act RSO 1990 to the affected property.

The Contractor shall supply "high quality grass seed" and the seed shall be broadcast by means of an approved mechanical spreader. All areas on which seed is to be placed shall be loose at the time of broadcast to a depth of 25mm. Seed and fertilizer shall be spread in accordance with the supplier's recommendations unless otherwise directed by the Engineer. Thereafter it will be the responsibility of the Landowner to maintain the area in a manner so as to promote growth.

Page 43

DIVISION B SPECIFICATIONS FOR OPEN DRAINS

<u>B</u>	CONTENT	<u>PAGE</u>
B.1	ALIGNMENT	1
B.2	PROFILE	1
B.3	EXCAVATION	1
B.4	EXCAVATED MATERIAL	2
B.5	EXCAVATION AT EXISITING BRIDGE AND CULVERT SITES	2
B.6	PIPE CULVERTS	2
B.7	RIP-RAP PROTECTION FOR CULVERTS	3
B.8	CLEARING, GRUBBING AND MULCHING	3
B.9	TRIBUTARY TILE OUTLETS	3
B.10	SEEDING	3
B.11	COMPLETION	4

Page 45

DIVISION B SPECIFICATIONS FOR OPEN DRAINS

B.1 ALIGNMENT

The drain shall be constructed in a straight line and shall follow the course of the present drain or water run unless noted on the drawings. Where there are unnecessary bends or irregularities on the existing course of the drain, the Contractor shall contact the Engineer before commencing work to verify the manner in which such irregularities or bends may be removed from the drain. All curves shall be made with a minimum radius of fifteen (15) metres from the centre line of the drain.

B.2 PROFILE

The Profile Drawing shows the depth of cuts from the top of the bank to the final invert of the ditch in metres and decimals of a metre, and also the approximate depth of excavated material from the bottom of the existing ditch to the final invert of the ditch. These cuts are established for the convenience of the Contractor; however, bench marks (established along the course of the drain) will govern the final elevation of the drain. The location and elevation of the bench marks are given on the Profile Drawing. Accurate grade control must be maintained by the Contractor during ditch excavation.

B.3 EXCAVATION

The bottom width and the side slopes of the ditch shall be those shown on the drawings. If the channel cross-section is not specified it shall be a one metre bottom width with 1.5(h):1(v) side slopes. At locations along the drain where the cross section dimensions change, there shall be a transitional length of not less than 10:1 (five metre length to 0.5 metre width differential). Where the width of the bottom of the existing ditch is sufficient to construct the design width, then construction shall proceed without disturbing the existing banks.

Where existing side slopes become unstable, the Contractor shall immediately notify the Engineer. Alternative methods of construction and/or methods of protection will then be determined prior to continuing work.

Where an existing drain is being relocated or where a new drain is being constructed, the Contractor shall strip the topsoil for the full width of the drain, including the location of the spoil pile. Upon completion of levelling, the topsoil shall be spread to an even depth across the full width of the spoil.

An approved hydraulic excavator shall be used to carry out the excavation of the open ditch unless otherwise directed by the Engineer.



B.4 EXCAVATED MATERIAL

Excavated material shall be placed on the low side of the drain or opposite trees and fences. The Contractor shall contact all Landowners before proceeding with the work to verify the location to place and level the excavated material.

No excavated material shall be placed in tributary drains, depressions, or low areas which direct water behind the spoil bank. The excavated material shall be placed and levelled to a maximum depth of 200 mm, unless instructed otherwise and commence a minimum of one (1) metre from the top of the bank. The edge of the spoil bank away from the ditch shall be feathered down to the existing ground; the edge of the spoil bank nearest the ditch shall have a maximum slope of 2(h):1(v). The material shall be levelled such that it may be cultivated with ordinary farm equipment without causing undue hardship to the farm machinery and farm personnel. No excavated material shall cover any logs, brush, etc. of any kind.

Any stones or boulders which exceed 300mm in diameter shall be removed and disposed of in a location specified by the Landowner.

Where it is necessary to straighten any unnecessary bends or irregularities in the alignment of the ditch or to relocate any portion or all of an existing ditch, the excavated material from the new cut shall be used for backfilling the original ditch. Regardless of the distance between the new ditch and the old ditch, no extra compensation will be allowed for this work and must be included in the Contractor's lump sum price for the open work.

B.5 EXCAVATION AT EXISITING BRIDGE AND CULVERT SITES

The Contractor shall excavate the drain to the full specified depth under all bridges and to the full width of the structure. Temporary bridges may be carefully removed and left on the bank of the drain but shall be replaced by the Contractor when the excavation is complete. Permanent bridges must, if at all possible, be left intact. All necessary care and precautions shall be taken to protect the structure. The Contractor shall notify the Landowner if excavation will expose the footings or otherwise compromise the structural integrity of the structure.

The Contractor shall clean through all pipe culverts to the grade and width specified on the profile.

B.6 PIPE CULVERTS

All pipe culverts shall be installed in accordance with the standard detail drawings. If couplers are required, five corrugation couplers shall be used for up to and including 1200mm diameter pipes and 10 corrugation couplers for greater than 1200mm diameter pipes.

When an existing crossing is being replaced, the Contractor may backfill the new culvert with the existing native material that is free of large rocks and stones. The Contractor is responsible for any damage to a culvert pipe that is a result of rocks or stones in the backfill.



B.7 RIP-RAP PROTECTION FOR CULVERTS

Quarry stone rip-rap shall be used as end treatment for new culverts and placed on geotextile filter material (Mirafi 160N or approved equal). The rip-rap shall be adequately keyed in along the bottom of the slope, and shall extend to the top of the pipe or as directed on the drawings. The maximum slope for rip-rap shall be 1(h):1(v) or as directed by the Engineer.

The Contractor shall be responsible for any defects or damages that may develop in the rip-rap or the earth behind the rip-rap that the Engineer deems to have been fully or partially caused by faulty workmanship or materials.

B.8 CLEARING, GRUBBING AND MULCHING

Prior to excavation, all trees, scrub, fallen timber and debris shall be removed from the side slopes of the ditch and for such a distance on the working side so as to eliminate any interference with the construction of the drain or the spreading of the spoil. The side slopes shall be neatly cut and cleared flush with the slope whether or not they are affected directly by the excavation. With the exception of large stumps causing damage to the drain, the side slopes shall not be grubbed. All other cleared areas shall be grubbed and the stumps put into piles for disposal by the Landowner.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched. Clearing, grubbing and mulching shall be carried out as a separate operation from the excavation of the ditch, and shall not be completed simultaneously at the same location.

B.9 TRIBUTARY TILE OUTLETS

All tile outlets in existing ditches shall be marked by the Landowner prior to excavation. The Contractor shall guard against damaging the outlets of tributary drains. Any tile drain outlets that were marked or noted on the drawings and are subsequently damaged by the Contractor shall be repaired by the Contractor at his expense. The Landowner shall be responsible for repairs to damaged tile outlets that were not marked.

B.10 SEEDING

The side slopes where disturbed shall be seeded using an approved grass seed mixture. The grass seed shall be applied the same day as the excavation of the open ditch.

Grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO and composed of the following varieties mixed in the proportion by weight as follows:

- 55% Creeping Red Fescue
- 40% Perennial Rye Grass
- 5% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.



B.11 HYDRO SEEDING

The areas specified in the contract document shall be hydro seeded and mulched upon completion of construction in accordance with O.P.S.S. 572.

B.12 HAND SEEDING

Placement of the seed shall be of means of an approved mechanical spreader.

B.13 COMPLETION

At the time of completion and final inspection, all work in the Contract shall have the full dimensions and cross-sections specified without any allowance for caving of banks or sediment in the ditch bottom.

DIVISION C SPECIFICATIONS FOR TILE DRAINS

<u>C</u> <u>CONTENT</u>

PAGE

C.1	PIPE MATERIALS	1
C.2	ALIGNMENT	1
C.3	PROFILE	2
C.4	EXCAVATION	2
C.5	INSTALLATION	2
C.6	TRENCH CROSSINGS	3
C.7	OUTLET PROTECTION	4
C.8	CATCH BASINS AND JUNCTION BOXES	4
C.9	TRIBUTARY DRAINS	5
C.10	CLEARING, GRUBBING AND MULCHING	5
C.11	ROADS AND LANEWAY SUB-SURFACE CROSSINGS	6
C.12	FILLING IN EXISTING DITCHES	6
C.13	CONSTRUCTION OF GRASSED WATERWAYS	6
C.14	UNSTABLE SOIL	6
C.15	ROCKS	6
C.16	BROKEN OR DAMAGED TILE	7
C.17	RECOMMENDED PRACTICE FOR CONSTRUCTION OF	
	SUBSURFACE DRAINAGE SYSTEMS	7

Page 51

DIVISION C SPECIFICATIONS FOR TILE DRAINS

C.1 PIPE MATERIALS

C.1.1 Concrete Tile

Concrete drain tile shall conform to the requirements of the most recent A.S.T.M. specification for Heavy-Duty Extra Quality drain tile. All tile with diameters less than 600mm shall have a pipe strength of 1500D. All tile with diameters 600mm or larger shall have a pipe strength of 2000D.

All tile furnished shall be subject to the approval of the Engineer. All rejected tile are to be immediately removed from the site.

C.1.2 High Density Polyethylene (HDPE) Pipe

All HDPE pipe shall be dual-wall corrugated drainage pipe with a smooth inner wall. HDPE pipe shall have a minimum stiffness of 320 kPa at 5% deflection.

Unless otherwise noted, all sealed HDPE pipe shall have a water tight gasketed bell and spigot joining system meeting the minimum requirements of CSA B182.8. Perforated HDPE pipe shall have a soil tight joining system, and shall be enveloped in non-woven geotextile filter sock.

C.2 ALIGNMENT

The Contractor shall contact the Engineer to establish the course of the drain. Where an existing drain is to be removed and replaced by the new drain, or where the new drain is to be installed parallel to an existing drain, the Contractor shall locate the existing drain (including repairing damaged tile caused by locating) at intervals along the course of the drain. The costs of locating shall be included in the tender price.

The drain shall run in as straight a line as possible throughout its length, except that at intersections of other watercourses or at sharp corners, it shall run on a curve of at least 15 metres radius. The new tile drain shall be constructed at an offset from and parallel with any ditch or defined watercourse in order that fresh backfill in the trench will not be eroded by the flow of surface water.

The Contractor shall exercise care not to disturb any existing tile drain or drains which parallel the course of the new drain, particularly where the new and existing tile act together to provide the necessary capacity. Where any such existing drain is disturbed or damaged, the Contractor shall perform the necessary repair at his expense.



C.3 PROFILE

Benchmarks have been established along the course of the drain which are to govern the elevations of the drain. The location and elevations of the benchmarks are shown on the drawings. Tile is to be installed to the elevation and grade shown on the profiles. Accurate grade control must be maintained by the Contractor at all times.

When installing a drain towards a fixed point such as a bore pipe, the Contractor shall uncover the pipe and confirm the elevation a sufficient distance away from the pipe in order to allow for any necessary minor grade adjustments to be made.

<u>C.4</u> EXCAVATION

C.4.1 Wheel machine

Unless otherwise specified, all trenching shall be carried out with a wheel machine approved by the Engineer. The wheel machine shall shape the bottom of the trench to conform to the outside diameter of the pipe. The minimum trench width shall be equal to the outside diameter of the pipe plus 100mm on each side of the pipe, unless otherwise specified. The maximum trench width shall be equal to the outside diameter of the pipe, unless otherwise specified.

C.4.2 Scalping

Where the depths of cuts in isolated areas along the course of the drain as shown on the profile exceed the capability of the Contractor's wheel machine, he shall lower the surface grade in order that the wheel machine may trench to the correct depth. Topsoil is to be stripped over a sufficient width that no subsoil will be deposited on top of the topsoil. Subsoil will then be removed to the required depth and piled separately. Upon completion, the topsoil will then be replaced to an even depth over the disturbed area. The cost for this work shall be included in his tender price.

C.4.3 Excavator

Where the use of an excavator is used in-lieu of a wheel machine, the topsoil shall be stripped and replaced in accordance with Item C.4.2. All tile shall be installed on 19mm clear crushed stone bedding placed to a minimum depth of 150mm which has been shaped to conform to the bottom of the pipe. The Contractor shall include the costs of this work in his tender price.

C.5 INSTALLATION

C.5.1 Concrete Tile

The tile is to be laid with close joints and in regular grade and alignment in accordance with the drawings. The tiles are to be bevelled, if necessary to ensure close joints. The inside of the tile is to be kept clear when laid. The sides of the tile are to be supported by partial filling of the trench



(blinding) prior to inspection by the Engineer. No tile shall be backfilled until inspected by the Engineer unless otherwise permitted by the Engineer. The tile shall be backfilled such that a sufficient mound of backfill is placed over the trench to ensure that no depression remains after settling occurs in the backfill.

Where a tile connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a tile drain passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

The Contractor shall supply and wrap all concrete tile joints with Mirafi 160N geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.
- 500mm wide for tile sizes larger than 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be.

C.5.2 HDPE Pipe

HDPE pipe shall be installed using compacted Granular 'A' bedding or 19mm clear crushed stone bedding from 150mm below the pipe to 300mm above the pipe. All granular material shall be compacted using a suitable mechanical vibratory compactor. Granular bedding and backfill shall be placed in lifts not exceeding 300mm and compacted to at least 95% Standard Proctor Maximum Dry Density (SPMDD).

Where a pipe connects to a catch basin or similar structure, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone under areas backfilled from the underside of the pipe to undisturbed soil. Where a pipe passes through a bore pit, the Contractor shall include in his tender price for the supply and placement of compacted Granular 'A' bedding or 19mm clear crushed stone from the underside of the pipe down to undisturbed soil with the limits of the bore pit.

As determined by the Engineer, unsuitable backfill material must be hauled off-site by the Contractor and Granular "B" shall be used as replacement backfill material.

C.6 TRENCH CROSSINGS

The Contractor shall not cross the backfilled trench with any construction equipment or vehicles, except by one designated crossing location on each property. The Contractor shall ensure that the bedding and backfill material at this designated crossing location is properly placed and compacted so as to adequately support the equipment and vehicles that may cross the trench.

Page | 4





The Contractor may undertake any other approved work to ensure the integrity of the tile at the crossing location. The Contractor shall ensure that no equipment or vehicles travel along the length of the trench. The Contractor shall be responsible for any damage to the new tile caused by the construction of the drain.

C.7 OUTLET PROTECTION

A tile drain outlet into a ditch shall be either HDPE pipe or corrugated steel pipe and shall include a hinged grate for rodent protection. The maximum spacing between bars on the rodent grate shall be 40mm. All corrugated steel outlet pipes shall be bevelled at the end to generally conform to the slope of the ditch bank.

Quarry stone rock rip-rap protection and geotextile filter material (Mirafi 160N), shall be installed around the outlet pipe and extended downstream a minimum distance of three metres, unless otherwise specified. The protection shall extend to the top of the backfilled trench and below the pipe to 300 mm under the streambed. The protection shall also extend 600mm into undisturbed soil on either side of the backfilled trench. In some locations, rip-rap may be required on the bank opposite the outlet.

Where the outlet occurs at the upper end of an open ditch, the rip-rap protection will extend all around the end of the ditch and to a point 800mm downstream on either side. Where heavy overflow is likely to occur, sufficient additional rip-rap and filter material shall be placed as directed by the Engineer to prevent the water cutting around the protection.

C.8 CATCH BASINS AND JUNCTION BOXES

Unless otherwise noted, catch basins shall be in accordance with OPSD 705.010 and 705.030. The catch basin grate shall be a "Birdcage" type substantial steel grate, removable for cleaning and shall be inset into a recess provided around the top of the structure. The grate shall be fastened to the catch basin with bolts into the concrete. Spacing of bars on grates for use on 600mmX600mm structures shall be 65mm centre to centre. Spacing of bars on grates for use on structures larger than 600mmX600mm shall be 90mm.

All catch basins shall be backfilled with compacted Granular 'A' or 19mm clear crushed stone placed to a minimum width of 300mm on all sides. If settling occurs after construction, the Contractor shall supply and place sufficient granular material to maintain the backfill level flush with adjacent ground. The riser sections of the catch basin shall be wrapped with filter cloth.

Quarry stone rip-rap protection shall be placed around all catch basins and shall extend a minimum distance of one (1) metre away from the outer edge of each side of the catch basin, and shall be placed so that the finished surface of the rip-rap is flush with the existing ground.

If there are no existing drains to be connected to the catch basin at the top end of the drain, a plugged tile shall be placed in the upstream wall with the same elevations as the outlet tile.

Junction boxes shall have a minimum cover over the lid of 450mm.



The Contractor shall include in his tender price for the construction of a berm behind all ditch inlet structures. The berm shall be constructed of compacted clay keyed 300mm into undisturbed soil. The top of the spill way of the earth berm shall be the same elevation as the high wall of the ditch inlet catch basin. The earth berm shall be covered with 100mm depth of topsoil and seeded with an approved green seed mixture. The Contractor shall also include for regrading, shaping and seeding of road ditches for a maximum of 15 metres each way from all catch basins.

The Contractor shall clean all catch basin sumps after completion of the drain installation. Catch basin markers shall be placed beside each catch basin.

C.9 TRIBUTARY DRAINS

Any tributary tile encountered in the course of the drain is to be carefully taken up by the Contractor and placed clear of the excavated earth. If the tributary drains encountered are clean or reasonably clean, they shall be connected into the new drain in accordance with the typical tile drain connection detail. Tributary tile drain connections into the new drain shall be made using high density polyethylene agricultural drain tubing installed on and backfilled with 19mm clear crushed stone. All tile drain connections into the new drain shall be either a cored hole with an insert coupler or a manufactured tee.

Where the existing drains are full of sediment, the decision to connect the tributary drain to the new drain shall be left to the Engineer. The Contractor shall be paid for each tributary drain connection as outlined in the Form of Tender and Agreement.

The Contractor shall be responsible for all tributary tile connections for a period of one year from the date of the Completion Certificate. After construction, any missed tile connections required to be made into the new drain shall be paid at the same rate as defined in the Form of Tender and Agreement. The Contractor will have the option to make any subsequent tile connections or have the Municipality make the required connections and have the cost of which deducted from the holdback.

Where an open ditch is being replaced by a new tile drain, existing tile outlets entering the ditch from the side opposite the new drain shall be extended to the new drain.

Where the Contractor is required to connect an existing tile which is not encountered in the course of the drain, the cost of such work shall constitute an extra to the contract.

C.10 CLEARING, GRUBBING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.

All trees or limbs 150mm or larger, that is necessary to remove, shall be cut, trimmed and neatly stacked in the working width for the use or disposal by the Landowner. Brush and limbs less than 150mm in diameter shall be mulched.

Clearing, grubbing and mulching shall be carried out as a separate operation from installing the drain, and shall not be completed simultaneously at the same location.



Page | 6

C.11 ROADS AND LANEWAY SUB-SURFACE CROSSINGS

All roads and laneway crossings may be made with an open cut. The Contractor may use original ground as backfill to within 600mm of finished grade only if adequate compaction and if the use of the original ground backfill has been approved beforehand by the Engineer.

C.12 FILLING IN EXISTING DITCHES

The Contractor shall backfill the ditch sufficiently for traversing by farm equipment. If sufficient material is available on-site to fill in the existing ditch, the topsoil shall be stripped and the subsoil shall be bulldozed into the ditch and the topsoil shall then be spread over the backfilled waterway. The Contractor shall ensure sufficient compaction of the backfill and if required, repair excess settlement up to the end of the warranty period.

C.13 CONSTRUCTION OF GRASSED WATERWAYS

Where the Contractor is required to construct a grassed waterway, the existing waterway shall be filled in, regraded, shaped and a seed bed prepared prior to applying the grass seed. The grass seed shall be fresh, clean and new crop seed, meeting the requirements of the MTO.

- 55% Creeping Red Fescue
- 15% Perennial Rye Grass
- 27% Kentucky Bluegrass
- 3% White Clover

Grass seed shall be applied at the rate of 100 kg/ha.

C.14 UNSTABLE SOIL

The Contractor shall immediately contact the Engineer if unstable soil is encountered. The Engineer shall, after consultation with the Contractor, determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

<u>C.15</u> <u>ROCKS</u>

The Contractor shall immediately contact the Engineer if boulders of sufficient size and number are encountered such that the Contractor cannot continue trenching with a wheel machine. The Engineer shall determine the action necessary and a price for additions or deletions shall be agreed upon prior to further drain installation.

If only scattered large stone or boulders are removed on any project, the Contractor shall either excavate a hole to bury same adjacent to the drain, or he shall haul the stones or boulders to a location designated by the Landowner.





C.16 BROKEN OR DAMAGED TILE

The Contractor shall remove and dispose of all broken (existing or new), damaged or excess tile off site.

C.17 RECOMMENDED PRACTICE FOR CONSTRUCTION OF SUBSURFACE DRAINAGE SYSTEMS

Drainage Guide for Ontario, Ministry of Agriculture, Food and Rural Affairs, Publication 29 and its amendments, dealing with the construction of Subsurface Drainage Systems, shall be the guide to all methods and materials to be used in the construction of tile drains except where superseded by other Specifications of the Contract.

Page 59

DIVISION E SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

<u>E</u>	<u>CONTENT</u>	PAGE
E.1	GENERAL REQUIREMENTS	1
E.2	NOTIFICATION	1
E.3	PIPE	1
E.4	INSTALLATION	1
E.5	AUGER PIT	2
E.6	CONSTRUCTION	2
E.7	ACCEPTANCE	2

Page 61

DIVISION E SPECIFICATIONS FOR DRAINAGE CROSSINGS BY THE BORING METHOD

E.1 GENERAL REQUIREMENTS

When a drainage crossing of a Roadway, Railway, etc. is to be carried out by the Boring Method, the following Specifications for this work shall apply. The Authority having jurisdiction over the lands involved with the crossing will supply no labour, equipment or materials for the construction of the crossing unless otherwise specified.

The Contractor shall be fully responsible for availing himself of, and satisfying any further Specifications that may apply to borings affecting the Authority having jurisdiction over the lands involved with the crossing.

E.2 NOTIFICATION

The Contractor shall give the Authority responsible for the lands being crossed at least five (5) days notice before he commences any work on the crossing.

<u>E.3</u> <u>PIPE</u>

The pipe or casing used in the crossing shall be smooth wall welded steel pipe with a minimum wall thickness as specified on the Plan and Profile. All pipe shall be new and manufactured from weldable steel having a minimum yield strength of 241 MPa. Pipe ends shall be bevel edged in the intrude to an angle of thirty (30) degrees for butt weld splicing. The name or trademark of the manufacturer and the heat number shall be clearly marked in the inside of the section of the pipe.

The pipe shall be of sufficient length so that during placement, no part of any excavation shall be closer than three (3) metres to the edge of a pavement and the slope of the excavation from the edge of shoulder, or other point as specified to the invert of the pipe shall be no less than one (1) metre vertical to one (1) metre horizontal (1:1) [See item E.5 "Auger Pit"].

E.4 INSTALLATION

The pipe or casing shall be placed by means of continuous flight augering inside the casing and simultaneous jacking to advance the casing immediately behind the tip of the auger. Complete augering of a tunnel slightly larger than the pipe and placing the entire length by pulling or jacking after completion of the tunnel will not be acceptable unless the method to be adopted is approved in advance by both the Engineer and the Authority responsible for the lands being crossed.



E.5 AUGER PIT

The pit excavated to accommodate the boring machine shall be so constructed so that the top edge of the pit shall not be closer than three (3) metres to the edge of the pavement. The slope of the pit from the top edge at the shoulder to the bottom of the pit shall not be steeper than one (1) metre vertical to one (1) metre horizontal (1:1). Shoring, sheeting, etc. shall be in accordance with the applicable and most recent Provincial Statutes.

The pit shall be left open for an absolute minimum of time, and if at all possible work shall be so scheduled so that excavation, placement of pipe and backfilling take place in one (1) working day. If this is not possible, every effort should be made to schedule the work so that the pit is not left open for more than one (1) day before and one (1) day after the boring operation.

E.6 CONSTRUCTION

During excavation, every effort should be made to place the top 300 mm of spoil (topsoil) in a separate pile for replacement on top on completion of the backfill operation. If this is not possible or practical, the Contractor shall import and place a minimum of 150 mm of good quality topsoil over the excavated and backfilled area. The finished work shall be left in a clean and orderly condition flush or slightly higher than the adjacent ground so that after settlement, it will conform to the surrounding ground. Excess earth (if any) shall be disposed of as directed by the Engineer and no additional payment will be allotted for such work.

The Contractor shall at his expense supply, erect and maintain suitable and adequate barricades, flashing lights, warning signs and/or flagmen to the satisfaction of the Engineer to adequately warn and protect the motoring public.

Any areas disturbed within the Right-of-Way of a County Road or King's Highway during construction, shall be covered with a minimum of 75 mm of topsoil, fertilized and seeded with an approved grass seed mixture.

E.7 ACCEPTANCE

All work undertaken by the Contractor shall be to the satisfaction of the Engineer.

1

DIVISION H SPECIAL PROVISIONS

<u>H</u> <u>CONTENT</u> PAGE H.1 GENERAL 1 H.2 UTILITIES H.3 WORKING AREA AND ACCESS 2 H.4 **OPEN DITCH WORK** 2 H.5 2 SEEDING H.6 **CULVERTS** 2 H.7 CLEARING BRUSHING AND MULCHING 2 H.8 TOPSOIL STRIPPING AND FINE GRADING 3 H.9 PIPE, INSTALLATION, BEDDING & BACKFILL 3 H.10 CATCH BASINS & MANHOLES 4 H.11 TILE CONNECTIONS 4 H.12 ROAD CROSSINGS 5 H.13 **RIP-RAP** 5 H.14 5 PUMP (FLEMING-MORRISSEY DRAIN)

Page 65



Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018 Reference No. 1536

Special provisions means special directions containing requirements particular to the work not adequately provided for by the standard or supplemental Specifications. Special provisions shall take precedence and govern any standard or supplemental Specifications.

H.1 GENERAL

The Contractor shall notify the Landowners, the Engineer and the Drainage Superintendent fortyeight (48) hours prior to construction and arrange a pre-construction meeting.

The Contractor shall verify the location of the new drainage system with the Engineer and the owners prior to construction.

The Contractor shall check and verify all dimensions and elevations and report any discrepancies to the Engineer prior to proceeding with the work.

All objects or obstructions within the construction working area such as signs, mailboxes, fences, property ornamentals, etc., that interfere with the installation of the drain shall be removed and reerected in the same location or another location satisfactory to the Landowner. Any damages to such objects by the Contractor shall be repaired, replaced, installed and paid for by the Contractor at the discretion of the Engineer.

The Contractor shall be responsible to arrange all traffic control signals, signs and devices that are required for safe and proper traffic management during the installation of the drainage system. Traffic control shall meet the standards of Book 7 of the Ontario Traffic Manual.

The Contractor must maintain access to all driveways along the route of the drain as well as maintain access for all emergency vehicles at all times during construction.

The Contractor shall be responsible for all trench settlement.

H.2 UTILITIES

All utilities shall be located and uncovered in the affected areas by the Contractor prior to construction. Contact Glen Bullock Municipality of North Middlesex with respect to the 50mm diameter waterline along the South side of Mount Carmel Drive.

The locations and elevations of all utilities shown on the drawings are approximate locations. Actual locations and elevations of all utilities must be verified by the Contractor prior to construction.

The Contractor shall arrange to have a representative of the utility owner on site during construction if it is a requirement by the utility owner.



H.3 WORKING AREA AND ACCESS

Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area.

Open Work (Regan Drain)

The working area for construction purposes shall be a width of 20 metres on the East side of the drain where the excavated material is to be placed and levelled. A working area for placing rip rap shall be a width of 10 metres on the West side of the drain.

Closed Work (Morrissey, Fleming-Morrissey Drain)

The working area for construction purposes shall be an average width of 25 metres along the alignment of the proposed tile drain.

H.4 OPEN DITCH WORK

The Contractor shall clean out the existing open ditch from sta. 0+000 to sta. 0+829. The spoil from the ditch cleanout shall be spread onsite by the Contractor along the ditch banks.

Where the ditch is to be widened the contractor shall strip any available topsoil prior to widening the ditch. The Contractor shall strip the topsoil from the side slopes of the ditch and stockpile onsite. The Contractor shall later spread all available topsoil over the spoil after it is levelled.

The Contractor shall construct a silt trap at the lower end of the drain and maintain it for the duration of construction.

H.5 SEEDING

The Contractor shall hand seed all disturbed ditch banks.

The seed mixture shall be an MTO Roadside mixture of the following proportions:

52% Creeping Red Fescue10% Kentucky Bluegrass35% Perennial Ryegrass3% White Clover

H.6 CULVERTS

Construction of culverts shall occur during low flow or no flow conditions.

Culverts shall be installed in accordance with the details included in the drawing set.

H.7 CLEARING BRUSHING AND MULCHING

The Contractor shall clear, brush and stump trees from within the working area.



All trees, limbs and brush less that 155mm in diameter shall be mulched. Trees greater than 150mm in diameter shall be cut and placed in piles designated by the Landowners.

H.8 TOPSOIL STRIPPING AND FINE GRADING

The Contractor shall strip the topsoil for a minimum width of four metres centred on the proposed tile drain. If a portion of the drain is to be installed by means of an approved hydraulic excavator (due to poor soil conditions), the Contractor shall strip the topsoil for width equal to the top width of the trench, or four metres, which ever is larger.

The Contractor shall stockpile the topsoil and later spread it over the backfilled trench. The Contractor shall ensure that the top soiled trench is left in a condition such that the landowner can perform final restoration using nothing more than farm equipment.

H.9 PIPE, INSTALLATION, BEDDING & BACKFILL

H.9.1 Concrete Field Tile

An approved wheel trencher shall be used to install the concrete field tile.

All concrete tile with diameters less than 600mm shall be Heavy-Duty Extra Quality Concrete Drain Tile 1500D. All 600mm diameter concrete tile shall be 2000D.

All concrete field tile shall be backfilled using native material. The backfill shall not be compacted but a sufficient mound shall be left over the trench by the Contractor to allow for settlement flush with adjacent lands. The Contractor shall be responsible for all trench settlement.

The Contractor shall supply and wrap all concrete tile joints with geotextile filter material as part of this contract. The width of the filter material should be:

- 300mm wide for tile sizes 150mm diameter to 350mm diameter.
- 400mm wide for tile sizes 400mm diameter to 750mm diameter.

The filter material shall completely cover the tile joint and shall have a minimum overlap of 300mm. The type of filter material shall be Mirafi 140NC for clay or loam soil conditions and Mirafi 160N for sandy or silty soil conditions.

H.9.2 High Density Polyethylene Pipe (H.D.P.E.)

An approved hydraulic excavator shall be used for the installation of all H.D.P.E. pipe.

All H.D.P.E. pipe shall be CSA B182.8 320 KPa.

All H.D.P.E. pipe shall have external split coupler joining systems.



Page | 4

All H.D.P.E. pipe shall be installed using 19mm (3/4") crushed stone bedding from 150mm below the pipe to 150mm above the pipe. Suitable native material shall be used as backfill from 150mm above the pipe to the underside of the topsoil.

H.10 CATCH BASINS & MANHOLES

All catch basins shall be precast concrete catch basins (Coldstream Concrete Ltd. or approved equal).

All existing catch basins that are to be removed shall be disposed of off-site by the Contractor.

All catch basins to have 300mm sumps.

The catch basin grate elevations shall be set to the satisfaction of the Engineer.

All catch basin grates shall be fastened to the new catch basins.

All catch basins shall have hot dipped galvanized bird cage grates (Coldstream Concrete Ltd. or approved equal).

Knockouts shall be provided in all catch basins.

All catch basins structures shall be installed on 150mm crushed stone bedding.

Structures within the road allowances shall have 300mm minimum M.T.O. Granular 'B' backfill around all sides up to the underside of the topsoil layer.

Structures on private property shall be backfilled using approved native material up to the underside of the topsoil layer.

All backfill material shall be placed and thoroughly compacted evenly around each structure in lifts not exceeding 300mm so as to minimize settlement around the structures.

The Contractor shall place quarry stone rip-rap material around all sides of catch basins for a width of 1m and shall be placed on an approved geo-textile filter material.

Lifts (modulocs) shall be placed by the Contractor on all catch basins if necessary to achieve the desired elevation when field setting the structures.

All holes for catch basin pipe connections to be cored by the manufacturer.

The Contractor shall be responsible to repair or reapply grout for all grouted connections into any catch basin for a period of one year after the completion certificate has been issued.

H.11 TILE CONNECTIONS

The Contractor shall make all tributary tile drain connections in accordance with the Typical Tile Connection Detail found in the drawing set.



The Contractor shall be responsible for all tile connections for a period of one year after the issuance of the completion certificate. The tile connections required to be made within this warranty period shall be made at the same rate as defined on the Form of Tender and Agreement. After construction, the Contractor will be given the option to make any subsequent tile connections or have the Municipality make said connections and have the costs of which deducted from the holdback.

H.12 ROAD CROSSINGS

The Contractor shall grade the road ditches to the new catch basins. All disturbed areas within the road allowances shall be top soiled and seeded.

H.13 RIP-RAP

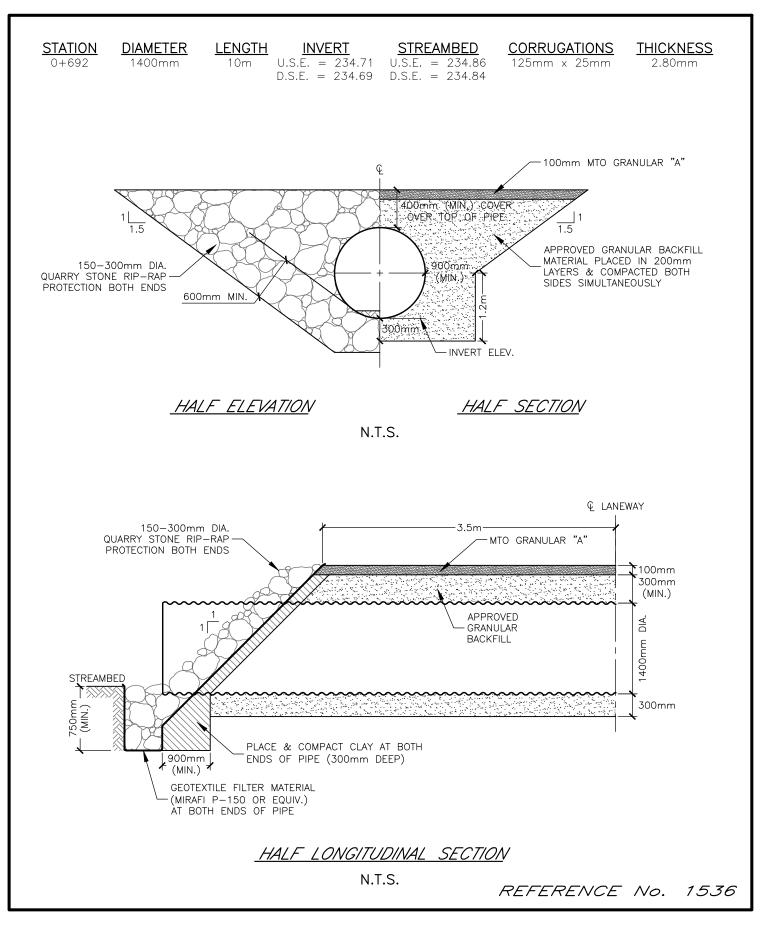
All stone rip-rap material shall be quarry stone 150 mm to 300 mm dia. and placed to a depth of 450 mm. All rip-rap material shall be placed on geo-textile filter material (Mirafi 180N).

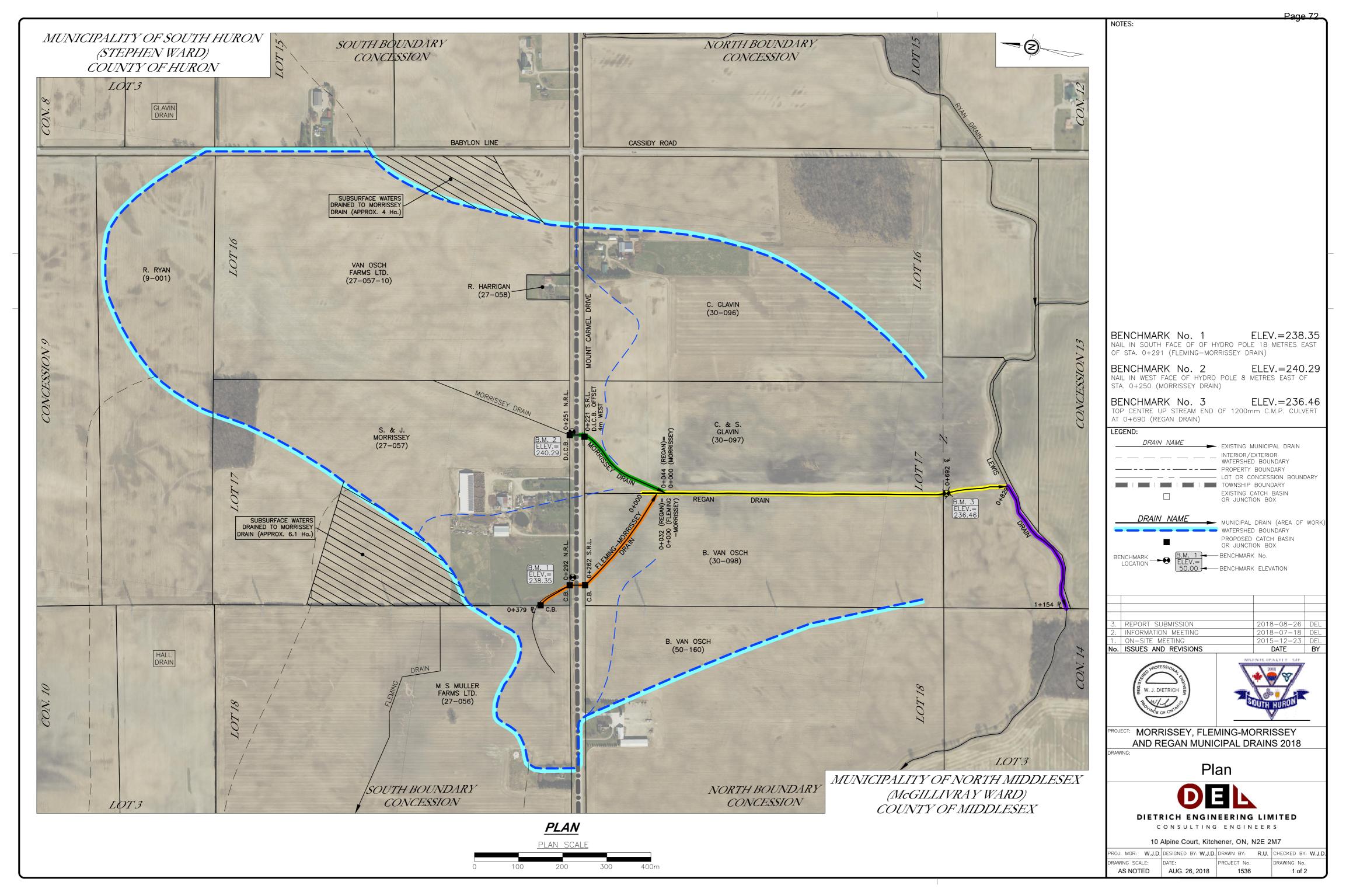
H.14 PUMP (FLEMING-MORRISSEY DRAIN)

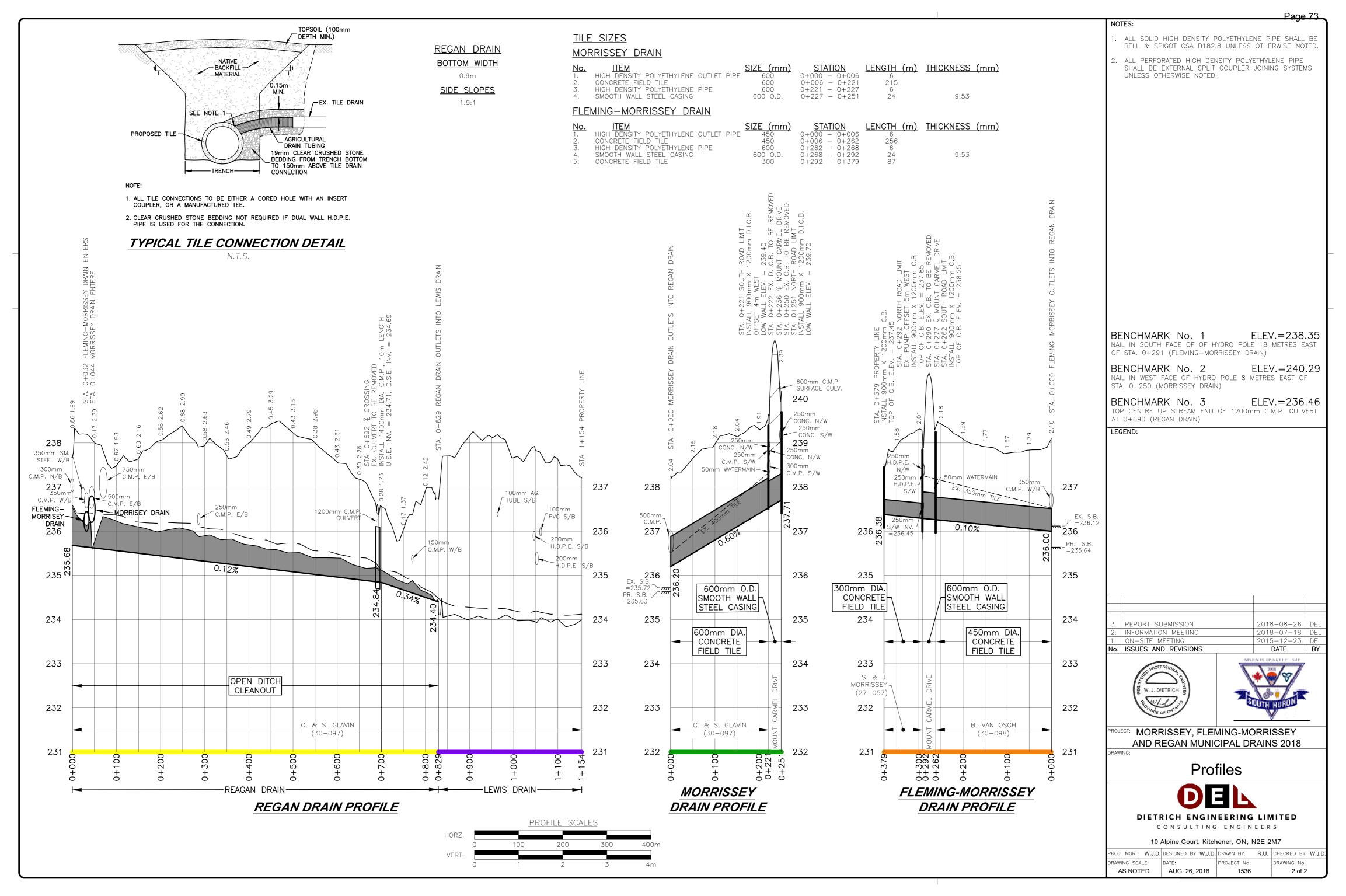
The Contractor shall decommission the pump at Sta. 0+292. The Contractor shall remove the pumping station and dispose of same off site.

Page 71

MORRISSEY, FLEMING-MORRISSEY AND REGAN MUNICIPAL DRAINS 2018 LANEWAY CULVERT DETAIL









Corporation of the Municipality of South Huron

Minutes for the Regular Council Meeting

Monday, October 1, 2018, 6:00 p.m. Council Chambers - Olde Town Hall

Members Present:	Dave Frayne - Deputy Mayor Tom Tomes - Councillor - Ward 1
	Marissa Vaughan - Councillor - Ward 1
	Wayne DeLuca - Councillor - Ward 2
	Craig Hebert - Councillor - Ward 2
	Ted Oke - Councillor - Ward 3
Member Regrets:	Maureen Cole - Mayor
Staff Present:	Dan Best, Chief Administrative Officer/Deputy Clerk
	Dave Atthill, Facilities Coordinator
	Sarah Smith, Huron County Planner
	Rebekah Msuya-Collison, Clerk

Fire alarm prior to start of meeting and municipal office was cleared. Council meeting was delayed until building cleared by South Huron Fire Department.

1. <u>Meeting Called To Order</u>

Chair Frayne Cole called the meeting to order at 6:14 pm.

- 2. Public Meeting
- 3. <u>Amendments to the Agenda, as Distributed and Approved by Council</u>

Motion: 449-2018 Moved: W. DeLuca Seconded: T. Oke

That South Huron Council approves the Agenda as presented.

Disposition: Carried

4. Disclosure of Pecuniary Interest and the General Nature Thereof

2

None

5. <u>Delegations</u>

5.1 Communities In Bloom - Symposium and Awards in Strathcona County, Alberta

Debbie Mountenay attended Council and advised that the Municipality had received the 5 Blooms Bronze for Rural Gardens award at the 2018 National/International Symposium and Awards Ceremonies in Strathcona County, Alberta. She advised that the judges were not only impressed with the South Huron rural gardens but also South Huron's corporate strategic plan especially the green energy piece, the cultural collective and the barn quilt trail.

She presented the award to Deputy Mayor Frayne and Craig Hebert who accepted on behalf of Council.

Motion: 450-2018 Moved: C. Hebert Seconded: T. Oke

That South Huron Council receives the delegation as presented from the Communities in Bloom Committee by Debbie Mountenay.

Disposition: Carried

5.2 Mollard Line Ratepayers - Petition

Gary Eagleson presented Council with a copy of his presentation and an updated petition with additional names.

Council directed the CAO to bring back a report that includes an update on the status of the project. Mr. Allan Hayter presented information with respect to Steel culverts.

Motion: 451-2018 Moved: T. Tomes Seconded: T. Oke

That South Huron Council receives the delegation as presented by Gary Eagleson.

Disposition: Carried

6. <u>Minutes</u>

6.1 Minutes of the Regular Council Meeting of September 17, 2018

Motion: 452-2018 Moved: C. Hebert Seconded: M. Vaughan

That South Huron Council adopts the minutes of the Regular Council Meeting of September 17, 2018, as printed and circulated.

Disposition: Carried

7. Councillor Board and Committee Reports

7.1 Minutes of Grand Bend Area Sewage Board meeting of April 27, 2018 and Agenda of September 14, 2018

Councillor Oke noted the Board Meeting date on report STB 9-2018 should be corrected to read September 14, 2018 not 2017. Council requested the Clerk contact Lambton Shores and advise.

Councillor Vaughan highlighted budget details including utility costs and flow charges.

Motion: 453-2018 Moved: T. Tomes Seconded: C. Hebert

That the minutes of the Grand Bend Area Sewage Board meeting of April 27, 2018 be received, as amended.

Disposition: Carried

7.2 Minutes of the Exeter Rodeo Committee meeting of July 9, 2018 and the draft minutes of the September 10, 2018

Council discussed the Rodeo Terms of Reference which outlines distribution of proceeds from the Rodeo Committee and that ultimately the recommendation would have to be approved by Council.

Motion: 454-2018 Moved: T. Oke Seconded: C. Hebert

That South Huron Council accept the recommendation of Exeter Rodeo Committee to appoint Darcey Cook and Mike Clarke to the Rodeo Committee. 3

Disposition: Carried

- 7.3 Minutes of the Community Hub/Recreation Project Steering Advisory Committee of August 14, 2018 and draft minutes of September 11, 2018
- 7.4 Draft Minutes of the South Huron Police Services Board meeting of September 11, 2018
- 7.5 Draft Minutes of the Kirkton-Woodham Community Pool Committee meeting of September 20, 2018

Motion: 455-2018 Moved: T. Oke Seconded: C. Hebert

That South Huron Council accept the recommendation of the Kirkton Woodham Community Pool Committee and appoint the following officers to the Committee:

- Jenna Becker, Chair
- Pam Benoit, Secretary.

Disposition: Carried

7.6 Upper Thames River Conservation Authority- Agenda and Reports of September 25, 2018

Motion: 456-2018 Moved: W. DeLuca Seconded: T. Tomes

That the minutes of the following committees and/or boards be received as presented to Council:

- Grand Bend Area Sewage Board minutes of April 27, 2018
- Exeter Rodeo Committee minutes of July 9, 2018 and draft minutes of September 10, 2018
- Community Hub/Recreation Project Steering Advisory Committee minutes of August 14, 2018 and draft minutes of September 11, 2018
- South Huron Police Services Board draft minutes of September
 11, 2018
- Kirkton-Woodham Community Pool Committee draft minutes of September 20, 2018

Page 78

• Reports of Upper Thames River Conservation Authority meeting of September 25, 2018

Disposition: Carried

8. <u>Staff Reports</u>

- 8.1 Planning
 - 8.1.1 S. Smith, Huron County Planner re: Consent C48-2018 (Coolman)

Planner Smith provided two letters at this time that form part of her presentation. Ms. Smith advised that the applicants were made aware in the pre-consultation process that the application does not conform to County or local severance policy, and the Planning department could not recommend approval of the application.

Motion: 457-2018 Moved: W. DeLuca Seconded: C. Hebert

That South Huron Council recommends to Huron County Council that Consent for file C48-2018 be denied and referred to County Council for decision as set out in the Planner's report dated September 24, 2018.

Disposition: Carried

8.1.2 S. Smith, Huron County Planner re: Consent C55-2018 (Hardeman/De Groot)

> Motion: 458-2018 Moved: C. Hebert Seconded: T. Oke

That South Huron Council recommends to Huron County Council that Consent for file C55-2018 be granted with conditions as set out in the Planner's report dated September 24, 2018.

Disposition: Carried

8.2 Operations and Infrastructure

8.2.1 D. Giberson, Director of Operations and Infrastructure - DWQMS Annual Management Review

Motion: 459-2018 Moved: C. Hebert Seconded: T. Tomes

That South Huron Council receives the report from D. Giberson, Director of Operations and Infrastructure re: DWQMS Annual Management Review and that Councillor Vaughan is selected to participate in this review.

Disposition: Carried

- 8.3 Financial Services
- 8.4 Administration
- 9. Deferred Business
 - 9.1 Draft Letter to Bob Sharen

Motion: 460-2018 Moved: W. DeLuca Seconded: C. Hebert

That South Huron Council approve the letter to Bob Sharen as presented.

Disposition: Carried

10. Notices of Motion

10.1 Notice of Motion

Motion: 461-2018 Moved: W. DeLuca Seconded: T. Tomes

Whereas there have been concerns raised regarding the closure of the Exeter OPP Station; and

Whereas MPP Lisa Thompson has indicated that a new detachment will be coming to her riding in Clinton; and

Whereas the municipality of South Huron Council has not been provided the opportunity for dialogue while the process took place;

6

Be it resolved that a letter be sent to Lisa Thompson MPP Huron-Bruce, Michael Tibollo, Minister of Community Safety and Correctional Services, Monte McNaughton, Minister of Infrastructure, and the OPP Municipal Policing Bureau for an up to date status report on the future of the Exeter OPP Station.

Disposition: Carried

Motion: 462-2018 Moved: W. DeLuca Seconded: M. Vaughan

That South Huron Council direct CAO Best to write and send a letter requesting an up to date status report on the new detachment and submit the letter for information at the next Council meeting.

Disposition: Carried

11. <u>Closed Session</u>

12. Mayor & Councillor Comments and Announcements

12.1 Mayor Cole - FCM Board of Directors Press Release September 17 2018

Councillor Tomes requested a status report on the Dashwood Hall washroom project and on the outcome of the meeting with the Office of the Fire Marshall (OFM). CAO Best advised that the tender for the project was extended until Friday at the request of local contractors. Mr. Best advised that he has had two meetings with the OFM and is working towards a phased audit which includes education, training and operations.

A question on the conduct of a Candidate at a Candidates meeting was brought up at this time. This information was given verbally and there was nothing submitted in writing.

Deputy Mayor Frayne updated Council on the Emergency Management exercise held in Clinton which was a pandemic with avian influenza. He mentioned that South Huron has now met the annual requirement for Emergency Management.

13. <u>Communications</u>

Page 80

7

- 8
- 13.1 Ministry of Municipal Affairs and Housing Consider Changes to Improve Municipal Governance
- 13.2 AMO Bill 31 Reducing the Size of City Council in Toronto
- 13.3 OPP Municipal Policing Bureau 2019 Municipal Policing Bill and Budget
- 13.4 Ontario Energy Board Notice of New Transportation Rate
- 13.5 BRA Board Meeting Highlights of the September 20, 2018 meeting
- 13.6 United Way Perth-Huron Social Research and Planning Council Community Consultation
- 13.7 Exeter United Church UCW Community Grant Status Update
- 13.8 South Huron Hospital Foundation Community Grant Status Update
- 13.9 Christina Riley-Ankers and Brad Ankers Request Designation as Potentially Vicious or Vicious Dog

Motion: 463-2018 Moved: C. Hebert Seconded: T. Tomes

That South Huron Council refer the request by Christina Riley-Ankers and Brad Ankers to remove the vicious dog designation to South Huron Animal Control Tribunal.

Disposition: Carried

13.10 Huron County - Resolution - Huron Domestic Assault Review Team (DART)

Motion: 464-2018 Moved: W. DeLuca Seconded: M. Vaughan

That South Huron Council receive communication items not otherwise dealt with.

Disposition: Carried

14. <u>Report From Closed Session</u>

- 15. <u>By-Laws</u>
 - 15.1 By-Law No. 81-2018 Site Plan Agreement Hamather Motor Products

Motion: 465-2018 Moved: T. Tomes Seconded: C. Hebert

That the South Huron Council gives first, second and third and final reading to By-Law #81-2018, being a by-law to authorize the execution of a Site Plan Agreement between the Municipality of South Huron and Hamather Motor Products in the Municipality of South Huron in the County of Huron.

Disposition: Carried

16. <u>Confirming By-Law</u>

16.1 By-Law No. 82-2018– Confirming By-Law

Motion: 466-2018 Moved: M. Vaughan Seconded: W. DeLuca

That the South Huron Council gives first, second and third and final reading to By-Law #82-2018, being a by-law to confirm matters addressed at the October 1, 2018 Council meeting.

Disposition: Carried

17. Adjournment

Motion: 467-2018 Moved: C. Hebert Seconded: W. DeLuca

That South Huron Council hereby adjourns at 7:30 p.m., to meet again on October 15, 2018 at 6:00 p.m. or at the Call of the Chair.

Disposition: Carried

Maureen Cole, Mayor

Rebekah Msuya-Collison, Clerk

Agenda Lake Huron Primary Water Supply System Joint Board of Management

4th I	Meeting	g of the Lake Huron Primary Water Board	
Octo	ober 4,	2018, 1:30 PM	
Corr	nmittee	Room #5	Pages
1.	Call t	o Order	
2.	Adop	tion of Minutes	
	2.1	Minutes of the 3rd Meeting held on Thursday, June 7, 2018.	3
3.	Cons	ent Items	
	3.1	Kelly Scherr, Chief Administrative Officer - Quarterly Compliance Report (2nd Quarter 2018: April - June)	17
	3.2	Kelly Scherr, Chief Administrative Officer - Environmental Management System and Quality Management System	19
	3.3	Kelly Scherr, Chief Administrative Officer - Capital Status Report	42
	3.4	Kelly Scherr, Chief Administrative Officer - Environmental and Quality Policy	47
	3.5	Kelly Scherr, Chief Administrative Officer - 2019 and 2020 Meeting Schedule	51
4.	Items	s for Discussion	
	4.1	Kelly Scherr, Chief Administrative Officer - 2019 Operating and Capital Budgets (Previously Distributed)	
	4.2	Kelly Scherr, Chief Administrative Officer - Municipal Act - Board Structure	53
	4.3	Kelly Scherr, Chief Administrative Officer - Municipal Drinking Water License - Consolidated Financial Information	66
	4.4	Kelly Scherr, Chief Administrative Officer - LH1219 Filter Backwash Turbidity Meter Project	74

		Page 84
4.5	Kelly Scherr, Chief Administrative Officer - LH1230 High Lift Pump Replacements Project	77
4.6	Kelly Scherr, Chief Administrative Officer - LH1317 Distressed Pipe Replacement Program	80
4.7	Kelly Scherr, Chief Administrative Officer - LH1384 Filter Rate Meter Replacement Project	84
Deferr	ed Matters/Additional Business	

6. Adjournment

5.

Lake Huron Primary Water Supply System Report

The 3rd Meeting of the Lake Huron Primary Water Supply System June 7, 2018

Attendance: Meeting held on Thursday, June 7, 2018 at the London City Hall, commencing at 1:32 PM

PRESENT: V. Ridley (Chair), C. Burghardt-Jesson, M. Cassidy, M. Cole, J. Finlay, J. Gillespie, J. Helmer, J. Vanderheyden and M. van Holst and J. Bunn (Committee Secretary)

ALSO PRESENT: T. Bender (OCWA), K. Butts (RWS), S. Core (OCWA), D. Gibson, B. Haklander (RWS), E. McLeod (RWS), C. Murchland (OCWA), D. Rodrigues (OCWA) and B. Tully (OCWA)

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Adoption of Minutes

2.1 Minutes of the 2nd Meeting held on Thursday, March 1, 2018.

FINLAY AND VANDERHEYDEN

That the Minutes of the March 1, 2018 meeting of the Lake Huron Primary Water Supply System Joint Board of Management **BE NOTED AND FILED**. **CARRIED**

3. Consent Items

3.1 Quarterly Compliance Report (1st Quarter 2018: January - March)

CASSIDY AND VAN HOLST

That, on the recommendation of the Chief Administrative Officer, the report dated June 7, 2018, with respect to the general, regulatory and contractual obligations of the Lake Huron Primary Water Supply System, for January to March 2018, **BE RECEIVED**. **CARRIED**

3.2 Environmental Management System and Quality Management System

CASSIDY AND VAN HOLST

That, on the recommendation of the Chief Administrative Officer, the report dated June 7, 2018, with respect to the Environmental Management System and Quality Management System for the Lake Huron Primary Water Supply System, **BE RECEIVED**. **CARRIED**

3.3 Summary of Insurance Policies

CASSIDY AND VAN HOLST

That, on the recommendation of the Chief Administrative Officer, the report dated June 7, 2018, with respect to the Summary of Insurance

Policies for the Lake Huron Water Supply System, **BE RECEIVED**. **CARRIED**

3.4 Water System Operation - Contract Status Update

CASSIDY AND VAN HOLST

That, on the recommendation of the Chief Administrative Officer, the report dated June 7, 2018, with respect to the status of the contract with the Ontario Clean Water Agency as the contracted operating authority for the Lake Huron Primary Water Supply Board, **BE RECEIVED. CARRIED**

4. Items for Discussion

4.1 2017 Audited Financial Statement

HELMER AND COLE

That, on the recommendation of the Chief Administrative Officer, the revised <u>attached</u> 2017 Audited Financial Statement for the Lake Huron Primary Water Supply System, **BE RECEIVED** and **BE ACCEPTED**. **CARRIED**

4.2 Surplus Asset Disposal

GILLESPIE AND HELMER

That, on the recommendation of the Chief Administrative Officer, the following actions be taken with respect to the portable diesel generator located in the Powdered Activated Carbon Building at the Lake Huron Primary Water Treatment Plant:

a) the above-noted portable diesel generator **BE DECLARED** surplus; and,

b) the Civic Administration **BE AUTHORIZED** to dispose of the asset in a manner fitting its value. **CARRIED**

5. Deferred Matters/Additional Business

None.

7. Adjournment

The meeting adjourned at 2:02 PM.

Financial Statements of

LAKE HURON AREA PRIMARY WATER SUPPLY SYSTEM

December 31, 2017

INDEPENDENT AUDITORS' REPORT

To the Board of Directors of Lake Huron Area Primary Water Supply System

We have audited the accompanying financial statements of Lake Huron Area Primary Water Supply System, which comprise the statement of financial position as at December 31, 2017, the statements of operations, change in net financial assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Lake Huron Area Primary Water Supply System as at December 31, 2017 and its results of operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Chartered Professional Accountants, Licensed Public Accountants DRAFT London, Canada

LAKE HURON AREA PRIMARY WATER SUPPLY SYSTEM Statement of Financial Position December 31, 2017, with comparative information for 2016

	2017	2016
Financial assets		
Due from the Corporation of the City of London (note 3)	\$ 23,505,532	\$ 20,700,907
Trade and other receivables	627,445	1,053,164
Total financial assets	24,132,978	21,754,071
Financial liabilities		
Accounts payable and accrued liabilities	2,260,810	2,874,777
Deferred revenue (note 4)	674,777	711,077
Accrued interest on long-term debt	54,196	55,884
Long-term debt (note 5)	9,254,783	9,982,226
Total financial liabilities	12,244,566	13,623,964
Net financial assets	11,888,411	8,130,107
Non-financial assets		
Tangible capital assets (note 6)	157,682,748	158,395,013
Prepaid expenses	206,664	163,296
Total non-financial assets	157,889,412	158,558,309
Accumulated surplus (note 7)	\$ 169,777,823	\$ 166,688,416

Commitments (note 9) Contingent liabilities (note 10)

LAKE HURON AREA PRIMARY WATER SUPPLY SYSTEM Statement of Operations Year ended December 31, 2017, with comparative information for 2016

	Budget	2017	2016
Revenues			
User charges	\$ 19,680,947 \$	21,583,674	\$ 20,726,432
Investment income	15,000	297,350	346,936
Transfer payments	-	-	
Provincial	-	36,300	65,864
Federal	-	35,845	161,614
Other	5,000	5,313	7,576
Total revenues	19,700,947	21,958,483	21,308,422
Expenses			
Salaries, wages and benefits	580,930	520,347	577,186
Materials and supplies	10,347,800	10,396,226	10,903,505
Contracted services	151,344	441,603	611,183
Rents and financial expenses	52,500	47,174	44,716
Interest on long-term debt (note 5)	228,994	195,819	202,864
Amortization of tangible capital assets (note 6)	-	7,064,735	6,973,943
Administrative charges	203,173	203,173	198,218
Total expenses	11,564,741	18,869,076	19,511,616
	0,400,000	2 000 407	4 700 000
Annual surplus	8,136,206	3,089,407	1,796,806
Accumulated surplus, beginning of year (note 7)	166,688,416	166,688,416	164,891,610
Accumulated surplus, end of year (note 7)	\$174,824,622 \$	169,777,823	\$166,688,416

DRAF

LAKE HURON AREA PRIMARY WATER SUPPLY SYSTEM Statement of Change in Net Financial Assets Year ended December 31, 2017, with comparative information for 2016

	Budget	2017	2016
Annual surplus	\$ 8,136,206	\$ 3,089,407	\$ 1,796,806
Acquisition of tangible capital assets Amortization of tangible capital assets	(505,399)	(6,352,470) 7,064,735	(2,928,186) 6,973,943
	7,630,807	3,801,672	5,842,563
Change in prepaid expenses	-	(43,368)	(1,801)
Change in net financial assets	7,630,807	3,758,304	5,840,762
Net financial assets (debt), beginning of year	8,130,107	8,130,107	2,289,345
Net financial assets, end of year	\$ 15,760,914	\$ 11,888,411	\$ 8,130,107



2017	2016

Cash provided by:

Operating activities:		
Annual surplus	\$ 3,089,407	\$ 1,796,806
Items not involving cash:		
Amortization of tangible capital assets	7,064,735	6,973,943
Amortization of debenture discount	8,066	7,932
Changes in non-cash assets and liabilities:		
Due from the Corporation of the City of London	(2,804,625)	(5,636,939)
Prepaid expenses	(43,368)	(1,801)
Trade and other receivables	425,718	780,232
Accounts payable and accrued liabilities	(613,967)	197,367
Deferred revenue	(36,300)	(65,864)
Accrued interest on long-term debt	(1,688)	(3,406)
Net change in cash from operating activities	7,087,979	4,048,270
Capital activities:		
Purchase of tangible capital assets	(6,352,470)	(2,928,186)
Cash used in capital activities	(6,352,470)	(2,928,186)
Financing activities:		
Proceeds from issuance of long term debt	404,232	-
Long-term debt repayments	(1,139,741)	(1,120,084)
Cash used in financing activities	(735,509)	(1,120,084)
Net change in cash flows	\$ - \$	-



1. Nature of reporting entity

The final transfer order for Lake Huron Area Primary Water Supply System (the "Entity) was effective September 15, 2000, transferring assets along with any other real property to The Corporation of the City of London (the "Corporation") in trust to act as the Administering Municipality on behalf of the participating municipalities.

Under the transfer order, the works, properties and all assets, liabilities, rights and obligations of the system are conveyed, assigned and transferred to the Corporation as Trustee. Each of the benefitting municipalities, for so long as the municipality is serviced by the works has an undivided beneficial ownership interest in the works as tenant in common with all other municipalities jointly. The proportion that each municipality's interest bears to the total of all municipalities' interests shall be in the same ratio that the quantity of water supplied from the works to the municipalities at any time and from time to time bears to the total quantity of water supplied to all municipalities at such time. At present, the benefitting municipalities are The City of London, the Municipalities of Bluewater, South Huron, Lambton Shores, North Middlesex, Lucan-Biddulph, Middlesex Centre and Strathroy-Caradoc.

The transfer order established a joint board of management to govern the management of the water supply system. The joint board of management is comprised of eleven members appointed by the respective councils of participating municipalities. The Board composition is as follows:

Municipality	Members	Votes
The City of London	4	17
Bluewater	1	1
South Huron	1	1
Lucan-Biddulph	1	1
Lambton Shores	1	1
North Middlesex	1	3
Middlesex Centre	1	1
Strathroy-Caradoc	1	3

2. Significant accounting policies

The financial statements of the Entity are prepared by management, in accordance with Canadian generally accepted accounting principles as defined in the CPA Canada Public Sector Handbook – Accounting. Significant accounting policies are as follows.

(a) Accrual accounting

Sources of financing and expenses are reported on the accrual basis of accounting.

(b) Non-financial assets

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

Year ended December 31, 2017

2. Significant accounting policies (continued)

(b) Non-financial assets (continued)

i) Tangible capital assets

Tangible capital assets are recorded at cost which includes amounts that are directly attributable to acquisition, construction, development or betterment of the asset. The cost, less residual value, of the tangible capital assets, excluding land, are amortized on a straight line basis over their estimated useful lives as follows:

Asset	Useful Life - Years
Buildings and building improvements Vehicles Machinery and equipment Water infrastructure	15 - 40 5 - 15 7 - 20 10 - 60

Annual amortization is charged in the year of acquisition and in the year of disposal using the half year rule. Assets under construction are not amortized until the asset is available for productive use.

ii) Interest capitalization

The interest costs associated with the acquisition or construction of a tangible capital asset are not capitalized.

(c) Revenue recognition

The Entity recognizes revenue when water is drawn by each customer, collection of the relevant receivable is probable, persuasive evidence of an arrangement exists and the sales price is fixed or determinable.

(d) Government transfers

Government transfer payments from the Corporation are recognized in the financial statements in the year in which the payment is authorized and the events giving rise to the transfer occur, performance criteria are met, and a reasonable estimate of the amount can be made. Funding that is stipulated to be used for specific purposes is only recognized as revenue in the fiscal year that the related expenses are incurred or services performed. If funding is received for which the related expenses have not yet been incurred or services performed, these amounts are recorded as a liability at year end.

(e) Use of estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Significant items subject to such estimates and assumptions include the valuation allowances for receivables and useful lives assigned to tangible capital assets.

Actual results could differ from those estimates.

2. Significant accounting policies (continued)

(f) **Budget figures**

Budget figures have been provided for comparison purposes. Given differences between the budgeting model and generally accepted accounting principles established by the Public Sector Accounting Board ("PSAB"), certain budgeted amounts have been reclassified to reflect the presentation adopted under PSAB.

(g) Liability for contaminated sites

Under PS 3260, liability for contaminated sites are defined as the result of contamination being introduced in air, soil, water or sediment of a chemical, organic, or radioactive material or live organism that exceeds an environmental standard. This Standard relates to sites that are not in productive use and sites in productive use where an unexpected event resulted in contamination.

3. Due from the Corporation of the City of London

As the Administering Municipality, the Corporation manages the daily operations of the Entity. The Corporation maintains a separate general ledger on behalf of the Entity. All funds are paid and received through the Corporation's bank account and are held for use by the Entity.

4. **Deferred revenue**

Deferred revenue is comprised of the following:

Long-term debt is stated as follows:

	2017	2016
Provincial HELP Funding	\$ 674,	777 \$ 711,077

5. Long-term debt

⁽a)

	2017	2016
Long-term debt assumed by The Corporation of the City of London, as administering municipality, on behalf of the Lake Huron Area Primary Water Supply System, with semi-annual interest payments:		
(a) at rates ranging from 2.05% to 3.20%, maturing September 2022.	\$ 928,950	\$ 1,101,375
(b) at rates ranging from 1.95% to 3.80%, maturing September 2023.	946,560	1,090,380
 (c) at rates ranging from 0.80% to 2.25%, maturing March 2025 (d) at rates ranging from 1.15% to 2.85% 	7,029,775	7,853,271
(d) at rates ranging from 1.15% to 2.85%, maturing March 2027	406,931	-
Total long-term debt	9,312,216	10,045,026
Less: Unamortized debenture discount	(57,433)	(62,800)
Net long-term debt	\$ 9,254,783	\$ 9,982,226

5. Long-term debt (continued)

(b) The long-term debt repayment schedule is as follows:

2018 2019	\$ 1,197,478 1,218,241
2020 2021	1,239,448 1,261,262
2022 2023 & Beyond	1,283,326 3,112,461

(c) Total charges for the year for long-term debt which are reported on the Statement of Operations are as follows:

	2017		2016
Interest Amortization of debenture discount	\$ 187,752 8,066	\$	194,932 7,932
	\$ 195,819	\$	202,864

6. Tangible capital assets

	Balance at December 31,		Discussion	Balance at December 31,
Cost	2016	Additions	Disposals	2017
Land	\$ 1,843,513	\$-	\$-	\$ 1,843,513
Buildings and building improvements	48,838,423	6,373,733	131,349	55,080,808
Vehicles, machinery and equipment	39,815,696	2,680,224	801,183	41,694,738
Water infrastructure	117,350,378	318,842	677	117,668,542
Assets under construction	3,216,457	115,300	3,135,467	196,290
Total	\$ 211,064,467	\$ 9,488,099	\$ 4,068,675	\$ 216,483,891
	Balance at			Balance at
	December 31,	Amortization		December 31,
Accumulated Amortization	2016	expense	Disposals	2017
	<u>^</u>	•	•	•
Land	\$ -	\$ -	\$ -	\$ -
Buildings and building improvements	11,909,222	1,954,911	131,349	13,732,784
Vehicles, machinery and equipment Water infrastructure	15,922,499 24,837,734	2,907,505	801,183 515	18,028,821
Assets under construction	24,037,734	2,202,320	515	27,039,538
Total	\$ 52,669,454	\$ 7,064,735	\$ 933,047	\$ 58,801,143
	ψ 52,009,454	φ 7,004,733	φ 955,047	\$ 50,001,145
	Net book value			Net book value
	December 31,			December 31,
	2016			2017
Land	\$ 1,843,513			\$ 1,843,513
Buildings and building improvements	36,929,201			41,348,024
Vehicles, machinery and equipment	23,893,197			23,665,916
Water infrastructure	92,512,644			90,629,004
Assets under construction	3,216,458			196,290
Total	\$ 15 8,395,013			\$ 157,682,748

6. Tangible capital assets (continued)

(a) Assets under construction

Assets under construction with a net book value of \$196,290 (2016 - \$3,216,458) have not been amortized. Amortization of these assets will commence when the asset is available for productive use.

(b) Tangible capital assets disclosed at nominal values

Where an estimate of fair value could not be made, the tangible capital asset was recognized at a nominal value. Land is the only category where nominal values were assigned.

(c) Write-down of tangible capital assets

There were no write-downs in tangible capital assets during the year (2016 - nil).

7. Accumulated surplus

Accumulated surplus consists of individual fund surplus and reserve funds as follows:

	2017	2016
Surplus:		
Invested in tangible capital assets	\$143,711,822	\$144,102,760
Total surplus	143,711,822	144,102,760
Reserve funds set aside for specific purpose by the	<u>د</u>	
Board:		
	\$ 26,066,000	\$ 22,585,656
Board:		<u>\$ 22,585,656</u> 22,585,656

8. Financial instruments

(a) The carrying values of due from the Corporation of the City of London, trade and other receivables and accounts payable and accrued liabilities approximate their fair values due to the relatively short periods to maturity of the instruments.

The fair value of long-term debt approximates its carrying value as interest rates are similar to current market rates of interest available to the Entity.

(b) Financial risks

The Entity is not exposed to any significant interest, foreign currency or credit risks arising from its financial instruments.

9. Commitments

Derivatives

The Entity has the following derivative:

• Contract with one block negotiated October 22, 2015, with a daily electricity purchase of 24 megawatt hours. Covering the period of November 1, 2015 until October 31, 2018, remaining contract cost of \$219,938 (2016 - \$484,008).

This derivative contract was purchased to price certainty for 15% of the Entity's electricity needs over the term of the contract. The value of the contract is not reflected as an asset or liability in these financial statements.

10. Contingent liabilities

There are certain claims pending against the Entity as at December 31, 2017. The final outcome of these claims cannot be determined at this time, however management believes that settlement of these matters will not materially exceed amounts recorded in these financial statements.

11. Budget Data

Budget data presented in these consolidated financial statements are based upon 2017 operating budget approved by the joint board of management. Adjustments to budgeted values were required to provide comparative budget values based on the full accrual basis of accounting. The chart below reconciles the approved budget with the budget figures as presented in these financial statements.

		Budget
Revenues		
User charges	\$	19,680,947
Municipal Revenues - Other		20,000
Total revenues		19,700,947
Expenses		
Personnel Costs		519,430
Administrative Expenses		82,150
Financial Expenses - Other		272,500
Financial Expenses - Interest & Discount on LTD		228,994
Financial Expenses - Debt Principal Repayments		1,139,741
Financial Expenses - Transfers to Reserves and Reserve Funds		6,996,465
Purchased Services		684,344
Materials & Supplies		9,552,650
Furniture & Equipment		21,500
Other Expenses		203,173
Recovered Expenses		
Total expenses		19,700,947
Net surplus (deficit) as per Budget	\$	-
	i	
PSAB Reporting Requirements:		
Transfers to Reserves and Reserve Funds	\$	6,996,465
Debt principal repayments		1,139,741
Net PSAB Budget surplus as per Financial Statements	\$	8,136,206



 Report No.:
 LH-2018-03-02

 Report Page:
 1 of 2

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
 Subject: Quarterly Compliance Report (2nd Quarter 2018: April - June)

RECOMMENDATION

That the Quarterly Compliance report with respect to the general, regulatory and contractual obligations of the Lake Huron Primary Water Supply System **BE RECEIVED** for the information of the Board of Management; it being noted that there were no Adverse Water Quality Incidents or adverse laboratory results in the 2nd quarter of 2018.

EXECUTIVE SUMMARY

Since the previous report to the Board, there were no new or proposed regulatory changes that may have a significant impact on the Lake Huron Primary Water Supply System (LHPWSS).

The Water Quality Quarterly Report for the period of April 1 – June 30, 2018 was posted on the water system's website at <u>https://huronelginwater.ca/consumer-resources/water-quality/</u>.

There were no Adverse Water Quality Incidents (AWQI) reported by the operating authority or adverse laboratory results reported by the third-party accredited laboratory during this quarter.

BACKGROUND

Pursuant to Board of Management resolution, this Compliance Report is prepared on a quarterly basis to report on general, regulatory and contractual compliance issues relating to the regional water system. For clarity, the content of this report is presented in two basic areas, namely regulatory and contractual, and does not intend to portray an order of importance or sensitivity nor a complete list of all applicable regulatory and contractual obligations.

REGULATORY ISSUES

<u>Recent Regulatory Changes:</u> At the time of drafting this report, there are no new regulatory changes for this reporting period which may have an impact on the LHPWSS.



 Report No.:
 LH-2018-03-02

 Report Page:
 2 of 2

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

New Environmental Bill of Rights (EBR) Registry Postings: At the time of drafting this report, there were no new postings on the EBR, or through other sources, that may have an impact on the LHPWSS.

Quarterly Water Quality Reports: The Water Quality Quarterly Report for the period of April 1 – June 30, 2018 was completed by the operating authority, and is posted on the Water Systems' website at https://huronelginwater.ca/consumer-resources/water-quality/.

<u>Note</u>: In order to better comply with the *Accessibility for Ontarians with Disabilities Act*, 2005, the detailed tables of water quality test results which were previously appended to this Report have been removed. The full list of test results of drinking water quality parameters is posted on the water system's website and available in print at the Board's Administration Office in London upon request. In addition, the detailed water quality information is also published within the water system's Annual Report required by O.Reg. 170/03 under the *Safe Drinking Water Act*.

<u>Adverse Water Quality Incidents (AWQIs)</u>: There were no AWQI reported by the operating authority or adverse laboratory results reported by the third-party accredited laboratory during this quarter.

CONTRACTUAL ISSUES

ARTICLE 3, "Operation and Maintenance of the Facilities – General":

Board staff informally meets with OCWA on a monthly basis to discuss operations and maintenance related issues, and formally on a quarterly basis to review contractual performance. The 2018 first quarter Contract Report was received from OCWA on July 27, 2018 and was discussed at the quarterly administration meeting between Board staff and OCWA on August 9, 2018. Copies of the monthly Operations and Maintenance Reports, or quarterly Contract Reports are available at the Board's Administration Office in London upon request.

This report was written by Erin McLeod, Quality Assurance and Compliance Manager.

Submitted by:

Andrew Henry, P. Eng. Director, Regional Water Supply

Recommended by.

Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer



 Report No.:
 LH-2018-03-03

 Report Page:
 1 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
 Subject: Environmental Management System and Quality Management System

RECOMMENDATION

That the following report with respect to the Environmental Management System and Quality Management System for the Lake Huron Primary Water Supply System **BE RECEIVED** for information.

BACKGROUND

Environmental Management System (EMS)

The Lake Huron Primary Water Supply System (LHPWSS) has an Environmental Management System (EMS) which has been registered to the ISO 14001 standard since 2003. The LHPWSS underwent a three-year registration audit in November 2017 and was recommended for registration to the ISO14001:2015 standard for a three-year period (ending in 2020).

The continued utilization and registration of the EMS to the ISO 14001 standard is a requirement of the Service Agreement with Ontario Clean Water Agency (OCWA), the contracted Operating Authority for the LHPWSS.

Quality Management System (QMS)

In 2006, the Drinking Water Quality Management Standard (DWQMS) was integrated with the existing EMS and the combined EMS/QMS is maintained by the contracted Operating Authority. The *Safe Drinking Water Act* (SDWA) and the water system's Municipal Drinking Water Licence (MDWL) require that an accredited Operating Authority be in operational charge of the drinking water system. In order to become accredited, the Operating Authority must utilize and maintain an Operational Plan that meets the requirements of the DWQMS, and must undergo an external accreditation audit every three years. OCWA received full scope DWQMS re-accreditation in October 2016 and is currently accredited for the three-year period ending in 2019.



Report No.:LH-2018-03-03Report Page:2 of 23Meeting Date:October 4, 2018File No.:Content 4, 2018

DISCUSSION

Management Review

The documented EMS/QMS and its performance requires Management Review by Top Management a minimum of once annually to ensure that the management team of the Board and the Operating Authority stay informed of environmental and quality related issues. Items discussed at the Management Review meetings include, but are not limited to, water quality test results, environmental and quality performance, legislative changes, identified nonconformances, corrective and preventive actions, staff suggestions, changing circumstances and business strategies, and resource requirements. Corrective and preventive actions include not only those to address non-conformance issues and opportunities for improvement identified as part of internal and external audits, but also non-compliance issues identified by the Ministry of the Environment, Conservation and Parks (MECP), suggestions from staff, and opportunities for improvement identified during the Management Review process.

In order to carry out more effective Management Review meetings, the Board's administration has opted to conduct shorter meetings at more frequent intervals. Although each required Management Review input may not be covered at every meeting, over the course of the year all required inputs are reviewed at least once.

Management Review meetings were held on June 28, 2018 and September 5, 2018. The June 28, 2018 meeting minutes are attached to this report as Appendix A for the information of the Board. The September 5, 2018 meeting minutes will be included in a future report to the Board once the minutes are finalized and accepted by all parties of the meeting.

Internal Audits

Pursuant to the international ISO 14001 EMS standard and the provincial DWQMS, periodic "internal" audits are performed by the Board's administration to ensure continued compliance with legislated, contractual, and other requirements, as well as conformance with the ISO 14001 EMS standard and DWQMS. Internal audits also ensure that the ongoing operation of the LHPWSS conforms to the EMS and QMS as implemented. As required by the standards, internal audits are performed a minimum of once annually.

A QMS Internal Audit was conducted on April 18 & 20, 2018, and a summary of the audit findings is included in Appendix B of this report. Zero (0) non-conformances and twenty four (24) opportunities for improvement were identified during the audit. The audit findings were discussed at the June 28, 2018 Management Review meeting and action items were subsequently assigned.

An EMS Internal Audit was conducted on June 6 & 8, 2018 and a summary of the audit findings is included in Appendix C of this report. Zero (0) non-conformances and five (5) opportunities for improvement were identified during the audit. The audit findings were discussed at the September 5, 2018 Management Review meeting and action items were subsequently assigned.



 Report No.:
 LH-2018-03-03

 Report Page:
 3 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

The audit findings were considered to be minor, largely related to possible improvements to documentation, and should easily be addressed through assigned action items.

External Audits

Annual surveillance audits (third-party external audits) are conducted for both the EMS and QMS, with a recertification audit taking place every third year. The external registrar for both the EMS and QMS is currently SAI Global. External audits review all aspects of the EMS or QMS, including the internal audits, subsequent management reviews, and corrective action processes.

There were no external audits conducted during this reporting period.

Corrective and Preventive Actions

For an EMS and QMS to be effective on an on-going basis, an organization must have a systematic method for identifying actual and potential non-conformities, making corrections and taking corrective and preventive action, preferably preventing problems before they occur. The Internal Audit process and Management Review are the two main drivers for identifying potential problems and opportunities for improvement for the LHPWSS and implementing corrective actions. Preventive actions may originate from identified opportunities for improvement as part of an audit, but also staff suggestions and discussions with management.

It is important to note that action items should not be construed as **compliance failures**, but rather an action to be undertaken which will improve the LHPWSS's overall performance.

Action items are the result of the "PLAN-DO-CHECK-ACT" continual improvement process. The identification of action items is a critical component of continual improvement and an essential element of management systems. The identification of action items should be seen as a positive element, as this drives continual improvement.

A key concept of PLAN-DO-CHECK-ACT is that it does not require or expect 100% conformance, but promotes an environment of continual improvement by identifying shortfalls, implementing corrective and preventive measures, and setting objectives and targets for improvement. Figure 1 outlines the general process.



Report No.:	LH-2018-03-03	
Report Page:	4 of 23	
Meeting Date:	October 4, 2018	
File No.:		

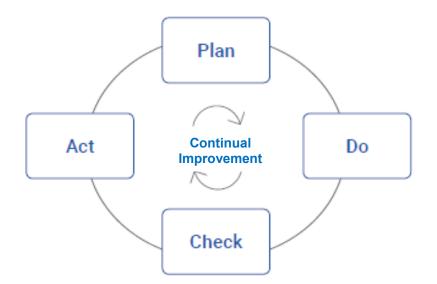


Figure 1: Plan-Do-Check-Act improvement process

Since the last report to the Board, the following summarizes new action items that have been added to the EMS/QMS action item tracking system:

- Seven (7) new proactive action items were added as a result of the June 28, 2018 Management Review meeting.
- Four (4) new action items were added as a result of the Management of Change review process.
- Twenty four (24) new action items were added as a result of the April 18 & 20, 2018 QMS Internal Audit.
- Five (5) new action items were added as a result of the June 6 & 8, 2018 EMS Internal Audit.

As of September 6, 2018, there are currently 43 open action items in the system. This represents an overall completion rate of 92%.

All outstanding action items in the system are driven by continual improvement. The majority of open action items in the system are administrative in nature with an assigned priority of low, meaning that they are opportunities for improvement and proactive in nature. None of the open action items relate to regulatory issues (ie. non-compliances), management system non-conformances, or water quality issues.



Report No.:LH-2018-03-03Report Page:5 of 23Meeting Date:October 4, 2018File No.:File No.:

CONCLUSION

The Internal Audits and frequent Management Review meetings continue to effectively identify system deficiencies. The EMS and QMS for the LHPWSS continue to be suitable, adequate and effective. Activities by OCWA continue to address the need for change, and the management systems are being revised and refined as required.

This report was prepared by Erin McLeod, Quality Assurance & Compliance Manager with the assistance of Arlene Tanashi, Compliance Coordinator.

Submitted by: Recommended by: Andrew Henry, P. Eng. Kelly Scherr, P.Eng., MBA, FEC Director, Regional Water Supply Chief Administrative Officer

Attachments:

Appendix A - Management Review Meeting Minutes (June 28, 2018)

Appendix B - Quality Management System (QMS) Internal Audit Report Summary (April 18 & 20, 2018)

Appendix C - Environmental Management System (EMS) Internal Audit Report Summary (June 6 & 8, 2018)



Report No.:LH-2018-03-03Report Page:6 of 23Meeting Date:October 4, 2018File No.:File No.:

APPENDIX A: MANAGEMENT REVIEW MEETING MINUTES (JUNE 28, 2018)

Lake Huron & Elgin Area Primary Water Supply Systems EMS/QMS Management Review

Date	June 28, 2018
Time	9:00 am – 12:00 pm
Location	Regional Water Supply Boardroom
Attendees	Andrew Henry (RWS), Erin McLeod (RWS), Blair Tully (OCWA), Denny Rodrigues (OCWA), Shawn Core (OCWA), Simon Flanagan (OCWA), Arlene Tanashi (RWS)
Regrets	
C.C.	

-----Meeting Notes-----

1. Review and approval of previous meeting minutes - May 3, 2018

Revision 1 of the minutes is posted to SharePoint. The minutes were approved. No changes required.

2. LHPWSS QMS Internal Audit - April 18 and 20, 2018

The purpose of the audit was to verify conformance with the Ontario Drinking Water Quality Management Standard v. 2.0 (DWQMS) for the Lake Huron Primary Water Supply System (LHPWSS). A summary of the audit findings was circulated. Zero (0) non-conformances (NC) and twenty four (24) Opportunities for Improvement (OFI) were noted. Discussion ensued and suggested additions and changes to action items and deadlines will be incorporated into the CAF tracking spreadsheet.

3. EAPWSS QMS Internal Audit - April 26 and 27, 2018

The purpose of the audit was to verify conformance with the Ontario Drinking Water Quality Management Standard v. 2.0 (DWQMS) for the Elgin Area Primary Water Supply System (EAPWSS). A summary of the audit findings was circulated. Zero (0) non-conformances (NC) and sixteen (16) Opportunities for Improvement (OFI) were noted. Discussion ensued and suggested additions and changes to action items and deadlines will be incorporated into the CAF tracking spreadsheet.



 Report No.:
 LH-2018-03-03

 Report Page:
 7 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

4. Raw Water Supply and Drinking Water Quality Trends

<u>Elgin</u>

Handout of Elgin six year trends included: raw water pH, treated water pH, filtered water aluminum residual, raw water turbidity, treated water turbidity, raw water temperature, raw water colour, treated water fluoride residual, treated water free chlorine residual, THMs and HAAs.

All trends look fine.

There is now a raw water Dissolved Oxygen (DO) analyzer in place at the low lift. Top management suggested that raw water DO be added to the trend reporting.

Action Item: Add Dissolved Oxygen (DO) to the Summary of Water Quality, Chemical and Operating Data in the monthly operations reports. Deadline: August 31, 2018. Denny Rodrigues.

Action Item: Ensure that Dissolved Oxygen (DO) is in Vantage Point. Deadline: December 31, 2018. Walter Martin.

Action Item: Investigate correlation between lake levels and turbidity. Process Engineering Intern to compile data from Environment Canada Climate Change (ECCC). Deadline: July 31, 2018. Erin McLeod.

<u>Huron</u>

Handout of Huron six year trends included: raw water pH, treated water pH, raw water turbidity, treated water turbidity, treated water aluminum residual, treated water free chlorine residual, raw water temperature, raw water colour, THMs and HAAs. General notes on the trends:

- Treated water average pH is more stable in the last year and a half
- A5 to A7 alum switch for a summer trial period is now in effect
- Free chlorine residual creeping up while pH is going down
- Raw Water temperature; switched data collection source from lab to analyzer
- THM reading for Exeter Hensall (MS3) had a reading of greater than 50 ug/L for the first time in October 2017 sample. Exeter-Hensall (MS3) historically has highest THM because of longest residence time in distribution system but this reading is still well below the maximum acceptable concentration of 100 ug/L.

Action Item: To confirm date of switching data collection source for raw water temperature from lab to analyzer. Deadline: July 31, 2018. Denny Rodrigues.



 Report No.:
 LH-2018-03-03

 Report Page:
 8 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Action Item: To verify whether colour is being reported as apparent colour or true colour and when a switch in lab procedure occurred. Deadline: July 31, 2018. Denny Rodrigues.

Action Item: Top Management requested that electronic copies of the Raw Water Supply and Drinking Water Quality Trend reports for both Huron and Elgin be provided to OCWA for the purpose of sharing with personnel. Deadline: July 31, 2018. Erin McLeod.

5. <u>Results from Board Meetings – June 7, 2018</u>

Huron Board Meeting

Quarterly Compliance Report:

Received for information.

EMS/QMS Report:

Request for clarification on the 93% completion of action items, specifically what does this represent (i.e. all items since inception in 2012), and what types of action items are there which are not administrative and low priority.

General questions/comments re:

- Latest MOECC inspection, request for status update on completion of action items related to this;
- Construction Lien Act;
- DO analyzer at Elgin and linkages between this and detection of algal blooms;
- Copper guideline, clarification on the Maximum Acceptable Concentration (MAC) and Aesthetic Objective (AO).

Elgin Board Meeting

Quarterly Compliance Report:

The Board requested further information on the recent changes to the *Safe Drinking Water Act* and *Clean Water Act* with regards to source protection planning, to confirm that there will be no significant impacts to the EAPWSS.

EMS/QMS Report:

Received for information.

6. <u>Relevant Communications from Interested Parties</u>

a) Elgin: MOECC – Hydrilla - Invasive Species Warning

Corporate Compliance OCWA provided information regarding Hydrilla which is an invasive aquatic plant that has spread rapidly through much of the U.S. Although it has not been detected in Canada yet, it is anticipated that the nutrient-rich waters of Lake



LH-2018-03-03		
9 of 23		
October 4, 2018		

Erie could be a Hydrilla habitat. Consequently, the provincial government has added it to their Invading Species Awareness Program. It is able to grow aggressively, outcompeting native plants and forming dense mats which degrades water quality by raising pH levels, decreasing oxygen and increasing water temperature.

b) Elgin: Kettle Creek Conservation Authority (KCCA) Watershed – Report Card The London Free Press published an article discussing the Report Card. Highlights of the Report Card included a review of the surface water quality, underground water quality, forest conditions and cover, and wetland condition.

c) Elgin: Southwestern Public Health

Elgin St. Thomas Public Health and Oxford County Public Health have merged and are now known as Southwestern Public Health.

Action Item: Update ECP-2 (Emergency Contact & Essential Suppliers & Services List) and EMC-1 (Report of Adverse Water Quality Incident AWQI), to reflect Southwestern Public Health. Deadline: 30-Sep-18. Denny Rodrigues.

Title	Haloacetic Acids (HAAs) Sampling Concerns		
Source	Ministry of the Environment and Climate Change (MOECC)		
Date Posted/	May 9, 2018 – Email notification		
Notice Received			
Comments Due	N/A		
Summary	The purpose of the letter was to clarify ministry guidance for HAAs sampling. In light of the recently introduced HAAs standard of 80 ug/L which comes into force January 1, 2020, guidance has been provided for developing the monitoring program. The guidance indicates that more than one sampling location may be required to characterize HAAs levels throughout the system.		
Notes	The LHPWSS and EAPWSS have been conducting quarterly HAAs sampling since 2012. The LHPWSS currently samples for HAAs at four (4) different locations (Arva Reservoir, SC-2, KM-2, EH-3). The EAPWSS currently samples for HAAs at one (1) location (EMPS valve house). Consideration will have to be given to sample at a point after the EMPS reservoir, as per the guidance document. Action Item: Follow up with City of London and MOECC regarding HAA sampling at the EMPS and sharing of results. Deadline: Sept. 30, 2018. Erin McLeod.		

7. <u>Compliance Obligations Update</u>



Report No.:	LH-2018-03-03	
Report Page:	10 of 23	
Meeting Date:	October 4, 2018	
File No.:		

Post Meeting Notes:	Upon further review, the letter indicates that HAAs peak in the distribution system closer to a chlorine addition point, and decrease at the extremities of the system. Peak HAAs also change location in the distribution system throughout the year. For the LHPWSS, a suggestion would be to consider adding two (2) more sampling points; PS#3 after re-chlorination (i.e. station discharge) and PS#4
	after re-chlorination (i.e. station discharge). Action Item: Review/investigate additional sampling points for HAAs sampling in the distribution system. Sept. 30, 2018. Denny Rodrigues and Shawn Core.

Title	Streptium in Drinking Water Guideline Technical Decument
THE	Strontium in Drinking Water - Guideline Technical Document
	for Public Consultation
Source	Health Canada
Date Posted/	May 25, 2018
Notice Received	
Comments Due	July 20, 2018
Summary	"A maximum acceptable concentration (MAC) of 7.0 mg/L is proposed for strontium in drinking water, based on bone effects in rats and using currently available scientific studies and approaches. This guideline technical document provides exposure information as well as analytical methods and treatment technologies that may be effective for strontium removal at the municipal and residential scales."
Notes	There is currently no data available in WaterTrax for strontium in treated water, for either EAPWSS or LHPWSS. MOECC Drinking Water Surveillance Program (DWSP) data from 2011 – 2016: Strontium in Elgin treated water: Max. 171 μg/L, average 160.6 μg/L (based on 10 results) Strontium in Huron treated water: Max. 115 μg/L, average 104.5 μg/L (based on 6 results)

Proposed Changes to Municipal Drinking Water Licence (MDWL) and Drinking Water Works Permit (DWWP)

Staff viewed the MOECC Webinar June 27, 2018 which presented a number of proposed changes to MDWL and DWWP:



Report No.:	LH-2018-03-03	
Report Page:	11 of 23	
Meeting Date:	October 4, 2018	
File No.:		

- Issue date vs Effective date on MDWL
- New condition on the MDWL that states all the procedures in Operations & Maintenance manuals must be implemented. BT concerned that SCADA process control narratives and operations manuals are not fully reflective of current day, this is applicable to both facilities but more in regards to Huron for the operations manual.
- Residuals Management Facility (RMF) information included on the MDWL is being reviewed to ensure appropriate limits and monitoring requirements. This could impact the LHPWSS which currently has very lenient monitoring requirements compared to the EAPWSS
- Wording regarding CT calculations is being clarified
- New conditions for calibration of CT monitoring equipment (this should have no impact on the LHPWSS and EAPWSS as it's already being done)
- New Schedule is being issued for Source Protection, as it relates to storage of liquid fuel (e.g. diesel).

The LHPWSS will be the first system to have the MDWL renewed (2019), and will be subject to the new conditions prior to the EAPWSS MDWL renewal (2021).

Action Item: Circulate draft copies with proposed changes to the MDWL and DWWP documents from MOECC when received. Submit comments to MOECC. Deadline: July 12, 2018. Erin McLeod.

8. Effectiveness of the Risk Assessment Process

The risk assessment process continues to be suitable and effective. The DWQMS requires that the risk assessment identifies the method to verify, at least once every calendar year, the currency of the information and the validity of the assumptions used in the risk assessment. Both Elgin and Huron water systems are prompted to do the review by a generated work order.

The Annual Reviews for both systems will be conducted in July 2018 by OCWA (Denny Rodrigues). Indications were that cross referencing will take place to the Management of Change Forms to ensure all recent changes have been captured on the risk assessment.

9. <u>Results of Emergency Response Testing</u>

On February 01, 2018 the Annual Fire Drill took place at EAPWSS. On March 8, 2018 the Annual Fire Drill took place at LHPWSS.



 Report No.:
 LH-2018-03-03

 Report Page:
 12 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

The power failure at LHPWSS in April 2018 is being used as an actual event for the annual Contingency Review/Test for both water supply systems.

A tracking spreadsheet is used to ensure Emergency Mandatory Contingency Reviews/Tests take place as required.

10. Adequacy of Resources

The adequacy of resources for the EMS/QMS was discussed.

SharePoint is not being used to its full potential yet. Going forward it will be a valuable tool. There was a bit of a rush in fall of 2017 to get the documents into SharePoint so that the external auditor would have access. Administrative updates to documents are currently underway. In recent months, the Operations and Compliance Team Leads have been familiarizing themselves and becoming accustomed to using SharePoint. Operations staff still need to be introduced to SharePoint.

BT Observation – Staff resources have been strained over the past year, due to the need to support capital and operations projects. This has an impact on EMS/QMS. AH - Increased Capital Projects have increased strain on EMS/QMS. RWS will be revisiting project management resources to see how OCWA is being engaged in projects. Project management through Office 365 may ultimately be more efficient, and an opportunity to relieve strain on resources.

It should be noted that the regular reprioritization of the CAF tracking items is ensuring that the highest priority items are being dealt with in a timely manner.

11. Suitability, Adequacy and Effectiveness of the EMS/QMS

Discussion took place around this topic as the external auditor has always highlighted this during the audit process.

Wording in the quarterly EMS/QMS Board Report states "The Internal Audits and frequent Management Review meetings continue to effectively identify system deficiencies. The EMS/QMS continues to be suitable, adequate and effective. Activities by OCWA continue to address the need for change, and the management systems are being revised and refined as required."

Top Management noted:

• From a regulatory standpoint there have been no major non compliances and non-conformances.



 Report No.:
 LH-2018-03-03

 Report Page:
 13 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

- Office 365/SharePoint has improved the system, and should overall improve effectiveness.
- Action items are being address in a timely fashion.
- EMS/QMS provides a valuable education piece for staff.
- Staff awareness is going really well, staff are engaged and asking questions.
- The management system culture is being ingrained, OCWA is now writing EMS/QMS requirements into Request for Proposal (RFP), example of life cycle perspective.
- OCWA internal quarterly meetings are being utilized to highlight safety, process, compliance and EMS/QMS issues.
- Feedback from the Joint Boards of Management including our customers (municipalities) is that they are satisfied with identification and management of risk, and confident in the operation and administration of the systems.

12. Status of action items

Action item summaries were provided for both water supply systems. As of June 25, 2018 EAPWSS action items are 93% complete and LHPWSS actions items are 91% complete.

When presenting this information to the Board in future, we will try presenting qualitative rather than quantitative data (e.g. confirmation that open action items do not relate to regulatory non-compliance, water quality issues, etc.).

Action Item: Improved wording to be included in the EMS/QMS Board Report to ensure clarification of status of action items to the Boards. Deadline: August 30, 2018. Erin McLeod.

13. Environmental Objectives - Update

LHPWSS Environmental Management Program (EMP) objectives were reviewed. Handouts of each EMP objective and the progress updates were provided for each Project/Study. Handouts were provided updating Lake Huron Water Treatment Plant Electricity Efficiency and Chemical Efficiency trends for the last five years. Also provided was the McGillivray Pumping Station Electricity Efficiency trend.

EAPWSS Environmental Management Program (EMP) objectives were reviewed. Handouts of each EMP objective and the progress updates were provided for each Project/Study. Handouts were provided updating Elgin Water Treatment Plant Electricity Efficiency and Chemical Efficiency trends for the last five years.



 Report No.:
 LH-2018-03-03

 Report Page:
 14 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Action Item: Track RMF solids going to landfill and not being returned to the lake for EAPWSS. Deadline: December 31, 2018. Erin McLeod.

14. Environmental & Quality Policy

As part of an Opportunity For Improvement (OFI) noted from the external audits conducted last fall and staff discussion and review of the Scope and individual policies, a mock-up of a combined Environmental & Quality Policy has been prepared. This was done keeping the end user in mind.

Action Item: Circulate draft version of the combined Environmental & Quality Policy by email for comment. Deadline: August 15, 2018. Erin McLeod.

15. Life Cycle Perspective

Discussion of Life Cycle Perspective has been deferred until next meeting.

Next Meeting: To Be Determined



 Report No.:
 LH-2018-03-03

 Report Page:
 15 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

APPENDIX B: QUALITY MANAGEMENT SYSTEM (QMS) INTERNAL AUDIT REPORT SUMMARY (APRIL 18 & 20, 2018)



QUALITY MANAGEMENT SYSTEM (QMS) INTERNAL AUDIT

Audit Dates: April 18 and April 20, 2018

Auditor(s): Arlene Tanashi, Compliance Coordinator, Regional Water Supply; Denny Rodrigues, Safety Process & Compliance Manager, OCWA

Audit Purpose:

The purpose of the audit was to verify conformance with the Ontario Drinking Water Quality Management Standard Version 2.0 (DWQMS) for the Lake Huron Primary Water Supply System (LHPWSS). Internal audits ensure the QMS is being continually improved.

Non-conformances and opportunities for improvement are listed below.

Auditor Qualifications:

Arlene Tanashi has completed an Internal Auditing for the DWQMS course (see Certificate in Appendix C).

Methodology:

The Internal Audit was conducted as outlined in Procedure LH-ADMIN-1200 (Internal Audit) of the QMS and was comprised of a conformance review of the facilities and limited to the operation of the water supply system by the contracted Operating Authority, Ontario Clean Water Agency, since the last Internal Audit conducted July 11 and 12, 2017.

Note: The audit was conducted through a review of a <u>sampling</u> of documents, limited interviews and observations by the auditors to demonstrate conformance with the standard. The review and audit should not be construed as a complete and comprehensive review of all aspects/risks and all documents.

Findings:



 Report No.:
 LH-2018-03-03

 Report Page:
 16 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

The following is a summary of the audit findings, including non-conformances and opportunities for improvement. The detailed audit checklists are attached for further information.

- Appendix A: LF-ADMIN-1201 DWQMS Internal Audit Checklist (Arlene Tanashi)
- Appendix B: LF-ADMIN-1201 DWQMS Internal Audit Checklist Element 19 ONLY (Denny Rodrigues)
- Appendix C: Internal Auditor Certificate Arlene Tanashi

Definitions:

- A non-conformance (NC) is a non-fulfillment of a requirement.
- An opportunity for improvement (OFI) describes a requirement that conforms but can be more effectively addressed.

Areas Visited:

- Lake Huron Water Treatment Plant, 71155 Bluewater Highway, South Huron
- McGillivray Pumping Station, 4064 McGillivray Drive, North Middlesex
- Exeter-Hensall Pumping Station, 39590 Huron Street, South Huron
- Arva Terminal Reservoir, 13964 Medway Road, Middlesex Centre
- Komoka-Mt. Brydges Pumping Station, 13964 Medway Road, Middlesex Centre

Interviews Conducted:

- Andrew Henry Director (Regional Water Supply)
- Denny Rodrigues Safety, Process and Compliance Manager & QMS Representative (OCWA)
- Shawn Core Senior Operations Manager (OCWA)
- Erin McLeod Quality Assurance & Compliance Manager (Regional Water Supply)
- Brandon Davis Operator (OCWA)
- Scott Dinney Senior Operator (OCWA)



 Report No.:
 LH-2018-03-03

 Report Page:
 17 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

SUMMARY OF FINDINGS

Non-Conformances (NC)

There were zero (0) non conformances noted during the audit.

Opportunities for Improvement (OFIs)

Element 5 Document and Records Control

OFI #1: Consider that there is no version number on each page of the Operational Plan as required per the Director's Directions Minimum Requirements for Operational Plans. [**Post Audit Note: Completed**].

OFI #2: Consider reviewing all headers of EMS/QMS procedures to ensure that the QMS Reference matches what is in the Operational Plan.

For example, five administrative procedures are noted under Element 3 Commitment and Endorsement, yet the headers of these procedures do not all contain the reference to that element. For example, Element 8 is referenced in the header of LH-ADMIN-2400 Hazard Analysis (Risk Assessment) & Critical Control Points v. 2.0 but is not referenced in the Operational Plan.

OFI #3: Consider updating all EMS/QMS documentation, including the Quality Policy, to reflect Andrew Henry's title change to "Director" from "Division Manager".

OFI #4: Consider adding wording referencing haloacetic acids (HAAs) in addition to trihalomethanes (THMs) in Table 2 of LH-ADMIN-200 Document & Records Control v. 2.0.

OFI #5: Consider that LH-CCP-2000 Chlorination Control and LH-CCP-3000 Turbidity Control in Compliance binder are not the most current version.

OFI #6: Consider that LF-ADMIN-2054 Distribution Sampling Record Form v. 2.0 was an unapproved document that was in use.

Element 6 Drinking Water System

OFI #7: Consider making a reference in the Operational Plan to LHPWSS Process Flow Diagrams, which reference Element 6 in the header (indicating they are part of the EMS/QMS documentation). This would be in addition to the Lake Huron WTP Process Flow Diagram dated June 2017. This would provide additional description of Distribution System components.



 Report No.:
 LH-2018-03-03

 Report Page:
 18 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

OFI #8: Consider addition of the B-line regulatory monitoring station to LHPWSS Process Flow Diagrams.

OFI #9: Consider adding how polymer chemical deliveries are made on p.10 and p.11 (to match other chemical systems) of the LHPWSS Process Flow Diagrams.

OFI #10: Consider applicability that on the header of LH-ADMIN-700 Changes in the Lake Huron System there is a QMS Reference to Element 6.

Element 7 Risk Assessment

OFI #11: Consider removing QMS reference to Element 8 in the header of LH-ADMIN-2400 Hazard Analysis (Risk Assessment) & Critical Control Points v. 2.0.

Element 8 Risk Assessment Outcomes

OFI #12: Consider adding QMS Reference Element 8 to the header of QMS Risk Assessment & Outcomes v. 2.0, for consistency with the Operational Plan.

OFI #13: Consider that under Intake and Hazard of Frazil Ice there is duplication of wording "monitor water levels in low lift surge wells".

OFI #14: Consider removing the word "Seasonal" under Intake and the hazard Mussel since chlorination for mussel control now takes place all year round.

OFI #15: Consider that LH-CCP-3000 Turbidity Control requires updating based on more recent filter backwash data.

Element 9 Organizational Structure, Roles, Responsibilities and Authorities

OFI #16: Consider the Technical Project Coordinator position for inclusion in LH-ADMIN-100 Structure & Responsibilities table.

Element 12 Communications

OFI #17: Consider that the Visitor Sign-In Logs being used at different facilities are not all the same. Consider creating a controlled Visitor Sign-In Log and using the same one at each facility. **N.B. Repeat finding**. This was an OFI from the last QMS Internal Audit July 11 & 12, 2017. (CAF #386). [Post Audit Note: Completed].



 Report No.:
 LH-2018-03-03

 Report Page:
 19 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Element 13 Essential Supplies and Services

OFI #18: Consider that Flowmetrix is not listed in HCP-3 Emergency Contact & Essential Suppliers & Services List for Calibration Services and Monitoring Equipment Supplies. [Noted Post Audit].

Element 16 Sampling, Testing and Monitoring

OFI #19: Consider that the Uncontrolled form "training sheet for acceptable sample results" is still in use in Control Room. Consider controlling the sheet and incorporating the form into LF-ADMIN-2052. **N.B. Repeat finding**. This was an OFI from the last QMS Internal Audit July 11 & 12, 2017. (CAF #394). **[Post Audit Note: Completed].**

Element 17 Measurement and Recording Equipment Calibration and Maintenance

OFI #20: Consider updating LH-ADMIN-2200 Calibration of EMS/QMS Equipment to reflect that three (3) types of calibration certificates exist but only one (1) is listed. All have been approved in SharePoint.

OFI #21: Consider that expired chemicals are present in the lab as follows:

- Buffer Solution 4 litre pH 10.1 +/- 0.02 @ 25 degrees C Lot A7081 Exp. March 2018.
- Hach Voluette Analytical Standard Chlorine Solution 50-75 mg/l Lot A6006 Exp. Sep-17.

Element 18 Emergency Management

OFI #22: Consider that Emergency Standard Operating Procedures (HSOP) were not available for auditing purposes. These documents are part of the EMS/QMS documentation. There were no old HSOPs in the Compliance Office copy (red binder) and in Control Room copy (red binder) there was no emergency procedure for Power Failure at WTP.

OFI #23: Consider adding Emergency Standard Operating Procedures (HSOP) to Associated Procedures list on page 5 and 6 of the Operational Plan as they are referenced in the Operational Plan.

Element 21 Continual Improvement

OFI #24: Consider the need for the prompt box titled "Working Effectively After 90 Days?" at end of LF-ADMIN-400 Corrective Action Form, as it is typically not being filled in.



 Report No.:
 LH-2018-03-03

 Report Page:
 20 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

APPENDIX C: ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) INTERNAL AUDIT REPORT SUMMARY (JUNE 6 & 8, 2018)



ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) INTERNAL AUDIT

Audit Dates: June 06 and 08, 2018

Auditor(s): Arlene Tanashi, Compliance Coordinator, Regional Water Supply; Denny Rodrigues, Safety, Process & Compliance Manager, OCWA.

Audit Purpose:

The purpose of the audit was to verify conformance with the ISO 14001:2015 Environmental Management Systems standard for the Lake Huron Primary Water Supply System (LHPWSS). Internal audits ensure the EMS is being continually improved.

Non-conformances and opportunities for improvement are listed below.

Auditor Qualifications:

Arlene Tanashi has completed an ISO 14001:2015 training course in Internal Auditing. Denny Rodrigues has completed an ISO 14001:2004 training course. In addition, both auditors have also completed ISO 14001:2015 Transition training. See certificates in Appendix C.

Methodology:

The Internal Audit was conducted as outlined in Procedure LH-ADMIN-1200 (Internal Audit) of the EMS and was comprised of a conformance review of the facilities and limited to the operation of the water supply system by the contracted operating authority, Ontario Clean Water Agency, since the last Internal Audit conducted August 17 and 18, 2017.

Note: The audit was conducted through a review of a <u>sampling</u> of documents, limited interviews and observations by the auditors to demonstrate conformance with the ISO 14001:2015 Environmental Management Systems standard. The review and audit should not be construed as a complete and comprehensive review of all aspects/risks and all documents.



 Report No.:
 LH-2018-03-03

 Report Page:
 21 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Findings:

The following is a summary of the audit findings, including non-conformances and opportunities for improvement. The detailed audit checklists are attached for further information.

- Appendix A: LF-ADMIN-1200 EMS Audit Checklist (Arlene Tanashi)
- Appendix B: LF-ADMIN-1200 EMS Audit Checklist Only Clauses 9.1.2 and 9.2 (Denny Rodrigues)

Definitions:

- A non-conformance (NC) is a non-fulfillment of a requirement.
- An opportunity for improvement (OFI) describes a requirement that can be more effectively addressed.

Areas Visited:

- Lake Huron Water Treatment Plant, 71155 Bluewater Highway, South Huron
- McGillivray Pumping Station, 4064 McGillivray Drive, North Middlesex
- Exeter-Hensall Pumping Station, 39590 Huron Street, South Huron
- Arva Terminal Reservoir, 13964 Medway Road, Middlesex Centre
- Komoka-Mt. Brydges Pumping Station, 13964 Medway Road, Middlesex Centre

Interviews Conducted:

- Blair Tully General Manager (OCWA)
- Denny Rodrigues Safety, Process and Compliance Manager & QMS Representative (OCWA)
- Shawn Core Senior Operations Manager (OCWA)
- Greg Henderson Team Lead, Operations & Compliance (OCWA)
- Paul Otis Operator (OCWA)
- Owen Vincent Team Lead Maintenance & Distribution (OCWA)
- Erin McLeod Quality Assurance & Compliance Manager (RWS)

SUMMARY OF FINDINGS

Positives:

7.3 Awareness:

- Interviews with personnel provided evidence that performance of duties was taking place keeping in mind Environmental Management Program objectives related to electricity use and chemical consumption.



 Report No.:
 LH-2018-03-03

 Report Page:
 22 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

- Contractor on site aware of the Environmental Policy and the EMS. The subcontractor to the main contractor had also signed the Visitors Sign-In and EMS signoffs were in place for both companies.

10.3 Continual Improvement:

- Significantly improved housekeeping and storage related to chemicals both at WTP (maintenance shop and garage) and remote facilities.
- Improved WHMIS labelling.
- A new parts washer has been installed in the maintenance shop which uses an environmentally safe biomaterial and waste is removed by Safety Kleen.
- All random checks for monthly fire extinguisher, eye wash and safety shower stations were observed to be completed.
- Metal recycle bins located in garage and parking lot being utilized. Good separation of waste.

Non-Conformances (NC)

There were zero (0) non-conformances noted.

Opportunities for Improvement (OFIs)

4.2 Understanding the needs and expectations of interested parties

OFI #1: Consider including Community Emergency Management Coordinators (CEMCs) and Media Outlets in the ISO 14001:2015 Interested Parties document.

6.2.1 Environmental objectives

OFI #2: Consider that the two documented objectives were not posted in the WTP lunchroom as per LH-ADMIN-1500 Objectives, Targets & Programs v. 2.0, Section 8.1.

7.3 Awareness

OFI #3: Consider reviewing which personnel require the Refresher EMS/QMS training and schedule a training session.

7.5.2 Creating and updating (documented information)

OFI #4: Consider reviewing the EMS Manual for correct references to procedures and at the same time ensure that all document headers have the appropriate EMS reference(s).



 Report No.:
 LH-2018-03-03

 Report Page:
 23 of 23

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

OFI #5: Consider that the following procedures do not reflect current practice regarding electricity use; LH-ADMIN-2100 Electricity Use and LH-ADMIN-2000 Monitoring Maintenance, Operations, & Quality.



Report No.:LH-2018-03-04Report Page:1 of 5Meeting Date:October 4, 2018File No.:Image: Control of the second secon

To: Chair and Members Lake Huron Primary Water Supply System Board of Management
From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
Subject: Capital Status Report

RECOMMENDATION

That the following actions be taken with regard to Lake Huron Primary Water Supply System capital projects:

- a) That this report regarding the status of capital projects **BE RECEIVED** for information; and,
- b) That projects LH1231 Alum Flow Switch and LH1906 Office Expansion BE CLOSED, with the surplus funds in the approximate amount of \$30,644 released to the Board's Reserve Funds; and,
- c) That projects LH1225 Distressed Pipe 32-48 Repair, LH1316-17 Annual Maintenance (2017), and LH1367 Electronic Document Management System **BE CLOSED**, with the additional funds in the approximate amount of \$205,750 be provided from the Board's Reserve Funds.

DISCUSSION

The Capital Project Status Report, attached to this report as Appendix A for the Board's information, provides a brief overview of the status of current capital projects for the Lake Huron Primary Water Supply System. This report is provided for the general information of the Board.

The status report is divided into four categories of projects, namely:

1. **Ongoing Projects**: This section provides a summary list of all projects which are funded by the Board through the Capital Budget and which are currently in-progress. Board funded projects are typically for the replacement or upgrade of existing assets, the construction of new assets, or engineering studies and assessments, as approved by the Board.



 Report No.:
 LH-2018-03-04

 Report Page:
 2 of 5

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Under the terms of the Service Agreement with the contracted operating authority, the Board is also required to pay for some maintenance/repair projects. The benchmark used in the operating contract is that if the value of the material and any contracted labour is over \$30,000, the project is considered Capital Maintenance and the contracted operating authority would fund the first \$30,000, with the balance funded by the Board. Accordingly, the Board maintains an annual "fund" within the Board's capital budget to pay for these projects as they arise.

2. **Completed Projects - Release Surplus to Reserve Funds**: This section provides a summary list of all projects which are presently completed, but do not require additional funds from that budgeted. Should the Board approve the closure of the listed projects, it is the recommendation of staff to release the surplus funds, if any, to the Reserve Fund.

Completed Projects – Reduce Authorized Debt: In the case where the project is funded through the issuance of a debenture, should the Board approve the closure of the listed project it is the recommendation of staff to reduce the previously authorized but unissued debt for the project(s).

3. **Completed Projects - Additional Funding Required**: This section provides a summary list of all projects which are presently completed, but require additional funds from that originally approved. Should the Board approve the closure of the listed projects, it is the recommendation of staff to provide the required additional funding from the Board's Reserve Fund.

Submitted by: Recommended by: Kelly Scherr, P.Eng., MBA, FEC Andrew Henry, P. Eng. Director, Regional Water Supply Chief Administrative Officer

Attachments: Capital Project Status Summary



Report No.: LH-2018-03-04 Report Page: 3 of 5 Meeting Date: October 4, 2018 File No.: File No.:

APPENDIX A: CAPITAL PROJECT STATUS SUMMARY

A.1 Ongoing Capital Projects

PROJECT NO.	PROJECT	Approved Budget	EXPENDED TO DATE *	Status
LH1202	Meter Replacement & Upgrades	\$175,000	\$141,492	Multi-year program. Project ongoing
LH1203	WTP HVAC Replacement	\$7,500,000	\$7,277,404	Project complete. Minor deficiencies to be addressed.
LH1207	Concrete Crack Injection	\$90,000	\$36,042	Multi-year project. Project ongoing
LH1208	Drain Pipe Replacement	\$40,000	\$18,470	Multi-year project. Project ongoing
LH1209	HLP#5 Valve Replacement	\$365,000	\$53,351	Project ongoing
LH1216	Closed Loop Chlorine Control	\$100,000	\$10,914	Project ongoing
LH1218	Master Key System	\$100,000	\$87,264	Project ongoing
LH1219	Filter Backwash Turbidity Meters	\$100,000	\$0	Project initiated
LH1222	Low Lift Pump Refurbishment	\$270,000	\$164,820	Project ongoing
LH1227	Pipe Conveyance System	\$30,000	\$0	Project to be initiated
LH1229	Security Upgrades	\$150,000	\$0	Project to be initiated
LH1230	High Lift Pump Replacement	\$125,000	\$11,878	Project ongoing
LH1232	Arva Victaulic Repair	\$50,000	\$0	Project to be initiated
LH1233	Control Panel/Wire Cleanup	\$25,000	\$0	Project to be initiated
LH1234	HVAC Smoke Alarm	\$100,000	\$0	Project to be initiated
LH1235	PAC System Assessment	\$100,000	\$18,848	Project ongoing
LH1236	Raw Water Flow Meter Replacement	\$125,000	\$0	Project initiated
LH1237	RMF Settling Plate Study	\$50,000	\$0	Project to be initiated
LH1238	Roof Replacement	\$200,000	\$0	Project initiated
LH1239	Sluice Gate Repairs	\$150,000	\$21,432	Project ongoing
LH1240	Travelling Screen #1 Replacement	\$500,000	\$377,981	Project ongoing



Report No.:	LH-2018-03-04	
Report Page:	4 of 5	
Meeting Date:	October 4, 2018	
File No.:		

PROJECT NO.	PROJECT	Approved Budget	EXPENDED TO DATE *	Status
LH1241	Review Inactivation Control Strategy	\$30,000	\$26,036	Project ongoing
LH1303	Easement Maintenance	\$185,000	\$27,971	Project ongoing
LH1316 -18	Annual Maintenance (2018)	\$125,000	\$2,403	Annual program
LH1317	Distressed Pipe Replacement	\$350,000	\$45,792	Project ongoing
LH1327	Strathroy Transmission Main	\$22,000,000	\$14,838,658	Project complete. Final Invoice to be issued.
LH1332	Electrical Systems Upgrade	\$7,495,000	\$6,504,533	Project complete. Deficiencies to be addressed
LH1338	Huron WTP Instrumentation	\$610,000	\$617,586	Annual program
LH1341	Sodium Hydroxide Metering Pump	\$75,000	\$0	Project initiated
LH1347	Pipeline Chamber Upgrades	\$500,000	\$382,075	Project ongoing
LH1353	WTP Modifications	\$350,000	\$92,700	Multi-year project
LH1369	Filter Media Rebuild	\$1,680,000	\$1,300,963	Ongoing multi-year project
LH1373	IT Security Upgrades	\$600,000	\$404,873	Project ongoing
LH1375	Low Lift Screen Repairs	\$540,000	\$403,959	Project ongoing
LH1379	Low Lift Surge Valves	\$140,000	\$94,875	Project ongoing
LH1380	Clarifier Upgrades	\$120,000	\$5,031	Project ongoing
LH1382	Annual IT Mtce. Allowance	\$200,000	\$155,627	Project ongoing
LH1383	Server Room Fire Suppression	\$30,000	\$2,374	Project initiated
LH1384	Filter Rate Meters	\$200,000	\$0	Project initiated
LH1385	1996 Crop Yield Monitoring	\$450,000	\$270,060	Project ongoing
LH1386	Chemical Delivery Panel	\$75,000	\$13,285	Project ongoing
LH1387	B Line Road Monitoring Station	\$40,000	\$8,350	Project ongoing
LH1388	Coagulation Optimization Study	\$50,000	\$0	Project to be initiated
LH1389	Flow Control Strategy & Storage Study	\$25,000	\$23,642	Project completed. Awaiting final invoice



 Report No.:
 LH-2018-03-04

 Report Page:
 5 of 5

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	Status
LH1428	Distressed Pipe 11-5 Repair	\$250,000	\$242,120	Project completed. Awaiting final invoice
LH1900	Record Drawings & Documents	\$406,000	\$383,611	Ongoing multi-year project
LH1902	Residue Management Facility	\$24,350,000	\$18,665,092	Project complete. Awaiting final invoice
	TOTAL	\$71,221,000	\$52,731,512	

A.2(a) Completed Projects – Release Surplus to Reserve Funds (\$30,644)

PROJECT NO.	PROJECT	Approved Budget	EXPENDED TO DATE *	STATUS
LH1231	Alum Flow Switch	\$30,000	\$16,138	Project completed
LH1906	Office Expansion	\$130,000	\$113,218	Project completed
	TOTAL	\$160,000	\$129,356	

A.2(b) Completed Projects – Reduce Authorized Debt

PROJECT NO.	PROJECT	Approved Budget	EXPENDED TO DATE *	Status
	TOTAL	\$ 0	\$ 0	

A.3 Completed Projects – Additional Funding Required (\$205,750)

PROJECT NO.	PROJECT	APPROVED BUDGET	EXPENDED TO DATE *	Status
LH1225	Distressed Pipe 32-48 Repair	\$200,000	\$381,895	Project completed
LH1316 -17	Annual Maintenance (2017)	\$125,000	\$137,173	Annual program completed
LH1367	Electronic Document Management System	\$100,000	\$111,682	Project completed
	TOTAL	\$425,000	\$630,750	

<u>Notes</u>:

* Expended as of 7 September 2018



Report No.:LH-2018-03-06Report Page:1 of 4Meeting Date:October 4, 2018File No.:

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer

Subject: Environmental and Quality Policy

RECOMMENDATION

That the following actions be taken with respect to the Environmental Management System and Quality Management System for the Lake Huron Primary Water Supply System:

- a) The Board of Management for the Lake Huron Primary Water Supply System RECEIVE the report for information; and,
- b) The Board of Management for the Lake Huron Primary Water Supply System ENDORSE the Environmental and Quality Policy attached to this report.

PREVIOUS AND RELEVANT REPORTS

June 8, 2017 Environmental Management System and Quality Management System

January 22, 2015 Management System Policies and Operational Plan

December 5, 2013 Management System Policies

BACKGROUND

Environmental Management System (EMS)

The Lake Huron Primary Water Supply System (LHPWSS) has an Environmental Management System (EMS) which has been registered to the ISO 14001 Standard since 2003. The continued utilization and registration of the EMS is a requirement of the Service Agreement with the Ontario Clean Water Agency (OCWA), the contracted operating authority for the LHPWSS.

Quality Management System (QMS)

The LHPWSS has a Quality Management System (QMS) which has been in place since 2006. The QMS is now a regulatory requirement under the Province's Municipal Drinking Water Licencing program, which includes the Drinking Water Quality Management Standard.



Report No.:LH-2018-03-06Report Page:2 of 4Meeting Date:October 4, 2018File No.:Image: Control of the second secon

DISCUSSION

Environmental and Quality Policy

The standards for the Environmental Management System (EMS) and Quality Management System (QMS) each respectively require the development and implementation of an environmental policy and quality policy. The Policies incorporate the guiding principles of the management systems and provide the foundation for the EMS and QMS. The Policies provide the necessary "drivers" and direction for implementing and improving the organization's EMS and QMS.

The LHPWSS currently has a separate Environmental Policy and Quality Policy. The Policies are reviewed a minimum of once annually by Top Management, and any recommended changes are brought forward to the Board for consideration and approval. The Environmental Policy and Quality Policy were last approved by the Board on June 8, 2017 and January 22, 2015, respectively. The current Policies are posted on the website at: https://huronelginwater.ca/about-us/management-systems/

During the most recent external audit by SAI Global, the auditor noted that the Policies were lengthy and contained duplication of information already included elsewhere within the management system documentation (e.g. scope). Rather, the Policies should focus on the direction of the organization, the commitments, the drivers for the management system, and what distinguishes the LHPWSS from other organizations.

Staff is recommending the following changes:

- Combine the two separate Policies into one document, to avoid duplication of information.
- Remove non-essential information such as Water Board description and facility descriptions as this can be detailed elsewhere in the management system documentation.
- Revise generic statements to include details specific to the LHPWSS.

A combined Environmental and Quality Policy will streamline the information, and subsequently will better highlight the Board's commitments. This will also make the Policy more convenient, concise, and memorable for end users.

The revised Environmental and Quality Policy is included as Appendix A of this report for the Board's reference and consideration. If approved by the Board, the revised Policy will become effective October 4, 2018.

As with the previous Policies, the proposed Environmental and Quality Policy will play an important role in the Board's continuing commitments to the management systems and the continual improvement of the water system.



Report No.:LH-2018-03-06Report Page:3 of 4Meeting Date:October 4, 2018File No.:Image: Control of the state of the state

Information for this report was provided by Erin McLeod, Quality Assurance & Compliance Manager.

Submitted by: Recommended by: nil Andrew Henry, P. Eng. Kelly Scherr, R Eng., MBA, FEC Chief Administrative Officer Director, Regional Water Supply

Attachments: Environmental and Quality Policy



Report No.:LH-2018-03-06Report Page:4 of 4Meeting Date:October 4, 2018File No.:File No.:

APPENDIX A: ENVIRONMENTAL AND QUALITY POLICY



ENVIRONMENTAL AND QUALITY POLICY

The Lake Huron Primary Water Supply System (LHPWSS) and Ontario Clean Water Agency (OCWA) as the Operating Authority are committed to:

- Maintaining and continually improving the Environmental Management System (EMS) and Quality Management System (QMS) to enhance environmental and quality performance.
- Managing and operating the drinking water system in a responsible manner.
- Providing the customer with safe drinking water.
- > Being environmental and quality leaders in the municipal drinking water industry.
- Promoting owner and consumer confidence in the safety of the drinking water supply.
- Developing and implementing policies and environmental objectives in partnership.
- Protecting the environment, including prevention of pollution, energy management, and chemical usage optimization.
- Promoting resource stewardship, including conservation.
- Meeting all relevant compliance obligations and encouraging suppliers and subcontractors to similarly meet these requirements.
- Accomplishing these commitments through the dedication, support and participation of all personnel.

The LHPWSS and OCWA will periodically undertake reviews, evaluations and performance measurements of the operations to promote conformance with the Environmental and Quality Policy.

OCWA also maintains a separate Quality Management System Policy which governs the activities of the Operating Authority as a Corporation.

Andrew Henry Director, Regional Water Supply Elgin Area Primary Water Supply System Blair Tully General Manager Ontario Clean Water Agency



Report No.:LH-2018-03-05Report Page:1 of 2Meeting Date:October 4, 2018File No.:Image: Control of the second secon

- **To:** Chair and Members Lake Huron Primary Water Supply System Board of Management
- From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
- Subject: 2019 and 2020 Meeting Schedule

RECOMMENDATION

That the Board of Management for the Lake Huron Primary Water Supply System **APPROVE** the proposed meeting schedule for the Board of Management for 2019 and 2020.

PREVIOUS AND RELATED REPORTS

December 1, 2016	2017 and 2018 Meeting Schedule - Revised
October 16, 2016	2017 and 2018 Meeting Schedule

BACKGROUND

The Board of Management for the Lake Huron Primary Water Supply System regularly meets on the first Thursday of March, June, October and December. Rather than meeting in September (consistent with a meeting every three months) the budget report is issued in September, thirty days in advance of the October meeting, to allow for a comprehensive review period by the Board Members.

In the year of a municipal election, the meeting which would normally be held in December is deferred to at least mid-January in the following year to allow for each newly elected municipal council to recommend their members and alternates to the Board.

DISCUSSION

The following dates in 2019 were previously approved by the Board at the December 1, 2016 meeting:

January 24, 2019*



Report No.:LH-2018-03-05Report Page:2 of 2Meeting Date:October 4, 2018File No.:

The following meeting dates in 2019 are recommended for the consideration and approval by the Board:

March 7, 2019 June 6, 2019 October 3, 2019 December 5, 2019

The following meeting dates in 2020 are recommended for the consideration and approval by the Board:

March 5, 2020 June 4, 2020 October 8, 2020 December 3, 2020

* The municipal election being held in October 2018 requires the meeting that would normally be held in December 2018 to be scheduled in mid- to late-January 2019.

Submitted by:

Andrew Henry, P. Eng. Director, Regional Water Supply

Recommended by:

Kelly Scherr, P, Eng., MBA, FEC Chief Administrative Officer



 Report No.:
 LH-2018-03-07

 Report Page:
 1 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer

Subject: Municipal Act – Board Structure

RECOMMENDATION

That the Board of Management for the Lake Huron Water Supply System **RECEIVE** this report for information.

PREVIOUS AND RELATED REPORTS

December 1, 2018 Board Structure – Municipal Act

December 10, 2016 (Concurrent Meeting) Corporate Options for the Primary Water Supply Systems

EXECUTIVE SUMMARY

Representatives from all of the benefiting municipalities were invited to attend one of two identical information sessions (workshop #1) held on June 22 and June 29, 2019. The workshop provided an overview of the establishment of the Board and regional water system, and options under the Municipal Act to clarify the legal status of the Board; as either a Municipal Services Board (local board) or Municipal Services Corporation.

Additional documentation and information is being prepared for the consideration of the benefiting municipalities, including the preparation of an outline of an agreement that could be used to establish either the Municipal Services Board or Municipal Services Corporation.

It is currently anticipated that an agreement likely wouldn't be finalized and approved by each municipal council any earlier than the fourth quarter of 2019.



Report No.:LH-2018-03-07Report Page:2 of 13Meeting Date:October 4, 2018File No.:File No.:

BACKGROUND

The ownership of the Lake Huron Primary Water Supply System was transferred from the Province of Ontario and the Board of Management established in 2000 in accordance with the Transfer Order issued by the Minister of the Environment under the *Municipal Water and Sewage Systems Transfer Act*, 1997. Because of the ambiguity of the *Municipal Water and Sewage Systems Transfer Act* and the subsequent Order, the legal status of the Board requires further clarification with specific regard to the *Municipal Act* and in relation to the collective powers of the benefitting municipalities of the water system.

DISCUSSION

Information Workshop #1

Representatives from all of the benefiting municipalities were invited to attend one of two (duplicate) information workshops (Workshop #1) held on June 22 and June 29, 2018 at the Best Western Lamplighter Inn and Conference Centre. The workshop was intended to provide preliminary information on the legal status of the Board and regional water system, including:

- Background information related to the Municipal Water & Sewage Systems Transfer Act, the Transfer Orders creating the Board of Management, an overview of the current organization, administration and operation of the regional water systems, and the current ambiguity of the legal status of the Board.
- An overview of the options under the Municipal Act (local board/Municipal Services Board versus Municipal Services Corporation), the legal relationship between the Board and its benefiting municipalities, reporting relationships, and applicable law (including the Municipal Freedom of Information and Protection of Privacy Act, and the Safe Drinking Water Act)
- An overview of the current financial status and fiscal relationship with the benefiting municipalities, and potential financial implications with the Municipal Act options.

As part of the municipal workshops, there was an open forum discussion whereby attendees could ask questions, express concerns, and provide comments on the information presented. In addition, the overall process of consideration and approval by the respective Councils of each of the benefiting municipality was discussed.

An overview of the workshop and summary of the questions asked is attached to this report as Appendix A for the information of the Board.

Action Items and Next Steps

Following Workshop #1, documents are being prepared for the benefiting municipalities which will outline:

• A summary of the workshop discussions, frequently asked questions, and additional requested information;



Report No.:LH-2018-03-07Report Page:3 of 13Meeting Date:October 4, 2018File No.:

- An overview of the options under the Municipal Act (do nothing, local board/Municipal Services Board, or Municipal Corporation) and anticipated benefits and risks associated with each;
- An outline of possible options for administering the system; and,
- An outline of a possible agreement that could be used to establish either a Municipal Services Board or a Shareholders Agreement (Municipal Services Corporation).

In addition, and at the request of the municipal representatives, the option of establishing one legal entity over both the Lake Huron and Elgin Area water systems is being explored including variations whereby the systems operate independently or jointly as one combined regional water system.

It is anticipated that these document will be circulated to each of the benefiting municipalities in late 2018, and then discussed at a second workshop during the winter of 2018/2019.

It is important to note that the decision whether to pursue and establish the Board under the Municipal Act, either as a Municipal Services Board or a Municipal Services Corporation, is entirely at the discretion of each Municipal Council. Should one Municipal Council chose to not approve the agreement that would establish the Board as a Municipal Services Board or Municipal Services Corporation, the issue cannot proceed further and the Board would continue to operate in legal ambiguity.

TIMELINE

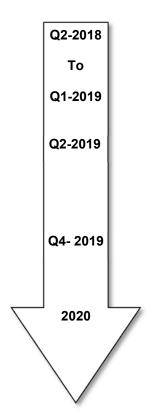
There is no set schedule in the discussions or specific deadline to establish (or not) the Board as a Municipal Services Board or Municipal Services Corporation. It is the recommendation of staff that process be allowed progress at a steady pace and measured pace, but allow all parties of the discussion the opportunity to receive and deliberate on issues of concern.

Based solely on the level of engagement at the first workshop, the questions asked and information requested, it is currently anticipated that an agreement wouldn't be achieved any earlier than the third quarter of 2019.

An agreement would have to be approved and authorized by the Council of each of the benefiting municipalities through by-law.



Report No.:	LH-2018-03-07
Report Page:	4 of 13
Meeting Date:	October 4, 2018
File No.:	



INFORMATION MEETINGS - Benefiting municipalities meet to understand and discuss the options available, obligatory and suggested process(es) for undertaking each option, potential benefits and detriments of each option to both the Boards and the benefiting municipalities, and the potential legal and financial implications. In order to proceed beyond this "information stage", each municipality must agree to enter into detailed discussions and negotiations with the objective of drafting an agreement for the preferred option.

MUNICIPAL DECISION – Each of the benefiting municipalities must decide to pursue (or not) further discussions and negotiations. *It is highly recommended that each benefiting municipality seek their own legal and financial advice, as necessary, prior to their commitment to enter into further discussions and negotiations.*

MUNICIPAL DISCUSSION AND NEGOTIATION – The benefiting municipalities collectively enter into detailed discussions and negotiations with respect to the preferred option with the objective of drafting an agreement which defines the "new entity" as preferred.

ESTABLISH NEW ENTITY – Once the agreement between the benefiting municipalities is finalized, each municipality must pass an enacting bylaw to complete the creation of the new municipal entity.

New entity begins operation (January 1, 2020 at the earliest)

Submitted by:

Andrew Henry, P. Eng. Director, Regional Water Supply

Recommended by

Kelly Scherr, P Eng., MBA, FEC Chief Administrative Officer

Attachments: Appendix A – Stakeholder Information Session (June 22 and June 29, 2018)



 Report No.:
 LH-2018-03-07

 Report Page:
 5 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

APPENDIX A: STAKEHOLDER INFORMATION SESSION (JUNE 22 AND JUNE 29, 2018)

Municipal Services Boards, Municipal Services Corporations, and the Lake Huron/Elgin Area Water Supply Systems

PRESENTATIONS:

The Origins of the Regional Water Systems, and the Transition to the Boards of Management

Andrew Henry, Director of Regional Water, Lake Huron & Elgin Area Water Systems

Mr. Henry provided details on the origin of regional water systems and the transition to the current boards of management. He explained that originally the province constructed, owned and operated regional water and wastewater systems through the Ontario Water Resource Commission, and then subsequently through the Ministry of the Environment and the Ontario Clean Water Agency. The province transferred ownership of water and wastewater assets throughout the province to the municipalities under the *Water & Sewage Systems Transfer Act, 1997* (the "MWSTA"). The MWSTA established a system whereby water and wastewater systems that benefitted multiple municipalities were transferred and governed by boards of management (the "Water Boards").

MWSTA Transfer Orders

In 1998 a MWSTA Transfer Order (the "1998 Transfer Order") created separate provisional Water Boards for both the Huron water system and the Elgin water system. The debt associated with the water system was transferred from the province and refinanced, and the City of London was appointed as Trustee.

In 2000 the province issues a final transfer order for each of the Huron and Elgin Systems (the "2000 Transfer Orders"). The 2000 Transfer Orders completed the transfer of real property associated with the systems to the City of London as trustee. As a trustee, London holds registration of property in its name for the benefit of the municipalities that the regional water systems' services. London is also mandated to provide administrative services to the Huron and Elgin Water Boards.

The 2000 Transfer Orders established the management structure for the Water Boards including the roles, responsibilities and obligations of Board members with the overarching obligation to act in the best interests of regional water system. The Water Boards have the authority to act by by-law, issue policies, approve budgets, and enter into contracts, and maintain bank accounts.

Problem Statement

The authorities given to Water Boards through transfer orders under the MWSTA imply that they are "bodies-corporate", but their legal status is slightly ambiguous. A body-corporate is defined



Report No.:	LH-2018-03-07
Report Page:	6 of 13
Meeting Date:	October 4, 2018
File No.:	

as "an organization such as a company or government entity that is considered to have its own legal rights and responsibilities similar to a natural person". Examples of "Body-Corporates" include: private corporations, public corporations, (M.A.) Local Board, Limited Liability Partnerships, etc.

Municipalities of the Huron-Elgin water systems need to deal with this issue of unclear legal identity because the implications are widespread. For example, legal status determines the Water Boards' ability to hold debt, have bank accounts, have employees etc. The *Municipal Act, 2001* provides several legal structures for possible future governance structures of the water system.

Overview of Legal Options under the Municipal Act, 2001

Paula Lombardi, Partner and Solicitor, Siskinds LLP

Ms. Lombardi explained that the *Municipal Act, 2001* (the "Act") provides municipalities with three options concerning the future governance structure of water systems: 1) Local Board / Municipal Services Board, 2) a Municipal Services Corporation, or 3) "do nothing".

1) Local Boards

The definition of a Local Board in section 1 of the Act includes a municipal service board, transportation commission, public library board, board of health, police services board, and planning board. Generally a Local Board can refer to any board, commission, committee, body or local authority established or exercising any power under any provincial legislation with respect to the affairs of one or more municipality (excluding a school board and conservation authority).

Municipal Authority with respect to Local Boards are governed by s.216 of the Act, which grants Municipalities power to deal with various boards defined broadly. Municipal councils can make changes to Local Boards (s.216(5)), may pay remuneration of members, officers, and employees of Local Board (s. 283).

Local Boards are now subject to mandatory codes of conduct, and as of January 1, 2018 they can conduct electronic meetings and closed door meetings. Closed door meetings are limited to statutory exemptions to protect information received from a province or crown agency, competitive positions, contractual or other negotiations, trade secrets or information of monetary value, and information relied in in negotiations.

Local Boards still look after best interest of municipality, but their first priority is to the mandate of the Local Board.

There are additional regulatory requirements of Local Boards, including the fact that they are governed by the *Municipal Freedom of Information and Protection of Privacy Act* ("MFIPPA"),



 Report No.:
 LH-2018-03-07

 Report Page:
 7 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

and the *Planning Act* requires that comments decisions of Local Boards that affect a planning matter shall be consistent with and conform to provincial plans and policies (ss. 3(5) and (6)).

2) Municipal Service Corporations

Since 2007, with the passage of Bill 68, the Act has allowed the creation of Municipal Services Corporations ("MSCs"). An MSC is wholly owned by a municipality. It may be brought into existence only after the municipality has done a case study, but once established it cannot easily be dissolved by council.

In general an MSC is more nimble and more flexible than a Local Board, and while it is tied to the municipality its sits outside of the immediate authority of council. An MSC is tantamount to a delegation of authority by the municipality, but as soon as it is formed there is limited oversight by the council.

Power of MSCs

MSCs have powers to do things Local Boards cannot do, such as leverage real assets. This is in part because an MSC, unlike a Local Board, is a real corporation and the articles of incorporation dictate what it can do. MSC's may be structured under the *Ontario Business Corporations Act* ("OBCA"), however, all shares of MSC must be owned by municipalities. While private entities cannot own any shares in a MSC, the MSC can enter into public / private partnerships.

There are some differences between MSCs and regular corporations. For example, MSCs are subject to MFIPPA (like Local Boards) and are deemed under the Act to be the same as a Local Boards for the purposes of certain regulatory oversight regimes (i.e. conflict of interest and privacy).

Directors of MSCs

A Shareholder Declaration determines governance structure of an MSC, and Directors are appointed by municipal council. An MSC always has a representative of municipal council on the board, but the remainder of the board depends on the Shareholder Declaration. Often the Shareholder Declaration will require that Directors have expertise in the area of the intended purpose of the MSC. This is distinct from Local Boards where the decision about whether directors should have a particular expertise depends on the political cycle and the decision of council.

Directors' decisions must be in the best interests of the MSC (similar to the duty of a member of a Local Board to act in best interest of the Board). This includes any municipal representative. His or her first duty is to the MSC.

Liability

Because an MSC is a separate legal entity from the municipality, any liability associated with the operation of its service remains with the MSC and not the municipality. For example, the duty of



 Report No.:
 LH-2018-03-07

 Report Page:
 8 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

care to provide safe drinking water under the *Safe Drinking Water Act* would create liability for an MSC that owned and operated the municipal drinking water system, not the municipality. Whereas, if the drinking water system is operated by a Local Board, the liability stays with the municipality.

Water System Finances

Anna Lisa Barbon, Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, City of London.

Accounting

Lake Huron and Elgin prepare their own financial statements on an annual basis. Generally, the works, properties and all assets, liabilities and rights of the water system are transferred jointly to the member municipalities.

Debt Issuance

As the administering municipality, London issues the debt on behalf of the Huron and Elgin Water Boards. London has had a AAA credit rating for 42 years. As a result London receives a very good interest rate that the Water Boards have been able to take advantage of.

"Pros" to Water Systems Holding Their Own Debt:

- financial flexibility (control over timing, structure, terms and conditions of debenture issuances)
- potential additional debt capacity for benefiting municipalities

"Cons" to Water Systems Holding Their Own Debt:

- potential for lower credit rating (additional borrowing costs)
- administrative effort and cost (obtaining a credit rating, fiscal agents, clearing and depository requirements)
- limited debt capacity for Huron and Elgin

OPEN DISCUSSION: COMMENTS, QUESTIONS AND CONCERNS OF STAKEHOLDERS

Comments

There was a general request for a summary of the pros and cons of three option discussed, and a recognition that municipalities will not able to make decision right away. The earliest possible time to make a decision is likely January 2019 with the remainder of 2018 being used to ensure that the municipalities have the information necessary to advise councils of their options.

Attendees were also reminded that the Water Boards as they exist today have no authority over this discussion, but it is a decision for municipal councils. Ultimately, all 15 municipalities will



 Report No.:
 LH-2018-03-07

 Report Page:
 9 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

have to come to an agreement based on what's best for entire region. That said, no provincial approval is required for the municipalities' decision.

Questions

Q: If Council appoints someone to the board, is there a mechanism for removing them?

- Yes, in an MSC a shareholder declaration can provide such a mechanism. The shareholder declaration could tie representation to an election cycle, establish criteria for alternative appointment, etc.
- Under the current Water Board system, they serve at the pleasure of the municipality

Q: If a person sits on board and a decision comes and they don't want to decide until they go back to council and get feedback, can we do that?

 No, you don't have an obligation to take it back to council, you're duty is to the water system, we're voting anyways and continuing to operate as a board.

Q: Can you have an alternate member or a substitute?

– Yes, under either system.

Q: If the agenda is public information, can I discuss the agenda with council prior to going to the board, or can I not discuss with council at all?

- Today, the Water Boards are run as local boards and the agendas are public with exception of confidential items. So board member can sit down with staff or fellow council members and discuss.
- Remember an MSC is a separate corporation with its own board and makes its own decision and regularly reports back to council, so shouldn't be seeking advice from council (outside of periodic update to council) – council has no say once MSC formed.

Q: If you go to MSC structure, who represents rate payers, tax payers, customers?

 It depends on the Stakeholder Declaration. It can be specific about what the Board has to take into consideration, and this could be tied to guidance documents that are reviewed annually, for example.

Q: With so many municipalities as members, how is the public interest determined in guidance document because the needs are different across municipalities?

If you think about the overall interest in the day-to-day operations of a water system, decision of the MSC Board can be expected to be based on the benefit to public at large regardless of specific municipalities. However, if there are different needs by municipality, the Stakeholder Declaration can say that annually as part of annual business plan, you can create key identifiers for the goals and plans for each municipality and figure that out.



 Report No.:
 LH-2018-03-07

 Report Page:
 10 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Q: With MSC and skills-based members, is that a paid position? Compensation from municipality?

- Currently, remuneration (if any) is provided by the municipality
- In the future, you can write it into Stakeholder Declaration. It could be could be nothing or could be *per diem* and expenses, whatever is written in.

Q: The voting system does not work the same in Huron vs Elgin, so how would it work going forward with an MSC?

Votes are proportion to the approximate benefit to each municipality, with the exception that London held to only 60% of votes on the Huron system. This structure could remain the same in an MSC, or it could change. In an MSC, the Stakeholder Declaration is the governing/controlling document and it would spell out the voting mechanism.

Q: Under the current system, we consolidate the debt, I assume we can't count the proportion of the revenue?

 Yes, it's recognized, but it's a part of your broader financial situation and with debt it could free up the debt limit for individual municipalities. If we're a government business enterprise, you take debt component away. Either way it's relative.

Q: Under MSC, do we still have administration from municipality?

- It depends, but likely not. You could structure it as two separate corporations (Elgin and Huron), and hypothetically you could have one contracted to the other, or you could create joint administration. At this stage the thinking remains very preliminary and high level.

Q: Is one of the options a complete merger of the Elgin Water Board and Huron Water Board into a single corporation?

At this point, we are not proposing that. This is entirely up the municipalities, but we are proceeding under assumption that they would stay separate. If you want us to look at merging into one single corporation we can. It is possible but we are not proposing it at this point.

Q: In order for structure of the Board to comply with requirements of the Municipal Act, is the re-structuring a necessity or is it just a recommendation?

- Under the changes, we are not actually sure if we are a body corporate at law. It's implied, but we are not sure. For example, the City of London as bare trustee is currently signing extra agreements so they are reassured that contracts will be followed and bills paid back.
- For example, the Boards buy electricity every year and we don't know if we can legally do that.
- We are choosing to act and behave as a local board, but we don't know for sure that we are.



Report No.:	LH-2018-03-07
Report Page:	11 of 13
Meeting Date:	October 4, 2018
File No.:	

The Boards are at a stage in your operations that you have to do something to make the legal structure clear and to do all the things you're doing – now that the Boards are more sophisticated in our operation and management, it's time for us to evolve and we need to make the determination of whether we're a MSB or MSC.

Q: Have we spoken to the Ministry about this issue and asked them to clarify what we are?

- Yes, and their response was it's your problem now, figure it out.
- The changes in 2010 to the *Municipal Act* allow us to fix it ourselves and it's in the best interest of the municipalities to work together to fix it because then we can make sure we get what we want.

Q: For similar boards in Ontario, what are they doing?

- There are two others, besides ours:
 - The Lambton Area Board is years behind us
 - The Union (Chatham) Board is looking at same thing we are
- Since 2002, there have been several instances in Ontario where municipalities are creating MSBs, but more often it's a MSC (Innisfil, Chatham etc.) because these opportunities now exist.

Q: Do you have comparative costs of the 2 options?

- We could give potential costs. What municipalities see now is the unit rate at which we sell municipalities water, pays for admin costs, electricity, engineering, to reserve funds etc.
- If we go MSC route, the actual changes are that board's decision.
- If stays as MSB, they make the decisions of how it changes in the future.
- Boards would have to be accredited for their credit-worthiness, could be AAA, but likely go down to AA and that could increase costs over time.
- Operating costs would likely not change unless the administration changed dramatically under the new structure.
- If we went to a one corporation system, may still choose to run it as 2 separate water systems with different rates charged for Huron versus Elgin.
- We could also have a holding corporation with 2 subsidiaries under it, one for each system, and each system could have its own boards and shareholder declaration.

Q: Are we having this discussion so we can remove the debt from our individual municipalities and have more room before we hit the ceiling? Is that the main driver?

- We see the main issues as: Are these entities body corporates at law and what does that mean?
- The biggest issue with respect to debt is the whole financial sustainability of the water systems themselves. They could trigger even greater impact on the municipalities over



Report No.:	LH-2018-03-07
Report Page:	12 of 13
Meeting Date:	October 4, 2018
File No.:	

the long term if debts of the water systems go up and it begins to affect the ability to do future capital projects.

- But the risk depends on how much debt each municipality is carrying currently and is different for each. So that's why you need to go back and look at your own – could have a higher impact if you're already close to your debt capacity, or may not want to arbitrarily increase debt anyways because can impact on your interest rates in the long run.
- The financial plan of the water systems is good place to start. It shows you debt-equity ratios etc.

Q: Do we know if the debt we have currently is transferable over to a new MSC?

- We think that it is, but we would look at how that's done once we move forward, different ways to transfer it all over.
- An MSC could purchase all the debts and assets of the entities and re-finance etc. accordingly
- Once transferred to a MSC, depending on how the MSC is structured, it will be evaluated on its own.
- if you make it the same (MSB), you'd need to look at how it will impact your credit rating with future financial plans, taking on debt, capital projects etc.
- But consolidation could occur under either option.

Q: Are there any major substantive differences on the personnel side if going with one option over the other?

- This entirely depends on the structure that's adopted, operationally likely wouldn't change much, but how you administer it would depend on what the entity is.
- Currently we contract out a lot of administration services that may change depending on how we structure it.

Q: As new board members come onto the Water Boards, they will have to be brought up to speed, how will that work over the next year?

- Water Boards themselves have no authority over this process, entirely up the municipalities, only responsibility is to inform the board about progress.
- For the next 6 months, mostly administration working on this issue, informing councils and Andrew informing the Boards

Q: The goal in terms of how to better manage risk and liability under standards of care, members etc. wasn't included in your presentation, so can you include how the risks and liabilities etc. will be better managed under each option?

- Yes, you will get that before the next session.
- We talked about it a little bit, but we can provide an FAQ on how it's being managed now and how it could be changed under a different structure. For example, the application of



 Report No.:
 LH-2018-03-07

 Report Page:
 13 of 13

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

safe drinking water act, how it applies to boards and back to municipalities is something we looked at.

CLOSING REMARKS AND NEXT STEPS:

- Preliminary recommendation in session in late fall after balloting exercise happening in October.
- Then gather feedback.
- By spring, have a recommendation for municipalities to consider based on everyone's opinions, concerns etc. and maybe even a draft stakeholders' declaration.
- This is not a short process. It will likely take up to a year.



Report No.:LH-2018-03-09Report Page:1 of 8Meeting Date:October 4, 2018File No.:

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
 Subject: Municipal Drinking Water Licence – Consolidated Financial Information

RECOMMENDATION

That the Lake Huron Primary Water Supply System Board of Management **APPROVE** the consolidated financial information for the purposes of the Municipal Drinking Water Licence application, it being noted that this document is based upon the approved Financial Plan of October 2016.

PREVIOUS AND RELEVANT REPORTS

October 6, 2016 Financial Plan Update

October 3, 2013 Financial Plan

BACKGROUND

Under the *Safe Drinking Water Act* (SDWA), municipal residential drinking water systems must be licensed under Municipal Drinking Water Licensing Program. A licence is issued by the Ministry of the Environment, Conservation, and Parks (MECP) and is valid for a five year period.

There are five elements that must be in place under the Municipal Drinking Water Licence (MDWL):

- 1. A Drinking Water Works Permit (DWWP);
- 2. An accepted operational plan;
- 3. An accredited operating authority;
- 4. A Permit To Take Water (PTTW);
- 5. A Financial Plan.

Requirements for Financial Plans are prescribed under O.Reg. 453/07 (Financial Plans). In addition, a guidance manual entitled "*Toward Financially Sustainable Drinking Water and Wastewater Systems (August 2007)*" was produced by the Ministry to assist owners in the preparation of their Financial Plans for the purposes of applying for a Municipal Drinking Water



 Report No.:
 LH-2018-03-09

 Report Page:
 2 of 8

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Licence. The guidance manual sets out broad principles, but adherence to this guideline is not mandatory. The guidance manual emphasizes the importance of long-term capital planning and asset management. The Financial Plan must contain projections of financial information for each fiscal year for a minimum six year period.

The intent of the Financial Plan is to ensure that municipalities plan for the long-term financial sustainability of their drinking water systems to guarantee the safety of their drinking water into the future.

Municipal Drinking Water Licences are issued for a five year period and have an expiry date. Drinking water system owners are required to apply for renewal of a MDWL six months before the expiry date.

The current MDWL for the LHPWSS expires on May 30, 2019, with a specified renewal application date of November 30, 2018.

The existing Financial Plan is required to be updated and financial information consolidated in preparation for the MDWL renewal. As part of the MDWL renewal application, a Financial Plan must be in place that applies for a period of six years beginning in 2019, the year that the MDWL expires. When a Financial Plan is approved by the Board, it is posted on the water system's website at <u>www.huronelginwater.ca</u> for public information. The regulation requires that copies of the Financial Plan must be made available to the public served by the drinking water system, at no charge, and on a website if the system owner has a website. In addition, notice of availability is also required.

DISCUSSION

In 2015, the LHPWSS retained Watson & Associates Economists Ltd. (Watson) to undertake the completion of a Financial Plan for the regional water system. This study provided an analysis for current capital and operating forecasts, costing for asset management/lifecycle cost requirements, current volumes, and customer profiles. The results of this analysis provided updated water rates for customers of the LHPWSS. The resultant rate analysis provided fiscally responsible practices that are in-line with current and pending provincial legislation at a level of increases that are reasonable. The Financial Plan was endorsed by the Board on October 6, 2016.

For the purposes of the MDWL application, consolidated financial information has been prepared based on the Financial Plan approved on October 6, 2016. The consolidated financial information meets the minimum requirements of the Municipal Drinking Water Licence renewal, and is included in Appendix A for the consideration of the Board.



Report No.:LH-2018-03-09Report Page:3 of 8Meeting Date:October 4, 2018File No.:Image: Control of the state of the state

Information for this report was provided by Erin McLeod, Quality Assurance & Compliance Manager, Kate Butts, Budget and Finance Analyst, and Debbie Gibson, Financial Business Administrator.

Recommended by: Submitted by: Kelly Scherr, REng., MBA, FEC Andrew Henry, P. Eng. Chief Administrative Officer Director, Regional Water Supply

Attachment: Consolidated Financial Information for MDWL Renewal Application



Report No.:LH-2018-03-09Report Page:4 of 8Meeting Date:October 4, 2018File No.:File No.:

APPENDIX A: CONSOLIDATED FINANCIAL INFORMATION FOR MDWL RENEWAL APPLICATION

LAKE HURON PRIMARY WATER SUPPLY SYSTEM

Statement of Financial Position

	Audited	Forecast (unaudited)						
	2017	2018	2019	2020	2021	2022	2023	2024
Financial assets								
Due from Corporation of the City of London ⁽¹⁾	23,505,532	28,241,253	28,427,375	29,799,961	35,380,174	37,439,989	42,509,883	52,823,485
Trade and other receivables	627,445	718,777	644,765	678,522	688,897	734,740	743,107	759,894
Total financial assets	24,132,978	28,960,030	29,072,140	30,478,483	36,069,071	38,174,729	43,252,990	53,583,379
Financial liabilities								
Accounts payable and accrued liabilities	2,260,810	2,439,541	2,586,649	2,655,985	2,635,764	2,842,396	2,845,672	2,827,084
Deferred revenue ⁽²⁾	674,777	-	-	-	-	-	-	-
Accrued interest on long-term debt	54,196	47,232	40,146	32,935	25,598	18,130	11,693	6,154
Net long-term debt	9,254,783	8,065,505	6,855,466	5,624,221	4,371,161	3,096,037	1,996,776	1,050,968
Total financial liabilities	12,244,566	10,552,278	9,482,261	8,313,141	7,032,523	5,956,563	4,854,141	3,884,206
Net financial assets / (debt)	11,888,412	18,407,752	19,589,879	22,165,342	29,036,548	32,218,166	38,398,849	49,699,173
Non-financial assets								
Tangible capital assets (net)	157,682,748	156,421,402	156,952,489	156,703,149	152,426,624	152,336,249	149,319,172	141,746,833
Prepaid expenses	206,664	155,517	160,183	164,988	169,938	175,036	180,287	185,696
Total non-financial assets	157,889,412	156,576,919	157,112,672	156,868,137	152,596,562	152,511,285	149,499,459	141,932,529
Accumulated surplus	169,777,824	174,984,671	176,702,551	179,033,479	181,633,110	184,729,451	187,898,308	191,631,702

* subject to rounding

Notes:

(1) As the Administering Municipality, the Corporation of the City of London manages the daily operations of the Lake Huron Primary Water Supply System (LHPWSS). The Corporation maintains a separate general ledger on behalf of the LHPWSS. All funds are paid and received through the Corporation's bank account and are held for use by the LHPWSS.
 (2) Deferred revenue consists of funding received from the Province of Ontario related to the HELP program.

Disclaimer

These Proforma Financial Statements were prepared for purposes of the Municipal Drinking Water License Renewal. They are based on the approved 2016 Financial plan, as well as assumptions and calculations used by staff for budget purposes. Readers are cautioned that they may not be appropriate for other uses. For internal use only – please do not share publicly.

LAKE HURON PRIMARY WATER SUPPLY SYSTEM Pro-forma Statement of Operations

	Audited			Fo	recast (unaudite	ed)		
	2017	2018	2019	2020	2021	2022	2023	2024
Devenues								
Revenues	24 502 674	00 00E 777	22.000.000	22 772 000	22 502 000	24 420 000	25 247 000	25 022 240
User charges Investment income	21,583,674 297,350	23,295,777 509,484	22,080,000 484,637	22,773,000 453,021	23,592,000 517,105	24,439,000 594,458	25,317,000 689,269	25,823,340 770,429
	297,330	509,464	404,037	455,021	517,105	594,450	009,209	770,429
Transfer payments ⁽¹⁾								
Provincial	36,300	674,777	-	-	-	-	-	-
Federal	35,845	674,777	-	-	-	-	-	-
Other ⁽²⁾	5,313	-	-	520,000		680,000	-	-
Total revenues	21,958,483	25,154,815	22,564,637	23,746,021	24,109,105	25,713,458	26,006,269	26,593,769
F								
Expenses	500.045	740.000	750 000		70 4 000			
Salaries, wages and benefits	520,345	748,866	750,099	771,922	794,386	817,510	841,313	866,525
Materials and supplies	10,396,226	10,602,046	11,120,753	11,513,518	11,866,677	12,341,296	12,670,504	13,105,339
Contracted services ⁽³⁾	441,603	875,188	1,095,793	1,029,340	550,021	1,092,982	754,745	199,141
Rents and financial expenses	47,174	80,912	82,500	84,150	85,833	87,549	89,300	91,086
Interest on long-term debt	195,819	186,570	168,933	148,135	124,344	97,782	66,995	40,320
Amortization	7,064,735	7,246,134	7,415,220	7,649,233	7,863,948	7,950,126	8,178,936	8,316,456
Administrative charges	203,173	208,252	213,459	218,795	224,265	229,872	235,619	241,509
Total expenses	18,869,075	19,947,968	20,846,757	21,415,093	21,509,474	22,617,117	22,837,412	22,860,376
Annual surplus	3,089,408	5,206,847	1,717,880	2,330,928	2,599,631	3,096,341	3,168,857	3,733,393
Accumulated surplus, beginning of year	166,688,416	169,777,824	174,984,671	176,702,551	179,033,479	181,633,110	184,729,451	187,898,308
Accumulated surplus, end of year	169,777,824	174,984,671	176,702,551	179,033,479	181,633,110	184,729,451	187,898,308	191,631,702

* subject to rounding

Notes:

(1) Transfer payments are primarily comprised of funding received from the Federal and Provincial governments relating to the HELP program.

(2) Other Revenue includes Miscellaneous Revenue and estimated one-time incentive payments from Independent Electricity System Operator (IESO) for High Lift Pump Replacements.

(3) Contracted services includes capital expenditures which do not qualify as a Tangible Capital Asset under the PSAB 3150 definition.

Disclaimer

These Proforma Financial Statements were prepared for purposes of the Municipal Drinking Water License Renewal. They are based on the approved 2016 Financial plan, as well as assumptions and calculations used by staff for budget purposes. Readers are cautioned that they may not be appropriate for other uses. For internal use only – please do not share publicly.

LAKE HURON PRIMARY WATER SUPPLY SYSTEM Projected Statement of Net Financial Assets

	Audited			Fo	recast (unaudite	ed)		
	2017	2018	2019	2020	2021	2022	2023	2024
Annual surplus	3,089,408	5,206,847	1,717,880	2,330,928	2,599,631	3,096,341	3,168,857	3,733,393
Acquisition of tangible capital assets	(6,352,470)	(5,984,788)	(7,946,307)	(7,399,893)	(3,587,423)	(7,859,751)	(5,161,859)	(744,117)
Amortization of tangible capital assets	7,064,735	7,246,134	7,415,220	7,649,233	7,863,948	7,950,126	8,178,936	8,316,456
	3,801,673	6,468,193	1,186,793	2,580,268	6,876,156	3,186,716	6,185,934	11,305,732
Change in prepaid expenses	(43,368)	51,147	(4,666)	(4,805)	(4,950)	(5,098)	(5,251)	(5,409)
Change in net financial assets	3,758,305	6,519,340	1,182,127	2,575,463	6,871,206	3,181,618	6,180,683	11,300,323
Net financial assets, beginning of year	8,130,107	11,888,412	18,407,752	19,589,879	22,165,342	29,036,548	32,218,166	38,398,849
Net financial assets, end of year	11,888,412	18,407,752	19,589,879	22,165,342	29,036,548	32,218,166	38,398,849	49,699,173

* subject to rounding

Disclaimer

These Proforma Financial Statements were prepared for purposes of the Municipal Drinking Water License Renewal. They are based on the approved 2016 Financial plan, as well as assumptions and calculations used by staff for budget purposes. Readers are cautioned that they may not be appropriate for other uses. For internal use only – please do not share publicly.

LAKE HURON PRIMARY WATER SUPPLY SYSTEM Statement of Cash Flows

	Audited			Fo	recast (unaudite	ed)		
	2017	2018	2019	2020	2021	2022	2023	2024
Cash provided by:								
Operating activities:								
Annual surplus	3,089,408	5,206,847	1,717,880	2,330,928	2,599,631	3,096,341	3,168,857	3,733,393
Items not involving cash:								
Amortization	7,064,735	7,246,134	7,415,220	7,649,233	7,863,948	7,950,126	8,178,936	8,316,456
Amortization of debt discount	8,066	8,202	8,202	8,202	8,202	8,202	6,974	5,944
Change in non-cash assets and liabilities:								
Due from Corporation of City of London	(2,804,625)	(4,735,722)	(186,122)	(1,372,586)	(5,580,213)	(2,059,815)	(5,069,894)	(10,313,601)
Prepaid expenses	(43,368)	51,147	(4,666)	(4,805)	(4,950)	(5,098)	(5,251)	(5,409)
Trade and other receivables	425,718	(91,332)	74,012	(33,757)	(10,375)	(45,843)	(8,367)	(16,787)
Accounts payable and accrued liabilities	(613,967)	178,731	147,108	69,336	(20,221)	206,632	3,276	(18,588)
Deferred revenue	(36,300)	(674,777)	-	-	-	-	-	-
Accrued interest on long-term debt	(1,688)	(6,964)	(7,086)	(7,211)	(7,337)	(7,468)	(6,437)	(5,539)
Net change in cash from operating activities	7,087,979	7,182,266	9,164,548	8,639,340	4,848,685	9,143,077	6,268,094	1,695,869
Capital activities:								
Purchase of tangible capital assets	(6,352,470)	(5,984,788)	(7,946,307)	(7,399,893)	(3,587,423)	(7,859,751)	(5,161,859)	(744,117)
Cash used in capital activities	(6,352,470)	(5,984,788)	(7,946,307)	(7,399,893)	(3,587,423)	(7,859,751)	(5,161,859)	(744,117)
	(0,002,110)	(0,001,100)	(1,010,001)	(1,000,000)	(0,001,120)	(1,000,101)	(0,101,000)	(,)
Financing activities:								
Proceeds of long term debt	404,232	-	-	-	-	-	-	-
Repayment of long-term debt	(1,139,741)	(1,197,478)	(1,218,241)	(1,239,447)	(1,261,262)	(1,283,326)	(1,106,235)	(951,752)
Cash used in financing activities	(735,509)	(1,197,478)	(1,218,241)	(1,239,447)	(1,261,262)	(1,283,326)	(1,106,235)	(951,752)
Net change in cash flows	-	-	-	-	-	-	-	-
Cash and short-term investments, beginning of year	-	-	-	-	-	-	-	-
Cash and short-term investments, end of year	-	-	-	-	-	-	-	-

* subject to rounding

<u>Disclaimer</u>

These Proforma Financial Statements were prepared for purposes of the Municipal Drinking Water License Renewal. They are based on the approved 2016 Financial plan, as well as assumptions and calculations used by staff for budget purposes. Readers are cautioned that they may not be appropriate for other uses. For internal use only – please do not share publicly.



 Report No.:
 LH-2018-03-12

 Report Page:
 1 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1219

To: Chair and Members Lake Huron Primary Water Supply System Board of Management
From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
Subject: LH1219 Filter Backwash Turbidity Meter Project

RECOMMENDATION

That the Board of Management for the Lake Huron Water Supply System take the following actions with regard to project LH1219 – Filter Backwash Turbidity Meters Project:

- a) That the project budget be **INCREASED** by \$150,000 for a total budget of \$250,000, with the additional funds being provided from the Capital Reserve Fund; and,
- b) The Board **RECEIVE** this report regarding the status of the Filter Backwash Turbidimeters Project for information.

PREVIOUS AND RELATED REPORTS				
October 1, 2015	2016 Operating & Capital Budgets			
October 6, 2016	Capital Status Report			
October 5, 2017	Capital Status Report			

BACKGROUND

A previous assessment of the filter backwash process has recommended that turbidity meters be installed on each filter in order to monitor the cleanliness of the waste discharge during the backwash process. This will result in the reduction of the amount of backwash water required to clean the filters, with consequential beneficial impacts on the new Residuals Management Facility.

DISCUSSION

Once the majority of work was completed in the filter area, the Board's contracted operating authority, the Ontario Clean Water Agency (OCWA), was asked procure and manage the installation of the new turbidity meters pursuant to the Service Agreement with OCWA. OCWA engaged an Engineering consultant to review and prepare the necessary specifications for the purchase and install of these meters.



Report No.:	LH-2018-03-12
Report Page:	2 of 3
Meeting Date:	October 4, 2018
File No.:	LH1219

With the completion of the engineering assessment, the revised cost estimate for the project is approximately \$177,000 including necessary engineering required to complete the project. The original estimate for the 2016 budget included the purchase and wiring of the meters, but did not anticipate the need for the greater engineering scope of work and the extensive amount of programming needed for the installation.

It is anticipated that this upgraded backwash control system can save approx. 10%-30% of treated water required (varies seasonally) to clean each filter, amounting to between 180 million to 540 million litres annually. The value of this treated water based on 2018 rates of \$0.4846/m³ is equal to \$87,228 – \$261,684 in savings annually. The reduction in backwash process water will also save on energy use, chemical use, and the amount of water directed to the Residuals Management facility and (ultimately) discharged back to the lake.

This project will ultimately help assist the water supply system in achieving our environment objectives and targets as part of the ISO 14001 Environmental Management System.

PROJECT FINANCIAL STATUS

Capital Project LH1219 Filter Backwash Turbidimeter Replacement Project has a current approved budget of \$100,000.

Summary of Projected Costs:

Construction	\$ 150,000
Engineering	35,000
Contingency	35,000
Net HST (@ 1.76%)	4,000
OCWA Contract Administration Fee	14,000
Total	\$238,000



 Report No.:
 LH-2018-03-12

 Report Page:
 3 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1219

CONCLUSION

It is the recommendation of Board staff that the budget be increased to allow for the installation of the turbidity meters in order to undertake the project as originally planned, and assist in overall plant efficiency.

This report was written by John Walker, Operations Manager.

Submitted by: Recommended by: Kelly Scherr, PEng., MBA, FEC Andrew Henry, P. Eng. Director, Regional Water Supply Chief Administrative Officer



 Report No.:
 LH-2018-03-10

 Report Page:
 1 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1230

To: Chair and Members Lake Huron Primary Water Supply System Board of Management
From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
Subject: LH1230 High Lift Pump Replacements Project

RECOMMENDATION

That the following actions be taken with regard to Lake Huron Primary Water Supply System LH1230 High Lift Pump Replacements Project:

- a) That the detailed design engineering proposal from AECOM Canada Ltd. in the amount of \$415,178, including contingency and excluding HST, **BE ACCEPTED**; it being noted that this is a single source procurement in order to meet the funding deadlines set by the Independent Electricity Systems Operator;
- b) That the Board Chair and Chief Administrative Officer **BE AUTHORIZED** to execute a consulting services agreement with AECOM Canada Ltd. for the completion of the abovenoted project; and,
- c) That this report **BE RECEIVED**, for information.

PREVIOUS AND RELATED REPORTS

October 5, 2017 2018 Operating & Capital Budgets

BACKGROUND

The recently completed Energy Audit and Pump Optimization study identified a significant opportunity for energy savings and the optimization of pump operations with the replacement of the high lift pump system that are original to the plant construction and nearing the end of their useful life. This engineering assignment will provide the detailed engineering of the pump replacements, confirm construction requirements, anticipated savings, and available funding from Independent Electricity Systems Operator (IESO), Hydro One and other senior government programs.

DISCUSSION

Since the completion of the Energy Study, Board staff have continued the discussions with IESO regarding possible project incentives and associated program timing in relation to the health of the Capital Reserve Fund.



Report No.:	LH-2018-03-10
Report Page:	2 of 3
Meeting Date:	October 4, 2018
File No.:	LH1230

As determined through the 2018 budget deliberations, the project was only able to be partially funded by the Capital Reserve Fund in 2018 such that a preliminary design could be undertaken to reaffirm and expand upon the study findings, particularly in regards to the recommended installation of a pressure sustaining valve (PSV) upstream of the Arva reservoir which was included in the modeling analysis upon which the recommendations of the study were based. The preliminary design undertaken by AECOM has determined that the PSV is not required at this time and recommends the following:

- 1. Replace the least efficient duty pump with a jockey pump and place an additional jockey pump in the spare pump slot; and,
- 2. Replace two least efficient duty pumps with new efficient duty pumps.

The remaining two original high lift pumps at the water treatment plant, and the four original high lift pumps at the McGillivray Pump Station will be replaced at a future date.

The IESO has advised that the in-service deadline for the two jockey pumps is on or before December 31, 2020 and the in-service deadline for the two new duty pumps is on or before December 31, 2022. The estimated total financial incentives from IESO for the jockey (\$500K) and duty pumps (\$575K) is \$1.075M.

In order to meet the strict funding deadlines and associated reporting requirements set by the IESO associated with the installation of the two jockey pumps, the detailed design will need to be accelerated primarily due to the estimated 12-14 months that will be required to manufacture and deliver the pumps of this size. In addition, it will take approximately 6 months for a contractor to install the pumps once they are delivered to site.

If the current Board meeting schedule were followed, the detailed design engineering assignment would be normally be awarded near the end of January 2019. With the manufacturing and construction timing requirements noted above, this would leave 3 months for detailed engineering design and tender award which is insufficient time to deliver the engineering required by the project. For this reason, it is recommended that the single-source engineering proposal from AECOM Canada Ltd. (AECOM) be accepted in advance of 2019 budget approval to garner an additional 4 months of design time needed to meet the deadlines set by the IESO.

Board staff have reviewed the proposal from AECOM and determined that the proposed work plan provides the necessary engineering in order to deliver the project within the strict IESO funding deadline. This single source procurement process is in keeping with the Section 14.4.i of the City of London's Procurement of Goods and Service Policy (*strictly used as a guide*):

Another organization [IESO] is funding or substantially funding the acquisition and has determined the supplier and the terms and conditions of the commitment into which the City will enter are acceptable to the City.



 Report No.:
 LH-2018-03-10

 Report Page:
 3 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1230

Based on the proposed work plan, AECOM estimates the fees associated with the detailed design assignment to be \$415,178 including contingency and excluding HST. It is therefore anticipated that the total engineering cost for this project will remain within the proposed budget that is presented in the 2019 Budget Report. On this basis, Board staff recommends the proposal from AECOM be accepted.

CONCLUSION

In order to meet the strict funding deadlines set by the Independent Electricity Systems Operator (IESO) Board staff initiated a single source procurement process, subject to the final approval of the Board, for detailed design engineering associated with the high lift pump replacements at the Lake Huron water treatment plant. The work plan and schedule proposed by AECOM will ensure that the project meets the IESO funding deadline requirements and therefore Board staff recommends the proposal from AECOM be accepted.

This report was written by Billy Haklander, Environmental Services Engineer.

Submitted by:

Andrew Henry, P. Eng. Director, Regional Water Supply

Recommended by:

Kelly Scherr, P, Eng., MBA, FEC Chief Administrative Officer



 Report No.:
 LH-2018-03-08

 Report Page:
 1 of 4

 Meeting Date:
 October 4, 2018

 File No.:
 LH1317

To: Chair and Members Lake Huron Primary Water Supply System Board of Management
From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
Subject: LH1317 Distressed Pipe Replacement Program

RECOMMENDATION

That the Board of Management **RECEIVE** this report with regard to the Distressed Pipe Replacements Project for information.

PREVIOUS AND RELATED REPORTS

October 5, 2017

2018 Operating & Capital Budgets

BACKGROUND

As a result of the condition assessment and subsequent real-time data collected from the Acoustic Fibre Optic Monitoring System within the 1200mm high pressure transmission pipeline, the water system has recently replaced two high-risk pipe segments on the pipeline. This purpose of the Distressed Pipe Replacement program is to replace high pressure pipe segments that are at risk of catastrophic failure on a systemic and proactive basis. The 2018 program also included a detailed assessment of the monitoring data accumulated to date to develop a predictive model to further refine the program and assist with determining targeted replacements in future years.

DISCUSSION

In January 2019, Board staff retained the services of Pure Technologies Ltd. (Pure) to develop a predictive model which focuses on the1200-millimetre diameter pre-stressed concrete pipe (PCCP) portions of Pipeline A and is used as a tool to help the water supply system better manage the pipeline by reviewing the pipeline degradation rates over a projected 25-year period. This predictive approach provides the water system with information regarding the anticipated rate at which pipe segments may reach their yield failure limits. This projected degradation rate for each of the nearly 10,000 pipe segments may be included in capital budget planning process over the next 5 to 25 years.

Lake Huron Pipeline A has experienced four catastrophic failures since its installation in 1965-1966. After the latest failure on May 23, 2012, a PureEM[™] electromagnetic inspection was performed to assess the condition of the pre-stressing wire wraps in each pipe section. The electromagnetic (EM) inspection evaluates each pipe section and quantifies the amount and



Report No.:	LH-2018-03-08	
Report Page:	2 of 4	
Meeting Date:	October 4, 2018	
File No.:	LH1317	

location of damage along the transmission pipeline. However, this technology only provides a snapshot of the pipeline condition at the time of inspection and does not provide any information regarding the deterioration rate of the pipeline as it ages. Accordingly, to monitor the pipeline on a continuous basis and record wire wrap breaks in real-time, a SoundPrint[™] Acoustic Fiber Optic (AFO) monitoring system was installed in June 2015. The EM and AFO data from the Lake Huron Pipeline A, along with the data from Pure's EM and AFO database, were used to calculate deterioration rates using a Monte Carlo simulation statistical analysis.

This information was then used to estimate the probability of an individual pipe segment, with varying levels of deterioration, reaching or exceeding the defined high-risk limit in each year up to 2045. The statistical probabilities were then applied to pipes in each baseline physical condition (i.e. starting with 0, 5, 10, 15, etc. broken wire wraps) to develop the projected deterioration rates for pipes with varying levels of distress.

The projections estimate that 925 pipes (out of 9,763 pipes) on the Lake Huron Pipeline A are estimated to exceed their yield limits with a medium probability (30% to 50%) and 89 pipes are expected to exceed their yield limit with a high probability (> 50%) by the year 2045. Yield limit ranges from 20 to 100 broken wire wraps for different pipes. Although the broken wire wraps could be non-contiguous (spread across the length of the pipe) and the pipes may still have some remaining life, the pipes have been identified as exceeding the threshold for "high-risk."

The analysis performed as part of this study should not be treated as though the results are exact. The results are probabilistic and are based both on site-specific monitoring and inspection data, and on data from Pure's worldwide database, in order to ensure there is enough data to perform the analysis with respect to degradation rates of the pipeline. As such, there is a degree of uncertainty associated with the results that the reader needs to be aware of when interpreting the results. In the future, as more site-specific data is collected and less data is used from Pure's database, it is anticipated that the degree of uncertainty associated with this analysis will reduce. Based on the current analysis, it is recommended that the pipeline should be re-evaluated in 5 to 10 years to re-establish and refine the failure prediction results based on the expanded dataset.

For planning purposes, the current projected distress estimates can be used to set repair/replacement budget estimates. Board staff recommend that funds be made available to repair or replace the projected number of pipes as part of the subsequent Financial Plan Updates; however, actual repair decisions be made based on addressing the highest-risk pipes identified by the AFO monitoring system.

As the program matures and the rate of pipe segment deteriorations change, the replacement program will evolve from the replacement of individual pipes, to the targeted replacement or twinning of the pipeline in specified high-risk areas.



 Report No.:
 LH-2018-03-08

 Report Page:
 3 of 4

 Meeting Date:
 October 4, 2018

 File No.:
 LH1317

The recommendations for the pipe replacement program are as follows:

Near-term (<5 years):

- 1. Install Transient Pressure Monitors to calibrate pipeline Performance Curves.
- 2. Rely on AFO monitoring results to prioritize pipe replacements.

Mid-term (5-10 years):

- 1. Prepare medium-term budget estimates based on Predictive Modelling numbers for pipes needing replacement.
- 2. Perform re-evaluation of Pipeline A to update failure predictions based on additional AFO monitoring data.
- 3. Consider an electromagnetic inspection of the pipeline to re-calibrate the baseline data.

Long-term (>10 years):

- 1. Prepare long-term budget estimates based on Predictive Modelling numbers for pipes needing replacement.
- 2. Perform re-evaluation of Pipeline A to update failure predictions based on additional AFO monitoring data.
- 3. Prioritize sections for replacement (instead of individual pipe segments) or additional pipeline twinning based on Predictive Modelling and real-time performance monitoring.

Based on the findings of this study, Pure Technologies has recommended the consideration of the installation of transient pressure sensors along the length of the pipeline, especially on the twinned sections which have been affected by higher pressures and more significant fatigue loads compared to other areas. The installation of pressure monitoring sensors is beneficial as it provides additional information regarding recurring transient pressure events along the length of pipeline, as well as atypical operating conditions in the system (e.g. short succession pump shut-off-re-start operations or short pump cycles). Such operations should be avoided or minimized as much as possible to mitigate the overall stresses on the system.

Additionally, the evaluation of transient pressure data would be helpful in determining whether additional surge mitigation measures would be a cost-effective technique to be considered in planning distressed pipe replacements. The proposed pressure/transient monitoring program is included within the 2019 Budget Report for the Board's consideration.



 Report No.:
 LH-2018-03-08

 Report Page:
 4 of 4

 Meeting Date:
 October 4, 2018

 File No.:
 LH1317

CONCLUSION

Board staff retained the services of Pure Technologies Ltd. to develop a predictive model that provides the water system with information and guidance related to when pipes along the 1200mm transmission main may reach their yield failure limits, and aid in the development of business that may be included in capital budget planning over the next 5 to 25 years. This information along with the AFO continuous monitoring program and proposed transient monitoring is used to replace high-risk pipe segments on a systemic basis.

This report was written by Billy Haklander, Environmental Services Engineer.

Submitted by: Recommended by: Kelly Scherr, REng., MBA, FEC Andrew Henry, P. Eng Director, Regional Water Supply Chief Administrative Officer



 Report No.:
 LH-2018-03-11

 Report Page:
 1 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1384

 To: Chair and Members Lake Huron Primary Water Supply System Board of Management
 From: Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer
 Subject: LH1384 Filter Rate Meter Replacement Project

RECOMMENDATION

That the Board of Management for the Lake Huron Water Supply System take the following actions with regard to project LH1384 – Filter Rate Meter Replacement Project:

- a) That the project budget be **INCREASED** by \$120,000 for a total budget of \$320,000, with the additional funds being provided from the Asset Replacement Reserve Fund; and,
- b) The Joint Board **RECEIVE** this report regarding the status of the Filter Rate Meter Replacement Project for information.

PREVIOUS AND RELATED REPORTS

October 6, 2016 2017 Operating & Capital Budgets

October 5, 2017 Capital Status Report

BACKGROUND

The existing flow meters used to manage and control the rate of filtration on each of the twelve filters are original to the plant, are well past their useful life, and their inaccuracies are becoming increasingly problematic for the reliable operation of the water treatment plant. As part of the 2017 Capital Budget, plans were put in place to have the filter rate meters replaced as time permitted, ideally in conjunction with the filter media replacement program. Due to the large amount of capital works going on at the plant, the installation of these meters was delayed to prevent contractors working in the same location and to avoid Constructor issues under the Occupational Health and Safety Act.



 Report No.:
 LH-2018-03-11

 Report Page:
 2 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1384

DISCUSSION

Once the majority of work was completed in the filter area of the water treatment plant the Board's contracted operating authority, the Ontario Clean Water Agency (OCWA), was asked procure and manage the installation of the replacement meters pursuant to the Service Agreement with OCWA. With the participation of Board staff, OCWA prepared the specifications and issued a public tender for the meters. The tender closed August 28 and included a 90-day price validity period.

The results of the tender were significantly higher than expected. Upon detailed analysis, staff believe the higher costs are attributed to a combination of several factors, including:

- Greater SCADA integration costs based on the updated SCADA requirements (i.e. newer telemetry protocols to have a proper totalizer and not one based on a sum of instantaneous flows)
- Different power requirements for the new meters than the original filter rate meters
- Additional piping modifications required, as the new meters will not fit into the space taken up by the old meters
- Increased cost of steel and materials

PROJECT FINANCIAL STATUS

Capital Project LH1384 Filter Rate Meter Replacement Project has a current approved budget of \$200,000.

Summary of Projected Costs:

Tender Value	\$ 277,970
Contingency	15,000
Net HST (@ 1.76%)	5,156
OCWA Contract Administration Fee	17,906
Total	\$316,032



 Report No.:
 LH-2018-03-11

 Report Page:
 3 of 3

 Meeting Date:
 October 4, 2018

 File No.:
 LH1384

CONCLUSION

It is the recommendation of Board staff that the budget be increased to allow for the installation of the filter rate meters in order to secure the current pricing, and to assist in overall plant efficiency.

This report was written by John Walker, Operations Manager.

Submitted by:

Andrew Henry, P. Eng. Director, Regional Water Supply

Recommended by:

Kelly Scherr, P, Eng., MBA, FEC Chief Administrative Officer September 4, 2018

Chair and Members Lake Huron Primary Water Supply System Joint Board of Management

Re: 2019 Operating & Capital Budget

Enclosed please find a copy of the draft 2019 Budget for the Lake Huron Primary Water Supply System. You are receiving the document at this time in keeping with a request by the Board to receive the draft Budget a month in advance of the meeting at which it is to be considered. The balance of the agenda material for the upcoming meeting scheduled for Thursday, October 4, 2018, London City Hall, will be provided one week in advance of the meeting as per usual practice.

J. Bunn Committee Secretary

Enclosure



c/o The City of London Regional Water Supply Division 235 North Centre Road, Suite 200 London, Ontario N5X 4E7



 Report No.:
 LH-2018-03-01

 Report Page:
 1 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

To: Chair and Members Lake Huron Primary Water Supply System Board of ManagementFrom: Kelly Scherr, P.Eng., MBA, FEC

Chief Administrative Officer

Subject: 2019 Operating and Capital Budgets

RECOMMENDATION

That the following actions be taken by the Board of Management for the Lake Huron Water Supply System with regard to the 2019 Operating and Capital Budgets:

- a) The Board APPROVE the 2019 Operating Budget in the total amount of \$22,107,000 as presented;
- b) The Board APPROVE the 2019 Capital Budget in the total amount of \$15,127,000 as presented;
- c) The Board RECEIVE the 2018 to 2028 Capital Forecast for information;
- d) The Board **APPROVE** the 2019 rate for water of \$0.4943 per cubic meter; and,
- e) The Board **RECEIVE** the 2017 to 2023 Flow and Financial Analysis for information.
- f) The Board **APPROVE** the target balance for the Emergency Reserve Fund at \$5,000,000.

EXECUTIVE SUMMARY

The proposed operating and capital budgets present a balanced cost and revenue projection for 2019, and are consistent with the water system's Financial Plan approved in 2016. The proposed water rate for 2019 of 49.43 cents per cubic meter of water will adequately address capital, operating and administrative requirements as currently projected. The Financial Plan continues to be a key element in the long term strategic approach that addresses both infrastructure and operating issues, and ensures fiscal responsibility to maintain a reliable and sustainable water supply to the benefiting municipalities and consumers.

Cost projections presented in the 2019 budget include the operating costs within the extended term of the agreement with the contracted operating authority, which now incorporate the current and future costs for the operation of the new Residuals Management Facility.



 Report No.:
 LH-2018-03-01

 Report Page:
 2 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

The 2019 Capital Budget builds on the water system's Asset Management Plan approved in 2016, and utilizes the Customer Level of Service framework and Risk Mitigation strategy previously approved by the Board. This includes the utilization of the new business case process to better quantify anticipated costs, savings, and service impacts to the water supply system.

The projects and initiatives in the 2019 Capital Budget are presented in this report within two primary groupings; Maintain Level of Service (Maintain LOS) projects that serve to ensure that services are provided at the current level of service, and Improved Level of Service (Improved LOS) which address enhancements to levels of service, support growth of the system and increasing water demands, address regulatory changes, or increased efficiency. A proposed capital project may touch, in part, all of these aspects, however they are presented within this report according to their respective primary driver.

PROPOSED 2019 OPERATING BUDGET

2019 Water Rate

It is proposed in this budget that the water rate for the wholesale of water to the benefiting municipalities be set at 0.4943 per cubic meter (49.43¢ per cubic meter). In responding to regulatory, operational and inflationary pressures, this proposed 2019 rate represents a 2.0% increase from the current rate.

The rate proposed for the 2019 budget is <u>LESS</u> than the projected rate increase of 3.0% previously reported to the Board in the 2018 Budget and the recently approved Financial Plan, largely due to the increased volume of water projected to be supplied to the benefiting municipalities in 2019.

2019 Budget Volume

Allowing for the current rate of population and water demand growth within the benefiting municipalities, as well as anticipated impacts of continued water conservation, the proposed 2019 treated water volume included in the budget of 44.67 million cubic meters represents an 8.7% increase compared with the 2018 approved budgeted volume, and approximately 7.1% lower than the anticipated 2018 actual supplied volumes by year-end.

Approved 2018 budget volume	41,110,000 m ³
Anticipated 2018 year-end volume	48,070,690 m ³
Proposed 2019 volume	44,668,650 m ³



Report No.:LH-2018-03-01Report Page:3 of 10Meeting Date:October 4, 2018File No.:

The long-term volume projections for the regional water systems have been re-evaluated in preparation for the 2019 budget, and revised to incorporate increasing consumption trends within the City of London. Supplied volumes to the other benefiting municipalities continue to remain stable, with low to moderate long-term annual growth in consumption.

The anticipated 2018 year-end volume is reflective of the higher than normal temperatures and generally drier conditions experienced this year. Staff expect that the short-term consumption will increase from the previous projections provided to the Board, largely due to the higher anticipated consumption by London, however a more conservative approach has been used for the longer-term volume projections.

Water demand projections and anticipated capital works are reviewed regularly to ensure capital investments are appropriately coordinated and timed, and will be reviewed again during future revisions to the Master Water Plan and Asset Management Plan. Further, the recently adopted business case process as part of the Asset Management Plan promotes a risk mitigation and level of service strategy which further addresses the appropriate timing of necessary projects.

Operating Costs

The two single largest operating costs for the water supply system are the contract costs for the operation and maintenance of the water supply system, and the purchase of power for the system. The 2019 budgeted operating costs are approximately \$10.32 million, reflecting a net 0.8% projected decrease compared to the 2018 budget. Energy saving initiatives implemented at the facility are translating to an anticipated 9% decrease in energy costs, offsetting increases in other contracted services for 2019. Of the \$10.32 million, energy comprises approximately 40% of operating expenditures.

The Service Fee currently paid to the Board's contracted operating authority, the Ontario Clean Water Agency (OCWA), is solely comprised of a general component (reflecting labour, material and chemical costs, etc.) paid by the Board. As electricity can be highly variable on a year-over-year basis, the risk of market volatility has summarily been assumed by the Board and mitigated through the Board's energy procurement strategy, as well as conservation and efficiency programs.

The Board previously received and accepted an energy, conservation and pump optimization study report which reviewed possible cost saving and efficiency measures related to the procurement and usage of electrical energy and the associated pump strategy for the system. A number of efficiency recommendations were received and incorporated into the Asset Management Plan and Financial Plan, which require the development of a business case to better quantify anticipated costs, savings, and service impacts. The proposed capital plan has started to incorporate some of the energy efficiency projects, with further projects to be considered in future.



 Report No.:
 LH-2018-03-01

 Report Page:
 4 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

Administration and Other Expenses

The Administration and Other Expenditures projected for the 2019 budget of approximately \$1.94 Million represents a \$21,000 net increase over the 2018 budget amount. This net increase is due to numerous changes to the water supply system, including:

- Overhead and service costs: the administration charges paid to the City of London for such services as accounts payable/receivable, clerical support, and budget administration was marginally increased to reflect current actual costs to the city.
- Management & Administrative Personnel: previous projections for personnel costs have been adjusted as a result of lower job rates for new positions previously approved by the Board.
- Information Technology: projected increase in costs to secure, maintain, and support the water systems information technology

Security Audit

The recently completed and approved Security Audit and Threat Risk Vulnerability Assessment recommended a number of capital and operating investments to the regional water system, including staffing resources. The proposed 2019 Operating Budget currently does not include any anticipated contracted security-related services. Board staff are in the process of completing the development of an implementation and resource plan, and a comprehensive report will be presented to the Board at a future meeting including recommended changes to the 2019 Operating Budget, if any.

The approved 2018 and proposed 2019 Capital budgets included an allowance for addressing critical recommendations and upgrades from the Security Audit. Investments continue to be evaluated and implemented on a priority basis, starting with the water treatment plant facilities.

PROPOSED 2019 CAPITAL BUDGET

The proposed 2019 Capital Budget reflects a number of projects to address capital improvements and critical reinvestment in the water supply system's assets, as well as regulatory requirements, ongoing and proposed Board initiatives. Project specific summaries are provided in Appendix A of this report for the Board's information.



Report No.:	LH-2018-03-01
Report Page:	5 of 10
Meeting Date:	October 4, 2018
File No.:	

Financial Plan and Asset Management Plan

The approved Asset Management Plan and Financial Plan provided an assessment of anticipated capital projects, based on condition assessments, operational assessments provided by our contracted operating authority, and previously undertaken studies which were available at that time. In the development of the 2019 Capital Budget, a business case is created for each project which outlines the scope of the issue that needs to be addressed, options, cost estimates, and project dependencies. The business case process is linked with our Customer Level of Service framework and Risk Mitigation strategy in order to better prioritize and direct funds in a more strategic fashion and in consideration of financial constraints which may be experienced.

Within this framework, a capital project may be "lifecycle" in nature and required in order to maintain a level of service, and/or "service improvement" in nature which may address:

- Enhancement to the level of service (including safety and security, and working conditions);
- Support of system growth or growth in water demands;
- Address regulatory changes; or,
- Increase efficiency.

The level of capital investment will vary from year-to-year, most especially for projects related to system or water demand growth. The Asset Replacement Reserve is used for lifecycle projects (maintain LOS), while the Capital Reserve is used for system improvements. A given project, in principle, may address multiple elements within the Customer Level of Service framework (energy efficiency, health & safety, regulatory, performance, etc.), and therefor may require the utilization of both the Asset Replacement Reserve (lifecycle) and the Capital Reserve (service improvement and growth).

It is important to note that the anticipated projects outlined in the Asset Management Plan tend to be based on risk mitigation in the first five-year planning period, and systemic or age-related in nature for the remaining 25+ year planning period. In addition, the financial information presented in the Asset Management Plan is considered an "unconstrained" financial projection; meaning without consideration of such things as other operational needs and financial constraints (e.g. borrowing capacity) experienced by the water supply system.

The Financial Plan is utilized to incorporate the needs identified in not only the Asset Management Plan, but also the Master Water Plan (growth study) and other planning studies undertaken by the system, as well as the evolving operational and administrative needs of the system to better constrain the financial requirements and implications to the system. During the development of the annual budget the projections in the Financial Plan are measured and adjusted according to actual conditions, which will consequently affect the capital plan in each fiscal year.

 Report No.:
 LH-2018-03-01

 Report Page:
 6 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

2019 Capital Plan

Primary Water Supply System

The Financial Plan approved by the Board recommends an average year-end balance for the Asset Replacement Reserve in the order of \$7.5 million. Although the actual investment and rate of commitment may vary year to year, the current capital plan maintains the average investment rate as outlined in the Asset Management Plan and Financial Plan.

In contrast, the Capital Reserve is intended to grow significantly over time to provide a sufficient base for funding large growth-related projects in future. The balance of generational investment equity (utilization of reserves established by current users, versus debt incurred and paid by future users) has yet to be fully quantified, and will be addressed in future Master Water Plan and Financial Plan studies. There are no significant growth-related expenditures within the current planning period (i.e. plant expansion or pipeline twinning), and staff are satisfied that the issue of generational equity can be addressed within a reasonable timeframe.

Lifecycle Projects (Maintain Level of Service)

Proposed projects in the 2019 Capital Budget which address maintaining the system's level of service are:

- Hydraulic/Transient Model Update
- Plant Instrumentation
- McGillivray Control Panel Replacement
- Building Repairs
- Filter Media Replacement
- PLC Replacements

In addition to the above-noted capital projects, the 2019 Capital Budget includes LH1316 Annual Maintenance which funds, in part, maintenance and repair projects undertaken by the contracted operating authority, the Ontario Clean Water Agency. All maintenance and repairs of the system's assets are the obligation of the contracted operating authority to undertake in accordance with the Service Agreement. For activities of maintenance and repair where the value of the material and any contracted specialty service exceed \$30,000 (adjusted annually by CPI), the Board is responsible for the <u>value</u> of the work in excess of the \$30,000 (as adjusted). To facilitate this work, the Capital Budget includes an Annual Maintenance project which is utilized to fund this contractual obligation of the Board.

Service Improvement Projects (Enhanced Level of Service, Regulatory Changes, Efficiency)

Proposed projects in the 2019 Capital Budget for which the primary driver is service improvement are:

- Security Upgrades
- Crop Yield Monitoring (2012 Rupture)
- Chamber 63 Access

- High Lift Pump Replacement
- Master Water Plan
- Flash Mixer Upgrade

A summary of the capital projects are provided in Appendix A of this report.



 Report No.:
 LH-2018-03-01

 Report Page:
 7 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

CAPITAL FORECAST

A number of capital projects are projected beyond the 2019 Capital Budget year, which will have an impact on the financial forecast and future water rates for the water system. Some of these capital projects were anticipated in previous budget forecasts, and are now inclusive of the recently completed Asset Management Plan and Financial Plan. As previously noted, staff undertake a complete business case assessment for each project to confirm the costs, timing, and priority of the project, consistent with our new Customer Level of Service framework and Risk Mitigation strategy.

The next update to the Board's Master Water Plan is proposed in the 2019 Capital Budget, and future updates to the Asset Management Plan and Financial Plan are anticipated to be initiated in 2021.

FLOW AND FINANCIAL ANALYSIS

Included in the budget package is a projection of annual volumes and finances beyond 2019, and provides a summary analysis of one option for rate increases and the use of debt (if any). This projection has incorporated the recommendations from the Financial Plan, but has been adjusted to reflect the higher than previously anticipated volumes and corresponding revenues.

The projected operating expense beyond 2019 assumes that the future cost of operating the system is consistent with the amended operating agreement with the Ontario Clean Water Agency to 2022. In addition, energy expenditures projected beyond 2019 have assumed a reasonable escalation of costs, tied to the anticipated annual volumes projected and consequential savings from various efficiency-related investments.

As a direct result of the anticipated higher annual volumes, staff are currently projecting a 2% annual increase in the rate beyond the 2019 budget; roughly equivalent to the average rate of general inflation. This water rate projection, however, may be subject to change and revision as the 2019 Master Water Plan is completed and subsequently incorporated in to future Financial Plans.

Reserve Funds

Conceptually, the Asset Replacement Reserve is required to provide a stable funding source for capital programs designed to replace, maintain and potentially extend the asset life to its full potential. Accordingly, the contribution to the Asset Replacement Reserve fund year-overyear should be relatively consistent, on average, with minor variations accounted for as the Asset Management Plan is implemented.

Conversely, the Capital Reserve Fund is intended for growth-related capital programs and various system improvement initiatives. As these programs tend to be periodic in nature, the



 Report No.:
 LH-2018-03-01

 Report Page:
 8 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

reserve fund balance in the Capital Reserve may significantly increase or significantly decrease in any given year depending on the programs undertaken.

In accordance with the Financial Plan and previous Board resolution, the target balance of the Emergency Reserve Fund is established at \$2 million, wherein contributions will be discontinued when the Emergency Reserve Fund balance reaches the target value. The Emergency Reserve Fund is intended to fund unplanned and unanticipated emergency-related projects such as pipeline failures, tank ruptures and treatment process failures.

The costs associated with the most recent pipe failures had significantly depleted the Emergency Reserve Fund in the years in which they occurred. Given this and the total value of assets the Lake Huron system operates and maintains, it is the recommendation of staff that the target ending balance be increased from \$2 million to \$5 million.

Acknowledgement

The preparation of the 2019 Operating and Capital budgets were undertaken by the Regional Water Supply Division staff, with the assistance of Debbie Gibson and City of London Financial Services.

Submitted by Recommended by: Andrew Henry, P. Eng. Kelly Scherr, P.Eng., MBA, FEC Chief Administrative Officer Director, Regional Water Supply

Appendix A:

2019 Capital Project Summary

Attachments:

2019 Operating and Capital Budgets, and Nine Year Capital Forecast, October 4, 2018



 Report No.:
 LH-2018-03-01

 Report Page:
 9 of 10

 Meeting Date:
 October 4, 2018

 File No.:
 File No.:

APPENDIX A: 2019 CAPITAL PROJECT SUMMARY

Lifecycle Projects (Maintain LOS)

<u>LH1242 – Hydraulic/Transient Model Update & Transient Monitoring</u> (multi-year program): The last hydraulic model for the transmission system was completed in 2009. In addition, transient pressures within the transmission system have the potential to cause catastrophic failures to the various pumping systems and pipelines that supply the benefiting municipalities. This project proposes to update the hydraulic and transient model for the system, and incorporate the new high lift pumps proposed for the water treatment plant.

<u>LH1244 – Building</u> Repairs: This project proposes to undertake a comprehensive condition assessment of the building structures, including the slab walls, windows and glazing.

<u>LH1338 – Plant Instrumentation</u> (annual program): Much of the plant's online analyzers are beyond their useful life. This program funds a systematic replacement of the water system's online analyzers that are critically necessary to ensure ongoing compliance with regulations and the system's Municipal Drinking Water Licence.

<u>LH1369 – Filter Media Rebuild</u> (multi-year program): This project undertakes the systemic replacement of the media within the filter boxes, as well as the filter rate valves and control valves, with an allowance for repairs to the existing filter block and drains as needed. The filter media will be replaced in two filters per year over a six year program, with 2019 being the last year of the program. This program does not replace the entire filtration system, which would include the filter block, underdrains, channels, and associated control systems and backwash equipment.

<u>McGillivray Control Panel Replacement</u>: The existing control panel at this pumping station was installed in the early 1970's, and is largely comprised of solid-state switches and solenoids and requires complete replacement.

<u>PLC Replacements</u> (multi-year program): Much of the water system's programmable logic controllers (PLC) are ten years old and nearing the end of their life. This project is intended to implement a systematic replacement program to update change the existing controllers.

Service Improvement Projects (Enhanced LOS, Growth, Regulator Changes, Efficiency)

<u>LH1229 – Security Upgrades</u> (multi-year program): The recently completed Security Audit and Threat Risk Vulnerability Assessment provided policy, resource, and site-specific recommendations to mitigate security and safety risks at all facilities. The project proposed is a multi-year allowance to undertake security-related modifications to all facilities, based on the criticality assessment and recommendations of the security specialist.



Report No.:	LH-2018-03-01
Report Page:	10 of 10
Meeting Date:	October 4, 2018
File No.:	

<u>LH1230 – High Lift Pump Replacement</u>: The recently completed Energy Audit and Pump Optimization Study identified the high lift pumps at the water treatment plant and McGillivray intermediate pump station as a significant opportunity for energy optimization and savings. Although the ideal solution would be to replace all nine of the 3000hp pumps (five at the water treatment plant and four at the McGillivray Booster Pump Station) with a more optimal pump set-up, the 2019 costs assume a more cost effective short- to mid-term solution of removing three pumps at the water treatment plant replacing them with two lower volume high-head pumps and two more efficient high volume pumps. The 2018 portion of the project provides a detailed engineering assessment and design work necessary to confirm the construction requirements, anticipated savings, and available funding from IESO and other government agencies. The 2019 portion of the project is the anticipated cost of equipment purchases and installation.

<u>LH1255 – Crop Yield Monitoring (2012 Rupture)</u>: The pipeline rupture that occurred in 2012 caused significant damage to nearby agricultural lands. The Board entered into agreements with the affected landowners compensating for damages as a result of the catastrophic failure of the pipeline, which included a requirement to monitor the crop yields in the 7th, 8th, and 9th year after the land was reinstated. The intention of the monitoring is to ensure that the crop yields have sufficiently recovered following the repair and reinstatement, and don't require additional work to mitigate ongoing losses.

<u>LH2019 – Master Water Plan Update</u>: The Master Water Plan for the regional water system is undertaken every five years, and used to evaluate the impacts of anticipated growth in the system and supplied volumes to the benefiting municipalities.

<u>Chamber 63 Access</u>: Periodic access to this critical chamber currently requires access over three properties; a distance of about 850m through agricultural lands and along waterways. The proposed project will install a manufactured culvert near Chamber 63 which will reduce the access requirements to only 300m across one property and significantly reduce the annual impacts to landowners.

<u>Flash Mixer Upgrade</u>: The current equipment used for the rapid mixing of coagulant necessary for the chemically-assisted sedimentation process has been demonstrated to be inefficient and ineffective in the proper dispersion of chemicals for an effective flocc formation, resulting in the overutilization of chemicals. This project proposes to undertake improvements to the flash mixers to significantly improve the coagulation and sedimentation process, and reduce chemical consumption.



Primary Water Supply System

2019 Operating and Capital Budgets and Nine Year Capital Forecast

October 4, 2018

Lake Huron Primary Water Supply System 2019 Budget

Table of Contents	
 Revenue and Expenditure Summary 	PAGE # 1
 Administration and Other Expenditures 	2
 2019 Capital Plan with Forecast for 2020 to 2028 	3-4
 Capital Plan Sources of Financing 	5
 Reserve Fund Analysis and Continuity Schedules 	6-8
 Flow and Financial Analysis Summary 	9

Lake Huron Primary Water Supply System 2019 Budget Revenue and Expenditure Summary (\$000's)

	2018	2019		%	2018
	Approved	Proposed	Incr (Decr)	Budget	Year End
	Budget	Budget Budget Over 2018 In		Incr (Decr)	Projection
Revenue					
Volume Revenues ⁽¹⁾	19,922	22,080	2,158	10.8%	23,296
Other Revenues	20	26	6	30.0%	22
Total Revenue	\$ 19,942	\$ 22,106	\$ 2,164	10.9%	\$ 23,318
Expenditures					
Operating Costs ⁽²⁾	10,402	10,320	(82)	(0.8)%	9,893
Administration and Other Expenditures	1,918	1,938	20	1.0%	1,877
Debt Principal Repayments ⁽³⁾	1,197	1,218	21	1.8%	1,197
Interest on Long Term Debt ⁽³⁾	182	163	(19)	(10.4)%	182
Contribution to Reserve Funds	6,243	8,467	2,224	35.6%	10,169
Total Expenditures	\$ 19,942	\$ 22,106	\$ 2,164	10.9%	\$ 23,318

* subject to rounding

Notes:

(1) A volume increase is anticipated in 2019 (from 41,110,000 m³ in 2018 to 44,668,650 m³ in 2019). Rates per m³ are proposed to increase by 2.0%.
(2) Part of the service contract costs are direct to the Lake Huron system (i.e. electricity), while all other costs are fixed to the annual operating costs included in the Service Fee paid to the Ontario Clean Water Agency.

(3) Refer to page 9 for more information on debt.

Lake Huron Primary Water Supply System 2019 Budget Administration & Other Expenditures (\$000's)

Administration & Other Expenditures	2018 Approved Budget	2019 Proposed Budget	Incr (Decr) Over 2018	% Budget Incr (Decr)	2018 Year End Projection
Management & Administrative Personnel (1)	748	681	(67)	(9.0)%	645
Support and Overhead Costs ⁽²⁾	208	213	5	2.4%	208
Payment in Lieu of Taxes	268	275	7	2.6%	274
Insurance (Director & Officers, General Liability)	330	300	(30)	(9.1)%	313
Financial/Office Expenses ⁽³⁾	250	279	29	11.6%	341
Information Technology Maintenance ⁽⁴⁾	27	113	86	318.5%	15
Purchased Services (Legal, Consulting, Locates etc.)	87	77	(10)	(11.5)%	80
Total Administration & Other Expenditures	\$ 1,918	\$ 1,938	\$ 20	1.0%	\$ 1,877

* subject to rounding

Notes:

(1) Management & Administrative Personnel costs have decreased due to new positions being evaluated at a lower rate than originally budgeted.

(2) Support and Overhead Costs reflect the costs charged by the Administering Municipality for various administrative functions (e.g. Finance, Purchasing, Human Resources, Risk Management, etc.).

(3) Financial/Office Expenses include other administrative expenses such as leased space, training/seminars/conventions, computer leasing, and sampling and research initiatives.

(4) For the 2019 budget year, the budget for Annual IT Maintenance has increased based on expected maintenance requirements for existing computer and network systems

Lake Huron Primary Water Supply System 2019 Budget 2019 Capital Plan with Forecast for 2020 to 2028 (\$000's)

		Project	Prior Years	2018 Approved	-	2020	2021	2022	2023	2024 to
#	Description	Total	Budget	Budget	Budget					2028
	Financial Plan	100					50			50
LH1204	McGillivray HVAC Replacement	1,750						1,750		
	Concrete Crack Injection	150	60	30		30		30		
	Pipe Conveyance System	30		30	400					
LH1229	Security Upgrades	550		150	100	100	100	100		
LH1230	High Lift Pump Replacement	13,557		125	13,432					
LH1231	Alum Flow Switch Install	30		30						
	Arva Victaulic Repair	50		50						
	Control Panel/Wire Cleanup	25		25						
	HVAC Smoke Alarm	100		100						
	PAC System Assessment Study	50		50						
	Raw Water Flowmeter Replacement	125		125						
	RMF Settling Plate Study	50		50						
LH1238	Roof Replacement	200		200						
LH1239	Sluice Gate Repairs	150		150						
LH1240	Travelling Screen #1 Replacement	500		500						
LH1241	Review Inactivation Control Strategy and UV Upgrade	30		30						
LH1242	Hydraulic/Transient Model Update & Transient Monitoring	550			110	110	110	110	110	
LH1243	McGillivray Electrical Upgrades	5,477					685	4,792		
LH1244	Building Repairs	85			85					1
LH1245	Flocculator Walking Beam Rehab	200					200			ſ
LH1246	LL Building - Curtain Wall/Clearstory Window Replacement	156					156			
LH1247	LL Building - Roofing	572					572			
LH1249	LL/Clearwell Sluice Gate Replacement	260					260			
LH1250	McGillivray Pumps & Valves Refurbishment	3,842						3,842		
	PAC Feed/Transfer Pump System Replacement	715					715			
	Pre-treatment System Modifications	1,000					1,000			
LH1255	Crop Yield Monitoring - 2012 Rupture	110			110		,			
LH1256	Crop Yield Monitoring - 2014 Pipeline Twinning	300					300			
	Annual Maintenance ⁽¹⁾	1,500	125	125	125	125	125	125	125	625
	Distressed Pipe Replacement	1,550		350		300		300		600

cont'd

Lake Huron Primary Water Supply System 2019 Budget 2019 Capital Plan with Forecast for 2020 to 2028 (\$000's)

		Project	Prior Years	2018 Approved	2019 Proposed	2020	2021	2022	2023	2024 to
#	Description	Total	Budget	Budget	Budget					2028
LH1333	Asset Management Plan	300					150			150
LH1338	Plant Instrumentation	1,360	535	75	75	75	75	75	75	375
LH1352	Arva Reservoir Structural Repairs	2,000					2,000			
LH1369	Filter Media Rebuild	2,105	1,255	425	425					
LH1428	Distressed Pipe (11-5) Replacement	300	250	50						
LH1900	Record Drawings & Documents	431	401	5		5		5		15
LH2019	Lake Huron Master Plan Update	235			135					100
LH2034	Huron Flocc Room Railing Replacement			100						
Planned	Anticipated Asset Replacements (AMP)	5,359								5,359
Proposed	Chamber 63 Access Culvert	75			75					
Proposed	McGillivray Control Panel Replacement	150			150					
Proposed	UPS Coordination	110							110	
Proposed	Flash Mixer Upgrade	1,024			265	759				
Proposed	PLC Replacements	400			40	40	40	40	40	200
		\$ 47,613	\$ 2,626	\$ 2,775	\$ 15,127	\$ 1,544	\$ 6,538	\$ 11,169	\$ 460	\$ 7,474

* subject to rounding

Notes:

(1) Capital account for Board contributions to maintenance projects undertaken by the operating authority.

Lake Huron Primary Water Supply System 2019 Budget Capital Plan Sources of Financing (\$000's)

2018 Approved Budget	2019 Proposed Budget	2020	2021	2022	2023
2,189	3,683	767	4,967	9,731	387
536	11,444	257	1,571	758	73
50	-	-	-	-	-
-	-	-	-	-	-
-	-	520	-	680	-
\$ 2,775	\$ 15,127	\$ 1,544	\$ 6,538	\$ 11,169	\$ 460
	Approved Budget 2,189 536 50 -	Approved Budget Proposed Budget 2,189 3,683 536 11,444 50 - - - - - - -	Approved BudgetProposed Budget20202,1893,68376753611,44425750520	Approved BudgetProposed Budget202020212,1893,6837674,96753611,4442571,57150520-	Approved BudgetProposed Budget2020202120222,1893,6837674,9679,73153611,4442571,57175850520-680

subject to rounding

Lake Huron Primary Water Supply System 2019 Budget Asset Replacement Reserve Fund Analysis and Continuity Schedule (\$000's)

Asset Replacement Reserve Fund (1)	Actual						Proje	ecte	d				
Asset Replacement Reserve Fund (1)	2017		2018		2019	202	20	2021		20	22		2023
Reserve Fund Opening Balance Sources :	16,03	2	12,982		9,763	10	,107		14,717	1	5,728		14,433
Current Year Operating Contributions Proceeds from Sale of Assets Transfer from Capital Reserve Fund	2,70	8	3,194		3,857	5,	,156		5,705		8,168		8,479
Net Interest Earnings - 1.8% ⁽²⁾	19	1	196		170		221		272		269		333
Total Sources	\$ 18,93	1	\$ 16,372	\$	13,790	\$ 15	,484	\$	20,694	\$2	4,165	\$	23,245
Uses: Total Lifecycle Capital Projects Less: Other Funding Sources Less: Debenture Requirement	5,94	9	2,189		3,683		871 (104)		4,967 -		9,867 (136)		387
Net Current Year Fund Draws ⁽³⁾ Prior Years Capital Expenditures	5,94		2,189 4,420		3,683		767		4,967		9,731		387
Total Uses Reserve Fund Ending Balance	\$ 5,94 \$ 12,98		\$6,609 \$9,763	\$ \$	3,683 10,107	\$ \$ 14	767 ,717	\$ \$	4,967 15,728	-	9,731 4,433	\$ \$	387 22,859

* subject to rounding

Notes:

(1) The Asset Replacement Reserve Fund was established in 2008 to fund projects of a lifecycle nature to maintain existing levels of service and has an average annual target ending balance of \$7.5M.

(2) Projected net interest earnings based on an average rate of anticipated sources and uses of funds.

(3) Drawdowns are based on full/committed capital needs and not intended to project the actual cash flow of funds being utilized in a particular year.

Lake Huron Primary Water Supply System 2019 Budget Capital Reserve Fund Analysis and Continuity Schedule (\$000's)

Capital Reserve Fund (1)	Actual			Proj	ected			
	2017	2018	2018 2019		2021	2022	2023	
Reserve Fund Opening Balance Sources:	5,877	11,084	14,422	7,869	11,408	13,622	14,615	
Current Year Operating Contributions	5,688	3,743	4,610	3,624	3,563	1,498	1,963	
Net Interest Earnings - 1.8% ⁽²⁾	76	228	281	172	223	252	280	
Total Sources	\$ 11,641	\$ 15,055	\$ 19,313	\$ 11,665	\$ 15,194	\$ 15,372	\$ 16,858	
Uses: Total System Improvement & Growth Projects Less: Other Funding Sources Less: Debenture Requirement	557	536	11,444	673 (416)	1,571 -	1,302 (544)	73	
Net Current Year Fund Draws ⁽³⁾ Prior Years Capital Expenditures ⁽³⁾	557	536 97	11,444	257	1,571	758	73	
Transfer to Asset Replacement Reserve Fund Total Uses Reserve Fund Ending Balance	\$557 \$11,084	\$ 633 \$ 14,422	\$ 11,444 \$ 7,869	\$257 \$11,408	\$ 1,571 \$ 13,622	\$ 758 \$ 14,615		

* subject to rounding

Notes:

(1) The Capital Reserve Fund was established to fund projects of a growth nature, enhancing levels of service, or address issues which are regulatory or safety in nature.

(2) Projected net interest earnings based on an average rate of anticipated sources and uses of funds.

(3) Drawdowns are based on full capital needs and not intended to project the actual cash flow of funds in a particular year.

Lake Huron Primary Water Supply System 2019 Budget Emergency Reserve Fund Analysis and Continuity Schedule (\$000's)

Emergency Reserve Fund (1)	4	Actual			Proje	ecte	d			
Emergency Reserve Fund (1)		2017	2018	2019	2020	2	2021	2	022	2023
Reserve Fund Opening Balance Sources:		676	2,000	5,000	5,031		5,063		5,154	5,247
Current Year Operating Contributions		1,550	3,232	-						
Net Interest Earnings - 1.8% ⁽²⁾		8	34	31	32		91		93	94
Total Sources	\$	2,234	\$ 5,266	\$ 5,031	\$ 5,063	\$	5,154	\$	5,247	\$ 5,341
Uses:										
Current Year Capital Expenditures ⁽³⁾		234	50							
Prior Years Capital Expenditures ⁽³⁾			216							
Total Uses	\$	234	\$ 266	\$ -	\$ -	\$	-	\$	-	\$ -
Reserve Fund Ending Balance	\$	2,000	\$ 5,000	\$ 5,031	\$ 5,063	\$	5,154	\$	5,247	\$ 5,341

* subject to rounding

Notes:

(1) The Emergency Reserve Fund was established in 2011 to fund projects that arise on an emergency basis. This funding is to be in place outside of the Capital and Asset Replacement Reserve Funds and their defining guidelines. Contributions will be capped once the reserve fund balance reaches \$5.0 million.

(2) Projected net interest earnings based on an average rate of anticipated sources and uses of funds.

(3) Drawdowns are based on full capital needs and not intended to project the actual cash flow of funds in a particular year.

Lake Huron Primary Water Supply System Flow and Financial Analysis Summary (\$000's)

	Actual	Approved			Proje	ected		
Factors	2017	2018 Budget	2018	2019	2020	2021	2022	2023
Rate Increase ⁽¹⁾	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Total Flow m ³	45,896,828	41,110,000	48,070,690	44,668,650	45,167,823	45,873,277	46,589,216	47,315,797
Total Water Rate \$/m ³	0.4705	0.4846	0.4846	0.4943	0.5042	0.5143	0.5246	0.5351
Flow Volume Revenues	21,584	19,922	23,296	22,080	22,773	23,592	24,439	25,317
Other Revenue	27	20	22	26	20	20	20	20
Total Revenue	\$ 21,611	\$ 19,942	\$ 23,318	\$ 22,106	\$ 22,793	\$ 23,612	\$ 24,459	\$ 25,337
Operating Expenses ⁽²⁾	9,697	10,402	9,893	10,320	10,694	11,028	11,483	11,791
Administrative Expenses	632	1,918	1,877	1,938	1,938	1,938	1,938	1,938
Debt Servicing Costs ⁽³⁾	1,336	1,379	1,379	1,381	1,381	1,378	1,372	1,166
Total Operating & Administrative Expenses	\$ 11,665	\$ 13,699	\$ 13,149	\$ 13,639	\$ 14,013	\$ 14,344	\$ 14,793	\$ 14,895
Asset Replacement Reserve Fund Contributions	2,708	2,500	3,194	3,857	5,156	5,705	8,168	8,479
Capital Reserve Fund Contributions	5,688	3,743	3,743	4,610	3,624	3,563	1,498	1,963
Emergency Reserve Fund Contributions	1,550	-	3,232	-	-	-	-	-
Total Expenses	\$ 21,611	\$ 19,942	\$ 23,318	\$ 22,106	\$ 22,793	\$ 23,612	\$ 24,459	\$ 25,337

* subject to rounding

Notes:

(1) Rate increases recommended are consistent with the approved Financial Plan which provide for prudent financial planning to accommodate inflation, new capital requirements and adequate reserve fund balances.

(2) Operating expense projections reflect annual inflationary increases and anticipated adjustments, in accordance with the service agreement with the contracted operating authority.

- (3) Debenture Requirements:
 - Debt authorized (2007) for the PLC & SCADA Systems Upgrade (LH1330) in the amount of \$1.75M was issued in 2012 with payments beginning in 2013 (all-in interest rate of 2.8% for a 10 year term).
 - Debt authorized (2006) for the Backup Generator (LH1326) in the amount of \$1.5M was issued in 2013 with payments beginning in 2014 (all-in interest rate of 3.3% for a 10 year term).
 - Debt authorized (2011) for the Residue Management Plant (LH1902) in the amount of \$16M was partially issued in 2015 (\$7M) with payments beginning in 2016 (all-in interest rate of 1.9% for a 10 year term). It is not expected that any further debt will be required for this project.
 - Debt authorized (2012) for the Huron Transmission Main Twinning (LH1305) in the amount of \$4M was partially issued in 2015 (\$1.665M) with payments beginning in 2016 (all-in rate of 1.9% for a 10 year term). Further debt issuance in 2017 in the amount of \$0.4M and payments beginning in Sept/17 (all-in rate of 2.48% for a 10 for a 10 year term). It is not expected that any further debt will be required for this project.
 - Rates noted above could change depending upon market conditions at the time of debt issuance.

THE MUNICIPALITY OF LAMBTON SHORES

Community Services Department - 9575 Port Franks Road RR 1, Thedford, ON NoM 2N0 T: 519-243-1400 / 1-866-943-1400 F: 519-243-3500

September 27, 2018

Municipality of South Huron 322 Main Street South PO Box 759 Exeter, Ontario N0M 1S6

Attention: Rebekah Msuya-Collison, Clerk

Dear Ms. Msuya-Collison:

At the Grand Bend and Area Joint Sewage Board meeting held on September 14th, 2018, the following motion was passed:

THAT the Grand Bend Area Joint Sewage Board recommends that the 2019 Budget attached be forwarded to the Municipal Councils of Lambton Shores and South Huron for comment. Carried.

As such, on behalf of the Grand Bend Area Joint Sewage Board (the Board), please find attached the draft 2019 Budget for the Grand Bend Sewer System along with the corresponding staff report for review and comment by the South Huron Council.

The budget for the Grand Send Sewage System is created by the Board, and is funded by the Municipalities of Lambton Shores and South Huron. The draft 2019 total budget, for the Grand Bend Sewage System is \$740,070.90 which includes a contribution to the Capital Replacement and Rehabilitation Reserve Fund of \$209,100.

The funding proportions for each municipality are based on the defined capital contributions split, and actual flow contributed to the system. Flows are estimated based on a three year average; however final contributions from each municipality are based on actual flows. The flow estimates used to calculate the 2019 budget are included with the budget for Council's information. For clarity, the share proportion attributed to each municipality is shown on the attached budget.



The draft 2019 budget results in the following total funding contributions required from each Municipality:

South Huron: \$283,740.32 Lambton Shores: \$456,330.58

Clause 19 of the Tri-Party Agreement states the following:

19. Comments

Each Participating Municipality may, within thirty (30) days after receiving a draft Budget, make written comments to the Administering Municipality or the Administering Authority and the Joint Sewage Board. 20. Joint Sewage Board Approval

The Board kindly requests that the South Huron Council review and the attached draft 2019 Grand Bend Area Joint Sewage Board Budget and provide any comment they may have to the undersigned by October 30, 2018 for inclusion in the next Board meeting agenda.

Sincerely;

Steve McAuley, C.Tech Director of Community Services Lambton Shores, Administering Municipality

GRAND BEND AREA JOINT SEWAGE OPERATIONS Proposed 2019 Budget - September 2018 1st Draft

	r					l		
		2018 DRAFT YTD	0010 Draination	2019 BUDGET	Budget			
OWNER CONTRIBUTION	2018 BUDGET	To Aug.31	2018 Projection	2019 BUDGET	Increase\Decrease			
OWNER CONTRIBUTION				150 000 50	0 / 00 50			
LAMBTON SHORES CONTRIBUTION	448,167.06	223,950.31		456,330.58	8,163.52			
SOUTH HURON CONTRIBUTION	301,075.33	150,670.88		283,740.32	-17,335.01			
TOTAL REVENUE	749,242.39	374,621.19		740,070.90	-9,171.49			
						Lambton Shores	South Huron	Basis of
ADMINISTRATIVE AND GOVERNANCE						Share	Share	Cost Split
GENERAL ADMIN CHARGE STE	3.859.88		0.050.00	0.007.00	77.40	0 5 4 7 00	4 000 70	
INSURANCE STF	3,859.88	18.354.60	3,859.88 18,354.60	3,937.08 18.905.24	77.19 -1.423.98	2,547.29	1,389.79	1
INSURANCE PS2 & FORCEMAIN	20,329.21	16,354.60	16,354.60		,	12,231.69	6,673.55	1
	- 7 000 00		7 000 00	0.00	0.00	4 050 40	0 5 4 4 00	
AUDIT	7,200.00		7,200.00	7,200.00	0.00	4,658.40	2,541.60	1
ACCOUNTING SERVICES	2,040.00		2,040.00	2,040.00	0.00	1,319.88	720.12	1
IT	500.00			500.00	0.00	323.50	176.50	1
SCADA SUPPORT STF	2,000.00		2,000.00	2,000.00	0.00	1,294.00	706.00	1
ENGINEERING STF	2,000.00			2,000.00	0.00	1,294.00	706.00	1
LEGAL	1,000.00			1,000.00	0.00	647.00	353.00	1
TAXES STF	79,526.10	3,952.95	3,952.95	81,116.62	1,590.52	52,482.45	28,634.17	1
TAXES PS2	1,784.29	1,175.79	1,175.79	1,819.97	35.69	909.99	909.99	2
Transfer to Capital Reserve Fund	205,000.00		205,000.00	209,100.00	4,100.00	135,287.70	73,812.30	
TOTAL PART A	325,239.48	23,483.34	243,583.22	329,618.90	4,379.43	212,995.90	116,623.01	
FIXED MTC & OPERATIONAL COSTS								
TELEPHONE STF	2,000.00	1,309.01	2,000.00	2,000.00	0.00	1,186.77	813.23	3
TELEPHONE PS2		1,216.97	1,900.00	2,000.00		1,000.00	1,000.00	2
COMPUTER EXPENSE	500.00			500.00	0.00	296.69	203.31	3
BUILDING REPAIRS & MAINT. STF	20,000.00		15,000.00	20,000.00	0.00	11,867.66	8,132.34	3
GROUNDS MAINTENANCE	3,000.00		3,000.00	3,000.00	0.00	1,780.15	1,219.85	3
ANNUAL PREVENTIVE MAINTENACE *	10,176.00	6,783.94	10,176.00	10,176.00	0.00	6,038.26	4,137.74	3
WETLAND PEST CONTROL	1,000.00		1,000.00	1,000.00	0.00	593.38	406.62	3
TOTAL PART B	36,676.00	9,309.92	33,076.00	38,676.00	0.00	22,762.91	15,913.09	
VARIABLE OPERATIONAL COSTS (RELA	ATED TO FLOWS)				0.00			
OMI ADMINISTRATIVE COSTS STF *	33,475.00	22,316.55	33,475.00	34,325.00	850.00	20,367.87	13,957.13	3
OPERATOR WAGES STF *	97,892.00	65,261.33	97,892.00	100,378.00	2,486.00	59,562.58	40,815.42	3
ELECTRICAL COSTS STF	138,507.92	56,732.63	105,000.00	110,250.00	-28,257.92	65,420.46	44,829.54	3
ELECTRICAL COSTS PS2	13,000.00	5,942.24	9,000.00	9,450.00	-3,550.00	5,575.44	3,874.56	4
UNION GAS STF	26,100.00	27,707.43	37,000.00	38,850.00	12,750.00	23,052.92	15,797.08	3
WATER STF	20,000.00	10,998.54	17,000.00	18,000.00	-2,000.00	10,680.89	7,319.11	3
WATER PS2	500.00	187.65	300.00	500.00	0.00	295.00	205.00	4
CHEMICALS *	43,981.00	29,320.20	43,981.00	45,097.00	1,116.00	26,759.79	18,337.21	3
LABORATORY SAMPLING *	13,871.00	10,074.76	13,781.00	14,926.00	1,055.00	8,856.83	6,069.17	3
TOTAL PART C	387,326.92	228,541.33	357,429.00	371,776.00	-15,550.92	220,571.78	151,204.22	
TOTAL EXPENSES	749,242.39	261,334.59	634,088.22	740,070.90	-9,171.49	456,330.58	283,740.32	

Legend for Basis of cost split		
Capital split for plant (64.7% LS, 35.3% SH)	1	
Capital split for PS2 (50% LS, 50% SH)	2	
Flow Proportion to Plant	3	
Flow Proportion to PS2	4	

GRAND BEND AREA JOINT SEWAGE OPERATIONS 2019 Flow Calculations

	2018 FLOW CALCULA					-
Month	PS2	POG	HC Playhouse	Pinery	Oakwood	Grand Cove
Jan	28126	3743	115	22	1431	10453
Feb	28083	2060	129	36	1378	9662
Mar	17998	564	105	27	1315	8464
Apr	30773	1441	183	76	1952	8285
May	23009	460	180	806	1606	7318
June	22606	527	455	2706	2302	5077
July	30344	406	402	4909	2262	5001
Aug	29428	690	421	6492	2961	4967
Sept	20340	418	215	2546	2239	5062
Oct	17979	388	133	651	2162	5635
Nov (2016)	23093	851	103	24	1744	8570
Dec (2016)	17427	345	105	17	1477	6564
Total	289206	11893	2546	18312	22829	85058
Avg Month	24101	991	212	1526	1902	7088
Avg Annual	289206	11893	2546	18312	22829	85058
ndicates 2017 actual flows					•	

2018 FLOW CALCULATION ESTIMATE (m3)								
	2019 (3 YR AVG)	2018 (projection)	2017	2016				
Main Pump (PS2)	271,729	289,206	276,530	249,452				
GRAND COVE	88,218	85,058	88,076	91,520				
OAKWOOD	23,193	22,829	24,179	22,570				
Lambton Shores (PS2 - GC & Oakwood)	160,319	181,319	164,275	135,362				
POG	9,182	11,893	8,932	6,720				
нср	2,301	2,546	2,674	1,684				
Pinery	19,022	18,312	18,170	20,584				
Grand Total Flows To GB plant (PS2 Flow Plus Remaining Sources)	302,234	321,957	306,306	278,440				
	MUNICIPAL TOTAL	_S						
SOUTH HURON	122,894	122,326	123,861	122,494				
LAMBTON SHORES	179,341	199,631	182,445	155,946				
TOTAL	302,234	321,957	306,306	278,440				

MUNCIPAL FLOW APROPORTIONMENT						
	Lambton Shores	South Huron				
PS2 Flow Proportions	59.00%	41.00%				
GB Plant Proportions	59.34%	40.66%				

Reven	ue Calculation		
	Total	Lambton Shores	South Huror
Part A - per agreement			
PS 2- 50% LS, 50% SH	1,819.97	909.99	909.99
Treatment Facility - 64.7% LS, 35.3% SH	327,798.93	212,085.91	115,713.02
Total Part A	329,618.90	212,995.90	116,623.01
Part B - Flow Based			
PS2	-	-	-
Plant	38,676.00	22,949.67	15,726.33
Total Part A	38,676.00	22,949.67	15,726.33
Part C - Flow Based			
PS2	9,950.00	5,870.44	4,079.56
Plant	344,326.00	204,317.14	140,008.86
Total Part C	354,276.00	210,187.58	144,088.42
Total	722,570.90	446,133.15	276,437.76



Staff Report

Report To:	Dan Best, Chief Administrative Officer		
From:	Don Giberson, Director of Operations and		
	Infrastructure		
Date:	October 15 2018		
Report:	ESD.18.33		
Subject:	Tender Results for the Supply of Winter Sand		

Recommendations:

That South Huron Council receive the report from Don Giberson, Director of Operations and Infrastructure RE: Tender Results for the Supply of Winter Sand; and

That South Huron Council accept the tender received from the low bidder N.C. Jones & Sons and authorize the award of a contract for Supply of Winter Sand in the amount of \$35,002.88 (including HST).

Purpose:

The purpose of this report is to notify Council of the results of the tender for the supply winter sand, to mix/stockpile with road salt provided by the Municipality and to haul road salt from Compass Minerals in Goderich to Municipal Works Yards in South Huron and to recommend award of a contract to the low bidder.

Background and Analysis:

The tender for the Supply of Winter Sand was advertised on the Bids & Tenders web site on August 14, 2018. Tenders closed on Thursday, September 20, 2018 at 2:00pm and three (3) tenders were received by the Municipality. Tenders were opened by Deputy Mayor Dave Frayne, in the presence of Angela Shipway, Financial Services Supervisor; Maggie McBride, Treasury Assistant; Don Giberson, Director of Operations and Infrastructure and several contractors.

The following are the tender results:

	Contractor	Price	HST	Total Cost
		(Excluding HST)		(Including HST)
1	N.C. Jones & Sons	\$30,976.00	\$4,026.88	\$35,002.88
2	Clarence Carter and Sons Ltd	\$32,800.00	\$4,264.00	\$37,064.00
3	Ryan Bossence	\$33,472.00	\$4,351.36	\$37,823.36

Tenders were checked by the Director; found to be complete and in conformance with the tender specifications.

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

Increased Communications and Municipal Leadership

Transparent, Accountable and Collaborative Governance

Dedicated Economic Development Effort

Financial Impact:

The costs associated with the supply of winter sand are included in the 2018 Transportation Services Operating Budget.

A detailed financial analysis of the tender received from the low bidder was carried out and summarized as follows:

FINANCIAL ANALYSIS SUMMARY						
	Unit Price	Total				
Supply, load, haul & mix 1600 tonne of winter sand at Usborne Yard	\$10.05	\$16,080.00				
Supply, load, haul & mix 960 tonne of winter sand at Stephen Yard	\$10.25	\$9,840.00				
Haul salt from Compass Mine in Goderich to Usborne Yard	\$7.90	\$3,160.00				
Haul salt from Compass Mine in Goderich to Stephen Yard	\$7.90	<u>\$1,896.00</u>				
Subtotal		\$30,976.00				
13% HST		<u>\$4,026.88</u>				
TOTAL		\$35,002.88				
Cost prior to HST		\$30,976.00				
Non-recoverable HST		\$545.18				
TOTAL		\$31,521.18				

The increase in the total cost is due an increase in the quantity of winter sand over previous years. The quantity increase is as a result of an operational change to revise the sand/salt mix at the Usborne Shed from a 55/45 mix to an 80/20 mix. There will be an offsetting decrease in road salt costs as a result of changing the sand/salt mix.

The 2018 budget for winter sand and salt is \$82,700 and the actual expenditures to date are \$41,852. This is much higher than normal for this time of year. This increase in costs is a result of the extremely harsh winter and extensive winter control operations carried out from January to March.

Based on previous year's average snowfall and the expected expenditures to prepare for the 2018/19 winter season, it is anticipated that winter sand/salt material expenses for 2018 may be over budget. It is also anticipated that this potential over-expenditure will be offset by other under-expenditures in the Transportation Services Operating Budget. At the end of the fiscal year, if the overall Winter Control costs are over budget, funds could be transferred from the Winter Stabilization Reserve to cover the extra costs.

Historically there have been few bidders on the Winter Sand tender. In order to give Council a more fulsome picture of pricing trends for winter sand, an analysis was carried out on the historical costs as follows:

	Historical Winter Sand costs per tonne						
	2013	2014	2015	2016	2017	2018	
Usborne Yard	\$9.15	\$10.25	\$10.75	\$9.50	\$11.05	\$10.05	
Stephen Yard	\$8.65	\$9.75	\$10.85	\$10.50	\$10.55	\$10.25	
NOTE: The 2018 unit	t price for th	e supply of	winter sand	is lower thar	n the previou	us year.	
		Historical c	osts per to	onne to ha	ul road sal	t	
	2013	2014	2015	2016	2017	2018	
Usborne Yard	\$7.50	\$7.50	\$7.50	\$8.00	\$7.50	\$7.90	
Stephen Yard	\$7.85	\$7.85	\$7.85	\$8.00	\$7.85	\$7.90	

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

Approved 2018 Transportation Services Operating Budget

Consultation:

Director of Financial Services Supervisor of Operations (Roads)

Related Documents:

None

Respectfully submitted,



Staff Report

Report To:	Dan Best, Chief Administrative Officer
From:	Don Giberson, Director of Operations and
	Infrastructure
Date:	October 15 2018
Report:	ESD.18.34
Subject:	Tender Results for the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments.

Recommendations:

That South Huron Council receive the report from Don Giberson, Director of Operations and Infrastructure RE: Tender Results for the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments. AND;

That South Huron Council accept the tender received from the low bidder Huron Tractor Ltd and authorize the award of a contract for Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments in the amount of \$115,300 (including applicable HST).

Purpose:

The purpose of this report is to notify Council of the results of the tender for the supply of a utility tractor, snow blade, snow blower and roadside mower attachments and to recommend award of a contract to the low bidder.

Background and Analysis:

The tender for the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments was advertised on the Bids & Tenders web site on August 14, 2018. Tenders closed on Thursday, September 20, 2018 at 2:00pm and ten (10) tenders were received by the Municipality. Tenders were opened by Deputy Mayor Dave Frayne, in the presence of Angela Shipway, Financial Services Supervisor; Maggie McBride, Financial Services Coordinator; Don Giberson, Director of Operations and Infrastructure and several contractors.

Tenders were checked by the Director of Operations and Infrastructure. Five of the tenders received did not meet the minimum specifications set out in the tender specifications. The remaining five tenders were found to be complete and in conformance with the tender specifications.

The following are the results of the tenders that met the minimum specifications:

	Dealership Name	Equipment Description	Quoted Price (excluding HST)	Non-recoveable HST	Total Price
1	Huron Tractor Ltd	John Deere 5115R Utility Tractor FT-4 (115hp)	\$79,900.00	\$0.00	\$79,900.00
		John Deere R240 Disc Mower (6 discs)	\$14,475.00	\$0.00	\$14,475.00
		Lucknow D85-OR (Snow Blower)	\$10,575.00	\$0.00	\$10,575.00
		Horst 4200 (Snow Blade)	\$10,350.00	\$0.00	\$10,350.00
				TOTAL	\$115,300.00
2	Delta Power Equipment	Case IH Farmall 115U (115hp)	\$85,049.56	\$1,496.87	\$86,546.43
		Disc Mower (6 Discs)	\$15,146.00	\$266.57	\$15,412.57
		(Snow Blower)	\$11,288.44	\$198.68	\$11,487.12
		Horst 4203W (Snow Blade)	\$13,272.00	\$233.59	\$13,505.59
				TOTAL	\$126,951.71
3	Farm Power Equipment Inc.	Deutz Fahr 5120 G (116hp)	\$90,988.00	\$0.00	\$90,988.00
		Disc Mower (6 Discs)	\$12,305.00	\$0.00	\$12,305.00
		(Snow Blower)	\$13,711.00	\$0.00	\$13,711.00
		Horst 4203W (Snow Blade)	\$13,503.00	\$0.00	\$13,503.00
	•			TOTAL	\$130,507.00
4	McGavin Farm Equipment Ltd	New Holland T-5 120 Electro Command (117 hp)	\$115,500.00	\$2,032.80	\$117,532.80
		New Holland Disc Mower (6 Discs)	\$15,400.00	\$271.04	\$15,671.04
		Smyth (Snow Blower)	\$12,000.00	\$211.20	\$12,211.20
		Horst 4200 Series (Snow Blade)	\$13,600.00	\$239.36	\$13,839.36
		·	-	TOTAL	\$159,254.40
5	McGavin Farm Equipment Ltd	New Holland T-6 155 Electro Command (125 hp)	\$123,800.00	\$2,178.88	\$125,978.88
		New Holland Disc Mower (6 Discs)	\$15,400.00	\$271.04	\$15,671.04
		Smyth (Snow Blower)	\$12,000.00	\$211.20	\$12,211.20
		Horst 4200 Series (Snow Blade)	\$13,600.00	\$239.36	\$13,839.36
		·		TOTAL	\$167,700.48

Operational Considerations:

There were no alternatives considered.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process.

The recommendations and actions outlined in this report are reflective of the following strategic objectives:

Administrative Efficiency and Fiscal Responsibility

Increased Communications and Municipal Leadership

Transparent, Accountable and Collaborative Governance

Dedicated Economic Development Effort

Financial Impact:

The costs associated with the Supply of a Utility Tractor, Snow Blade, Snow Blower and Roadside Mower Attachments are included in the 2018 Transportation Services Capital Budget.

A detailed financial analysis of the tender received from the low bidder was carried out and summarized as follows:

FINANCIAL ANALYSIS SUMMARY					
	Unit Price	Total			
Supply & Delivery 115 HP Utility Tactor	\$79,900.00	\$79,900.00			
Supply & Delivery Snow Blade	\$14,475.00	\$14,475.00			
Supply & Delivery PTO driven Snow Blower	\$10,575.00	\$10,575.00			
Supply & Delivery 6' wide Roadside Mower	\$10,350.00	<u>\$10,350.00</u>			
Subtotal		\$115,300.00			
13% HST		<u>\$0.00</u>			
TOTAL		\$115,300.00			
Cost prior to HST		\$115,300.00			
Non-recoverable HST		\$0.00			
TOTAL		\$115,300.00			
Approved Budget to replace roadside disk mower (Equip #140)		\$12,000.00			
Approved Budget to replace Utility Tractor, PTO & blower (Equip #110)		\$139,500.00			
Total Approved budget		\$151,500.00			
Net Difference Approved Budget vs Tender Cost		\$36,200.00			

The total cost for the supply of Utility Tractor, snow blade, snow blower and roadside mower attachments, including applicable non-recoverable HST is within the approved amounts in the 2018 Transportation Services Capital Budget.

The Utility tractor is a replacement for Equipment #110 - 2009 JD 5603 tractor/loader with PTO & blower. Please note that it was determined to be more operationally efficient to replace the tractor/loader with a tractor and snow blade at a reduced capital cost. The roadside mower (Equipment #140 2015 Keverland disk mower) and the PTO driven snow blower are equivalent replacements for existing equipment.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

1. Approved 2018 Transportation Services Capital Budget

Consultation:

Director of Financial Services Supervisor of Operations (Roads)

Related Documents:

None

Respectfully submitted,



Staff Report

Dan Best, Chief Administrative Officer			
Sandy Becker, Director of Financial Services			
October 15 2018			
FIN.18.19 Council Expenses			
2018 Council Expenses as of September 30, 2018			

Recommendations:

That South Huron Council receives the report from S.Becker, Director of Financial Services/Treasurer re: 2018 Council Expenses as of September 30, 2018

Purpose:

To provide Council with a summary of Council expenses for the period ending September 30, 2018 for information.

Background and Analysis:

Remuneration and expenses of members of Council has been defined in By-Law 59-2013. The chart below provides the YTD expenses incurred by members of Council as of September 30, 2018.

COUNCIL 2018 EXPENSES as of September 30, 2018 Per ByLaw 59-2013								
Council Member	Registration		Travel expenses (including parking,meals and accomodations)		Miscellaneous Expenses (including clothing allowance)		Total	
Cole, Maureen	\$	2,879.28	\$	6,036.56	\$	137.38	\$	9,053.22
Frayne, David	\$	589.68	\$	747.64	\$	-	\$	1,337.32
Deluca, Wayne	\$	885.07	\$	2,438.24	\$	-	\$	3,323.31
Hebert, Craig	\$	773.38	\$	1,916.71	\$	85.00	\$	2,775.09
Tomes, Tom	\$	803.38	\$	1,539.93	\$	_	\$	2,343.31
Vaughan, Marissa	\$	1,140.07	\$	2,056.00	\$	-	\$	3,196.07
Oke, Ted	\$	773.38	\$	1,970.48	\$	-	\$	2,743.86
Total	\$	7,844.24	\$	16,705.56	\$	222.38	\$	24,772.18

Operational Considerations:

No alternatives are presented related to the proposed recommendation.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015-2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

 $\sqrt{\text{Transparent}, \text{Accountable, and Collaborative Governance}}$

Financial Impact:

The 2018 budget for training/conferences, travel and supplies is \$21,500. As of the time of this report, the overall expenditures are at 74% of the approved budget for this costing centre.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

By-Law 59-2013 Remuneration and expenses Municipal Act, Section 283

Page 205

Page | 3

Consultation:

Dan Best, Chief Administrative Officer

Related Documents:

Respectfully submitted,

Sandy Becker, Director of Financial Services



Staff Report

Report To:	Dan Best, Chief Administrative Officer			
From:	Sandy Becker, Director of Financial Services			
Date:	October 15 2018			
Report:	FIN.18.20			
Subject:	2018 Third Quarter Operating Variance Report			

Recommendations:

That South Huron Council receive the report from S. Becker, Director of Financial Services re: 2018 Third Quarter Operating Variance Report for information only.

Purpose:

The purpose of this report is to update South Huron Council regarding the operating performance as of September 30, 2018.

Background and Analysis:

The department managers are accountable to monitor their departmental revenues and expenditures and project to the end of the fiscal period to ensure that they remain within the approved budget.

The quarterly financial report represents the municipal financial activity for the period ending September 30, 2018 on a basis consistent with that of the budget adopted by Council.

The third quarter report includes 75% of the fiscal operating year. A straight line budget theory has been used to represent the budget year to date to give an idea of what nine months of the budget looks like. It is calculated by evenly distributing the budget over the fiscal year. This theory fits certain line items better than others and is, therefore, merely a guide. The expectation is that the third quarter would see actual results around 75% of the total budget, but this is subject to timing differences such as, annual membership payments, lump sum insurance payments, etc.

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are presented.

South Huron's Strategic Plan:

The recommendation(s) included in this Staff Report support the following goals identified in the 2015-2019 Strategic Plan:

Administrative Efficiency and Fiscal Responsibility

Transparent, Accountable and Collaborative Governance

The quarterly variance reporting framework assists managers in identifying emerging issues along with steps or processes required to adjust activities to stay within the budget or to respond to those emerging issues.

The consistency of providing these accountability and information reports assist council in better understanding the operational and budgetary issues facing various costing centres.

Financial Impact:

The results of the third quarter operating variances do not suggest any adverse financial impacts.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

Budget Development and Financial Reporting Policy & Procedure Reserves and Reserves Fund Policy & Procedure

Consultation:

The following department managers provided an update on each of their respective areas of responsibility;

Dwayne McNab, Development Services Manager Jo-Anne Fields, Community Services Manager Don Giberson, Environmental Services Director

Related Documents:

Appendix A – Q3 Operating Variances by Department

Prepared by,

Angela Shipway, Financial Services Supervisor

Respectfully submitted,

Sandy Becker, Director of Financial Services

Appendix A – Q3 Operating Variances by Department

Building & Development Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	% of Budget Utilized
Revenue:					
Fines/Penalties ¹	3,000	2,250	406	(2,594)	13.54%
Other Revenue ²	30,000	22,500	2,987	(27,013)	9.96%
Permits/Licenses	206,500	154,875	299,574	93,074	145.07%
Transfer from Reserves ³	52,690	39,518	-	(52,690)	0.00%

¹ Fines/Penalties lower than anticipated.

² Other revenue includes rebill revenues for professional services. As mentioned below, these services are based on public demand.

Page 208

³ This is an annual transfer that will be completed upon year end.

User Fees/Charges	29,500	22,125	28,261	(1,239)	95.80%
Total Revenue	321,690	241,268	331,228	(5,462)	102.97%
Expense:					
Contracted Services ⁴	96,639	72,479	19,255	(77,384)	19.92%
Materials	82,259	61,694	30,343	(51,916)	36.89%
Transfer to Reserves	3,279	2,459	2,459	(820)	74.99%
Wages & Benefits	284,298	213,224	195,409	(88,890)	68.73%
Total Expenses	466,475	349,856	247,465	(219,010)	53.05%
Net Total	(144,785)	(108,589)	83,763	228,548	

The Building and Planning departments have seen greater than anticipated activity, and thus, revenues. With expenses in line with budget and a favourable revenue variance, building and development services is expected to finish favourably overall. It is important to note that the variance report is run on a specific date and includes any and all transactions posted up to that date.

Services
Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	% of Budget Utilized
Revenue:					
Cemetery	90,000	67,500	66,791	(23,209)	74.21%
Donations/Fundraising	350	263	73	(277)	20.79%
Investment Income ⁵	17,400	13,050	16,029	(1,371)	92.12%
Other Revenue ⁶	0	0	2,065	2,065	0.00%
Total Revenue	107,750	80,813	84,959	(22,791)	78.85%
Expense:					
Contracted Services ⁷	4,850	3,638	4,324	(526)	89.16%

⁴ These include professional fees and are based on demand from the public.

⁵ Rising interest rates and a slight change in investment strategy has assisted in a favourable return.

⁶ This includes an HST recovery.

⁷ Most of these services are IT related and are paid annually.

Materials	42,610	31,958	31,200	(11,410)	73.22%
Transfer to Reserves	10,179	7,634	6,455	(3,724)	63.42%
Wages & Benefits ⁸	82,935	62,201	81,422	(1,513)	98.18%
Total Expense	140,574	105,430	123,401	(17,172)	87.78%
Net Total	(32,824)	(24,618)	(38,442)	(5,619)	

The expenses for the Cemetery appear slightly high when using the 75% benchmark for Q3. This is due to the seasonal nature of Cemetery Operations. It is anticipated that the Cemetery will end up in a favourable position at year-end.

Emergency Services

		Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Re	evenue:					
Do	nations/Fundraising	8,000	6,000	4,762	(3,238)	59.53%
Gr	ant Revenues ⁹	25,000	18,750	32,703	7,703	130.81%
Ot	her Revenue	5,000	3,750	1,345	(3,655)	26.90%
Us	er Fees/Charges ¹⁰	19,220	14,415	24,664	5,444	128.32%
	Total Revenue	57,220	42,915	63,474	6,254	110.93%
Ех	pense:					
Co	ontracted Services	103,198	77,399	65,395	(37,804)	63.37%
Ма	aterials ¹¹	221,540	166,155	186,434	(35,106)	84.15%
Tr	ansfer to Reserves	172,231	129,173	129,173	(43,058)	75.00%
W	ages & Benefits	436,036	327,027	305,308	(130,728)	70.02%
	Total Expense	933,005	699,754	686,309	(246,696)	73.56%
Ne	et Total	(875,785)	(656,839)	(622,835)	252,950	

The revenues have significantly increased since the second quarter report as a result of public demand for fire services. Expenses for fire services are reasonably within budget.

⁸ The bulk of the wages/benefits are expected in the warmer months due to the seasonal nature of the program.

⁹ Grant revenues are based on variable factors within Fire Agreements.

¹⁰ User fees recovered from the Q2 report due to the increase in fire calls for department support, non-resident collisions, unauthorized burns etc.

¹¹ Includes an annual premium for insurance.

General Administratio	n
------------------------------	---

		Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	% of Budget Spent
Re	evenue:					
	nes/Penalties	193,230	144,923	126,332	(66,898)	65.38%
	ant Revenues	1,502,313	1,126,735	1,115,803	(386,510)	74.27%
	/estment Income ¹²	70,000	52,500	184,355	114,355	263.36%
	her Revenue	2,500	1,875	2,769	269	110.77%
	ermits/Licenses	,	,	,		
		12,200	9,150	8,959	(3,241)	73.43%
	xation Levy ¹³	8,535,451	6,401,588	8,617,770	82,319	100.96%
	ansfer from eserves ¹⁴	163,767	122,825	-	(163,767)	0.00%
Us	er Fees/Charges	21,400	16,050	21,062	(338)	98.42%
	Total Revenue	10,500,861	7,875,646	10,077,050	(423,811)	95.96%
Ex	pense:					
Сс	ontracted Services	2,096,318	1,572,239	1,539,808	(556,510)	73.45%
Ex	ternal Transfers	278,230	208,672	130,674	(147,556)	46.97%
Gr	ant Expenses	55,426	41,570	40,408	(15,018)	72.90%
Ma	aterials	364,182	273,137	205,431	(158,751)	56.41%
Tra	ansfer to Reserves	52,313	39,235	36,174	(16,139)	69.15%
Wa	ages & Benefits	1,066,121	799,591	789,555	(276,566)	74.06%
	Total Expense	3,912,589	2,934,442	2,742,050	(1,170,539)	70.08%
Ne	et Total	6,588,272	4,941,204	7,335,000	746,728	

¹² Finance reviewed the investment strategy including an analysis of cash flow requirements which allowed investment of general funds at a higher interest rate. Slight increase in interest rates have also contributed to the increase in investment income for 2018.

¹³ Final tax bills have been issued/posted for the remainder of the fiscal year.

¹⁴ Annual transfer at year-end.

Revenues for General Administration are higher than expected due mainly to the increase in investment income . Expenses are in line with budget for this part of the fiscal year.

Recreation Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	% of Budget Spent
Revenue:					
Donations/Fundraising ¹⁵	37,600	28,200	24,405	(13,195)	64.91%
Grant Revenues ¹⁶	20,621	15,466	-	(20,621)	0.00%
Other Revenue	10,700	8,025	6,706	(3,994)	62.67%
User Fees/Charges	671,762	503,822	460,984	(210,778)	68.62%
Total Revenue	740,683	555,512	492,095	(248,588)	66.44%
Expense:					
Contracted Services ¹⁷	143,720	107,790	72,100	(71,620)	50.17%
Debt - Interest Payments	30,257	22,693	15,301	(14,956)	50.57%
Debt - Principal ¹⁸ Payments	34,484	25,863	17,069	(17,415)	49.50%
Grant Expenses	33,091	24,818	33,091	-	100.00%
Materials	770,400	577,800	578,499	(191,901)	75.09%
Transfer to Reserves	133,173	99,880	99,879	(33,294)	75.00%
Wages & Benefits	973,659	730,244	706,985	(266,674)	72.61%
Total Expense	2,118,784	1,589,088	1,522,925	(595,859)	71.88%
Net Total	(1,378,101)	(1,033,576)	(1,030,831)	347,271	

¹⁵ Donations are largely collected for advertising in the arena on the boards and ice resurfacer. This is seasonal and has not yet been collected.

¹⁶ This includes the Bluewater share for the Dashwood Community Centre which has not yet been received.

¹⁷ Slightly low as this figure contains a Recreation Master Plan which has not yet been completed.

¹⁸ Debt principal and interest were not posted prior to generating this variance report. Anticipated to be within budget.

Page | 8

Page 213

Revenues are slightly low for Recreation, however, seasonal values for ice rentals impact the overall revenues. It is anticipated that these values will increase. Expenses are within a reasonable range for the third quarter.

Sewer Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:					
Fines/Penalties	0	0	2,949	2,949	0.00%
General Revenue	261,770	196,328	261,178	(592)	99.77%
Other Revenue ¹⁹	30,000	22,500	17,295	(12,705)	57.65%
User Fees/Charges ²⁰	1,723,320	1,292,490	1,055,162	(668,158)	61.23%
Total Revenue	2,015,090	1,511,318	1,336,584	(678,506)	66.33%
Expense:					
Contracted Services ²¹	297,910	223,433	254,813	(43,097)	85.53%
Debt - Interest Payments	409,851	307,388	327,025	(82,826)	79.79%
Debt - Principal payments	337,008	252,756	315,703	(21,305)	93.68%
Materials	280,915	210,686	220,708	(60,207)	78.57%
Transfer to Reserves	475,613	356,710	356,710	(118,903)	75.00%
Wages & Benefits	215,070	161,303	150,254	(64,817)	69.86%
Total Expense	2,016,367	1,512,276	1,625,212	(391,155)	80.60%
Net Total	(1,277)	(958)	(288,628)	(287,350)	

The revenues appear slightly low due to timing differences between billing and reporting cycles as well as revenues based on public demand for services. The expenses are slightly higher than anticipated at this point due to unexpected costs associated with the Sewage Lagoon and the increased capital replacement contribution for the Grand Bend Sewage Treatment Plant.

¹⁹ This is rebill revenues and are volatile based on public demands for services. ²⁰ This includes Stephen's third quarter levy, but not Exeter due to the timing difference in the billing and reporting cycles.

²¹ This includes an unbudgeted amount for capital replacement for the Grand Bend Sewage Treatment Plant, approved by Council (Motion #12-2018) post-budget.

Solid Waste Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:					
Other Revenue	33,500	25,125	17,510	(15,990)	52.27%
Transfer from Reserves	45,749	34,312	0	(45,749)	0.00%
User Fees/Charges ²²	1,153,199	864,899	776,058	(377,141)	67.30%
Total Revenue	1,232,448	924,336	793,568	(438,879)	64.39%
Expense:					
Contracted Services	873,526	655,145	665,905	(207,621)	76.23%
Materials ²³	56,586	42,440	55,515	(1,071)	98.11%
Transfer to Reserves	124,297	93,223	14,473	(109,824)	11.64%
Wages & Benefits	178,136	133,602	106,328	(71,808)	59.69%
Total Expense	1,232,545	924,409	842,221	(390,324)	68.33%
Net Total	(97)	(73)	(48,652)	(48,555)	

Landfill revenues are slightly low which can be a result of the Exeter third quarter levy not being included due to timing differences between billing and reporting cycles. The expenses are, similarly, slightly lower than anticipated.

Streetlighting

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue: General Revenue ²⁴	123,519	92,639	124,138	619	100.50%
Other Revenue	0	0	951	951	0.00%
Total Revenue	123,519	92,639	125,089	1,570	101.27%

²² Includes Stephen's third quarter levy, but not Exeter due to timing differences between reporting and billing cycles.

²³ This includes an amount paid to the Municipality of Bluewater for the Landfill site property taxes. As a result of the 2016 assessment the land values have increased substantially.

²⁴ These are the special area rates that have been billed with the Final Tax Bills of 2018.

Expense:					
Materials	100,400	75,300	57,429	(42,971)	57.20%
Transfer to	23,119	17,339	17,339	(5,780)	75.00%
Reserves					
Total Expense	123,519	92,639	74,768	(48,751)	60.53%
Net Total	0	0	50,321	50,321	0.00%

Streetlighting is anticipated to be within budget.

Transportation Services

		Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	% of Budget Spent
Rev	enue:					
Grar	nt Revenues ²⁵	92,613	69,460	-	(92,613)	0.00%
Othe	er Revenue	88,220	66,165	51,780	(36,440)	58.69%
Tran	nsfer from Reserves ²⁶	20,000	15,000		(20,000)	0.00%
Usei	r Fees/Charges	14,476	10,857	14,476	-	100.00%
	Total Revenue	215,309	161,482	66,256	(149,053)	30.77%
Rev	enue:					
Con	tracted Services ²⁷	185,778	139,333	38,142	(147,636)	20.53%
Deb	t Payments - Interest	1,006	755	1,006	-	100.00%
Deb	t Payments - Principal	41,919	31,440	41,919	-	100.00%
Grar	nt Expenses	85,226	63,920	31,535	(53,691)	37.00%
Mate	erials	1,250,491	937,868	902,227	(348,264)	72.15%

²⁵ Grant Revenues include FCM for asset management program and Municipal Drain grant which have not yet been received. ²⁶ Annual reserve transfer completed at year end. ²⁷ Slightly low due to the timing of the asset management program. RFP is out for

data gap fulfillment so this is anticipated to increase.

Page | 11

Transfer to Reserves		700,854	525,641	525,641	(175,213)	75.00%
Waę	ges & Benefits	924,319	693,239	718,304	(206,015)	77.71%
	Total Expense	3,189,594	2,392,196	2,258,775	(930,819)	70.82%
Net	Total	(2,974,285)	(2,230,714)	(2,192,520)	781,766	

The expenses for Transportation appear to be in line with budget for this time of the year. Certain line items are low to compensate for greater operational demand in other areas.

Water Services

	Budget	Budget YTD	YTD Actual Cost	Variance Over/(Under)	YTD Percentage
Revenue:					
Fines/Penalties	18,000	13,500	15,941	(2.050)	88.56%
				(2,059)	
General Revenue	134,828	101,121	134,546	(282)	99.79%
Other Revenue	50,000	37,500	38,464	(11,536)	76.93%
Transfer from Reserves	10,900	8,175	0	(10,900)	0.00%
User Fees/Charges ²⁸	3,628,419	2,721,314	2,045,432	(1,582,987)	56.37%
Total Revenue	3,842,147	2,881,610	2,234,383	(1,607,764)	58.15%
Expense:					
Contracted Services ²⁹	148,500	111,375	37,205	(111,295)	25.05%
Debt - Interest Payments	536,734	402,551	270,725	(266,009)	50.44%
Debt - Principal payments	384,115	288,086	194,554	(189,561)	50.65%
Materials	1,056,609	792,457	688,614	(367,995)	65.17%
Transfer to Reserves	816,000	612,000	612,000	(204,000)	75.00%
Wages & Benefits	528,264	396,198	399,631	(128,633)	75.65%
Total Expense	3,470,222	2,602,666	2,202,728	(1,267,493)	63.48%
Net Total	371,925	278,944	31,655	(340,270)	

²⁸ User fee revenues are low due to timing of Exeter utility billing.

²⁹ This includes the Water/Sewer Rates Study which is currently wrapping up so this is expected to increase with invoices received. Additionally, an amount for asset management was included here and an RFP is out for those services.

Water revenues appear slightly low due to the timing differences in billing and reporting cycles. Exeter third quarter billing is not included here. All other revenues are on or above target. Expenses are all within budget as well.



Dan Best, Chief Administrative Officer
Sandy Becker, Director of Financial Services
October 15 2018
FIN.18.21
2018 Capital Progress Report – September

Recommendations:

That South Huron Council receives the report from S. Becker, Director of Financial Services re: 2018 Capital Progress Report – September completed as of September 30, 2018 for information only.

Purpose:

The purpose of this staff report is to provide Council with a summary of the status of the 2018 capital projects.

Background and Analysis:

In September the Municipality is well into the busy construction season with many projects underway and some wrapping up. Invoices have started coming in depending on the vendors' processes. It is important to note that there is a timing lag due to invoicing and the YTD actual costs do not necessarily reflect the % of work completed. The % of work completed is based on a qualitative analysis of the work or process completed for the projects.

Each department manager has provided a status update for their respective 2018 approved capital projects. Although this is just over the mid point in the fiscal year capital invoicing is weighted more heavily in the latter half.

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are required.

South Huron's Strategic Plan:

The recommendation(s) included in this Staff Report support the following goals identified in the 2015-2019 Strategic Plan:

- 1. Administrative Efficiency and Fiscal Responsibility
- 2. Transparent, Accountable and Collaborative Governance

The monthly capital project status report keeps Council and the public informed on the actual costs, budget project status, and explanations for delays or expected commencement for each project in the capital budget.

The report assists Council in keeping track of its approved priorities and expected delivery times for projects. It also serves to keep staff accountable for the budget priorities requested and granted.

Financial Impact:

There are no financial implications for the Municipality arising from the recommendation in this report.

Legal Impact:

There are no legal implications for the Municipality arising from the recommendation in this report.

Staffing Impact:

There are no staffing implications for the Municipality arising from the recommendation in this report.

Policies/Legislation:

By-law No. 79-2017 to adopt the 2018 Budget

Consultation:

The following department managers provided an update on each of their respective projects;

Jo-Anne Fields, Community Services Manager Don Giberson, Director of Operations and Infrastructure Dan Best, CAO

Related Documents:

Appendix A – 2018 Capital Progress Report – September

Page | 3

Prepared by,

Angela Shipway, Financial Services Supervisor

Respectfully submitted,

Sandy Becker, Director of Financial Services

Appendix A – 2018 Capital Progress Report – September

Job	Job Description	YTD	Budget	Variance	% of Comp	NOTES
General Adm	inistration					
2018-GA-01	Replace Photocopier	3,202	3,562	360	100%	COMPLETE
		3,202	3,562	360		
Emergency S	Services					
2018-FD-01	SCBA Replacement	11,437	13,000	1,563	100%	COMPLETE
2018-FD-02	PPE Replacement	10,158	19,240	9,082	65%	5/9 sets delivered with the remaining 4 expected in the fall.
2018-FD-03	Replace Freightliner Rescue	-	250,000	250,000	25%	Tender awarded to Lafleur Industries Inc. as per Motion # 66-2018; Expected delivery October 2018.
2018-FD-04	Exeter Station Pad Paving	-	20,000	20,000	0%	Referred to transportation services to achieve financial efficiencies.
		21,595	302,240	280,645		
Transportatio	on Services					
20-3043	James St - Main to Edward	19,107	18,900	(207)	100%	COMPLETE
20-3054	Simcoe St Andrew to Main	8,739	10,375	1,636		
20-3055	William St Anne to Huron	10,847	11,800	953	100%	COMPLETE.
20-3056	George St Main to Orchard	14,409	16,700	2,291		
20-3057	Bridge Repairs - #3037 McTaggert Line	1,455	20,805	19,350	100%	COMPLETE
20-3059	Bridge Repairs - #3039 McTaggert Line	1,635	44,948	43,313	95%	Substantial completion with minor work remaining.

2017-TS-06	McTaggert Line Bridge #3038	358,101	570,446	212,345	100%	COMPLETE
2017-TC-05	Huron St Recon - Edward-East	290,675	890,000	599,325	25%	Tender awarded to Birnam Excavating Inc as per motion #191-201; Underground services Edward to Pryde complete; Pryde to Pinewood 50% complete. Underground from Pinewood to east end, along with associated roadwork and all surface restoration work remains.
2017-TS-03	Line 17 - Hern to Rogerville	-	180,000	180,000	25%	Lead by the Municipality of West Perth; Authorization for South Huron portion as per motion #307-2018; Pulverizing complete; paving scheduled to be complete by early October
2017-TS-04	Gregus Crt Overlay	-	30,000	30,000	0%	Deferred to fund Whalen Line as per motion #306- 2018.
2017-TS-05	Marlborough St - Sand to Well.	-	30,000	30,000	0%	Deferred to fund Whalen Line as per motion #306- 2018.
2018-TC-05	Waterloo St - London Rd S-Rail	-	60,000	60,000	25%	Engineering tender awarded to BM Ross as per motion #342-2018; Base plan survey and preliminary engineering are complete.

Page 223
Page | 6

2018-TS-02	Mollard and McTaggert Line	-	142,632	142,632	10%	Tender awarded to Norjohn Contracting and Paving Ltd as per motion #341-2018; Internal prep 85% Complete with Contractor anticipated to start in October 2018.
2018-TS-05	Whalen Line - Hwy 4- McTaggert	41,830	501,050	459,220	100%	Lead by Lucan Biddulph; Authorization for South Huron portion as per motion #306-2018; Shoulder widening, subdrains, pulverizing and asphalt complete; awaiting invoicing.
2018-TS-07	Replace Kvernland Disk Mower	-	12,000	12,000	10%	Tender closes September 20, 2018; council report forthcoming.
2018-TS-08	Replace JD Tractor	-	139,500	139,500	10%	Tender closes September 20, 2018; council report forthcoming.
2018-TS-09	Replace VeePro Snow Spreader	7,194	11,500	4,306	100%	COMPLETE
2018-TS-10	Mollard Line Culvert Repl.	3,988	40,000	36,012	25%	Engineering tender awarded to GM BluePlan as per motion #344-2018. Base plan survey work and preliminary engineering has been completed.
		757,980	2,730,656	1,972,676		
Streetlighting						
2017-TS-07	Phase 3 DT Decorative SL	_	160,000	160,000		Evaluating different streetlight alternatives in conjunction with initiatives in the downtown core.

		-	160,000	160,000		
Recreation S	ervices					
20-7126	Port Blake Revitalization (Design)	1,840	414,578	412,738	15%	RFP closed in April with no bids. As per report CAO.07-2018 the landscaping patio and entrance are moving forward as a late fall project.
20-7127	Exeter Swimming Pool	1,728,890	1,700,000	(28,890)	98%	Substantial completion; awaiting final invoicing. Council report anticipated.
20-7132	SHRC/Community Hub	25,186	125,000	99,814	10%	RFP for the Fundraising feasibility closing October 19, 2018.
2017-RS-05	Dashwood CC Washrooms	12,698	120,000	107,302	15%	Staff met with stakeholders to discuss options. RFP closes October 4, 2018.
2017-RS-11	Victoria Park Washrooms	1,857	10,000	8,143	100%	Lioness Club Project; Washrooms are open.
2018-RS-05	4x4 Utility Vehicle	-	9,158	9,158	10%	Staff continue to research options within the budget. Purchase of unit will benefit operations throughout the year.
2018-RS-06	KW Pool Sandblasting	43,492	44,774	1,282	100%	COMPLETE Tender awarded to PPL Aquatics, Fitness and Spa as per motion #164-2018. Sandblasting completed with a change order to \$15,255 to repair walls. Completed

2018-RS-07	KW Rock Climbing Apparatus	-	15,264	15,264	0%	Optimist Club project. Will not proceed with purchase in 2018
		1,813,963	2,438,774	624,812		
Solid Waste	Services					
20-9001	Landfill Expansion - Stage 3	-	80,000	80,000	0%	Ongoing capital costs related to future expansion. Expected to occur over a number of years as per legislative requirements.
		-	80,000	80,000		
Sanitary Sew	vor Sorviços					
20-5623	William St Sanitary Pumping Station	29,198	1,900,040	1,870,842	15%	Final Design delayed due to potential dewatering requirements and related shoring of wet well excavation. Supplemental geotechnical and design alternatives evaluated and design concept selected; 60% design stage.
20-5629	Simcoe St Andrew to Main	4,521	6,275	1,754	100%	COMPLETE
2017-S-01	Upgr Lagoon Aeration Exeter	202,889	421,120	218,231		
2017-SC-03	William St - Anne-Huron	4,730	6,000	1,270	100%	COMPLETE Carryforward project and some expenditures recorded in 2017 which explains the significant savings.

2017-SC-04	James St - Main to Edward	11,464	12,000	536	100%	COMPLETE
2017-SC-05	Huron St Recon - Edward-East	282,884	630,000	347,116	25%	Tender awarded to Birnam Excavating Inc as per motion #191-201; Underground services Edward to Pryde complete; Pryde to Pinewood 50% complete. Underground from Pinewood to east end, along with associated roadwork and all surface restoration work remains.
2018-S-01	Rehab Sewage Lagoon Filters	4,352	15,000	10,648	90%	Engineering complete, awaiting final report and draft tender document.
2018-S-03	Mollard Line Forcemain Repl.	276,189	386,006	109,816	90%	Tender for road surface restoration was awarded to Norjohn Contracting and Paving Ltd as per motion #341-2018. Surface treatment scheduled to be complete in October 2018
2018-SC-05	Waterloo Street - London -Rail	-	60,000	60,000	25%	· · · · · · · · · · · · · · · · · · ·
		816,228	3,436,441	2,620,213		·
Water Service						
20-4141	Simcoe St Andrew to Main	2,579	4,040	1,461	100%	COMPLETE
20-4142	William St Anne to Huron	5,446	6,000	554		

20-4144	Dashwood Rd Watermain Replacement	50,830	50,000	(830)	100%	COMPLETE	
2017-W-03	Dashwood Rd - Shipka - Bronson	375,347	585,000	209,653		Contract awarded to Robinson Farm Drainage	
2017-W-04	Shipka Line - South R- Kirkton	315,761	372,000	56,239	99%		
2017-W-05	Watermain Repl - Huron-McTag.	143,915	139,800	(4,115)			Line complete. Commissioning and final tie-ins required on McTaggart & Huron.
2017-W-07	Bulk Water Station 82 Nelson	-	50,000	50,000	5%	Draft tender completed and under review	
2017-WC-04	James St Recon. Main - Edward	7,531	7,500	(31)	100%	COMPLETE	
2017-WC-05	Huron St Recon - Edward-East	166,512	550,000	383,488	15%	Tender awarded to Birnam Excavating Inc as per motion #191-201. Underground services from Edward to Pryde completeSection from Pryde to Eastern Ave still remaining, as well as all surface restoration work.	
2018-W-01	2018 Water Meter Replacement	13,297	250,000	236,703	5%	Ongoing capital costs as meters are being replaced.	
2018-W-02	Replace Photocopier - W Share	3,202	3,562	360	100%	COMPLETE	
2018-W-06	Shipka Line - Kirkton to 83	6,128	25,000	18,872		Engineering tender awarded to GM BluePlan	
2018-W-07	Parr Line WM - N/S of Crediton	5,782	25,000	19,218	15%	Base plan survey work has	
2018-W-08	Huron St - Corbett to West End	3,770	15,264	11,494		been completed.	

	Grand Totals	4,514,922	11,354,839	6,849,917		
		1,100,099	2,203,166	1,103,067		
2018-WC-05	Eng - Waterloo St - #4- Rail	-	70,000	70,000	10%	Engineering tender awarded to BM Ross as per motion #342-2018. Base plan survey work has commenced.
2018-W-09	HP Water Tower Upgrade	-	50,000	50,000	5%	Engineering tender awarded to BM Ross as per motion #342-2018. Work has commenced and is on schedule to be complete before the end of the year.



Staff Report

Dan Best, Chief Administrative Officer
Sandy Becker, Director of Financial Services
October 15 2018
FIN.18.22
Annual Investment Report

Recommendations:

That South Huron Council receives the report from Sandy Becker, Director of Financial Services/Treasurer, re: Annual Investment Report as information only.

Purpose:

The purpose of this report is to provide Council with an annual investment report on the investment portfolio for the period August 1, 2017 to July 31, 2018 inclusive, as required by Ontario Regulation 438/97.

Background and Analysis:

Ontario Regulation 438/97 of the Municipal Act, 2001 and the Municipality of South Huron's Investment Policy requires that the Treasurer submit, at least, annually a report to Council on the investment portfolio activities and returns. The following information reports on the performance of the municipality's investment portfolio for the period August 1, 2017 to July 31, 2018 inclusive.

Interest Rates

Over the reporting period interest rates have been steadily on the rise as the economy recovers. The bank of Canada rate increased from 1% to $1.75\%^1$

¹ https://www.bankofcanada.ca/rates/interest-rates/canadian-interest-

rates/?lookupPage=lookup_canadian_interest.php&startRange=2008-09-

within the twelve month period, which translates into an increase of 75 basis points.

Many investments have a return that is directly correlated with increases in interest rates, however, bond market values tend to have the opposite effect. This is due to the fact that the new bonds are issued with higher coupon rates, therefore, existing bonds with lower coupons are worth less and when not held to maturity will generate a loss being sold at a discount.

South Huron had two bond portfolios that were beginning to generate losses as "interest" is withdrawn annually to fund Cemetery operations. As a result, the funds were removed from this type of investment and placed in short term GIC's and a high interest savings account. Both of these investments are secure and will ensure no losses are realized at disposal.

Increase in Investments

An analysis was completed on the funds in the Municipality's general bank account that is not required immediately. While maintaining a healthy minimum balance the funds have been invested in a high interest savings account earning upwards of \$5,500 per month or approximately \$66,000 per year.

Portfolio Diversification

The diversification of the investment portfolio is important in order to minimize risk. South Huron invests in short-term (within 1 year) GICs, High Interest Savings Accounts, and Money Market Funds. All of these are very stable with minimal to no risk associated.

Current Investment Portfolio

Our investment portfolio is broken down by type of investment as follows:

Type of Investment	Principal Invested (Jul. 31, 2018)	Interest Earned	Realized Gain/(Loss)
High Interest Savings Account (HISA) – OneFund General	2,703,151	82,575	
HISA – ScotiaBank General	3,009,624	9,624	
HISA – OneFund Cemetery	251,554	1,140	
Money Market – OneFund General	2,089,135	23,026	
Bond Fund – Cemetery ²	-	656	(3,045)
Universe Corporate Bond Fund – Cemetery	-	2,836	(341)
Equity Market - Cemetery	-	-	13,290
GIC – General	1,000,000	3,767	
GICs – Cemetery	559,053	10,770	
Total	9,612,517	134,394	9,904

The following is a breakdown of the portfolio into asset types. The cash represents liquid bank accounts held for General Operations, Cemetery/Trust, and Reserves. The short-term investments includes high-interest savings accounts, money market funds, and GIC's.

² The bond funds, as mentioned earlier have an inverse relationship with interest rates and with the demand for annual interest to fund Cemetery operations it was best to realize the bond fund losses while they can still be offset by the gains in the equity market. This ensured no loss of principal investment.

Investment	Balance (\$) July 31, 2018	% of Portfolio
Cash	9,839,717	50.58%
Short Term Investments	9,612,517	49.42%
Total	19,452,234	100%

<u> Treasurer's Statement</u>

In my opinion, the investments held by the Corporation of the Municipality of South Huron, for the period August 1, 2017 to July 31, 2018, are consistent with the investment policy and goals adopted by Council. Additionally, said investments were all prescribed securities in accordance with Section 418 (1) of the *Municipal Act, 2001* and are all eligible investments as per O.Reg. 438/97.

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are presented.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

As a result of a review of our investment strategy, including analysis of cash flow requirements, together with acquiring a higher rate on a High Interest Savings Account we realized approximately \$39,000 more in interest over the previous year.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

Ontario Regulation 438/97 of the Municipal Act, 2001 South Huron's Investment Policy (Bylaw 53-2008)

Consultation:

Dan Best, CAO

Related Documents:

Prepared by,

Angela Shipway, Financial Services Supervisor

Respectfully submitted,

Sandy Becker, Director of Financial Services



Staff Report

Report To:	Dan Best, Chief Administrative Officer
From:	Dwayne McNab, Development Services
	Manager/CBO
Date:	October 5 2018
Report:	BUILDING 18.03
Subject:	Q3 July to September Building Activity Report and 2018 Year to Date Building Activity Report

Recommendations:

That South Huron Council receives the reports from D. McNab, Development Services Manager/CBO re: Q3 July to September Building Activity Report and 2018 Year to Date Building Activity Report.

Background and Analysis:

The purpose of this staff report is to inform Council on building activity for the period between July 1 and September 30, 2018

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are presented.

South Huron's Strategic Plan:

The recommendations(s) included in this Staff Report are not specifically related to the goals identified in the 2015-2019 Council Strategic Plan.

Financial Impact:

There are no financial implications for the Corporation resulting from the proposed recommendation.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Policies/Legislation:

No policies, by-laws and or legislation associated with the proposed recommendation.

Consultation:

Irene Datars, Administrative Assistant to Development Services was consulted.

Related Documents:

- A Q3 July to September Building Activity Report
- B 2018 Year to Date Building Activity Report

Respectfully submitted,

Dwayne McNab, Development Services Manager/CBO



Q3: July to September BUILDING ACTIVITY REPORT

TYPE OF PERMIT	PER	PERMITS CO		CONSTRUC	TIO	N VALUE		<u>h 1919</u>	WA	ARD		118 J.
								2017			2018	
							Ward 1:	Ward 2:	Ward 3:	Ward 1:	Ward 2:	Ward 3:
	2017	2018	-	2017		2018	Stephen	Exeter	Usborne	Stephen	Exeter	Usborne
Residential			L ċ	-	ć	050.000.00	0	0		0		
Multiple Residential Unit Multiple Residential Unit Addition/	0	1	\$		\$	950,000.00	0	0	0	0	1	0
Alteration	0	0	\$		\$	<u>7</u> 27	0	0	0	0	0	0
Single Family Dwelling	3	5	\$	1,250,000.00	\$	1,710,000.00	2	1	0	4	1	0
Residential Addition/ Alteration	9	12	\$	295,800.00	\$	525,907.00	4	3	2	4	6	2
Residential Accessory Building	4	12	\$	58,500.00	\$	498,700.00	2	2	0	8	3	1
Trailer Unit	3	5	\$	275,000.00	\$	588,000.00	3	0	0	5	0	0
Trailer Addition/ Alteration	0	1	\$		\$	9,400.00	0	0	0	1	0	0
Commercial												
Commercial New Construction	0	0	\$	-	Ś	-	0	0	0	0	0	0
Commercial Addition/Alteration	5	1	\$	364,900.00	Ś	37,976.00	0	4	1	0	1	0
commercial Addition/Alteration			Ŷ	301,300.00	Ŷ	37,370.00					-	
Industrial	in Sel			I &		- S						5.0
Industrial New Construction	1	1	\$	330,000.00	\$	1,428,000.00	1	0	0	1	0	0
Industrial Addition/Alteration	0	1	\$	1	\$	20,000.00	0	0	0	0	1	0
Institutional		rto griefi	<u>а</u> н		-				- TE		-	1. 2. 2
Institutional New Construction	0	0	\$	-		0	0	0	0	0	0	0
Institutional Addition/Alteration	0	3	\$			135000	0	0	0	1	1	1
		-			-				_			
Agriculture	10	l ô	16	1 772 150 00		2 267 520 12		0	-	ľ á	0	1
Agricultural New Construction	10	8		1,772,150.00	\$	2,267,528.12	3	0	7	4	0	4
Agricultural Addition	0	1	\$	-	\$	54,000.00	U	0	0	1	0	0
Septic Permits	6	8	\$	49,000.00	\$	278,000.00	2	0	4	6	Ó	2
				77.000.00		7 750 00						
Demolitions	5	2	\$	77,000.00	\$	7,750.00	1	4	0	1	1	0
Change of Use	0	0	\$	-	\$		0	0	0	0	0	0
Wind Turbine	0	0	\$	-	\$		0	0	0	0	0	0
			1 2		ş							
TOTALS	46	61	\$	4,472,350.00	\$	8,510,261.12	18	14	14	36	15	10
Fees Charges				2017		2018						
	Buildin	g Permits	\$		\$	83,745.60						
	-	nce Letters	-		\$	2,400.00						
		elopment	T									
	Charges	ciopinent	\$		\$	25,688.00						
TOTAL		110 110 11	\$	47,532.71	\$	111,833.60						



2018 Year to Date (YTD) BUILDING ACTIVITY REPORT

TYPE OF PERMIT	PERI	MITS	S CONSTRUCTIO		ON	/ALUE		WARD					
		ha prime,				2017			2018				
	101 (j4)						Ward 1:	Ward 2:	Ward 3:	Ward 1:	Ward 2:	Ward 3:	
	2017	2018		2017		2018	Stephen	Exeter	Usborne	Stephen	Exeter	Usborne	
Residential										-			
Multiple Residential Unit	5	1	\$	4,300,000.00	\$	950,000.00	0	5	0	0	1	0	
Multiple Residential Unit Addition/ Alteration	0	2	\$	1 0	\$	85,000.00	0	0	0	0	2	0	
Single Family Dwelling	18	19	\$	5,662,000.00	\$	8,385,000.00	4	13	1	6	10	3	
Residential Addition/ Alteration	35	30	\$	1,533,600.75	\$	1,585,757.00	13	14	8	6	18	6	
Residential Accessory Building	17	22	\$	229,100.00	\$	600,000.00	7	7	3	11	9	2	
Trailer Unit	6	6	\$	575,000.00	\$	594,200.00	6	0	0	6	0	0	
Trailer Addition/ Alteration	8	6	\$	99,240.88	\$	58,834.00	8	0	0	5	1	0	
Commercial													
Commercial New Construction	4	1	\$	3,419,000.00	\$	52,500.00	1	2	1	1	0	0	
Commercial Addition/Alteration	15	8	\$	1,620,697.97	\$	918,196.00	4	8	3	1	7	0	
Industrial	- 2 - 3 -		-					-	-		1 Parts		
Industrial New Construction	2	2	\$	2,910,000.00	\$	14,428,000.00	2	0	0	2	0	0	
Industrial Addition/Alteration	0	1	\$	-	\$	20,000.00	0	0	0	0	1	0	
Instritutional				and the second second						- B Langue	-		
Institutional New Construction	0	1	\$		\$	500,000.00	0	0	0	0	1	0	
Institutional Addition/ Alteration	0	4	\$		\$	350,764.38	0	O	0	1	2	1	
Agriculture				NI AND ALL	12	St. 3. 28						and the second	
Agricultural New Construction	25	22	\$	12,865,150.00	\$	6,181,788.12	8	0	17	12	0	10	
Agricultural Addition	1	4	\$	200,000.00	\$	2,344,000.00	1	0	0	3	0	1	
Septic Permits	12	16	\$	81,000.00	\$	383,200.00	6	1	5	10	0	6	
				CASE NAMES AND ADDRESS AND ADDRESS			IV and		1		T		
Demolitions	11	5	\$	148,500.00	\$	57,750.00	3	8	0	2	3	0	
Change of Use	0	0	\$	42	\$	4	0	0	0	0	0	0	
Wind Turbine	0	0	\$	-	\$	2	0	0	0	0	0	0	
		0	12	(.	Ş		U			1 0		0	
TOTALS	159	150	\$	33,643,289.60	\$	37,494,989.50	63	58	38	66	55	29	
Fees Charges				2017		2018	:						
	Building Permits		\$	256,466.63	\$	293,508.06							
	Compliance Letters		_		\$	7,125.00							
		elopment		22	1								
	Charges		\$	-	\$	61,413.00							
TOTAL		din su i	\$	256,466.63	\$	300,633.06							

.



Staff Report

Dan Best, Chief Administrative Officer
Rebekah Msuya-Collison, Municipal Clerk
October 15 2018
27-2018
Application for Tile Drain Loan Provisional Approval

Recommendations:

That South Huron Council receives the report from R. Msuya-Collison, Clerk re: Application for Tile Drain Loan; and

That South Huron Council provisionally approves a Tile Drain Loan in the amount of \$50,000 for Concession 3 Part Lot 13, Stephen Ward, Municipality of South Huron

Purpose:

To seek Council's provisional approval of a Tile Drain Loan.

Background and Analysis:

A Tile Loan application has been received for property known as Concession 3 Part Lot 13, Stephen Ward.

Council's provisional approval allows work to begin on this tile drain. A rating by-law will be prepared upon completion of the work.

Operational Considerations:

There are no operational considerations associated with this report.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

There are no financial implications associated with this report.

Legal Impact:

No legal implications have been identified for this report.

Staffing Impact:

Tile loan inspector to confirm work has been completed and administration of collection of loan repayments.

Policies/Legislation:

Tile Drainage Act Tile Drain Loan Program Policies

Consultation:

Wil Telford, Deputy Treasurer

Related Documents:

Respectfully submitted,

Rebekah Msuya-Collison, Municipal Clerk



Staff Report

Report To:	Dan Best, Chief Administrative Officer
From:	Rebekah Msuya-Collison, Municipal Clerk
Date:	October 15 2018
Report:	29-2018
Subject:	Request for Drainage Improvement

Recommendations:

That South Huron Council receives the report from R. MsuyaCollison, Clerk re: Requests for Drain Improvement under Section 78 of the Drainage Act; and

That South Huron Council hereby appoints William J. Dietrich, P. Eng., from Dietrich Engineering Ltd. as the Municipal Drainage Engineer to prepare a report for Drain Improvement.

Purpose:

To provide Council with the Petition for Drain Improvement filed by Frank Dietrich.

Background and Analysis:

Please find attached Petition for Drain Improvement by Owners pursuant to Section 78 of the Drainage Act. R.S.O. 1990, as submitted by Frank Dietrich.

Operational Considerations:

There are no operational considerations as a result of the actions outlined in this report.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

There is no financial impact as a result of the actions outlined in this report.

Legal Impact:

There is no legal impact as a result of the actions outlined in this report.

Staffing Impact:

There is no staffing impact as a result of the actions outlined in this report.

Policies/Legislation:

Drainage Act

Consultation:

Dietrich Engineering Limited

Related Documents:

Notice of Request for Drain Improvement

Respectfully submitted,

Rebekah Msuya-Collison, Municipal Clerk

No	tice	of	Re	equest	: for	Drain	Improven	nent

Drainage Act, R.S.O. 1990,c. D.17, subs. 78(1)

То:	To: The Council of the Corporation of the Municipality of South Hut	on								
Re:	Re: Brock-Miller Branch A Municipal Drain									
	(Name of Drain)									
	In accordance with section 78(1) of the <i>Drainage Act</i> , take notice that I/we, as owner(s) or mentioned drain be improved.	f land affected, request that the above								
The	The work being requested is (check all appropriate boxes):									
[Changing the course of the drainage works;									
[✓ Making a new outlet for the whole or any part of the drainage works;									
[Constructing a tile drain under the bed of the whole or any part of the drainage w	Constructing a tile drain under the bed of the whole or any part of the drainage works;								
[Constructing, reconstructing or extending bridges or culverts;									
[Constructing, reconstructing or extending embankments, walls, dykes, dams, resistations or other protective works in connection with the drainage works;	ervoirs, pumping								
[Otherwise improving, extending to an outlet or altering the drainage works;									
[Covering all or part of the drainage works; and/or									
(Consolidating two or more drainage works.									
Prov	Provide a more specific description of the proposed drain improvement you are requesting:									
To	To improve the water flow of the existing drain.									

Property Owners:

S.L.

• Your municipal property tax bill will provide the property description and parcel roll number.

. In rural areas, the property description should be in the form of (part) lot and concession and civic address.

• In urban areas, the property description should be in the form of street address and lot and plan number, if available.

Property Description	
Lot 5 Concession 8	
Ward or Geographic Township	Parcel Roll Number
Usborne	010008016000000

If property is owned in partnership, all partners must be listed. If property is owned by a corporation, list the corporation's name and the name and corporate position of the authorized officer. Only the owner(s) of the property may request a drain improvement.

Select Ownership Type

Enter the mailing address and primary contact information of property owner below:

Last Name Dietrich			First Name Frank	Middle Initial
Mailing Address				
Unit Number	Street/Road Number 34858	Street/Road Name Saintsbury Line		PO Box
City/Town RR 1 Lucan		Lesen	Province ON	Postal Code N0M 2J0
Cell Phone Number Cell Phone Number (Optional) 519 318-0196 519 318-0196		Email Address (Optional) fdiet@quadro.net	I , <u></u> ,	

To be completed by recipient municipality:

Notice filed this 26	day of September	20 18		
Name of Clerk (Last	Name, First Name)		Signature of Clerk	
MSUYH	-COLLISON	RebeKah	Allollisi	





Staff Report

Report To:	Dan Best, Chief Administrative Officer
From:	Rebekah Msuya-Collison, Municipal Clerk
Date:	October 15 2018
Report:	30-2018
Subject:	Request for Service, Complaints and By-Law Summary

Recommendations:

That South Huron Council receives the report from R. Msuya-Collison, Clerk re: Request for Service, Complaints and By-Law Summary

Purpose:

This complaint summary provides Council with information regarding the type and status of Requests for Service, Complaints and By-Law Complaints from July 1 to September 30, 2018.

Background and Analysis:

Procedures for managing customer general complaints, request for service and by-law enforcement are currently in place. The policy assists the municipality in providing excellent service to the public and contributes to continuous improvement of operations by:

- Providing a fair complaint procedure which is clear and easy to use for anyone wishing to make a complaint; and
- ✓ Providing a timely and accurate response to complaints; and
- ✓ Using complaints as an opportunity to improve program and service delivery issues.

Please find attached summary from July 1 to September 30, 2018.

Operational Considerations:

No operational considerations have been identified for this report.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

No financial implications associated with this report.

Legal Impact:

No legal implications have been identified for this report.

Staffing Impact:

No staffing impact has been identified for this report.

Policies/Legislation:

Complaint Policy – By-law 22-2016

Consultation:

Municipal Staff and Municipal Enforcement

Related Documents:

Request for Service Complaint Log July to September 2018 By-Law Summary Log July to September 2018

Respectfully submitted,

Rebekah Msuya-Collison, Municipal Clerk

By-Law Infractions April 1, 2018 to June 30, 2018

		Proposed Section of By-Law		
File No.	By-Law	Contravention	Status	
43-2018	Property Standards	General Standards for all Property	In Progress	Monitoring
44-2018	Licensing	Licencing requirements	Closed	
45-2018	Zoning	Permitted Uses	In Progress	Notice
46-2018	Property Standards	Residential Standards	Closed	
47-2018	Animal Control	Dogs running at large	In Progress	Monitoring
48-2018	Property Standards	General Standards for all Property	Closed	
49-2018	Animal Control	Dogs without tags	Closed	
50-2018	Property standards	Residential Standards	Closed	
51-2018	Property standards	General Standards for all Property	Closed	
52-2018	Property standards	Residential Standards	Closed	Monitoring
53-2018	Property standards	Residential Standards	Closed	Monitoring
54-2018	Property standards	Residential Standards	Closed	Monitoring
55-2018	Property Standards	Residential Standards	Closed	
56-2018	Property Standards	Residential Standards	In Progress	Notice
57-2018	Property Standards	Residential Standards	In Progress	Monitoring
58-2018	Property Standards	Residential Standards	In Progress	Notice
59-2018	Property Standards	General Standards for all Property	In Progress	
60-2018	Property standards	Residential Standards	Closed	
61-2018	Property Standards	General Standards for all Property	In Progress	

In Progress Monitoring - Further measures may be required Closed Monitoring - Closed but MEU will revisit Notice - Notice has been given with deadline In Progress - Working towards compliance

Proposed Section of By-Law

Request for Service/Complaints July 1, 2018 to September 30, 2018

Туре	File No.	Details	Status
Complaint	M04-31-2018	Stray cat	Closed
Complaint	M04-32-2018	Tree limbs	Closed
Complaint	M04-33-2018	Grass cutting	Closed
Request for Service	M04-34-2018	Tree limbs	Closed
Request for Service	M04-35-2018	Concrete around drain	Closed
Complaint	M04-36-2018	Smoking in public areas	Closed
Request for Service	M04-37-2018	Sidewalk repair	Closed
Complaint	M04-38-2018	Air quality	Health Unit
Complaint	M04-39-2018	Cemetery maintenance	Closed
Request for Service	M04-40-2018	Weeds	Closed
Request for Service	M04-41-2018	Dead tree	Closed
Request for Service	M04-42-2018	Tree limbs	Closed
Request for Service	M04-43-2018	Sidewalk repair	Closed
Request for Service	M04-44-2018	Pooling water	Investigation
Complaint	M04-45-2018	Cemetery maintenance	Closed
Request for Service	M04-46-2018	More sidewalks	Policy
Request for Service	M04-47-2018	Tree limbs	In Progress
Complaint	M04-48-2018	Cemetery maintenance	Closed
Request for Service	M04-49-2018	Road issue	In Progress
Complaint	M04-50-2018	Noise complaint	By-Law



Staff Report

Report To:	Dan Best, Chief Administrative Officer				
From:	Rebekah Msuya-Collison, Municipal Clerk				
Date:	October 15 2018				
Report:	31-2018				
Subject:	Appoint Members to Court of Revision for Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018				

Recommendations:

That South Huron Council receives the report from R. Msuya-Collison, Clerk, re: Appoint Members to Court of Revision for Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018; and

That South Huron Council hereby appoints the following members______ to the Court of Revision for above Municipal Drains to be held on November 19, 2018 at 5:00 p.m., prior to the regularly scheduled Council meeting; and

That ______ be appointed Chair.

Purpose:

To set the date and appoint the members for the Court of Revision for the Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018.

Background and Analysis:

The Drainage Act, R.S.O. 1990, requires a Court of Revision be held for the purpose of receiving appeals to the assessments for drainage work, as set out in the engineer's report. The Court may have three (3) or five (5) members, and must be held at least twenty (20) days after but not more than thirty (30) days after mailing the notice.

A provisional By-law is provided in the By-Law portion of the agenda for first and second readings to adopt the Engineer's Report, as presented by William

Operational Considerations:

There are no other operational considerations as a result of the actions outlined in this report.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies key priorities and strategic directions. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

There are no financial implications as a result of the actions outlined in this report.

Legal Impact:

There are no legal implications as a result of the actions outlined in this report.

Staffing Impact:

There are no staffing implications as a result of the actions outlined in this report.

Policies/Legislation:

Drainage Act

Consultation:

Dietrich Engineering Limited

Page 251

Related Documents:

Morrissey, Fleming-Morrissey and Regan Municipal Drains 2018 Dietrich Engineering Limited Report

Respectfully submitted,

Rebekah Msuya-Collison, Municipal Clerk



Staff Report

Report To:	Dan Best, Chief Administrative Officer				
From:	Rebekah Msuya-Collison, Municipal Clerk				
Date:	October 15 2018				
Report:	32-2018				
Subject:	South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference.				

Recommendations:

That South Huron Council receives the report of R. Msuya-Collison, Clerk regarding the proposed South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference.; and

That Council approve the South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference. as presented; and

That the necessary by-law be forwarded to Council for the required three readings.

Purpose:

The purpose of this report is to obtain Council approval for the proposed South Huron Animal Control Tribunal Rules of Procedure and Terms of Reference.

Background and Analysis:

With respect to the muzzling and leashing of dogs, the *Municipal Act*, 2001 provides as follows:

"If a municipality requires the muzzling or leashing of a dog under any circumstances, the council of the municipality shall, upon the request of the owner of the dog, hold a hearing to determine whether or not to exempt the owner in whole or in part from these requirements." With respect to Designation As Potentially Vicious Or Vicious Dogs, the Animal Control By-Law provides as follows:

"8.2 Where a dog has been designated as a potentially vicious or vicious dog the owner may appeal to the Tribunal, by written notice, within fifteen days of the Municipality notifying the owner of the decision to designate the dog.

8.3 Where an owner appeals to the Tribunal the Tribunal shall hear the appeal by way of a new hearing under the Statutory Powers Procedure Act to determine whether the dog is vicious or potentially vicious.

8.4 No member of the Tribunal or its staff is personally liable for anything done by it or him or her under authority of this by-law."

In addition to establishing the requirement for an appeal process, the *Municipal Act* also provides that a municipality may delegate the powers of Council to a Committee of Council. South Huron Animal Control By-law provides for a process whereby the owner of a dog in receipt of an Order pursuant to the By-law may appeal the Order to the Animal Control Tribunal.

The Animal Control Tribunal will hear appeals under the Animal Control Bylaw. The Animal Control Tribunal is a quasi-judicial body operating separate from Council and requires its own procedural by-law. The rules of procedure for the Animal Control Tribunal are established as required in accordance with the *Statutory Powers of Procedure Act*.

The draft South Huron Animal Control Tribunal Rules of Procedure (the "Rules of Procdure") sets out how the Tribunal will conduct its hearings. In accordance with the *Statutory Powers of the Procedure Act*, the rules of procedure sets out the steps in which the Chair of the Tribunal shall conduct the Hearing. The rules of procedure and terms of reference will ensure that the Animal Control Tribunal Hearing provides an effective, efficient, transparent and fair process.

The portion of the By-law 21-2018 with respect to vicious/potentially vicious dogs should be reviewed with respect to the *Dog Owners Liability Act* to determine if enforcement should be undertaken through our current process.

Operational Considerations:

The Tribunal's operating budget and meeting management support is provided through the Clerk's department.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015- 2019 Strategic Plan identifies Strategic Objectives. The following elements are supported by the actions outlined in this report:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Transparent, Accountable, and Collaborative Governance

Financial Impact:

Costs are only incurred in the case of an appeal being submitted for a Hearing to be conducted.

Legal Impact:

As a committee of Council, the South Huron Animal Control Tribunal members will be covered by the municipality's errors and omissions and general liablility policies to protect and defend against claims from third parties while performing duties outlined in the Terms of Reference for their position as a member of the Tribunal.

Staffing Impact:

Tribunal meetings are scheduled as needed when an appeal is received.

Policies/Legislation:

Municipal Act, 2001 *Statutory Powers of Procedure Act* South Huron Animal Control By-law 21-2018

Consultation:

Chief Administrative Officer

Related Documents:

Draft Animal Control Tribunal Rules of Procedure Draft Animal Control Tribunal Terms of Reference

Page | 4

Respectfully submitted,

Rebekah Msuya-Collison, Municipal Clerk

Page 255

South Huron Animal Control Tribunal Terms of Reference

The Municipal Act, 2001, permits Council to delegate its authority to create a quasijudicial body to hear appeals with respect to animal control.

1. Name

The name of the Tribunal is the Municipality of "South Huron Animal Control Tribunal"

2. Mandate

The South Huron Animal Control Tribunal (the "Tribunal") is an independent quasijudicial tribunal that reviews the decisions of the Animal Control Officer and By-Law Enforcement Officer.

The Tribunal has the authority to:

- a) Confirm the determination of a Vicious or Potentially Vicious Dog Order; or
- b) Rescind the determination of a Vicious or Potentially Vicious Dog Order;
- c) Confirm, modify or rescind the Order and/or extend the time for complying with Order
- d) Make any the Animal Control Officer or By-Law Enforcement Officer could have made, or direct that the owner do anything under the Animal Control By-Law, as the Tribunal considers proper and for such purpose may substitute its opinion for that of the Animal Control Officer or By-Law Enforcement Officer.

3. Enabling Legislation, By-Law or Staff Report:

The South Huron Animal Tribunal is established under the authority of the Animal Control By-Law 21-2018, as amended.

The Animal Control Tribunal is required to adhere to the provisions outlined in Animal Control Tribunal Rules of Procedure amended from time to time.

The Tribunal operates under the authority of the *Statutory Powers and Procedure Act*. The Tribunal hears appeals from the decisions of the Animal Control Officer and By-Law Enforcement Officer that carry right of appeal to the Tribunal as set out in South Huron Animal Control By-Law 21-2018.

4. Board Size and Composition

The Tribunal is comprised of all of the members of Council including one member appointed as Chair. Each meeting is conducted by a tribunal panel of all the members.

5. Term

The term of appointment of members to the Tribunal is four years coincident with the term of Council. Members continue to serve until their successors are appointed.

6. Chair

The Tribunal member will select a Chair from within the membership at the first hearing of each year and the Chair may rotate on an annual basis or as deemed necessary by the Tribunal members.

If the Chair is not present within the first ten minutes of a Tribunal meeting or is absent through illness or otherwise, the Tribunal shall select another member as Acting Chair. While presiding, the Acting Chair shall have all the powers of the Chair.

The Chair of the Tribunal is responsible for:

- Chairing any necessary meetings of the Tribunal in accordance with the Animal Control Tribunal Rules of Procedure;
- Acting as the lead representative and spokesperson for the Tribunal;
- Preparing the Report to Council on the Tribunal activities;
- Ensuring that hearing practices of the Tribunal are fair and effective;
- Ensuring quality and consistency of tribunal decisions and that the Tribunal carries out its functions and meets its obligations;
- Liaison with Municipal staff on administrative support matters;
- Responding to information and privacy related matters respecting the Tribunal.

7. Member Responsibilities

Tribunal members are responsible for:

- Reviewing materials filed with each application they hear;
- Rendering a written decision based on the information presented;
- Attending meetings of the Tribunal and when not possible to attend send regrets in advance.

8. Tribunal Hearing Procedure

Meetings of the Tribunal shall be governed by South Huron Animal Control Tribunal Rules of Procedure (the "Rules of Procedure"). The frequency of meetings is on an asneeded basis (at the availability of the individuals involved). Posting of the Tribunal meeting agenda on the South Huron website shall constitute notice of a Tribunal meeting.

An annual activity report will be submitted to Council. The decision of the Tribunal is final.

9. Quorum:

A majority of the membership (4 Members) constitutes a quorum. If a quorum is not present within (15) minutes of the times fixed for the commencement of the meeting, the Tribunal meeting will be rescheduled to a future date.

10. Administration

The Clerk of the municipality or designate shall follow the administrative practices and procedures as established for the Tribunal and shall carry out any other duties required to implement the Tribunal decisions.

The Secretary will ensure that agendas, minutes and decisions are properly communicated using South Huron's website or other means necessary.

The records emanating from meetings of the Municipality of South Huron Animal Control Tribunal shall be retained and preserved by the Municipality of South Huron in accordance with South Huron's Record Retention By-Law.

11. Open and Closed Meetings

Hearings are subject to the Animal Control Tribunal Rules of Procedure requirements and are open to the public with the exception of situations where the Tribunal is of the opinion that 9(1)(a) or (b) of the Statutory Powers Procedure Act applies to the information submitted.

Members of the public are entitled to reasonable access to all information submitted to the Tribunal, where the Tribunal is of the opinion that 9(1)(a) or (b) of the Statutory Powers Procedure Act applies.

12. Members and Chair Remuneration

Where the Municipality of South Huron has received an appeal under the Animal Control By-Law, staff from the Municipal Clerk's Office will provide administrative support to the Tribunal and the Clerk, or designate shall act as Secretary.

Tribunal members will receive remuneration for their participation in accordance with South Huron Council Remuneration Policies. Administration costs for such items as printing and mailing will be absorbed within the Municipal Clerk's operating budget.

13. Code of Conduct and Conflict of Interest

All members will govern under the Code of Conduct as adopted by Council.

If a member has, at any time, a conflict of interest in relation to a particular issue or interest they must declare this conflict of interest under the agenda order of

business. The conflict of interest is to be properly documented by the Secretary and recorded in the minutes.

Members shall abide by the rules outlined within the Municipal Conflict of Interest Act and shall disclose the pecuniary interest to the Secretary, in writing and absent himself or herself from meetings for the duration of the discussion and voting (if any) with respect to that matter.

14. Errors/Omissions

The accidental omission to give notice of any meeting of the Tribunal to its members or the non-receipt of any notice by any member, or any error in any notice that does not affect its substance, does not invalidate any resolution passed or any proceedings taken at the meeting. Any member of the committee may at any time waive notice of any meeting.

15. Review

A review of these Terms of Reference will be undertaken every four years, and presented to Council for adoption or more frequently if deemed necessary by the Tribunal.

The Clerk has delegated authority to make administrative changes to these Terms of Reference that may be required from time to time due to legislative changes, or if, in the opinion of the Clerk, the amendments do not change the intent of the Terms of Reference.

16. Council Adoption

Terms of Reference adopted by the Council of the Municipality of South Huron on by By-Law _____.

South Huron Animal Control Tribunal Rules of Procedure

to Govern the Proceedings of the South Huron Animal Control Tribunal

Part 1

Definitions

"Applicant" shall mean the animal owner who submits a notice in writing requesting a hearing for review of an order to comply issued under section Animal Control By-Law 21-2018;

"Animal Control Tribunal" shall mean the Committee of Council called the South Huron Animal Control Tribunal;

"By-law Enforcement Officer/ Animal Control Officer" shall mean a person appointed as such by a by-law of the Municipality of South Huron to enforce this By-law.

"Confirmation of Hearing Request" shall mean an acknowledgement of receipt by the Clerk of the animal owner's notice in writing requesting a hearing.

"Tribunal Secretary" shall mean the Tribunal Secretary or any person under their authority.

"Hearing" shall mean that part of the proceeding before the Tribunal where evidence or submissions are heard:

"Oral hearing" shall mean a hearing or part of a hearing during which the parties or their representative(s) attend in person before the Tribunal.

Interested person" shall mean a person attending the Tribunal and may include a person does not have party status before the Tribunal.

"Party" shall mean the applicant and the municipality, as represented.

"Person" shall includes a corporation, partnership, agent or trustee, or other legal representatives of a person to whom the context can apply according to law, and the entities included within the meaning of a person in the Statutory Powers Procedure Act, R.S.O. 1990, c. S.22, as amended.

"Potentially vicious dog" shall mean any individual dog that, in the absence of any mitigating factor, chases or approaches any person or domestic animal in a menacing

fashion or apparent attitude of attack, including but not limited to behaviour such as growling or snarling.

"Proceeding" shall mean a matter brought before the Tribunal.

"Representative" shall mean legal counsel or agent who is authorized by law to represent a person in the proceeding.

"Respondent" shall mean the Municipality of South Huron, as represented.

"Rules" shall mean the Rules of Procedure as set out in this document, which may be amended from time to time.

"Tribunal" shall mean the Animal Control Tribunal of the Municipality of South Huron.

"Vicious dog" shall mean any individual dog that:

a) Has, in the absence of any mitigating factor, attacked, bitten or caused injury to a person or has demonstrated a propensity, tendency or disposition to do so; or

b) Has significantly injured or killed a domestic or farm animal; or

c) Having been previously designated as a potentially vicious dog is kept or permitted to be kept in violation of the requirements for such dog.

Part 2

Application of Rules

General

- 1. These Rules apply to all Hearings before the South Huron Animal Control Tribunal (the "Tribunal"), subject to the Animal Control By-law, *Statutory Powers Procedure Act*, and any other applicable legislation.
- 2. The Tribunal may, at any time, as it deems necessary, dispense with compliance with any Rule, save and except those prescribed as mandatory by the *Statutory Powers Procedure Act* and any other legislation governing the Tribunal.
- **3.** These Rules shall be liberally construed to secure the just, most expeditious and cost-effective determination of every proceeding on its merits.
- **4.** Where a party to an appeal has not complied in full with any Rule, the Tribunal may:

- **a.** adjourn the proceeding until satisfied that such Rule has been complied with; or
- **b.** take any other step as it considers just and reasonable.
- 5. A party to a proceeding may be represented by an Agent.
- **6.** Hearings shall be held at the Municipality of South Huron Town Hall at 322 Main Street South, Exeter unless otherwise specified in the Notice of Hearing.
- **7.** The Tribunal Secretary shall administer oaths and affirmations for the purpose of any of a Hearing.

Part 3

Tribunal Hearings

Record of Tribunal Hearings

- 8. The Tribunal Secretary shall record the Hearings of the Tribunal.
- **9.** Other than the Tribunal Secretary, no person shall take or attempt to take a photograph, motion picture, audio recording or other record capable of producing visual or aural representations by electronic means or otherwise at a Hearing before the Tribunal that is open to the public, without the Tribunal's consent.

Voting

- **10.** All actions taken by the Tribunal shall be voted on and the decision made by majority vote.
- **11.** Members, including the Chair, may vote on all motions and other questions submitted at a Hearing.
- **12.** In the case of a tie vote, the motion or question shall be deemed to have been lost.

Quorum for Meetings

- **13.** A majority of the Members must be present to achieve quorum for a Hearing.
 - **a.** If no quorum is present 15 minutes after the time appointed for the commencement of the Hearing, the Tribunal Secretary shall cancel the Hearing and shall reschedule the Hearing in accordance with these Rules.
 - **b.** Notwithstanding Subsection 13(a), when the number of Members who refrain from participating in debate of a matter, or voting by reason of having declared an interest according to the provisions of the *Municipal Conflict of Interest Act*, leaves a remaining number of Members that does

not make quorum, the remaining Members will be deemed to constitute quorum, provided that not less than two (2) Members to remain present to continue the Hearing.

Part 3

Notice Requesting an Appeal Notice

- **14.** An appeal is commenced by the filing of a Notice of Appeal in the form approved by the Municipal Clerk, in accordance with the provisions of the Animal Control By-law.
- **15.** The Notice of Appeal shall be provided to the Municipal Clerk before close of business on the last day for appeals by personal delivery.
- **16.** A complete Notice of Appeal shall include:
 - **a.** a copy of the decision or order giving rise to the appeal;
 - **b.** a statement setting out the grounds for the appeal;
 - **c.** the name, telephone number, email address and address for service of the Appellant or Agent;
 - d. the original signature of the Appellant or Agent;
- **17.** Where a Notice of Appeal is not complete, the Municipal Clerk shall refuse the Notice of Appeal and shall inform the Appellant of the documentation required in order to complete the Notice of Appeal.
- **18.** If a Notice of Appeal is received after the appeal deadline the Municipal Clerk shall refuse the Notice of Appeal and shall advise the Appellant in writing that:
 - a. the appeal is denied based on the late filing; and
 - **b.** the decision or order under appeal is final and binding.
- **19.** A person wishing to bring a motion to extend the time for filing an appeal shall make a written request (the "request"), supported by reasons, to the Tribunal Secretary.
- **20.** The Tribunal Secretary may then schedule a time for the hearing of the motion and shall forward a copy of the request to the members of the Tribunal and the Animal Control Officer or By-Law Enforcement Officer
- **21.** The person making the request has a right to attend the motion and further explain the particulars of the request to the Tribunal.

22. The Tribunal also has the right to ask questions of the person bringing the motion.

Part 5

Notice of Hearing Scheduling of Hearing

- **23.** Within sixty (60) days of receipt of a complete Notice of Appeal by the Municipal Clerk:
 - **a.** the Tribunal Secretary shall contact the Members to advise them of the Appeal and to confirm quorum for the next Hearing date; and
 - **b.** the Tribunal Secretary shall schedule a Hearing, and shall give reasonable notice to the required parties.
- 24. The Notice of Hearing shall contain:
 - a. the time, place and purpose of the Hearing;
 - **b.** a reference to the statutory authority under which the hearing will be held; and
 - **c.** a statement that if the Appellant or Agent does not attend the Hearing, the Tribunal may proceed in the Appellant's absence and the Appellant will not be entitled to any further notice in the proceeding.

25. The Secretary will send a Notice of Hearing to the Appellant by registered mail at least 21 days prior to the hearing.

Agenda

- **26.** The Tribunal Secretary shall compile an Agenda for each Hearing to include all appeals to be dealt with at that Hearing date.
- **27.** The Tribunal Secretary shall provide a copy of the agenda for each Hearing to the Members at least ninety-six (96) hours prior to the Hearing date.
- **28.** A copy of the Agenda may be posted on the Municipality of South Huron website.

Withdrawal of Appeal

29. An appeal may be withdrawn prior to the Hearing date by filing a letter of withdrawal with the Municipal Clerk as soon as reasonable.

30. If the Municipal Clerk receives a withdrawal of appeal prior to the Hearing date, notice of cancellation of that particular Hearing shall be sent to all persons who received the Notice of Hearing.

Effect of Non-Attendance at a Hearing

31. Where Notice of a Hearing has been given to a party and the party does not attend the Hearing, the Tribunal may proceed in the absence of the party and the party is not entitled to any further notice in the proceeding.

Part 6

Filing Documents

Filing Documents

- 32. If an Appellant intends to make use of any written or documentary evidence at the Hearing, the Appellant shall bring to the hearing a sufficient number of copies of documents for the Tribunal members, the Tribunal Secretary and the other parties. Documents are to be delivered to the Municipal Clerk no later than seven (7) clear days before the Hearing date.
- **33.** The Tribunal Secretary shall distribute copies of the Appellant's documents to the required parties.
- **34.** The Appellant shall include with the documents a statement of his or her address, telephone number, email address and the name of the proceeding to which the document relates.

Part 7

Disclosure

- **35.** The Animal Control Secretary, who attends the hearing in support of the Order, **may** send a disclosure package to the Appellant, which may include the following:
 - a. A copy of the signed order;
 - b. A copy of the signed courtesy letter sent to the Appellant (if

applicable);

- c. A copy of the Animal Control Officer's notes;
- d. A copy of the photographs taken by the Animal Control Officer;
- e. A copy of any relevant or other documents;
- f. A list of any additional material that may be used at the hearing such as additional photographs;
- g. A request for disclosure from the Appellant including a deadline date.
- **36.** If the Appellant has any material, such as documents or photographs, that he or she wishes to use during the hearing, the Appellant should disclose it to the Animal Control Secretary in advance, as requested in the disclosure package sent by the Animal Control Secretary.
- **37.** If either the Animal Control Secretary or the Appellant brings forward material during the hearing that has not been disclosed to the other party in advance, the Chair of the Tribunal will recess the hearing to allow the other party to review the material. When the hearing resumes, the other party will be given the opportunity to state any objections to the use of the material during the hearing. The Tribunal will decide, based on the submissions of the parties, whether or not the material may be referred to or introduced into evidence.

Part 8

Adjournments

Adjournments

- **38.** A Hearing may be adjourned at the discretion of the Tribunal upon its own motion or upon the motion of a party where that party satisfies to the Tribunal that the adjournment is required to permit an adequate Hearing to be held.
- **39.** In deciding whether to grant an adjournment, the Tribunal may consider one or more of the following factors:
 - a. the sufficiency of the reasons advanced for the request to adjourn;
 - b. the timeliness of the request;
 - c. the resources of the Tribunal;
 - **d.** the prejudice to the parties;
 - e. whether any adjournments have been granted previously;
 - f. the consent of the parties; and
 - g. any other relevant factor.

- **40.** The Tribunal may grant adjournments on such terms and conditions as it considers advisable.
- **41.** The Tribunal may, in its discretion, refuse an adjournment even though the parties consent.

Part 9

Legal Advice to Tribunal Members

42. Members of the Tribunal holding a Hearing shall not have taken part, before the Hearing, in any communication directly or indirectly in relation to the subject-matter of the Hearing, with any person, or with any party or Agent, except upon notice to and with opportunity for all parties to participate, but the Tribunal may seek legal advice from Counsel to the Tribunal and, in such case, the nature of the advice should be made known to the parties in order that they may make submissions as to the law.

PART 10

Witnesses Order for Witness Statements

43. The Tribunal may order a party to the Hearing to provide witness statements or summary of the evidence witnesses will give, including expert witnesses.

Rights Of Parties To Examine Witnesses

- **44.** A party to a proceeding may, at a Hearing:
 - a. call and examine witnesses and present evidence and submissions; and
 - **b.** conduct cross-examinations of witnesses at the Hearing to the extent reasonably required for a full and fair disclosure of all matters relevant to the issues in the Hearing.

Summons To Witness

45. The Tribunal may issue a summons to a witness on its own initiative or upon request of a party in accordance with the *Statutory Powers Procedures Act.*

Abuse of Process

- **46.** The Tribunal may make such orders or give such directions in proceedings as it considers proper to prevent abuse of its processes.
- **47.** The Tribunal may reasonably limit further examination or cross-examination of a witness where it is satisfied that the examination or cross-examination has been sufficient to disclose fully and fairly all matters relevant to the issues in the proceeding.
- **48.** The Tribunal may exclude from a Hearing anyone, other than a person licensed under the Law Society Act, appearing on behalf of a party or as an Agent if it finds that such person is not competent to properly represent or to advise the Party or witness or does not understand and comply at the Hearing with the duties and responsibilities of an advocate or adviser.

Part 11

Hearing Procedures Opening Procedures

- **49.** The Chair shall call the Hearing to order and read an opening statement outlining the procedure and format of the Hearing process.
- **50.** The Chair will read out the proceedings listed on the Agenda.

Statements

- **51.** Where a Member has any direct or indirect pecuniary interest pursuant to the *Municipal Conflict of Interest Act*, in any proceeding that is before the Tribunal, the Member,
 - **a.** shall, prior to any consideration of the Appeal, disclose the interest and the general nature thereof;
 - b. shall recuse him or herself from the Hearing of that Appeal; and
 - **c.** shall not attempt in any way whether before, during or after the Hearing to influence the decision of the Tribunal.

Motions

52. The Tribunal will hear motions regarding any Hearing listed on the Agenda.

- **53.** The Tribunal will hear motions for adjournment requests prior to the commencement of any Hearing.
- **54.** If a party brings a motion regarding a proceeding not listed on the agenda, the Tribunal may decide to hear the motion at that time or order that it be brought at a later date.

Order of Presentation

- **55.** Subject to any motions previously adopted by the Tribunal, the Chair will indicate that the Tribunal will now hear the first appeal on the agenda.
- **56.** The Chair make an opening address and requests that the Parties to an appeal identify themselves, including any witnesses who intend to give evidence on behalf of the Appellant to the appeal.
- 57. All Appellants and/or their representatives and witnesses must sign in.
- **58.** The Chair will call the meeting to order and ask Tribunal members to declare any conflicts of interest.
- **59.** The Tribunal Secretary will advise of any changes to the Agenda. The Tribunal will approve the Agenda and adopt the previous meeting minutes.
- **60.** The Chair will ask the Animal Control Secretary, who sits facing the Tribunal, whether there are any requests for adjournment or Orders that have been complied with. The Tribunal will deal with these matters first.
- **61.** The Chair will state the Order for which the appeal is being heard and the Appellant will take a seat facing the Tribunal.
- **62.** The Animal Control Secretary and then the Appellant may make an opening submission;
- **63.** The Animal Control Secretary will call their witnesses. Once called, a witness is seated at the witness table and is sworn in, either under oath or by affirmation.
- **64.** At the conclusion of the testimony of each of the Animal Control Secretary's witnesses, the Appellant and the Tribunal may ask their own questions.
- **65.** After the Animal Control Secretary has called all of their witnesses, the Appellant will call their witnesses who may be the Appellant themselves and/or other

witnesses. Again, once called, a witness is seated at the witness table and is sworn in, either under oath or by affirmation.

- **66.** Information submitted by the Animal Control Secretary and the Appellant shall be limited in speaking to not more than fifteen (15) minutes in total per appeal.
- **67.** At the conclusion of the testimony of each of the Appellant's witnesses, the Animal Control Secretary, the By-Law Enforcement Officer and/or Animal Control Officer and the Tribunal may ask their own questions.
- **68.** The Appellant and then the Animal Control Secretary make final submissions, which should include what they want the Tribunal to do with respect to confirming, modifying or rescinding the Order and/or extending the time for complying with Order.
- 69. The Tribunal Members may ask questions of any witness, through the Chair.
- **70.** After all the evidence has been presented by all parties to the proceedings, the By-Law Enforcement Officer and/or Animal Control Officer may make a closing address, followed by the closing address of the Appellant, if he or she decides to do so.

Other Representations; Right of Reply

- **71.** After the Appellant's presentation, the Tribunal will hear from anyone else who wishes to make representations before the Tribunal pertaining to the matter.
- **72.** Persons giving evidence are subject to questions by the Tribunal, the Appellant or the Appellant's Agent, and the Agent for the Municipality.
- **73.** The Municipality's Agent has the right of reply on matters which could not have been anticipated prior to hearing the Appellant's evidence.

Closing Statements

74. At the conclusion of all evidence presented, parties are entitled to make final submissions to the Tribunal.

Considerations in Exercising Powers to Make an Order

- **75.** The Tribunal may take into consideration the following:
 - a. The dog's past and present temperament and behaviour;
 - b. The seriousness of the injuries caused by the subject dog;
 - c. Unusual contributing circumstances tending to justify the dog's action;

- d. The improbability that a similar attack will be repeated;
- e. Precautions taken by the owner to preclude similar attacks in the future; and
- f. Any other circumstances the Tribunal considers to be relevant.

Tribunal Decision

- **76.** The Tribunal may recess any time to consider its final decision or any interim decision during the Hearing.
- **77.** The Tribunal will render its decision on the matter in the presence of the public and the Animal Control Secretary and the Appellant. If Tribunal determines that additional information is required to render a decision, it may adjourn the matter to a future meeting date.
- 78. If the Tribunal requires, it may move into Closed Session upon adoption of the required motion, to deliberate and/or to draft a Notice of Decision or to consult with Counsel for the Tribunal. The Tribunal shall give a written decision or may reserve its decision.
- **79.** If the decision is reserved the Chair will advise the Appellant that the Appellant will be notified by registered mail of the Tribunal's decision.
- **80.** The decision of the Tribunal is final and binding and include details that include confirming, modifying or rescinding the Order and/or extending the time for complying with Order.
- **81.** The Tribunal's decision or order is effective from the date on which it was made and will be sent to the Appellant within two (2) weeks of the hearing.

Notice Of Decision

- **82.** The Tribunal Secretary shall issue a copy of the Notice of Decision or order, including the reasons if any have been given, to each party who participated in the proceeding, or the party's representative or agent, if any, within five (5) days of the making of the decision.
- **83.** The Tribunal shall issue a copy of the Notice of Decision or order, including the reasons if any have been given, to each party who participated in the proceeding, or the party's representative or agent, if any,
 - i. in person
 - ii. by regular mail;
 - iii. by electronic transmission;

- iv. by some other method that allows proof of receipt.
- a. If the copy of the decision or order is sent by mail, it shall be sent to the party's most recent address known to the Tribunal, and shall be deemed to have been received by the party on the fifth (5) day after the day it is mailed.
- b. If the copy of the decision or order is sent by electronic transmission, it shall be deemed to be received on the date it was sent.
- c. If the copy of the decision or order is sent by a method referred to in 80 (iv), it shall be deemed to be received on the date contained in the proof of receipt.
- **84.** The written decision set out in the Notice of Decision shall be signed by all Members of the Tribunal that took part in the Hearing and shall contain written reasons to support the decision.
- **85.** The Notice of Decision shall contain a record of the proceedings, compiled by the Tribunal Secretary, which shall include:
 - **a.** list of persons present;
 - b. list of witnesses and for whom they testified;
 - c. any interlocutory orders made by the Tribunal; and
 - **d.** all documentary evidence filed with the Tribunal, subject to any limitations expressly imposed by any other Act.

Accessibility and Accommodation

86. Parties requiring accommodation of a disability in order to participate in Tribunal proceedings, whether as an Appellant, witness, or agent representing the Appellant, must notify the Tribunal as early as possible in order that accommodation requests can be addressed in advance of the Hearing date.



Staff Memo

Report To:	South Huron Council
From:	Dan Best, Chief Administrative Officer/Deputy
	Clerk
Date:	October 15 2018
Report:	CAO 2018-18
Subject:	Dashwood Community Centre RFP Results

Recommendations:

That the memo of D Best, Chief Administrative Officer dated October 15, 2018 regarding the Dashwood Community Centre project RFP results be received; and

That Brannon Construction be awarded the project to design and construct the washroom renovations at the Dashwood Community Centre for the price of \$107,300 plus HST.

Purpose:

Approval

Background and Analysis:

Further to CAO Report 2018-16 dated September 4, 2018, the Municiplaity followed the following process respecting Dashwood Community Centre project:

- A Request for Proposal (RFP) was issued on September 14, 2018 and closed on October 4, 2018 for the design and construction of the project
- The scope of the project inviting proposals from qualified proponents to design and construct new washrooms to meet OBC and Accessible guidelines at the Dashwood Community Centre within the existing

footprint of the building causing minimal impact on the existing front hallway and no impact in the hall itself. Alternatively, the Municipality will consider alternative designs that are outside of the footprint, meet OBC and Accessibility requirements.

 A Review committee will consist of the South Huron CAO, Bluewater staff member and a member of the Advisory Committee. Final report back to Council(s)

One bid was submitted for the project by Brannon Construction. The proposal was reviewed by the Committee on October 10, 2018. The review Committee scored the bid on the following criteria:

Evaluation Criteria	Weighting	Score
Demonstrated Performance	10	3
Experience and Qualifications	10	8
Approach and Methodology	40	30
Cost	40	37
Total	100	81

Financial Impact:

The Municipality of South Huron as part of the 2018 budget process approved an upset limit of \$120,000 plus HST for this project. Subsequent expenditures related to the previous tendering process, building permit and minor variance application resulted in the current procurement process to have an upset limit of \$107,300 plus HST.

The Municipality of Bluewater has committed \$40,200 (applying 50% of the Dashwood Mens Club funding) and the Dashwood Mens Club has committed \$30,000 to the project (addition requirement).

The following table outlines the overall breakdown of the project:

ITEM	Revenues	Expenses
Brannon Construction Proposal		\$107,300
Building Permit, Variance, Architect		\$12,700
South Huron Budget (Levy, Turbine Revenue)	\$64,800	
Municipality of Bluewater contribution	\$40,200	
Dashwood Mens Club	\$30,000	
Totals	\$135,000	\$120,000

It should be noted that the exterior works related to this project including site works (asphalt for accessible parking) and contingencies were not included in the proposal. It is anticipated that any of these items would be covered by the \$15,000 in source revenue available to complete the project in 2019 as the \$30,000 donation from the Mens Club was an unknown at the time of the 2018 budget; but ensures that the project (RFP and saite works/accessible parking) can move forward subject to Council approval.

The exterior work for the building renovation is anticipated to begin on November 1, 2018. No interior work will begin until January 2019 in order to facilitate events for the fall and upcoming Christmas season. Staff will work with the patrons and partners of the facility during the renovation process.

Legal Impact:

There are no legal implications as a result of the actions outlined in this report

Staffing Impact:

The exterior work for the building renovation is anticipated to begin on November 1, 2018. No interior work will begin until January 2019 in order to facilitate events for the fall and upcoming Christmas season. Staff will work with the patrons and partners of the facility during the renovation process.

Policies/Legislation:

Procurement of Goods and Services Policy 33-2017

Consultation:

Dashwood Community Centre Advisory Committee Municipality of Bluewater Staff Dashwood Mens Club

Page 276

Related Documents:

Construction Design Concept

Respectfully submitted,

Dan Best, Chief Administrative Officer/Deputy Clerk

PRE-FINISHED METAL ROOF TO MATCH EXISTING

PRE-FINISHED METAL FASCIA TO MATCH EXISTING (TYP.)

EAVESTROUGH AND VENTED SOFFIT TO MATCH EXISTING (TYP.)

PRE-FINISHED METAL CLADDING TO MATCH EXISTING

STEP FOOTINGS AS REQUIRED IN ACCORDANCE WITH OBC

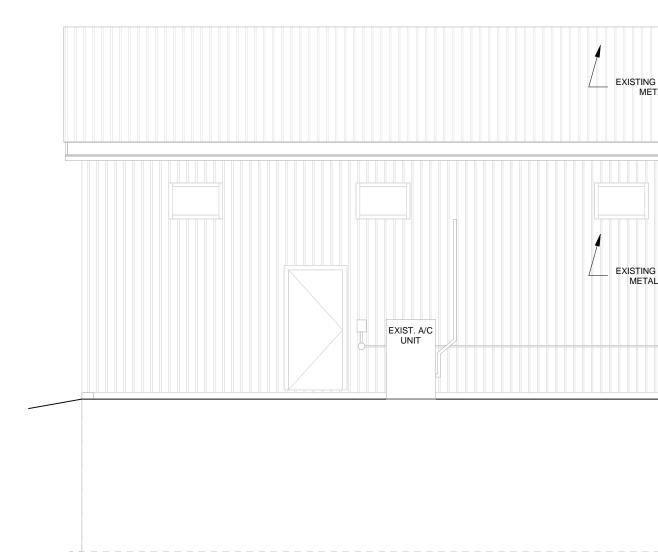
JOHNSON

ENGINEERING CONSULTANTS STRUCTURAL - CIVIL - MUNICIPAL

368 HURON STREET, [519] 271-9923 STRATFORD, ONTARIO NSA 515 PAX (619) 271-5353 http://www.jcelinc.on.co

20t

റ്



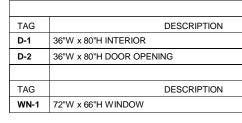
+110'-0 3/4" TOP PLATE

+101'-5 1/2" t/o MAIN FLOOR

+96'-8" t/o NEW FOOTING

+100'-0" GRADE

NORTH							WASYLKO	ARCHITECT
	DESIGN	MR	No.	REVISION DESCRIPTION	MM/DD/YY	CH'KD	WASYLKO ARCHITECT INC.	at citle
	DRAWN	MR	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	NAT AND
	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		MIST
								AP O
							370 QUEENS AVE	8°.~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
							LONDON ON N6B 1X6	~ ⁴⁰
							519.663.0888	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
							FAX 663.5258	

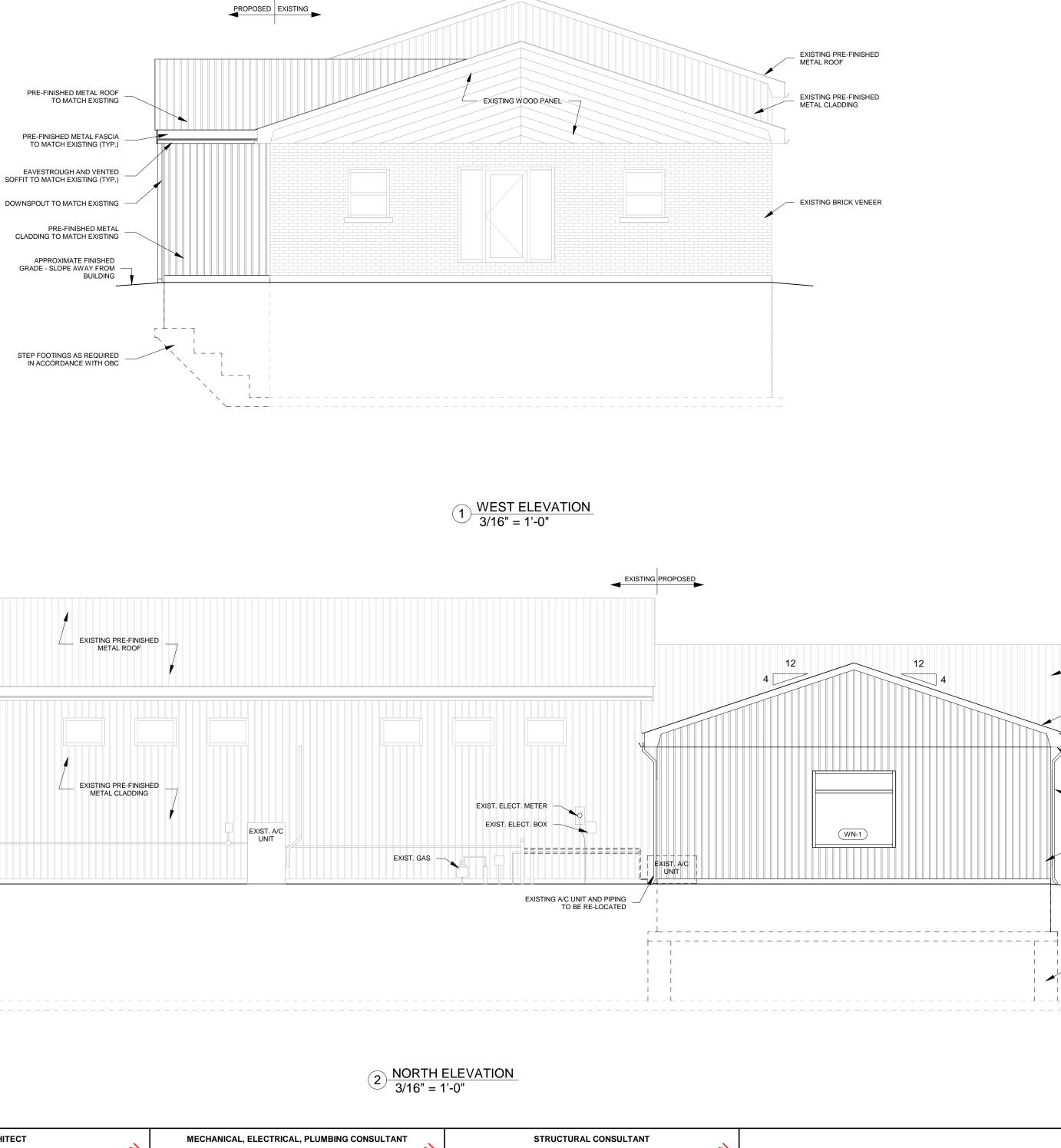


NOTE:

- ALL JACK STUDS / KING STUDS TO BE 2x6 SPF No.1 SPF No.1 / No.2 FOR 2x8 FRAMED WALLS.
- 2. LAMINATE BUILT UP STUD POSTS IN ACCORDANCE
- 3. CONTRACTOR TO CONFIRM ROUGH OPENINGS PR

4. ALL EXTERIOR GRADE DOORS TO BE INSULATED.

150 CENTRE ST., DASHWOOD, ON NOM 1N0

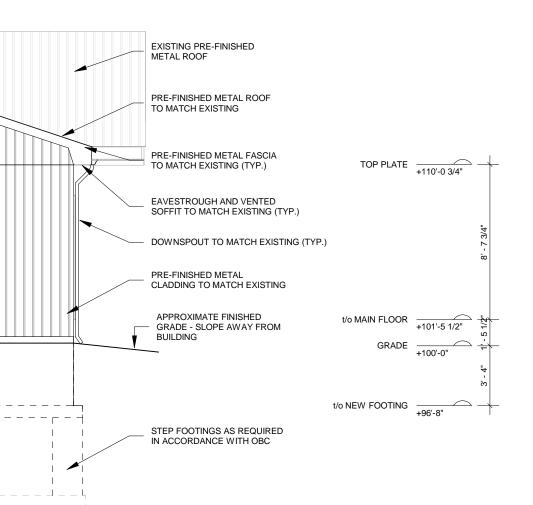


NOT

ENGINEERING

AND DESIGN LTD.

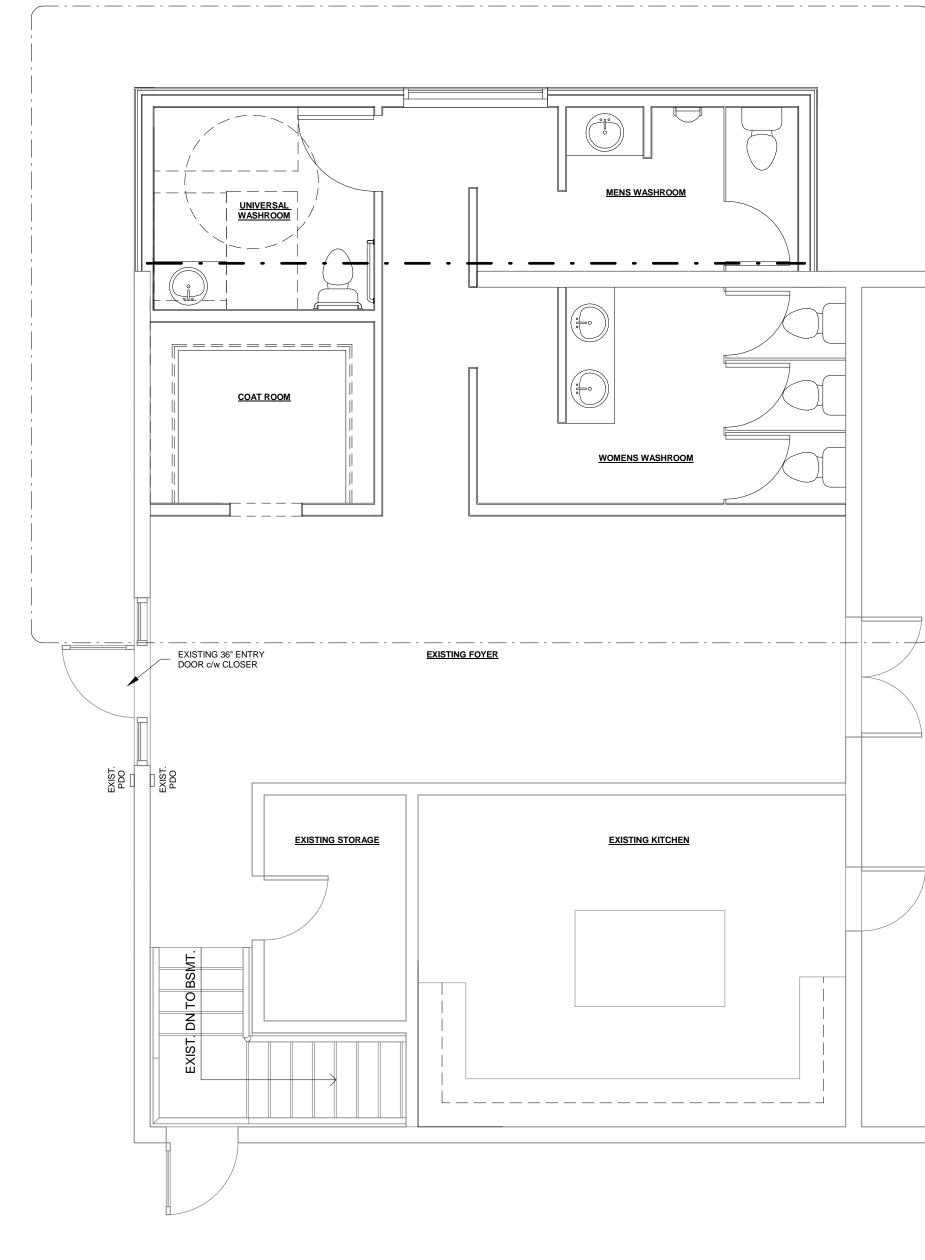
			DOOR SCHEDULE		
	ROUGH OPENING	HEAD HEIGHT	LINTEL	BEARING	COMMENTS
	38-1/2" x 82-1/2"	82-1/2"	2-PLY 2x4 SPF No.1/No.2	1 JACK STUD / 1 KING STUD EACH END	PROVIDE POWER DOOR OPERATOR
	38-1/2" x 82-1/2"	82-1/2"	2-PLY 2x4 SPF No.1/No.2	1 JACK STUD / 1 KING STUD EACH END	
			WINDOW SCHEDULE		
	ROUGH OPENING	HEAD HEIGHT		BEARING	COMMENTS
	73"W x 67"H	104"	2-PLY 2x6 SPF No.1/No.2	2 JACK STUDS / 2 KING STUDS EACH END	
.1 / No.2 FOR 2x6 FRA E WITH OBC. RIOR TO CONSTRUC	IMED WALLS AND 2x8			UINTEL - REFER TO SCHEDULE FOR SIZE AN JACK STUDS - REFER TO SCHEDULE FOR NU KING STUD - REFER TO SCHEDULE FOR NU	UMBER OF PLIES
				WOOD LINTEL DETAIL	



SCALE	SCALE	DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION	PROJECT No. MR18-098
	As indicated		SHEET NO. S-1
		ELEVATIONS	

CONSTRUCTION NOTES

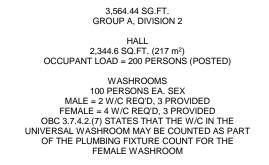
- 1. ALL CONSTRUCTION TO MEET OR EXCEED THE 2012 OBC REQUIREMENTS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SITE DIMENSIONS AND ACCOMMODATE ANY VARIATIONS FROM WHAT IS DRAWN.
- WINDOW AND DOOR SIZES GIVEN ON THE PLAN ARE BASED ON NOMINAL SIZES. ALL SIZES TO BE VERIFIED WITH OWNER AND ADJUSTED TO MANUFACTURER'S SPECIFICATIONS.
- DIMENSIONS ARE TO THE FACE OF CONCRETE WALLS / STUDS. WALLS ARE DIMENSIONED ACTUAL SIZE (I.E. 2" x 4" STUD 1-1/2" x 3-1/2").
- 5. BLOCK ALL BEAMS AND GIRDER TRUSSES DOWN TO THE FOUNDATION.



NORTH								ARCHITECT
	DESIGN	MR	No.	REVISION DESCRIPTION	MM/DD/YY	СН'КД	WASYLKO ARCHITECT INC.	
	DRAWN	MR	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	
—_N—_	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		le.
								REF.C
							370 QUEENS AVE LONDON ON	Y OF
							N6B 1X6	
							519.663.0888 FAX 663.5258	40

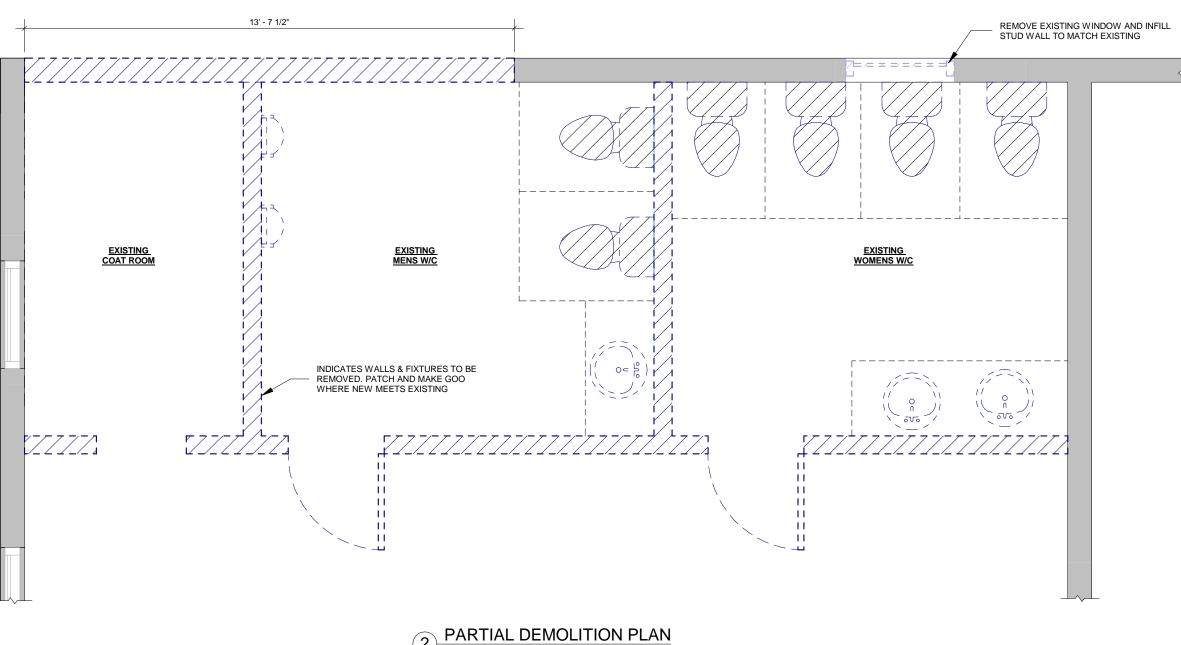
 $(1) \frac{\text{GROUND FLOOR PLAN}}{1/4" = 1'-0"}$

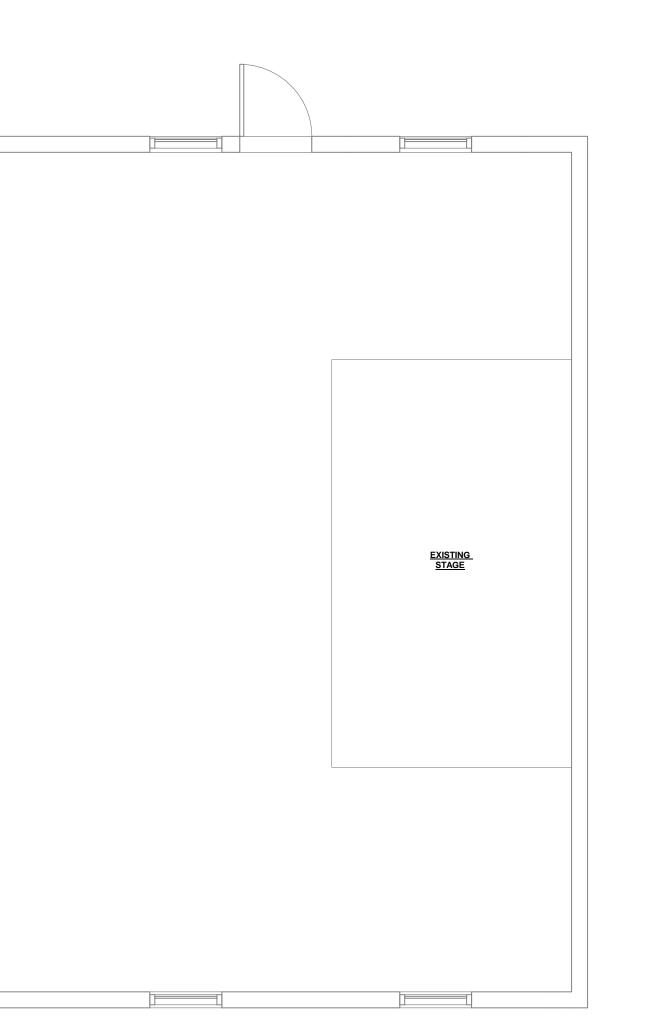




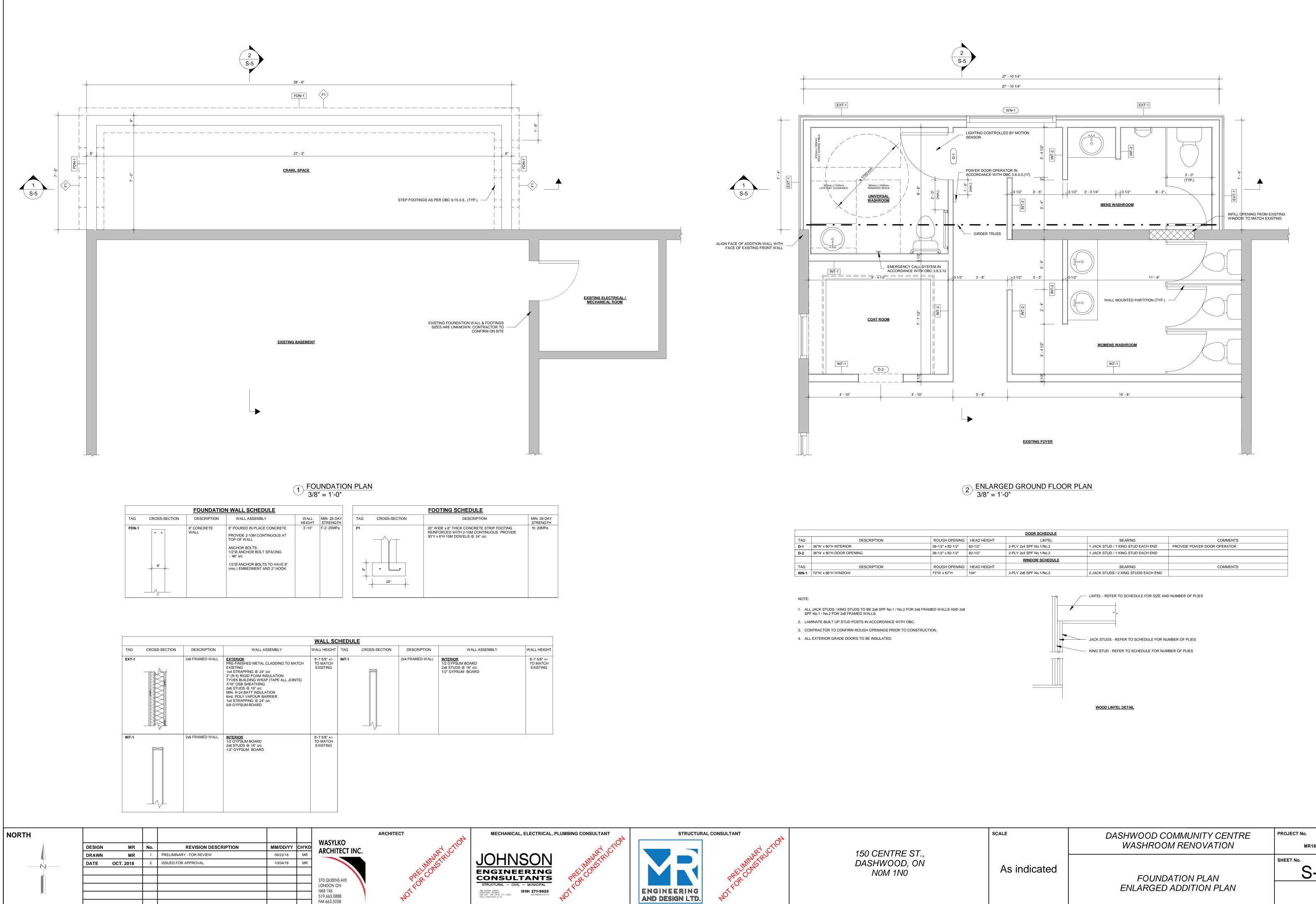
EXISTING COMMUNITY CENTRE

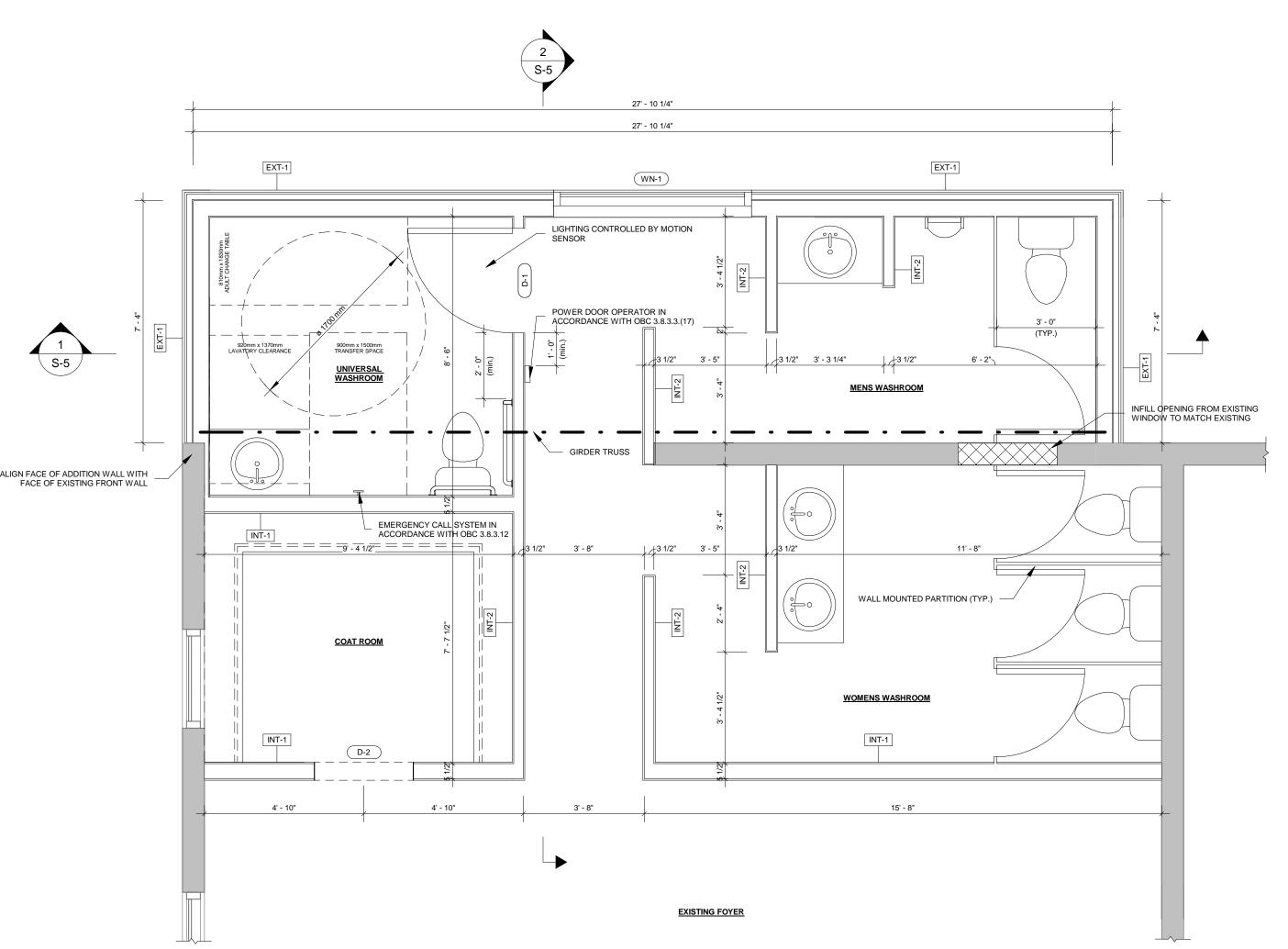
2 PARTIAL DEMOLITION PLAN 3/8" = 1'-0"





SCALE		DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION	PROJECT No. MR18-098
A	s indicated	MAIN FLOOR PLAN PARTIAL DEMOLITION PLAN	SHEET NO. S-2



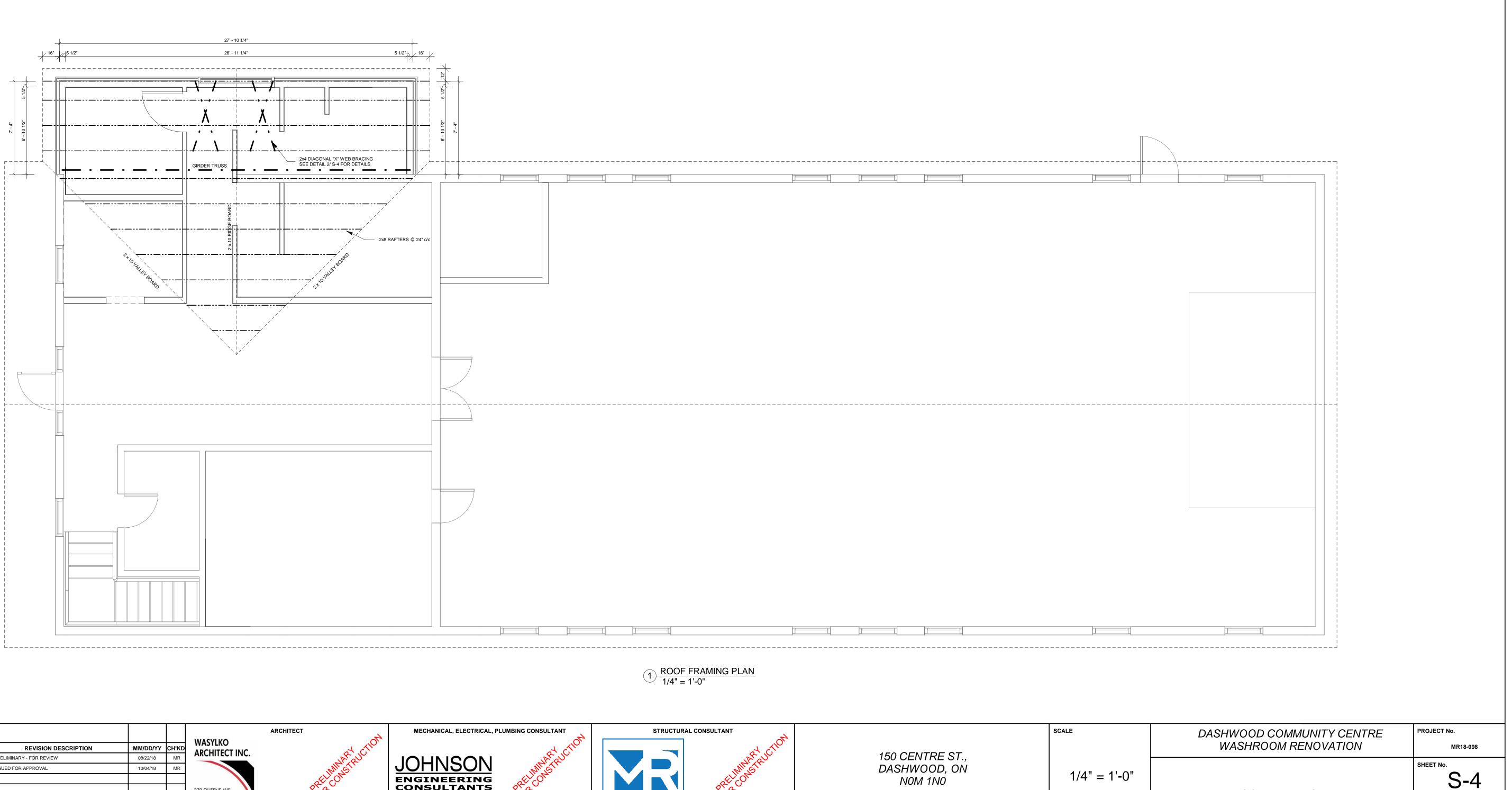


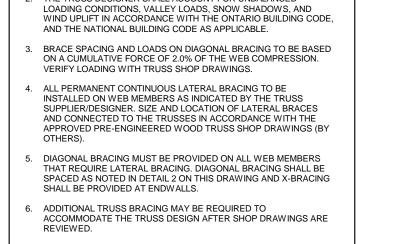
DOOR SCHEDULE									
TAG	DESCRIPTION	ROUGH OPENING	HEAD HEIGHT	LINTEL	BEARING	COMMENTS			
D-1	36"W x 80"H INTERIOR	38-1/2" x 82-1/2"	82-1/2"	2-PLY 2x4 SPF No.1/No.2	1 JACK STUD / 1 KING STUD EACH END	PROVIDE POWER DOOR OPERATOR			
D-2	36"W x 80"H DOOR OPENING	38-1/2" x 82-1/2"	82-1/2"	2-PLY 2x4 SPF No.1/No.2	1 JACK STUD / 1 KING STUD EACH END				
				WINDOW SCHEDULE					
TAG	DESCRIPTION	ROUGH OPENING	HEAD HEIGHT		BEARING	COMMENTS			
WN-1	72"W x 66"H WINDOW	73"W x 67"H	104"	2-PLY 2x6 SPF No.1/No.2	2 JACK STUDS / 2 KING STUDS EACH END				

Page 279

	SCALE As indicated	DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION	PROJECT No. MR18-098
		FOUNDATION PLAN	SHEET NO. S-3
		ENLARGED ADDITION PLAN	

NORTH							WACYLKO	ARCHITECT
	DESIGN	JM	No.	REVISION DESCRIPTION	MM/DD/YY	сн'кр	WASYLKO ARCHITECT INC.	
	DRAWN	JM	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	2
	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		MAN
							370 QUEENS AVE	81 8- C
							LONDON ON N6B 1X6	A KO
							519.663.0888	~ ²⁰ .
							FAX 663.5258	•

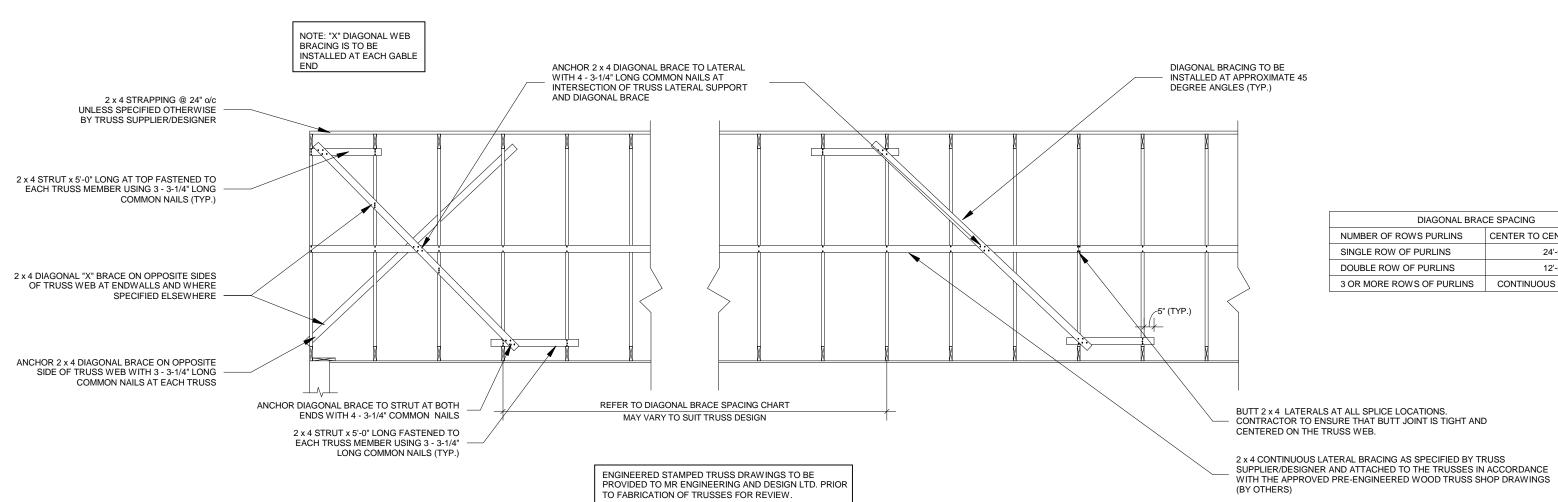




. TRUSSES TO BE DESIGNED FOR THE LOADS NOTED ON THE STRUCTURAL DRAWINGS.

. THE TRUSS DESIGNER SHALL ACCOUNT FOR UNBALANCED

TRUSS BRACING NOTES:



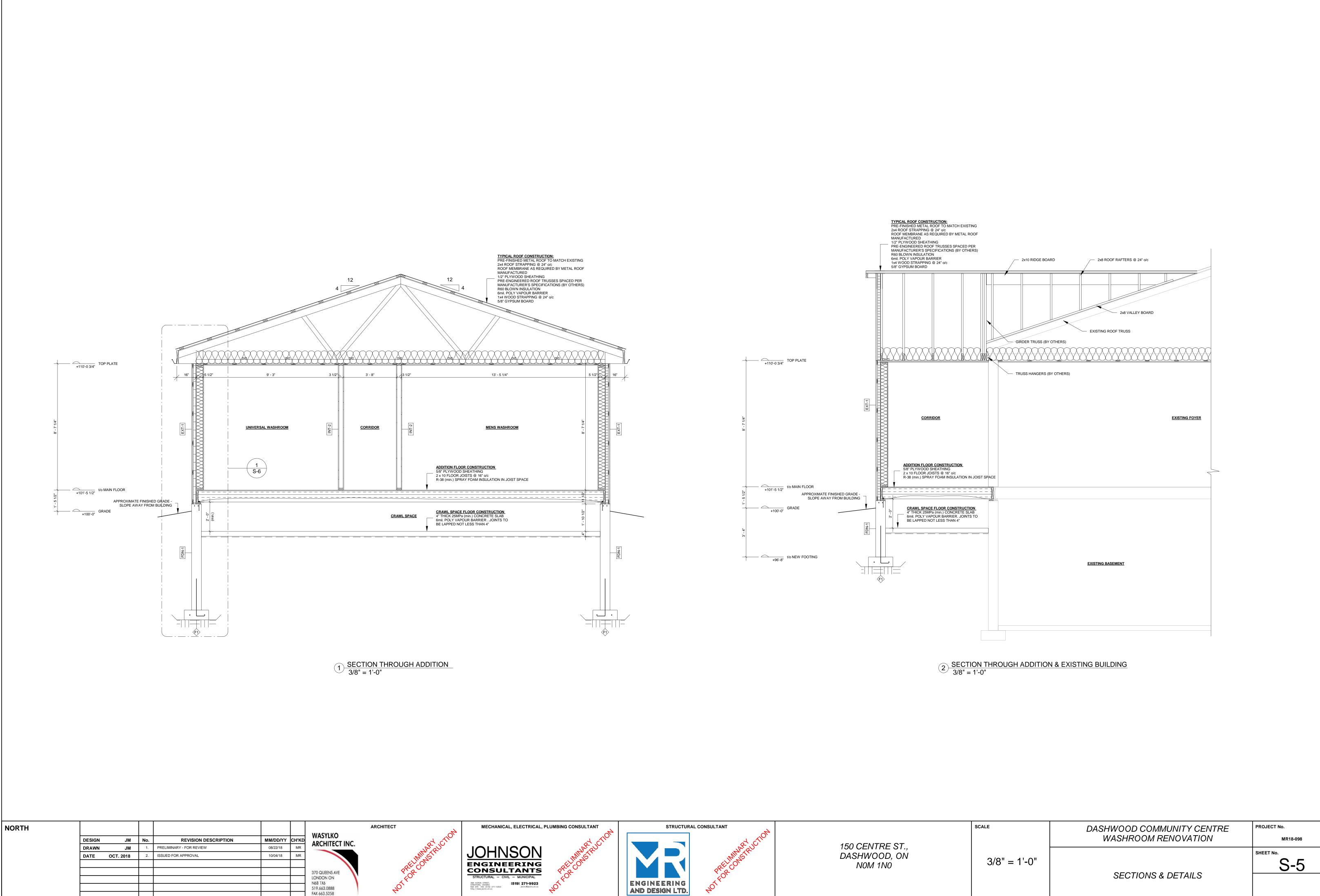


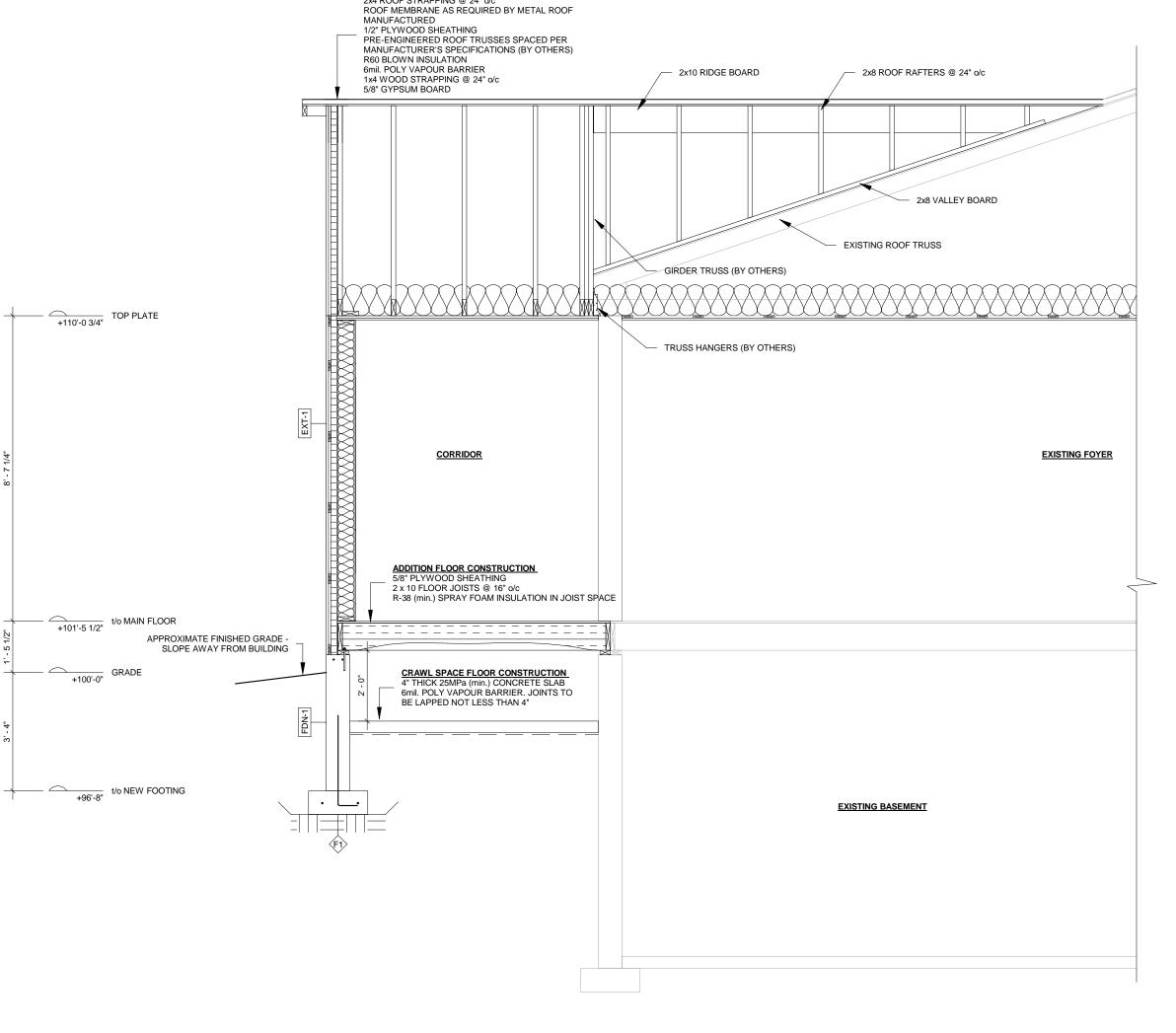
2 WEB BRACING DETAILS 1/4" = 1'-0"

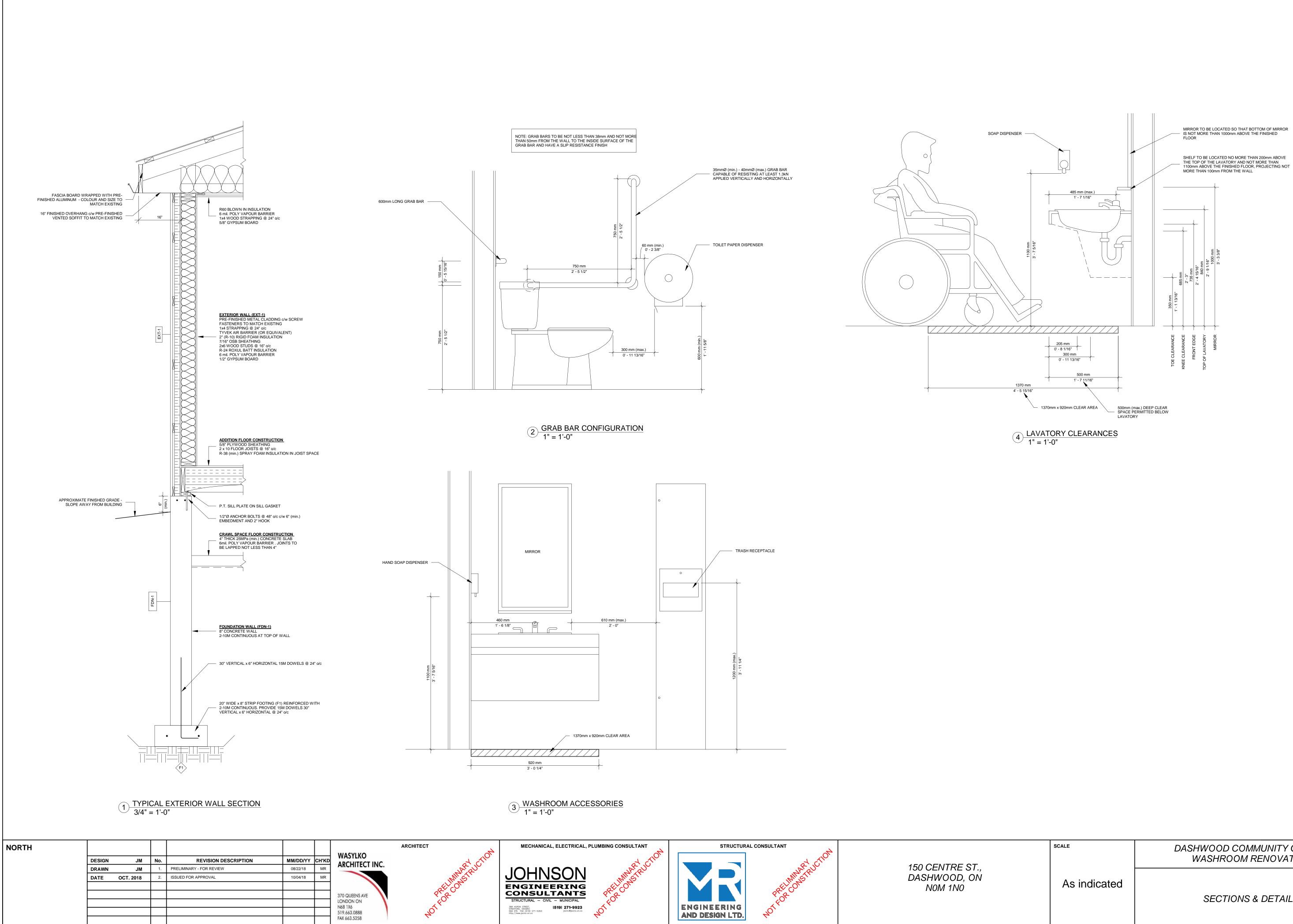
NUMBER OF ROWS PURLINS CENTER TO CENTER SPACING 24'-0" 12'-0" 3 OR MORE ROWS OF PURLINS CONTINUOUS "V" BRACING

DIAGONAL BRACE SPACING

ROOF FRAMING PLAN









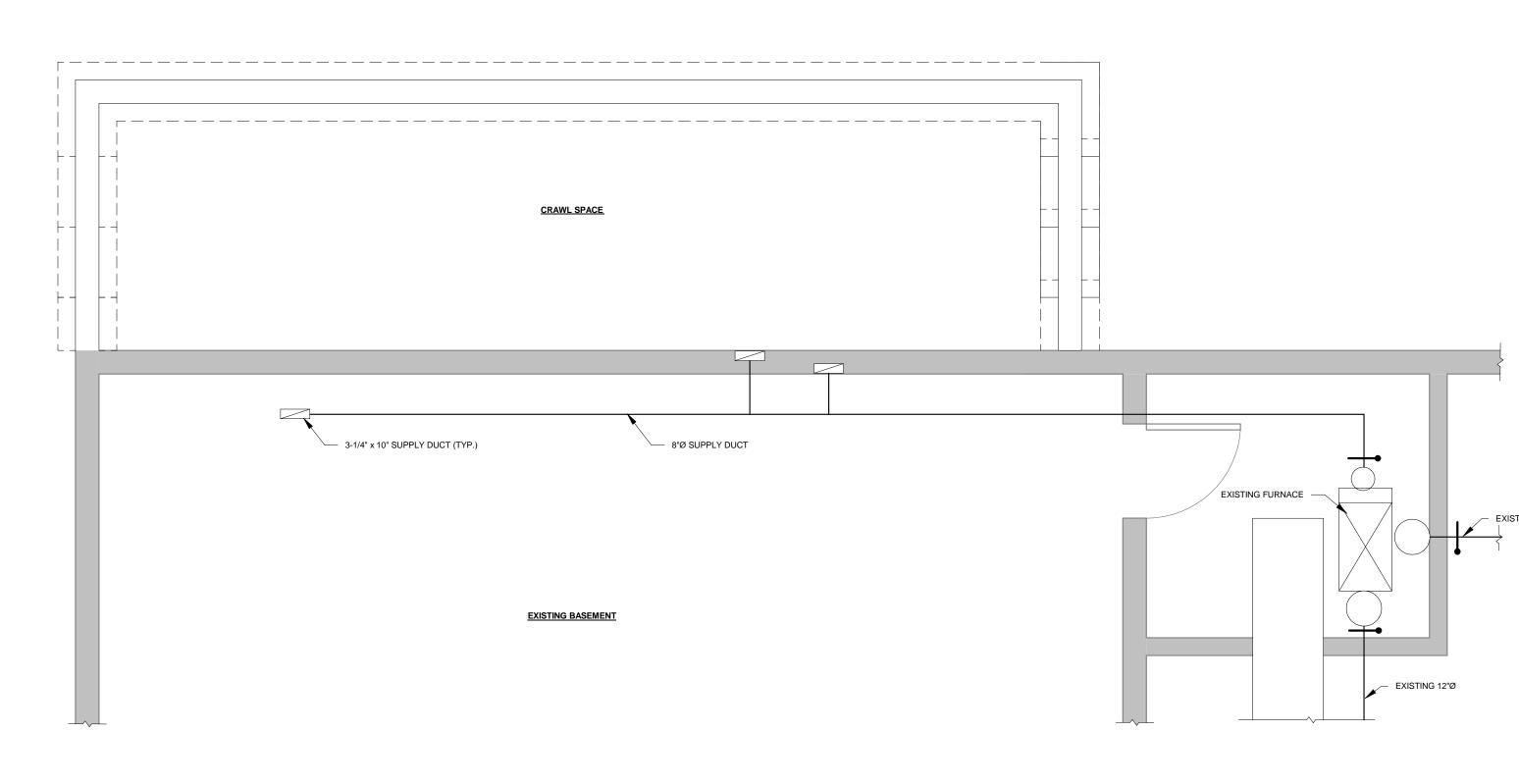
DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION

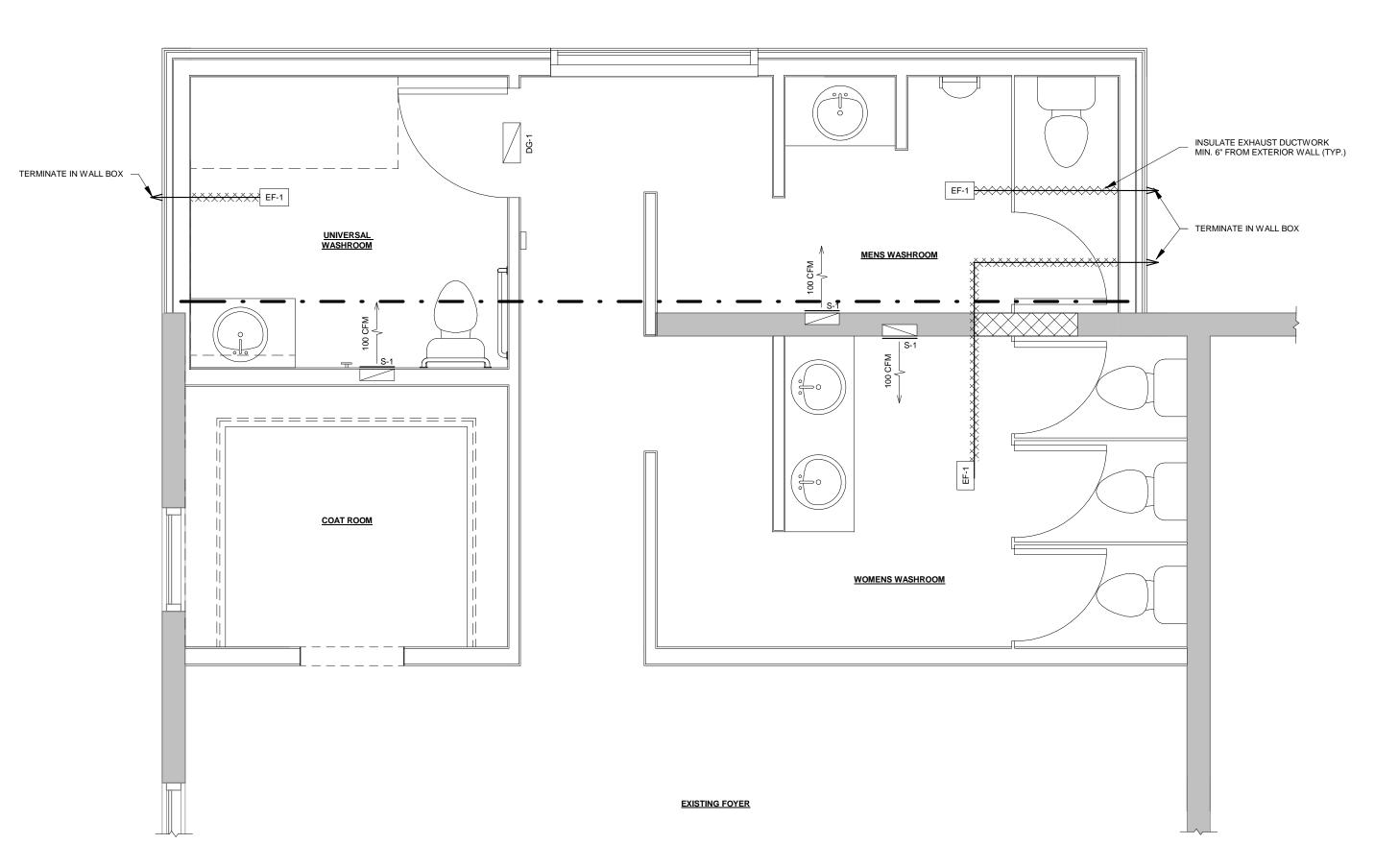
PROJECT No.

MR18-098

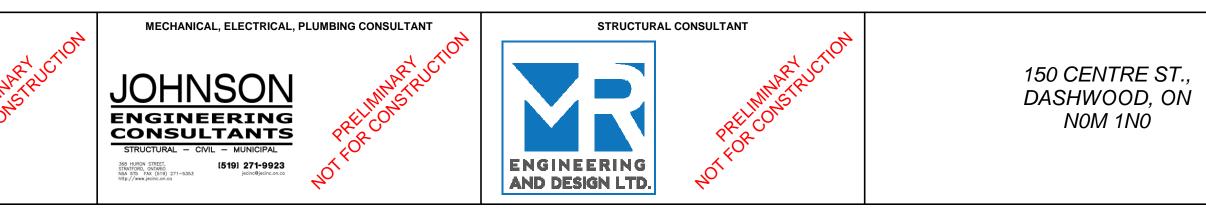
SHEET No. **S-6**

SECTIONS & DETAILS





NORTH								ARCHITECT
	DESIGN	JM	No.	REVISION DESCRIPTION	MM/DD/YY	сн'кр	WASYLKO	
	DRAWN	JM	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	
N	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		in the second
								ALL C
							370 QUEENS AVE	8°. &
							LONDON ON N6B 1X6	~~~
							519.663.0888	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
							FAX 663.5258	Ň



2 GROUND FLOOR HVAC PLAN - BY JOHNSON ENGINEERING CONSULTANTS 3/8" = 1'-0"

1 BASEMENT HVAC PLAN - BY JOHNSON ENGINEERING CONSULTANTS3/8" = 1'-0"

MECHANICAL DRAWING NOTES:

- ALL HVAC WORK AND NEW EQUIPMENT AND WORKS TO MEET OR EXCEED ASHRAE 90.1 FOR ENERGY EFFICIENCY
- . HVAC CONTRACTOR TO REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ROOM LAYOUT, AND GENERAL CEILING INFORMATION
- ALL RIGID SECTIONS OF DUCTWORK TO HAVE JOINTS SEALED, WRAPPED AND INSULATED. DUCT ISOLATION REQUIRED ON ALL SYSTEMS BETWEEN HVAC EQUIPMENT AND HORIZONTAL DUCT ASSEMBLIES
- SUPPORT OF ALL MECHANICAL WORK TO BE FROM STRUCTURAL SUPPORTS AND NOT THE ROOF DECK. STRUCTURAL APPROVAL BY OTHERS
- EXISTING FURNACE TO BE REVIEWED AN SERVICES AS REQUIRED
- DOORS FOR WASHROOMS AND ROOMS WITH EXHAUST VENTS REQUIRE PROVISIONS FOR RETURN AIR. GRILLES IN DOORS RECOMMENDED. PROVIDE FIRE DAMPER IF FIRE RATED DOOR
- DUCTS SHOWN AS ROUND SIZES MAY BE CONVERTED TO EQUIVALENT BOX SECTIONS

MECHANICAL DESIGN INFORMATION HEAT LOSS WAS DETERMINED WITH:

- INDOOR WINTER TEMPERATURE OF 22°C (72°F) OUTDOOR WINTER TEMPERATURE OF -20°C (-5°F) WIND SPEED OF 29 KPH (18MPH) FROM NNW SUPPLY AIR TEMPERATURE OF 40°C (104°F) NO OTHER HEAD LOADS INCLUDED. 3000 cfm 0.A. OR 2.2 ACH INCLUDED FOR BANQUET AREAS.
- HEAT GAIN CALCULATIONS DETERMINED WITH:
- INDOOR SUMMER TEMPERATURE OF 22°C (72°F) OUTDOOR SUMMER TEMPERATURE OF 29°C (84°F) WIND SPEED OF 16KPH (10MPH) FROM SW SUPPLY AIR TEMPERATURE PF 16°C (62°F)

MECHANICAL EQUIPMENT SCHEDULE

 MECHANICAL EQUIPMENT SCHEDULE

 TONS
 CFM
 EX. STATIC
 COOLING BTU
 HEATING BTU
 HP
 ELECTRIC 2
 FRESH AIR
 REMARKS

 1200
 0.5
 90,000 84,000
 1/2
 120V/1PH FLA: X.XA
 N/A
 EXISTING UNIT SERVING HALL AREA

 90
 0.25
 120V/1PH 70W
 VENT TO EXTERIOR. INCLUDE WEATHE HOOD w/ BD DAMPER

 ITEM (SYM) DESCRIPTION FRN1 EXISTING FURNACE EF-1 BATHROOM FAN AIR-KING BFQ110 VENT TO EXTERIOR. INCLUDE WEATHER HOOD w/ BD DAMPER

EXISTING 12"Ø

1. GAS INPUT / OUTPUT RATINGS 2. CONFIRM ELECTRICAL SUPPLY BEFORE ORDERING

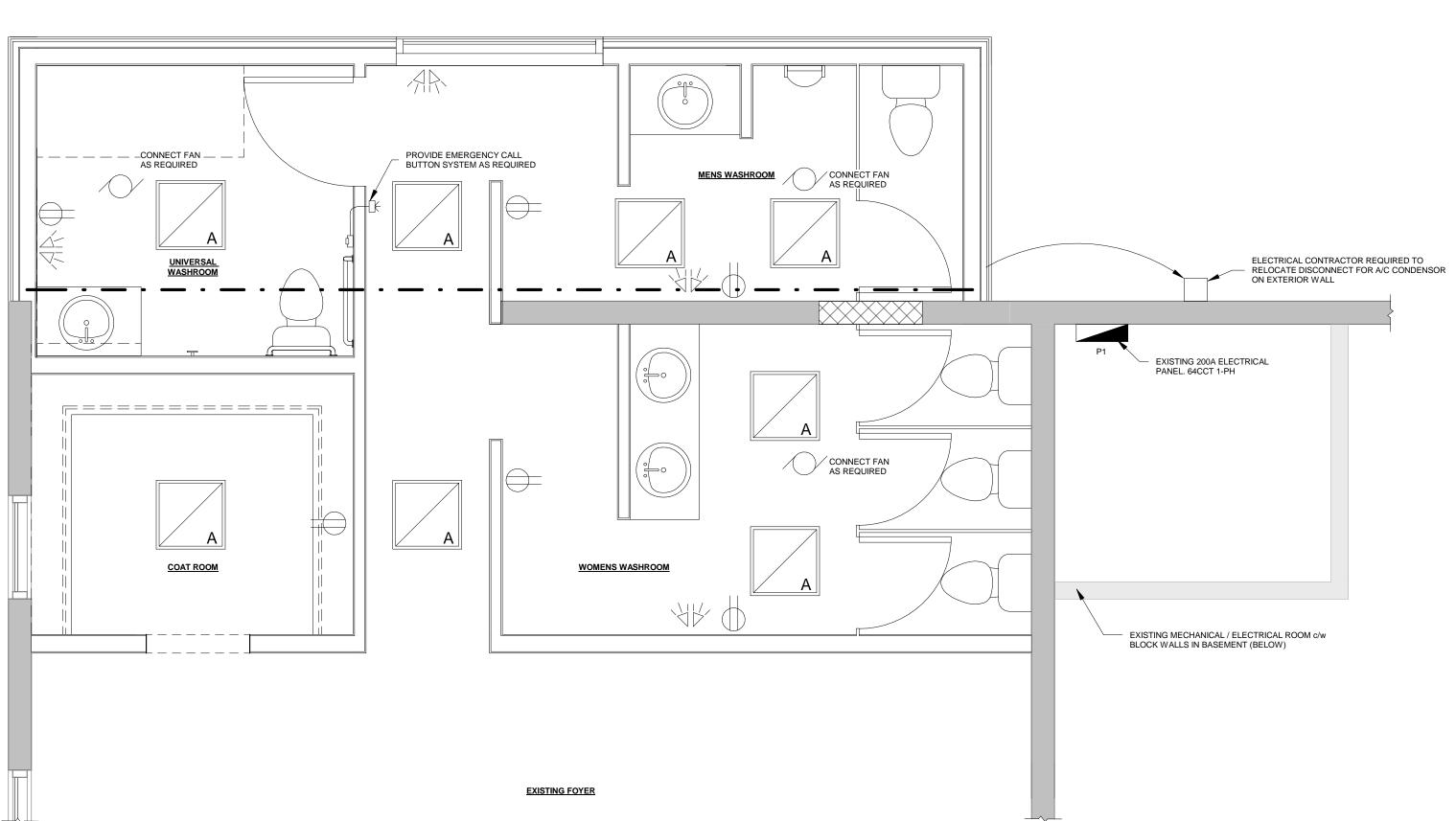
			GRILLE AND DIFFUSOR SCHEDULE		
ITEM (SYM)	DESCRIPTION	MAKE	DESCRIPTION, MANUFACTURER OR APPROVED EQUAL	FURN . BY	REMARKS
S-1	STEEL WALL GRILLE	EH PRICE	#520P 4" x 12" SUPPLY DIFFUSOR	CONTR.	-
DG-1	DOOR GRILLE	EH PRICE	STG1 TRANSFER GRILLE FOR DOOR - 14" x 16"	CONTR.	-

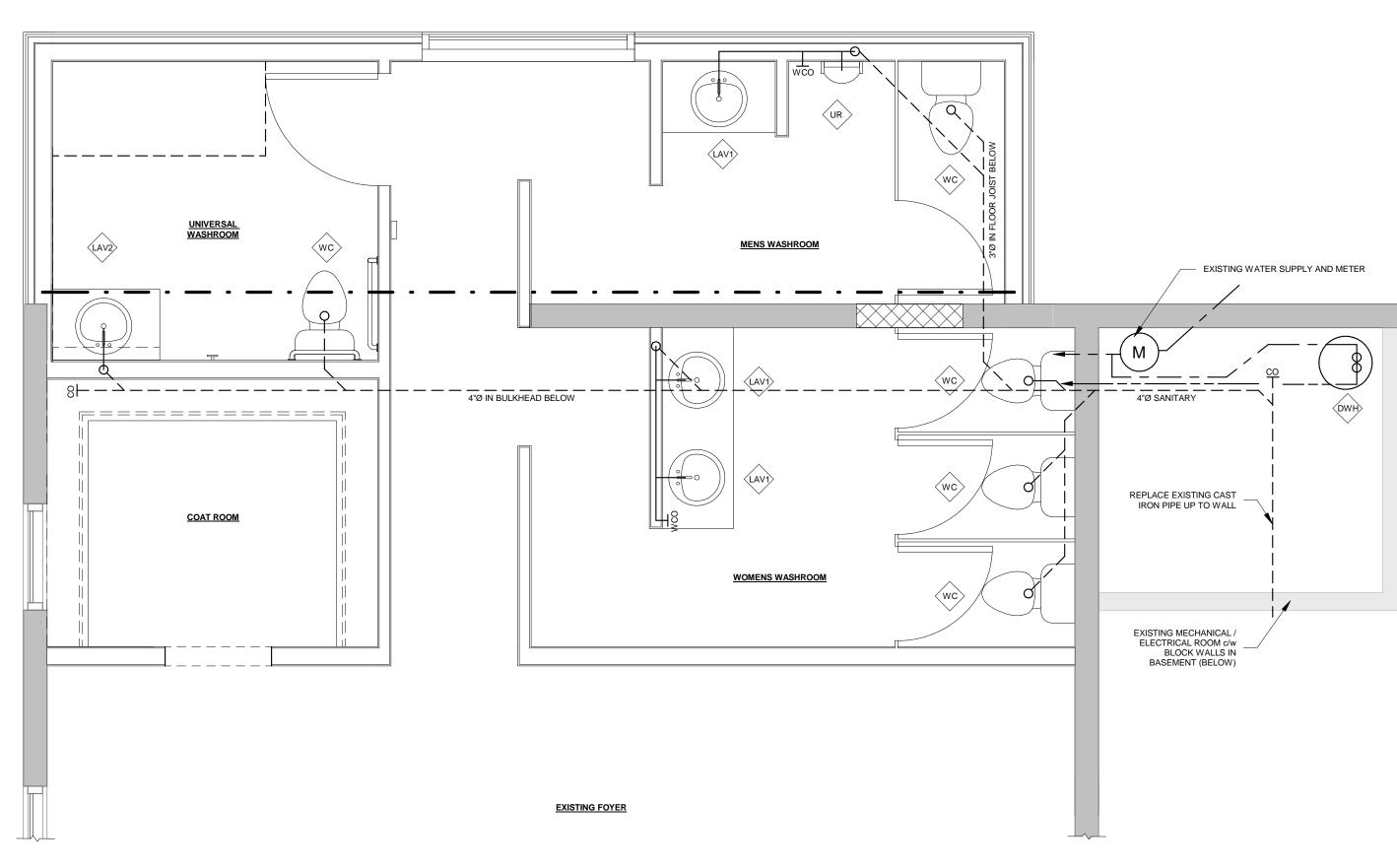
REMARKS:

REMARKS:

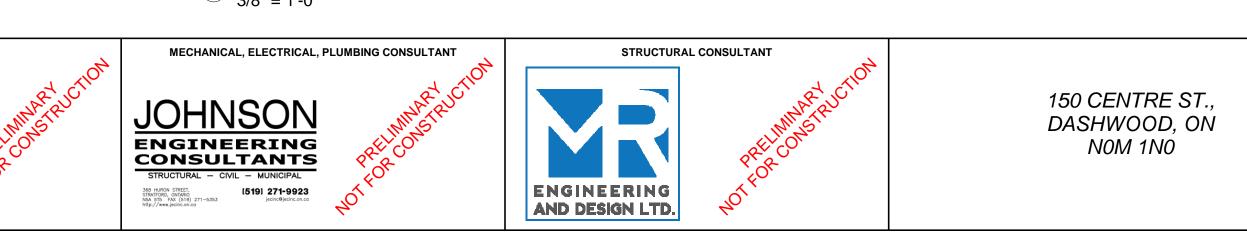
1. NECK SIZES AS NOTED ON DRAWNG 2. GRILLE SIZES AS NOTED ON DRAWING

SCALE	DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION	PROJECT No. MR18-098
As indicated	MECHANICAL DRAWINGS FOUNDATION & GROUND FLOOR PLAN	SHEET NO. S-7





NORTH								ARCHITECT
	DESIGN	JM	No.	REVISION DESCRIPTION	MM/DD/YY	сн'кр		
	DRAWN	JM	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	
N	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		
								J.
							370 QUEENS AVE	8. A
							LONDON ON N6B 1X6	40
							519.663.0888	20.
							FAX 663.5258	•



2 ENLARGED PLUMBING PLAN - BY JOHNSON ENGINEERING CONSULTANTS 3/8" = 1'-0"

 $\textcircled{1} \underbrace{\text{ENLARGED ELECTRICAL PLAN - BY JOHNSON ENGINEERING CONSULTANTS}}_{3/8" = 1'-0"}$

- ELECTRICAL DRAWING NOTES: ALL WIRING AND CONDUCTOR SIZING TO BE ACCORDING TO ELECTRICAL SAFETY CODE FOR ONTARIO ELECTRICAL CONTRACTOR TO CONFORM TO GENERAL SPECIFICATIONS, ARCHITECTURAL DRAWINGS, AND THE ONTARIO ELECTRICAL SAFETY CODE
- ELECTRICAL CONTRACTOR TO PROVIDE TYPE WRITTEN DIRECTORY CARDS FOR EACH PANEL
- ESA INSPECTION CERTIFICATES REQUIRED FOLLOWING COMPLETION OF ALL ELECTRICAL WORK
- WALL RECEPTACLES TO BE MOUNTED AT MINIMUM HEIGHT OF 400mm TO CENTRE & TO BE LABELED WITH PANEL & CCT # IN RED DYMO TAPE
- ALL BUILDING CONTROLS AND SWITCHES SHALL BE INSTALLED BETWEEN 900mm AND 1100mm FROM FLOOR FOR BARRIER FREE REQUIREMENTS. THERMOSTATS AND PULL STATIONS TO BE MOUNTED AT A MAXIMUM HEIGHT OF 1200mm TO CENTRE
- ELECTRICAL CONTRACTOR TO VERIFY REQUIREMENTS OF ALL MECHANICAL EQUIPMENT ON SITE. VERIFY FUSE TYPES, SIZES AND LOCATIONS IN SUB PANELS
- LIGHTING CONTROL TO BE WITH OCCUPANCY SENSORS AUTOMATIC DOOR OPENING NOT REQUIRED IF DOOR IS NOT SELF CLOSING

ELECTRICAL SYMBOL LEGEND:

AR.	EMERGENCY LIGHTING (DOUBLE HEAD) EM1 OR EM2
\oplus	DUPLEX RECEPTACLE
A	2'-0" x 2'-0" LIGHT FIXTURE LED LIGHT FOR SUSPENDED CEILING
\langle	MECHANICAL EQUIPMENT, TYPE AS NOTED ON MECHANICAL DRAWINGS. (BY OTHERS)
	ACTIVATION BUTTON
	ALARM SIREN & BEACON

PLUMBING DRAWING NOTES: PLUMBING CONTRACTOR SHALL CONFORM TO GENERAL SPECIFICATION, PLUMBING CODES AND LOCAL CODES HAVING JURISDICTION

- PLUMBING CONTRACTOR AND GENERAL CONTRACTOR TO ENSURE THAT PUBLIC WASHROOMS MEET HANDICAP REQUIREMENTS AS REQUIRED BY BUILDING CODES
- ALL DRAINAGE PIPES TO BE 2% SLOPE (1/4" PER FOOT) MINIMUM
- . CONTRACTOR TO BLOCK AND SECURE ALL WATER LINES THROUGH CEILING SPACE TO AVOID NOISY PIPES
- EXISTING SANITARY SEWER IS CAST IRON AND SHOULD BE REPLACED UP TO POINT WHERE PIPE EXITS THROUGH BLOCK WALL
- WATER LINES TO BE UPSIZED TO 3/4" AFTER METER THROUGHOUT
- ALL SANITARY DRAINS TO BE RUN BETWEEN FLOOR JOISTS WHEREVER POSSIBLE AND WITHIN INSULATION OF CRAWLSPACE E . MAIN INTERIOR RUN TO BE ENCLOSED WITHIN BULKHEAD AS REQUIRED
- ALL FIXTURES REQUIRE APPROPRIATE SHUT-OFF VALVES AS PER OBC. USE DAHL 13-2277
- WATER SYSTEM NOT DRAWN IN ITS ENTIRETY. SUPPLY EACH FLOOR AND FIXTURE WITH WATER AS REQUIRED AS PER EQUIPMENT SCHEDULE

PLUMBING EQUIPMENT SCHEDULE

ITEM (SYM)	DESCRIPTION	NO. REQ.	DESCRIPTION, MANUFACTURER, OR APPROVED EQUAL	CON		S (in.) VENT	FURN. BY	REMARKS
DHW	WATER HEATER	1	EXISTING ELECTRIC HEATER	3/4"	-	-	EXIST.	1
LAV1	LAVATORY	3	AMERICAN STANDARD DROP-IN OVAL SINK; WHITE. RESIDENTIAL FAUCET AS PER OWNER	1/2"	1-1/2"	1-1/2"	CONTR.	
LAV2	LAVATORY	1	AMERICAN STANDARD 0954 WALL MOUNT; WHITE; B.F. FAUCET TO BE MANUAL BF DELTA 27C4975; 33T260 DRAIN	1/2"	1-1/2"	1-1/2"	CONTR.	
WC	WATER CLOSET	5	AMERICAN STANDARD CADET ELONGATED, RIGHT HEIGHT, WHITE, BF STANDARD TANK MANUAL FLUSH	1/2"	3"	AS NOTED	CONTR.	
UR	URINAL	1	Z-5755 TOP SPUD URINAL c/w MANUAL FLUSH VALVE. INCLUDE WALL BRACKET	3/4" IPS	2"	1-1/2"	CONTR.	

1. PROVIDE SHUT-OFF VALVES ON BOTH HOT AND COLD. PROVIDE TEMPERING VALVE AND HEAT TRAP ON PIPING

PLUMBING SYMBOL LEGEND:							
— со	CLEAN OUT						
— wco	WALL CLEAN OUT						
o	ELBOW TURNED UP						
O	ELBOW TURNED DOWN						
	PROPOSED SEWER LINE						
	COLD WATER LINE						
	HOT WATER LINE						

As indicated

SCALE

REMARK

DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION

PROJECT No.

MR18-098

PLUMBING & ELECTRICAL DRAWINGS

SHEET No.

S-8

THESE PLANS AND SPECIFIC	RIAL UNITS UNLESS NOT										IBER SHALL BE No. 2 GRADE SPECIES SPF (
THE CONTRACTOR IS TO CHI	CK AND VERIFY ALL DIME	NSIONS ON	THE STRUCTU	JRAL DRAV	VINGS WITH OT		ANY				LAMINATED VENEER LUMBER (LVL) SHALL I POSTS SHALL BE No.1 GRADE SPECIES SPE
DISCREPANCIES OR ERRORS DO NOT SCALE DRAWINGS.	MUST BE REPORTED TO	THE ENGINE	EER PRIOR TO	COMMENC	CING WORK.						WOOD IN CONTACT WITH CONCRETE OR S
FEATURES OF CONSTRUCTION										6. ALL	PLYWOOD SHALL CONFORM TO CSA STAN OSB SHALL CONFORM TO CSA 0325 CONS ⁻ 4/2F16.
CANADA 1995 AND, FARM BU	LDING STANDARDS - PUBI	LICATION 80	9.			, -					NAILS/FASTENERS USED WITH PRESSURE
ALIGNMENT, BOLTS AND WELDED CONNECTIONS AND FOR THE PROMPT SUBMISSION OF ALL REPORTS TO THE PROJECT ENGINEER. 3. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE PROVISIONS FOR TEMPORARY BRACING DURING CONSTRUCTION TO RESIST THE APPLIED LOADS THAT ARE INDICATED IN THESE DRAWINGS AND SUBSEQUENT DRAWINGS BY OTHERS.											MANUFACTURED CONNECTORS/HARDWAR NAILING SHALL BE AS PER NBCC/OBC UNLE
APPLIED LOADS THAT ARE INDICATED IN THESE DRAWINGS AND SUBSEQUENT DRAWINGS BY OTHERS.											KES AND STAPLES". BOLTS USED FOR WOOD CONNECTIONS SI PED GALVANIZED BOLTS, NUTS, WASHERS
REMOVE ALL TOPSOIL AND I		ROM BELOV	V THE EXTENT	S OF THE I	EXCAVATION.						D WALLS SHALL BE ANCHORED TO THE FO
OUND FOOTINGS WHICH AF		WEATHER	A MINIMUM OF	F 4'-0" BELC	OW FINISHED GI	RADE UNLESS SP	ECIFIED OTHERWISE			<u>TRUSSE</u> 1 THE	<u>S:</u> ROOF TRUSSES ARE TO BE DESIGNED FOI
FOUND ALL FOOTINGS ON N. IMIT STATES (SLS) AND 225 9.4.4.1. O.B.C.).										DRA LOA	WINGS STAMPED BY A PROFESSIONAL EN DS, TIMBER SPECIES, GRADES, BRACING A HORS TO RESIST UPLIFT AS CALCULATED
GRANULAR FILL UNDER FOO NO FILL SHALL BE PLACED U								PMDD.			BEARING SHOWN ON THE DRAWINGS IS TO SSES TO SUIT THE BEARING WIDTH.
BACKFILL AND COMPACT FO DO NOT BACKFILL FOUNDAT											PERMANENT BRACING FOR TRUSSES SHAL ORDING TO GUIDELINES PUBLISHED BY TH
HAVE BEEN CAST AND HAVE				OVED THE	FOUNDATION C	ONDITIONS.					BALANCED LOADING CONDITIONS SHALL BE
ALL STANDING WATER SHAL ENGINEER TO BE NOTIFIED I					TO POURING CO	NCRETE.					ISS SHOP DRAWINGS SHALL BE PROVIDED LLL BE NOTED ON THE SHOP DRAWINGS.
NCRETE:										SITE RE	
CONCRETE SHALL CONFORM				BAR PLACE	MENT.					ACC	CONTRACTOR/OWNER SHALL CONTACT TI ORDANCE WITH OBC DIVISION C SECTION CCORDANCE WITH OBC DIVISION C SECTIC
* WELDED WIRE F	AN/CSA-G30.18-M92 CSA-0 ABRIC SHALL HAVE A MIN fy = 448 MPa (65,000ps	IMUM YIELD si)	STRENGTH							PER	FORM A GENERAL REVIEW TO ENSURE TH,
	FEEL SHALL HAVE A MININ fy = 400 MPa (58,000ps	si)								0. 1112	a) FOOTINGS - WHEN THE CONCRET CONCRETE
ALL REINFORCING BARS SHA NOVEMENT DURING CONCRI REINFORCING IS TO BE GENI	TE PLACEMENT.										b) FOUNDATION WALLS - WHEN THE OF CONCRETE
PRACTICE". ALL SPLICES SH						INADA WANDAL	JF STANDARD				c) FRAMING INSPECTION - WHEN TH THAT WOULD PREVENT A VISUAL IN
	CONCRETE	SPLICE	LENGTH : mm								d) TRUSS INSPECTION - WHEN THE
	REBAR SIZE	25MPa 400	400	400	35MPa 400					4. THE	CONTRACTOR/OWNER TO NOTIFY THE EN
		(16") 600	(16") 600 (24")	(16") 500 (20")	(16") 500 (20")						INFORMATION: G IMPORTANCE:
	15M	(24")	(24)								ls
	20M	(24") 800 (32") 1200	700 (28")	700 (28") 1100	700 (28") 1100						har
	20M 25M	800 (32") 1200 (48")	700 (28") 1100 (44")	(28")	(28")						lw le
	20M 25M LIES TO ALL DOWELS UNL	800 (32") 1200 (48") ESS NOTED	700 (28") 1100 (44") 0 OTHERWISE.	(28") 1100 (44")	(28") 1100 (44")	NOTED OTHERW	/ISE.				le CATION (EXETER, ON)
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFO	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24*)	800 (32") 1200 (48") ESS NOTEL AROUND C CRETE LAYE	700 (28") 1100 (44") 0 OTHERWISE.	(28") 1100 (44")	(28") 1100 (44") CTIONS UNLESS						le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFO XTENDING 24" (min.) BEYON	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONG D EACH CORNER OF THE C	800 (32") 1200 (48") ESS NOTEE AROUND C CRETE LAYE DPENING.	700 (28") 1100 (44") OTHERWISE. ORNERS/WALI	(28") 1100 (44") L INTERSEC L WINDOW	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/	ANICAL OR SIMILA				BUILDIN <u>ROOF</u>	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONG D EACH CORNER OF THE G EEN REINFORCING STEEL	800 (32") 1200 (48") ESS NOTEE AROUND C CRETE LAYE DPENING.	700 (28") 1100 (44") OTHERWISE. ORNERS/WALI ER AROUND AL	(28") 1100 (44") L INTERSE L WINDOW RETE SHALL	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/	ANICAL OR SIMILA				BUILDIN <u>ROOF</u>	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb
LL HORIZONTAL BARS SHAL ROVIDE 1-15M PER REINFO XTENDING 24" (min.) BEYON HE CLEAR DISTANCE BETW EXPOSURE CO	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONG D EACH CORNER OF THE G EEN REINFORCING STEEL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA	700 (28") 1100 (44") OTHERWISE. ORNERS/WALI SR AROUND AL ACE OF CONCR	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm	NICAL OR SIMILA VS: .SS C-1,C-3,A-1,A-2,A- 75mm				BUILDIN <u>ROOF</u>	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr)
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFO EXTENDING 24" (min.) BEYON "HE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE C EEN REINFORCING STEEL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA	700 (28") 1100 (44") OTHERWISE. ORNERS/WALI SR AROUND AL ACE OF CONCR	(28") 1100 (44") L INTERSE(L WINDOW RETE SHALL F-1,F-2 - 75 - 75	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0	NICAL OR SIMILA VS: ISS C-1,C-3,A-1,A-2,A-:				BUILDIN <u>ROOF</u> LIVE LO <i>I</i>	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Ca Cs
LL HORIZONTAL BARS SHAL ROVIDE 1-15M PER REINFOI XTENDING 24" (min.) BEYON HE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS,	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONG D EACH CORNER OF THE G D EACH CORNER OF THE G EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL	800 (32") 1200 (48") EESS NOTEL AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI R AROUND AL ACE OF CONCR NRTH 30mr 1-1/ S 20mr 3/4	(28") 1100 (44") L INTERSE(L WINDOW RETE SHALL F-1,F-2 - 75 - 75 - 75 - - 75 - - 75 - - - - - - - - - - - - -	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOW EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 0mm -1/2"	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A-3 75mm 3" 50mm 2" 60mm 2-3/8"				BUILDIN ROOF LIVE LO/ SPECIFII	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca
LL HORIZONTAL BARS SHAL ROVIDE 1-15M PER REINFOI XTENDING 24" (min.) BEYON HE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE O D EACH CORNER	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI SR AROUND AL ACE OF CONCR NRTH 30mr 1-1/ S 20mr 1.0	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75 - 75 - 75 - 10 44 - 11 - 12 - 12 - 12 - 12 - - - - - - - - - - - - -	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 00mm -1/2" 0mm	ANICAL OR SIMILA VS: LSS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm				BUILDIN ROOF LIVE LO/ SPECIFII	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x (RESSURE
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE C EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER AGGREGAT	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL ORNERS/WALL SCE OF CONCR ACE OF CONCR N RTH 30mr 1-1/ S 20mr 3/4 1.0 E SIZE 1.0 T SHALL BE PL Concrete	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.(5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLOV	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0 VING TOLERANC	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR Q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 200m ii) LAR	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE (EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME M (8") OR LESS: +/- 8mm (1 26R THAN 200mm (8") BUT	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER AGGREGAT DED PLATE ETER AGGREGAT DLESS THAI EMBER, THI LESS THAN	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL ORNERS/WALL SR AROUND AL SR AROUND AL SR AROUND AL ACE OF CONCR N RTH S 20m 3/4 1.0 E SIZE 1.0 T SHALL BE PL N N 1/3 OF THE S CKNESS OF A	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 40 4" 1 0 ACED WIT PECIFIED I WALL, OR	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLOV MINIMUM COVENTHE SMALLEST	ANICAL OR SIMILA VS: SSS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR Q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 ii) LAR iii) 6001 c) LATERAL SPAC d) LONGITUDINAL	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") CEMENT LAYER OR CONG DEACH CORNER OF THE G DEACH CORNER OF THE G EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME (B) OR LESS: +/-30mm (1- JOCATION OF BENDS AND	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF EDED PLATE ETER AGGREGAT FORCEMEN D LESS THAI EMBER, THI (4") LESS THAN 3/4") ENDS OF E	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI 0 OTHERWISE. ORNERS/WALI SR AROUND AL SKE OF CONCR NRTH 30m 1-1/ S 20m 3/4 1.0 E SIZE 1.0 T SHALL BE PL N N 1/3 OF THE S CKNESS OF A 0 600mm (24"): 1 SARS: ±/-50mm	(28") 1100 (44") L INTERSE(L WINDOW RETE SHALL F-1,F-2 	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLOV MINIMUM COVER THE SMALLEST	ANICAL OR SIMILA VS: USS C-1,C-3,A-1,A-2,A-1 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 VING TOLERANCI DIMENSION OF A	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE COI CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DD i) 200m ii) 600n c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONG D EACH CORNER OF THE G D EACH CORNER OF THE G EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM (ED BY THE OWNER, REIN (4") OR LESS: +/- 8mm (1) SER THAN 200mm (8") BUT NO PTH OF THE FLEXURAL M m (8") OR LESS: +/- 8mm (1) SER THAN 200mm (8") BUT NO PTH OF THE FLEXURAL M m (8") OR LESS: +/- 80mm (1) LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAILU	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF SED TO EAF ETER AGGREGAT FORCEMEN D LESS THAI EMBER, THI /4") ENDS OF E ENDS AT D ABLE FOR IN	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI R AROUND AL ACE OF CONCR ACE OF CONCR N RTH 30m 11:0 S 20m 3/4 1.0 E SIZE 1.0 T SHALL BE PL N 1/3 OF THE S CKNESS OF A 600mm (24"): 1 BARS: +/-50mm ISCONTINUOU ISPECTION BY	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 40 44" 1 2 1 2 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVER THE SMALLEST) F MEMBERS: +/- R BEFORE POUF	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0 VING TOLERANCI 2 DIMENSION OF A 20mm (3/4") ING THE CONCRI	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss × Cb × 0] RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0)
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2007 ii) LAR iii) 6000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN IN TO BE NOTIFIED WELL IN ADV	20M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE O D EACH CORNER, AND FOL S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (8") OR LESS: +/- 30mm (1-1) LOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF EXECTION EAF DED PLATE ETER AGGREGAT DED PLATE ETER AGGREGAT DED PLATE EMBER, THI (4") (4") (4") ENDS AT D ABLE FOR IN DULE. ENG	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI RAROUND AL RAROUND AL RAROUND AL RAROUND AL RTH 1.10 1.11 S 20rr 3/4 1.11 S 20rr 3/4 1.11 S 20rr 3/4 1.12 S 1.11 S 20rr 3/4 1.0 E SIZE 1.0 E SIZE 1.0 GOMmm (24"): 1 GOMMM (24"): 1 SPECTION BY INCONTINUOU INSPECTION BY	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 . 7(10 . 7(10) . 7(1)	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVER THE SMALLEST SEFORE POUR SPECTION AT H	ANICAL OR SIMILA VS: SSS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI 2.0 VING TOLERANCI	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.5) Sa (1.0)
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE COI CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 ii) LAR iii) 6000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN TO BE NOTIFIED WELL IN AD ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN	20M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE G D EACH CORNER OF THE G EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM IED BY THE OWNER, REIN /ER: +/-12mm (1/2") BUT NC PTH OF THE FLEXURAL M m (8") OR LESS: +/- 8mm (1-1 LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE BHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF SED TO EAF DED PLATE TER AGGREGAT FORCEMEN D LESS THAN 3/4") ENDS OF E EMBER, THI /4") ENDS OF E ENDS AT D ABLE FOR IN DULE. ENG I THE REINF TURE CONF HE THICKNE	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI R AROUND AL ACE OF CONCR ACE OF CONCR N RTH 30m 11.0 S 20m 3/4 1.0 E SIZE 1.0 SCKNESS OF A 600mm (24"): 1 SARS: +/-50mm ISCONTINUOU ISPECTION BY INEER TO CAR ORCING STEE ORMING WITH SS OF THE SL/	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 T T F-1,F-2 T M 4(4" 1 T T M 4(4" 1 T T M 4(4" 1 T T M 4(4" 1 T T M 4(4" 1 T T T T T T T T T T T T T	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVEI THE SMALLEST) F MEMBERS: +/- R BEFORE POUF ISPECTION AT H O THE PLACEME 3-A5, TYPE 10.	ANICAL OR SIMILA VS: SSS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2-3/8" 2.0 2.0 2.0 2.0 VING TOLERANCE DIMENSION OF A 20mm (3/4") ING THE CONCRET	R OPENINGS				le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED)
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 ii) 6000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN I TO BE NOTIFIED WELL IN AD ALL RRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS (C) SHALL NOT EXCEED THE GRI PROVIDE CLEAN, UNCOATED	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE (24") RTONOMINAL MAXIMUM AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM (ED BY THE OWNER, REIN /ER: +/-12mm (1/2") BUT NO PTH OF THE FLEXURAL M m (8") OR LESS: +/- 8mm (1- 1) COCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAIL COCATION OF BENDS AND PLACE TO BE MADE AVAIL COCATION OF BENDS AND PLACE TO BE MADE AVAIL COCATION OF BENDS AND COF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TI SAND AND COARSE AGGE	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF ETER AGGREGAT FORCEMEN FORCEMEN ENDS OF E ENDS OF E EN	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALI R AROUND AL ACE OF CONCR ACE OF CONCR Image: Stress of the stress	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 . 75 . 75	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVER THE SMALLEST P MEMBERS: +/- R BEFORE POUF ISPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONT	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0 VING TOLERANCI 2.0 2.0 VING TOLERANCI 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET FROL JOINTS IN S	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x] RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 200m ii) LAR iii) 600 c) LATERAL SPAC d) LONGITUDINAL ALL REINFORCING STEEL IN 1 TO BE NOTIFIED WELL IN AD ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE CLEAN, UNCOATED TO THE CONCRETE SPECIFIC	20M 25M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE (24) RECENT CORNER OF THE (24) CEEN REINFORCING STEEL DITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME (ED BY THE OWNER, REIN /ER: +/-12mm (1/2") BUT NO PTH OF THE FLEXURAL M (8") OR LESS: +/- 8mm (1 SER THAN 200mm (8") BUT DOM CLARGER: +/-20mm (NG OF BARS: +/-30mm (1) DCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAILJ /ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TI SAND AND COARSE AGGF ATIONS PROVIDED BELOW	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER AGGREGAT FORCEMEN D LESS THAI EMBER, THI AU SENDS OF E ENDS AT D ABLE FOR IN DULE. ENG I THE REINF TURE CONF HE THICKNESS C REGATES FF V FOR AGGI	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL RAROUND AL ACE OF CONCR	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 YHIN THE FOLLOV MINIMUM COVEL THE SMALLEST YHIN THE FOLLOV SPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ES WHICH CONF	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 VING TOLERANCI DIMENSION OF A 20mm (3/4") ING THE CONCRET ING OF CONCRET ING THE CONCRET ING THE CONCRET ING OF CONCRET	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2007 ii) LAR EXPOSURE COVE CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2007 ii) LAR EXPOSURE COVE ALL REINFORCING STEEL IN TO BE NOTIFIED WELL IN ADV ALL GRIT, MUD AND DEBRIS SPECIFIC PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRIP PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBRA	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (8") OR LESS: +/- 8mm (1 26R THAN 200mm (8") BUT M OF BARS: +/-20mm (1) DOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAIL /ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TO SAND AND COARSE AGGA ATION TO PLACE ALL CONC	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED S OF E ENDS O	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL RAROUND AL ACE OF CONCR	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 YHIN THE FOLLOV MINIMUM COVEL THE SMALLEST YHIN THE FOLLOV SPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ES WHICH CONF	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 VING TOLERANCI DIMENSION OF A 20mm (3/4") ING THE CONCRET ING OF CONCRET ING THE CONCRET ING THE CONCRET ING OF CONCRET	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 200m ii) LAR iii) 600 c) LATERAL SPAC d) LONGITUDINAL ALL REINFORCING STEEL IN 1 TO BE NOTIFIED WELL IN AD ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE CLEAN, UNCOATED TO THE CONCRETE SPECIFIC PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBR. ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES	20M 25M 25M LIES TO ALL DOWELS UNL L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE (EEN REINFORCING STEEL DITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME (F) (2000 CONTON (2000) (100 OF BARS: +/-200m (1-1) LOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND COF CANADIAN MANUFAC IN GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TH SAND AND COARSE AGGI ATIONS PROVIDED BELOW ATER REDUCING ADD MIX' VIION TO PLACE ALL CONC A 3" SLUMP +/-1".	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF SED TO EAF ETER AGGREGAT FORCEMEN D LESS THAN 3(4") ENDS OF E EMBER, THI (4") ENDS OF E ENDS AT D ABLE FOR IN DULE. ENG I THE REINF TURE CONF HE THICKNESS C REGATES FF V FOR AGGI FURE WHEF CRETE.	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL R AROUND AL ACE OF CONCR	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 40 4" 1 TM 40 4 4 4 4 4 4 4 4 4 4 4 4 4	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 0 F MEMBERS: +/- R BEFORE POUF ISPECTION AT H 0 THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ES WHICH CONF ILITY IS REQUIRE	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DI i) 2007 ii) LAR iii) 6007 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL CONTROL JOINTS IN SLABS C SHALL NOT EXCEED THE GRI PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS C SHALL NOT EXCEED THE GRI PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBRA ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") REMENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL DITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME COF DARS: +/-30mm (1-1) LOCATION OF BENDS AND DCATION OF BENDS AND PLACE TO BE MADE AVAILJ VANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH SAND AND COARSE AGGI ATIONS PROVIDED BELOW ATER REDUCING ADD MIX' ATION TO PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DLESS THAN 3/4") 2 ENDS OF E ENDS AT D ABLE FOR IN DULE. ENG 1 THE REINF TURE CONF HE THICKNESS C REGATES FF V FOR AGGIE TURE WHEF CRETE. FROM EXPC	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL RAROUND AL ACE OF CONCR ACE OF THE SIZE ACOM APPROVE ACE OF THE SLAB O ACM APPROVE ACE OF THE SLAB O <td>(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 44 (4" 1- TM 44 (4" 1- (4" 1- TM 44 (4" 1- TM 44 (4"</td> <td>(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 YHIN THE FOLLOV MINIMUM COVEL THE SMALLEST YHIN THE FOLLOV SPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '.</td> <td>ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C</td> <td>R OPENINGS</td> <td></td> <td></td> <td>BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC</td> <td>le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL DADS AND LOAD COMBINATIONS T</td>	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 44 (4" 1- TM 44 (4" 1- (4" 1- TM 44 (4"	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 YHIN THE FOLLOV MINIMUM COVEL THE SMALLEST YHIN THE FOLLOV SPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '.	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL DADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 ii) 1000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN I TO BE NOTIFIED WELL IN AD ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS C SHALL NOT EXCEED THE GRI PROVIDE CLEAN, UNCOATED TO THE CONCRETE SPECIFIC PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBR. ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE i) CURING TYPE 1	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE O D EACH CORNER OF THE O EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM (ED BY THE OWNER, REIN /ER: +/-12mm (1/2") BUT NC PTH OF THE FLEXURAL M m (8") OR LESS: +/- 8mm (1- 1) COCATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND PLACE TO BE MADE AVAIL (ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC IN GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TI SAND AND COARSE AGGI ATIONS PROVIDED BELOV ATER REDUCING ADD MIX' NTION TO PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT ENDS OF E EMBER, THI (4") ENDS OF E ENDS AT D ABLE FOR IN DULE. ENG I THE REINF TURE CONF HE THICKNESS C REGATES FF V FOR AGGF FURE WHEF CRETE. FROM EXPC	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL R AROUND AL ACE OF CONCR ARDUND AL ACE OF CONCR ARTH 30m 1.10 S 20m 3.44 CE SIZE 1.0 E SIZE 1.0 S 20mm 3.44 CKNESS OF A 600mm (24"): 1 SARS: +/-50mm ISCONTINUOU ISPECTION BY INEER TO CAR ORCING STEE ORCING STEE ORMING WITH SS OF THE SLAB O REGATE SIZE. RE INCREASED OSURE TO FRE E TESTING LAE HE SPECIFIED	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 4(4" 1- TM 4(4"	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL(1) 5mm 3" 0mm -1/2" 0mm -1/2" 0mm -1/2" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVEI THE SMALLEST 0 F MEMBERS: +/- R BEFORE POUF ISPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '. H.	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL DADS AND LOAD COMBINATIONS
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2007 ii) LAR MIL OF COVE ALL REINFORCING STEEL IN CONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN TO BE NOTIFIED WELL IN ADV ALL GRIT, MUD AND DEBRIS PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE PLASTICIZER OF W JSE HIGH FREQUENCY VIBRA ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE i) CURING TYPE 1 ii) CURING TYPE 2 iii) CURING TYPE 2	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RCEMENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL IDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL MAXIMUM (ED BY THE OWNER, REIN /ER: +/-12mm (1/2") BUT NO PTH OF THE FLEXURAL M m (8") OR LESS: +/- 8mm (1- 1) COATION OF BENDS AND LOCATION OF BENDS AND LOCATION OF BENDS AND COATION OF BENDS AND PLACE TO BE MADE AVAIL (ANCE OF POURING SCHE BHALL BE REMOVED FROM T OF CANADIAN MANUFAC IN GRADE SHALL BE 1/4 TH CATER OF 30 TIMES THE TI SAND AND COARSE AGGI ATIONS PROVIDED BELOV ATER REDUCING ADD MIX ATION TO PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED - 3 DAYS @ 10°C TO ATTAIL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF DED PLATE ETER AGGREGAT DED PLATE ETER AGGREGAT DED PLATE ETER AGGREGAT DED PLATE ETER AGGREGAT DED S AT D ABLE FOR IN DULE. ENG I THE REINF TURE CONF HE THICKNESS C REGATES FF V FOR AGGIE TURE WHEF CRETE. FROM EXPC D CONCRETI N 40% OF TH N 70% OF T	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL R AROUND AL ACE OF CONCR ARDUND AL ACE OF CONCR ARTH 30m 1.10 S 20m 3.44 CE SIZE 1.0 E SIZE 1.0 S 20mm 3.44 CKNESS OF A 600mm (24"): 1 SARS: +/-50mm ISCONTINUOU ISPECTION BY INEER TO CAR ORCING STEE ORCING STEE ORMING WITH SS OF THE SLAB O REGATE SIZE. RE INCREASED OSURE TO FRE E TESTING LAE HE SPECIFIED	(28") 1100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 TM 4(4" 1- TM 4(4"	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL(1) 5mm 3" 0mm -1/2" 0mm -1/2" 0mm -1/2" 0mm -1/2" 1.5 1.5 HIN THE FOLLON MINIMUM COVEI THE SMALLEST 0 F MEMBERS: +/- R BEFORE POUF ISPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '. H.	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C	R OPENINGS			BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x RESSURE q 1/50 YEAR q 1/10 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (0.2) Sa (0.5) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE INLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN I TO BE NOTIFIED WELL IN ADV ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE PLASTICIZER OF W JSE HIGH FREQUENCY VIBR. ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE PLACEMENT. ALL CONCRETE SHALL BE TE i) CURING TYPE 1 ii) CURING TYPE 2 iii) CURING TYPE 3	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RECENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL DIDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (%) OR LESS: +/- 8mm (1) DER THAN 200mm (8") BUT M (8") OR LESS: +/- 8mm (1) DCATION OF BENDS AND LOCATION OF BENDS AND DCATION OF BENDS AND DCATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER REDUCING ADD MIX ATTON PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED - 3 DAYS @ 10°C TO ATTAIL - 7 DAYS @ 10°C TO ATTAIL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED S OF E ENDS	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL R AROUND AL ACE OF CONCR ARDUND AL ACE OF CONCR ARTH 30m 1.10 S 20m 3.44 CE SIZE 1.0 E SIZE 1.0 S 20mm 3.44 CKNESS OF A 600mm (24"): 1 SARS: +/-50mm ISCONTINUOU ISPECTION BY INEER TO CAR ORCING STEE ORCING STEE ORMING WITH SS OF THE SLAB O REGATE SIZE. RE INCREASED OSURE TO FRE E TESTING LAE HE SPECIFIED	(28") 1100 11100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75 111 F-1,F-2 - 75 111 4(4" 1111	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECHA L BE AS FOLLOV EXPOSURE CLA 2,S-1,S-2 C-XL(1) 5mm 3" 0mm -1/2" 1.5 1.5 1.5 F MEMBERS: +/- R BEFORE POUF ISPECTION AT H 0 THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '. H. H.	ANICAL OR SIMILA VS: SS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2.3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A DIMENSION OF A 20mm (3/4") ING THE CONCRET S DISCRETION. NT OF CONCRET IS DISCRETION. NT OF CONCRET FROL JOINTS IN S ORM WITH CSA/C	R OPENINGS	CURING TYPE	AGGREGATE	BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x] RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2000 ii) 6000 c) LATERAL SPAC d) LONGITUDINAL ALL REINFORCING STEEL IN I TO BE NOTIFIED WELL IN ADI ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE CLEAN, UNCOATED TO THE CONCRETE SPECIFIC PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBR. ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE i) CURING TYPE 1 ii) CURING TYPE 2 iii) CURING TYPE 3 CONCRETE SPECIFICATIONS DESCRIPTION	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RECENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL DIDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (%) OR LESS: +/- 8mm (1) DER THAN 200mm (8") BUT M (8") OR LESS: +/- 8mm (1) DCATION OF BENDS AND LOCATION OF BENDS AND DCATION OF BENDS AND DCATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER REDUCING ADD MIX ATTON PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED - 3 DAYS @ 10°C TO ATTAIL - 7 DAYS @ 10°C TO ATTAIL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED S OF E ENDS	700 (28") 11100 (44") 0 OTHERWISE. ORNERS/WALL R AROUND AL ACE OF CONCR ARS: AROUND AL ACE OF CONCR Image: Arrow of the state of th	(28") 1100 11100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75 111 F-1,F-2 - 75 111 4(4" 1111	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECHA L BE AS FOLLOV EXPOSURE CLA 2,S-1,S-2 C-XL(1) 5mm 3" 0mm -1/2" 1.5 1.5 1.5 F MEMBERS: +/- R BEFORE POUF ISPECTION AT H 0 THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT '. H. H.	ANICAL OR SIMILA VS: ASS C-1,C-3,A-1,A-2,A-3 75mm 2" 60mm 2-3/8" 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	R OPENINGS	CURING TYPE 1	AGGREGATE 14-20mm	BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x] RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
ALL HORIZONTAL BARS SHAL PROVIDE 1-15M PER REINFOI EXTENDING 24" (min.) BEYON THE CLEAR DISTANCE BETW EXPOSURE CON CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 2007 ii) LAR (iii) 6000 c) LATERAL SPAC d) LONGITUDINAL e) LONGITUDINAL e) LONGITUDINAL ALL REINFORCING STEEL IN ITO BE NOTIFIED WELL IN ADV ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBRA ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE i) CURING TYPE 1 ii) CURING TYPE 2 iii) CURING TYPE 2 iii) CURING TYPE 2 iii) CURING TYPE 3 ESCRIPTION FOOTINGS FOUNDATION WALLS	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RECENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL DIDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (%) OR LESS: +/- 8mm (1) DER THAN 200mm (8") BUT M (8") OR LESS: +/- 8mm (1) DCATION OF BENDS AND LOCATION OF BENDS AND DCATION OF BENDS AND DCATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER REDUCING ADD MIX ATTON PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED - 3 DAYS @ 10°C TO ATTAIL - 7 DAYS @ 10°C TO ATTAIL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED S OF E ENDS	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL RAROUND AL ACE OF CONCR ARE AROUND AL ACE OF CONCR Image: Arrow of the second state of th	(28") 1100 11100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75 111 F-1,F-2 - 75 111 4(4" 1111	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECHA L BE AS FOLLOV EXPOSURE CLA 2,S-1,S-2 C-XL0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 F MEMBERS: +/- R BEFORE POUR SPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE WPERATURES AT '. H. H. H. H. NGTH @ 28 DAY 20MPa 25MPa	ANICAL OR SIMILA VS: ASS C-1,C-3,A-1,A-2,A- 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 2.0 VING TOLERANCI DIMENSION OF A 20mm (3/4") ING THE CONCRET ING THE CONCRET I	R OPENINGS	1	14-20mm 14-20mm	BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x] RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED) ALL DESIGN LOADS ARE <u>UNFACTORED</u> ALL LOADS AND LOAD COMBINATIONS T
CAST AGAINST BEAMS, GIRDEF SLABS, WALLS, RATIO OF COVE RATIO OF COVE RATIO OF COVE UNLESS OTHERWISE SPECIF a) CONCRETE CO b) WHERE THE DE i) 200m ii) LAR iii) 600 c) LATERAL SPAC d) LONGITUDINAL ALL REINFORCING STEEL IN TO BE NOTIFIED WELL IN AD ALL GRIT, MUD AND DEBRIS S PROVIDE PORTLAND CEMEN CONTROL JOINTS IN SLABS O SHALL NOT EXCEED THE GRI PROVIDE PLASTICIZER OF W USE HIGH FREQUENCY VIBRA ALL CONCRETE SHALL HAVE TAKE ADEQUATE MEASURES CONCRETE SHALL BE TE i) CURING TYPE 1 ii) CURING TYPE 2	20M 25M 25M LIES TO ALL DOWELS UNE L BE HOOKED 600mm (24") RECENT LAYER OR CONC D EACH CORNER OF THE O DEACH CORNER OF THE O DEACH CORNER OF THE O EEN REINFORCING STEEL DIDITION AND PERMANENTLY EXPO S, COLUMNS, AND PILES JOISTS, SHELLS, AND FOL R TO NOMINAL BAR DIAME R TO NOMINAL BAR DIAME PTH OF THE FLEXURAL M (%) OR LESS: +/- 8mm (1) DER THAN 200mm (8") BUT M (8") OR LESS: +/- 8mm (1) DCATION OF BENDS AND LOCATION OF BENDS AND DCATION OF BENDS AND DCATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ COATION OF BENDS AND PLACE TO BE MADE AVAILJ (ANCE OF POURING SCHE SHALL BE REMOVED FROM T OF CANADIAN MANUFAC N GRADE SHALL BE 1/4 TH CATER REDUCING ADD MIX ATTON PLACE ALL CONC A 3" SLUMP +/-1". TO PROTECT CONCRETE STED BY A CSA CERTIFIED - 3 DAYS @ 10°C TO ATTAIL - 7 DAYS @ 10°C TO ATTAIL	800 (32") 1200 (48") EESS NOTEE AROUND C CRETE LAYE DPENING. AND SURFA SED TO EAF ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED PLATE ETER AGGREGAT FORCEMEN DED S OF E ENDS	700 (28") 1100 (44") 0 OTHERWISE. ORNERS/WALL RAROUND AL ACE OF CONCR ACE OF CONCRET ACM APPROVE CON APPROVE COSURE TO FRE COSURE TO FRE ACE OF CONCRET ACE OF CONCRET N	(28") 1100 11100 (44") L INTERSEC L WINDOW RETE SHALL F-1,F-2 - 75 111 F-1,F-2 - 75 111 4(4" 1111	(28") 1100 (44") CTIONS UNLESS V, DOOR, MECH/ L BE AS FOLLOV EXPOSURE CL/ 2,S-1,S-2 C-XL.0 5mm 3" 0mm -1/2" 1.5 1.5 1.5 1.5 SMINIMUM COVEL THE SMALLEST N F MEMBERS: +/- R BEFORE POUP ISPECTION AT H O THE PLACEME 3-A5, TYPE 10. NG OF THE CONF ILITY IS REQUIRE MPERATURES AT Y H. NGTH @ 28 DAY 20MPa	ANICAL OR SIMILA VS: ASS C-1,C-3,A-1,A-2,A-1 75mm 3" 50mm 2" 60mm 2-3/8" 2.0 2.0 VING TOLERANCI DIMENSION OF A 20mm (3/4") ING THE CONCRET ING THE CONCRET ING THE CONCRET ING THE CONCRET ING THE CONCRET ING THE CONCRET IS DISCRETION. NT OF CONCRET IS DISCRETION. INT OF CONCRET IS DISCRETION. IS DISCRETION.	R OPENINGS	1	14-20mm	BUILDIN ROOF LIVE LO/ SPECIFII WIND PF SEISMIC	le CATION (EXETER, ON) G LOCATION (158 CENTRE ST., DASHWOOD AD SNOW (Ss) RAIN (Sr) Cb Cw Ca Cs ED BALANCED SNOW LOAD (S) = [Ss x Cb x 0 RESSURE q 1/50 YEAR q 1/10 YEAR WIND DESIGN CATEGORY TERRAIN EDATA Sa (0.2) Sa (1.0) Sa (1.0) Sa (2.0) PGA SITE CLASSIFICATION (ASSUMED)

NORTH								ARCHITECT	
	DESIGN	MR	No.	REVISION DESCRIPTION	MM/DD/YY	сн'кр	WASYLKO ARCHITECT INC.		
	DRAWN	MR	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.		
	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR			
									270 270
							370 QUEENS AVE	<	<u>کر</u> کر
							LONDON ON N6B 1X6	*	ک ک
							519.663.0888	20	•
							FAX 663.5258		

BETTER UNLESS NOTED OTHERWISE.

2.0E Fb 3,100 R BETTER UNLESS NOTED OTHERWISE.

DR BETTER UNLESS NOTED OTHERWISE.

ARD 0121 OR 0151.

RUCTION SHEATHING OR CSA 0437.0 WAFERBOARD WITH MINIMUM PANEL MARK FOR 0325 OSB

REATED LUMBER SHALL BE GALVANIZED OR ACQ QUALIFIED.

TO BE GALVANIZED.

S NOTED OTHERWISE. NAILS AND SPIKES SHALL CONFORM TO THE CSA STANDARD B111 "WIRE NAILS,

ALL BE A307 (min.). WHERE BOLTS ARE EXPOSED TO CORROSIVE ENVIRONMENTS, A307 (min.) HOT HALL BE USED.

NDATION 1/2"Ø ANCHOR BOLTS SPACED AS INDICATED ON THE DRAWINGS

THE SPECIFIED LOADS. THE SUPPLIER IS TO PROVIDE ERECTION AND MEMBER FABRICATION INEER LICENSED IN THE PROVINCE OF ONTARIO. THE DRAWINGS MUST INDICATE DESIGN ID CONNECTORS. ALL TRUSSES MUST BE ANCHORED WITH APPROPRIATE TIE-DOWN METAL ND SHOWN IN THE TRUSS DESIGN CALCULATIONS AND TRUSS DRAWINGS.

MAXIMUM WIDTH TO BE PROVIDED AND THE TRUSS MANUFACTURER MUST DESIGN THE

BE SECURELY ANCHORED BY BACK BRACING DIAGONALLY OR ATTACHING TO END WALLS CANADIAN WOOD TRUSS ASSOCIATION.

NCLUDED IN THE TRUSS DESIGN. SNOW LOADS DUE TO ROOF VALLEYS AND SNOW SHADOWS/DRIFTING.

O THE ENGINEER TO REVIEW PRIOR TO FABRICATION. DESIGN LOADS AND ASSUMPTIONS

E LOCAL MUNICIPAL BUILDING DEPARTMENT TO PERFORM SITE REVIEWS OF CONSTRUCTION IN

1.2.2.1. THE CONTRACTOR/OWNER SHALL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO THE CONSTRUCTION IS IN GENERAL CONFORMITY WITH THE PLANS.

FORMWORK AND REINFORCING STEEL HAVE BEEN SET AND ARE READY FOR THE PLACEMENT OF

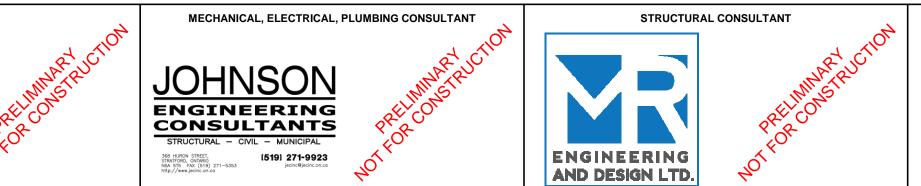
CONCRETE FORMWORK AND REINFORCING STEEL HAVE BEEN SET AND ARE READY FOR THE PLACEMENT

BUILDING HAS BEEN COMPLETELY FRAMED, PRIOR TO INSTALLING INTERIOR OR EXTERIOR SHEATHING PECTION OF KEY FRAMING COMPONENTS RUSSES AND ASSOCIATED BRACING HAVE BEEN COMPLETED, PRIOR TO INSTALLING CEILING FINISHES

FURAL COMPONENTS OF THE FACILITY HAVE BEEN COMPLETED NEER @ 519-317-0128. ADEQUATE NOTICE IS ANTICIPATED AND EXPECTED.

	NORMAL	
	1.0	
	1.0	
	1.0	
ON)		
	2.4 kPa (50.1 psf)	
	0.4 kPa (8.4 psf)	
	0.8	
	1.0	
	1.0	
	1.0	
w x Ca x Cs] + Sr	2.32 kPa (48.5 psf)	
	0.49 kPa (10.2 psf)	
	0.38 kPa (7.9 psf)	
	CATEGORY 3	
	OPEN	
	0.130	
	0.080	
	0.051	
	0.016	
	0.040	
	D	

BE IN ACCORDANCE WITH THE LATEST EDITION



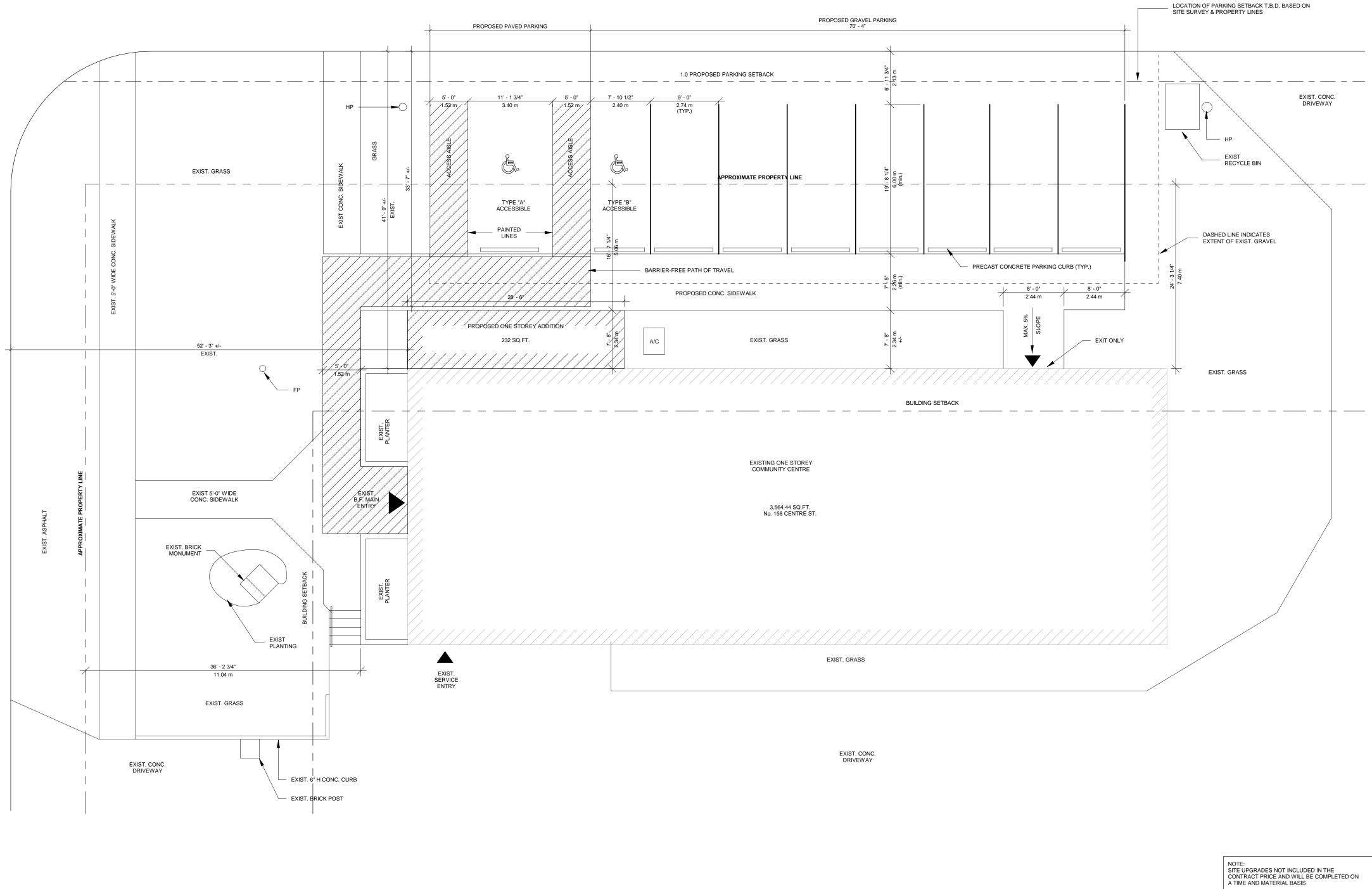
150 CENTRE ST., DASHWOOD, ON N0M 1N0 SCALE

DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION PROJECT No.

SHEET NO. S-9

MR18-098

GENERAL NOTES



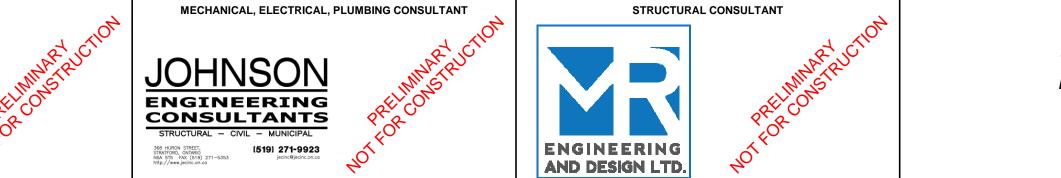
ш	
R	
S	
ш	
2	
Ë	
5	
Ш	
Ш	
U	

Ε

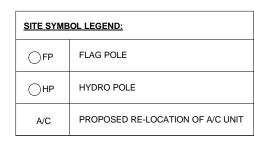
NORTH								ARCHITECT
	DESIGN	JM	No.	REVISION DESCRIPTION	MM/DD/YY	сн'кр	WASYLKO	
	DRAWN	JM	1.	PRELIMINARY - FOR REVIEW	08/22/18	MR	ARCHITECT INC.	2
N	DATE	OCT. 2018	2.	ISSUED FOR APPROVAL	10/04/18	MR		M
							370 QUEENS AVE	8.8
							LONDON ON N6B 1X6	A FC
P 1							519.663.0888	~20`
							FAX 663.5258	•

BOSTON STREET

1) EXETER SPLASH PAD 1/8" = 1'-0"



150 CENTRE ST., DASHWOOD, ON NOM 1N0



SCALE	DASHWOOD COMMUNITY CENTRE WASHROOM RENOVATION	PROJECT No. MR18-098
As indicated	SITE LOCATION PLAN	SHEET NO.

MUNICIPALITY OF CORPORATION OF THE MUNICIPALITY OF SOUTH HURON 322 Main Street South P.O. Box 759 Exeter Ontario NOM 1S6 Phone: 519-235-0310 Fax: 519-235-3304 Toll Free: 1-877-204-0747 www.southhuron.ca

October 12, 2018

Superintendent M.M. (Marc) Bedard Commander, Municipal Policing Bureau 777 Memorial Avenue Orillia, ON L3V 7V3

RE: OPP Detachment Move to Clinton and Impacts to South Huron Satellite Office

Dear Superintendent Bedard;

The Province recently announced that it will fund construction of nine (9) new OPP detachments spending more than \$182M including our Huron County-Detachment. This is welcome news but has created much speculation and concern regarding the future of our OPP satellite office located in Exeter.

As a result, the following resolutions were passed at the Council meeting of October 1, 2018:

Motion: 461-2018 Moved: W. DeLuca Seconded: T. Tomes

Whereas there have been concerns raised regarding the closure of the Exeter OPP Station; and

Whereas MPP Lisa Thompson has indicated that a new detachment will be coming to her riding in Clinton; and

Whereas the municipality of South Huron Council has not been provided the opportunity for dialogue while the process took place;

Be it resolved that a letter be sent to Lisa Thompson MPP Huron-Bruce, Michael Tibollo, Minister of Community Safety and Correctional Services, Monte McNaughton, Minister of Infrastructure, and the OPP Municipal Policing Bureau for an up to date status report on the future of the Exeter OPP Station.



CORPORATION OF THE MUNICIPALITY OF SOUTH HURON

322 Main Street South P.O. Box 759 Exeter Ontario NOM 1S6 Phone: 519-235-0310 Fax: 519-235-3304 Toll Free: 1-877-204-0747 www.southhuron.ca

Disposition: Carried

Motion: 462-2018 Moved: W. DeLuca Seconded: M. Vaughan

That South Huron Council direct CAO Best to write and send a letter requesting an up to date status report on the new detachment and submit the letter for information at the next Council meeting.

Disposition: Carried

At this time, the Municipality is seeking a response to the following:

- What impacts (if any) the announcement regarding the Huron County OPP Detachment move from Goderich to Clinton will have on the Exeter OPP Satellite Office?
- What are the future plans for the Exeter OPP Satellite Office?
- An overall update on the construction project including timelines.

We hope you are able to respond as quickly as possible to the above in order to ensure that the correct information is provided to our community.

If you have any questions, or if you or staff from the Municipal Policing Bureau would like to present to our Council, please feel free to contact me directly at 519 235-0310 ext.228 or via email at <u>cao@southhuron.ca</u>

Kind regards,

Dan Best MPA, BA



Chief Administrative Officer

 cc. Hon. Michael Tibollo, MPP Vaughan-Woodbridge, Minister of Community Safety and Correctional Services Hon. Lisa Thompson, MPP Huron-Bruce, Minister of Education Hon. Monte McNaughton, MPP Lambton-Kent-Middlesex, Minister of Infrastructure J.V.N. (Vince) Hawkes, OPP Commissioner Mary Silverthorn, OPP Provincial Commander, Corporate Services South Huron Council From: Amanda Delorey <<u>adelorey@fcm.ca</u>>
Date: September 25, 2018 at 10:47:09 AM EDT
To: Amanda Delorey <<u>adelorey@fcm.ca</u>>, Elena Pierce <<u>epierce@fcm.ca</u>>
Subject: FCM scholarships for young women: Launching September 25th and closing December 15th

September 25, 2018

FCM scholarships for young women: Launching September 25th and closing December 15th

The Federation of Canadian Municipalities (FCM) is accepting nominations for a pair of scholarships that recognize young women interested in getting involved in local government.

The deadline to apply for the Andrée P. Boucher Memorial Scholarship and the Canadian Women in Municipal Government Scholarship is December 15, 2018. This year, a total of \$14,000 in scholarships will be awarded to high school, college and university students across Canada.

FCM established these scholarships to support young women who demonstrate leadership and interest in local government, and to encourage others to get involved in their community. The scholarships are part of FCM's initiative to reach parity in municipal councils across Canada.

Andrée P. Boucher Memorial Scholarship

This \$4,500 scholarship is presented to a female college or university student deemed to have submitted the best research paper on a topic related to women in politics.

Two André P. Boucher Scholarships will be awarded.

- One to a student at the college/university undergraduate level; and
- One at the university graduate level.

Canadian Women in Municipal Government Scholarship

These \$1,000 scholarships are presented to outstanding high school students for their involvement in their school's leadership team or student council.

Five regional scholarships will be presented across Canada this year, one each for British Columbia, the Prairies and Territories, Ontario, Quebec and Atlantic Canada.

Applications

To apply for any of the scholarships or to take a look at the eligibility requirements, visit FCM's website.

The Federation of Canadian Municipalities is the national voice of municipal government, with 2,000 members representing 91 per cent of the Canadian population.

Le 25 septembre 2018

Bourses d'études de la FCM pour étudiantes : Lancement le 25 septembre et ferme le 15 décembre

La Fédération canadienne des municipalités (FCM) accepte présentement les mises en candidature pour ses bourses d'études qui soutiennent de jeunes étudiantes intéressées à participer à la vie démocratique locale.

La date limite pour poser une candidature pour la bourse d'études commémorative de la mairesse Andrée P. Boucher ou pour la bourse femmes dans les gouvernements municipaux est le 15 décembre 2018. Cette année, la FCM remettra un total de 14 000 \$ en bourses à des étudiantes d'écoles secondaires, de cégeps, de collèges et d'universités dans toutes les régions du Canada.

La FCM a mis en place ces bourses d'études afin de reconnaître l'apport des jeunes femmes qui démontrent du leadership et de l'intérêt en matière de gouvernance locale et pour en inciter d'autres à s'investir dans leurs collectivités. Les bourses font partie de l'initiative de la FCM visant à promouvoir la participation des femmes dans la vie municipale.

Bourse d'études commémorative de la mairesse Andrée P. Boucher

La bourse de 4 500 \$ est décernée à deux étudiantes de niveau collégial ou universitaire qui auront présenté les meilleurs documents de recherche portant sur les femmes en politique.

Deux bourses d'études commémoratives de la mairesse Andrée P. Boucher seront attribuées :

- la première à une étudiante de niveau collégial ou du premier cycle universitaire;
- la seconde à une diplômée universitaire.

Bourses pour les femmes dans les gouvernements municipaux

Ces bourses de 1 000 \$ chacune sont données à des étudiantes du secondaire qui se sont démarquées dans leur participation aux équipes d'animation ou au conseil étudiant de leur école.

Une bourse sera présentée cette année dans chacune des cinq régions suivantes : Colombie-Britannique, les Prairies et les Territoires, l'Ontario, le Québec et l'Atlantique.

Mises en candidature

Pour poser votre candidature à ces bourses d'études et pour connaître leurs critères d'admissibilité particuliers, veuillez visiter le <u>site web de la FCM</u>.

La Fédération canadienne des municipalités est la voix nationale des gouvernements municipaux. Elle comporte 2 000 membres représentant 91 % de la population canadienne.

Amanda Delorey

Coordinator, Executive Director's Office | FCM Programs Coordonnatrice, Bureau du directeur exécutif | Programmes de la FCM T. 343-925-6428



Rebekah Msuya-Collison

From:	Dan Best
Sent:	Friday, October 05, 2018 4:45 PM
То:	Rebekah Msuya-Collison
Subject:	Fwd: From the Minister of Community Safety and Correctional Services – Information on Fire Regulations
Attachments:	image001.wmz

Sent from my Bell Samsung device over Canada's largest network.

------ Original message ------From: MCSCS Feedback <MCSCS.Feedback@ontario.ca> Date: 2018-10-05 4:29 PM (GMT-05:00) To: MCSCS Feedback <MCSCS.Feedback@ontario.ca> Subject: From the Minister of Community Safety and Correctional Services – Information on Fire Regulations

Ministry	of Commun	ity Salety
and Cor	rectional Se	

filinistère de la Sécurité communautaire et des Services correctionnels

Office of the Minister

25 Grosvenor Street 16" Floor Toronto ON 6/7A 1Y6 Tel. 416-325-0408 MCSCS.Feedback@Ontatio.ca 25. rue Grosvenor 16° étage Toronio ON 647A 1Y6

Bureau du ministre

TGronio CM 197A 1976 TGL 4 10-325-0406 MCSCS.Feedback@Ontarlo.ca



October 5, 2018

On May 8, 2018, the previous government passed three regulations under the *Fire Protection and Prevention Act, 1997* related to firefighter certification, public reports, and community risk assessments. Over the past few months, I have heard substantial concerns about the mandatory certification regulation, which would come into force July 1, 2019. After hearing these concerns, our government has decided to repeal the Firefighter Certification regulation effective October 5, 2018. The community risk assessment and public reports regulations will come into force as scheduled.

We have heard from stakeholders that the certification regulation would present significant challenges for fire services and municipalities – in particular, small, rural, and northern municipalities with volunteer fire departments. Fire departments and municipalities across the province have voiced concern with the resources and supports that were anticipated to be required to be compliant with the certification requirements, as well as the potential longer-term impacts on the ability of volunteer fire services to recruit certified firefighters.

My goal remains to ensure both firefighter and public safety and to that end, I agree in principle with the certification of all firefighters. Moving forward, however, I want to ensure that any proposals concerning fire safety balance the interests of all stakeholders.

Should you have any questions or comments, please contact mcscsinput@ontario.ca.

Sincerely,

Michael Tibollo Minister

Confidentiality Warning: This e-mail contains information intended only for the use of the individual named above. If you have received this e-mail in error, we would appreciate it if you could advise us through the Ministry of Community Safety and Correctional Services' website at http://www.mcscs.jus.gov.on.ca/english/contact_us/contact_us.asp and destroy all copies of this message. Thank you.

If you have any accommodation needs or require communication supports or alternate formats, please let us know.

Ministry of Agriculture, Food and Rural Affairs

Office of the Parliamentary Assistant

77 Grenville Street, 11th Floor Toronto, Ontario M7A 1B3 Tel: 416-326-3074 www.ontario.ca/OMAFRA

> 77, rue Grenville, 11e étage Toronto (Ontario) M7A 1B3 Tél. : 416 326-3074

www.ontario.ca/MAAARO

Ontario

Bureau de l'adjoint parlementaire

Ministère de l'Agriculture, de l'Alimentation et des Affaires rurales

Her Worship Maureen Cole Mayor Municipality of South Huron <u>m.cole@southhuron.ca</u>

Dear Mayor Cole:

forward to working together to address the concerns that were raised by municipalities. Municipalities of Ontario (AMO) conference. I appreciated the discussion and look Thank you and your delegation for meeting with me during the Association of

efforts to address your community's development challenges. I also appreciate the overview and introduction to the Community Hub/Recreational Centre project and your newcomer attraction and retention activities. I commend you for

these initiatives. She can be reached at 519-271-6574 or vicki.lass@ontario.ca. communities. Please continue to work with your Agriculture and Rural Economic Our ministry is committed to working with our rural partners to build strong, vibrant rural Development Advisor Vicki Lass. She can provide support and guidance with both of

development initiatives. Again, thank you for meeting with me to provide an overview of these economic

things better for the people of Ontario. I look forward to continuing to work with you to strengthen our communities and make

Please accept my thanks and best wishes.

Sincerely,

Hundel

Randy Pettapiece Parliamentary Assistant

c: Vicki Lass, OMAFRA



Good things grow in Ontario À bonne terre, bons produits

> Ministry Headquarters: 1 Stone Road West, Guelph, Ontario N1G 4Y2 Bureau principal du ministère: 1 Stone Road West, Guelph (Ontario) N1G 4Y2

Ontario Provincial Police Police provinciale de l'Ontario



Municipal Policing Bureau Bureau des services policiers des municipalités

777 Memorial Ave.	777, avenue Memorial		
Orillia ON L3V 7V3	Orillia ON L3V 7V3		
Tel: 705 329-6140	Tél. : 705 329-6140		
Fax: 705 330-4191	Téléc.: 705 330-4191		
File Reference:	612-20		

September 27, 2018

Dear CAO/Treasurer,

Further to the information provided in the 2019 Annual Billing Statement package I wish to provide you with an update with respect to the payment of the remaining 2018 Court Security and Prisoner Transportation Grant allotment. The Ministry advised the OPP on September 26, 2018 of the fact that the distribution of the final 2018 grant allotment is currently on hold as a result of the government's continuing expenditure management review. This review is expected to set service delivery planning as part of a multi-year planning process.

We appreciate your patience during this review period and we commit to provide an update as soon as it is available.

Yours truly,

Anne Bedand

M.M. (Marc) Bedard Superintendent Commander, Municipal Policing Bureau



PLANNING & DEVELOPMENT

57 Napier Street, Goderich, Ontario N7A 1W2 CANADA Phone: 519.524.8394 Ext. 3 Fax: 519.524.5677 Toll Free: 1.888.524.8394 Ext. 3 www.huroncounty.ca

NOTICE OF AN APPLICATION FOR CONSENT FOR SEVERANCE

DATE: October 2, 2018

File # C67-18

TO:

- Owner/Applicant: Tuckey Farms Limited c/o Pete Tuckey
- Chandra Alexander, Clerk Municipality of Bluewater
- Arlene Parker, Planning Coordinator Municipality of Bluewater
- Abutting Municipality with 1 km of subject property, Municipality of South Huron
- Goderich Exeter Railway c/o Genesee Wyoming Canada Inc.
- Ministry of Transportation London
- Huron County Health Unit
- Craig Metzger, Senior Planner, Huron County Planning Department

Enclosed is a copy of an application for Consent for your review and comments to the Huron County Planning & Development Department.

LOCATION OF PROPERTY

Municipality: Bluewater Part Lot 4, Concession 1, Hay East Ward Address: 71479 London Road Owner/Applicant: Tuckey Farms Limited c/o Pete Tuckey Solicitor: Kim McLean

PURPOSE AND EFFECT

This application proposes to create a new lot under the Municipality of Bluewater's surplus farm house policies. The proposed land to be severed is approximately 2.09 acres (0.845 ha) and has a house and agricultural lands. The land to be retained is approximately 95.84 acres (38.79 ha) of agricultural land.

LAST DAY FOR RECEIVING COMMENTS

We would appreciate your comments by October 16, 2018 as to whether or not your department or agency has any comments to this severance and whether or not any conditions should be imposed. All comments should be addressed to the Attention of Lisa Finch, Land Division Administrator at the following by e-mail address <u>lfinch@huroncounty.ca</u> or by regular mail to the address above and to the Attention of Lisa Finch, Land Division Administrator. We will assume you have no objections to the application if no comments are received by the time specified. If this does not provide you with sufficient opportunity to consider the application, please advise.

DECISION AND APPEAL

If you wish to be notified of the decision in respect to the proposed consent, you must make a written request to the Huron County Planning & Development Department c/o Ms. Lisa Finch, Land Division Administrator, Huron County Consent Granting Authority at 57 Napier Street, 2nd Floor, Goderich, Ontario, N7A 1W2.

If a person or public body, that files an appeal of a decision in respect of the proposed consent, does not make written submission to the Huron County Planning Department before it gives or refuses to give a provisional consent, then the Local Planning Appeal Tribunal may dismiss the appeal.



"Planning with the community for a healthy, viable and sustainable future."

ADDITIONAL INFORMATION

Further information regarding this application will be available to the public for inspection between 8:30 a.m. to 4:30 p.m. - Monday to Friday at:

Huron County Planning & Development Department 57 Napier Street, 2nd Floor, Goderich, Ontario N7A 1W2

Alternatively, you may review the application at the local municipal office.



For office use only File # C 67/18 Received SEPT. 28, 20 18 Considered Complete OCT. 1, 20 18

1. PRE-SUBMISSION CONSULTATION

Applicants are <u>strongly</u> encouraged to contact the County and speak/meet with the Planner assigned to the Municipality before submitting an application for information specific to their application.

Date of Applicant's consultation meeting with County Planner assigned to Municipality:

2. APPLICATION INFORMATION

Name of Applicant Tuckey Farms Limited c/o Pete Tuckey	Name of Owner
Telephone Numbers	Telephone Numbers
Home 519-235-3050 Work	Home Work
Fax Cell 519-808-9247	Fax Cell
Email tuckeyfarms@sympatico.ca	Email
Address 71504 London Rd R R 3 Exeter	Address
Postal Code NOM1S5	Postal Code
Solicitor name (if known) Raymond & McLean	

Address: 387 Main Street Exeter Ontario N0M 1S1

Tel. 519-235-2264	Tal	51	9	-23	35	-22	264	
-------------------	-----	----	---	-----	----	-----	-----	--

Email: kim@raymondmclean.ca

 ■ applicant, and\or □owner

3. LOCATION OF THE SUBJECT PROPERTY - SEVERED & RETAINED (Complete applicable lines)

Municipality: Bluewater	Ward: Hay East
Concession: 1	Lot Number(s): PT 4
Registered Plan:	Lot(s) Block(s):
Reference Plan:	Part Number(s):
Municipal Address (911 number and street/road name):	Street Number:
71479 London Rd R R 3 Exeter on Non 155	Roll # (if available)

a) Are there any right-of-way easements or restrictive covenants affecting the severed or retained land?

b) 🗌 Yes 🛛 🔳 No

If Yes, describe the location of the right-of-way or easement or covenant and its effect:

c) Is any of the severed or retained land in Wellhead Protection Area C? 🗌 Yes 👘 🖬 No 🔲 Unknown

If Yes, please obtain a Restricted Land Use Permit from the Risk Management Official. If Unknown, please consult with your Municipal Planner and obtain a Restricted Land Use Permit if necessary.

4. PURPOSE OF THE APPLICATION

Transfer:		Other:	
	Creation of a new lot		Charge
	Addition to lot		Lease
	An easement		Correction of title
	Other purpose (please specify)		

Briefly, describe the proposed transaction.

Name(s) of person(s), if known, to which land or interest in land is to be transferred, leased or charged:

If a surplus severance, provide legal description and locations of other farm holdings of owner/purchaser.

If a lot addition, identify the lands to which the parcel will be added.

Municipality:	South Huron	_{Ward:} Usborne
Concession:	1	Lot Number(s) 24
Registered Plan:	<u></u>	Lot(s) Block(s)
Reference Plan:	·	Part Number(s)
Name of Street/Road:	London Rd Exeter ON	Street Number 71504

5. DESCRIPTION OF SUBJECT LAND

a) Description land intended to be severed:	a) Description of land intended to be retained:
Frontage: 65m	Frontage: 37m
Depth: 130m	Depth: 1006m
Area: 8450m ³ 0.845ha	Area: 38.79ha
Existing Use(s Residence & Agricultures	Existing Use(s) Agriculture
Proposed Use(s) Residence	Proposed Use(s) Agriculture
Existing Building(s) or Structure(s)	Existing Building(s) or Structure(s)
Proposed Building(s) or Structures	Proposed Building(s) or Structures
b) Type of access: (check appropriate space)	b) Type of access: (check appropriate space)
🗎 provincial highway	🗎 provincial highway
🗆 county road	🗆 county road
🗋 municipal road, maintained all year	🗔 municipai road, maintained all year
municipal road, seasonally maintained	municipal road, seasonally maintained
□ other	🗋 other
c) Type of water supply proposed: (check appropriate space)	c) Type of water supply proposed: (check appropriate space)
publicly owned and operated piped water system	\Box publicly owned and operated piped water system
privately owned and operated individual well	privately owned and operated individual well
🗏 dug 🛛 drilled	🗋 dug 🔤 drilled
privately owned and operated communal well	privately owned and operated communal well
□ lake or other water body	\Box lake or other water body
other means (please specify)	other means (please specify)
d) Type of sewage disposal proposed: (check appropriate space)	d) Type of sewage disposal proposed: (check appropriate space)
publicly owned & operated sanitary sewage system	publicly owned & operated sanitary sewage system
 privately owned & operated individual septic tank 	\Box privately owned & operated individual septic tank
privately owned & operated communal septic system	privately owned & operated communal septic system
	🗆 privy
- ····,	other means (please specify)

6. LAND USE

- a) What is the existing Official Plan designation of the property? Agricultural
- b) What is the zoning of the property?
 - AG1

c) Are any of the following uses or features on the subject land or on adjacent land, within 500 metres of the subject land?

Please respond Yes or No to each use or feature.

Use or Feature	On Subject Land? Please indicate Yes or No	On adjacent land, within 500 metres of the subject land? Please indicate Yes or No If Yes, give distance from subject land in metres.		
An agricultural operation, including livestock facility or stockyard	no	yes	A GRICHATURAL WITH NO L-1055TOCK	
A landfill	no	no		
A sewage treatment plant or waste stabilization plant	no	no		
A provincially significant wetland (Class 1, 2 or 3 wetland)	no	no		
A provincially significant wetland within 120m of the subject lands	no	no		
Flood plain	no	no '		
A rehabilitated mine site	no	no		
A non-operating mine site within 1 km of the subject land	no	no		
An active mine site	no	no		
An industrial or commercial use (specify the use(s)	no	no		
A former industrial or commercial use	no	no		
An active railway line	no	no		
A municipal airport	no	no		
An underground storage tank or buried waste	no	no		
A current Environmental Site Assessment for the site or has one been prepared within the last 5 years. If yes , please submit with application.	no	no		

7. HISTORY OF PROPERTY

a) Has the subject land ever been the subject of an application for approval of a plan of subdivision under Section 51 of the Planning Act or a consent under Section 53 of the Planning Act?

🗆 Yes 🛛 🖹 No 🛄 Unknown

If Yes, and known, provide file number of the application and the decision made on the application.

File Number:	 	

Decision:__

- b) If this application is a re-submission of a previous consent application, describe how it has been changed from the original application.
- c) Is the subject land reserved for manure applications under the nutrient management plan or manure agreement that was submitted to the municipality? Yes **Ves No**
 - d) Has the subject land ever been the subject of an application for approval of a plan of subdivision or consent under the Planning Act?
 If Yes, provide for each severed, the date of transfer, the name of the transferred and the land use.

8. PROVINCIAL POLICY

Is the application consistent with the provincial policy statement issued under Section 3 (1) of the Planning Act?

Yes 🗃 🛛 No 🗌 Unknown 🗌

9. NATURAL HERITAGE

Has the Planner advised the Applicant that this application needs to be reviewed by the Huron County Stewardship Coordinator for comments on Natural Heritage matters.

Yes□ (submit a fee of \$204.00 made payable to the Treasurer, County of Huron) No 🖻

10. HEALTH UNIT REVIEW:

Please answer Section A OR Section B, depending on the type of servicing available.

Section A – Where SANITARY SEWERS are available.

Is the property within 183 metres (600 feet) of an abattoir? (slaughter house)	Yes	No 🗐	
	.	·····	

Section B – Where SEPTIC SYSTEMS are available.

The application is for the creation of a new lot for which the primary use will be a new dwelling (other than a new dwelling on a farm).	Yes 🖻	No🗆
The severed parcel contains a residence or other building(s) serviced by an on-site sewage system?	Yes	No□
If you answered Yes; is the on-site sewage system older than 5 years of age?	Yes	No
If you answered Yes ; has the on-site sewage system been inspected by a licenced contractor within the past 3 years?	Yes	No
If you answered Yes ; you are required to provide a certificate of inspection with your application.		

If you answered No ; you will be required to have an inspection carried out and provide a certificate of inspection as a condition of consent (severance) approval.		
Is the property less than .4 hectares (1 acre) in area?	Yes□	No
Does the property have less than .2 hectares (1/2 acre) of "useable land"* for a septic tank and tile bed? See definition of "useable land" below.	Yes	No 🔳

- * "Usable Land" means an area of land with suitable original soil for the installation of a Class 4 subsurface sewage disposal system, free of any buildings, structures, swimming pools, etc. and such land is or will be used solely for a septic tank and tile bed and any future replacement of the tile bed, and which area is at least 3 metres (10 feet) from any property line, at least 15 metres (50 feet) from any drilled well, at least 30 metres (100 feet) from any dug well, at least 15 metres (50 feet) from any top-of-bank of a watercourse or lake, not located in a flood plain, not located in an environmentally sensitive area, and does not contain field tile or other artificial drainage. (Other restriction may apply according to legislation).
- **Note:** Regardless of the results from Section A or B, some applications may require comments from the Health Unit as identified through the planning process. In these cases, the relevant fee shall apply.

If the answer to any question in Section 10 is "Yes" the Health Unit comments will be required and a fee must be submitted with your application: Cheque should be made payable to the Treasurer, County of Huron.

Health Unit Review Fee:	<u>\$</u> 268.00_
Severance resulting in 2 lots or fewer:	\$268.00
Severance resulting in 3 lots or more:	\$509.00
Total Paid	\$ 268.00

11. SKETCH CHECKLIST

The application shall be accompanied by a clean, legible sketch showing the following information. Failure to supply this information will result in a delay in processing the application.

Please do not use pencils for completing sketch as they do not copy well.

Please check the boxes indicating that your sketch provides the following information:

- boundaries and dimensions of the land that is to be severed and the part that is to be retained;
- boundaries and dimensions of any land owned by the owner of the subject land that abuts the severed and retained land;
- distance between the subject land and the nearest township lot line and/or landmark, such as a railway crossing or bridge;
- Iccation of all land previously severed from the parcel;
- Iccation of all wells, including abandoned wells, on neighbouring properties within 30m of lot lines of both the severed and retained lands subject to this consent application
- Iocation of all natural and artificial features in the subject land and adjacent lands such as railways, roads, watercourses, drainage ditches, field drains, river or stream banks, wetlands, wooded areas and the location and nature of any easement affecting the subject land;
- Iccation of all buildings, wells, abandoned wells and all components of a sewage system (i.e. septic tanks and weeping beds) on the severed and retained lands, and the distance of each to the proposed new lot line;
- existing uses on adjacent land such as residential, agricultural and commercial uses;

- Iocation of beach access if the property is a recreational property, adjacent to or in proximity to the waterfront;
- □ location and nature of any easements affecting the property.
- □ whether sewage disposal will be provided by a publicly owned and operated sanitary sewage system, a privately owned and operated individual or communal septic system, a privy or other means.

12. APPLICANT'S/OWNER'S DECLARATION

(This must be completed by the Person Filing the Application for the proposed development site.)

1, Porr Tackor of the

South Hurs Countrof Hunor (Name of Town, Township, etc.)

In the Region/County/District <u>Hundo</u> solemnly declare that all of the statements contained in this application and supporting documentation are true and complete, and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of the "Canada Evidence Act." I hereby acknowledge and accept the requirements and costs referred to the in Notes listed.

NOTES:

Please be advised the responsibility for filing a complete application rests solely with the owner/applicant. Anything not requested or applied for in this application and subsequently found to be necessary (which may require another application(s) and fee(s)) are the sole responsibility of the owner/applicant. The County/Municipality will address only the application as applied for, and any items that are not included in the application are not the responsibility of the County/Municipality.

All studies required to support this application shall be at the expense of the applicant and included at the time of submission as a complete application. Where the County/Municipality incurs costs for the peer review of any consultants' reports or fees for legal opinions, the County/Municipality will be reimbursed such costs by the applicant.

In the event of third-party appeals to applications approved by the County/Municipality, the applicant may be responsible for some or all of the legal and other costs incurred by the County/Municipality, at the discretion of the County/Municipality.

DECLARED before me at:				
Region/County/District _	HURON			
In the Municipality of	Bluewater			
			Signature	
This $2 5t$	day of Soptember,	2018 (Year)	_	
			Porr Tuckor,	
ach	~		Please Print name of Applicant	
Commissioner of Oaths				

Ariene Elizabeth Parker, a Commissioner, etc., Province of Ontario, for the Corporation of the Municipality of Bluewater. Expires October 13, 2018

13. OWNER/APPLICANT'S CONSENT DECLARATION

In accordance with the provisions of the <u>Planning Act</u>, it is the policy of the County Planning Department to provide the public access to all development applications and supporting documentation.

In submitting this development application and supporting documentation,

I <u>for for for for for for for for the set of the provisions of the Municipal Freedom of</u> Information and Protection of Privacy Act, that the information on this application and any supporting documentation provided by myself, my agents, consultants and solicitors, will be part of the public record and will also be available to the general public.

I hereby authorize the County of Huron staff, municipal staff and council members of the decision making authority to have access to the subject site for purposes of evaluation of the subject application.

If the application is deemed incomplete, the applicant has 60 days to provide the necessary information. After 60 days has lapsed, the application and fee will be mailed back to the applicant.

* 72 Fuly	Sort. 21/18
Signature /	Date
Print Name: PETE TUCKOY	Title: PRESIDONT

Note: Where the owner is a firm or corporation, the person signing this section shall state that he/she has authority to bind the corporation or affix the corporate seal.

14. AUTHORIZATIONS

If the applicant is not the owner of the land that is the subject of this application, the written authorization of the owner that the applicant is authorized to make the application must be included with this form or the authorization set out below must be completed.

Authorization of Owner for Agent to Make the Application

I, ______, am the owner of the land that is the subject of this application for a consent and for the purposes of the Freedom of Information and Protection of Privacy Act, I authorize

_, to make this application on my behalf.

Signature

Date

If the applicant is not the owner of the land that is the subject of this application, complete the authorization of the owner concerning personal information set out below.

Authorization of Owner for Agent to Provide Personal Information

I, ______, am the owner of the land that is the subject of this application for a consent and, for the purposes of the *Freedom of Information and Protection of Privacy Act*, I authorize

______, as my agent for this application to provide any of my personal information that will be included in this application or collected during the process of the application.

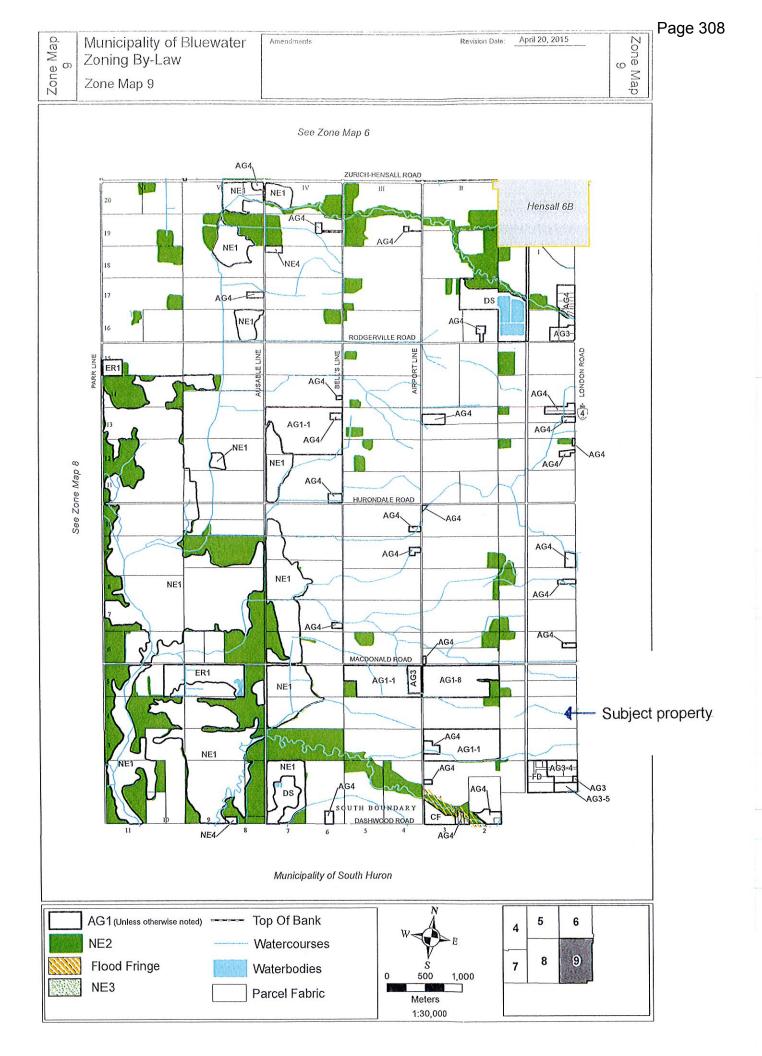
Signature

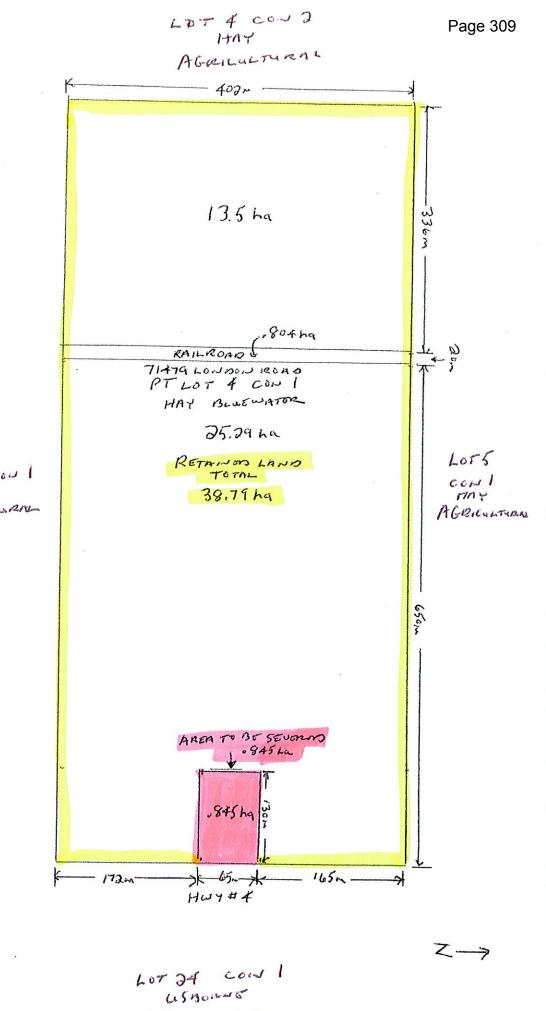
Print Name: __

Title:

Date

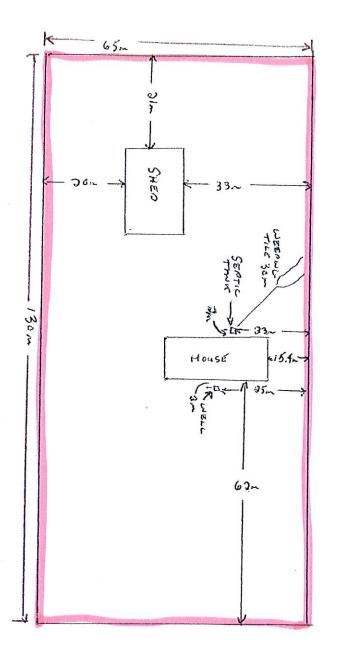
<u>Note:</u> Where the owner is a firm or corporation, the person signing this section shall state that he/she has authority to bind the corporation or affix the corporate seal.





AGRICULTURAL

LOT 3 COU 1 HATY AGRICUMTURIT



5

TO BE SEUCRED ALL ADJACOUT LAWS 479 LONDON ROITO LAY SLUBURTON Lot A con í ,845 ha

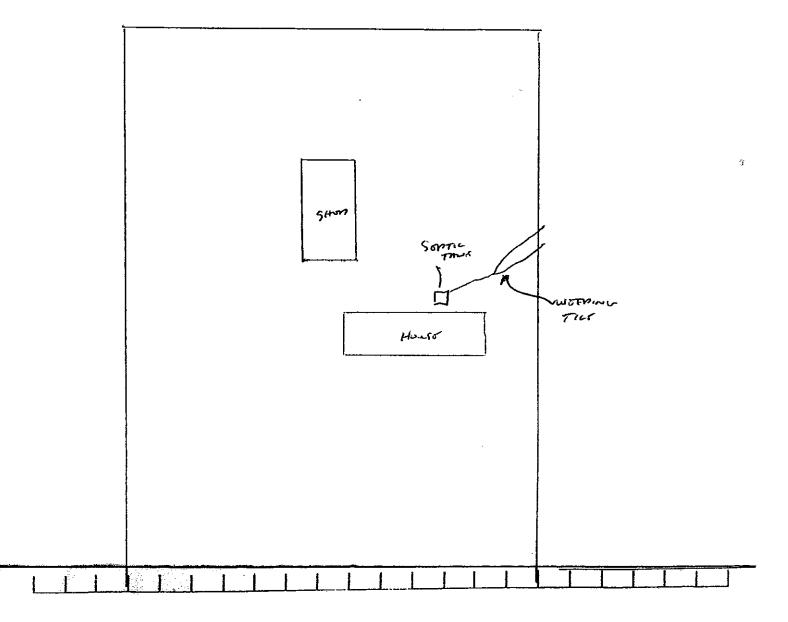
ζ->

Septic System Inspection Report	Page 311
Customer Name: PETS TUCKSY	
Phone Number 519 - 808 - 9247	
Mailing Address: 71504 Lowson Roms RR#3 911 address 71504	Low nor Rom
Property Location (Lot, Conc., R.P.#): PT. Lat & Cowc. 1	
Municipality: Bruewator Ward: Hay	
Consent File #: B/	
Note: The tank must be pumped for the inspection.	
1. Is the system a tertiary treatment system? If so, list the type: Date last serviced:	
2. Tank condition and material (ie. Steel, fiberglass, cement, plastic):	
3. Age of sewage system: 2.5 years	
4. Approximate size of tank: 600 gel	
7. Depth of tank: <u>/ FT</u>	
5. Number of compartments: P1 D2	
6. Condition of inlet and outlet baffles:	
7. Is there a filter on the tank? I yes	
8. Are there any signs of back-up in the tank? #no [] yes If yes, please describe:	<u> </u>
9. Are there any signs of sewage break-out to the surface over the tile bed? If no () yes If yes, please describe	
10. Is there physical room to replace the system on the proposed severed parcel consideration location of all existing wells)	(taking into
11. Is the existing sewage system in total within the proposed severed parcel? Byes	🛛 no
12. From this visual inspection, does the septic system appear to be functioning properly	y?le yes[]no
13. Additional comments:	

Page	1	of	2
------	---	----	---

Ĩ.

14. Please provide a sketch of the system (including tank and tile bed location on property):



Waiver

÷

ч,

This report provides information on the visual inspection of the septic system at the date of inspection only. It is not a guarantee or warranty on the septic system.

ONICO Name of Licenced Contractor

Aug 27- 2018 Date

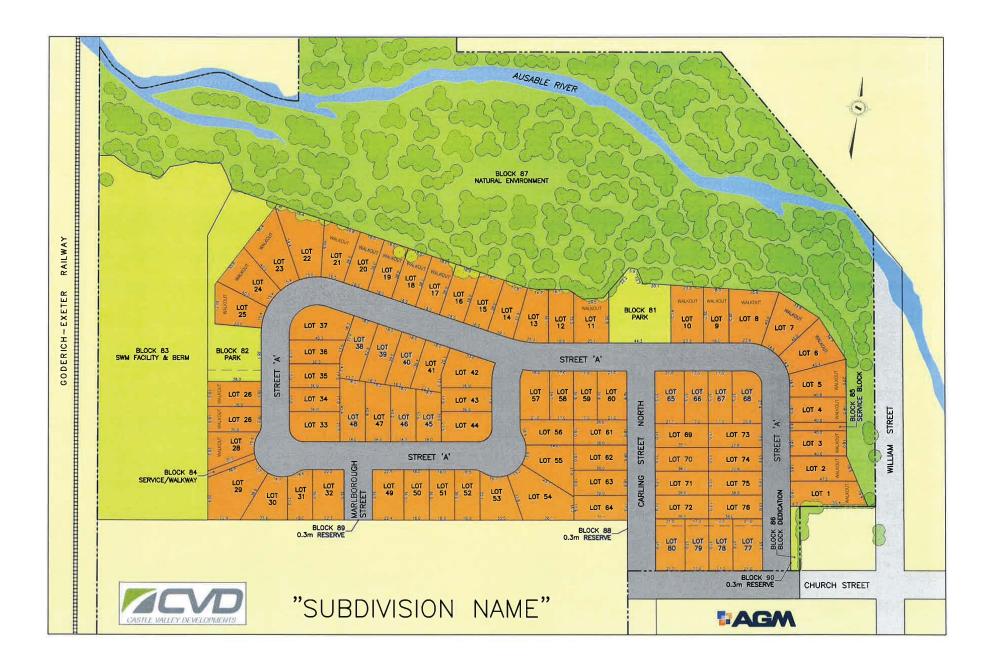
Signature

CASTLE VALLEY DEVELOPMENTS INC.	VALLEY DEVELOPMENTS INC.
OCTOBER 1ST, 2018	
TO Mrs. Maureen Cole Mayor	
Mr. Dan Best C.A.O	
ALL THE STAFF	STAFF
It is with great pleasure that we announce that the purchase of the Hensall	announce that the purchase of the Hensall
property has now closed. We at Castlevalley Developments (CVD) Inc.	Castlevalley Developments (CVD) Inc.
wish to express our heartfelt gratitude to Mrs. Cole and Mr. Best, for	titude to Mrs. Cole and Mr. Best, for
having graced us with their presence during our many information	ence during our many information
sessions in Exeter.	
The quality of information that was given to us and the level of	vas given to us and the level of
professionalism shown encouraged us to commit us to working	ed us to commit us to working
with the community of Exeter and provide new housing which	id provide new housing which
will benefit everyone.	
Regards,	
CASTLEVALLEY DEVELOPMENTS INC.	INC.

445 EDGELEY BLVD, UNIT 6, CONCORD, ON L4K 4G1

905.660.2789

WWW.CVDGROUP.CA



Thames Road Elimville Community Park

Box 3, Exeter, ON NOM 1S6

Email: b.cooper@quadro.net http://thamesroadelimvillecommunitypark.weebly.com

September 27, 2018

Municipality of South Huron 322 Main St. S., Box 759 Exeter, ON NOM 1S6

Dear Mayor Cole & Members of Council:

Re: Request for Community Partnership Agreement

The Thames Road Elimville Community Park Committee respectively request Council's consideration of the opportunity to develop a partnership agreement towards the beautification and maintenance of this popular community park.

Situated at 41391 Thames Road East (County Rd. 83) – six kilometres east of Exeter, this 5 acre park was gifted to the community's children in 1924 by Thomas and Margaret Cameron. It has been looked after by a wide variety of volunteers over the 94 years. This current committee has worked since 2011 to create a multi-use park so that it can continue offering a publically-accessible green space for the people of South Huron and beyond.

Over 1000 hours of volunteer effort has been put into this revitalization which includes trimming, pruning and clean-up, tree planting, participating in building the timber-frame pavilion on the site, installation of a playground relocated from a closed local school, erecting a split rail fence, maintaining gateway gardens as well as designing, painting and installing the 'Cameron's Legacy' barn quilt as part of the South Huron Barn Quilt Trail.

The park committee previously had a 30 plus year partnership agreement with the municipality, and would like to enter into a similar agreement again. This park provides an outdoor green space for local families and for community gatherings, special events as well as a play area for children and rest stop for people travelling on the busy Thames Road through South Huron.

Open to all local and regional residents, as well as visitors the Thames Road Elimville Community Park is a gem in the community. The committee has hosted the Communities in Bloom Judges barbecue for the past few years and has been recognized as a Garden of the Week by South Huron Communities in Bloom.

Our committee has applied for a South Huron Community Grant to support the beautification and maintenance of this open space for the community. The opportunity for a partnership was mentioned in that grant application, so we felt communicating with Council to discuss the potential for a renewed partnership was appropriate at this time.

If you have any questions, please feel free to contact us at <u>b.cooper@quadro.net</u>. We appreciate the past support of Council and trust you will give this request all due consideration.

Sincerely,

Thames Road Elimville Community Park Committee

Beth Cooper, Chair; Robert Bray, Vice Chair; Judith Parker, Secretary Kathy Bray, Jack Hodgert, Kristy Bray, Jayne Rowcliffe, Brad Cann, Ryan Parker, Sydney Rowcliffe -----Original Message-----From: jon@premiumtransportation.ca [mailto:jon@premiumtransportation.ca] Sent: Wednesday, October 10, 2018 9:08 AM To: Rebekah Msuya-Collison <clerk@southhuron.ca> Subject: Re: Exeter Legion Remembrance Day Parade

Good morning Rebekah,

We will be parading on Sunday November 11th. Our parade will form up at 945am in the Legion parking lot and on William Street in front of the Legion. We will depart at 10am and head towards Sanders Street turn left and go up to the stoplights where we will turn left and form up in front of the Cenotaph. After we lay our wreaths which from start to finish should be about 15 minute's. Afterwards we will head to the Trivitt church and take part in there service. After there service which will likely be done around 12pmish we will form back up and head back to the stoplights at Sanders Street turn right head to William street and turn right and finish back at the Legion.

Jon Corbett Inbound Dispatch Premium Transportation Toll Free 1-888-875-0030 Fax 1-519-228-7799 cell 519-614-0630 visit us at www.premiumtransportation.ca



6547 ROGER STEVENS DRIVE P.O. BOX 755 SMITHS FALLS, ON K7A 4W6 TEL: (613) 283-7478 FAX: (613) 283-3112 www.township.montague.on.ca

September 19th, 2018

THE CORPORATION OF THE

TOWNSHIP OF MONTAGUE

Honourable Doug Ford, Premier of Ontario Legislative Building Queen's Park Toronto ON, M7A 1A1 VIA EMAIL

Hello,

Please be advised the Council of the Township of Montague passed the following resolution at its regular meeting of September 4th, 2018:

MOVED BY: V. Carroll SECONDED BY: J. Abbass RESOLUTION NO:192-2018 DATE: September 04, 2018

That the Council of the Township of Montague hereby support the Association of Municipal Clerks and Treasurers of Ontario in requesting that the Provincial Government undertake consultation with municipalities prior to modifying legislation that effects municipal governments.

And that this resolution be circulated to the Association of Municipal Clerks and Treasurers of Ontario and the Ontario Premier. CARRIED

Please contact me if you have any additional questions.

Thank you,

Jásmin Ralph Clerk Administrator

Cc: Association of Municipal Clerks and Treasurers of Ontario All Ontario Municipalities Honourable Randy Hillier MPP, Lanark-Frontenac-Kingston **BEN RYZEBOL, Director of Public Works** PUBLIC WORKS - TELEPHONE: (519) 941-1065 FAX: (519) 941-1802 email: bryzebol@amaranth.ca



SUSAN M. STONE, C.A.O./Clerk-Treasurer TELEPHONE: (519) 941-1007 FAX: (519) 941-1802 email: suestone@amaranth-eastgary.ca

374028 6TH LINE, AMARANTH, ONTARIO L9W 0M6

September 20, 2018

Ministry of Environment and Climate Change Hon. Chris Ballard, Minister Ferguson Block 11th Flr, 77 Wellesley Street West Toronto, ON M7A 2T5

Dear Minister Ballard,

Re: Licensing Process to Take Water for Commercial Water Bottling Facilities

At the regular meeting of Council held September 12, 2018, the following resolution was carried:

Moved by J. Aultman – Seconded by G. Little

Be it Resolved That:

WHEREAS the Township of Amaranth understands that there is currently a permitting process to take water for commercial water bottling facilities;

AND WHEREAS the municipal permitting process to take water is more stringent and is subject to Source Water Protection Policies;

NOW THEREFORE the Township of Amaranth requests that the licensing process to take water for commercial water bottling facilities be the same as the municipal licensing process and be subject to Source Water Protection regulations and all annual inspections and reviews within this process be included;

AND FURTHER THAT this resolution be circulated to Provincial Government, Conservation Authorities, Source Protection Committee and all municipalities.

Should you require anything further please do not hesitate to contact this office.

Yours truly,

Susan M. Stone CAO-Clerk-Treasurer Township of Amaranth



Ministry of Agriculture, Food and Rural Affairs By-law for Municipalities Not Within a Regional Municipality, the County of Oxford or The District Municipality of Muskoka – Form 5

Drainage Act, R.S.O. 1990, c. D.17, subs. 45(1)

Drainage By-law Number	83-2013	8
------------------------	---------	---

in the County of Huron	
Whereas the council of the Municipality of South Huron	has procured a
report under section 78 of the Drainage Act for the improvement	
of the Morrissey, Fleming-Morrissey and Regan Municipal	drain
And whereas the report dated $2018/08/26$ has been authored by <u>W.J. Dietr</u>	ICII, F. Elig.
and the attached report forms part of this by-law;	
And whereas the estimated total cost of the drainage work is $\$212,500.00$;
And whereas \$56,600,00 is the amount to be contributed by the	Municipality
And whereas $\$56,600.00$ is the amount to be contributed by the of South Huron	
of South Huron	for the drainage works;
And whereas (Complete this clause only if other municipalities are being assessed a sh	are of the cost of the project.);
\$155,900.00 is being assessed in the Municipality of North Mi	ddlesex
is being assessed in the of	
is being assessed in the of	
And whereas the council is of the opinion that drainage of the area is desirable;	
Therefore the council of the Municipality of South Huron	A 1824
pursuant to the Drainage Act enacts as follows:	
1. AUTHORIZATION	
The attached report is adopted and the drainage works is authorized and shall be c	ompleted as specified in the report.
2. BORROWING	
The Corporation of the Municipality of South Huron	
•	ng the amount necessary for
may borrow on the credit of the Corporation the amount of bei the improvement of the drainage works.	ng the amount necessary for

6. CITATION

This by-law comes into force on the passing thereof and may be cited as the		
"Morrissey, Fleming-Morrissey and First reading 2018/10/15		5 <u>2018</u> by-law".
	0	
Second reading 2018/10/15		
Provisionally adopted this <u>15</u> day of <u>October</u> , <u>2018</u>		
Name of Head of Council (Last, First Name)	Signature	
Cole, Maureen		
Name of Clerk (Last, First Name)	Signature	
Msuya-Collison, Rebekah		
Third reading		
Enacted this day of, 2018		
Name of Head of Council (Last, First Name)	Signature	
Name of Clerk (Last, First Name)	Signature	
I, Rebekah Msuya-Collison		
clerk of the Corporation of the Municipality of South Huron		
certify that the above by-law was duly passed by the council of the Corporation and is a true copy		
thereof.		
Name of Clerk (Last, First Name)	Signature	
Msuya-Collison, Rebekah		



The Corporation of the Municipality of South Huron

By-Law # 84-2018

Confirming By-Law

Being a by-law to adopt, confirm and ratify matters dealt with by the Council of the Corporation of the Municipality of South Huron.

Whereas Section 8 of the *Municipal Act, 2001*, as amended, provides that the powers of a Municipality shall be interpreted broadly to enable it to govern its affairs as it considers appropriate and to enhance the Municipality's ability to respond to municipal issues; and

Whereas Section 5(3) of the *Municipal Act, 2001*, as amended, provides that a municipal power, including a municipality's capacity, rights, powers and privileges under section 9, shall be exercised by by-law unless the municipality is specifically authorized to do otherwise; and

Whereas the Council of The Corporation of the Municipality of South Huron deems it expedient to adopt, confirm and ratify matters dealt with at all meetings of Council;

Now therefore be it resolved that the Council of The Corporation of the Municipality of South Huron enacts as follows:

- 1. That the proceedings and actions taken by Council and municipal officers of the Corporation of the Municipality of South Huron at the <u>October 15, 2018 Regular Council Meeting</u> in respect of each report, motion, recommendation, by-law and any other business conducted are, except where the prior approval of the Local Planning Appeal Tribunal or other authority is required by law, hereby adopted, ratified and confirmed and shall have the same force and effect as if each and every one of them had been the subject matter of a separate by-law duly enacted.
- 2. That the Mayor and Members of Council of the Corporation of the Municipality of South Huron are hereby authorized and directed to do all things necessary to give effect to the said actions of Council of the Corporation of the Municipality of South Huron or to obtain approvals where required.
- 3. That on behalf of The Corporation of the Municipality of South Huron, the Mayor, or the Presiding Officer of Council, and the Clerk or the Chief Administrative Officer, where instructed to do so, are hereby authorized and directed to execute all necessary documents and to affix thereto the Corporate Seal.
- 4. That this By-Law shall not be amendable or debatable.

Read a first and second time this 15th day of October, 2018

Read a third time and passed this 15th day of October, 2018